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by Sidney Davy Miller

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March 26, 2019

Ms. Kavita Kale  
Executive Secretary  
Michigan Public Service Commission  
7109 West Saginaw Highway  
Lansing, MI 48917

Re: Upper Michigan Energy Resources Corporation  
2018 PSCR Reconciliation  
Case No. U-20208

Dear Ms. Kale:

Enclosed for electronic filing are the Application and Direct Testimony and Exhibit of John G. Guntlisbergen. Also enclosed are the Appearances of Sherri A. Wellman and Paul M. Collins.

A marked-up copy of the Notice of Hearing has been e-mailed to Angela Sanderson of your office.

If you should have any questions, please kindly advise.

Very truly yours,

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

By: \_\_\_\_\_  
Sherri A. Wellman

SAW/kf  
Enclosures

cc w/enc: John G. Guntlisbergen  
Dennis M. Derricks  
Ted Eidukas  
Koby Bailey  
Rich Stasik

**STATE OF MICHIGAN**

**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

\* \* \* \* \*

In the matter of the application of <b>UPPER MICHIGAN</b> )	
<b>ENERGY RESOURCES CORPORATION</b> for )	Case No. U-20208
reconciliation of its power supply cost recovery plan )	
<u>for the 12-month period ended December 31, 2018</u> )	

**APPLICATION**

UPPER MICHIGAN ENERGY RESOURCES CORPORATION (“UMERC”) requests the Michigan Public Service Commission (“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 2018 through December 2018, 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 2018 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. As of January 1, 2017, UMERC serves approximately 36,500 full requirements electric customers, as well as distribution-only

electric customers who qualify for retail access service. UMERC also provides retail natural gas service to approximately 5,300 full requirements customers, and natural gas transportation service to qualifying transportation customers.

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 2018 results in a net cumulative over-recovery of \$51,588, inclusive of interest. UMERC's WEPCo Rate Zone 2017 reconciliation, approved in Case No. U-20074, was an over-recovery amount (including interest during the 2017 plan year) of \$519,709. The 2018 net cumulative over-recovery of \$51,588 includes the roll-in of this allocated 2017 over-recovery.

6. For the WPSC Rate Zone, UMERC experienced a net cumulative under-recovery of \$66,946, inclusive of interest, during the period ending December 31, 2018. This amount includes the roll-in of UMERC's over-recovery of \$8,420 for the WPSC Rate Zone during the period ending December 31, 2017, as approved by the Commission's Order Approving Settlement Agreement in Case No. U-20074.

7. The testimony and exhibits of John G. Guntlisbergen 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 2018, as included in this reconciliation, were reasonably and prudently incurred;

C. Find and determine that UMERC's net cumulative over-recovery of \$51,588, as of December 31, 2018, for its WEPCo Rate Zone, should be rolled into the beginning balance of its 2019 PSCR reconciliation for its WEPCo Rate Zone;

D. Find and determine that UMERC's net cumulative under-recovery of \$66,946, as of December 31, 2018, for its WPSC Rate Zone, should be rolled into the beginning balance of its 2019 PSCR reconciliation; and

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

Respectfully submitted,

UPPER MICHIGAN ENERGY RESOURCES  
CORPORATION

Dated: March 26, 2019

By: \_\_\_\_\_

One of its Attorneys  
Sherri A. Wellman (P38989)  
Paul M. Collins (P69719)  
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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, 2018. )

Case No. U-20208

**DIRECT TESTIMONY AND EXHIBIT OF**  
  
**JOHN G. GUNT LISBERGEN**  
  
**ON BEHALF OF**  
  
**UPPER MICHIGAN ENERGY RESOURCES CORPORATION**

March 2019

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

2 A. My name is John G. Guntlisbergen. My business address is WEC Energy Group  
3 (“WEC”), 700 North Adams Street, P.O. Box 19001, Green Bay, WI 54307-9001. I am  
4 the Manager of Electric Fuel Cost Recovery in the State Regulatory Affairs Department  
5 of WEC. Upper Michigan Energy Resources Corporation (“UMERC” or “the Company”)  
6 is a wholly owned subsidiary of WEC.

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

9 A. In 1981, I graduated from St. Norbert College - De Pere, Wisconsin, with a Bachelor of  
10 Business Administration Degree in Accounting. After completing college I was  
11 employed by Wisconsin Public Service Corporation (“WPS Corp”) as a Depreciation  
12 Analyst and later as the Depreciation Supervisor in the Corporate Tax Department.  
13 While in the Corporate Tax Department, I performed depreciation studies on utility plant  
14 property, and determined book depreciation, tax depreciation and deferred taxes on an  
15 actual and forecasted basis. In 1993, I moved to the Rates and Economic Evaluation  
16 Department as a Rates Planner. I performed cost studies and rate impact studies for  
17 generation planning and long-range corporate planning. I participated in the analysis of  
18 transmission costs and the development of the transmission tariffs for filing with the  
19 Federal Energy Regulatory Commission (“FERC”). I performed electric and gas cost of  
20 service studies for the Michigan and Wisconsin jurisdictions. I have also worked with  
21 the power supply areas for WPS Corp and Upper Peninsula Power Company to develop  
22 Power Supply Cost Recovery (“PSCR”) plans and in the reconciliation of the PSCR costs  
23 to revenues.

