

## Staff Briefing Papers

Meeting Date June 29, 2023

Agenda Item 4\*

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Company Minnesota Power

Docket No. **E-015/AA-21-312**

**In the Matter of Power's Petition for Approval of the Annual Automatic Adjustment Charges for the Period of January 2022 through December 2022**

Issues Should Minnesota Power's 2022 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, 2023  |
| Department of Commerce - Comments (Public and Trade Secret) | April 14, 2023 |
| Large Power Intervenors – Comments                          | April 17, 2023 |
| Minnesota Power – Reply Comments (Public and Trade Secret)  | May 11, 2023   |
| Large Power Intervenors - Reply Comments                    | May 22, 2023   |
| Department of Commerce – Letter                             | May 31, 2023   |

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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.

## **I. Statement of the Issue**

Should Minnesota Power's 2022 Annual Fuel and Purchased Energy Charge Rider true-up be approved?

## **II. Background**

On March 1, 2023, Minnesota Power (MP, Company) filed its 2022 Annual True-Up of its Fuel and Purchased Energy Charge (Petition) seeking recovery of \$13.3 million. MP proposed a 12-month recovery period beginning the first month following Commission approval.

On April 14, 2023, the Minnesota Department of Commerce, Division of Energy Resources (Department, DOC) filed comments recommending approval of Minnesota Power's Petition.

On April 17, 2023, Large Power Intervenors (LPI) filed comments requesting updated rate information, if/how baseload generation decisions exposed MP to market at a greater degree, if/how the short/long term action plans MP recent integrated resource plan (Docket No. 21-33) impacted market exposure in 2022 or will impact market exposure in 2023 and beyond, if/how MP's existing demand response programs mitigate exposure, whether MP is exploring economic demand response or other customers options to help further mitigate market exposure going forward, and a detailed analysis explaining why/how FCA costs are increasing at dramatic pace MP's significantly lower reliance upon fossil-based fuel generation.

On May 11, 2023, Minnesota Power filed reply comments agreeing with the Departments recommendations and provided LPI's requested information.

On May 22, 2023, Large Power Intervenors filed response comments recommending the Commission reject Minnesota Power's requested \$13.3 million FCA true-up and order MP to explore rate mitigation strategies.

On May 31, 2023, The Department filed a letter reiterating approval of MP's FCA true-up.

## **III. Parties' Comments**

### **A. Minnesota Power - True-Up Filing**

#### **1. Background**

On December 2, 2021, the Commission approved Minnesota Power's January 2022 through December 2022 Forecasted Rates for its Rider for Fuel and Purchased Energy Charge (Fuel Adjustment Clause, FAC, FCA).

On June 30, 2022, Minnesota Power submitted a proposal to adjust rates by \$36.0 million due to higher than forecasted market pricing and associated impacts on congestion costs between

generation and load. After a 30-day notice period and no objection to the rate adjustment, Minnesota Power increased the approved monthly fuel cost rates for August through December 2022 by \$36.0 million.

## 2. 2022 FCA Forecast to Actuals

Minnesota Power's 2022 actual sales were 8,962,240 MWh and actual fuel costs were \$285.9 million. During 2022 Minnesota Power under collected fuel costs by \$13.3 million and proposed to recover that amount over a 12-month period beginning the first of the month following Commission approval.

## 3. Fuel Costs

Table 1 compares 2022 forecasted total sales, total cost of fuel and average cost of fuel to actuals

**Table 1 Fuel Cost Summary**

| <b>2022 Forecasted Fuel</b>                    | <b>2022 Adjusted Forecast</b> | <b>2022 Actual</b> | <b>Difference</b> |
|------------------------------------------------|-------------------------------|--------------------|-------------------|
| Company's Generating Stations                  | \$87,497,496                  | \$130,269,082      | \$42,771,585      |
| Purchased Energy                               | \$210,911,146                 | \$262,867,849      | \$51,956,703      |
| MISO Charges                                   | \$18,239,651                  | \$59,750,884       | \$41,511,234      |
| MISO Schedules 16, 17 & 24                     | (\$107,186)                   | (\$406,916)        | (\$299,730)       |
| Fuel Cost Recovered through Inter System Sales | \$88,073,950                  | \$167,749,176      | \$79,675,226      |
| Costs Related to Solar                         | \$-                           | \$83               | \$83              |
| Time of Generation and Solar Energy Adjustment | \$384,405                     | \$440,270          | \$55,864          |
| Forecasted Cost of Fuel                        | \$229,065,935                 |                    |                   |
| Significant Events Filing                      | \$36,052,884                  |                    |                   |
| Total Cost of Fuel                             | \$265,118,819                 | \$285,985,742      | \$20,866,923      |
| Total Fuel Clause Sales (MWh)                  | 8,763.90                      | 8,962.30           | 198.4             |
| Average Cost of Fuel                           | \$30.25                       | \$31.91            | \$1.66            |

