

Staff Briefing Papers

Meeting Date June 29, 2023

Agenda Item 3*

Company Otter Tail Power Company

Docket No. E-017/AA-21-311

In the Matter of Otter Tail Power Company's Petition for Approval of the Annual Forecasted Rates for its Energy Adjustment Rider, Rate Schedule 13.01

Issues Should the Commission approve the true-up of Otter Tail's annual costs and collections recovered through Otter Tail's Energy Adjustment Rider (EAR)?

Staff Robert Manning Robert.manning@state.mn.us 651-201-2197

✓ **Relevant Documents**

Date

Compliance Filing – OTP Petition – Otter Tail (Public & Trade Secret) February 28, 2023

Comments – Department of Commerce (Public & Trade Secret) April 11, 2023

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BACKGROUND

On February 28, 2023, Otter Tail Power Company (Otter Tail or the Company) filed its Petition to true-up its January 1, 2022, through December 31, 2022 costs and collections recovered through its Energy Adjustment Rider (EAR) under Rate Schedule 13.01. Otter Tail seeks recovery of \$9,408,291 over the 12-month period from September 2023 through August 2024.

On April 11, 2023, the Minnesota Department of Commerce, Division of Energy Resources (Department or DOC) filed comments recommending approval of Otter Tail's petition.

DISCUSSION

I. Otter Tail Initial Filing

A. Key Results

Otter Tail stated that its system-wide recoverable actual EAR costs for 2022 were \$144,347,469, as compared to forecasted costs of \$104,111,271. This amount is adjusted to include the proposed return of the 2022 portion of MISO Planning Resource Auction (PRA revenues) received from the 2022/2023 planning year auction, as well as recovery of the cost of generation plant reagent expenses and the return for revenue from the sale of steam and water from Big Stone to Poet Biorefining. These changes are effective July 1, 2022, per the Commission Order in Otter Tail's most recent rate case¹.

Table 1 shows the total 2022 actual cost per MWh was \$25.89, or 24.58% higher than forecast. Total 2022 average costs were 38.65% over forecast, and total system sales were 11.30% over forecast. Average on-peak and off-peak locational marginal prices (LMPs) were almost double forecast (99.41% and 90.5% above forecast respectively), and the overall average cost of market purchases and purchased power agreements (PPAs) was 60.8% higher than forecast.

¹ Docket No. E-017/GR-20-719, *In the Matter of the Application of Otter Tail Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota*, FINDINGS OF FACT, CONCLUSIONS, AND ORDER, February 1, 2022, p. 67, Ordering Paragraphs 32 & 33.

Table 1 – 2022 FCA Summary (Total System)

	Actual	Forecast	Variance	Variance %
Average Cost per MWh	\$25.890	\$20.783	\$5.107	24.58%
MWh Sales Subject to FCA	5,574,424	5,009,474	565,949	11.30%
Total Cost (Fuel & Purchased Power)	\$144,347,469	\$104,111,271	\$40,236,198	38.65%
Average On-Peak LMP Prices @ OTP.OTP	\$54.48	\$27.32	\$27.16	99.41%
Average Off-Peak LMP Prices @ OTP.OTP	\$37.11	\$19.48	\$17.63	90.50%
MWh's of PPAs and Market Purchases	2,921,421	2,697,570	223,851	8.29%
Total Cost of PPAs and Market Purchases	\$119,095,196	\$68,415,446	\$50,679,750	74.08%
Average Cost of PPAs and Market Purchases	\$40.77	\$25.36	\$15.41	60.80%

B. 2022 Total Costs Significantly Higher than Forecast

Table 2 summarizes Otter Tail's actual 2022 monthly FCA costs compared to forecast.

Table 2 – 2022 Monthly Fuel & Purchased Power Costs Forecast to Actual (Total System)

Month	Actual	Forecast	Variance
January 2022	\$11,036,271	\$10,227,866	\$808,404
February 2022	\$10,681,168	\$10,834,669	(\$153,501)
March 2022	\$10,764,370	\$9,473,628	\$1,290,742
April 2022	\$8,001,479	\$8,303,518	(\$302,039)
May 2022	\$11,216,014	\$7,401,181	\$3,814,833
June 2022	\$14,931,102	\$7,117,994	\$7,813,108
July 2022	\$11,563,597	\$7,886,305	\$3,677,292
August 2022	\$12,002,917	\$8,259,675	\$3,743,242
September 2022	\$11,020,893	\$7,123,672	\$3,897,221
October 2022	\$10,296,892	\$7,514,539	\$2,782,353
November 2022	\$11,241,663	\$8,978,483	\$2,263,180
December 2022	\$21,591,101	\$10,989,740	\$10,601,361
Total	\$144,347,469	\$104,111,271	\$40,236,198

C. 2022 Sales Higher than Forecast

Otter Tail's 2022 FCA forecast was developed using the most current sales forecast available at

the time of its May 1, 2021 initial filing. For 2022, overall kWh sales were up 11.3% relative to forecast as Otter Tail saw material load growth in all jurisdictions across its system in 2022. Heating Degree Days were 112.5% of normal, and Cooling Degree Days were 113.5% of normal in 2022, indicating that weather played a role in sales growth.

