


Staff Briefing Papers

Meeting Date	June 24, 2021	Agenda Item 4*
Company	Minnesota Power	
Docket No.	E-015/AA-19-302	
	In the Matter of the Petition of Minnesota Power for Approval of its 2020 Annual Forecast and Monthly Fuel Cost Charges	
Issues	Should Minnesota Power's 2020 Annual Fuel and Purchased Energy Charge Rider true-up be approved?	
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 Relevant Documents	Date
Minnesota Power – True-Up Report (Public and Trade Secret)	March 1, 2021
Department of Commerce – Comments (Public and Trade Secret)	April 15, 2021
Minnesota Power – Reply Comments	April 30, 2021

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

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I. Statement of the Issues

Should Minnesota Power's 2020 Annual Fuel and Purchased Energy Charge Rider true-up be approved?

II. Background

On March 1, 2021, Minnesota Power (MP, Company) filed its 2020 Annual True-Up of its Fuel and Purchased Energy Charge Rider (Petition) seeking to refund \$3,661,470 over a twelve-month period of September 2021 through August 2022.

On April 15, 2021, the Minnesota Department of Commerce – Division of Energy Resources (Department, DOC) filed comments recommending approval of Minnesota Power's Petition, with a minor modification. The Department recommended that the Company issue refunds over a four-month period from September 1 – December 31, 2021.

On April 30, 2021, Minnesota Power filed reply comments agreeing to issue refunds over the four-month period recommended by the Department.

III. Parties' Comments

A. Minnesota Power – Initial Filing

On November 14, 2019, the Commission approved Minnesota Power's January 2020 through December 2020 Forecasted Rates for its Rider for Fuel and Purchased Energy Charge (Fuel Adjustment Clause, FAC).

On June 30, 2020, the Commission approved Minnesota Power's Resolution Proposal Petition (Resolution Proposal) to resolve and ultimately withdraw the 2019 Rate Case.¹ In the Resolution Proposal, the Company proposed retaining rates set in the 2016 Rate Case but shifting the recovery of its energy and capacity asset-based wholesale sales margins (asset-based margins) from base rates to its fuel adjustment clause.

On July 1, 2020, Minnesota Power updated its 2020 FAC Forecasted rates to reflect the shift in the recovery of asset-based margins from base rates to the FAC.

On July 31, 2020, Minnesota Power submitted Reply Comments in the 2021 FAC Forecast Docket² indicating it would reduce the 2020 FAC Forecast by \$12.2 million over a four-month period beginning in September 2020. The \$12.2 million reduction was based on actual over-collection of fuel and purchases for the first six months of 2020.

¹ Docket Nos. E-015/GR-19-442 and E-015/M-20-429.

² Docket No. E-015/AA-20-463.

1. 2020 FAC Forecast to Actuals

Due to lower sales than forecasted, as shown in Table 1, approximately \$8.9 million of the \$12.2 million was applied in 2020 resulting in a remaining 2020 FAC true-up credit of \$3.7 million.

Table 1 – 2020 Over/(Under) Collection Credit

	Actual
2020 Forecast to Actual Over Collection	\$12,574,977
Less: Over Collection Credit Applied in 2020	\$8,913,507
Remaining Over Collection Credit	\$3,661,470

2. Fuel Costs

Table 2 provides a comparison of the 2020 FAC Forecast as updated on July 1, 2020 to include asset-based margins resulting from Minnesota Power’s Rate Case Resolution. Due to the COVID-19 Pandemic a number of the original assumptions included in the 2020 FAC Forecast ended up being different than actuals.