## 4. Sales

As shown in Table 2, mainly due to increased Large Power Taconite sales, actual sales were 198,378 MWhs, or 2%, higher than forecasted. Additionally, due to increased MISO market sales Inter System sales were 832,716 MWhs higher than forecast. However, Inter System sales are removed from the Total Sales 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 purchaser which creates market purchases and sales in a month.

**Table 2 – Sales Comparison (MWh)**

| <b>2022 Sales</b>                             | <b>Forecasted Sales</b> | <b>Actual Sales</b> | <b>Difference</b> |
|-----------------------------------------------|-------------------------|---------------------|-------------------|
| <b>Total Sales of Electricity</b>             | <b>11,917,313</b>       | <b>12,948,280</b>   | <b>1,030,966</b>  |
| Residential                                   | 1,033,882               | 1,063,695           | 29,813            |
| Commercial                                    | 1,188,275               | 1,181,292           | -6,983            |
| Large Power Taconite                          | 3,925,163               | 4,297,541           | 372,378           |
| Large Power Paper and Pulp                    | 485,003                 | 490,030             | 5,027             |
| Large Power Pipeline                          | 316,335                 | 305,030             | -11,305           |
| Other Miscellaneous                           | 332,806                 | 341,716             | 8,910             |
| Municipals                                    | 1,498,638               | 1,299,049           | (199,589)         |
| Inter System Sales                            | 3,137,211               | 3,969,927           | 832,716           |
| <b>Less: Inter System Sales</b>               | <b>3,137,211</b>        | <b>3,969,927</b>    | <b>832,716</b>    |
| Customer Intersystem Sales                    | 872,711                 | 820,924             | (51,787)          |
| Market Sales                                  | 2,260,131               | 3,140,614           | 880,483           |
| Station Service                               | 4,369                   | 8,390               | 4,021             |
| Sales due to Retail and Resale Loss of Load   | 0                       | 0                   | 0                 |
| <b>Less: Solar Generation &amp; Purchases</b> | <b>16,240</b>           | <b>16,112</b>       | <b>(128.00)</b>   |
| <b>Total Fuel Clause Sales</b>                | <b>8,763,862</b>        | <b>8,962,240</b>    | <b>198,378</b>    |

Minnesota Power provided the following information regarding 2022 actual sales when compared to forecast:<sup>1</sup>

- Residential sales were within 2% of the 2022 forecast.
- Commercial sales were 1% less than forecasted.
- Large Power Taconites were 9% more than forecasted. Taconite customers were above forecasted production levels in 2022.
- Large Paper and Pulp were 1% more than forecasted.
- Large Power Pipelines were 4% lower than forecasted due to lower loads.
- Other Misc. were 3% more than forecasted.
- Municipals were 13% lower than forecasted due to the new NEMMPA contracts. In addition, effective September 1, 2022, Hibbing Public Utilities is no longer a municipal customer of Minnesota Power.
- Intersystem Sales were about 832,000 MWhs above forecasted.

<sup>1</sup> Minnesota Power Petition at Attachment 2, pg. 24.

## 5. Generation<sup>2</sup>

Higher energy production at Minnesota Power's thermal generation fleet as well as the Hibbard Renewable Energy Center was due to being called upon by MISO more frequently because of higher market prices than forecasted. Additionally, when Minnesota Power submitted its forecast in May 2021, the Company did not anticipate Boswell Unit 3 would be dispatched most of the year because it had transitioned to economic dispatch in July 2021. The increased generation at the Company's Laskin facility was due to MISO dispatching the units for reliability purposes.

