July 23, 2020

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

VIA E-FILING

Re: In the Matter of an Investigation into Self-Commitment and Self-Scheduling of Large Baseload Generation Facilities
Docket No. E999/CI-19-704
Sierra Club Public Version of Surreply Comments: Otter Tail Power 2020 Annual Compliance Filing

Dear Mr. Seuffert:

Sierra Club respectfully submits its Surreply Comments on Otter Tail Power's 2020 Annual Compliance Filing in Docket No. E999/CI-19-704.

Please contact me at (303) 454-3358 or lauriewilliams@sierraclub.org if you have any questions regarding this filing.

Sincerely,
/s/ Laurie Williams
Staff Attorney
Sierra Club
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STATE OF MINNESOTA
BEFORE THE PUBLIC UTILITIES COMMISSION

Katie J. Sieben	Chair
Valerie Means	Commissioner
Matthew Schuerger	Commissioner
Joseph K. Sullivan	Commissioner
John A. Tuma	Commissioner

In the Matter of an Investigation into	)	
Self-Commitment and	)	Docket No. E-999/CI-19-704
Self-Scheduling of Large Baseload	)	
Generation Facilities	)	

SIERRA CLUB SURREPLY COMMENTS
IN RESPONSE TO OTTER TAIL POWER'S 2020 COMPLIANCE FILING

Developed with the Assistance of Synapse Energy Economics, Inc., Jamie Hall (lead)
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PUBLIC DOCUMENT –TRADE SECRET [or PRIVILEGED] DATA HAS BEEN EXCISED

July 23, 2020

I. INTRODUCTION

On July 8, 2020, Otter Tail Power (OTP) filed reply comments in *In the Matter of an Investigation into Self-Commitment and Self-Scheduling of Large Baseload Generation Facilities*, Docket No. E999/CI-19-704. Nothing in Otter Tail's reply comments alters the conclusions and recommendations expressed in our Initial Comments.

Our analysis indicated that OTP's practice of self-committing Big Stone and Coyote led to periods of avoidable, sustained losses to customers, and that OTP's assertion that these units' revenues were net positive is based on an incomplete accounting of the units' costs. Both Big Stone and Coyote operated uneconomically **[TRADE SECRET DATA BEGINS** …**TRADE SECRET DATA ENDS]** the time between 2017 and 2019. Initial Comments at 4. As discussed in our Initial Comments, our analysis suggests that OTP's customers would benefit if the Company were to move both Big Stone and Coyote to year-round economic commitment and dispatch.

Moreover, OTP's contention that our recommendations exceed the scope of this proceeding is without merit. The Commission has a duty to ensure the reasonableness of fuel costs; all of our recommendations are responsive to that mandate.

II. RESPONSE TO COMMISSION'S JUNE 10TH NOTICE

In its June 10th Notice providing for reply and response comment periods in this docket, the Commission requested that parties respond to a series of questions. Those questions, as well as our responses thereto, are provided below.

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

No; as discussed in our Initial Comments and as further explained below, Otter Tail Power's filing did not adequately demonstrate that its commitment and dispatch practices for Big Stone and Coyote are minimizing costs and maximizing customer benefits.

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?

From our analysis of Otter Tail Power's March 1 filing, the following conclusions can be drawn (as also presented in our Initial Comments):

- During the reporting period, OTP both uneconomically self-committed and often appeared to uneconomically self-schedule Big Stone and Coyote. Specifically, OTP self-committed the dispatch of its Big Stone and Coyote units up to each unit's minimum operating level 100 percent of the time that the units were not in outage, regardless of economics. Furthermore, the data suggests OTP often uneconomically self-scheduled the dispatch of Big Stone and Coyote above their minimum operating levels (despite stating that it does not do so). While Otter Tail has taken steps in 2020 to improve its commitment and dispatch practices for Big Stone by moving that unit to economic commitment during low price periods, it has not done so for Coyote.

