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by Sidney Davy Miller

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March 22, 2023

Ms. Lisa Felice
Executive Secretary
Michigan Public Service Commission
7109 W. Saginaw Hwy.
Lansing, MI 48917

Re: Upper Michigan Energy Resources Corporation
2022 PSCR Reconciliation
Case No. U-21057

Dear Ms. Felice:

Enclosed for electronic filing in the above case please find Upper Michigan Energy Resources Corporation's Application and the supporting Direct Testimony and Exhibit of James M. Beyer. Also included is my Appearance.

Should you have any questions, please contact me.

Very truly yours,

Miller, Canfield, Paddock and Stone, P.L.C.

By: _____
Sherri A. Wellman

SAW:ehk
Enclosures
cc w/enc: James M. Beyer
Richard Stasik
Ted Eidukas
Koby Bailey

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * * *

In the matter of the application of **UPPER MICHIGAN**)
ENERGY RESOURCES CORPORATION for) Case No. U-21057
reconciliation of its power supply cost recovery plan)
for the 12-month period ended December 31, 2022.)

APPLICATION

UPPER MICHIGAN ENERGY RESOURCES CORPORATION (“UMERC”) requests the Michigan Public Service Commission (“MPSC” or the “Commission”) to approve the reconciliation of UMERC’s power supply costs and revenues pursuant to 1982 PA 304 (“Act 304”) for the 12-month period January 2022 through December 2022, and represents to the Commission as follows:

1. UMERC is a public service corporation organized under the laws of Michigan with its principal offices located in Milwaukee, Wisconsin, and with service centers located at 800 Industrial Park Drive, Iron Mountain, Michigan, and 1717 Tenth Avenue, Menominee, Michigan. For the 2021 Power Supply Cost Recovery (“PSCR”) Plan year, UMERC provided retail electric service to the public in service areas located in the Upper Peninsula, including the counties of Alger, Baraga, Delta, Dickinson, Gogebic, Houghton, Iron, Marquette, Menominee, and Ontonagon.

2. On January 1, 2017, pursuant to a Settlement Agreement approved by the Commission on December 9, 2016 in Case No. U-18061 (“U-18061 Settlement Agreement”), UMERC was established as a Michigan regulated utility providing service only to electric and natural gas customers in the Upper Peninsula of Michigan.

3. UMERC's retail electric business in Michigan is subject to the Commission's jurisdiction pursuant to 1909 PA 106, as amended, MCL 460.551 *et seq.*; 1909 PA 300, as amended, MCL 462.2 *et seq.*; 1919 PA 419, as amended, MCL 460.51 *et seq.*; and 1939 PA 3, as amended, MCL 460.1 *et seq.*

4. Incorporated in UMERC's rate schedules are PSCR clauses as authorized by the Commission in Case No. U-18061.

5. For the WEPCo Rate Zone, the 12-month reconciliation of UMERC's power supply costs and revenues for 2022 results in a cumulative under-recovery of \$2,864,484 inclusive of an interest amount. UMERC's WEPCo Rate Zone 2021 PSCR reconciliation approved in Case No. U-20809 reflected an under-recovery of \$4,743,197. The 2022 cumulative under-recovery includes the roll-in of the 2021 under-recovery, and UMERC requests approval to roll the 2022 cumulative under-recovery of \$2,864,484 into its WEPCo Rate Zone 2023 PSCR reconciliation beginning balance.

6. For the WPSC Rate Zone, the 12-month reconciliation of UMERC's power supply costs and revenues for 2022 result in a cumulative under-recovery of \$2,954,501 inclusive of an interest amount. UMERC's WPSC Rate Zone 2021 approved in Case No. U-20809 was an under-recovery amount of \$3,419,108. The 2022 cumulative under-recovery includes the roll-in of the 2021 under-recovery, and UMERC requests approval to roll the 2022 cumulative under-recovery of \$2,954,501 into its WPSC Rate Zone 2023 PSCR reconciliation beginning balance.

7. The testimony and exhibit of James M. Beyer are filed in support of this Application. UMERC represents that its proposals are just and reasonable and in the public interest.

WHEREFORE, Upper Michigan Energy Resources Corporation requests that this Commission:

A. Approve the reconciliation of UMERC's 12-month power supply costs and revenues as presented by UMERC;

B. Find and determine that the power supply costs incurred by UMERC during 2022, as included in this reconciliation, were reasonably and prudently incurred;

C. Find and determine that UMERC's total cumulative under-recovery of \$2,864,484, as of December 31, 2022, for its WEPCo Rate Zone, should be rolled into the beginning balance of its 2023 PSCR reconciliation for its WEPCo Rate Zone;

D. Find and determine that UMERC's cumulative under-recovery of \$2,954,501, as of December 31, 2022, for its WPSC Rate Zone, should be rolled into the beginning balance of its 2023 PSCR reconciliation for its WPSC Rate Zone; and

E. Grant UMERC such other and additional relief as shall be lawful and proper.

Respectfully submitted,

UPPER MICHIGAN ENERGY RESOURCES
CORPORATION

Dated: March 22, 2023

By: _____
Its Attorney
Sherri A. Wellman (P38989)
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Lansing, MI 48933
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STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
UPPER MICHIGAN ENERGY RESOURCES)
CORPORATION for reconciliation of its power supply)
cost recovery plan for the 12-months)
ended December 31, 2022.)

Case No. U-21057

DIRECT TESTIMONY AND EXHIBIT OF

JAMES M. BEYER

ON BEHALF OF

UPPER MICHIGAN ENERGY RESOURCES CORPORATION

March 22, 2023

DIRECT TESTIMONY AND EXHIBIT OF
JAMES M. BEYER

1 **Q. Please state your name, business address, and position.**

2 A. My name is James M. Beyer. My business address is WEC Energy Group (“WEC”), 2830
3 South Ashland Avenue, Green Bay, WI 54304. I am a Project Specialist in the State
4 Regulatory Affairs Department of WEC. Upper Michigan Energy Resources Corporation
5 (“UMERC” or the “Company”) is a wholly owned subsidiary of WEC.

6

7 **Q. Please describe briefly your education, professional, and utility background.**

8 A. I graduated from Northern Michigan University, Marquette, Michigan, with a Bachelor of
9 Science Degree in Accounting in 2002 and from Lakeland College, Sheboygan, Wisconsin,
10 with a Master of Business Administration degree in 2006. I have been employed by WEC
11 and its predecessors, first as a Pricing Analyst and currently as a Project Specialist since
12 2004. In my current position, I perform and am otherwise involved in rate related studies,
13 service and tariff administration, financial analyses, and rate development and
14 administration.

15

16 **Q. Have you testified before a regulatory agency?**

17 A. Yes. I have testified before the Public Service Commission of Wisconsin (“PSCW”) and
18 the Michigan Public Service Commission (“MPSC” or the “Commission”).