Minnesota Power provided the following information regarding 2022 generation costs when compared to forecast:<sup>3</sup>

- Boswell total costs were 29% above forecast because sales were higher than forecast. Also, Minnesota Power saw actual market prices come in significantly higher than forecast which increased Boswell 3 and 4's output. With Boswell 3 being economic and market prices being high, Boswell 3 was cleared by MISO more often than expected which increased their generation by 67% compared to forecast.
- Higher market prices also resulted in Hibbard being called on and running more than forecasted. Minnesota Power forecasted and ran Hibbard for all 12 months but actual generation was 115% above forecast. Hibbard's \$/MWh was 122% above forecast due to a significant rise in biomass fuels costs throughout 2022 due to higher production costs related to diesel, labor, and inflation.
- The higher market prices contributed to higher than forecasted generation at Laskin. Minnesota Power forecasted Laskin to run 4 months but it ran 10 months which increased its generation 500% compared to forecast. Also, 2022 natural gas prices were 66% higher than 2021 which resulted in a higher \$/MWh.
- Wind generation was 0.21% below forecast with Bison being 1% below forecast but Tac Ridge being 29% above forecast. Wind generation owned by Minnesota Power has a \$0 Fuel Cost so this increased generation helped reduce FCA Costs.
- Hydro generation was 11% lower than forecast due to a drier spring and fall. In the spring, low snowfall totals from the previous winter led to a lower than forecast runoff. In the fall, drier conditions led to low flows which lowered the Hydro generation in September and October 2022. Hydro generation owned by Minnesota Power has a \$0 Fuel Cost.

## 6. Purchase Costs

Minnesota Power provided the following information regarding 2022 purchase costs when compared to forecast that shows the main drivers of purchase cost increases:<sup>4</sup>

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<sup>2</sup> Trade Secret Table 3 in Minnesota Power's Petition summarizes MP's production, by plant.

<sup>3</sup> Minnesota Power Petition at Attachment 2, pgs. 24-25.

<sup>4</sup> Minnesota Power Petition at Attachment 2, pgs. 25-27.

- Manitoba Hydro's 133 MW contract has a variable energy piece based on energy market (133 Purchase Power Agreement) and, throughout 2022, Minnesota Power procured higher than forecast energy from Manitoba Hydro at a slightly higher cost.
- With higher than forecast market prices, Minnesota Power increased company generation to offset market purchases which lowered the MWhs purchased from market. Market per MWh purchase prices were 141% above forecast due to higher than forecast MISO Market prices.
- Minnkota Power Station Service costs were higher than forecasted. The forecast was 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, 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.
- Oliver 1 costs were 4% lower than forecast due to credits received on the Oliver 1 invoices that were not forecasted and lowered the \$/MWh.
- Oliver 2 costs were 3% more than forecast due to more generation than forecasted at Oliver 2. There were credits received on the Oliver 2 invoices that were not forecasted which lowered the \$/MWh but, with the higher generation, total costs at Oliver 2 were higher than forecast.
- Wing River generation and costs were 42% lower than forecasted. Wing River was slightly below forecast almost every month and did have an outage in January and February 2022.
- Nobles generation was 8% higher than forecast and its \$/MWh was slightly higher than forecast. Minnesota Power saw strong winds in southern MN throughout 2022 which increased Nobles generation. The slightly higher \$/MWh was due to compensated curtailments which are not forecasted.
- When the forecast was prepared, there was no purchase to serve municipal solar energy as this was a contract that was signed after the forecast was filed. The contract to serve municipal solar energy started in April 2022. The offsetting sales are in the Inter-System-Customer Sales section.
- Square Butte generation was higher than forecast and its fuel costs were slightly lower than forecast which reduced its overall costs.

## **7. Inter-System Sales**

Minnesota Power provided the following information regarding inter-system sales when