- OTP's failure to conduct forward-looking analyses to inform unit commitment and dispatch decisions has resulted in OTP uneconomically operating the units during many periods at an unnecessary and likely avoidable loss. Using OTP's own data in Attachment 2 to its Annual Compliance Filing, we identify [**TRADE SECRET DATA BEGINS**…**TRADE SECRET DATA ENDS**] periods of consecutive hourly losses at Big Stone and Coyote from 2017 to 2019, with losses totaling **[TRADE SECRET DATA BEGINS**…**TRADE SECRET DATA ENDS**]. This type of imprudent operation could have been avoided—or, at minimum, the losses could have been significantly mitigated—by employing proper forward-looking analysis of projected costs and revenues.

- OTP's claim that its units' revenues exceed costs during the 18-month reporting period (July 2018 through December 2019) is based on an incomplete accounting of variable operating costs and contains some unexplained discrepancies. OTP's conclusion that, in aggregate, "revenues have exceeded the fuel costs attributable to operating these plants during periods of self-schedule and self-commitment"[1] is based on an incomplete accounting of short-run marginal costs that omits costs resulting from variable predictive maintenance and, for Coyote, fuel costs that OTP classifies as fixed.

- OTP's decision to enter into a fuel contract for Coyote that designates a **[TRADE SECRET DATA BEGINS**… **TRADE SECRET DATA ENDS]** portion of fuel costs as fixed is a significant driver of OTP's conclusion that Coyote is economic. We found that, if the entire fixed portion of Coyote's fuel costs were instead considered to be a variable cost (as they are for Big Stone), Coyote's operation would have been uneconomic on an energy cost basis alone for [**TRADE SECRET DATA BEGINS**… **TRADE SECRET DATA ENDS**] of its operational hours during the filing period. With this redesignation, Coyote's net revenues appear [**TRADE SECRET DATA BEGINS**… **TRADE SECRET DATA ENDS**] Big Stone's. Both Coyote and Big Stone have incurred fuel and variable operations and maintenance ("O&M") costs well above market prices for sustained periods in each year from 2017 through 2019. Because OTP has the power to negotiate its fuel contracts, the utility, not ratepayers, should bear the risk associated with

[1] Annual Compliance Filing of Otter Tail Power, Docket No. Docket No. E999/CI-19-704, page 8.

such contractual provisions. OTP's decision to enter into coal contracts with outsized fixed terms has resulted in OTP designating a [**TRADE SECRET DATA BEGINS**… **TRADE SECRET DATA ENDS**] portion of Coyote's fuel costs as fixed. OTP therefore excludes these costs from the MISO offer curve,[2] which then understates Coyote's variable costs and makes the unit appear more attractive to dispatch than it would otherwise.

- OTP could generate over [**TRADE SECRET DATA BEGINS**…**TRADE SECRET DATA ENDS]** in additional revenue for its customers by decreasing the minimum operating level of its units. Our analysis finds that reducing the minimum operating level of each unit by half could have resulted in [**TRADE SECRET DATA BEGINS**…**TRADE SECRET DATA ENDS**] in additional net revenues for OTP's customers from 2017 through 2019.

- OTP has not sufficiently supported its claim that Big Stone and Coyote are needed to meet resource adequacy requirements. OTP has identified resource adequacy requirements as a barrier to changing its commitment practices, but has conducted neither a robust technical nor an economic analysis exploring the costs and benefits of meeting its resource adequacy requirements through other means.

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

We recommend that the Commission take the following actions in response to Otter Tail's filing:

- In the absence of a multi-day commitment market at MISO, the Commission should require Otter Tail Power 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 daily and weekly forward-looking evaluations of unit commitment strategies. OTP should be required to utilize day-ahead locational marginal price (LMP) forecasts, unit operational costs, and unit start-up and shut-down costs to determine on at least a day-ahead basis, taking the full 24-hour period of expected revenues into account, whether to designate a unit as economic or must-run, or to take it offline. OTP should be required to retain this analysis to allow the Commission to evaluate whether a unit's commitment decision maximizes its economic value to OTP's customers.

- The Commission should indicate that in OTP's next Fuel Clause Adjustment True-Up proceeding, it will disallow recovery from ratepayers any fuel and variable O&M costs

[2] The offer curve consists of the bids offered to MISO.

incurred as a result of OTP's uneconomic dispatch of Big Stone or Coyote, where not supported by the forward-looking analyses described above or otherwise justified. This does not mean to say that the forward-looking analyses must always match the commitment decision. Rather, the Company should keep records sufficient to explain its decision-making process for periods in which both of the following conditions are true: (1) the Company's operations deviate from the actions that the forward-looking analysis suggested it should take, and (2) the Company incurs net operational losses over a period of time greater than the units' cool-down time to warm plus warm startup time. The reasonableness of unit commitment practices should be evaluated based on an analysis that incorporates predictive maintenance costs—and any other excluded costs that scale with and are impacted by plant operations—into the variable costs used to make unit commitment decisions.

