

## Staff Briefing Papers

Meeting Date	June 30, 2022	Agenda Item 6*
Company	Minnesota Power	
Docket No.	<b>E-015/AA-20-463</b>	
	<b>In the Matter of Minnesota Power's Petition for Approval of the Annual Forecasted Rates for its Rider for Fuel and Purchased Energy Charge</b>	
Issues	Should Minnesota Power's 2021 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, 2022
Minnesota Power – Compliance Filing (Correction)	April 1, 2022
Department of Commerce – Comments (Public and Trade Secret)	April 14, 2022
Minnesota Power – Reply Comments	April 25, 2022

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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 2021 Annual Fuel and Purchased Energy Charge Rider true-up be approved?

## II. Background

On March 1, 2022, Minnesota Power (MP, Company) filed its 2021 Annual True-Up of its Fuel and Purchased Energy Charge Rider (Petition) seeking recovery of \$56.3 million. In order to mitigate the true-up's monthly impact, MP requested to recover this amount over the 17-month period of April 2022 to August 2023 rather than the standard September to August 12-month recovery period.

On April 1, 2022, Minnesota Power made a filing correcting the previous calculation of the 2021 true-up factors. The recovery amount did not change.

On April 14, 2022, the Minnesota Department of Commerce – Division of Energy Resources (Department, DOC) filed comments recommending approval of Minnesota Power's Petition, including the proposed 17-month recovery period.

On April 25, 2022, Minnesota Power filed reply comments agreeing with the Department's recommendations.

## III. Parties' Comments

### Minnesota Power – True-Up Filing

On December 22, 2020, the Commission approved Minnesota Power's January 2021 through December 2021 Forecasted Rates for its Rider for Fuel and Purchased Energy Charge (Fuel Adjustment Clause, FAC, FCA).

On July 30, 2021, Minnesota Power submitted a rate adjustment proposal to recover costs related to two significant unforeseen weather-related outages which impacted the Company's High Voltage Direct Current ("HVDC") Transmission line ("HVDC Event"). After a 30-day notice period and no objection to the rate adjustment, Minnesota Power increased the approved monthly fuel cost rates for September through December 2021 by \$8.4 million.

#### 1. 2021 FCA Forecast to Actuals

Minnesota Power's 2021 actual sales were 9,194,640 MWh and actual fuel costs were \$318.0 million. During 2021 Minnesota Power under collected fuel costs by \$55.8 million. Additionally, due to higher than forecasted sales during the September 2021 through December 2021 refund time period, Minnesota Power over refunded 2020 fuel costs by approximately \$500,000. As a result, the Company proposed a 2021 FCA True-up amount of \$56.3 million.

## 2. Fuel Costs

Table 1 compares of the updated 2021 FCA Forecast to actuals and shows that 2021 total sales, total cost of fuel and average cost of fuel were all significantly higher than forecasted.

**Table 1 – Fuel Cost Summary**

<b>2021 Forecasted Fuel</b>	<b>2021 Initial Forecast</b>	<b>2021 Updated Forecast</b>	<b>2021 Actual</b>	<b>Difference</b>
Company's Generating Stations	\$95,021,916	\$95,021,916	\$111,316,949	\$16,295,033
Purchased Energy	\$223,688,549	\$223,688,549	\$302,780,486	\$79,091,937
MISO Charges	\$24,860,016	\$24,860,016	\$64,223,807	\$39,363,791
MISO Schedules 16, 17 & 24	\$214,567	\$214,567	\$79,627	(\$134,940)
Fuel Cost Recovered through Inter System Sales	(\$127,835,782)	(\$127,835,782)	(\$160,780,204)	(\$32,944,422)
Costs Related to Solar	\$0	\$0	(\$1,366)	(\$1,366)
Time of Generation and Solar Energy Adjustment	\$432,654	\$432,654	\$386,358	(\$46,296)
Significant Events Filing – HVDC Costs	\$0	\$8,423,738	\$0	(\$8,423,738)
Total Cost of Fuel	\$216,381,920	\$224,805,658	\$318,005,657	\$93,199,998
Total Fuel Clause Sales (MWh)	8,188.0	8,188.0	9,195.0	1,007.0
Average Cost of Fuel	\$26.42	\$27.46	\$34.59	\$7.13

## 3. Sales

As shown in Table 2, customer sales increased by 1,006,676 MWhs, or 12%, over forecasted sales mainly due to increased industrial sales. When Minnesota Power submitted its initial forecast in May 2020 the Company anticipated that, due to the global pandemic, the lower sales experienced in 2020 would continue.