compared to forecast:<sup>5</sup>

- IPS and RFPS MWhs were higher than forecasted. The increased \$/MWh was due to higher than forecasted market prices.
- Economy and Non-Firm MWhs were lower than forecast due to Silver Bay Power- North Shore Mining being idle from April - December. The increased \$/MWh was due to higher than forecasted market prices.
- Since it is usually small, Excess Energy is not forecasted. With higher than forecasted loads, MP saw more excess energy.
- Since it is usually small, Incremental and Price Recall are not forecasted. With higher than forecasted loads, MP saw more Incremental and Price Recall energy.
- Oconto loads were higher than forecasted.
- NEMMPA Incremental: Starting January 1, 2022, all Minnesota Power municipal customers except for SWL&P, Nashwauk, and Hibbing Public Utilities. This was not known at the time the forecast was prepared.
- Municipal Solar Energy: When the forecast was prepared, there was no solar energy sale to a municipal customer as this was a contract that was signed after the forecast was filed. The contract to serve municipal solar energy started in April 2022.
- Hibbing Public Utilities: In April 2022, Hibbing Public Utilities signed a Purchase Power Agreement with Minnesota Power. Part of this new contract includes a long-term firm sale. Effective September 1, 2022, Hibbing Public Utilities is no longer a municipal customer of Minnesota Power. This was not known at the time the forecast was prepared. Minnesota Power's on May 11, 2022 compliance filing in Docket No. E015/M-21-28, discloses the pertinent details of this bilateral contract.
- Asset Based Sales (Non-MISO): Since load was higher, more Minnesota Power generation was used to serve load and not available to serve Asset Based Sales thus creating less Asset Based sales and more Liquidation sales.
- Since Minnkota Power Liquidation which is based on Butte Square Butte's generation, increase the MWhs and lower costs of the Minnkota Power Liquidation which is based on the output and costs of Square Butte.
- 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 purchase and generation, MP saw increased MISO Market sales.
- Oliver County I's forecast assumptions were based on the previous year's average and 2022 actuals were slightly higher.
- Oliver County II's forecast assumptions were based on the previous year's average and 2022 actuals were slightly lower.
- WPPI station service is calculated when Boswell 4 is offline. Boswell 4 was offline 62 more days than forecast and costs are based off on DA LMPs and with higher market prices higher WPPI station service costs were higher than forecast.

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<sup>5</sup> Minnesota Power Petition at Attachment 2, pgs. 27-29.

- Wing River was offline in January and February 2022 and there was station service which was not forecasted.
- 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. Higher than forecast MISO Costs recovered thru Market Sales were due to higher than forecast Market MISO sales.
- The Asset Based Margin Credit were 458% higher than forecast. This increase in the credit is mainly due to higher than forecasted MISO market prices which increased the sales price for Asset Bases Sales. This increase in sales price increased the margins back to customers. Also, with the signed NEMMPA and Hibbing Public Utilities contracts some of the sales margins flow to the customers in the “Asset Based Margins” section.

## **8. MISO Costs**

Minnesota Power provided the following information regarding 2022 MISO Costs when compared to forecast:<sup>6</sup>

- 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 did not include amounts in its forecast.
- Day Ahead (DA)/Real Time (RT) Losses and Congestion are Minnesota Power’s repurchased energy costs. When the forecast is prepared, all of the repurchased energy costs are reflected in Day Ahead Loss category. Actual 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 since 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.

## **9. True-Up Proposal**

Minnesota Power proposed a 2022 FCA True-up of \$13.3 million to be collected over a 12-month period beginning the first of the month following Commission approval.

## **B. Department of Commerce – Comments**

The Department reviewed Minnesota Power’s Petition to determine (1) whether the Company’s actual 2022 energy costs were reasonable and prudent, (2) correctly calculated the

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<sup>6</sup> Minnesota Power Petition at Attachment 3, pg. 2.



2022 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. Prudence and Reasonableness of Minnesota Power's Actual 2022 Fuel/Purchased Power Costs

As shown in Table 3, the Department noted that Minnesota Power's relevant MWh sales were 2% higher than forecasted, total system actual fuel/purchased power costs recoverable through the FCA were 8% higher than forecasted and average fuel and purchased power costs, per MWh, were 5.5% higher than forecasted.

**Table 3 – Comparison of Select Forecasted to Actual Data for Minnesota Power's Fuel Clause Adjustment True-Up**

| Data Description                          | Actual        | Forecast      | Percentage Difference |
|-------------------------------------------|---------------|---------------|-----------------------|
| MWh Sales Subject to FCA                  | 8,763,862.00  | 8,962,240.00  | 2.26%                 |
| Total Cost of Fuel/Purchased Power        | \$265,118,819 | \$285,985,742 | 7.87%                 |
| Average Fuel/Purchased Power Cost Per MWh | \$30.25       | \$31.91       | 5.49%                 |

Table 4 breaks into several major categories of cost and offsetting credit/revenue components of Minnesota Power's actual and forecasted fuel/purchased power costs recoverable through the FCA. The higher energy market prices combined with higher sales caused higher generation and purchased power costs. Also, MISO charges were significantly greater than forecasted - \$59.8 million actual compared to \$18.2 million forecasted or 227.6% higher.