Table 2 – Fuel Cost Summary

2020 Forecasted Fuel	07/01/2020 Updated Forecast	2020 Actual	Difference
Company’s Generating Stations	\$103,248,928	\$76,291,182	(\$26,957,746)
Purchased Energy	\$198,857,794	\$193,346,294	(\$5,511,500)
MISO Charges	\$12,154,321	\$16,466,491	\$4,312,170
MISO Schedules 16, 17 & 24	(\$333,698)	\$164,843	\$498,542
Fuel Cost Recovered through Inter System Sales	(\$78,133,355)	(\$97,823,379)	(\$19,690,024)
Costs Related to Solar	(\$101,692)	(\$70)	\$101,623
Time of Generation and Solar Energy Adjustment	\$519,336	\$432,548	(\$86,788)
Total Cost of Fuel	\$236,211,634	\$188,877,910	(\$47,333,723)
Total Fuel Clause Sales (MWh)	9,764,655	8,436,693	(1,327,962)

3. Sales

Customer sales decreased by approximately 549,000 MWhs. The decrease is mainly due to the idling of several large industrial customers.

Inter System sales increased by 1,368,448 MWhs; however, they are non-FAC MWhs, these sales are removed from the Total Sales of Electricity. The main reason for the increase in Inter System sales is due to MISO market sales, liquidated sales, and retail and resale loss of load sales. Minnesota Power did not forecast market sales because every month they had forecasted market purchases. Liquidated Sales were also not forecasted because the model either decreases purchases or reduces generation instead of calculating liquidation. Actuals look at a

Day Ahead and Real Time market that can cause liquidation. Also, retail and resale loss of load sales were not anticipated when the 2020 forecast was filed. Also, due to the COVID-19 pandemic, large power customer load decreased in 2020 and sales were made to replace the loss of load. Table 3 provides a sales comparison summary.

Table 3 – Sales Comparison (MWh)

2020 Sales	Forecasted Sales	Actual Sales	Difference
Total Sales of Electricity	12,830,542	12,868,727	38,185
Residential	1,049,317	1,046,011	(3,306)
Commercial	1,254,765	1,134,254	(120,511)
Industrial	5,742,123	5,395,795	(346,328)
Municipals	1,355,385	1,340,290	(15,095)
Other Miscellaneous	381,531	316,907	(64,624)
Inter System Sales	3,047,421	3,635,470	588,049
Inter System Sales	(3,047,421)	(4,415,869)	(1,368,448)
Customer Intersystem Sales	847,016	780,399	(66,617)
Market Sales	2,194,233	3,112,893	918,659
Station Service	6,172	4,521	(1,650)
Sales due to Retail and Resale Loss of Load	0	518,056	518,056
Solar Generation & Purchases	(18,466)	(16,165)	2,301
Total	9,764,655	8,436,693	(1,327,962)

4. Generation

A major planned outage at Boswell Unit 4 originally planned for the spring of 2020 was postponed until the spring of 2021. Due to the COVID-19 pandemic Minnesota Power implemented certain protocols at the facility to minimize employee and community exposure. This movement allowed for additional time to plan for and mitigate the employee and community risks associated with executing the outage during the pandemic.

In July 2020 Hibbard Energy Center and in July and August 2020 Laskin Energy Center were picked up by MISO for reliability. Both Hibbard Energy Center and Laskin Energy Center ran more than planned in the forecast.

5. Market Prices

Average MISO Market price used in the 2020 FAC Forecast was higher than 2020 actuals.³

6. True-up Proposal

Per the timeline provided in Docket No. E-999/CI-03-802, Minnesota Power proposed that the 2020 FAC true-up be credited to customers over a 12-month period beginning September 1,

³ Table 4 (Trade Secret) in the Petition quantifies the difference.

2021. The true-up credit rate applied to customer bills will be based on forecasted sales for September 2021 through August 2022.

B. Department of Commerce – Comments

The Department noted that the purpose of Minnesota Power’s Petition is to (1) demonstrate that the Company’s fuel/purchased power costs for 2020 were reasonable and prudent, (2) request Commission approval of the Company’s proposal to apply the 2020 FCA \$3.7 million true-up refund to sales subject to the FCA over the period of September 1, 2021 - August 31, 2022, and (3) request Commission approval of the FCA true-up compliance reporting required by Minnesota Rules 7825.2800 – 7825.2840 and applicable Commission orders.