Inter System 485,749 MWhs sales increase was mainly due to increased Mid-Continent Independent System Operator (MISO) market sales, liquidated sales and customer sales. However, Inter System sales are removed from the Total Sales of Electricity as they are non-FAC MWhs. Minnesota Power used the RTSim production cost model to determine the volume and cost of MISO market sales used in the forecast. Actuals are looked at hourly so there will be hours where Minnesota Power is a net seller and hours when Minnesota Power is a net purchaser. Liquidated sales are not forecasted as the model either decreases purchases or reduces generation instead of calculating liquidation where actuals look at a Day Ahead and Real Time market that can cause liquidation. In its 2021 forecast, Minnesota Power assumed that, due to the pandemic, customers would nominate lower. However, actual 2021 nominations were closer to full production; therefore, less sales were needed due to Retail Loss of Load.

**Table 2 – Sales Comparison (MWh)**

<b>2021 Sales</b>	<b>Forecasted Sales</b>	<b>Actual Sales</b>	<b>Difference</b>
<b>Total Sales of Electricity</b>	<b>13,073,637</b>	<b>14,566,917</b>	<b>1,493,283</b>
Residential	1,034,896	1,043,665	8,769
Commercial	1,121,024	1,174,413	53,389
Industrial	4,592,122	5,542,593	950,471
Lighting	12,106	10,445	(1,661)
Municipal Pumping	45,550	47,423	1,873
Municipals	1,398,623	1,393,315	(5,308)
Inter System Sales	4,869,313	5,355,063	485,749
<b>Less: Inter System Sales</b>	<b>(4,869,313)</b>	<b>(5,355,063)</b>	<b>(485,749)</b>
Customer Intersystem Sales	764,396	1,067,722	303,326
Market Sales	2,236,937	3,412,055	1,175,118
Station Service	7,885	6,126	(1,759)
Sales due to Retail and Resale Loss of Load	1,860,096	869,160	(990,936)
<b>Less: Solar Generation &amp; Purchases</b>	<b>16,357</b>	<b>17,215</b>	<b>858</b>
<b>Total</b>	<b>8,187,964</b>	<b>9,194,640</b>	<b>1,006,676</b>

Minnesota Power, in Attachment 2, page 27, provided the following information regarding 2021 actual sales when compared to forecast:

- Residential sales were within 0.85% of the 2021 forecasted.
- Commercial sales were 4.8% higher than forecasted. Minnesota Power forecasted that the lower sales seen in 2020 would continue into 2021 due to the COVID-19 pandemic but Minnesota Power saw sales rebound in 2021.
- Industrial Taconites sales were 20.7% higher than forecasted. Minnesota Power forecasted that Taconite customers would operate at lower 2021 production levels; however, these customers operated at close to full production.
- Lighting sales were 13.7% lower than forecasted.
- Municipal Pumping were 4.1% higher than forecasted.
- Municipals sales were 0.4% lower than forecasted.
- Intersystem Sales were about 486,000 million MWhs above forecasted.

#### **4. Generation<sup>1</sup>**

As a result of increased customer sales, lower renewable production, and higher market prices, Minnesota Power saw higher energy production at its thermal generation fleet. Additionally, due to lower-than-expected wind and extreme drought conditions, MP's zero cost fuel resources saw a 14% decrease in generation.

<sup>1</sup> Trade Secret Table 3 in Minnesota Power's Petition summarizes MP's production, by plant.

On July 20, 2021, Minnesota Power transitioned Boswell Unit 3 to economic dispatch; however, the unit was consistently dispatched due to market conditions.

Due to the increase demand in generation, Minnesota Power, in September 2021, implemented coal conservation measures to ensure Boswell maintained an adequate fuel supply for the winter season. Those measures included testing of alternative fuels at Boswell, working with the MISO Independent Market Monitor to develop an effective offer structure to ensure the units were offered appropriately into the market, and utilization of the bilateral market to minimize customer exposure to the higher priced market. In late 2021, the Company was also able to secure additional coal, after working with its rail transportation provider to deliver volumes over its binding nomination in an effort to keep a consistent number of train deliveries through the remainder of 2021 and into 2022.