**Table 4 - Minnesota Power's Actual and Forecasted Total Company 2022 Fuel/Purchased Power Costs and Offsetting Credits/Revenues by Major Category**

| Fuel/Purchased Power Cost, Credit, or Revenue Category | 2022 Forecast | 2022 Actual   | Percentage Difference |
|--------------------------------------------------------|---------------|---------------|-----------------------|
| Plant Generation Costs                                 | \$87,497,496  | \$130,269,082 | 48.88%                |
| Purchased Power Costs                                  | \$210,911,146 | \$262,867,849 | 24.63%                |
| MISO Charges                                           | \$18,239,651  | \$59,750,884  | 227.59%               |
| MISO Schedule 16, 17 & 24                              | (\$107,186)   | (\$406,916)   | -279.64%              |
| Fuel Cost Recovered through Inter System Sales         | \$88,073,950  | \$167,749,176 | 90.46%                |
| Costs Related to Solar                                 | -             | \$83          | n/a                   |
| Time of Generation and Solar Energy Adjustment         | \$384,405     | \$440,270     | 14.53%                |
| Significant Events Filing                              | \$36,052,884  | -             | n/a                   |
| Total Costs, Net Credits and Revenue                   | \$265,118,819 | \$285,985,742 | 7.87%                 |
| Total Fuel Clause Sales (MWh)                          | 8,763.9       | 8,962.3       | 2.26%                 |
| Average Cost of Fuel                                   | \$30.25       | \$31.91       | 5.49%                 |

The Department noted that, due to increased Large Power Taconite sales, MP's customer sales increased 198,378 MWhs, or 2%, over forecast.

Based on Minnesota Power's experience, the Department concluded it is reasonable that the Company's actual fuel/purchased costs recoverable through FCA were more than forecasted. The Department noted that most of the reasons for increased fuel costs, including higher gas and energy market prices as well as higher MISO charges, were mostly beyond Minnesota Power's control, although continued costs controls and efficiency are important to keep fuel costs reasonable. The Department recommended the Commission find MN Power's actual 2022 fuel/purchased power costs recoverable through FCA be found to be reasonable.

## **2. Minnesota Power's 2022 Fuel Clause Adjustment True-up**

In its Petition, Minnesota Power requested recovery of \$13.3 million in FCA under attributed to under collected 2022 fuel costs, with recovery over a 12-month period effective the first of the month following Commission approval. Table 5 summarizes the actual amount to be recovered.

**Table 5 – 2022 Over/(Under) Collection Credit**

|                                        | <b>Actual</b>  |
|----------------------------------------|----------------|
| 2022 Actual Collections from Customers | \$231,771,476  |
| Less: Actual Costs and Actual Sales    | \$245,039,378  |
| Net 2022 FCA True-up Amount            | (\$13,267,902) |

The Department concluded Minnesota Power correctly calculated its FCA/FPE \$13.3 million under-collection and considered the Company's proposal to collect the amount over the 12-month period beginning the first month following Commission approval 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 Petition's compliance reporting portions.

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

In its February 6, 2008 Order,<sup>7</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."

The Department reviewed Minnesota Power's approved and actual Minnesota jurisdiction generation maintenance expenses for 2022 and, since actual generation maintenance expenses exceeded amounts approved in rates, found them to be reasonable. The Department will continue to monitor Minnesota Power's generation maintenance expenses in future filings, to ensure underspending on generation maintenance expenses does not result in increased outage costs passed on to the ratepayers through the FPE.

#### **5. Conclusion and Recommendations**

Based on its review, the Department concluded (1) MN Power's actual fuel/purchased power costs for 2022 were reasonable and prudent, (2) MN Power correctly calculated its 2022 FCA/FPE Rider under collection of \$13,267,902, and (3) MN Power's Petition complies with the applicable reporting requirements, subject to the Department's review of MP's generation maintenance expenses in the Company's Reply Comments. Therefore, the Department recommended the following:

- Find MN Power's actual 2022 fuel/purchased power costs recoverable through the FCA/FPE rider were reasonable and prudent for 2022.
- Find MN Power correctly calculated its 2022 FCA/FPE Rider under-collection of \$13,267,902.

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<sup>7</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

- Allow MN Power to collect \$13,267,902 in the 12-month period following approval by the Commission.
- Approve the compliance reporting portions of Minnesota Power’s Petition.