19

20 **Q. Please describe UMER.**

21 A. UMER is a Michigan jurisdictional regulated utility authorized to serve the former
22 Michigan electric customers of Wisconsin Electric Power Company (“WEPCO”) and
23 Wisconsin Public Service Corporation (“WPS Corp”) and the former Michigan natural gas

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1 customers of WPS Corp. Michigan approvals for UMERC to provide retail electric and
2 natural gas service in the state of Michigan were granted by the Commission in its
3 December 9, 2016 Order in Case No. U-18061. The approvals granted in Case No. U-
4 18061 included, but were not limited to the, (i) transfer of the electric distribution assets
5 of WEPCO and WPS Corp used for providing retail electric service in Michigan, (ii) (at
6 least initially, with the exception of the Tilden Mining Company, L.C. (“Tilden”) and
7 Empire Iron Mining Partnership (collectively the “Mines”)) transfer of WEPCO’s and
8 WPS Corp’s Michigan retail tariff electric customers to UMERC, (iii) assumption of
9 WEPCO’s and WPS Corp’s PSCR clauses, and (iv) authority to provide electric service
10 under the current rates, terms, and conditions of service set forth in WEPCO’s and WPS
11 Corp’s Michigan electric tariff books.

12
13 **Q. What happened with the Mines’ load upon UMERC’s completion of the Upper**
14 **Peninsula (“UP”) generation solution?**

15 A. Consistent with the U-18061 Settlement Agreement, WEPCO continued to serve the
16 Mines until UMERC’s completion of the UP generation solution on March 31, 2019, and
17 the corresponding termination of both of the 2015-2020 Large Curtailable Special
18 Contracts between WEPCO and the Mines that were approved by the Commission’s
19 April 23, 2015 Order in Case No. U-17862 (“Mines’ Special Contracts”). Once those
20 events occurred, the Mines transferred to, and became customers of, UMERC. In a
21 signed letter appended as Attachment B to WEPCO’s September 1, 2016 Application
22 Requesting Approval of Amendment in Case No. U-17862, WEPCO and Empire agreed
23 that Empire’s special contract would terminate no later than October 15, 2016. The

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1 Commission approved the termination letter in its December 9, 2016 Order in Case No.
2 U-17862. Therefore, upon the transfer of Tilden to UMEREC, service has been pursuant to
3 a Special Contract between UMEREC and Tilden, which was approved by the MPSC on
4 October 25, 2017, in Case No. U-18224. As I discuss later, Tilden is not a PSCR
5 customer.

6
7 **Q. What is the purpose of your testimony in this proceeding?**

8 A. The purpose of my testimony is to support the reconciliation of UMEREC's actual power
9 supply costs to the revenues it collected pursuant to authorized base rates and PSCR factors
10 for the 12-month period ended December 31, 2022.

11
12 **Q. What PSCR bases and loss factors were used for determining PSCR cost recovery for
13 the WEPCo and WPSC Rate Zones in 2021?**

14 A. As part of the approvals sought in Case No. U-18061, the PSCR clauses of WEPCO and
15 WPS Corp were transferred to UMEREC. As such, this 2022 PSCR reconciliation filing
16 reflects that UMEREC recovered PSCR costs via separate PSCR clauses for the customers
17 of the WEPCo Rate Zone and WPSC Rate Zone. Thus, each rate zone had its own PSCR
18 base and factor. The WEPCo Rate Zone reflected the current loss factor of 1.04 and the
19 PSCR base of \$45.47 per MWh, and the WPSC Rate Zone reflected the current loss factor
20 of 1.0276 and the PSCR base of \$40.52 per MWh. This filing reconciles 2022 PSCR
21 revenues and costs for each rate zone.

DIRECT TESTIMONY AND EXHIBIT OF
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1 **UMERC POWER SUPPLY**

2 **Q. How does UMERC meet its customers' power supply and transmission service**
3 **requirements?**

4 A. The Company owns generation, participates in the Midcontinent Independent System
5 Operator, Inc. ("MISO") Market, receives transmission services from the American
6 Transmission Company LLC ("ATC") and purchases power from customer-owned
7 generation to meet its customers' power supply and transmission service requirements.

8
9 **Q. Please describe UMERC's owned generation currently operating in the Upper**
10 **Peninsula ("UP").**

11 A. As part of the UP generating solution, UMERC installed natural gas-fueled reciprocating
12 natural gas-fueled internal combustion engines ("RICE") at the following two facilities in
13 the UP: (i) the Kuester Power Plant, with seven generators, each with a capacity of
14 approximately 18 MW, and (ii) the Mihm Power Plant, with three generators, each with a
15 capacity of approximately 18 MW.

16
17 **Q. How is UMERC recovering the PSCR costs related to its RICE generation, and its**
18 **participation in the MISO Market and the ATC for power supply and transmission**
19 **services?**

20 A. As is typical, fuel costs relating to the RICE generation, costs for participation in the MISO,
21 and transmission costs relating to ATC are being recovered from the WEPCo Rate Zone
22 and WPSC Rate Zone customers via the PSCR mechanism. Additionally, as a customer
23 of the Company, Tilden is paying UMERC for fuel costs to operate the RICE units for its

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1 load, purchases and sales of power from MISO for its load, and transmission costs for
2 transmission services for its load, pursuant to the terms of the approved Tilden Special
3 Contract. UMERC credits the monthly revenues received from Tilden for energy and
4 transmission to the total UMERC PSCR fuel, purchased power, MISO and ATC costs.

5
6 The total UMERC generated and purchased MWh is also reduced by the Tilden load
7 requirements, resulting in the UMERC WEPCo and WPSC Rate Zones load requirements
8 excluding Tilden. The PSCR cost per MWh are determined by dividing the remaining
9 PSCR cost by the UMERC WEPCo and WPSC Rate Zone load requirements excluding
10 Tilden. Both rate zones are charged the same PSCR cost per MWh. However, as discussed
11 earlier, for the retail WEPCo Rate Zone the loss factor of 1.04 is being applied to the PSCR
12 cost per MWh to determine the UMERC PSCR system costs assigned to the WEPCo Rate
13 Zone sales. For the WPSC Rate Zone, the loss factor of 1.0276 is being applied to the
14 PSCR cost per MWh to determine the UMERC PSCR system costs assigned to the WPSC
15 Rate Zone sales.

16
17 **Q. Did any of the generating units at the Kuester or Mihm power plants experience**
18 **outages during 2022 lasting more than 90 days?**

19 A. No. There were no outages at the Kuester or Mihm power plants lasting more than 90 days.

20
21 **Q. Did UMERC suspend operations of Kuester and/or Mihm for economic reasons in**
22 **2022?**

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1 A. No. U MERC did not suspend the operations of either plant due to economic reasons in
2 2022.