- 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.
- With respect to Otter Tail's long-term fuel supply contract for the Coyote plant, the Commission should consider two actions:

    1. The Commission should order Otter Tail to evaluate whether continued participation in that contract is in its customers' interest in its next Integrated Resource Plan. Given that Otter Tail is required to file an analysis of the impact of regional haze regulations on Coyote's economics by the end of the year, this analysis would ideally be incorporated into that filing.

    2. Because the Commission has never reviewed the prudence of the contract, any imprudent associated costs should be disallowable in the utility's fuel clause adjustment true-up proceeding. As discussed in detail in our Initial Comments, one approach for addressing this would be to disallow any costs (including fuel costs that Otter Tail treats as fixed) incurred above the market cost of energy during the hours Coyote is operating.

- 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 in its next IRP.
- OTP should also consider reducing the minimum operating levels at Big Stone and Coyote.
- 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.

- With respect to the phenomenon of OTP's units dispatching uneconomically above their operating minimums, it would be helpful if OTP were required to:

    1. Better explain why its units are dispatching uneconomically above their minimums more broadly;
    2. Take a number of one-week samples in which this phenomenon is observed and, in each hour, explain which of its nine offered reasons account for dispatch above the minimum when uneconomic. The series of one-week samples should cover all reasons listed;
    3. Describe – at least qualitatively, but preferably quantitatively – how frequently each of OTP's nine offered reasons occurs within the reporting period; and
    4. Going forward, keep a record with an explanation for each instance of uneconomic dispatch above the economic minimum that lasts for more than four hours.

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

It is our understanding that OTP was required to evaluate Big Stone and Coyote for economic commitment in this proceeding.

Should the Commission establish enforcement procedures for this issue?

Yes; see recommendations above.

Are there other issues or concerns related to this matter?

We provide a response to OTP's reply comments, below.

III. Response to Otter Tail Reply Comments

A. OTP's claim that its units' revenues exceeded costs during the reporting timeframe reflects an incomplete accounting methodology.

Otter Tail reasserts that its units' revenues were net positive during the reporting timeframe. OTP Reply Comments at 3, 6. This assertion is incorrect and is based on an incomplete accounting of short-run marginal costs that omits the cost of variable predictive maintenance and, for Coyote, fuel costs that OTP classifies as fixed.

First, as we note in our Initial Comments, even using OTP's incomplete accounting, both units were [**TRADE SECRET DATA BEGINS**… **TRADE SECRET DATA ENDS]**. Energy prices in 2020 are significantly lower than either 2017 or 2019, indicating that the units' revenues have likely further eroded. Initial Comments at 10.

Moreover, as we explained in our Initial Comments, OTP does not include predictive maintenance costs in its analysis of its unit commitment and dispatch practices. As a result, OTP's variable O&M costs that it submits in its MISO offer are unusually low. *Id.* at 19-20. From July 2016 through 2019, Big Stone's average non-fuel variable O&M costs were approximately [**TRADE SECRET DATA BEGINS**…**TRADE SECRET DATA ENDS]** and Coyote's average non-fuel variable O&M costs were approximately [**TRADE SECRET DATA BEGINS**…**TRADE SECRET DATA ENDS]**.[3] This is [**TRADE SECRET DATA BEGINS**… **TRADE SECRET DATA ENDS]** the $5.78/MWh non-fuel variable O&M costs in 2020 dollars that Horizons Energy assigns to 400-599 MW coal plants in its Fall 2019 North American Market Database, based primarily on historical O&M data from FERC Form 1.[4]

Excluding predictive maintenance costs allows OTP to make the units look more economic than they are when comparing costs to the LMP revenues earned, such as it did with the data in Attachment 2 to OTPs' Annual Compliance Filing.

