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July 8, 2020



Mr. Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
350 Metro Square Building
121 7th Place East
St. Paul, MN 55101-2147

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PUBLIC (OR PRIVILEGED) DATA
HAS BEEN EXCISED**

**RE: In the Matter of an Investigation into Self-Commitment and Self-Scheduling of Large
Baseload Generation Facilities
Docket No. E999/CI-19-704
Reply Comments**

Dear Mr. Seuffert:

Otter Tail Power Company (Otter Tail) hereby submits its Reply Comments to the Minnesota Public Utilities Commission (Commission) in the above referenced matter.

OTP has taken reasonable efforts to maintain the secrecy of the information marked as PROTECTED DATA which derives independent 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 (the "Protected Data"). The Protected Data is therefore "trade secret information" and "nonpublic data" under Minn. Stat. § 13.37.

Otter Tail has electronically filed this document with the Minnesota Public Utilities Commission and is serving a copy on all persons on the Official Service List for this docket. A Certificate of Service is also enclosed.

Should you have any questions regarding this filing, please contact me at 218-739-8279 or stommerdahl@otpc.com.

Sincerely,

/s/ *STUART TOMMERDAHL*
Stuart Tommerdahl
Manager, Regulatory Administration

cjh
Enclosures
By electronic filing
c: Service List

**STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION**

In the Matter of an Investigation into
Self-Commitment and Self-Scheduling
of Large Baseload Generation Facilities

Docket No. E999/CI-19-704

OTTER TAIL POWER COMPANY REPLY COMMENTS

I. INTRODUCTION & BACKGROUND

On November 13, 2019, the Minnesota Public Utilities Commission (Commission) issued an order¹ directing Minnesota Power, Northern States Power Company d/b/a Xcel Energy (Xcel), and Otter Tail Power Company (Otter Tail) to take the following actions in the matter of an Investigation into Self-Commitment and Self-Scheduling of Large Baseload Generation Facilities (2020 Annual Filing):

- File annual reports analyzing potential options for dispatching certain generators during certain seasons and not others, and strategies for using “economic” commitments for specific coal-fired generating plants.
- Report future self-commitment and self-scheduling analyses calculated according to a Commission-prescribed method.
- Provide stakeholders with a live Excel spread sheet containing the data used to complete their analyses.

The November 13, 2019 Order also established this separate Docket in which to submit these annual reports.

On March 2, 2020, Otter Tail submitted its annual compliance filing, which provided an economic analysis of the two largest baseload generating plants in which it

¹ In the Matter of the Review of the 2017–2018 Annual Automatic Adjustment Report for All Electric Utilities, Docket No. E-999/AA-18-373, Order Accepting 2017–2018 Electric Reports and Setting Additional Requirements (November 13, 2019).

has an ownership interest, Big Stone Plant (Big Stone) in South Dakota and Coyote Station (Coyote) in North Dakota.

By way of background, Otter Tail owns 53.9 percent of Big Stone, which is fueled by Powder River Basin coal railed-in from Wyoming, and 35 percent of Coyote, which is a mine mouth generating plant fueled by North Dakota lignite coal. The energy associated with Otter Tail's share of these plants is offered into the Midcontinent Independent System Operator (MISO) market, as is the energy associated with the other co-owners save for Northwestern Energy (which is a member of the Southwest Power Pool (SPP) and offers the energy associated with its ownership share of those plants into the SPP market).

The development of these plants in the late 1970s and early 1980s afforded Otter Tail and its customers an opportunity to realize economies of scale and lower energy costs by partnering with neighboring utilities to own portions of two different plants. This arrangement also provides generation resource flexibility and fuel source diversity (Big Stone is able to use multiple fuel suppliers to mitigate supplier viability and cost risks, while Coyote avoids fuel delivery disruption and freight cost escalation risks being a mine-mouth plant). Otter Tail has undertaken similar risk mitigation measures with its natural gas-fired and wind generation plants, by constructing natural gas-fired generation at different geographical sites reliant on different pipelines, and by constructing wind generation at geographically diverse sites in wind-rich areas. Geographically dispersed generation sources also mitigate risk associated with natural disasters.

Otter Tail and its co-owners have always operated these plants with the benefit of each co-owner's customers in mind. Otter Tail and its co-owners have recognized the changing marketplace for energy in recent years and have worked hard to adapt the operations of these plants accordingly. As discussed later in these Reply Comments, in April of this year, Otter Tail and its co-owners finalized a plan that now allows Big Stone to be offered into both the MISO and SPP markets on an economic basis when feasible for all owners of the plant. Otter Tail and its Coyote co-owners are also evaluating procedural changes that would allow Coyote to be dispatched on an economic basis, when feasible and desired by all co-owners.