Table 3: 2022 Monthly kWh Sales Forecast to Actual – Total System

Month	Actual	Forecast	Variance
January 2022	529,048,149	516,873,302	12,174,847
February 2022	521,550,256	471,590,712	49,959,544
March 2022	512,979,140	456,164,950	56,814,190
April 2022	463,532,875	401,011,353	62,521,522
May 2022	451,829,905	370,125,163	81,704,742
June 2022	408,186,786	359,944,884	48,241,902
July 2022	404,127,303	380,025,386	24,101,917
August 2022	425,239,938	377,367,374	47,872,564
September 2022	452,105,540	357,634,608	94,470,932
October 2022	429,364,579	380,642,809	48,721,770
November 2022	459,289,285	440,851,227	18,438,058
December 2022	518,170,378	497,242,562	20,927,816
Total	5,575,424,134	5,009,474,330	565,949,804

D. Comparison of Forecasted Rates to Actual Rates per kWh

The actual average cost of fuel and purchased power for 2022 was \$0.025890 per kWh compared to a forecast of \$0.020783 per kWh. Otter Tail filed revised forecasts on July 27, 2022 for September 2022 through December 2022.

Table 4A – Total FCA Cost per kWh – Initial Forecast to Actual (Total System)²

Month	Actual	Initial Forecast	Variance
January 2022	\$0.020861	\$0.019788	\$0.001073
February 2022	\$0.020480	\$0.022975	(\$0.002495)
March 2022	\$0.020984	\$0.020768	\$0.000216
April 2022	\$0.017262	\$0.020706	(\$0.003444)
May 2022	\$0.024824	\$0.019996	\$0.004827
June 2022	\$0.037959	\$0.019775	\$0.018184
July 2022	\$0.030450	\$0.020752	\$0.009698
August 2022	\$0.030212	\$0.021888	\$0.008324
September 2022	\$0.026075	\$0.019919	\$0.006156
October 2022	\$0.025829	\$0.019742	\$0.006087
November 2022	\$0.026147	\$0.020366	\$0.005781
December 2022	\$0.043346	\$0.022101	\$0.021245

Table 4-B – Total FCA Cost per kWh – Revised Forecast to Actual (Total System)³

Month	Actual	Revised Forecast	Variance
September 2022	\$0.026075	\$0.022341	\$0.003734
October 2022	\$0.025829	\$0.029491	(\$0.003662)
November 2022	\$0.026147	\$0.027120	(\$0.000973)
December 2022	\$0.043346	\$0.024261	\$0.019085