We recommend that the Commission require OTP to evaluate its unit commitment practices using an analysis that incorporates predictive maintenance costs—and any other excluded costs that scale with and are impacted by the frequency and duration of plant operations—into the variable costs that OTP uses to make its unit commitment and dispatch.

For Coyote, OTP's analysis is further biased because it excludes the [**TRADE SECRET DATA BEGINS**… **TRADE SECRET DATA ENDS]** portion of Coyote's fuel costs that its contract designates as fixed. As explained in our Initial Comments, pages 21-25, this exclusion has an outsized impact on its analysis of Coyote's costs and revenues. OTP excludes approximately **[TRADE SECRET DATA BEGINS**… **TRADE SECRET DATA ENDS]** of Coyote's fuel costs from its submission in the MISO offer curve pursuant to the terms of its fuel contract. *Id.* This artificially makes Big Stone (whose fuel contract does not have fixed terms) appear less economic to operate than Coyote when looking at just variable costs: using the methodology set by the fuel contracts, Big Stone's average unit cost from 2017 to 2019 was [**TRADE SECRET DATA BEGINS**…**TRADE SECRET DATA ENDS**, while Coyote's average unit cost during the same period was only [**TRADE SECRET DATA BEGINS**…**TRADE SECRET DATA**

[3] *Id.* at 20; see also Attachment 1 to Otter Tail Power's response to Sierra Club Information Request 19.

[4] Horizons Energy is known for its industry expertise on issues such as integrated resource planning, power market analytics, and economic consulting. See: https://www.horizons-energy.com/about/.

ENDS. *Id.* If Coyote's fuel contract were structured like Big Stone's, Coyote's fuel costs would be [**TRADE SECRET DATA BEGINS**…**TRADE SECRET DATA ENDS]**. *Id.*

When Synapse re-evaluated unit costs assuming all coal contract costs for Coyote are variable, it found that Coyote's economics appear similar or slightly worse than Big Stone's, with both units operated uneconomically for **[TRADE SECRET DATA BEGINS**… **SECRET DATA ENDS]** of all operational hours from 2017 through 2019. *Id.* at 24. In fact, Coyote actually incurred **[TRADE SECRET DATA BEGINS**…**TRADE SECRET DATA ENDS]** in net operational *losses* across *all* months from 2017 through 2019 when including the fixed portion of its fuel costs in its offer curve. *Id.*

B. Data Regarding Big Stone Commitment

OTP notes in its Reply Comments that Otter Tail and the co-owners of Big Stone transitioned that unit to economic commitment in April 2020. OTP Reply at 6. In response to our information request, OTP stated that based on economic offer, Big Stone was decommitted due to prevailing market conditions on April 29th, 2020. *Id.* The Commission may find it informative to request that OTP provide an update regarding how the unit has performed since that date. OTP states in its Reply Comments that it offers Big Stone on an economic basis "when feasible for all owners of the plant," Reply Comments at 2; it would be helpful to know precisely how often the unit is still being committed uneconomically under the owners' new procedures.

C. Scope of the Commission's authority in this proceeding

In our Initial Comments, we recommended that the Commission take several steps to improve OTP's accountability regarding the reasonableness of its fuel costs in future fuel clause adjustment proceedings and in its next IRP. Initial Comments at 5-7. OTP asserts in its Reply that "Sierra Club and Fresh Energy…seek to convert this review of self-commitment and self-scheduling of large baseload generation facilities into a prudency and resource planning review, issues that greatly exceed the scope and intent of this proceeding." OTP Reply at 5. OTP further contends that:

> 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 prudency 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.

Id. at 7.

Similarly, in response to our recommendation that the Commission require utilities to identify any proposed new coal contracts and submit them for prudence review in fuel clause adjustment proceedings, OTP asserts that it "is unaware of any statute, rule or practice mandating pre-execution prudency review of fuel contracts," and that "[i]mposing such a standard on all utilities in the future would seem to require a rule-making or other process, where the costs and benefits of added regulatory review, and the scope of that review, would be evaluated." *Id.* at 20.

Sierra Club disagrees with OTP's contention that a rulemaking is needed in order for the Commission to take the actions we have recommended. Nor do we seek to convert this docket into a resource planning proceeding. To the contrary, we specifically suggest that some of our recommendations be incorporated into the utility's next IRP proceeding.