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

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

**Q. Please describe UMERC.**

A. UMERC is a Michigan jurisdictional regulated utility authorized to serve the former Michigan electric customers of Wisconsin Electric Power Company ("WEPCo") and WPS Corp and the former Michigan natural gas customers of WPS Corp. Michigan approvals for UMERC to provide retail electric and natural gas service in the state of Michigan were granted by the Commission in its December 9, 2016 Order in Case No. U-18061. The approvals granted in Case No. U-18061 included, but were not limited to, (i) the transfer of the electric distribution assets of WEPCo and WPS Corp used for providing retail electric service in Michigan, (ii) (at least initially, with the exception of the Tilden Mining Company, L.C. and Empire Iron Mining Partnership (collectively the "Mines")) the transfer of WEPCo's and WPS Corp's Michigan retail tariff electric customers to UMERC, (iii) the assumption of WEPCo's and WPS Corp's PSCR clauses, and (iv) the authority to provide electric service under the current rates, terms and conditions of service set forth in WEPCo's and WPS Corp's then Michigan electric tariff books.

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

1 A. The purpose of my testimony is to support the reconciliation of UMERC’s actual power  
2 supply costs to the revenues it collected pursuant to its authorized base rates and PSCR  
3 factors for the 12-month period ended December 31, 2018.  
4

5 **WHOLESALE PURCHASE POWER AGREEMENTS**

6 **Q. As addressed in Case No. U-18061, UMERC will not own any generation assets until**  
7 **the long-term Upper Peninsula (“UP”) generation solution is in service. In the**  
8 **interim, what was UMERC’s power supply source during the 2018 PSCR period?**

9 A. The geographic areas in which UMERC provides electric service to former WEPCo  
10 Michigan retail customers are known as the WEPCo Rate Zone, and the geographic areas  
11 in which UMERC provides electric service to former WPS Corp Michigan retail  
12 customers are known as the WPSC Rate Zone. As identified by the Company in its  
13 Application filed in Case No. U-18408, UMERC continues to have two purchase power  
14 agreements in place, (i) the WEPCo Power Purchase Agreement (“PPA”), and (ii) the  
15 WPS Corp PPA (collectively the “PPAs”). These PPAs, as previously presented and  
16 approved in Case No. U-18061 and addressed in Case No. U-18408, provide “slice of  
17 system” benefits and costs from the WEPCo and WPS Corp generation systems, similar  
18 to the allocation of generation costs in a retail rate case, to the WEPCo Rate Zone and  
19 WPSC Rate Zone, respectively. The PPAs are formula-based, with two formulas – one  
20 for capacity costs and one for energy costs.  
21

22 **Q. Are these PPAs subject to FERC regulation?**

23 A. Yes. These PPAs are wholesale transactions that are subject to FERC regulation. Both

1 PPA's are utilizing cost-based formula rates that FERC approved in WEPCo and WPS  
2 Corp FERC rate cases. WEPCo's FERC rate case was docket number ER06-1320, and  
3 was approved by FERC's order dated September 14, 2007. WPS Corp's FERC rate case  
4 was docket number ER03-606, and was approved by FERC's order dated November 19,  
5 2004. In both orders, FERC found the formula rates to be just and reasonable.  
6

7 **Q. Are the FERC-approved cost-based formula rates based on tariffs?**

8 A. Yes. The capacity and energy formulas that are used in the WEPCo PPA are contained in  
9 WEPCo's Formula Rate Wholesale Sales Tariff, FERC Electric Tariff Volume No. 9.  
10 The capacity and energy formulas that are used in the WPS Corp PPA are contained in  
11 WPS Corp's FERC Rate Schedule W-1A for Full Requirements Service to Wholesale  
12 Customers, Volume 2.  
13

14 **Q. Please provide a general description of the capacity rate.**

15 A. The capacity rate is intended to recover the generation ownership costs and purchase  
16 capacity costs of the providing utility, *i.e.*, WEPCo and WPS Corp, respectively.  
17 Generation ownership costs include the return on and of the generation assets. This is  
18 accomplished by taking the corporate purchase capacity and generation ownership costs  
19 for each company and dividing by the summation of the 12 system monthly peaks in a  
20 year for each company. This creates a dollar per kilowatt ("kW") per month charge or  
21 rate that is charged to the customer's load at the time of the company's monthly peak.  
22 Customers are billed on estimated rates that are trued-up the following year once the  
23 supplier's FERC Form 1 that provides the audited actual company costs is filed.

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**Q. Please provide a general description of the energy formula rate.**

A. The energy rate is intended to recover each of WEPCo’s and WPS Corp’s fuel, energy purchases, and variable generation operation and maintenance (“O&M”) costs. The energy formula rate is intended to recover the fuel and energy purchases. This is accomplished by taking the corporate fuel and energy purchase costs for each and dividing by the system sales in megawatt hours (“MWh”) for each company. This provides a system average dollar per MWh rate. For WPS Corp, the on peak energy rate is calculated by multiplying the system dollar per MWh rate by 1.2. Similarly, the off peak energy rate is calculated by multiplying the system dollar per MWh rate by 0.8. For WEPCo, the on peak energy rate is calculated by multiplying the system dollar per MWh rate by 1.14. Similarly, the off peak energy rate is calculated by multiplying the system dollar per MWh rate by 0.9. The customer (*i.e.*, UMERC) is billed using on peak and off peak rates determined using forecasted system costs and sales and are trued up with actual system costs and sales on a two-month lag for WPS Corp and for WEPCo on a one month lag for Energy Rate Part 1 and on an annual basis for Energy Rate Part 2.