3

4 **Q. Does U MERC have any additional information on the root cause determination of the**
5 **exhaust valve recession issues related to the 2021 Mihm outage? If a remedy has been**
6 **determined, please provide an explanation.**

7 A. No, not at this point. The vendor continues to investigate the exhaust valve recession issues
8 and is still working to identify and confirm the root cause. Through ongoing discussions
9 with the vendor, U MERC has learned that once the root cause is identified, the vendor will
10 work as efficiently as possible to develop a remedy for the exhaust valve recession issue.
11 Field testing, as part of this investigation has been performed by the vendor and U MERC
12 expects the results to be shared by the vendor as soon as available. Monthly update
13 meetings with the vendor are in place and U MERC will provide further updates to
14 Commission Staff when information is provided.

15

16 **Q. If a remedy has not been determined please provide all replacement power costs and**
17 **other expenses that are booked as power supply costs associated with the 2021 Mihm**
18 **outage.**

19 A. Mihm Unit 1 returned to service and was producing energy as of December 9, 2021,
20 therefore there was no purchase of replacement power associated with the outage at Mihm
21 Unit 1 in 2022.

22

DIRECT TESTIMONY AND EXHIBIT OF
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1 **Q. Do the costs in this reconciliation include Northern Natural Gas Pipeline (“NNG”)**
2 **reservation fees and transportation charges for transporting natural gas to the**
3 **Kuester and Mihm power plants?**

4 A. Yes. The Company has firm transportation contracts with NNG with a daily capacity of
5 24,610 dth and a reservation rate of \$0.48/dth/day. The firm transportation contracts are
6 for a 20 year term and began on November 1, 2019. These contracts were approved by
7 FERC and include reservation fees and a NNG approved tariff gas transportation rate. The
8 total pipeline reservation fees were \$4.3 million and the gas transportation fees were about
9 \$244,000 for 2022.

10
11 **Q. Please explain why the Company contracts for firm transport from the pipelines.**

12 A. The interstate pipelines serving the UMERC area have much of their firm transportation
13 capacity sold and allocated to the various shippers for multiple years. During severe or
14 colder-than-normal weather consumption increases dramatically for many and it is likely
15 that contracted firm transportation capacity could be fully utilized. Unlike firm
16 transportation, released capacity or interruptible capacity is typically subject to recall under
17 such conditions, therefore any supplier relying on interruptible or released capacity would
18 likely be unable to deliver its supply to the Company’s service territory. The Company
19 secures firm transportation capacity to provide reliable transportation of supply, rather than
20 relying on interruptible or released capacity, which may potentially be lower priced but
21 which also carries the risk of being unavailable when it is most needed.

22
23 **Q. Please describe the pipeline balancing services used by the Company.**

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1 A. The Company has contracted for balancing services for about 4,000 Dth/day with NNG.
2 UMERC's balancing fees for 2022 were approximately \$154,000.

3

4 **Q. Did UMERC incur any demurrage or penalty charges during the reconciliation**
5 **period?**

6 A. No.

7

8 **Q. Describe UMERC's natural gas fuel purchases.**

9 A. UMERC employed a mix of supply terms for natural gas fuel purchases: (i) term supplies,
10 which were supplies for longer than one month, (ii) first of the month ("FOM") base-load
11 supplies and (iii) daily purchases.

12

13 **Q. Has UMERC included cost associated with a risk management plan and if so, what is**
14 **the amount of gas risk management transaction costs included in this reconciliation?**

15 A. No. UMERC's hedging strategy is intended to manage price risk with physical term
16 supplies and first of month base-load supplies in the winter season, which do not include
17 gas risk management transaction costs. Term purchases provide enhanced reliability for
18 customers during the winter months while hedging against daily price volatility by
19 minimizing UMERC's exposure to the daily prices for its gas needs. There were no risk
20 management transaction costs incurred with the physical term supplies and first of month
21 base-load supply.

22

23 **Q. Please describe MISO charges and payments for this reconciliation.**

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1 A. For 2022, UMERC had MISO energy purchases of 1,083,940 MWh for \$57.5 million and
2 incurred MISO Market other charges and credits as follows:

Net Revenue Sufficiency Guarantee	\$44,149
Distribution of Excess Congestion	(\$36,347)
Net Congestion Expense / (Revenue)	(\$3,789,244)
Net Losses Expense / (Revenue)	(\$1,688,399)
ASM Charges	\$226,631
<hr/>	
Total MISO Market Other Charges & Credits	(\$5,243,210)

4

5 **Q. Are you sponsoring any exhibits in connection with your testimony?**

6 A. Yes, I am sponsoring Exhibit A-1 (JMB-1) consisting of three pages.

7

8 **Q. Was Exhibit A-1 (JMB-1) prepared by you?**

9 A. Yes, it was.

10

11 **Q. Please describe Exhibit A-1 (JMB-1).**

12 A. Exhibit A-1 (JMB-1) details the UMERC 2022 WEPCo Rate Zone and WPSC Rate Zone
13 PSCR reconciliations, including interest calculations. Page 1 compares the 2022 actual
14 PSCR costs with a combination of the projected PSCR costs from January through July
15 2023 as approved in the Commission's April 14, 2022 Order Approving Settlement
16 Agreement in the 2022 PSCR Plan in Case No. U-21056 and the projected PSCR costs
17 from August through December 2023 as approved in the Commission's July 27, 2022
18 Order Approving Settlement Agreement. Page 2 details the calculation of PSCR revenues
19 as well as PSCR costs, interest, and over/(under) recovery for the months of January
20 through December 2022, resulting in a net under-recovery of \$2,864,484 in the WEPCo
21 Rate Zone and a net under-recovery of \$2,954,501 in the WPSC Rate Zone for the

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1 reconciliation period. Page 3 details the UMERG RICE generation dispatch, the MISO
2 Market purchases and opportunity sales (which include sales to Tilden), and the related
3 PSCR system costs and MWh by month for 2022, and the determination of the rate zone
4 power supply costs based on the cost per MWh of the monthly power supply sources.

5
6 **Q. Please describe what “Purchased Power Agreements” is at line 8 on page 3 of Exhibit**
7 **A-1 (JMB-1).**

8 A. Purchased Power Agreements are purchased power charges and credits received by
9 UMERG under the WEPCO and WPS Corp PPAs related to true-ups of prior year capacity
10 and energy charges.

11
12 **Q. Please describe what “Other Purchased Power” is at line 9 on page 3 of Exhibit A-1**
13 **(JMB-1).**

14 A. Other Purchased Power includes costs for purchases of power from customer owned
15 generation.

16
17 **Q. Please describe the “Economic Buyouts” that appear on page 3, line 12 of Exhibit A-**
18 **1 (JMB-1).**

19 A. The WPSC Rate Zone has an electric interruptible program for its Large Commercial and
20 Industrial customers, which allows the Company to interrupt service for two types of
21 electric system conditions. The first condition is known as emergency interruption, and
22 occurs when system demand, required operating reserves and firm transaction sales cannot
23 be supplied by available generating capacity plus purchased energy. Customers are

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1 required to interrupt load during emergency interruptions. The second condition is known
2 as "economic interruption" and occurs when purchased energy is available but at a market
3 price higher than the cost of typical peaking generation. When an economic interruption
4 is declared, the customer is required to reduce load to its firm nomination, or the customer
5 may choose to "buyout" of the interruption and continue to purchase energy above its firm
6 nomination, with the "buyout" energy being priced at the higher market price. The intent
7 of the buyout provision is to allow the interruptible customers the option of purchasing the
8 higher cost power.