As noted in Otter Tail’s initial filing, over the 18-month reporting period from July 2018 – December 2019, when both plants were self-scheduled into the MISO market, revenues for both plants were well in excess of costs, based on the Commission’s required analysis aligning variable costs with the offer curve submitted to MISO².

Department of Commerce Initial Comments June 8, 2020

On June 8, 2020, the Minnesota Department of Commerce’s Division of Energy Resources (Department), Sierra Club, and Fresh Energy (collectively, the Parties) filed Initial Comments in response to Otter Tail’s 2020 Annual Filing.

In its Initial Comments, the Department concluded that further analysis related to the overall benefits and costs of alternatives for economic or seasonal dispatch for Big Stone Plant should be included in Otter Tail’s next annual filing³. Notably, the Department (1) recommended that the Commission take no action regarding Otter Tail’s commitment and dispatch status decisions regarding Coyote⁴, and (2) concluded that a detailed economic analysis regarding potential retirement of units is unnecessary in this proceeding.⁵

The Department also recommended that “the utilities explain in reply comments the phenomenon of dispatching above the minimum even when a unit was not economic”⁶ which Otter Tail addresses later in these Reply Comments. The Department also made recommendations addressing differences in data reporting among utilities, recommending the following:

.....the Department recommends that the Commission require the utilities to file a compliance filing within 60 days of the Commission’s order containing an Excel

² November 13, 2019 Order in Docket E999/AA-18-373 Order Point 9: *The Commission will open an investigation in a separate docket⁸ and require Minnesota Power, Otter Tail, and Xcel to report their future self-commitment and self-scheduling analyses using a consistent methodology by including fuel cost and variable O&M costs, matching the offer curve submitted to MISO [Midcontinent Independent System Operator, Inc.] energy markets.*

³ Department Initial Comments dated June 8, 2020, Page 21

⁴ Department Initial Comments dated June 8, 2020, Page 21

⁵ Department Initial Comments dated June 8, 2020, Page 39

⁶ Department Initial Comments dated June 8, 2020, Page 40

spreadsheet of the required data, with formulas intact, that the utilities will fill out for each unit in future filings, including clear definitions of the inputs. As part of developing this spreadsheet, the Department recommends that the Commission determine if:

- a breakdown into unit fuel cost and unit variable O&M cost is necessary or if only a total variable cost is necessary;*
- ancillary services revenues should be included in the overall calculation of hourly net benefit / (cost); and*
- data regarding unavoidable self-commitment should be added to the utilities' filings in the future.*

Extension and Expansion of Reply and Response Comments

On June 10, 2020, the Commission issued a notice to extend the Reply and Response Comment periods to July 8, 2020 and July 23, 2020, respectfully. The topics open for comment are:

- Are the March 1, 2020 filings by the utilities adequate?*
- What conclusions can be drawn from the data filed by the utilities on March 1, 2020 in conjunction with what has been learned earlier in this investigation?*
- How should the Commission use the information provided by the utilities in this docket going forward?*
- Should the Commission require the utilities to evaluate any specific facilities for economic commitment?*
- Should the Commission establish enforcement procedures for this issue?*
- Are there other issues or concerns related to this matter?*

In these Reply Comments, Otter Tail responds to these topics and the other Parties' June 8, 2020 Initial Comments. Otter Tail also provides an updated Table 5 from the Initial Filing, to reflect a correction in that Table.

II. OTTER TAIL RESPONSES TO TOPICS OPEN FOR COMMENT

Otter Tail provides the following responses to the topics open for comment:

A. Are the March 1, 2020 filings by the utilities adequate?

Otter Tail's 2020 Annual Filing provides the appropriate information for this proceeding based on the scope set by the Commission. The initial scope of this proceeding is to evaluate if there are better and smarter ways for dispatching these baseload units. Otter Tail finds the Department's recommendations⁷ for clarity in parts of the information to be helpful.

Sierra Club and Fresh Energy, however, seek to convert this review of self-commitment and self-scheduling of large baseload generation facilities into a prudence and resource planning review, issues that greatly exceed the scope and intent of this proceeding. The Commission addresses prudence and resource planning in dockets specifically designed for those purposes and, from efficiency and due process standpoints, should contain consideration of such issues to those dockets. This is the only way to ensure an opportunity for meaningful participation by other potentially interested stakeholders, including customers.

B. What conclusions can be drawn from the data filed by the utilities on March 1, 2020 in conjunction with what has been learned earlier in this investigation?

Otter Tail conducted an analysis of two of the three baseload coal units in which it has ownership interests, Big Stone and Coyote,⁸ for purposes of providing a reasonable quantification of the difference in the cost of running the plants versus the corresponding prevailing market energy prices paid when the plants are self-committed or self-

⁷ Department's June 8, 2020 Comments, P. 40.

⁸ Big Stone is a 474 MW plant which Otter Tail is a 53.9% owner. Coyote is a 427 MW plant which Otter Tail is a 35% owner.

scheduled into the market. The third baseload coal unit in which Otter Tail has an ownership interest, Hoot Lake Plant,⁹ is scheduled for retirement in 2021.