**Q. Can you provide a general description of the transmission charges?**

A. The transmission charges are intended to pass-through to UMERC, the actual transmission, ancillary, and certain market charges incurred by WEPCo and WPS Corp from the Midcontinent Independent System Operator, Inc. (“MISO”) and the American Transmission Company LLC (“ATC LLC”) to serve UMERC. This is required since the WEPCo and WPS Corp formula rates do not include transmission cost recovery

1 mechanisms and because UMERL was not being charged directly by MISO or ATC LLC  
2 for its applicable share of transmission costs since UMERL was being served as part of  
3 the WEPCo and WPS Corp system transmission services from MISO and ATC LLC.  
4

5 **Q. The WEPCo FERC-approved energy rates are billed in two parts, Energy Rate Part**  
6 **1 and Energy Rate Part 2. Would you please explain the difference?**

7 A. Energy Rate Part 1 recovers fuel and energy related purchased power cost that would  
8 essentially be included in the FERC fuel clause: Fuel and Purchased Power (energy-  
9 related), less Opportunity Sales Revenue (energy related). Energy Rate Part 2 recovers  
10 O&M costs defined by the FERC “Predominance Method” as energy-related, and are not  
11 included in the Energy Rate – Part I (some maintenance-related accounts).  
12

13 **Q. Please explain the interruptible credit calculation.**

14 A. Both the WEPCo and WPSC Rate Zones have retail customers that take service under a  
15 tariff that provides UMERL the right to interrupt load under certain conditions, and  
16 UMERL is of the opinion that this serves to minimize costs to its PSCR customers. This  
17 interruptible retail load reduces the firm generation capacity that is needed to satisfy  
18 resource adequacy requirements with respect to generation capacity. UMERL receives a  
19 credit for the amount of retail interruptible load that is registered as a Load Modifying  
20 Resource (“LMR”) with MISO for a planning year. The credit for this interruptible load  
21 in the WPSC – W-1A tariff is \$7.00 per kW per month. The WPSC Rate Zone had  
22 13,200 kW of monthly retail interruptible load registered as an LMR for the first 5  
23 months of 2018 and 12,700 kW for the last 7 months of 2018. This provided an annual

1 credit of approximately \$1.1 million.

2  
3 For the WEPCo PPA, the interruptible credit is based on the MISO published cost of new  
4 generation capacity - Cost of New Entry (“CONE”). For the 2017 MISO planning year,  
5 the CONE is \$7.926 per kW per month. For the 2018 MISO planning year, the CONE is  
6 \$7.375 per kW per month. The WEPCo Rate Zone had 3,800 kW of monthly retail  
7 interruptible load registered as an LMR for the first 5 months of 2018 and 5,300 kW for  
8 the last 7 months of 2018. This provided an annual credit of approximately \$424,000.

9  
10 **Q. Are there capacity charges associated with the WEPCo and WPS Corp PPAs?**

11 A. Yes. Both PPAs have associated capacity charges exceeding six months. The  
12 Commission approved the capacity charges associated with the WEPCo PPA and the  
13 WPS Corp PPA in its December 9, 2016 Order in Case No. U-18061.

14  
**POWER SUPPLY COST RECOVERY**

15 **Q. How is UMERC recovering the costs associated with the PPAs?**

16 A. As part of the approvals sought in Case No. U-18061, the PSCR clauses of WEPCo  
17 (except as needed for WEPCo to continue to serve the Mines) and WPS Corp were  
18 transferred to UMERC. As such, this 2018 PSCR reconciliation filing reflects that  
19 UMERC is recovering PSCR costs via separate PSCR clauses for the customers of the  
20 WEPCo Rate Zone and WPSC Rate Zone. Thus, each Rate Zone has its own PSCR base  
21 and factor. The WEPCo Rate Zone reflects the current PSCR base of \$45.47 per MWh,  
22 and the WPSC Rate Zone reflects the current PSCR base of \$40.52 per MWh. The  
23 purpose of this filing is to reconcile 2018 PSCR revenues and costs for each Rate Zone.

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**Q. How is UMERC addressing the fact that legacy WEPCO and WPS Corp retail rates include generation ownership costs in base rates, but were not included in establishing the current PSCR bases; whereas all charges under the PPAs, including charges for generation ownership costs, would normally be included in the PSCR costs?**

A. As previously addressed in Case No. U-18061, until UMERC files a Michigan retail rate case and implements new PSCR base(s), the Company will exclude the generation-related ownership costs that are included in the capacity (depreciation, return, taxes, etc.) and energy (O&M) rates for both the WEPCO and the WPS Corp PPA for purposes of the PSCR factor calculations in its annual PSCR plan and reconciliation cases. For purposes of calculating the power supply costs to be recovered through the 2018 PSCR factors, the generation related ownership costs have not been included.