Minnesota Power, in Attachment 2, pages 27-29, provided the following information regarding 2021 generation costs when compared to forecast:

- Boswell total costs were 6% above forecast. Since Minnesota Power's 2021 sales were unexpected close to full production, they resulted higher output at Boswell 3 and 4. Also, Minnesota Power saw market prices rise throughout 2021 which increased the output of Boswell 3 and 4 as they were ran higher by MISO. With Boswell 3 being economic and the market prices high in 2021, Boswell 3 was cleared by MISO more often than expected in 2021.
- With the 2021 higher market prices and lower than expected cost for biomass fuel, Hibbard was called on and ran more than forecasted. Minnesota Power forecasted Hibbard to only run in July and August 2021; Hibbard ran all 12 months of the year which increased the generation and costs.
- Higher 2021 market prices also contributed to the increased generation at Laskin. Laskin was also dispatched by MISO to maintain reliability within the local area, which also lead to increased generation. Minnesota Power forecasted Laskin to run 5 months out of the year; however, Laskin ran 11 months of the year. Also, Natural Gas prices were up in 2021 which increased the \$/MWh of Laskin throughout the year.
- Wind generation was 3% below forecast. Bison was 3.5% below forecast; however, Tac Ridge was 14.8% above forecast. In 2022 there was a material increase in economic curtailment at the Bison wind turbines that rolled off PTCs in 2022. Wind generation owned by Minnesota Power has a \$0 Fuel Cost so this overall decrease in wind generation increased the FCA Costs.
- Due to a very dry year resulting in drought conditions on the system, 2021 hydro generation was 43% lower than forecasted. With low snowfall totals in the winter of 2020/2021, there was never really a spring 2021 runoff and that dry spell continued into the summer months where little rain was seen in the area. Hydro generation owned by Minnesota Power has a \$0 Fuel Cost. The decrease in hydro generation increased the FCA Costs.

## 5. Purchase Costs

Minnesota Power, in Attachment 2, pages 29-31, provided the following information regarding 2021 purchase costs when compared to forecast:

- Manitoba Hydro's 133 MW contract has a variable energy piece based on the energy market (133 Purchase Power Agreement) and throughout 2021, Minnesota Power procured more energy from Manitoba Hydro than was forecasted. The Manitoba Hydro 250 MW contract price came in slightly lower than forecasted due to a credit for energy storage provision that was not known at the time the forecast was filed which explains the lower average cost.
- Customer load was up in 2021 which means there were more market purchases to serve load. Due to higher than forecasted MISO Market prices, their price per MWh was 82% higher.
- Minnkota Power Station Service costs were slightly higher than forecasted. The forecast is based on prior year monthly average.
- Purchase to serve Non-Firm Retail Customer are forecasted at \$0, so this section is a placeholder when the forecast is made. Purchases to cover this Non-Firm Retail Customer were contracted with different counter parties and are included in the purchase by counterparty.
- Counter Party Purchases were not known or under contract at the time of the forecast filing but were procured during times when Minnesota Power was short and needed to purchase energy to cover load. This can happen when generation is lower than expected (i.e., conserving coal for winter operations or lower hydro generation), load is high, or Minnesota Power has generating units off for outage.
- The other purchases section includes all customer owned generation purchases that are not forecasted.
- Due to less generation than forecasted, Oliver I costs were 31% lower. Also, there were credits received on the Oliver 1 invoices that were not forecasted which lowered the \$/MWh.
- Due to less generation than forecasted, Oliver II costs were 17% lower. Also, there were credits received on the Oliver 1 invoices that were not forecasted which lowered the \$/MWh.
- Wing River generation was lower than forecasted.
- Nobles generation was 8% lower than forecasted and the \$/MWh was slightly lower than forecasted. For Nobles 2, the forecasted \$/MWh was a preliminary estimate because final pricing was dependent on final MISO network upgrade cost. Network upgrade costs were lower than expected, resulting in a lower energy prices reflected in actuals.
- Since they are very small, Solar Subscription Cancellations are not forecasted. Any customers that have a rolling balance of kWh due to solar garden generation is purchased back by Minnesota Power when they leave the program and are paid out for their unused solar generation.