The following conclusions can be drawn from the analysis:

- a. Market prices, which dictate what a unit is paid, can vary the results of this analysis from year to year.
- b. Over the eighteen-month reporting period, aggregate revenues have exceeded the fuel costs attributable to operating these plants during periods of self-schedule and self-commitment.

C. How should the Commission use the information provided by the utilities in this docket going forward?

The Commission should find that the information provided by Otter Tail complies with the Commission's November 13, 2019 Order in Docket No. E-999/AA-18-373 (AAA Order). Going forward, the Commission should use the information to inform its participation in the Organization of MISO States (which includes Commissioner Schuerger as President), thereby contributing to an even more efficient MISO market that may, in time, facilitate multi-day commitments.

D. Should the Commission require the utilities to evaluate any specific facilities for economic commitment?

Otter Tail does not believe the Commission should require utilities to evaluate specific facilities for economic commitment. MISO has primacy for ensuring regional resource adequacy. In addition, Otter Tail and its plant co-owners continually evaluate the most efficient and best use of their plants and make business decisions based on the best information available. Indeed, Otter Tail and its Big Stone co-owners transitioned to unit economic commitment in April 2020, following evaluation that occurs on a routine basis.

⁹ Hoot Lake Plant, which is owned entirely by Otter Tail, is made up of two units totaling 141 MWs.

E. Should the Commission establish enforcement procedures for this issue?

No. Establishment of enforcement procedures is premature and is not consistent with the scope set forth by the Commission. Enforcement procedures would presumably require some form of prudence and/or resource planning analysis – issues that exceed the scope of this docket and which, if added to the scope of this docket, would interfere or potentially preempt consideration of these issue in more appropriate dockets better structured to ensure opportunity for meaningful participation by other potentially interested stakeholders, including customers. Otter Tail believes this docket should remain informational.

F. Are there other issues or concerns related to this matter?

Otter Tail believes the Commission’s investigation parameters have been appropriately informational and recommends that the Commission not expand the scope of this investigation.

III. OTTER TAIL RESPONSES TO ITEMS RAISED BY OTHER PARTIES

A. Otter Tail provides the following responses to items raised by the Department in Initial Comments filed on June 8, 2020:

- i. *(Department) The phenomenon of dispatching above the minimum even when a unit was not economic appeared in the data for all units to varying degrees. The Department recommends that the utilities explain in reply comments the phenomenon of dispatching above the minimum even when a unit was not economic.*

Otter Tail is a member of MISO and operates in multiple state footprints. MISO’s services ensure access to reliable, least-cost delivered energy, while also ensuring that adequate capacity (including that afforded by units such as Big Stone and Coyote) is available when the region needs it most (e.g., during peak periods in the winter and summer, when variable energy resources may not otherwise be available). MISO

estimates that in 2019, its efforts provided between \$3.2 billion and \$3.9 billion in regional benefits, driven by enhanced reliability, more efficient use of the region's existing transmission and generation assets, and a reduced need for new assets.¹⁰

MISO determines economic dispatch and associated unit clearing levels above a unit's self-commitment when offered economically. This is standard practice for Otter Tail. Otter Tail never seeks to dictate to MISO the appropriate economic offer dispatch position above minimum output, excluding periods of de-rates or testing (neither of which is driven by economics). Otter Tail cannot comment on the specific inputs, criteria, or decision points MISO utilizes when determining dispatch instructions for units in the MISO market footprint, including Big Stone and Coyote, except to note that MISO seeks to operate the grid in the most economic manner possible while meeting all reliability requirements. That said Otter Tail offers the following potential reasons why the phenomenon of MISO dispatching above the minimum output may occur even when a unit is not economic (i.e., when market pricing does not cover production costs):

1. MISO has chosen to dispatch a unit for reliability purposes. If the unit accurately follows MISO dispatch, and locational marginal pricing (LMP) is not sufficient to cover production costs, MISO will provide make-whole payments to make the unit whole to its offer costs.
2. MISO utilizes a three-part economic offer for each unit in both the Day Ahead (DA) and Real Time (RT) markets. The whole of these offer components represents the variable costs associated with committing the plant and generating output. The first offer component is the plant startup offer. This is the cost to commit the unit and bring it online. The second

¹⁰ <https://www.misoenergy.org/about/miso-strategy-and-value-proposition/miso-value-proposition/>

component is the plant no-load offer. This represents the constant hourly cost to operate the plant, independent of generation output. The third component is the variable energy offer of the plant. This offer component essentially represents the cost of fuel on a per MWh basis (and other variable costs such as reagents, etc.). For the period under consideration, both the Big Stone and Coyote plants were self-committed at minimums or must-run. Under a must-run commitment, because the unit is already online and committed, MISO is not obligated to make the unit whole to its three-part offer. Instead MISO dispatches the unit above its economic minimum, or self-schedule, based only on the unit's variable energy offer (i.e., MISO does not include startup or no-load costs).