E. 2022 Market Prices for Natural Gas and Energy were Significantly Higher

1. Natural Gas Prices

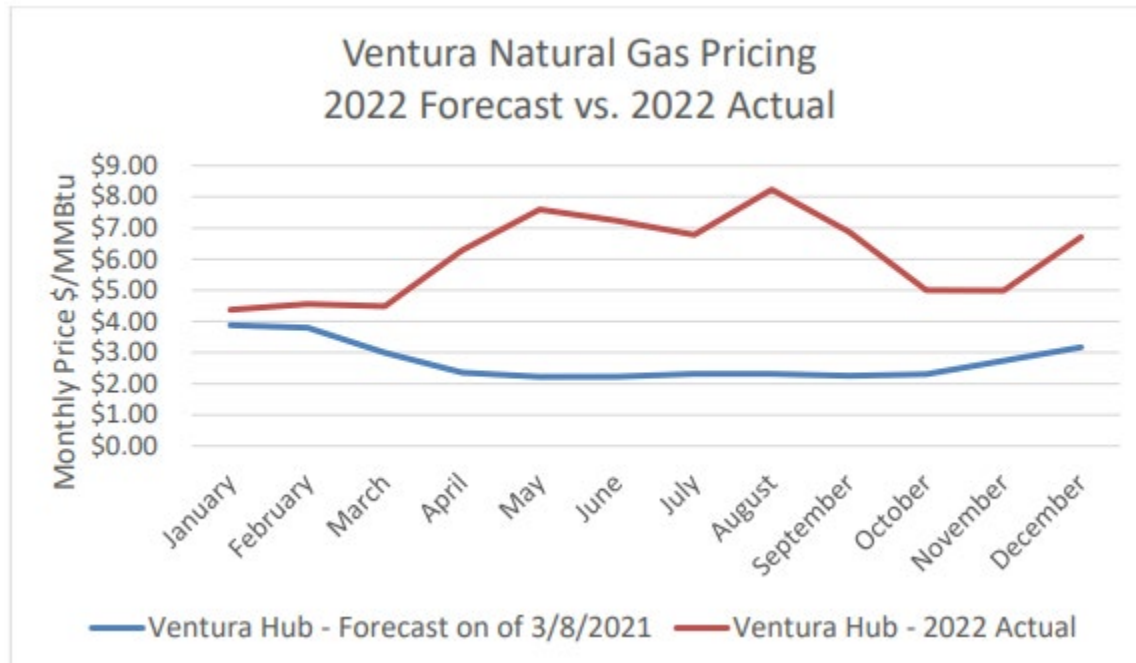
Natural gas generation facilities are often marginal units, or price-setting units, for Mid-Continent Independent System Operator (MISO) LMPs. At the time of the initial forecast, forward curves for natural gas projected relatively low, stable natural gas prices for 2022. After starting the year around \$4.00, gas prices, on average, were expected to stay between \$2.00 and \$3.00 per MMBtu much of the year. However, Ventura Natural Gas started the year between \$4.00 and \$5.00, rose through the spring to between \$7.00 and \$8.00, peaked over \$8.00 in August, and remained at or above \$5.00 through the rest of the year. Otter Tail observed that weather, domestic economic recovery, increased global demand, and uncertainty following the events in the Ukraine contributed to this run-up in pricing. The graph below compares 2022 actual average monthly Ventura Hub natural gas prices relative to forecasted prices from March 8, 2021, that were used as inputs in Otter Tail's FCA modeling to

² Initial Forecast from December 2, 2021, Order in Docket No. E-017/AA-21-311. Actual Data from Otter Tail Petition, p. 12.

³ Revised Forecast from Otter Tail Supplemental Filing of July 27, 2022, Docket No. E-017/AA-21-311. Actual Data from Otter Tail Petition, p. 12.

determine Otter Tail's initial forecasted rates.

Chart 1 – Natural Gas Pricing – 2022 Forecast vs 2022 Actual⁴



2. LMP Prices

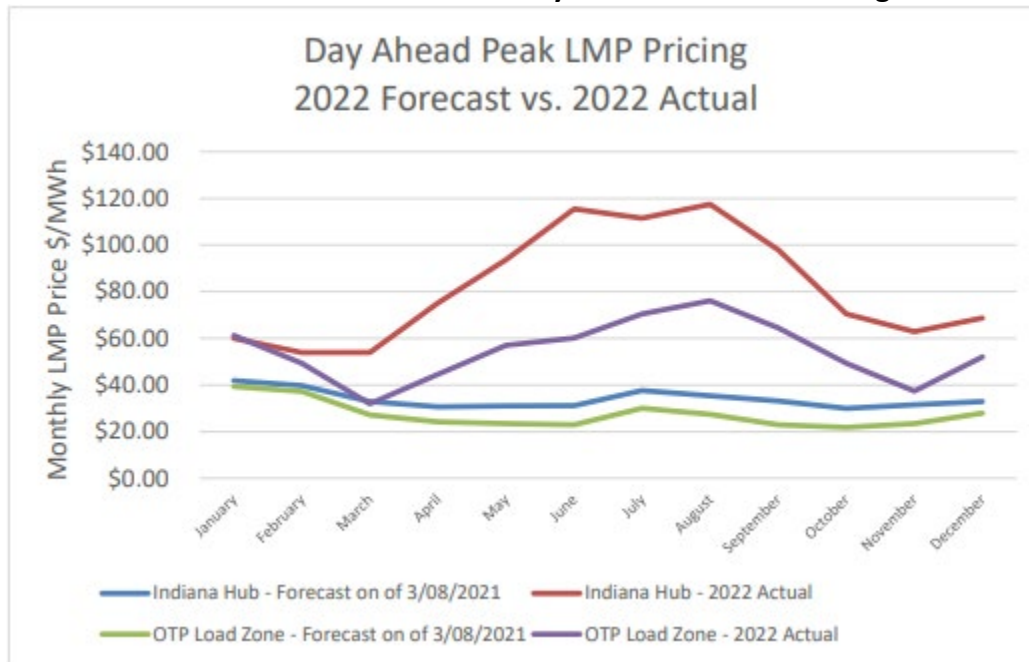
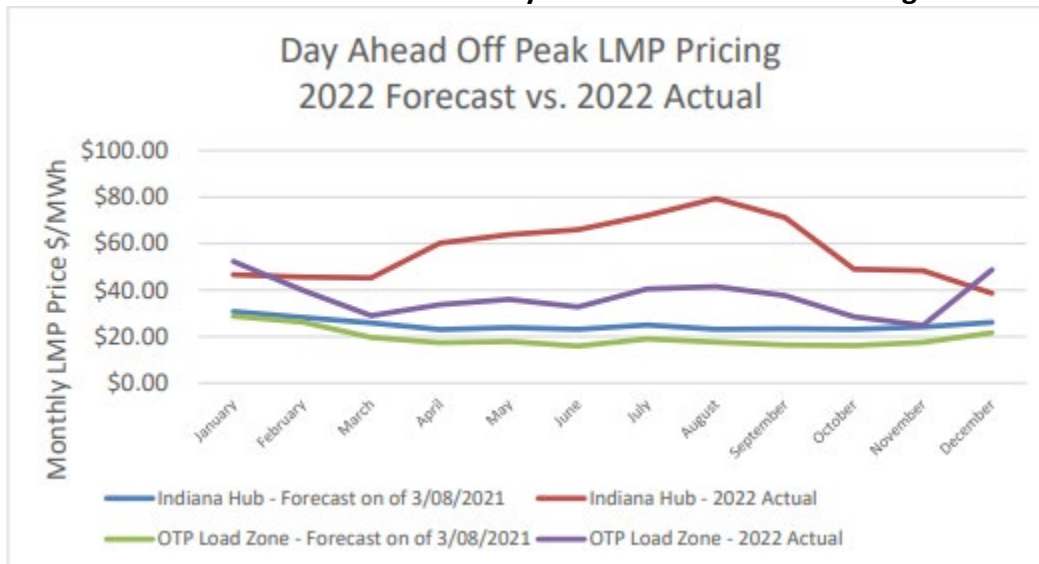
Forecast LMP prices are another key input to Otter Tail's model used to develop 2022 forecast rates. When market prices are lower than the fuel costs to generate, the model assumes market purchases will meet load, consistent with operations of the real market.