- Square Butte's generation was lower than forecasted.

## 6. Inter-System Sales

Minnesota Power, in Attachment 2, pages 31-33, provided the following information regarding 2021 inter-system sales when compared to forecast:

- PS and RFPS loads were unexpectedly near full production. The increased \$/MWh was due to market prices being higher than forecasted.
- Economy and Non-Firm loads were unexpectedly near full production. The increased \$/MWh was due to market prices being higher than forecasted.
- Since it is usually small, Excess Energy is not forecasted. With loads higher than forecasted, MP saw more excess energy.
- Since it is usually small, Incremental and Price Recall are not forecasted. With loads higher than forecasted, MP saw more Incremental and Price Recall energy.
- Oconto loads came in stronger than forecasted.
- Due to Boswell's fuel being slightly lower, MacQuarie's \$/MWh fuel cost was also lower.
- Due to Boswell's fuel being slightly lower, Nextera's \$/MWh fuel cost was also lower. Also, there were additional Nextera deals from July through December that were not known when the forecast was filed.
- Due to Boswell's fuel being slightly lower, Shell's \$/MWh fuel cost was also lower. Also, there were additional Shell deals from July through December that were not known when the forecast was filed.
- No Asset Backed Sales (Non MISO) were forecasted; however, MP saw sales when there were times that company generation was not needed to serve load.
- Since Minnkota Power Liquidation which is based on Butte Square Butte's generation, Square Butte's lower output decreased Minnkota Power Liquidation's actual.
- Liquidated Sales are not forecasted as the model either decreases purchases or reduces generation instead of calculating liquidation.
- Minnesota Power uses the RTSim production cost model to determine the volume and cost for MISO market sales. When excess energy is available and it's economical, the model will sell the excess energy into the MISO market. With the increase in bilateral purchase and generation, MP saw increased MISO Market sales in 2021.
- Oliver County I and Oliver County II's forecast assumptions were based on the previous year's average and 2021 actuals were slightly higher.
- WPPI station service is calculated when Boswell 4 is offline. The costs are based off on DA LMPs and, as a result of higher 2021 market prices, WPPI's costs were also higher.
- MISO Costs recovered through Customer Sales is part of their fuel cost and is reflected in the average cost price in the Inter-System Sales-Customer Sales section. MISO Costs recovered through Market Sales were higher than forecasted due to higher than forecasted counterparty sales. With increased energy prices there was higher than expected cost to deliver energy from the generator to MP.MP (i.e., LMP congestion and losses) with the highest cost seen at the Nobles 2 wind farm.



- As a result of higher customer nominations, Minnesota Power's actual Sales Due to Retail Loss of Load were lower than forecasted.
- As a result of higher 2021 MISO Costs, the Asset Based Margin Credit was 36% lower than forecasted.

## **7. MISO Costs**

Minnesota Power, in Attachment 2, pages 33-34, provided the following information regarding 2021 MISO Costs when compared to forecast:

- Day Ahead/Real Time Asset, Non-Asset, Excessive, and Non-Excessive Energy: Asset Energy is reflected in MISO market purchases and sales; therefore, Minnesota Power does not those amounts in its forecasts. However, for actuals, Minnesota Power is able break out the Asset Energy between the various charge types which accounted for 65% variance between forecasted and actuals MISO Costs.
- Day Ahead (DA)/Real Time (RT) Losses and Congestion are Minnesota Power's repurchased energy costs. For the forecast, all of the repurchased energy costs are reflected in Day Ahead Loss category; however, for actuals, costs are split out between DA Losses, RT Losses, DA Congestion, and RT Congestion.
- Day Ahead Financial Bilateral Transaction Congestion, Auction Revenue Rights Transaction Amount, Financial Transmission Rights Annual Transaction Amount, and Financial Transmission Rights Hourly Allocation are charges that are based on market prices. Minnesota Power saw a difference in prices between forecast and actuals which caused a difference in these various charges.
- The Real Time Revenue Sufficiency Guarantee Make Whole Payment difference is mainly due to the fact that some of Minnesota Power's generating units, for reliability purposes, were called on more than forecasted. This resulted in more Real Time Revenue Sufficiency Guarantee Make Whole Payments to Minnesota Power.