3. In Otter Tail's case, both Big Stone and Coyote are co-owned units operated by multiple co-owners in multiple wholesale energy markets. Otter Tail's variable energy offer assumes that each co-owner's share is being dispatched proportionally by its respective Independent System Operator (ISO). At the end of the month, all co-owners share in the dispatch of the generation, rather than any one owner being able to narrowly target at all times the dispatch to its specific advantage or efficiency. On the whole, the advantages of being a share participant in larger facilities with greater economies of scale has outweighed perceptions of what could be achieved by sole ownership of a portfolio that

is less geographically diverse or made up of smaller scale facilities.

4. Unit testing (e.g., for emissions compliance) requires a fixed MW output independent of market pricing levels. Generally, testing is scheduled in the DA, but can sometimes be extended or delayed into the RT market.
5. There are physical configuration transitions required within a plant to move from one operating level to another operating level. Those transitions take time and may not be advisable in response to abrupt price changes.
6. The ramp rate of the unit is not fast enough to keep up with volatile RT pricing. RT LMP pricing is based on 5-minute intervals averaged up to hourly values. RT generation dispatch setpoints are based on the current 5-minute interval. A subset of an hour's 5-minute LMP pricing can greatly impact the average hourly RT price. In such a situation, MISO would have limited opportunity to direct, and the generator would have little opportunity to move, in response to that pricing. This may contribute to an erroneous perception that the generator is not responding to pricing and dispatch signals appropriately, operating at an hourly MW output that is not aligned with hourly pricing.
7. The unit has dropped to minimum output levels, but the actual RT energy output slightly fluctuates moment to

moment, resulting in RT production slightly higher than minimum output.

8. The unit is ramping online.

9. The unit is ramping offline.

Big Stone and Coyote costs are reported using Otter Tail's ownership shares of the plants' month-end statements, reported in total dollars. This amount is divided by the number of net megawatt hours produced for Otter Tail during the month, yielding an average \$/MWh cost for the month. It should be noted that this average cost figure is different from the hourly cost figure when comparing against hourly market revenues and economic performance.

ii. *It would be possible for Otter Tail to provide (Department) To remedy various differences still present in the calculations and data reporting, the Department recommends that the Commission require the utilities to file a compliance filing within 60 days of the Commission's order containing an Excel spreadsheet of the required data, with formulas intact, that the utilities will fill out for each unit in future filings, including clear definitions of the inputs. As part of developing this spreadsheet, the Department recommends that the Commission determine if:*

- a breakdown into unit fuel cost and unit variable O&M cost is necessary or if only a total variable cost is necessary;
- ancillary services revenues should be included in the overall calculation of hourly net benefit / (cost); and
- data regarding unavoidable self-commitment should be added to the utilities' filings in the future. a breakdown between unit fuel cost and unit variable O&M cost on an average, monthly basis. As mentioned previously, Big Stone and Coyote costs are reported using Otter Tail's ownership shares of the plants'

month-end statements, reported in total dollars. This amount is divided by the number of net megawatt hours produced for Otter Tail during the month, producing an average \$/MWh cost for the month. This figure could be further broken down to delineate between unit fuel cost and unit variable O&M cost, if desired.

Because Coyote and Big Stone are co-owned, each co-owners' share of the plant is modeled, committed, and dispatched independently and, in the case of Northwestern, by SPP rather than MISO. This makes it very difficult for Otter Tail to quantify Otter Tail-only production costs on an hour to hour basis. Otter Tail uses a breakdown of monthly costs to determine hourly MISO offers. Furthermore, under a co-owned unit construct, the Otter Tail offer must assume an equally proportionate dispatch of other co-owner shares of the plant. In practice, the actual output is likely not proportional and instead reflects varying demand, dependent on co-owner needs and multiple ISO dispatch instructions, changing the total hourly cost to operate the plant. While it is possible for Otter Tail to provide a monthly, average, breakdown between unit fuel cost and unit variable O&M, it may not be possible for Otter Tail to provide these costs on an hour to hour basis. Otter Tail believes reporting actual Otter Tail variable costs on a monthly, average basis provides the most accurate representation of cost.

Otter Tail believes it is appropriate to include ancillary service revenues in the overall calculation of hourly net benefit. Ancillary service revenues are real revenue sources that are dependent on the applicable plant being online (except for supplemental reserves). A generator will not be eligible to provide the ancillary services of regulation and spinning reserve if it is decommitted. It is also important to highlight that ancillary service reserves can often be more valuable, on a per MWh basis, to a generator than the energy produced. MISO commitment and dispatch procedures optimize generator revenue among energy and ancillary service reserves. It is not uncommon for MISO to forgo committing and dispatching energy justified by existing market prices in order to commit ancillary service reserves it deems more valuable.