1. Prudency and Reasonableness of Minnesota Power’s Actual 2020 Fuel/Purchased Power Costs

As shown in Table 4, the Department noted that Minnesota Power’s relevant 2020 MWh sales were 13.6% less than forecasted, 2020 total system actual fuel/purchased power costs recoverable through the FCA were 20% less than the forecasted, and average fuel and purchased power costs, per MWh, were 7.4% lower.

Table 4 – Comparison of Select Forecasted to Actual Data for Minnesota Power’s 2020 Fuel Clause Adjustment True-Up

Data Description	Actual	Forecast	Percentage Difference
MWh Sales Subject to FCA	8,436,693	9,764,655	-13.6%
Total Cost of Fuel/Purchased Power	\$188,877,910	\$236,211,634	-20.0%
Average Fuel/Purchased Power Cost Per MWh	\$22.39	\$24.19	-7.4%

Table 5 breaks into several major categories the cost and offsetting credit/revenue components of Minnesota Power’s actual and forecasted 2020 fuel/purchased power costs recoverable through the FCA. MP’s actual 2020 plant generation and purchased power costs, the two largest components of the total net fuel/purchased power costs, were substantially less than forecasted. The lower energy market prices and the lower sales for large power customers resulted in lower generation and purchased power costs.

Table 5 - Minnesota Power’s Actual and Forecasted Total Company 2020 Fuel/Purchased Power Costs and Offsetting Credits/Revenues by Major Category

Fuel/Purchased Power Cost, Credit, or Revenue Category	2020 Actual	2020 Forecast	Percentage Difference
Plant Generation Costs	\$76,291,182	\$103,248,928	-26.1%
Purchased Power Costs	\$193,346,294	\$198,857,794	-2.8%
MISO Charges	\$16,466,491	\$12,154,321	35.5%
MISO Schedule 16, 17 & 24	\$164,843	(\$333,698)	-149.4%
Fuel Cost Recovered through Inter System Sales	(\$97,823,379)	(\$78,133,355)	25.2%
Costs Related to Solar	(\$70)	(\$101,692)	-99.9%

Fuel/Purchased Power Cost, Credit, or Revenue Category	2020 Actual	2020 Forecast	Percentage Difference
Time of Generation and Solar Energy Adjustment	\$432,548	\$519,336	-16.8%
Total Costs, Net Credits and Revenue	\$188,877,910	\$236,211,634	-20.0%
Total FCA Sales (MWh)	8,436,693	9,764,655	-13.6%

As shown in Table 3 above, customer sales decreased by approximately 549,000 MWhs, primarily due to the idling of large industrial customers and lower commercial/business sales. However, intersystem sales increased on a net basis by approximately 780,400 MWhs due to increases in MISO market sales, liquidated sales, and retail and resale loss of load sales. MP had 518,056 MWhs of sales with a related margin of \$515,793 that were a result of retail and resale loss of load. When MP’s customer demand nominations are lower than levels approved in the 2016 rate case, Minnesota Power is allowed to sell related MWhs in the wholesale market and keep related wholesale margins, as approved in Minnesota Power’s Rate Case Resolution in Docket Nos. E-015/GR-19-442 and E-015/M-20-429. The Department noted that, while it is helpful to both Minnesota Power and its customers to sell excess MWhs in the wholesale market to offset lower retail sales, the margin on retail sales is much larger than the margin on wholesale sales at this time.

Table 5 also shows that Minnesota Power’s 2020 MISO Charges were forecasted at \$12.2 million and actuals were \$16.5 million, or \$4.3 million (35.5%) higher. The Department noted that Minnesota Power’s Attachment No. 3 on page 5 shows a \$1.4 million increase in energy losses and a \$3.2 million increase in energy congestion costs, which appear to be a result of MP purchasing more day-ahead asset energy MWhs due to lower market prices compared to MP’s own generation and purchase power contracts for certain hours.

The Department’s Information Request 11 asked MP to explain how asset-based margins were returned to customers in 2020. To summarize MP’s response, the Department noted that, at a high level, asset-based margins were provided to customers in base rates for January through April 2020, then in the interim rate refund for the months of May and June 2020, and then in the FCA as part of Intersystem Sales for the remaining months of the year during July through December 2020. This transition, which moved asset-based margins from base rates in the rate case to the FCA, was a result of Minnesota Power’s Rate Case Resolution in Docket Nos. E-015/GR-19-442 and E-015/M-20-429.