9 Consistent with the UMER-C-WPSC interruptible tariffs, the Company declared
10 several economic interruptions and, as a result, recorded buyout volumes of 2,572 MWhs
11 and related revenues of \$353,284 in 2022. Because the cost of purchasing energy to supply
12 these sales was included in purchased power costs, the total revenues received from the
13 buyout sales have been credited to the 2022 PSCR costs and the buyout volumes have been
14 removed from the PSCR requirement sales as non-firm sales.

15
16 **Q. Please describe the "Opportunity Sales and Mines Revenues" that appear on page 3,
17 line 13 of Exhibit A-1 (JMB-1).**

18 A. As described previously, UMER-C credits the monthly revenues received from Tilden for
19 energy and transmission to the UMER-C PSCR fuel, purchased power, MISO and ATC
20 costs. Page 3, line 13 of Exhibit A-1 (JMB-1) includes these PSCR related revenues from
21 Tilden, as well as any opportunity sales revenue received by UMER-C for sales of energy
22 and related ancillary services to the MISO Market.

23

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1 **Q. Is UMERC's 2022 beginning over/(under) recovery balance for the WEPCo Rate**
2 **Zone the same as the as-settled amount in the 2021 PSCR Reconciliation in Case No.**
3 **U-20809?**

4 A. Yes. The 2021 PSCR Reconciliation under-recovery amount of \$4,743,197, shown as the
5 beginning over/(under) recovery balance for 2022, on Page 2, line 23, is the amount
6 approved for the UMERC WEPCo Rate Zone in the 2021 PSCR Reconciliation in Case
7 No. U-20809.

8
9 **Q. Is UMERC's 2022 beginning over/(under) recovery balance for the WPSC Rate Zone**
10 **the same as the as-settled amount in the 2021 PSCR Reconciliation in Case No. U-**
11 **20809?**

12 A. Yes. The 2021 PSCR Reconciliation over-recovery amount of \$3,419,108, shown as the
13 beginning over/(under) recovery balance for 2022, on Page 2, line 57, is the amount
14 approved for the UMERC WPSC Rate Zone in the 2021 PSCR Reconciliation in Case No.
15 U-20809.

16
17 **Q. Please describe in more detail the under-recoveries experienced by UMERC in the**
18 **WEPCo and WPS Rate Zones for the 12-month period ending December 31, 2022.**

19 A. One of the contributing factors to the under-recoveries of UMERC power supply costs in
20 2022 was the significant increase in natural gas prices used to fuel the RICE units.
21 Following is a comparison of the NYMEX futures market on July 28, 2021, which was
22 used in the 2022 PSCR Plan (as filed on September 30, 2021 in Case No. U-21056) from
23 January through July 2022 actual natural gas prices and a more recent August through

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1 December 2022 forecasted gas prices (reflected in the reopened application filed May 16,
2 2022):

	Original Plan/Reopener	Actual	Difference	
			\$	%
Jan-22	\$4.190	\$4.024	(\$0.166)	-4%
Feb-22	\$4.106	\$6.265	\$2.159	53%
Mar-22	\$3.841	\$4.568	\$0.727	19%
Apr-22	\$3.234	\$5.336	\$2.102	65%
May-22	\$3.147	\$7.267	\$4.120	131%
Jun-22	\$3.175	\$8.908	\$5.733	181%
Jul-22	\$3.210	\$6.551	\$3.341	104%
Aug-22	\$7.597	\$8.687	\$1.090	14%
Sep-22	\$7.571	\$9.353	\$1.782	24%
Oct-22	\$7.573	\$6.868	(\$0.705)	-9%
Nov-22	\$7.641	\$5.186	(\$2.455)	-32%
Dec-22	\$6.730	\$6.712	(\$0.018)	0%

3
4 As seen in the above graph, there were significant increases in actual natural gas prices
5 compared to those forecasted in the original plan from January through July 2022. The
6 forecasted natural gas prices from the amended plan effective August 2022 through
7 December 2022 were much closer to actuals.

8
9 Fuel costs for the Kuester generation facility were up by \$12.2 million (line 2) due to higher
10 generation and to the above mentioned higher prices for natural gas in 2022. Fuel costs for
11 the Mihm generation facility were up by \$6.5 million (line 3) due to higher generation and
12 to the above mentioned higher prices for natural gas in 2022. Generation was higher than
13 planned at both facilities because MISO LMPs were higher than anticipated due to higher
14 natural gas prices combined with increased coal conservation taking place across the MISO

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1 footprint. As a result, the Kuester and Mihm units were dispatched by MISO more
2 frequently than originally forecasted.

3
4 Another contributing factor to the under-recoveries of UMEREC power supply costs was a
5 significant increase in Locational Marginal Prices (“LMPs”) compared to forecasted prices.
6 The high natural gas prices have a direct correlation to the high LMPs. Another
7 contributing factor exacerbating the impact to higher LMPs is coal rail delivery issues,
8 which is a result of the railroads not being able to deliver the appropriate levels of coal to
9 maintain adequate levels of inventory. Problems with coal delivering railroads began
10 surfacing around the end of the summer of 2021. When the economy took a downturn as a
11 result of COVID, the railroads saw reduced delivery needs which led to a reduction in
12 employees. As the economy began to improve the need for train conductors and engineers
13 increased rather quickly. The railroads began to rehire but found it difficult to hire to at the
14 levels needed to meet the demand of their shipping customers. Without enough employees
15 to drive the trains, coal trains are sitting idle for extended periods of time or being stopped
16 altogether. As a result coal units are not being fully dispatched during periods of higher
17 LMPs caused by increased natural gas prices putting further pressure on LMPs, especially
18 during the shoulder months, i.e. spring and fall, when gas prices and LMPs tend to decrease
19 compared to winter and summer prices. The following is a comparison of LMPs used in
20 the 2022 PSCR Plan filed on September 30, 2021 to January through July 2022 actual
21 LMPs and a more recent August through December 2022 forecast of LMPs reflected in the
22 May 16, 2022 reopener. As seen in the below graph, there were significant increases in
23 actual LMPs compared to those forecasted in the original plan from January through July

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1 2022. The forecasted LMPs from the amended plan effective August 2022 through
2 December 2022 were much closer to actuals.