**Q. If the PPA charges to UMERC included generation related ownership costs, how did UMERC make sure that none of the ownership costs were included in its PSCR reconciliations?**

A. Since UMERC receives a slice of system assignment of all WEPCo and WPS Corp power supply costs, UMERC receives its load ratio share of the same power supply costs that were previously included in the WEPCo and WPS Corp PSCR reconciliations as part of the PPA charges. While the previous PSCR costs cannot be determined from the PPA charges, the PSCR costs are embedded in the WEPCo and WPS Corp PPA charges, and represent a portion of the energy, capacity and transmission PPA costs. Therefore,

1 UMERC developed an average PSCR system cost per MWh for each of the WEPCo and  
2 WPS Corp power supply systems, which only included WEPCo and WPS Corp power  
3 supply costs that were previously included in their PSCR reconciliations prior to the  
4 formation of the UMERC. These average WEPCo and WPS Corp PSCR system costs per  
5 MWh were adjusted for losses and applied to UMERC WEPCo Rate Zone and WPS Rate  
6 Zone sales, respectively, to determine UMERC PSCR costs.

7  
8 **Q. Are you sponsoring any exhibits?**

9 A. Yes, I am sponsoring Exhibit A-1 (JGG-1) consisting of four pages.

10  
11 **Q. Was Exhibit A-1 (JGG-1) prepared by you?**

12 A. Yes, it was.

13  
14 **Q. Please describe Exhibit A-1 (JGG-1).**

15 A. Exhibit A-1 (JGG-1) details the UMERC 2018 WEPCO Rate Zone and WPS Rate Zone  
16 PSCR reconciliations, including interest calculations. Page 1 compares the 2018 actual  
17 PPA and PSCR costs with the projected PPA and PSCR costs as approved in the April  
18 18, 2018 Order Approving Settlement Agreement in the 2018 PSCR Plan in MPSC Case  
19 No. U-18408. Page 2 details the calculation of PSCR revenues as well as PSCR costs,  
20 interest, and over/(under) recovery for the months of January through December 2018,  
21 resulting in a net over-recovery of \$51,588 in the WEPCO Rate Zone and an under-  
22 recovery of \$66,946 in the WPS Rate Zone for the reconciliation period. Page 3 details  
23 the WEPCo and the WPS Corp PSCR System Costs that are embedded in the PPAs and

1 the related System Requirements by month and shows the monthly PSCR cost per MWh  
2 used on Page 2, to calculate the costs attributable to the sales by Rate Zone. Page 4  
3 compares the 2018 actual WEPCo and the WPS Corp PSCR System Costs and System  
4 Requirements to the PSCR System Costs and System Requirements in the 2018 PSCR  
5 plan.

6  
7 **Q. Is UMERC's 2018 beginning over/(under) recovery balance for the WEPCo Rate**  
8 **Zone the same as the as-settled amount in the 2017 PSCR Reconciliation in Case No.**  
9 **U-20074?**

10 A. Yes. The 2017 PSCR Reconciliation over-recovery amount of \$519,709, shown as the  
11 beginning over/(under) recovery balance for 2018, on Page 2, line 23, is the amount  
12 approved for the UMERC WEPCO Rate Zone in the 2017 PSCR Reconciliation in Case  
13 No. U-20074.

14  
15 **Q. Is UMERC's 2018 beginning over/(under) recovery balance for the WPSC Rate**  
16 **Zone the same as the as-settled amount in the 2017 PSCR Reconciliation in Case No.**  
17 **U-20074?**

18 A. Yes. The 2017 PSCR Reconciliation over-recovery amount of \$8,420, shown as the  
19 beginning over/(under) recovery balance for 2018, on Page 2, line 56, is the amount  
20 approved for the UMERC WPSC Rate Zone in the 2017 PSCR Reconciliation in Case  
21 No. U-20074.

1 **Q. Please describe in more detail the over-recovery experienced by UMERC in the**  
2 **WEPCo Rate Zone for the 12-month period ending December 31, 2018.**

3 A. UMERC attempted to reduce its over-recovery in the WEPCo Rate Zone through its 2018  
4 PSCR factors, which included implementing negative PSCR factors during the year. As  
5 a result, the Company experienced an under-recovery of the 2018 PSCR costs in the  
6 amount of \$544,861, as shown on Page 2 of Exhibit A-1 (JGG-1), line 22. Subtracting the  
7 2017 WEPCo Rate Zone PSCR over-recovery balance of \$519,709 from the 2018 PSCR  
8 under-recovery amount of \$544,861, results in a year-end under-recovery of \$25,152. As  
9 stated above, Page 2 of Exhibit A-1 (JGG-1) details the over/under-recovery balance by  
10 month as well as the monthly interest calculation for the reconciliation period. Interest is  
11 calculated on the average recovery balance for each month. All twelve months of 2018  
12 had over-recovered average balances and, as such, the interest rate applied was the  
13 UMERC WEPCO Rate Zone authorized rate of return on common equity of 10.10%  
14 representing over-recovery interest of \$76,740 as shown on line 30. The 2018 under-  
15 recovery balance of \$25,152 as shown on line 24, less the plan year over-recovery  
16 interest of \$76,740 on line 30, results in a net cumulative over-recovery in the amount of  
17 \$51,588 for the WEPCO Rate Zone, as shown on line 32.