In summary, Minnesota Power experienced lower retail but higher wholesale energy sales, substantially lower generation and purchase power costs, and higher MISO Charges during 2020, which contributed to the Company’s actual 2020 fuel/purchased power costs being less than forecasted. Based on Minnesota Power’s actual experience in 2020, the Department concluded that it is reasonable that the Company’s actual 2020 fuel/purchased costs recoverable through the FCA were less than those forecasted and recommended that the Commission find that Minnesota Power’s actual 2020 fuel/purchased power costs recoverable through the FCA were reasonable and prudent.

2. Minnesota Power's 2020 Fuel Clause Adjustment True-Up

Minnesota Power requested that the \$3,661,470 over-collection shown in Table 1 be refunded between September 2021 through August 2022. However, based on the Department's discussion with Minnesota Power, because of the small size of the refund, and as long as it's not considered precedential, the Company is willing to refund the \$3,661,470 over the period September to December 2021.

The Department concluded that Minnesota Power correctly calculated its 2020 FCA Rider over-collection of \$3,661,470. The DOC asked MP to confirm that it is willing to refund the \$3,661,470 over the period September to December 2021⁴ and to provide the corresponding refund factor rate for the FCA Rider in Reply Comments.

3. Compliance with Reporting Requirements

The Department verified that the Petition included the information required by 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.⁵
- 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.
- Annual FCA true-up reporting compliance matrix specific to Minnesota Power, as shown in Attachment 1 of the March 1, 2019 joint comments and approved in Point 7 of the Commission's June 12, 2019 Order.

The Department concluded that Minnesota Power's Petition complies with the applicable reporting requirements and recommended that the Commission approve the compliance reporting portions of the Company's Petition.

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

In its February 6, 2008 Order,⁶ 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

⁴ The Department's comments showed a 2020 date instead of 2021 and subsequently repeats this possible oversight. Since 2020 is now over, Staff presumes that 2021 is the correct year and has represented that correction in these briefing papers.

⁵ ORDER APPROVING ADDITIONAL DETAILS OF NEW FUEL CLAUSE ADJUSTMENT PROCESS, In the Matter of an Investigation into the Appropriateness of Continuing to Permit Electric Energy Cost Adjustments, Docket No. E-999/CI-03-802 (June 12, 2019)

⁶ 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

most recent rate case. This requirement stems from the drastic increase in Investor-Owned Utilities’ (IOUs) outage costs during FYE06 and FYE07. When a plant experiences a forced outage, the utility must replace the megawatt hours that plant would have otherwise produced, usually through wholesale market purchases. The cost of those market purchases flows directly to ratepayers through the FCA. The high outage costs incurred by investor-owned utilities in FYE06 and FYE07 raised the question of whether plants were being maintained appropriately to prevent forced outages and whether IOUs were spending as much on plant maintenance as they were charging 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.”

Table 13 summarizes Minnesota Power’s 2018-2020 generation maintenance expenses. As stated in the Department’s FYE18 and FYE19 analysis, MP is spending less on maintenance of their generation facilities than the \$42.0 million that was approved in their most recent rate case, and MP’s spending continued to fall to \$30.3 million in 2020.⁷

Table 6 – Comparison of Minnesota Power’s Generation Maintenance Expense (\$ Millions)

Approved Annual Generation Maintenance Expense, 2016 Rate Case Test Year	Actual 2018 – 2020 Average	Difference
\$42.0	\$32.0 ⁸	-22.8%

Due to the link between the level of maintenance expense and forced outages, and due to the different ratemaking incentives that have existed for maintenance expenses versus replacement fuel costs (incentive to minimize operations and maintenance expense between rate cases with little to no incentive to minimize replacement power costs because of flow through recovery), the Department intends to continue to monitor the IOUs’ actual expenses pertaining to maintenance of generation plants, with a comparison to the generation maintenance amount approved in MP’s most recent rate cases in future FCA true-up filings.