## **8. Market Prices**

Due to extreme weather events like February's polar vortex and the significant heat and drought conditions which started in June and continued through the last part of the year, the power markets experienced major price volatility. Additionally, concerns over coal supply and a global energy crunch resulted in a significant increase in both natural gas and power market prices. Compared to 2020, natural gas prices increased by 95% and power prices at MP.MP increased by 120%. As a result, actual 2021 average market prices were higher than forecasted.<sup>2</sup>

## **9. True-up Proposal**

Minnesota Power requested the use of the Significant Unforeseen Impact clause to begin the collection of the proposed 2021 FCA True-up starting April 1, 2022 so that the \$56.3 million

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<sup>2</sup> Trade Secret Table 3 in Minnesota Power's Petition quantifies the difference.

under collection can be spread over a 17-month collection period (April 2022 through August 2023) instead of the standard 12-month collection period (September 2022 through August 2023). Extending the collection period reduces the monthly impact on customers and reduces the regulatory lag burden on Minnesota Power. This 17-month period would also allow for any potential adjustments, if deemed necessary, to be incorporated into the true-up beginning September 2022.

Based on forecasted rates for the applicable period, Table 3 shows the monthly true-up rates that will be applied to customer bills for April 2022 through December 2022. 2023 rates will be finalized once Minnesota Power's 2023 FCA forecast is approved. For the average residential customer, the proposed 2021 FCA True-up would be approximately \$3.50 per month.

**Table 3 – Customer Rate Impact over 17 Months (¢/KWh)<sup>3</sup>**

	2022 Approved Rates	2021 True-Up Rates	Total FCA Rates
April 2022	2.505	0.487	2.992
May 2022	2.470	0.571	3.041
June 2022	2.584	0.575	3.159
July 2022	2.953	0.543	3.496
August 2022	2.749	0.554	3.303
September 2022	2.527	0.565	3.092
October 2022	2.565	0.565	3.130
November 2022	2.436	0.550	2.986
December 2022	2.525	0.505	3.030

## Department of Commerce – Comments

The Department stated that it reviewed Minnesota Power's Petition to determine (1) whether the Company's actual 2021 energy costs were reasonable and prudent, (2) whether the Company correctly calculated the 2021 true-up for its FPE rates, and (3) whether the Petition complies with the reporting requirements set forth in the applicable Minnesota Rules and Commission Orders.

### 1. Prudency and Reasonableness of Minnesota Power's Actual 2021 Fuel/Purchased Power Costs

As shown in Table 4, the Department noted that Minnesota Power's relevant 2021 MWh sales were 12% higher than forecasted, 2021 total system actual fuel/purchased power costs recoverable through the FCA were 47% higher than the forecasted, and average fuel and purchased power costs, per MWh, were 31% higher than forecasted.

<sup>3</sup> Staff has updated this table to reflect MP's corrected true-up rates that were provided in its April 1 corrected filing.

**Table 4 – Comparison of Select Forecasted to Actual Data for Minnesota Power’s 2021 Fuel Clause Adjustment True-Up**

<b>Data Description</b>	<b>Actual</b>	<b>Forecast</b>	<b>Percentage Difference</b>
MWh Sales Subject to FCA	8,187,964	9,194,640	12.29%
Total Cost of Fuel/Purchased Power	\$216,381,920	\$318,005,657	46.96%
Average Fuel/Purchased Power Cost Per MWh	\$26.42	\$34.59	30.92%

Table 5 breaks into several major categories the cost and offsetting credit/revenue components of Minnesota Power’s actual and forecasted 2021 fuel/purchased power costs recoverable through the FCA. MP’s actual 2021 plant generation and purchased power costs, the two largest components of the total net fuel/purchased power costs, were substantially higher than forecasted. The higher energy market prices combined with higher sales caused higher general and purchased power costs for 2021. Table 5 also shows MISO charges were significantly greater than forecasted – \$64 million actual compared to \$24.8 million forecasted, or 158% higher.