18  
19 **Q. Please describe in more detail the under-recovery experienced by UMERC in the**  
20 **WPSC Rate Zone for the 12-month period ending December 31, 2018.**

21 A. UMERC attempted to reduce its over-recovery in the WPSC Rate Zone through its 2018  
22 PSCR factors, which included implementing increased negative PSCR factors during the  
23 year. The Company experienced an under-recovery of the 2018 PSCR costs in the

1 amount of \$86,929, as shown on Page 2 of Exhibit A-1 (JGG-1), line 55. Subtracting the  
2 2017 WPSC Rate Zone PSCR over-recovery balance of \$8,420 from the 2018 PSCR  
3 under-recovery amount of \$86,929, results in a year-end under-recovery of \$78,509. As  
4 stated above, Page 2 of Exhibit A-1 (JGG-1) details the over/under-recovery balance by  
5 month as well as the monthly interest calculation for the reconciliation period. Interest is  
6 calculated on the average recovery balance for each month. For January through  
7 November of 2018 the average recovery balance was an over-recovery and, as such, the  
8 interest rate applied was the UMERC WPSC Rate Zone authorized rate of return on  
9 common equity of 10.2%, representing over-recovery interest of \$11,661 as shown on  
10 line 64. The average recovery balance for the month of December was an under-recovery,  
11 therefore the interest rate applied was the Company's short term debt rate, resulting in an  
12 under-recovery interest of \$98. Adding the over-recovery interest of \$11,661 to the  
13 under-recovery interest of \$98 results in a net over-recovery interest amount of \$11,563,  
14 as shown on line 63. The 2018 under-recovery balance of \$78,509 as shown on line 57,  
15 less the plan year over-recovery interest of \$11,563 on line 63, results in a net cumulative  
16 under-recovery balance in the amount of \$66,946 for the WPSC Rate Zone, as shown on  
17 line 65.

18  
19 **Q. How does UMERC propose to address the PSCR over/under-recovery balances at**  
20 **the end of 2018?**

21 A. UMERC proposes to roll-in the WEPCo Rate Zone over recovery balance of \$51,588 into  
22 the WEPCo Rate Zone PSCR over/(under) recovery beginning balance for 2019.  
23 Similarly, UMERC proposes to roll-in the WPSC Rate Zone under recovery balance of

1           \$66,946 into the WPSC Rate Zone PSCR over/(under) recovery beginning balance for  
2           2019.

3  
4  
5   **DETERMINATION OF PSCR COSTS**

6   **Q.   What WEPCo system power supply costs and related net system requirements were**  
7           **included in the calculation of the average PSCR system cost per MWh in the**  
8           **determination of the WEPCo Rate Zone PSCR costs?**

9   A.   The WEPCo system power supply costs and related net system requirements that were  
10          included in the calculation of the average PSCR system cost per MWh in the  
11          determination of the WEPCo Rate Zone PSCR costs are shown on page 3 of Exhibit (A-  
12          1) (JGG-1), lines 1 through 14. The resulting total WEPCo PSCR system costs on line 7,  
13          page 3 and the total net system requirements on page 3, line 14 are also shown on lines  
14          15 and 16 of page 2 of Exhibit (A-1) (JGG-1). The WEPCo PSCR system costs on line  
15          15, page 2 are divided by the related net system requirements on line 16, page 2, resulting  
16          in the WEPCo PSCR System Cost per MWh on generation. Applying the WEPCo loss  
17          factor of 1.04 on line 18 to the WEPCo PSCR System Cost per MWh on generation,  
18          results in the WEPCo PSCR System Cost per MWh on sales, shown on line 19 of page 2.  
19          Applying the WEPCo PSCR System Cost per MWh on line 19, to the WEPCo Rate Zone  
20          sales subject to the PSCR on line 5, results in the WEPCo Rate Zone PSCR costs on line  
21          20. The WEPCo Rate Zone PSCR costs were compared to the WEPCo Rate Zone  
22          revenues shown on lines 10 through 13, page 2, which were collected through the PSCR  
23          base and PSCR factors billed to customers in 2018 to determine the PSCR over/(under)

1 recovery shown on line 22 of page 2.

2  
3 **Q. What costs were included for the Glacier Hills Wind Farm (“Glacier Hills”), the**  
4 **Montfort Wind Energy Center (“Montfort”) and the Rothschild Biomass**  
5 **Cogeneration Plant (“Rothschild”) in the determination of the WEPCo average**  
6 **system cost?**

7 A. Consistent with the Order Approving Settlement Agreement dated January 23, 2018, in  
8 UMEREC’s 2017 renewable energy (“RE”) Plan in Case No. U-18236, the generation was  
9 treated as a system-wide RE resource to be recovered through a transfer price, with  
10 incremental costs to be recovered through the RE surcharge. The 2018 transfer prices  
11 were as follows: (1) \$80.41 per MWh for Glacier Hills, (2) \$72.09 per MWh for Montfort  
12 and (3) \$72.09 per MWh for Rothschild. The Glacier Hills transfer price was approved by  
13 Commission Order in Case No. U-15812. The prices for Montfort and Rothschild are  
14 from the transfer price schedule developed by the MPSC Staff and approved by the  
15 Commission in its December 19, 2013 Order in Case No. U-16662. The WEPCO system  
16 transfer price costs that were included for Glacier Hills, Montfort and Rothschild are  
17 shown on Page 3, Line 3 of Exhibit (A-1) (JGG-1).