The Department noted that Minnesota Power’s 2018-2020 average maintenance spending was \$32.0 million compared to the \$42.0 million provided in MP’s rates. As a result, the Department considered MP’s incremental forced outage costs for 2020 as reported on MP’s Attachment Nos. 5 and 5.1. MP’s incremental forced outage costs of negative \$1.7 million were significantly lower than MP’s forecasted incremental forced outage costs of \$4.5 million, likely due to lower energy market prices. As a result of the low incremental forced outage costs for 2020, the Department will accept MP’s forced outage costs for the 2020 true-up. However, the Department will carefully review MP generation maintenance expense level in the upcoming rate case and correlation to incremental force outage costs in future FCA forecasts and true-up filings.

⁷ MP Attachment 10, page 2

⁸ Actual generation maintenance expense was \$36.1 million for 2018 and \$29.6 million for 2019.

5. Conclusion and Recommendations

Based on its review, the Department concluded that (1) Minnesota Power’s actual fuel/purchased power costs for 2020 were reasonable and prudent, (2) Minnesota Power correctly calculated its 2020 FCA Rider over-collection of \$3,661,470, and (3) Minnesota Power’s Petition complies with the applicable reporting requirements. Therefore, the Department recommended that the Commission take the following actions:

- Find that Minnesota Power’s actual 2020 fuel/purchased power costs recoverable through the FCA rider were reasonable and prudent for 2020.
- Find that Minnesota Power correctly calculated its 2020 FCA Rider over-collection of \$3,661,470. The Department asked MP to confirm, in reply comments, that it would be willing to refund the \$3,661,470 over the period September to December 2020 and to provide the corresponding refund factor rate for the FCA rider.
- Approve the compliance reporting portions of the Minnesota Power’s Petition.

C. Minnesota Power – Reply Comments

Minnesota Power agreed to the Department’s proposal to refund the 2020 FAC true-up over a four-month period and, as reflected in Table 7, provided revised true-up rates for the September 2021 through December 2021 period.

Table 7 – Comparison of Minnesota Power’s Generation Maintenance Expense (\$ Millions)

	Sep 2021	Oct 2021	Nov 2021	Dec 2021
2020 True Up Amount	(\$915,367)	(\$915,367)	(\$915,367)	(\$915,367)
2021 Forecasted Retail Sales (MWh)	540,222	554,680	562,561	614,400
2020 True Up Rates (¢/kWh)	(\$0.1694)	(\$0.1650)	(\$0.1627)	(\$0.1490)

IV. Staff Comments

Staff notes that the Department’s recommendation to refund Minnesota Power’s over-collection over a four-month period deviates from the standard practice of effecting fuel clause true-ups over a twelve-month period. However, that recommendation is consistent with recent Commission preference to refund ratepayers as quickly as possible so that those who are negatively impacted by the pandemic can receive financial relief sooner.

Finally, Staff has reviewed and verified Minnesota Power’s calculations and concurs with the Company and the Department’s recommendation that Minnesota Power’s Petition, as modified by the Department and agreed to by the Company, should be approved.

V. Decision Alternatives

1. Accept and approve Minnesota Power's 2020 Annual Fuel and Purchased Energy Charge Rider true-up compliance filing. (MP, DOC)
2. Do not accept and approve Minnesota Power's 2020 Annual Fuel and Purchased Energy Charge Rider true-up compliance filing.

True-Up Amount

3. Authorize Minnesota Power to refund the 2020 under-collection of \$3,661,470. (MP, DOC)
4. Authorize Minnesota Power to refund a different amount.

Timing of True-Up

5. Authorize Minnesota Power to refund the 2020 under-collection over a twelve-month period. (MP initial position)
6. Authorize Minnesota Power to refund the 2020 under-collection over a four-month period starting on September 1, 2021. (DOC, MP agreed)
7. Authorize Minnesota Power to refund the 2020 under-collection over a different time period.