As to our recommendation that the Commission consider cost disallowances in OTP's next fuel clause adjustment proceeding, our recommendation falls squarely within the scope of the Commission's jurisdiction. As observed in our Initial Comments, the Commission has the authority and the duty to ensure utilities' fuel costs are reasonable, pursuant to Minn. Stat. § 216B.16, Subd. 6 and Minn. R. 7825.2390. The reasonableness of all fuel costs is evaluated in fuel clause adjustment dockets; the current proceeding initially arose out of those dockets.[5] OTP does not point to a more appropriate docket in which these issues should be addressed, but instead appears to take the position that the Commission's role should be limited to "inform[ing] its participation in the Organization of MISO States… thereby contributing to an even more efficient MISO market that may, in time, facilitate multi-day commitments." *Id.* at 6. Limiting the Commission's action in this manner would in no way ensure the reasonableness of the utility's fuel costs, as required by Minnesota law.

OTP also opposes our recommendation that the Commission take steps to address its 25-year coal fuel supply contract for Coyote. As we noted in our Initial Comments, in 2012, OTP entered a fuel supply contract that will cost customers approximately [**TRADE SECRET DATA BEGINS**…**TRADE SECRET DATA ENDS**] in fixed costs over its life, without first evaluating the availability of lower cost alternatives. Initial Comments at 22. It is highly concerning that the utility does not appear to believe it has an obligation to ensure the prudence of such significant expenditures on behalf of its customers. Our Initial Comments present a reasonable and appropriate path forward for evaluating whether the contract is in customers' interest: First, the Commission should order Otter Tail to evaluate whether continued

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[5] *Order Approving Compliance Filings, In the Matter of an Investigation into the Appropriateness of Continuing to Permit Electric Energy Cost Adjustments*, Docket No. E-999/CI-03-802, Nov 5, 2019, at 4.

participation in that contract is in customers' interest in its next Integrated Resource Plan (IRP). Second, because the Commission has never reviewed the prudence of the contract, any imprudent associated costs should be disallowable in fuel cost adjustment proceedings. *Id.* at 6.

D. Uneconomic dispatch above the minimum operating level

In our Initial Comments, we expressed concern that "the data OTP provides in Attachment 2 to its Annual Compliance Filing show a substantial number of hours in which Big Stone and Coyote uneconomically cleared for dispatch in the day-ahead market above their minimum operating levels." Initial Comments at 18. This dispatch behavior was also identified by the Department of Commerce: "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." DOC Reply at 6.

In its Reply Comments, OTP first responded that this phenomenon is due in part to MISO's operations of OTP's units. OTP Reply at 8. We are concerned with this framing, and the implication by OTP that this phenomenon is caused by MISO making operational and dispatch decisions beyond OTP's control and understanding that incur losses to ratepayers. OTP then provides nine potential reasons why the phenomenon of MISO dispatching above the minimum output might occur even when a unit is not economic. *Id.* at 8-11.

While we appreciate OTP's efforts to outline its reasons for this phenomenon, all of its explanations remain high-level, and OTP does not provide quantitative data showing the frequency with which each of the justifications it offered occurs. It is our view that the information offered by the Company remains insufficient to assure the Commission that OTP is operating its coal plants in a manner that is maximizing customer benefit.

To that end, we recommend that the Commission require OTP to:

1. Better explain why its units are dispatching uneconomically above their minimums more broadly;

2. Take a number of one-week samples in which this phenomenon is observed and, in each hour, explain which of the nine reasons account for dispatch above the minimum when uneconomic. The series of one-week samples should cover all reasons listed;

3. Describe – at least qualitatively, but preferably quantitatively – how frequently each of the nine reasons occurs within the reporting period; and

4. Going forward, keep a record with an explanation for each instance of uneconomic dispatch above the economic minimum that lasts for more than four hours.

We now explore one of the nine potential reasons in more detail. In its Reply Comments, OTP states:

> 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***.**

OTP Reply at 9 (emphasis added.)

In response to this argument, we reiterate a recommendation from our Initial Comments that the Commission should require OTP to justify this last, emphasized sentence in its next IRP. Specifically, we stated: "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." Initial Comments at 31.