18  
19 **Q. What WPS Corp system power supply costs and related net system requirements**  
20 **were included in the calculation of the average PSCR system cost per MWh in the**  
21 **determination of the WPSC Rate Zone PSCR costs?**

22 A. The WPS Corp system power supply costs and related net system requirements that were  
23 included in the calculation of the average PSCR system cost per MWh in the

1 determination of the WPSC Rate Zone PSCR costs are shown on page 3 of Exhibit (A-1)  
2 (JGG-1), lines 18 through 32. The resulting WPS Corp PSCR system costs on line 25,  
3 page 3 and the net system requirements on page 3, line 32 are also shown on lines 50 and  
4 51 of page 2 of Exhibit (A-1) (JGG-1). The WPS Corp PSCR system costs on line 50,  
5 page 2 are divided by the related net system requirement sales on line 51, page 2,  
6 resulting in the WPS Corp PSCR System Cost per MWh on requirement sales on line 52,  
7 page 2. Applying the WPS Corp PSCR System Cost per MWh on line 52 to the WPSC  
8 Rate Zone sales subject to the PSCR on line 40 results in the WPSC Rate Zone PSCR  
9 costs on line 53. The WPSC Rate Zone PSCR costs were compared to the WPSC Rate  
10 Zone revenues shown on lines 45 through 48, page 2, which were collected through the  
11 PSCR base and PSCR factors billed to customers in 2018 to determine the PSCR  
12 over/(under) recovery shown on line 55 of page 2.

#### 14 **COMPARISON OF ACTUAL PSCR COSTS TO PSCR PLAN**

15 **Q. Please summarize the primary reasons for the variance in the PSCR costs between**  
16 **the 2018 PSCR plan as approved compared to the 2018 actual PSCR costs incurred**  
17 **for the WEPCo Rate Zone.**

18 A. As shown on page 4 of Exhibit (A-1) (JGG-1), lines 1 through 25, the WEPCo Rate Zone  
19 PSCR cost per MWh was lower than forecasted by \$3.12/MWh. The lower cost per MWh  
20 was due to lower PSCR net system costs incurred by WEPCo, which resulted in lower  
21 PSCR charges being included in the UMERCo WEPCo Rate Zone PPA. The lower  
22 WEPCo average PSCR system cost per MWh was primarily due to lower transmission  
23 costs from the ATC LLC and the MISO, as a result of lower income taxes from tax

1 reform, a reallocation of Presque Isle Power Plant System Support Resource charges  
2 based on a new FERC order, and a refund from ATC LLC as a result of a FERC audit.  
3 WEPCo generation fuel and purchased power related costs were lower due to lower  
4 generation and purchases, however the lower costs were mostly offset by lower  
5 opportunity sales revenue.

6  
7 **Q. Please summarize the primary reasons for the variance in the PSCR costs between**  
8 **the 2018 PSCR plan as approved compared to the 2018 actual PSCR costs incurred**  
9 **for the WPSC Rate Zone.**

10 A. As shown on page 4 of Exhibit (A-1) (JGG-1), lines 29 through 50, the WPSC Rate Zone  
11 PSCR cost per MWh was lower than forecasted by \$1.80/MWh. The lower cost per MWh  
12 was due to lower PSCR net system costs incurred by WPS Corp, which resulted in lower  
13 PSCR charges being included in the UMERC WPSC Rate Zone PPA. The lower WPS  
14 Corp average PSCR system cost per MWh was primarily due to lower transmission costs  
15 from the ATC LLC and the MISO as a result of lower income taxes from tax reform and  
16 a refund from ATC LLC as a result of a FERC audit. WPS Corp's lower transmission  
17 costs were somewhat offset by higher costs from generation fuel related costs that  
18 exceeded increased opportunity sales revenue.

19  
20 **PSCR COST RECONCILIATION APPROVAL**

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

1 A. UMERC requests that for both the WEPCo and WPSC Rate Zones, the Commission  
2 approve the 2018 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 2018 and the roll-in of the 2018 ending WEPCo and WPSC Rate Zone  
5 PSCR over/under-recovery balances into their respective 2019 beginning WEPCo and  
6 WPSC Rate Zone PSCR over/under recovery balances.

7

8 **Q. Were the costs of power supply incurred through reasonable and prudent actions on**  
9 **the part of UMERC?**

10 A. Yes. The PSCR costs that UMERC incurred in 2018, through the PPAs with WEPCo  
11 and WPS Corp, were reasonable and prudent. UMERC's PPAs with WEPCo and WPS  
12 Corp have been approved by FERC and by the MPSC in Case No. U-18061.

13

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

15 A. Yes, it does.

16

Upper Michigan Energy Resources Corporation  
2018 Power Supply Cost Recovery Reconciliation  
Comparison of Actual to Plan

Case No: U-20208  
Exhibit: A-1 (JGG-1)  
Witness: John G. Guntlisbergen  
Page: 1 of 4