3

	Original Plan/Reopener	Actual	Difference	
			\$	%
Jan-22	\$38.69	\$42.80	\$4.11	11%
Feb-22	\$32.52	\$43.63	\$11.11	34%
Mar-22	\$29.77	\$36.23	\$6.46	22%
Apr-22	\$24.03	\$47.26	\$23.23	97%
May-22	\$21.59	\$56.33	\$34.74	161%
Jun-22	\$26.59	\$60.62	\$34.03	128%
Jul-22	\$35.49	\$64.18	\$28.69	81%
Aug-22	\$78.94	\$78.95	\$0.01	0%
Sep-22	\$59.32	\$60.22	\$0.90	2%
Oct-22	\$60.80	\$53.80	(\$7.00)	-12%
Nov-22	\$63.59	\$52.75	(\$10.84)	-17%
Dec-22	\$86.43	\$74.07	(\$12.36)	-14%

4

5 Lastly, a portion of the 2022 under-recovery is related to 2021. A large customer in the
6 WPS Rate Zone was offline for the last quarter of 2022. This resulted in less sales which
7 in turn resulted in less PSCR recovery. Overall the WPS Rate Zone’s sales were down by
8 approximately 35,000 MWh than forecasted. This equates to approximately \$430,000 less
9 PSCR recovery revenue than forecasted.

10

11 As stated above, Page 2 of Exhibit A-1 (JMB-1) details the over/under-recovery balance
12 by month as well as the monthly interest calculation for the reconciliation period. Interest
13 is calculated on the average recovery balance for each month. The WEPCo Rate Zone’s
14 under-recovery interest was \$93,305 for the year 2022. The 2022 under-recovery balance
15 of \$2,771,179 as shown on line 24, plus the plan year under-recovery interest of \$93,305

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1 on line 30, results in a cumulative under-recovery in the amount of \$2,864,484 for the
2 WEPCo Rate Zone, as shown on line 32. The WPSC Rate Zone's under-recovery interest
3 was \$74,614 for the year 2022. The 2022 under-recovery balance of \$2,879,887 as shown
4 on line 58, plus the plan year under-recovery interest of \$74,614 on line 64, results in a
5 cumulative under-recovery in the amount of \$2,954,501 for the WPSC Rate Zone, as
6 shown on line 66.

7
8 **Q. How does UMERC propose to address the PSCR over/under-recovery balances at the**
9 **end of 2022?**

10 A. UMERC proposes to roll-in the WEPCo Rate Zone net cumulative under-recovery balance
11 of \$2,864,484 into the WEPCo Rate Zone PSCR over/(under) recovery beginning balance
12 for 2023. Similarly, UMERC proposes to roll-in the WPSC Rate Zone net cumulative
13 under-recovery balance of \$2,954,501 into the WPSC Rate Zone PSCR over/(under)
14 recovery beginning balance for 2023.

15
16 **DETERMINATION OF PSCR COSTS**

17 **Q. What system power supply costs and related system power supply MWh were used**
18 **in the calculation of the average PSCR system cost per MWh for the WEPCo and**
19 **WPSC Rate Zones for 2022?**

20 A. For 2022, the UMERC system power supply costs and related UMERC system supply
21 MWh were used in the calculation of the average PSCR system cost per MWh for both
22 the WEPCo and WPSC Rate Zones.

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1 The UMER system power supply costs and related UMER system supply MWh are
2 shown on Page 3 of Exhibit (A-1) (JMB-1), lines 2 through 31. The total UMER system
3 power supply costs, line 16 was divided by the total UMER system supply MWh, line
4 29, resulting in the average UMER PSCR System Cost per MWh, as shown on line 31.
5 The UMER PSCR System Cost per MWh are shown as being used for the WEPCo Rate
6 Zone on line 34 and for the WPSC Rate Zone on line 42.

7
8 **Q. How were the WEPCo and WPSC Rate Zone PSCR costs determined?**

9 A. As shown on Page 3 of Exhibit (A-1) (JMB-1), the WEPCo Rate Zone loss factor of 1.04
10 (line 35), was applied to the average PSCR system costs per MWh on supply (line 34)
11 resulting in the PSCR costs per MWh on sales (line 36). The PSCR costs per MWh on
12 sales (line 36) was then applied to the WEPCo Rate Zone sales (line 38), resulting in the
13 WEPCo Rate Zone PSCR costs (line 39). The WEPCo Rate Zone PSCR costs are also
14 shown on Page 2 of Exhibit (A-1) (JMB-1), line 20.

15
16 As shown on Page 3 of Exhibit (A-1) (JMB-1), the WPSC Rate Zone loss factor of
17 1.0276 (line 43), was applied to the average PSCR system costs per MWh on supply (line
18 42) resulting in the PSCR costs per MWh on sales (line 44). The PSCR costs per MWh
19 on sales (line 44) was then applied to the WPSC Rate Zone sales (line 46), resulting in
20 the WPSC Rate Zone PSCR costs (line 47). The WPSC Rate Zone PSCR costs are also
21 shown on Page 2 of Exhibit (A-1) (JMB-1), line 54.

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1 **COMPARISON OF ACTUAL PSCR COSTS TO PSCR PLAN**

2 **Q. Please summarize the primary reasons for the variance in the UMERC PSCR system**
3 **costs between the 2022 PSCR plan as approved compared to the 2022 actual UMERC**
4 **PSCR system costs incurred.**

5 A. As shown on Exhibit A-1 (JMB-1), Page 1, line 27, the actual average UMERC PSCR
6 system cost per MWh was \$13.22/MWh (or 24.9%) higher than the 2022 combination of
7 the original plan from January to July 2023 and the amended plan from August to
8 December 2023, primarily due to higher prices for natural gas used to fuel the RICE units.
9 Higher natural gas prices also resulted in higher market prices for power purchased in the
10 MISO Market throughout 2022. Overall, UMERC's PSCR system costs were higher than
11 the combination of the original and amended plan by \$9.8 million (line 12).

12

13 **Q. How did natural gas prices throughout 2022 impact PSCR costs in both the WEPCo**
14 **and WPSC Rate Zones?**

15 A. During 2021, increasing demand for natural gas resulted in higher natural gas prices.
16 Higher gas prices increased Locational Marginal prices in the MISO Market and
17 contributed to higher purchased power for UMERC customers, which results in higher
18 PSCR costs for the year. These high gas prices and market prices continued throughout
19 2022. See the charts on page 13 and 15 for more information.

20

21 **Q. How did MISO LMPs impact UMERC PSCR costs?**

22 A. The average cost per MWh of MISO market purchases was up \$11.08 in 2022 due to higher
23 MISO Market prices for power. MISO market purchase costs were higher by \$7.9 million

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1 from January through July using the original filed plan and \$9.5 million lower from August
2 through December using the amended plan. See the charts on page 13 and 15 for more
3 information.