Otter Tail does not support a potential requirement to provide data regarding unavoidable self-commitment. Due to the fact that Big Stone and Coyote are co-owned

and dispatched into two different ISOs, hourly offer commitment status can change quickly and unexpectedly as both MISO and SPP can commit, decommit, extend, and terminate runtimes across multiple co-owner plant shares, in both the DA and RT market. If one co-owner share of the plant is committed by MISO or SPP, or if one co-owner calls for its share, all other co-owners are contractually obliged to update their commitment status to self-committed. Furthermore, under the current economic offer at Big Stone, due to the lack of a multi-day commitment in either MISO or SPP, co-owners might determine it is in customers best interests to self-commit the unit in order to avoid cycling costs or to maintain plant operational and safety integrity (i.e., committing the unit to process coal stored for extended time periods in plant bunkers, as a result of economic decommitment, in order to avoid spontaneous fires in those bunkers). The co-owners collaborate to arrive on a joint commitment status decision, yet ultimately a single co-owner can call on the unit to be committed. For these reasons, it would be difficult to determine if a self-commitment should be classified as unavoidable.

- iii. *(Department) Regarding Otter Tail, the Department recommends that the Commission require Otter Tail to provide an analysis of the overall benefits and costs of alternatives, such as economic or seasonal dispatch, at Big Stone in the Company's next annual filing in this proceeding.*

In November of 2019, due to prevailing market conditions, Big Stone Plant co-owners began discussing and developing a technical solution that would allow for economic dispatch of the unit amongst three different owners, across two different energy markets. In the latter half of April 2020, Big Stone co-owners finalized development and implementation of a technical solution allowing for Big Stone Plant to utilize an economic offer. On April 29, 2020, based on that economic offer, Big Stone Plant was decommitted due to prevailing market conditions. In the absence of a MISO/SPP multi-day commitment, it is expected Big Stone will continue to operate on an economic commitment basis, utilizing periods of self-commitment to match co-owner commitment schedules, minimize cycling costs, and maintain plant operational and safety integrity.

Seasonal dispatch is not viable for Big Stone. As a MISO load-serving member, Otter Tail is required to maintain sufficient generation capacity to serve its load obligations. The same is true for the other co-owners of Big Stone. To be accredited as a MISO capacity resource, the resource is required to maintain a daily market offer, other than during periods of forced or planned mechanical outages, testing, fuel supply disruption, or similar circumstances. A MISO capacity resource is not allowed to maintain accreditation if it can generate energy but is not offered into the market. Big Stone and Coyote provide approximately half of the generation resources necessary to meet Otter Tail's MISO Module E capacity requirement. The units represent significant percentages of the other co-owner's generation resources, as well. If these resources were seasonally decommitted, and therefore no longer available to meet the daily must-offer obligations, Otter Tail would (and its co-owners may) fail to meet applicable capacity requirements.

Consequently, Otter Tail does not believe further analysis of the overall benefits and costs of alternatives, such as economic or seasonal dispatch, at Big Stone is necessary in its next annual filing. Otter Tail's next filing will reflect Big Stone's April 2020 offer practices.

B. Otter Tail provides the following responses to items raised by Fresh Energy in Initial Comments filed on June 8, 2020:

- iv. *(Fresh Energy) Update Order Point 9 of the Commission's November 13, 2019 Order to read:*

*The Commission will open an investigation in a separate docket and require Minnesota Power, Otter Tail, and Xcel to report their future self-commitment and self-scheduling analyses using a consistent methodology by including **all production costs including fuel, cost variable O&M costs, matching the offer curve submitted to MISO energy markets, and any other variable costs associated with the plant.***

The modifications suggested by Fresh Energy will not be consistent with the offer curve MISO uses in determining whether a plant is dispatched into the market. Unless the

Commission feels it necessary to change or expand the scope of this analysis, Otter Tail opposes Fresh Energy's recommended modifications and urges consistency with MISO practices. MISO, after all, is ultimately responsible for resource adequacy and operation of the regional market.

- v. *(Fresh Energy) In subsequent compliance filings, require Otter Tail to provide: a) an analysis of shifting to an economic commitment-based strategy at Coyote Station with the current coal contract, b) a discussion of the options and the costs of changing the Coyote Station contract, and c) an evaluation of how potential costs of changing the contract compare to Coyote's past and forecast operating losses.*

Fresh Energy's comments seek action and information that exceed the scope of this proceeding. Otter Tail is not able to amend, in its sole capacity, the supply agreement between Coyote co-owners and its lignite supplier. However, Otter Tail and its co-owners continue to evaluate economic commitment at Coyote.