	2018	2018		%
	<u>PSCR Plan</u>	<u>PSCR Actual</u>	<u>Variance</u>	<u>Variance</u>
1 <b>UMERC WEPCO Rate Zone</b>				
2 WEPCo PPA Costs - Energy	\$8,308,617	\$8,929,701	\$621,084	7.5%
3 WEPCo PPA Costs - Capacity	\$17,295,855	\$16,707,290	(\$588,566)	-3.4%
4 WEPCo PPA Costs - Transmission	\$4,577,390	\$3,936,762	(\$640,628)	-14.0%
5 Surplus Energy	\$0	\$8,924	\$8,924	0.0%
6				
7 WEPCo PPA Costs - Total	\$30,181,862	\$29,582,677	(\$599,185)	-2.0%
8				
9 WEPCo PSCR System Costs	\$1,188,947,018	\$1,115,476,343	(\$73,470,675)	-6.2%
10 WEPCo System Supplied (Mwhs)	26,798,497	27,046,098	247,601	0.9%
11 WEPCo PSCR Costs on Supplied (\$/Mwh)	\$44.37	\$41.24	(\$3.12)	-7.0%
12 Loss Factor	1.04	1.04		
13 WEPCo PSCR System Costs on Sales (\$/Mwh)	\$46.14	\$42.89	(\$3.25)	-7.0%
14				
15 UMERC WEPCO Rate Zone Sales (Mwhs)	351,856	349,425	(2,431)	-0.7%
16 WEPCo PPA Costs - PSCR	\$16,234,636	\$14,903,097	(\$1,331,539)	-8.2%
17 WEPCo PPA Costs - PSCR (\$/Mwh)	\$46.14	\$42.65	(\$3.49)	-7.6%
18 PSCR Base (\$/Mwh)	\$45.47	\$45.47		
19 PSCR Factor (\$/Mwh)	\$0.67	(\$2.82)	(\$3.49)	
20				
21	<b>2018</b>	<b>2018</b>		<b>%</b>
22 <b>UMERC WPSC Rate Zone</b>	<b><u>PSCR Plan</u></b>	<b><u>PSCR Actual</u></b>	<b><u>Variance</u></b>	<b><u>Variance</u></b>
23 WPS Corp PPA Costs - Energy	\$7,550,892	\$7,039,908	(\$510,984)	-6.8%
24 WPS Corp PPA Costs - Capacity	\$6,529,900	\$6,164,658	(\$365,242)	-5.6%
25 WPS Corp PPA Costs - Transmission	\$3,096,542	\$2,607,214	(\$489,328)	-15.8%
26				
27 WPS Corp PPA Costs - Total	\$17,177,334	\$15,811,780	(\$1,365,554)	-7.9%
28				
29 WPS Corp PSCR System Costs	\$493,192,447	\$481,111,967	(\$12,080,480)	-2.4%
30 WPS Corp System Sales (Mwhs)	12,595,411	12,880,035	284,625	2.3%
31 WPS Corp PSCR System Costs on Sales (\$/Mwh)	\$39.16	\$37.35	(\$1.81)	-4.6%
32				
33 UMERC WPSC Rate Zone Sales (Mwhs)	260,620	265,886	5,266	2.0%
34 WPS Corp PPA Costs - PSCR	\$10,205,879	\$9,950,465	(\$255,414)	-2.5%
35 WPS Corp PPA Costs - PSCR (\$/Mwh)	\$39.16	\$37.42	(\$1.74)	-4.4%
36 PSCR Base (\$/Mwh)	\$40.52	\$40.52		
37 PSCR Factor (\$/Mwh)	(\$1.36)	(\$3.10)	(\$1.74)	