OTP further defends the trend of uneconomic dispatch shown in hourly data by asserting that joint ownership makes hourly analysis challenging. OTP begins by explaining:

> 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.[6]

It is unclear how joint ownership impacts the ability for OTP to quantify production costs on an hourly basis. Fuel cost and variable O&M should be plant-specific, not owner-specific. Therefore, joint ownership should have no impact on this.

OTP continues:

[6] OTP Reply Comments at 12.

> 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.[7]

While it is reasonable that each owner would have varying levels of demand across hours, OTP must have records of, and should provide, each owner's demand and commitment and dispatch decision, as well as the dispatch instructions of SPP and MISO.

OTP finishes with the following:

> 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.[8]

Plant operational costs, including fuel, variable O&M, and start-up and shut down costs, do not vary across owners or markets. LMPs are known and reported for both MISO and SPP. The commitment and dispatch decision for each owner should also be known and recorded. This is to say that, on an hourly basis, OTP should have record of (and has already provided some of this information in this docket):

1. Plant cost;
2. MISO LMP;
3. Quantity dispatched into MISO;
4. SPP LMP;
5. Quantity dispatched into SPP;
6. Dispatch and commitment decisions by each owner; and
7. Quantity committed and dispatched by each owner.

We recognize that the structure of joint ownership makes operations and allocation of costs more complicated than under a sole ownership model. However, it is still incumbent on OTP to provide clear information and sufficient, transparent data that allow the Commission and intervenors to assess the reasonableness and prudence of the Company's operational practices.

[7] *Id*.
[8] *Id*.

We reject the implication that OTP's uneconomic hourly commitment and dispatch decision cannot be scrutinized because joint ownership makes it too complicated to accurately account for hourly net revenues. It is critical for the Commission and intervenors to have access to information that allows us to understand whether (a) a plant is actually being dispatched economically but the hourly data does not reflect this because of joint ownership, or (b) the plant is sometimes being dispatched uneconomically because a co-owner is regularly dispatching the plant uneconomically, but the decision is out of OTP's control. This is critical information for the Commission to have to evaluate the prudence of operational decisions.

To that end, we recommend that OTP provide each of the seven items outlined above for each hour in the reporting period to assist the Commission and intervenors in understanding when OTP was directing commitment and dispatch decisions, and when co-owners were driving the decision. Additionally, we recommend that the Commission require OTP to demonstrate how the owners calculate monthly share in dispatch of generation and associated costs and revenue by providing spreadsheets with formulae intact.

E. Unavoidable self-commitment

We support the Department's recommendation that "data regarding unavoidable self-commitment should be added to the utilities' filings in the future." DOC Reply at 7. In its Reply Comments, OTP expresses that it does not support a requirement to provide such data. Once again, OTP bases its objection on challenges relating to joint ownership and multi-market dispatch. Specifically, it states:

> 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.

OTP Reply at 12. We disagree with OTP and recommend that the Commission require OTP to provide data regarding all instances of unavoidable self-commitment lasting more than four hours. We rely on definitions provided in OTP's reply comments for assistance with classifying self-commitment decisions that are "unavoidable":

1. When one of the other co-owner's share of the plant is committed by MISO or SPP and thus OTP is contractually obliged to update its commitment status to self-committed;

2. When one of the other co-owners calls for its share of the plant and thus OTP is contractually obliged to update its commitment status to self-committed; and

3. When the co-owners determine it is in the customers best interest to self-commit the unit to avoid cycling costs or to maintain plant operational and safety integrity.

This data is important to understanding the impact of co-ownership on the amount of uneconomic dispatch, and could be incorporated into OTP's next IRP as part of its demonstration of why co-ownership remains in its customers' interests.

F. Co-ownership structure

In our Initial Comments, we stated: "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)." Initial Comments at 5.

In its Reply Comments, OTP claims this is inaccurate, and goes on to state that:

> 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.

OTP Reply at 16. Once again, OTP is asserting that it can only make certain decisions when in agreement with the other co-owners. In response to these claims, we reiterate our recommendation that the Commission require OTP to justify in its next IRP the prudence of continued operation of its units as a joint owner. This includes answering specific questions with in-depth responses and quantitative analysis, such as:

- Justifying why the co-ownership structure is most beneficial to OTP's customers if it prevents OTP from offering its unit economically.