C. Otter Tail provides the following responses to items raised by Sierra Club in Initial Comments filed on June 8, 2020:

- vi. *(Sierra Club) Moving Big Stone and Coyote from self-schedule to economic dispatch would save customers money. We commend OTP on taking steps towards a technical solution for moving Big Stone to economic commitment and dispatch, and recommend that Big Stone be moved entirely to economic operation, not just in low price seasons. We recommend the same be done for Coyote. There are only rare circumstances (such as stack testing) in which OTP should self-schedule Big Stone and Coyote. Instead, OTP should allow MISO to dispatch the units economically throughout the entire year; i.e., only when unit costs submitted to the offer curve are less than locational marginal prices (LMPs).*

Because Big Stone and Coyote are co-owned, Otter Tail alone cannot direct the offer status for these units. The following table details ownership of each plant, along with each co-owner’s corresponding Independent System Operator (ISO) membership.

Utility	Big Stone Ownership Share	Coyote Ownership Share	ISO Membership
Otter Tail Power Company	53.9%	35.0%	MISO
Montana Dakota Utilities	22.7%	25.0%	MISO
NorthWestern Energy	23.4%	10.0%	SPP
Northern Municipal Power Agency	0.0%	30.0%	MISO

The Big Stone and Coyote plant ownership agreements require the co-owners to take the energy associated with their ownership shares of the plant whenever another co-owner calls for commitment and dispatch. The call for commitment can come directly from a co-owner or via an ISO commitment request under an economic offer. The SPP and MISO markets do not coordinate the commitment and dispatch of co-owned units straddling the MISO/SPP market seam. Furthermore, both markets model the shares of a co-owned unit as individual, separate and distinct generators. When each co-owner’s share of the unit is offered as economic, it is possible only a portion of the entire unit would be dispatched. From a practical standpoint, since the plant is one physical generator, dispatch of a single co-owner’s share of the plant will result in all co-owner’s shares being dispatched. The shares of the plant not directly committed by SPP or MISO must be self-committed, to represent the physical reality that the entire plant is coming online.

Absent a MISO/SPP multi-day commitment of Big Stone, the co-owners intend to operate the unit on an economic basis, utilizing periods of self-commitment to match co-owner commitment schedules, minimize cycling, and maintain plant operational and safety integrity. Sierra Club’s assertion that there are “only rare circumstances (such as stack testing) in which Otter Tail should self-schedule” is inaccurate. As mentioned previously, an example of a necessary self-commitment is the processing of coal stored for extended time periods (due to economic decommitment) in order to avoid spontaneous fires. Such a commitment maintains the safety and operational integrity of

the plant. Again, Otter Tail alone cannot direct the offer practices to its plant co-owners. Economic commitment is only permissible with the consent of all plant co-owners.

Otter Tail and its co-owners continue to evaluate economic commitment at Coyote. As was the case with Big Stone, all Coyote co-owners would need to agree on this approach.

Footnote 51 on page 21 of Sierra Club's Initial Comments referenced EIA Form 923 Fuel Receipts. This data was for the entire Coyote plant. Notably, Otter Tail has only a 35 percent ownership share in Coyote.

- vii. *(Sierra Club) In the absence of a multi-day commitment market at MISO, the Commission should require utilities to establish a clear and auditable mechanism of determining whether its commitment decisions are in the best interests of ratepayers. The Commission should require OTP to track and maintain for review its forward-looking analysis of unit commitment strategies. OTP should be required to utilize Locational Marginal Price forecasts, unit operational costs, and unit start-up and shut-down costs to determine daily whether to self-commit a unit or to take it offline during periods of low market prices. OTP should be required to retain this analysis to allow the Commission to evaluate in fuel clause adjustment true-up proceedings whether a unit's commitment decision maximized its economic value to OTP's customers.*

This request is unreasonable, appears to be based on unsupported assumptions, and exceeds the scope and intent of this docket. Please consider the following:

- The requested short-term LMP forecast is very difficult to predict. Such a forecast would be based on numerous variables that can fluctuate greatly from day to day and even hour to hour (temperature, wind forecasts, loading levels), for which Otter Tail and its plant co-owners have no advance knowledge (transmission outages, transmission binding constraints, generation outages, day-ahead and real-time variances, etc.). This information is highly

fluid on a day to day basis and commitment decisions will often need to be made on a qualitative basis as opposed to a strictly quantitative basis.

Currently, MISO does not provide a multi-day pricing/commitment forecast.

- Unit operational costs, unit start-up costs, and shut-down costs, are already reflected in existing unit offers to the market.
- As discussed previously, self-scheduled commitments are often outside of Otter Tail's ability to control, due to the complexities of operating multi-owned, multi-market, generation across both the day ahead and real time market.
- Otter Tail has already demonstrated, through implementation of economic commitments at both Big Stone and Hoot Lake (baseload coal generation), and through offering Coyote on a variable cost basis, that we are operating our generation in the best interest of ratepayers. Otter Tail, along with the other co-owners, qualitatively forecast future market conditions to optimize both economic and operational plant performance.