Otter Tail's forecast 2022 LMP prices for the Otter Tail load zone used as modeling inputs, utilized the daily forward Indiana Hub price curves published by Intercontinental Exchange, Inc. (ICE). Otter Tail analyzed historical pricing basis between the Indiana Hub and Otter Tail load zone, evaluated historical market conditions, and considered current and future market expectations to develop an Otter Tail load zone forecast. As the Indiana Hub actual pricing deviates from forecast, the Otter Tail load zone will similarly deviate. The 2022 forecast used the March 8, 2021 Indiana Hub forward price curve.

Actual average on-peak 2022 Indiana Hub pricing, compared to the March 8, 2021 Indiana Hub price curve, increased approximately 140.7%. Similarly, actual, on-peak Otter Tail load zone pricing, compared to the March 8, 2021 forecast, increased approximately 99.4%. Otter Tail attributed the increase in LMP pricing in part to the higher natural gas pricing discussed earlier.

Charts 2A and 2B illustrate the increase in 2022 actual pricing relative to forecast.

⁴ Otter Tail Petition, p. 14.

Chart 2A – Day ahead Peak LMP Pricing**Chart 2B – Day Ahead Off-Peak LMP Pricing**

F. Generation Output

The model used by Otter Tail to develop its fuel forecast modeled plant dispatch and associated fuel costs was based on operating parameters and associated costs of running the plants. In the model, dispatch is influenced by:

- Amount of load to be served, which varies seasonally.
- Energy acquired from long term PPAs or other forward purchases.
- Forecast LMP's.
- Plant availability, factored in through planned outages and estimated forced outage rates.

1. Baseload Generation Utilization

Actual 2022 baseload generation was higher than forecast by 22.2%, with associated fuel costs 18.1% higher than forecast. When LMP prices exceed plant fuel and dispatch costs, these units operate at higher levels, displacing market purchases. As shown in Table 5, most variation from forecast occurred at Big Stone:

Table 5: 2022 Baseload Generation – Forecast to Actual (Total System)

Generating Unit	Actual MWh's	Forecast MWh's	Variance	Variance %
Big Stone Plant	1,023,430	711,672	311,758	43.8%
Coyote Station	795,864	776,954	18,910	2.4%
Total Baseload Generation – MWh's	1,819,294	1,488,626	330,668	22.2%
Total Baseload Fuel Costs	\$44,531,997	\$37,702,195	\$6,829,802	18.11%

Big Stone experienced four forced outages in 2022, the longest of which extended from November 5, 2022 into 2023. Coyote Station had 6 forced outages. Otter Tail provided a complete listing of forced outages in its Attachment 13 (Trade Secret).