### **C. Large Power Intervenor – Comments**

Large Power Intervenor stated increasing FCA rates represented one aspect of an overall troubling trajectory of rates and bills on Minnesota Power’s system. LPI noted that during the 2011-2012 timeframe, fuel and purchased energy costs averaged between \$19-\$20 per MWh, which shows customers’ fuel and purchased energy costs alone have increased by 60% over the last 10 years. The magnitude of this increase appears counterintuitive considering Minnesota Power’s decreased reliance on fossil fuel. Therefore, LPI requested additional information from Minnesota Power in reply comments.

LPI argued that FCA rates and other increases are driving industrial customers’ rates and bill upward. As shown in Table 6, based on Minnesota Power’s response to LPI Information Request No. 5000, Large Power customers’ average rate in 2022 was \$94.90 per MWh. Rates at this level are well above customers’ expectations and certainly raise concerns about Minnesota Power’s duty to have just and reasonable rates that comply with explicit state energy policy. Additionally, LPI requested Minnesota Power provide additional level of detail, showing how each item contributed to the total number.

**Table 6. Rate Impacts of Preferred Plan Relative to Actual and Projected Average Rates**

| <b>Rate Class Impact</b>              | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> |
|---------------------------------------|-------------|-------------|-------------|-------------|
| Large Power (average rate, cents/kWh) | 8.04        | 9.49        | 9.605       | 9.605       |
| Increase (cents/kWh)                  | -0.002      | 0.055       | 0.035       | 0.041       |
| Increase (%)                          | -0.02%      | 0.58%       | 0.36%       | 0.43%       |
| Average Impact (\$ / month)           | -\$1,140    | \$32,828    | \$20,752    | \$24,674    |

Large Power Intervenor also requested Minnesota Power provide additional information pertaining to increased market pricing in 2022 and beyond, by supplementing the record with the following information:

- If/how decisions to move baseload generation to seasonal/economic dispatch have exposed the Minnesota Power to the market to a greater degree.
- If/how the short- and long-term action plans in the Minnesota Power’s recent integrated resource plan (PUC Docket No. 21-33) impacted market exposure in 2022 or will impact market exposure in 2023 and beyond.
- If/how the Minnesota Power’s existing demand response programs mitigate market exposure.
- Whether the Minnesota Power is exploring economic demand response or other customer options to help further mitigate market exposure going forward.
- A detailed analysis explaining why/how FCA costs are increasing at a dramatic pace despite the Minnesota Power’s significantly lower reliance upon fossil-based fuel generation.

## D. Minnesota Power – Reply Comments

In response to the Department and LPI's requests for additional information MP provided the following.

### 1. Department of Commerce Request to Update Maintenance Expenses

As the Department's request, Minnesota Power provided the approved generation maintenance expense from most recent rate,<sup>8</sup> as well as the 2022 actual Minnesota Jurisdiction generation maintenance. Minnesota Power also updated its Attachment 10, which includes the generation maintenance expense information requested. MP noted that the data shown under the Commission Decision column in the updated attachment is not considered final approved until after all compliance filings have been submitted in the rate case.

### 2. LPI Information Request 5000 Update

LPI requested that Minnesota Power update the LPI IR 5000 with 2022 actuals, updated 2023 information and, current 2024 forecasts inclusive of base rates, riders, and FCA charges. The updated information is shown below in Table 7.

**Table 7. Rate Impacts of Preferred Plan Relative to Actual and Projected Average Rates Updated<sup>9</sup>**

| Rate Class Impact                     | 2021     | 2022     | 2023     | 2024     |
|---------------------------------------|----------|----------|----------|----------|
| Large Power (average rate, cents/kWh) | 7.78     | 9.13     | 10.07    | 10.45    |
| Increase (cents/kWh)                  | -0.002   | 0.055    | 0.035    | 0.041    |
| Increase (%)                          | -0.02%   | 0.58%    | 0.36%    | 0.43%    |
| Average Impact (\$ / month)           | -\$1,140 | \$32,828 | \$20,752 | \$24,674 |

<sup>8</sup> Docket No. E-015/GR-21-335.