Otter Tail fully endorses the concept of a multi-day market commitment in both MISO and SPP, and it encourages the Commission to exert its influence through the Organization of MISO States. Such a commitment would greatly reduce many of the concerns discussed above but would not completely alleviate all the complexities of a co-owned unit construct.

- viii. *(Sierra Club) The Commission should indicate that in the next Fuel Clause Adjustment True-Up proceeding, it will disallow the uneconomic portion of fuel costs during periods in which any utility commits and dispatches a coal plant uneconomically in a manner that is not supported by the forward-looking analyses described above. The reasonableness of unit dispatch practices should be evaluated based on analysis that incorporates predictive maintenance costs—and any other excluded costs that scale with and are impacted by plant operations—as well as a reasonable percentage of fuel costs, into the*

variable costs that OTP uses to make its unit commitment and dispatch decisions.

Sierra Club's recommendation to disallow certain portions of fuel costs, suggesting that those costs are unreasonable or imprudent, goes well-beyond the scope of this proceeding; overlooks the role of ISOs in, and the response of individual utilities to, resource adequacy rules; ignores the complexities of operating co-owned units; and vastly oversimplifies the complexities of regional markets and the multi-state footprints in which utilities operate. As demonstrated throughout these Comments, Otter Tail and its Big Stone and Coyote plant co-owners continue to evaluate opportunities to operate our plants efficiently and economically in this complex commercial and regulatory environment.

- ix. ***(Sierra Club)*** *The Commission should use a two-step approach for addressing OTP's 25-year coal fuel supply contract for Coyote. First, the Commission should order Otter Tail to evaluate whether continued participation in that contract is in customers' interest in its next Integrated Resource Plan. Second, because the Commission has never reviewed the prudence of the contract, any imprudent associated costs should be disallowable. One approach for addressing this would be to disallow any costs incurred above the market cost of energy during the hours Coyote is operating. This action could encourage OTP to seek a renegotiation of its fuel contract with Coyote Creek Mine to reduce the portion of costs that are fixed. This will place the appropriate burden of risk on the utility, not ratepayers, for entering a contract that has an [PROTECTED DATA BEGINS...
...PROTECTED DATA ENDS] percentage of fuel costs designated as fixed and therefore passed on to customers.*

Again, Sierra Club's recommendation goes well-beyond the scope of this proceeding. The Sierra Club's comments imply that the Coyote Station lignite supply agreement should have been reviewed for prudence prior to execution. Otter Tail is

unaware of any rule, statute, or Commission practice supporting this position. The Sierra Club also fails to acknowledge that Otter Tail in its sole capacity is not able to renegotiate, alter, or amend the supply agreement between the Coyote co-owners and its lignite supplier.

Note that Coyote is a mine-mouth plant (it is sited and operated at the “mouth” of the mine from which it will source its fuel) and, as such, the structure of any contract with a sole off-taker from such a mine will include contractual elements uniquely different from a plant whose fuel can potentially be secured and delivered by rail from multiple sources. Effectively, the costs attributable to the mine will inevitably be passed on to the sole off-taker, whether in an all-in variable cost, or a mix of fixed and variable costs. This reduces risk associated with the cost of freight, which is approximately two-thirds of the cost of delivered Powder River Basin (PRB) coal. Exposure to both railed coal and mine-mouth lignite, along with the generation diversity yielded by significant renewable energy and natural gas-fired resources, serves to responsibly mitigate energy price risks for our customers.

- x. *(Sierra Club) The Commission should require utilities to identify any proposed new coal contracts to the Commission, and to submit them for prudence review in fuel clause adjustment proceedings, before signing any such contracts. It should also signal that it will not allow utilities to recover from ratepayers future costs associated with new coal contracts that include fixed cost terms of service, or take or pay or liquidated damages provisions.*

The Sierra Club again exceeds the scope of this proceeding. As noted above Otter Tail is unaware of any statute, rule or practice mandating pre-execution prudence review of fuel contracts. Imposing such a standard on all utilities in the future would seem to require a rule-making or other process, where the cost and benefits of added regulatory review, and the scope of that review, would be evaluated. For example, requiring prudence review prior to procurement would likely cause significant logistic issues in bidding and sourcing to the detriment of customers. With respect to Otter Tail, all fuel

acquisition decisions and associated contracts require approval of and execution by all plant co-owners, who collectively work to acquire that fuel as economically as possible.

- xi. (Sierra Club) If OTP continues to identify co-ownership as a barrier to moving Coyote to economic dispatch, the Commission should require OTP to justify the prudence of continued operation of that unit as a joint owner.*

Sierra Club's recommendation goes well-beyond the scope of this proceeding. As noted earlier, Otter Tail and the other Coyote co-owners continue to evaluate offering Coyote on an economic basis.