- Quantifying the economic value the co-ownership structure provides to customers.

This is especially important considering OTP's claim that fuel cost disallowance goes beyond the scope of this proceeding:

> Sierra Club's recommendation to disallow certain portions of fuel costs, suggesting that those costs are unreasonable or imprudent…*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.*

OTP Reply at 19 (emphasis added). We agree that, based on OTP's descriptions in its Compliance Filing and in its Reply Comments, operating a coal plant with multiple co-owners, in multiple states and multiple markets, presents challenges. But this only further emphasizes our recommendation that OTP, in its next IRP, justify its co-ownership structure as being in the economic interest of its ratepayers. Finally, we reiterate our recommendation to the Commission that OTP explore alternative, potentially lower cost and more flexible resource options for energy and capacity.

G. Reasonableness of requiring utilities to use forward-looking analyses

In our Initial Comments, we recommended that the Commission require that utilities "establish a clear and auditable mechanism of determining whether its commitment decisions are in the best interests of ratepayers." Initial Comments at 30.

In its Reply Comments, OTP states that this recommendation is "unreasonable, appears to be based on unsupported assumptions, and exceeds the scope and intent of this docket." OTP Reply at 17. OTP states that this is unreasonable for several reasons. We respond specifically to two of them.

First, OTP states that: "The requested short-term LMP forecast is very difficult to predict." *Id.* We acknowledge that it is difficult to develop LMP forecasts; however, this fact does not excuse the Company from utilizing all reasonable tools available to ensure its behavior is reasonable and prudent. Furthermore, this process is used by other utilities. For example, Duke Energy Indiana[9] and Indianapolis Power & Light Company[10] both produce daily analyses that inform unit commitment decisions. From our conversations with other Minnesota stakeholders, it is our understanding that Xcel also uses forward-looking analyses to inform commitment and dispatch decisions.

Furthermore, OTP can and should develop frequent retrospective analyses to evaluate the accuracy of its forward-looking analyses. These retrospective analyses should evaluate the

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[9] IURC Cause No. 38707 FAC 123, IURC Cause No. 38707 FAC 124.
[10] IURC Cause No. 3870C FAC 127.

performance of OTP's unit commitment decisions in the MISO market by comparing actual incurred hourly costs and revenues alongside the forecasts from its forward-looking analyses. This will help refine how the utility relies on forward-looking analyses to inform its unit commitment decisions.

Second, OTP states that: "Otter Tail, along with the other co-owners, qualitatively forecast future market conditions to optimize both economic and operational plant performance." OTP Reply at 18. While we commend OTP and the other co-owners for developing qualitative forecasts of future market conditions, we continue to recommend that OTP develop quantitative forecasts in addition to its qualitative forecasts.

Lastly, we would like to acknowledge that we neither expect nor request OTP's commitment decisions to perfectly align with its forward-looking analyses. There are likely instances in which it makes sense for OTP to make commitment decisions that differ from those suggested by its forward-looking analyses. Rather, we clarify our position by stating that we are asking for OTP to demonstrate it is making prudent, analysis-informed commitment decisions by performing and maintaining for review daily and weekly forward-looking analyses, and keeping thorough records when its commitment and dispatch decisions appear uneconomic.

IV. Restatement of Recommendations

- In the absence of a multi-day commitment market at MISO, the Commission should require Otter Tail Power 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 daily and weekly forward-looking evaluations of unit commitment strategies. OTP should be required to utilize day-ahead locational marginal price (LMP) forecasts, unit operational costs, and unit start-up and shut-down costs to determine on at least a day-ahead basis, taking the full 24-hour period of expected revenues into account, whether to designate a unit as economic or must-run, or to take it offline. OTP should be required to retain this analysis to allow the Commission to evaluate whether a unit's commitment decision maximizes its economic value to OTP's customers.