**Table 5 - Minnesota Power’s Actual and Forecasted Total Company 2021 Fuel/Purchased Power Costs and Offsetting Credits/Revenues by Major Category**

<b>Fuel/Purchased Power Cost, Credit, or Revenue Category</b>	<b>2021 Initial Forecast</b>	<b>2021 Updated Forecast</b>	<b>2021 Actual</b>	<b>Percentage Difference</b>
Plant Generation Costs	\$95,021,916	\$95,021,916	\$111,316,949	17.15%
Purchased Power Costs	\$223,688,549	\$223,688,549	\$302,780,486	35.36%
MISO Charges	\$24,860,016	\$24,860,016	\$64,223,807	158.34%
MISO Schedule 16, 17 & 24	\$214,567	\$214,567	\$79,627	-62.89%
Fuel Cost Recovered through Inter System Sales	(\$127,835,782)	(\$127,835,782)	(\$160,780,204)	25.77%
Costs Related to Solar	\$0	\$0	(\$1,366)	0.00%
Time of Generation and Solar Energy Adjustment	\$0	\$8,423,738	\$0	-100.00%
Total Costs, Net Credits and Revenue	\$216,381,920	\$224,805,658	\$318,005,657	41.46%
Total Fuel Clause Sales (MWh)	8,188.0	8,188.0	9,195.0	12.30%
Average Cost of Fuel	\$26.42	\$27.45	\$34.57	30.87%

As shown in Table 2 above, the Department noted that MP’s Petition<sup>4</sup> shows a \$0.95 million increase in energy losses and a \$38.39 million increase in energy congestion costs, which appear to be largely a result of Minnesota Power purchasing more day-ahead asset energy MWhs. Minnesota Power experienced higher than forecasted sales, but also higher MISO Charges, plant generation costs, and purchased power costs. Total cost of fuel was nearly 47% percent higher than forecasted.

<sup>4</sup> Attachment No. 3, page 41.

Based on Minnesota Power’s actual experience in 2021, the Department concluded it is reasonable that the Company’s actual 2021 fuel/purchased costs recoverable through the FCA were more than those forecasted. The Department noted that most of the reasons for increased fuel costs, including lower renewable production, higher gas and energy market prices, and higher MISO charges, were mostly beyond Minnesota Power’s control, although continued cost controls and efficiency are important to keep fuel costs reasonable. The Department recommended that Minnesota Power’s actual 2021 fuel/purchased power costs recoverable through the FCA be found to be reasonable.

## 2. Minnesota Power’s 2021 Fuel Clause Adjustment True-Up

The Department noted that Minnesota Power requested the use of the Significant Unforeseen Impact clause to begin collecting the proposed 2021 FCA true-up starting April 1, 2022. The Commission’s December 19, 2017 Order in Docket No. E-999/CI-03-802 states, “The Commission will set recovery of the utility’s fuel, power purchase agreement, and other related costs (fuel rates) in a rate case or an annual fuel clause adjustment filing unless a utility can show a **significant unforeseen impact**”. The Commission’s June 12, 2019 Order (June 12 Order) in Docket No. E-999/CI-03-802 states:

The Commission adopts threshold of plus or minus 5 percent of all FCA costs and revenues to determine whether an event qualifies as a significant unforeseen impact that may justify an adjustment to the approved fuel rates. The Electric utilities are permitted to implement revised rates following a 30-day notice period, subject to a full refund, if no party objects to the revised rates.

In its Petition, Minnesota Power requested recovery of \$56.3 million in FCA under collections - \$55.8 million attributable to 2021 and approximately \$500,000 attributable to the over-refunding of 2020 fuel costs. Subsequently, in response to Department Information Request (IR) No. 1, the 2020 over-refunded amount was quantified to be \$525,128.<sup>5</sup> Table 6 summarizes the actual amount to be recovered.

**Table 6 – 2021 Over/(Under) Collection Credit**

	<b>Actual</b>
2021 Actual Collections from Customers	\$214,366,713
Less: Actual Costs and Actual Sales	\$270,204,980
Remaining Under Collection	(\$55,838,267)
2020 Over Refunded Amount	(\$525,128)
Net 2021 FCA True-up Amount	(\$56,363,395)

The Department noted that, since no objections were filed during the 30-day notice period of its March 1, 2022 filing, Minnesota Power began collecting the 2021 FCA True-up on April 1, 2022. On April 1, 2022, Minnesota Power also filed a correction to its March 1, 2022 filing revising its proposed 2021 FCA True-up factors beginning May 2022.

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<sup>5</sup> See DOC Attachment 1.