2. Wind Generation

Output from Otter Tail-owned wind generation was 8.7% lower than forecast for 2022. A majority of the variance was attributed by Otter tail to Merricourt Wind which, as shown in Table 6, was 13.5% below forecast:

Table 6: 2022 OTP Owned Wind Generation – Forecast to Actual (Total System)

	Actual MWh's	Forecast MWh's	Variance	Variance %
Langdon Wind	136,370	142,278	(5,908)	(4.3%)
Ashtabula Wind	145,669	151,886	(6,217)	(4.3%)
Luverne Wind	176,493	176,808	(315)	(0.18%)
Merricourt Wind	575,653	653,931	(78,278)	(13.5%)
Total Wind	1,034,185	1,124,903	(90,718)	(8.7%)

3. Gas & Oil Peaking Units, Hydro & Solar Generation

A small percentage of Otter Tail's generation comes from natural gas peaking units at Solway MN and Astoria, SD, several small oil peaking plants, and a small amount of hydro and small-scale solar generation facilities. Since they were needed to meet load needs in their respective geographic areas, both Solway and Astoria Station were dispatched by MISO at significantly higher than forecast levels in 2022. 2022 forecast to actual generation for these facilities was provided in Attachment 3 (Trade Secret) of Otter Tail's filing.

G. Market Purchases and PPAs

Otter Tail had three long-term wind PPAs as part of its overall 2022 resource portfolio. Additional energy was procured through shared service agreements and small co-gen agreements. The majority of Otter Tail's purchased power is acquired via the MISO DA and RT markets, and certain forward bilateral energy purchases executed to hedge market price volatility during period of peak load or when generating units are unavailable during major planned outages.

Due to 2022 growth in system sales, total bilateral and market-based purchases were 9.7% higher than forecast. Overall purchased power was 8.3% higher than forecast. Overall purchased power costs were \$50.7 million higher than forecast, a significant increase in overall costs. Average cost was \$40.77/MWh, compared to an average forecast cost of \$25.36/MWh for the purchased power portfolio.

Table 7 summarizes these market purchases:

Table 7 – 2022 Purchased Power Summary

	Actual	Forecast	Variance	Variance %
Wind PPAs – MWh's	335,159	331,045	4,114	1.25%
Shared Load/Small Co-Gen – MWh's	135,992	132,311	3,681	2.75%
Bilateral and MISO Market Purchases – MWh's	2,451,248	2,234,214	217,034	9.7%
Total Purchases – MWh's	2,921,421	2,697,570	223,851	8.3%
Total Purchases – Cost	\$119,095,331	\$68,415,446	\$50,679,885	74.1%
Average Cost per MWh	\$40.77	\$25.36	\$15.40	60.7%

H. MISO and SPP Wholesale Market Changes⁵

As a participant in the MISO and the SPP energy markets, Otter Tail is subjected to nearly 70 different wholesale market charges and credits. Table 8 summarizes 2022 MISO and SPP Market Charges which, in aggregate, were forecasted to be an expense of approximately \$0.2 million, but resulted in a revenue credit of approximately \$17.9 million. The largest variance occurred in the MISO market where FTR hourly allocation and FTR auction revenue rights amount variances yielded the largest favorable variances which offset smaller unfavorable DA and RT congestion and loss amount variances.

**Table 8 – 2022 MISO and SPP Wholesale Market Charges – Forecast to Actual (Total System)
Expense (Revenue)**

	Actual	Forecast	Variance	Variance %
MISO Market Charges	(\$14,430,995)	\$1,479,146	(\$15,910,141)	(1,075.5%)
SPP Market Charges	(\$3,513,429)	(\$1,283,711)	(\$2,229,718)	173.7%
Total Market Charges	(\$17,944,424)	\$195,435	(\$18,139,859)	(9,280%)

I. Asset Based Sales

Otter Tail forecast approximately \$7.67 million in 2022 asset-based sales. Plant availability, market prices and load levels can all have an impact on when plants are dispatched to a point where units are net sellers into the market. For 2022, Otter Tail realized approximately \$17.66 million of asset-based sales that offset fuel costs and provided a margin, all of which is credited

⁵ Detail forecast to actual comparison of all charge-types for both MISO and SPP can be found in Attachment 3 (marked as Non-Public) in Otter Tail's filing.

back to customers through the fuel clause. Table 9 compares the 2022 asset-based forecast to actual results.