- xii. (Sierra Club) OTP should also consider reducing the minimum operating levels at Big Stone and Coyote.*

Minimum operating levels are largely determined by safety, environmental permit limits, stable plant operations, and long-term maintenance impacts to equipment (due to cycling and corrosion due to operating at low temperatures) etc. Otter Tail relies on experienced plant staff to evaluate numerous factors, including those listed above, to set an appropriate minimum operating level. In fact, over time, the minimum operating levels at both Big Stone and Coyote have been lowered based on recommendations by plant operating staff. Sierra Club's recommendation reflects a lack of operational knowledge and a disregard for the safety of plant personnel, compliance with permit limits, and operational impact to plant equipment.

- xiii. (Sierra Club) The Commission should require OTP to evaluate alternative ways of meeting its resource adequacy requirements. In its next IRP, the Commission should require OTP to conduct an economic analysis comparing the costs and benefits of meeting its MISO Module E Capacity requirements with Big Stone and Coyote versus alternatives. Alternatives include, but are not limited to, the construction of new generation facilities, bi-lateral capacity purchases, and the purchase of capacity through the MISO capacity auction.*

This request seeks information concerning prudence and/or resource planning that are outside the scope of this Docket.

IV. INFORMATION RESPONSE CORRECTION

During discovery, Otter Tail identified an error in the accumulated deferred income taxes (ADIT) amount in Table 5 [Line 4] in the Initial Filing. Otter Tail provides revised Table 5 from the Initial Filing. In addition to correcting the ADIT amounts, Otter Tail includes the Otter Tail Minnesota share (OTP MN) and an estimated capital revenue requirement on Lines 8 and 9 respectively.

**Revised Table 5 From Initial Filing– Rate Base 2018
(December Year Ending Balances)**

	A	B	C
Line	Estimate of capital revenue requirements	Coyote	Big Stone
		[PROTECTED DATA BEGINS...	
1	Plant in Service		
2	Accumulated Depreciation		
3	Net Plant in Service		
4	Accumulated Deferred Income Tax		
5	Rate Base		
6	Rate of Return Allowed on Rate Base		
7	Estimated Capital Revenue Requirement (OTP Total)		
8	MN share		
9	Estimated Capital Revenue Requirement (OTP MN)		
			...PROTECTED DATA ENDS]

V. CONCLUSION

Otter Tail appreciates the opportunity to provide these Reply Comments. Initial Comments submitted by Sierra Club and Fresh Energy proposed to expand the scope of this Docket well-beyond its intended focus, into issues surrounding prudence and resource planning. However, Otter Tail believes the informational scope established by the Commission was reasonable and recommends the Commission preserve those parameters in this and the next filing currently scheduled for March 1, 2021. Otter Tail respectfully requests approval of its annual filing and supports the Department's recommendations regarding:

- submitting a compliance filing following issuance of an Order in this Docket to include the spreadsheet reflecting the data components to be provided in the next annual filing;
- providing additional breakdowns of fuel expense and other variable expenses on a monthly basis; and,
- continuing to include ancillary services revenues in future analysis.

Dated: July 8, 2020

Respectfully submitted,

OTTER TAIL POWER COMPANY

By /s/ STUART TOMMERDAHL

Stuart Tommerdahl
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215 South Cascade
Fergus Falls, MN 56538-0496
(218) 739-8279

CERTIFICATE OF SERVICE

**RE: In the Matter of an Investigation into Self-Commitment and Self-Scheduling of
Large Baseload Generation Facilities
Docket No. E999/CI-19-704**

I, Carly Haiby, hereby certify that I have this day served a copy of the following, or a summary thereof, on Will Seuffert and Sharon Ferguson by e-filing, and to all other persons on the attached service list by electronic service or by First Class Mail.

**Otter Tail Power Company
Reply Comments**

Dated this **8th** day of **July, 2020**.

/s/ Carly Haiby
Carly Haiby, Regulatory Filing Coordinator
Otter Tail Power Company
215 South Cascade Street
Fergus Falls MN 56537
(218) 739-8472

[illegible]

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_19-704_Official
Isabel	Ricker	ricker@fresh-energy.org	Fresh Energy	408 Saint Peter Street Suite 220 Saint Paul, MN 55102	Electronic Service	Yes	OFF_SL_19-704_Official
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_19-704_Official
Lynnette	Sweet	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_19-704_Official
Stuart	Tommerdahl	stommerdahl@otpc.com	Otter Tail Power Company	215 S Cascade St PO Box 496 Fergus Falls, MN 56537	Electronic Service	No	OFF_SL_19-704_Official
Brian	Tulloh	btulloh@misoenergy.org	MISO	2985 Ames Crossing Rd Eagan, MN 55121-2498	Electronic Service	No	OFF_SL_19-704_Official