The Department concluded that Minnesota Power correctly calculated its 2021 FCA Rider under-collection of \$56,363,395. The Department also considers the Company's proposal to collect the amount from customers effective April 2022 through August 2023 to be reasonable.

### **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.
- 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,<sup>6</sup> 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 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 7 summarizes Minnesota Power's 2018-2021 generation maintenance expenses. As stated in the Department's FYE18 and FYE19 analysis, MP is spending less on maintenance of

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<sup>6</sup> 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

their generation facilities than the \$42.0 million that was approved in their most recent rate case. In 2021, MP's maintenance expense was \$36.1 million.<sup>7</sup>

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

<b>Approved Annual Generation Maintenance Expense, 2016 Rate Case Test Year</b>	<b>Actual 2019 – 2021 Average</b>	<b>Difference</b>
\$42.0	\$32.0 <sup>8</sup>	-23.81%

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 2019-2021 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 2021<sup>9</sup> of \$9,799,512 to be significantly higher than Minnesota Power's forecasted incremental forced outage costs of negative \$3,503,793 million, largely due to higher energy market prices and increased outage days. The Department reviewed Minnesota Power's plant outages explanations<sup>10</sup> and found them to be reasonable. As a result, the Department accepted Minnesota Power's forced outage costs for the 2021 true-up. However, the Department will carefully review Minnesota Power's generation maintenance expense level in the open general rate case<sup>11</sup> and its correlation to incremental forced outage costs in future FCA forecasts and true-up filings.

## **5. Conclusion and Recommendations**

Based on its review, the Department concluded that (1) Minnesota Power's actual fuel/purchased power costs for 2021 were reasonable and prudent, (2) Minnesota Power correctly calculated its 2021 FCA Rider under-collection of \$56,363,395, 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 2021 fuel/purchased power costs recoverable through the FCA rider were reasonable and prudent for 2021.

<sup>7</sup> Minnesota Power Petition, Attachment 10, page 2.

<sup>8</sup> Actual generation maintenance expense was \$29.6 million for 2019 and \$30.3 million for 2020.

<sup>9</sup> Minnesota Power Petition, Attachment 5.

<sup>10</sup> Id.

<sup>11</sup> Docket No. E-015/GR-21-335.

- Find that Minnesota Power correctly calculated its 2021 FCA Rider under-collection of \$56,363,395.
- Allow Minnesota Power to collect \$56,363,395 from April 2022 through August 2023.
- Allow Minnesota Power to charge the rates for April 2022 through December 2022.
- Require the Company to provide an update for rates from January 2023 through August 2023 once the Company has an approved 2023 forecast.
- Approve the compliance reporting portions of the Minnesota Power's Petition.

## **Minnesota Power – Reply Comments**

Minnesota Power agreed with the Department's recommendations.

## **IV. Staff Comments**

Staff has reviewed and verified Minnesota Power's calculations and concurs with the Company and the Department's recommendation that Minnesota Power's Petition, including the 17-month recovery period, should be approved.

Staff does point out that, should the Commission decide that the standard 12-month recovery period should be used instead, then a compliance filing detailing the remaining unrecovered 2021 amount (i.e., net of recoveries that began in April 2022) and revised monthly recovery factors will be necessary.

## V. Decision Alternatives

1. Accept and approve Minnesota Power's 2021 Annual Fuel and Purchased Energy Charge Rider true-up compliance filing. (MP, DOC)
2. Do not accept and approve Minnesota Power's 2021 Annual Fuel and Purchased Energy Charge Rider true-up compliance filing.

### True-Up Amount

3. Authorize Minnesota Power to recover its 2021 under-collection of \$56,363,395. (MP, DOC)

### Timing of True-Up

4. Authorize Minnesota Power to recover the 2021 under-collection over the 17-month period of April 1, 2022. (MP, DOC)
5. Order Minnesota Power to recover the 2021 under-collection over the standard 12-month period starting on September 1, 2022.

### Compliance Filing (if decision alternative 5 is adopted)

6. Order Minnesota Power to, within 30 days of this hearing, make a compliance filing accounting for the all the 2021 recoveries to date and recalculating the September 2022 – August 2023 recovery factors.

### Other Compliance

7. Order Minnesota Power to, once its 2023 forecast is approved, provide updated rates for January 2023 through August 2023. (DOC, MP agreed)