Table 9 – 2022 Asset Based Sales – Forecast to Actual (Total System)
Expense (Revenue)

	Actual	Forecast	Variance	Variance %
Fuel Costs of Asset Based Sales	(\$12,303,307)	(\$4,501,599)	\$(7,801,708)	(173.3%)
Margin on Asset Based Sales	(\$5,359,005)	(\$3,173,156)	(\$2,185,849)	(68.9%)
Total Asset Based Sales	(\$17,662,312)	(\$7,674,755)	(\$9,987,557)	(130.1%)

J. Ancillary Services and Wind Curtailments⁶

At times, Otter Tail's generation resources are called upon to provide Ancillary Services into the MISO Ancillary Services Market (ASM), for which it receives a revenue stream. Additionally, certain provisions within Otter Tail's wind PPAs call for curtailment payments to be made if the facilities are shut down due to negative LMPs. These revenues and costs are a small component of overall FCA costs. ASM revenues were 29.3% lower than forecast in 2022, totaling \$261,428, while curtailment costs were 454.9% higher than forecast, totaling \$752,133.

K. Reagent Expenses & Steam and Water Sales

A new component of Otter Tail's FCA this year is Reagent Expenses and Steam and Water Sales. In Otter Tail's last general rate case,⁷ Otter Tail petition to recover generating plant reagent expenses for Big Stone and Coyote Station in the EAR was approved by the Commission with an effective date of July 1, 2022. No forecast costs were included in the 2022 EAR rates because the request in the rate case was still pending when the 2022 EAR rates were developed. Total reagent costs from July to December were approximately \$1.36 million and are summarized on line 26 of Attachment 2 of Otter Tail's filing.

Otter Tail also was approved to include margins attributable to the sale of steam and water to Poet Biorefining through the EAR, effective July 1, 2022. Again, no margin was attributed to the EAR in forecast because the rate case was pending when rates were developed. \$587 thousand in steam and water sales are credited to the EAR in line 27 of Attachment 2 of Otter Tail's filing.

L. MISO Planning Resource Auction Revenues

In 2022, Otter Tail realized significant revenues from the sale of excess generating capacity into the MISO Planning Resource Auction (PRA). In total Otter Tail was awarded \$9.34 million for the

⁶ Details on ASM and Wind Curtailments can be found in Attachments 2 and 3 of Otter Tail's filing.

⁷ Docket No. E-017/GR-20-719.

June 2022 to May 2023 planning year. On December 29, 2022, the Commission in Docket E-17/AA-22-214, as part of its order establishing Otter Tail's 2023 EAR tariff rates, ordered Otter Tail to include known MISO PRA revenues and expenses in the calculation of 2023 EAR rates. Based on that order, Otter Tail included the actual 2022 portion of the 2022/2023 PRA revenues in this true-up. In total, Otter Tail received \$5,347,776 (Total System) of PRA revenues through MISO settlements.⁸

M. True-up Balance as of December 31, 2022

As shown in Table 10, total 2022 forecasted Minnesota EAR recovery was \$56,761,399 and actual energy costs were \$66,169,690, resulting in a \$9,408,291 under-recovery. Also, Otter Tail had a 2021 true-up under-recovery balance of \$700,126, of which it recovered \$696,535 from September 1, 2022 through December 31, 2022. Combined, these resulted in a \$9,411,883 under-recovery.

Table 10 – True Up Balance of December 31, 2022

Item	Amount
Total 2022 recovery from forecasted EAR	\$56,761,399
Actual 2022 energy costs (MN Share)	\$66,169,690
Over/(Under) Recovery	(\$9,408,291)
Estimated True-up balance from 2021	(\$700,126)
Amount collected during September 1 – December 31, 2022	\$696,535
Total Net Remaining True-up Over/(Under) Recovery	(\$9,411,883)

N. Annual True-Up Factor

As shown in Table 11, for the September 2023 through August 2024 recovery period, Otter Tail forecasted 2,582,695,225 kWh of sales. With a remaining under-recovery of \$9,411,883, the annual true-up factor is \$0.0036 per kWh.

⁸ MISO Settlements of PRA are provided by Otter Tail in Attachment 1, Line 3, Attachment 2, Line 28 of its filing. Detail on timing of revenues is in Attachment 19 of Otter Tail's filing.

Table 11 – True Up Factor Calculations

Line	Item	Amount
1	Over/(Under) Recovery for 2022 FCA Year	(\$9,408,291)
2	Cumulative Over/(Under) Recovery through 2021 FCA Year	(\$3,592)
3 = 1 + 2	Total Over/(Under) Recovery	(\$9,411,883)
4	Forecasted kWh Sept 2023 to Aug 2024	2,582,795,225
5 = 3 / 4	Annual True-Up Factor	(\$0.0036)

O. Annual Compliance/Reporting Requirements

Otter Tail provided information attesting to their compliance to the following Minn. Rules:

- 7825.2810 Annual Report of Automatic Adjustment Charges
- 7825.2820 Annual Auditor's Report
- 7825.2830 Annual Five-Year Projection
- 7825.2840 Annual Notice of Reports Availability
- Other items in compliance with various Commission Orders in various dockets.