4
5 ATC and MISO Transmission Charges were higher by \$2.8 million (line 8) due to higher
6 than forecasted charges from the ATC and MISO for transmission service. \$2.6 million
7 relates to the original filed plan from January through July 2022 and \$0.2 million relates to
8 the amended plan from August through December 2022.

9
10 Credits from opportunity sales, including sales to Tilden, were higher by \$7.1 million or
11 \$14.04/MWh (line 11) due to higher prices for opportunity sales. The credits in the original
12 filed plan from January through July 2022 were \$11.6 million higher than forecasted and
13 the credits in the amended plan from August through December 2022 were \$4.5 million
14 lower than forecasted.

15
16 **Q. Were the costs of power supply incurred through reasonable and prudent actions on**
17 **the part of UMEREC?**

18 **A.** Yes. The PSCR costs that UMEREC incurred in 2022 through the operation of its owned
19 generation and its activity in the MISO Market were reasonable and prudent.

20
21 **PSCR COST RECONCILIATION APPROVAL**

22 **Q. What is UMEREC requesting the Commission to approve in this PSCR reconciliation**
23 **filing?**

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1 A. UMERC requests that for both the WEPCo and WPSC Rate Zones, the Commission
2 approve the 2022 reconciliation of all power supply revenues received, whether included
3 in base rates or collected through the PSCR clause, with the power supply costs incurred
4 by UMERC in 2022, and authorize the roll-in of the 2022 ending WEPCo and WPSC Rate
5 Zone PSCR under-recovery balances into the 2023 beginning WEPCo and WPSC Rate
6 Zone PSCR balances, respectively.

7

8 **Q. Does this conclude your direct testimony?**

9 A. Yes, it does.

10 40436455.1/156197.00054

	Jan-Jul 2022				Aug-Dec 2022				2022 Amended				2022			
	<u>PSCR Plan</u>	<u>PSCR Actual</u>	<u>Variance</u>	<u>%</u>	<u>PSCR Plan</u>	<u>PSCR Actual</u>	<u>Variance</u>	<u>%</u>	<u>PSCR Plan*</u>	<u>PSCR Actual</u>	<u>Variance</u>	<u>%</u>	<u>PSCR Plan*</u>	<u>PSCR Actual</u>	<u>Variance</u>	<u>%</u>
1 UMERC PSCR System Costs																
2 Kuester Fuel Costs	\$8,776,167	\$17,912,063	\$9,135,896	104.1%	\$11,687,587	\$14,816,494	\$3,128,907	26.8%	\$20,463,754	\$32,728,557	\$12,264,803	59.9%	\$20,463,754	\$32,728,557	\$12,264,803	59.9%
3 Mihm Fuel Costs	\$3,419,393	\$8,552,867	\$5,133,474	150.1%	\$4,771,717	\$6,113,929	\$1,342,212	28.1%	\$8,191,110	\$14,666,796	\$6,475,686	79.1%	\$8,191,110	\$14,666,796	\$6,475,686	79.1%
4 MISO Market Purchases Cost	\$24,897,479	\$32,756,306	\$7,858,828	31.6%	\$34,265,253	\$24,720,348	(\$9,544,905)	-27.9%	\$59,162,732	\$57,476,655	(\$1,686,077)	-2.8%	\$59,162,732	\$57,476,655	(\$1,686,077)	-2.8%
5 MISO Market Other Charges & Credits	(\$1,498,707)	(\$2,755,962)	(\$1,257,254)	83.9%	(\$1,126,934)	(\$2,487,248)	(\$1,360,314)	120.7%	(\$2,625,641)	(\$5,243,210)	(\$2,617,568)	99.7%	(\$2,625,641)	(\$5,243,210)	(\$2,617,568)	99.7%
6 Purchased Power Agreements	\$0	\$0	\$0	0.0%	\$0	\$0	\$0	0.0%	\$0	\$0	\$0	0.0%	\$0	\$0	\$0	0.0%
7 Other Purchased Power	\$0	\$35,197	\$35,197	0.0%	\$0	\$2,147	\$2,147	0.0%	\$0	\$37,345	\$37,345	0.0%	\$0	\$37,345	\$37,345	0.0%
8 ATC & MISO Transmission Charges	\$9,860,962	\$12,434,448	\$2,573,486	26.1%	\$8,826,622	\$9,041,531	\$214,909	2.4%	\$18,687,584	\$21,475,979	\$2,788,396	14.9%	\$18,687,584	\$21,475,979	\$2,788,396	14.9%
9 Voluntary Green Program Credits	(\$4,660)	(\$2,320)	\$2,340	-50.2%	(\$3,329)	(\$1,744)	\$1,585	-47.6%	(\$7,969)	(\$4,063)	\$3,925	-49.1%	(\$7,969)	(\$4,063)	\$3,925	-49.1%