<sup>9</sup> Notes: 2021 and 2022 actual average rates are based on FERC Form 1 actual revenue and usage, average monthly actual FPE and rider billing factors, and adjustment to align CPA factor in base rates with actual billing factor. 2023 average base rates are prorated assuming Interim Rates continue through 7/31/2023 and Final Rates are implemented on 8/1/2023. Interim Rates are based on 12/23/21 Interim Rate Compliance Schedule 1 and Final Rates are based on draft Final Compliance Schedule E-1. Other 2023 rates include actual 2023 updated FPE factors with 2021 true-up, CPA adjustment assuming the new rate is implemented on 7/1/2023 as filed, the 2022 RRR factors effective 2/1/2023, the 2023 TCR factors effective 1/1/2023, and the 2023 SRRR factors effective 8/1/2023. Monthly rider rates are averaged. 2024 average base rates are based on draft Final Compliance Filing Schedule E-1. All other billing factors noted above as being in-place by 12/31/2023 are continued through 12/31/2024.

### **3. Economic Dispatch**

At LPI's request, Minnesota Power provided insight on baseload generation and economic dispatch. In 2021, Minnesota Power successfully transitioned Boswell Unit 3 to economic dispatch. During 2022, Boswell Unit 3 was consistently dispatched by MISO, due to the strong energy markets. Currently with the transition there has not been a significant increased market exposure; however, as market prices begin to soften and are closer to the dispatch price for Boswell Unit 3, the Company could experience periods of time where MISO does not dispatch the unit and therefore, could have increased exposure to the market.

### **4. Impacts from Integrated Resource Plan ("IRP")**

In response to LPI's request, Minnesota Power provided additional information on if/how the short and long-term action plans approved in Minnesota Power's recent IRP impacted market exposure in 2022 or will impact market exposure in 2023 and beyond. Specifically, the Company stated:

*Minnesota Power's transition away from fossil fuel generation has been done carefully and thoughtfully to ensure a reasonable cost power supply and reliability is maintained for our 7x24 customers. The short-term action plan in Minnesota Power's IRP approved by the Commission did not include any actions that impacted market exposure in 2022. Going forward, Minnesota Power has developed, and the Commission approved, a diverse generation portfolio to decarbonize the company's power supply that includes Power Purchase Agreements ("PPA") and owned wind, hydro (including dispatchable), dispatchable gas generation, biomass, and solar that results in a low-cost portfolio for customers. With Minnesota Power's diverse renewable portfolio, it helps maintain a more consistent production of renewables, and when renewables are unavailable Minnesota Power has a dispatchable generation portfolio and demand response that can be used to fill the gaps. We will continue to keep reliability and market exposure in the forefront as we continue to transform.*

### **5. Existing Demand Response Programs**

At LPI's request, Minnesota Power provided additional information on how Minnesota Power's existing demand response programs mitigate market exposure. Minnesota Power stated it has the following demand response programs that are used to mitigate market exposure.

- Dual Fuel is an interruptible discount rate designed primarily for electric heating, which requires a separate meter that can be controlled by Minnesota Power. In exchange for a discounted rate, customers must agree to be interrupted (through a meter that can be interrupted by Minnesota Power), which typically occurs when demand on the electric system is high. Dual Fuel load is interrupted to reduce or mitigate exposure to market purchases from MISO when market costs are high.

- Incremental Production Service (IPS) – Incremental energy procured by Large Power Customers for service above the IPS threshold established in the Electric Service Agreement. This product also offered the Company a curtailable product in times of high system loads or during concerns of system volatility. Duration and frequency of curtailments are at the sole discretion of the Company and require a 10-minute notice.
- Released Energy and Voluntary Energy Buyback – Voluntary Customer products that reduce energy requirements during times when Minnesota Power is purchasing energy to meet firm energy requirements, thereby enabling the avoidance of higher-cost energy purchases.

## **6. Exploring Economic Demand Response or Other Customer Products**

In response to LPI’s inquiry regarding whether Minnesota Power was exploring economic demand response or other customer options to help further mitigate market exposure going forward. Minnesota Power noted that in its most recent IRP proceeding the Company proposed, and was subsequently ordered, to work collaboratively with customers to pursue up to 50 MW of additional long-term demand response by 2030 to address future resource adequacy changes. Minnesota Power stated that it continues to work with its customers to implement new longer-term demand response products to maximize this valuable resource for the region. This would also include exploring economic demand response criteria and options. Lastly, Minnesota Power noted that it continually evaluates additional demand response programs through its IRPs, including air conditioning and electric hot water heater cycling programs.