II. Department of Commerce – Comments

The Department reviewed Otter Tail's petition to determine:

- whether the Company's actual 2022 energy costs were reasonable and prudent,
- whether the Company correctly calculated the 2022 true-up for its Energy Adjustment rates, and
- whether the Petition complies with the reporting requirements set forth in the applicable Minnesota Rules and Commission Orders.

A. Prudence and Reasonableness of Otter Tail's Actual 2022 Fuel/Purchased Power Costs

The Department found that Otter Tail had higher than forecast costs for 2022 because actual plant generation and purchased power costs, the two largest components of the Company's total net fuel/purchased power costs, were substantially greater than forecast. The Department requested additional information from Otter Tail to supplement the filed information.

In response to its Information Request, the Department received the following reply:

There are several factors which contributed to the increased cost of market purchases in 2022 relative to the forecasted costs Otter Tail estimated when initial forecasted rates were developed back in early 2021. As noted in the Initial Filing, those factors include changes in overall load (sales) relative to forecasted, the increase in the volume of purchases from the market, and finally, the change in the forecasted market prices (LMPs) compared to what happened to actual market prices in 2022.

Otter Tail has little control over the market price of natural gas. Gas production and storage levels, as well as actual and forecasted demand for gas, have a big impact on the price. In addition, actual and forecasted weather, as well as other factors such as geopolitical events, also impact gas markets and associated price. Otter Tail is required to serve its load and does so through existing generation resources and purchases from the market, which in 2022, saw increased volatility that was difficult to predict.

Using that information in combination with Otter Tail's initial filing, the Department concluded that it is reasonable that the Company's actual 2022 fuel/purchased costs recoverable through the EAR/FCA were more than forecasted.

Table 12 – Department Cost Analysis by Major Category⁹

Fuel/Purchased Power Cost, Credit, or Revenue Category	2022 Actual (A)	2022 Forecast (B)	Percentage Difference (A-B)/B
Plant Generation Costs	\$64,941,756	\$43,409,256	49.6%
Purchased Power Costs	\$119,095,331	\$68,415,446	74.1%
Wholesale Market Costs/(Credits)	(\$17,994,424)	\$195,434	(9,281.8%)
Wind Curtailment Costs	\$752,133	\$135,545	454.9%
Credit for Fuel Costs of Asset-Based Sales	(\$12,303,307)	(\$4,501,599)	173.3%
Revenue Margin on Asset-Based Sales	(\$5,359,005)	(\$3,173,156)	68.9%
MISO Ancillary Services Market Revenue	(\$261,428)	(\$369,656)	(29.3%)
Total Costs, Net Credits and Revenues	\$144,347,469	\$104,111,271	38.6%

B. Otter Tail's 2022 Fuel Clause Adjustment True-Up

The Department verified Otter Tail's 2022 true-up calculation followed the true-up methodology provided for in the Company's approved EAR Rate Schedule, Section 13.01. Specifically, the Department confirmed that the true-up calculation:

- Was based on a historical twelve-month period – January 1 through December 31, 2022

⁹ Department Table 2, p. 7, Retrieved from Otter Tail Attachment 2. Department Table does not sum because it excludes non-forecast categories for Steam Plant Reagents (\$1,361,325), Steam and Water Sales (\$-587,138), and PRA Revenues (\$-5,347,776).

- Compared the actual and approved forecasted costs and credits/revenues to arrive at the under-recovered amount.
- Divided the under-recovered amount by the forecasted Minnesota kWh subject to the EAR/FCA (forecasted kWh for the proposed twelve-month period during which the true-up factor would be applied, September 2023 through August 2024) to arrive at the true-up factor per kWh.

The Department concluded that Otter Tail correctly calculated its 2022 EAR/FCA true-up, and the proposed true-up charge amount is reasonable, recommended approval of the net true-up recovery amount of \$9,411,883, and the corresponding true-up charge of \$0.0036 per kWh to be effective on September 1, 2023.

C. Compliance with Reporting Requirements

The Department verified that Otter Tail's Petition included the information required per the following:

- Minnesota Rules 7825.2800 - 7825.2840, as revised on pages 3 - 4 and approved in Point 1 of the Commission's June 12, 2019 Order in Docket No. E999/CI-03-802.
- Annual FCA true-up general reporting guidelines, as outlined on page 7 and approved in Point 5 of the Commission's June 12, 2019 Order in Docket No. E999/CI-03-802.
- Annual FCA true-up reporting compliance matrix specific to Otter Tail, as shown in Attachment 2 of the March 1, 2019 joint comments and approved in Point 7 of the Commission's June 12, 2019 Order in Docket No. E999/CI-03-802.