10 Economic Buyouts	\$0	(\$379,680)	(\$379,680)	0.0%	\$0	\$26,397	\$26,397	0.0%	\$0	(\$353,284)	(\$353,284)	0.0%	\$0	(\$353,284)	(\$353,284)	0.0%
11 Oportunity Sales	(\$30,240,762)	(\$41,795,468)	(\$11,554,706)	38.2%	(\$39,747,048)	(\$35,290,575)	\$4,456,473	-11.2%	(\$69,987,810)	(\$77,086,043)	(\$7,098,233)	10.1%	(\$69,987,810)	(\$77,086,043)	(\$7,098,233)	10.1%
12 UMERC PSCR System Costs	\$15,209,871	\$26,757,452	\$11,547,581	75.9%	\$18,673,868	\$16,941,280	(\$1,732,588)	-9.3%	\$33,883,739	\$43,698,732	\$9,814,993	29.0%	\$33,883,739	\$43,698,732	\$9,814,993	29.0%
13																
14 Kuester Generation (MWh)	222,238	272,142	49,904	22.5%	164,079	222,110	58,031	35.4%	386,317	494,252	107,935	27.9%	386,317	494,252	107,935	27.9%
15 Mihm Generation (MWh)	81,065	130,919	49,854	61.5%	64,857	91,087	26,230	40.4%	145,922	222,006	76,084	52.1%	145,922	222,006	76,084	52.1%
16 MISO Purchased Power (MWh)	822,961	642,614	(180,347)	-21.9%	587,487	441,326	(146,161)	-24.9%	1,410,449	1,083,940	(326,509)	-23.1%	1,410,449	1,083,940	(326,509)	-23.1%
17 Other Purchased Power (MWh)	-	88	88	0.0%	-	16	16	0.0%	-	104	104	0.0%	-	104	104	0.0%
18 Economic Buyouts (MWh)	-	(2,566)	(2,566)	0.0%	-	(6)	(6)	0.0%	-	(2,572)	(2,572)	0.0%	-	(2,572)	(2,572)	0.0%
19 Oportunity Sales (MWh)	(748,476)	(633,963)	114,512	-15.3%	(555,900)	(504,672)	51,228	-9.2%	(1,304,375)	(1,138,635)	165,740	-12.7%	(1,304,375)	(1,138,635)	165,740	-12.7%
20 UMERC PSCR System (MWh)	377,789	409,234	31,445	8.3%	260,524	249,862	(10,662)	-4.1%	638,313	659,095	20,783	3.3%	638,313	659,095	20,783	3.3%
21																
22 Kuester Fuel Cost (\$/MWh)	\$39.49	\$65.82	\$26.33	66.7%	\$71.23	\$66.71	(\$4.52)	-6.4%	\$52.97	\$66.22	\$13.25	25.0%	\$52.97	\$66.22	\$13.25	25.0%
23 Mihm Fuel Cost (\$/MWh)	\$42.18	\$65.33	\$23.15	54.9%	\$73.57	\$67.12	(\$6.45)	-8.8%	\$56.13	\$66.06	\$9.93	17.7%	\$56.13	\$66.06	\$9.93	17.7%
24 MISO Market Purchases Cost (\$/MWh)	\$30.25	\$50.97	\$20.72	68.5%	\$58.33	\$56.01	(\$2.31)	-4.0%	\$41.95	\$53.03	\$11.08	26.4%	\$41.95	\$53.03	\$11.08	26.4%
25 Economic Buyouts (\$/MWh)	\$0.00	\$147.98	\$147.98	0.0%	\$0.00	(\$4,582.74)	(\$4,582.74)	0.0%	\$0.00	\$137.38	\$137.38	0.0%	\$0.00	\$137.38	\$137.38	0.0%
26 Oportunity Sales (\$/MWh)	\$40.40	\$65.93	\$25.52	63.2%	\$71.50	\$69.93	(\$1.57)	-2.2%	\$53.66	\$67.70	\$14.04	26.2%	\$53.66	\$67.70	\$14.04	26.2%
27 PSCR System Cost on Supplied (\$/MWh)	\$40.26	\$65.38	\$25.12	62.4%	\$71.68	\$67.80	(\$3.88)	-5.4%	\$53.08	\$66.30	\$13.22	24.9%	\$53.08	\$66.30	\$13.22	24.9%
28																
29 UMERC WEPCO Rate Zone																
30 WEPCO Rate Zone PSCR Costs	\$8,601,490	\$13,967,138	\$5,365,648	62.4%	\$10,765,254	\$9,615,611	(\$1,149,643)	-10.7%	\$19,366,744	\$23,582,749	\$4,216,005	21.8%	\$19,366,744	\$23,582,749	\$4,216,005	21.8%
31 WEPCO Rate Zone Sales (MWh)	205,251	204,834	(418)	-0.2%	144,561	136,837	(7,724)	-5.3%	349,812	341,671	(8,141)	-2.3%	349,812	341,671	(8,141)	-2.3%
32 WEPCO Rate Zone PSCR Cost (\$/MWh)	\$41.91	\$68.19	\$26.28	62.7%	\$74.47	\$70.27	(\$4.20)	-5.6%	\$55.36	\$69.02	\$13.66	24.7%	\$55.36	\$69.02	\$13.66	24.7%
33																
34 UMERC WPSC Rate Zone																
35 WPSC Rate Zone PSCR Costs	\$6,531,183	\$10,188,896	\$3,657,715	56.0%	\$7,791,150	\$5,567,265	(\$2,223,885)	-28.5%	\$14,322,333	\$15,756,163	\$1,433,830	10.0%	\$14,322,333	\$15,756,163	\$1,433,830	10.0%
36 WPSC Rate Zone Sales (MWh)	158,054	151,057	(6,997)	-4.4%	105,959	77,379	(28,580)	-27.0%	264,013	228,436	(35,576)	-13.5%	264,013	228,436	(35,576)	-13.5%
37 WPSC Rate Zone PSCR Cost (\$/MWh)	\$41.32	\$67.45	\$26.13	63.2%	\$73.53	\$71.95	(\$1.58)	-2.2%	\$54.25	\$68.97	\$14.73	27.1%	\$54.25	\$68.97	\$14.73	27.1%