## **7. Detailed Analysis of Why FCA Costs are Increasing**

In response to LPI’s request for an analysis explaining why FCA costs are increasing at a dramatic pace despite the Company’s significant lower reliance upon fossil-based fuel generation, Minnesota Power stated:

Minnesota Power stated transition away from fossil fuel generation has been done carefully and thoughtfully to ensure a reasonable cost power supply and reliability is maintained for Minnesota Power 7x24 customers. MP’s power supply decisions are prudently vetted by the Commission and stakeholders through the IRP process every couple of years. The IRP evaluation takes into consideration Minnesota renewable and carbon reduction goals, environmental cost impacts to residents, rate impacts to customers, and the reliability of the system. Minnesota Power has been executing a well thought out plan to decarbonize our power supply that includes continuing to operate our most efficient coal generation resources (i.e. Boswell Units 3 and 4) to provide low-cost power to customers throughout the transition, a diverse renewable portfolio of wind, solar, and hydro that is a mix of owned resources and PPAs, a dispatchable fleet of gas and biomass fired generation, utilization of the MISO market when economical, and efficient use of customer demand response. Minnesota Power’s decarbonization plan



maintains a consistent production capability where renewables provide low-cost power, and when renewables are unavailable Minnesota Power has a dispatchable generation portfolio and demand response that can be used to economically fill the gaps.

## **E. Large Power Intervenor – Reply Comments**

### **1. Commission Should Reject 2022 FCA True-Up Request**

LPI noted that increasing FCA costs are placing unreasonable strains on customers. In 2022, the Minnesota Power’s initially forecasted total cost of fuel was \$229,065,935 (subsequently increased by \$36 million and potentially increasing by \$13.3 million more). In 2023 and 2024 the Company’s forecasts increased to \$265,752,178 and \$263,625,304, respectively. These costs are, undoubtedly, contributing to increasing projected rates for customers, which are trending upwards at an alarming rate applying Company projections. In the span of only a few months, Minnesota Power’s 2023 and 2024 Large Power customer projections are now approximately \$100.66/MWh and \$104.53/MWh, respectively.<sup>10</sup> As a result, LPI recommended that MP’s true-up request be denied.

### **2. The Commission Should Order Exploration of Rate Mitigation Strategies**

Large Power Intervenor recommended the Commission also order Minnesota Power to explore further rate mitigation options to provide customers with additional opportunities to control rapidly increasing electricity costs. LPI argued that Minnesota Power acknowledged that it “continually evaluates additional demand response,” and that it has been ordered to pursue more demand response options. Given the current trajectory of customers’ rates (described above), the need to facilitate these proposals is urgent, and LPI believes that stakeholder conversations and workshops should begin as soon as possible. LPI noted that the Commission has previously ordered the Company to work with customers on rate design issues, and LPI urged the Commission to direct a similar process here.<sup>11</sup>

## **F. Department of Commerce – Reply Comments**

The Department reviewed the Company’s approved and actual Minnesota jurisdiction generation maintenance expenses for 2022 provided in MP’s reply comments and found them reasonable.

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<sup>10</sup> MP Reply Comment at Updated Table 2(b).

<sup>11</sup> See In the Matter of Minnesota Power’s Compliance Report on Rate Design for Large Power Customers, PUC Docket No. E-015/M-21-61.



#### **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 be approved.

Staff notes that LPI's recommendation that Minnesota Power explore rate mitigation possibilities does not include a timeline recommendation. Therefore, if the Commission is persuaded by LPI's recommendation, Staff will add a compliance date to the decision alternative related to this issue.

**V. Decision Alternatives****Petition**

1. Accept and approve Minnesota Power's 2022 Annual Fuel and Purchased Energy Charge Rider true-up compliance filing. (MP, DOC)

**True-Up Amount**

2. Authorize Minnesota Power to recover its 2022 under-collection of \$13,267,902. (MP, DOC)
3. Do not authorize Minnesota Power to recover its 2022 under collection. (LPI)

**Timing of True-up**

4. Allow Minnesota Power to recover the 2022 under-collection over a 12-month period starting the 1<sup>st</sup> of the next month after the Commission issues its written order. (MP, DOC)

**Rate Mitigation**

5. Order Minnesota Power to work with stakeholders to explore rate mitigation strategies and file a progress report by January 15, 2024. (LPI, amended by Staff)