The Department concluded that the Petition complied with the applicable reporting requirements and recommended the Petition's compliance reporting portions be approved.

D. Maintenance Expenses of Generation Plants and Correlation to Incremental Forced Outage Costs

In its February 6, 2008 Order,¹⁰ the Commission required all electric utilities subject to automatic adjustment filing requirements, with the exception of Dakota Electric, to include in future annual automatic adjustment filings the actual expenses pertaining to maintenance of generation plants, with a comparison to the generation maintenance budget from the utility's most recent rate case. This requirement stemmed from the drastic increase in Investor-Owned Utilities' (IOUs) outage costs during fiscal years 2006 and 2007. When a generation plant experiences a forced outage, the utility must replace the megawatt hours that plant would have otherwise produced. The utility typically replaces these lost megawatt hours through wholesale market purchases. The cost of those market purchases flows directly to ratepayers through the

¹⁰ ORDER ACTING ON ELECTRIC UTILITIES' ANNUAL REPORTS, REQUIRING FURTHER FILINGS, AND AMENDING ORDER OF DECEMBER 20, 2006 ON PASSING MISO DAY 2 COSTS THROUGH FUEL CLAUSE, In the Matter of the Review of the 2005 AAA of Charges for all Electric Utilities, Docket No. E-999/AA-06- 1208 (February 6, 2008) p. 9, ordering paragraph 18.

EAR/FCA. The high outage costs incurred by investor-owned utilities in fiscal years 2006 and 2007 raised questions as to whether the utilities were: (1) maintaining plants appropriately to prevent forced outages and (2) spending as much on plant maintenance as they were charging to their customers in base rates. The Commission agreed with the Department and the Large Power Interveners that “utilities have a duty to minimize unplanned facility outages through adequate maintenance and to minimize the costs of scheduled outages through careful planning, prudent timing, and efficient completion of scheduled work.”¹¹

The Department evaluated Otter Tail’s generation maintenance expense for 2021-2022 and found that actual spending on generation maintenance for 2021-2022 was within 2% of the test year approved for base rates in Docket No. E-017/GR-20-719. The Department also investigated the outages reported by Otter Tail, including the long outage at Big Stone, which began on November 5th and continued through the beginning of 2023. The Department was convinced by Otter Tail’s response to its inquiries that no human errors or avoidable incidents could be identified as the cause of the outage event. The Department further found that the replacement power costs reported by Otter Tail corresponding to the 2022 forced outages were reasonable under the circumstances.

Because (1) the amount of generation maintenance expense is linked to a utility’s forced outages, (2) utilities have an incentive to minimize generation maintenance expense between rate cases, and (3) utilities do not have a strong incentive to minimize the replacement power costs for which they receive flow through recovery, the Department noted that it intends to continue to monitor the difference between investor-owned utilities’ actual and approved generation maintenance expenses in future FCA true-up filings.

E. Conclusions and Recommendations

Based on its review, the Department concluded that:

- Otter Tail’s actual fuel/purchased power costs for 2022 were reasonable and prudent;
- Otter Tail correctly calculated its 2022 fuel clause adjustment true-up and the resulting true-up under-collection amount of \$9,411,883 is reasonable; and
- Otter Tail’s Petition complies with the applicable reporting requirements.

Therefore, the Department recommended that the Commission:

- Find that Otter Tail’s actual 2022 fuel/purchased power costs recoverable through the EAR/FCA were reasonable and prudent for 2022.
- Approve Otter Tail’s EAR/FCA 2022 true-up and the resulting under-recovery amount of \$9,411,883 and true-up charge of \$0.0036 per kWh.
- Allow Otter Tail to collect the \$9,411,883 true-up under-recovery over a twelve-month period, from September 1, 2023 through August 31, 2024.

¹¹ Commission’s February 6, 2008 Order in Docket No. E-999/AA-06-1208, page 5.

- Approve the compliance reporting portions of Otter Tail's Petition.

III. Staff Comments

Staff has reviewed and verified Otter Tail's calculations and concurs with the Company and the Department's recommendation that Otter Tail's Petition should be approved.

DECISION OPTIONS

Energy Adjustment Rider True-Up Compliance Filing

1. Accept and approve Otter Tail's 2022 energy adjustment rider true-up compliance filing (Otter Tail, Department)

OR

2. Do not accept and approve the Otter Tail's 2022 energy adjustment rider true-up compliance filing.

True-Up Amount and True-Up Recovery Factor

3. Authorize Otter Tail to recover the net 2022 under-collection of \$9,411,883 through a true-up charge of \$0.0036 per kWh.

True-Up Recovery Period

4. Allow Otter Tail to collect the \$9,411,883 true-up under-recovery over a twelve-month period, from September 1, 2023 through August 31, 2024.