- The Commission should indicate that in OTP's next Fuel Clause Adjustment True-Up proceeding, it will disallow recovery from ratepayers any fuel and variable operations and maintenance (O&M) costs incurred as a result of OTP's uneconomic dispatch of Big Stone or Coyote, where not supported by the forward-looking analyses described above or otherwise justified. This does not mean to say that the forward-looking analyses must always match the commitment decision. Rather, the Company should keep records sufficient to explain its decision-making process for periods in which both of the following conditions are true: (1) the Company's operations deviate from the actions that the forward-looking analysis suggested it should take, and (2) the Company incurs net operational losses over a period of time greater than the units' cool-down time to warm plus warm startup time. The reasonableness of unit commitment practices should be evaluated based on an analysis that incorporates predictive maintenance costs—and any other excluded costs that scale with and are impacted by plant operations—into the variable costs used to make unit commitment decisions.

- 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.
- With respect to Otter Tail's long-term fuel supply contract for the Coyote plant, the Commission should consider two actions:

    1. The Commission should order Otter Tail to evaluate whether continued participation in that contract is in its customers' interest in its next Integrated Resource Plan. Given that Otter Tail is required to file an analysis of the impact of regional haze regulations on Coyote's economics by the end of the year, this analysis would ideally be incorporated into that filing.

    2. Because the Commission has never reviewed the prudence of the contract, any imprudent associated costs should be disallowable in the utility's fuel clause adjustment true-up proceeding. As discussed in detail in our Initial Comments, one approach for addressing this would be to disallow any costs (including fuel costs that Otter Tail treats as fixed) incurred above the market cost of energy during the hours Coyote is operating.

- 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.
- OTP should also consider reducing the minimum operating levels at Big Stone and Coyote.
- 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.
- With respect to the phenomenon of OTP's units dispatching uneconomically above their operating minimums, it would be helpful if OTP were required to:

1. Better explain why its units are dispatching uneconomically above their minimums more broadly;

2. Take a number of one-week samples in which this phenomenon is observed and, in each hour, explain which of the nine reasons account for dispatch above the minimum when uneconomic. The series of one-week samples should cover all reasons listed;

3. Describe – at least qualitatively, but preferably quantitatively – how frequently each of the nine reasons occurs within the reporting period; and

4. Going forward, keep a record with an explanation for each instance of uneconomic dispatch above the economic minimum that lasts for more than four hours.

Sierra Club respectfully requests the Commission adopt the recommendations above.

Dated: July 23, 2020

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, S. Laurie Williams, hereby certify that I have this day, served or caused to be served copies of the following document on the attached list of persons by electronic filing or e-mail.

Sierra Club Surreply Comments: Otter Tail Power 2020 Annual Compliance Filing

Docket No. E999/CI-19-704

Dated this 23rd day of July 2020

/s/ S. Laurie Williams
S. Laurie Williams

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Service List Member Information

Electronic Service Member(s)

Last Name	First Name	Email	Company Name	Delivery Method	View Trade Secret
Anderson	Christopher	canderson@allete.com	Minnesota Power	Electronic Service	No
Archer	Alison C	aarcher@misoenergy.org	MISO	Electronic Service	No
Commerce Attorneys	Generic Notice	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	Electronic Service	Yes
Ferguson	Sharon	sharon.ferguson@state.mn.us	Department of Commerce	Electronic Service	No
Gerhardson	Bruce	bgerhardson@otpco.com	Otter Tail Power Company	Electronic Service	No
Gleckner	Allen	gleckner@fresh-energy.org	Fresh Energy	Electronic Service	No
Havey	Kim	kim.havey@minneapolismn.gov	City of Minneapolis	Electronic Service	No
Larson	Douglas	dlarson@dakotaelectric.com	Dakota Electric Association	Electronic Service	No
Oehlerking Boes	Leann	lboes@mnpower.com	Minnesota Power	Electronic Service	No
Olson	Randy	rolson@dakotaelectric.com	Dakota Electric Association	Electronic Service	No
Residential Utilities Division	Generic Notice	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	Electronic Service	Yes
Ricker	Isabel	ricker@fresh-energy.org	Fresh Energy	Electronic Service	No
Seuffert	Will	Will.Seuffert@state.mn.us	Public Utilities Commission	Electronic Service	Yes
Sweet	Lynnette	Regulatory.records@xcelenergy.com	Xcel Energy	Electronic Service	No
Tommerdahl	Stuart	stommerdahl@otpco.com	Otter Tail Power Company	Electronic Service	No
Tulloh	Brian	btulloh@misoenergy.org	MISO	Electronic Service	No

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