* Plan is a combination of the 2022 Original Filed Plan from Jan - July and the amended plan from Aug - December

Upper Michigan Energy Resources Corporation
 2022 Power Supply Cost Recovery Reconciliation
 Determination of Power Supply Costs

Case No: U-21057
 Exhibit: A-1 (JMB-1)
 Witness: James M. Beyer
 Page 3 of 3

	1	2	3	4	5	6	7	8	9	10	11	12	Total
1 U MERC PSCR System Costs													
2 Kuester Plant	\$2,245,059	\$1,962,670	\$1,445,207	\$1,623,995	\$3,261,812	\$3,293,400	\$4,079,918	\$4,305,992	\$3,481,017	\$2,042,537	\$2,085,041	\$2,901,907	\$32,728,557
3 Mihm Plant	\$1,499,590	\$1,099,844	\$704,735	\$745,650	\$1,344,442	\$1,447,412	\$1,711,196	\$1,529,213	\$1,285,944	\$998,468	\$977,045	\$1,323,258	\$14,666,796
4 U MERC System Fuel Costs	\$3,744,649	\$3,062,514	\$2,149,942	\$2,369,645	\$4,606,254	\$4,740,812	\$5,791,114	\$5,835,205	\$4,766,961	\$3,041,005	\$3,062,086	\$4,225,165	\$47,395,353
5													
6 MISO Market Purchases Cost	\$5,144,581	\$4,212,963	\$4,611,928	\$5,140,607	\$3,611,722	\$4,283,992	\$5,750,513	\$4,620,240	\$6,202,346	\$4,689,320	\$4,227,225	\$4,981,217	\$57,476,655
7 MISO Market Other Charges & Credits	(\$320,551)	(\$275,371)	(\$175,575)	(\$296,935)	(\$112,653)	(\$805,074)	(\$769,803)	(\$617,381)	(\$598,417)	(\$374,655)	(\$424,237)	(\$472,558)	(\$5,243,210)
8 Purchased Power Agreements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9 Other Purchased Power	\$1,699	\$34	\$137	\$125	\$1,781	\$30,938	\$482	\$614	\$511	\$468	\$516	\$38	\$37,345
10 ATC & MISO Transmission Charges	\$1,876,967	\$1,820,697	\$1,850,752	\$1,725,299	\$1,643,014	\$1,702,663	\$1,815,057	\$1,723,640	\$1,860,478	\$1,797,716	\$1,841,920	\$1,817,776	\$21,475,979
11 Voluntary Green Program Credits	(\$350)	(\$489)	(\$368)	(\$257)	(\$267)	(\$252)	(\$336)	(\$341)	(\$333)	(\$338)	(\$250)	(\$482)	(\$4,063)
12 Economic Buyouts	(\$1,940)	(\$13,952)	(\$4,696)	(\$802)	(\$32,692)	(\$163,574)	(\$162,025)	\$48	\$1,696	\$11,168	\$13,485	\$0	(\$353,284)
13 Opportunity Sales & Mines Revenue	(\$7,049,911)	(\$5,428,248)	(\$5,208,111)	(\$5,221,420)	(\$5,811,225)	(\$6,038,162)	(\$7,038,391)	(\$7,115,810)	(\$7,903,086)	(\$6,344,160)	(\$6,157,146)	(\$7,770,373)	(\$77,086,043)
14 U MERC System Purchases & Sales	(\$349,504)	\$315,635	\$1,074,068	\$1,346,617	(\$700,321)	(\$989,469)	(\$404,502)	(\$1,388,989)	(\$436,804)	(\$220,480)	(\$498,487)	(\$1,444,383)	(\$3,696,621)
15													
16 U MERC PSCR System Costs	\$3,395,145	\$3,378,148	\$3,224,010	\$3,716,262	\$3,905,932	\$3,751,343	\$5,386,612	\$4,446,216	\$4,330,157	\$2,820,525	\$2,563,600	\$2,780,782	\$43,698,732
17													
18 U MERC System Supply (MWh)													
19 Kuester Plant(MWh)	29,266	32,340	28,510	28,242	44,472	45,721	63,591	57,674	51,772	37,734	38,782	36,148	494,252
20 Mihm Plant (MWh)	19,867	18,105	14,178	13,010	18,645	20,292	26,822	20,725	19,216	16,678	17,846	16,622	222,006
21 U MERC System Generation (MWh)	49,133	50,445	42,688	41,252	63,117	66,013	90,413	78,399	70,988	54,412	56,628	52,770	716,258
22													
23 MISO Purchased Power (MWh)	124,418	100,569	113,298	96,430	61,672	65,476	80,751	54,319	87,363	99,714	91,917	108,013	1,083,940
24 Other Purchase Power (MWh)	40	-	3	1	37	4	3	3	3	8	2	-	104
25 Economic Buyouts (MWh)	(1)	(91)	(78)	(16)	(162)	(1,155)	(1,063)	-	-	(6)	-	-	(2,572)
26 Opportunity & Mines Sales (MWh)	(110,473)	(88,780)	(95,889)	(81,960)	(71,388)	(74,869)	(110,605)	(72,870)	(106,194)	(113,438)	(106,366)	(105,803)	(1,138,635)
27 U MERC System Purchases & Sales (MWh)	13,984	11,698	17,334	14,455	(9,841)	(10,543)	(30,914)	(18,548)	(18,828)	(13,722)	(14,447)	2,210	(57,163)
28													
29 U MERC PSCR System Supply (MWh)	63,117	62,143	60,022	55,707	53,276	55,470	59,499	59,851	52,160	40,690	42,181	54,980	659,095
30													
31 U MERC PSCR System Cost (\$/MWh)	\$53.79	\$54.36	\$53.71	\$66.71	\$73.31	\$67.63	\$90.53	\$74.29	\$83.02	\$69.32	\$60.78	\$50.58	\$66.30
32													
33 U MERC - WEPCO Rate Zone													
34 U MERC PSCR System Cost (\$/MWh)	\$53.79	\$54.36	\$53.71	\$66.71	\$73.31	\$67.63	\$90.53	\$74.29	\$83.02	\$69.32	\$60.78	\$50.58	
35 U MERC-WEPCO PSCR Loss Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	
36 U MERC-WEPCO PSCR Cost/Mwh on Sales	\$55.94	\$56.54	\$55.86	\$69.38	\$76.25	\$70.33	\$94.15	\$77.26	\$86.34	\$72.09	\$63.21	\$52.60	
37													
38 U MERC WEPCO Rate Zone PSCR Sales (MWhs)	31,200	31,451	29,445	27,909	25,525	28,015	31,290	29,704	26,651	26,824	24,834	28,824	341,671
39 U MERC WEPCO Rate Zone PSCR Costs	\$1,745,305	\$1,778,220	\$1,644,786	\$1,936,339	\$1,946,282	\$1,970,264	\$2,945,942	\$2,294,939	\$2,301,030	\$1,933,771	\$1,569,726	\$1,516,145	\$23,582,749
40													
41 U MERC - WPSC Rate Zone													
42 U MERC PSCR System Cost (\$/MWh)	\$53.79	\$54.36	\$53.71	\$66.71	\$73.31	\$67.63	\$90.53	\$74.29	\$83.02	\$69.32	\$60.78	\$50.58	
43 U MERC-WPSC PSCR Loss Factor	1.0276	1.0276	1.0276	1.0276	1.0276	1.0276	1.0276	1.0276	1.0276	1.0276	1.0276	1.0276	
44 U MERC-WPSC PSCR Cost/Mwh on Sales	\$55.28	\$55.86	\$55.20	\$68.55	\$75.34	\$69.50	\$93.03	\$76.34	\$85.31	\$71.23	\$62.45	\$51.97	
45													
46 U MERC WPSC Rate Zone PSCR Sales (Mwhs)	23,173	20,861	21,733	22,045	20,457	20,827	21,961	23,019	20,015	10,206	11,551	12,589	228,436
47 U MERC WPSC Rate Zone PSCR Costs	\$1,280,993	\$1,165,302	\$1,199,671	\$1,511,187	\$1,541,239	\$1,447,458	\$2,043,049	\$1,757,246	\$1,707,456	\$726,974	\$721,347	\$654,241	\$15,756,163

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS
PUBLIC SERVICE COMMISSION

ENTRY OF APPEARANCE IN AN ADMINISTRATIVE HEARING

This form is issued as provided for by 1939 PA 3, as amended, and by 1933 PA 254, as amended. The filing of this form, or an acceptable alternative, is necessary to ensure subsequent service of any hearing notices, Commission orders, and related hearing documents.

General Instructions:

Type or print legibly in ink. For assistance or clarification, please contact the Public Service Commission at 517-284-8090.

*Please Note: The Commission will provide **electronic** service of documents to all parties in this proceeding.*

THIS APPEARANCE TO BE ENTERED IN ASSOCIATION WITH THE ADMINISTRATIVE HEARING:

Case / Company Name: Upper Michigan Energy Resources Corporation Docket No. U- 21057

Please enter my appearance in the above-entitled matter on behalf of:

1. (Name) Upper Michigan Energy Resources Corporation
2. (Name)
3. (Name)
4. (Name)
5. (Name)
6. (Name)
7. (Name)

Name Sherri A. Wellman
Address Miller Canfield
One Michigan Avenue, Suite 900
City Lansing State MI
Zip 48933 Phone 517-483-4954
Email wellmans@millercanfield.com
Date 03/22/2023

<input type="radio"/> I am not an attorney
<input checked="" type="radio"/> I am an attorney whose:
Michigan Bar # is P- <u>38989</u>
_____ Bar # is: _____
(state)

Signature: _____