	2018 1	2018 2	2018 3	2018 4	2018 5	2018 6	2018 7	2018 8	2018 9	2018 10	2018 11	2018 12	2019 1	Total
<b>1 UMERC - WEPCO Rate Zone</b>														
2 Sales Subject to PSCR Billed (Mwh)	36,759	29,090	28,725	28,423	26,970	28,825	31,018	31,368	26,337	27,234	29,475	26,988		351,211
3 Unbilled Sales Subject to PSCR (Mwh)	18,988	18,204	18,236	17,649	18,264	18,095	18,720	15,842	14,146	14,650	18,434	21,370		212,598
4 Unbilled Prior Month Sales Subject to PSCR (Mwh)	(23,156)	(18,988)	(18,204)	(18,236)	(17,649)	(18,264)	(18,095)	(18,720)	(15,842)	(14,146)	(14,650)	(18,434)		(214,384)
5 Sales Subject to PSCR Calendar (Mwh)	32,591	28,306	28,757	27,836	27,585	28,656	31,643	28,490	24,641	27,738	33,259	29,924		349,425
6														
7 PSCR Base Incl. Losses (\$/Mwh)	45.47	45.47	45.47	45.47	45.47	45.47	45.47	45.47	45.47	45.47	45.47	45.47	45.47	
8 PSCR Factor Applied (\$/Mwh)	0.67	0.67	0.00	0.00	(3.00)	(3.00)	(3.00)	(3.00)	(9.00)	(7.00)	(7.00)	(7.00)	(14.00)	45.47 (3.13)
9														
10 PSCR Revenue Billed (\$)	\$1,696,053	\$1,342,234	\$1,306,106	\$1,292,385	\$1,145,399	\$1,224,217	\$1,317,315	\$1,206,710	\$960,520	\$1,047,699	\$1,133,894	\$849,316		\$14,521,848
11 PSCR Revenue Unbilled Current Month (\$)	\$876,106	\$827,736	\$829,191	\$749,553	\$775,672	\$768,495	\$720,158	\$577,758	\$544,197	\$563,586	\$580,118	\$904,806		\$8,717,376
12 PSCR Revenue Unbilled Prior Month (\$)	(\$1,068,418)	(\$876,106)	(\$827,736)	(\$829,191)	(\$749,553)	(\$775,672)	(\$768,495)	(\$720,158)	(\$577,758)	(\$544,197)	(\$563,586)	(\$580,118)		(\$8,880,988)
13 Total PSCR Revenue (\$)	\$1,503,741	\$1,293,864	\$1,307,561	\$1,212,747	\$1,171,518	\$1,217,040	\$1,268,978	\$1,064,310	\$926,959	\$1,067,088	\$1,150,426	\$1,174,004		\$14,358,236
14														
15 WEPCo PSCR System Costs	\$94,222,118	\$66,304,844	\$80,064,863	\$83,879,988	\$99,607,307	\$89,444,166	\$113,239,795	\$123,461,126	\$101,032,364	\$85,810,732	\$85,015,235	\$93,393,804		\$1,115,476,343
16 WEPCo Generation with Losses (Mwh)	2,347,224	2,065,565	2,123,492	2,042,892	2,200,727	2,299,503	2,631,365	2,613,903	2,247,478	2,133,282	2,123,507	2,217,160		27,046,098
17 WEPCo PSCR System Costs on Generation (\$/Mwh)	\$40.14	\$32.10	\$37.70	\$41.06	\$45.26	\$38.90	\$43.03	\$47.23	\$44.95	\$40.22	\$40.04	\$42.12		\$41.24
18 WEPCo 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		1.04
19 WEPCo PSCR System Costs on Sales (\$/Mwh)	\$41.75	\$33.38	\$39.21	\$42.70	\$47.07	\$40.45	\$44.76	\$49.12	\$46.75	\$41.83	\$41.64	\$43.81		\$42.89
20 UMERC WEPCO Rate Zone PSCR Costs (\$)	\$1,360,668	\$944,870	\$1,127,545	\$1,188,589	\$1,298,407	\$1,159,154	\$1,416,320	\$1,399,407	\$1,151,979	\$1,160,288	\$1,384,895	\$1,310,975		\$14,903,097
21														
22 Over/(Under) Recovery (\$)	\$143,073	\$348,974	\$180,016	\$24,158	(\$126,889)	\$57,886	(\$147,342)	(\$335,097)	(\$225,020)	(\$93,200)	(\$234,466)	(\$136,971)		(\$544,861)
23 Beginning Recovery Balance (\$)	\$519,709	\$662,782	\$1,011,776	\$1,191,792	\$1,215,950	\$1,089,061	\$1,146,947	\$999,605	\$664,508	\$439,488	\$346,288	\$111,819		\$519,709
24 Ending Recovery Balance (\$)	\$662,782	\$1,011,776	\$1,191,792	\$1,215,950	\$1,089,061	\$1,146,947	\$999,605	\$664,508	\$439,488	\$346,288	\$111,819	(\$25,152)		(\$25,152)
25 Average Recovery Balance (\$)	\$591,246	\$837,279	\$1,101,784	\$1,203,871	\$1,152,506	\$1,118,004	\$1,073,276	\$832,057	\$551,998	\$392,888	\$229,054	\$43,334		
26														
27 Interest Rate Undercollection (%)	1.500%	1.540%	1.780%	1.830%	1.820%	1.930%	1.950%	1.960%	2.060%	2.230%	2.290%	2.440%		
28 Interest Rate Overcollection (%)	10.10%	10.10%	10.10%	10.10%	10.10%	10.10%	10.10%	10.10%	10.10%	10.10%	10.10%	10.10%		
29 Days in Month	31	28	31	30	31	30	31	31	30	31	30	31		365
30 Monthly Interest (\$)	\$5,072	\$6,487	\$9,451	\$9,994	\$9,886	\$9,281	\$9,207	\$7,137	\$4,582	\$3,370	\$1,901	\$372		\$76,740
31 Interest Balance (\$)	\$5,072	\$11,559	\$21,010	\$31,004	\$40,890	\$50,171	\$59,378	\$66,515	\$71,097	\$76,368	\$76,674	\$76,740		
32 Ending Recovery Balance + Interest (\$)	\$667,854	\$1,023,335	\$1,212,802	\$1,246,954	\$1,129,951	\$1,197,118	\$1,058,983	\$731,023	\$510,585	\$420,755	\$188,187	\$51,588		\$51,588
33														
34														
35														
<b>36 UMERC - WSPC Rate Zone</b>														
37 Sales Subject to PSCR Billed (Mwh)	21,548	21,534	21,946	21,822	19,743	22,487	22,575	21,672	25,677	21,015	21,703	24,556		266,277
38 Unbilled Sales Subject to PSCR (Mwh)	6,053	5,498	5,360	4,972	5,210	4,250	5,644	5,955	6,735	4,027	5,835	5,494		65,035
39 Unbilled Prior Month Sales Subject to PSCR (Mwh)	(5,885)	(6,053)	(5,498)	(5,360)	(4,972)	(5,210)	(5,644)	(5,955)	(6,735)	(4,027)	(5,835)	(5,494)		(65,426)
40 Sales Subject to PSCR Calendar (Mwh)	21,715	20,979	21,808	21,433	19,981	21,526	23,969	21,983	26,458	18,307	23,510	24,215		265,886
41														
42 PSCR Base Incl. Losses (\$/Mwh)	40.52	40.52	40.52	40.52	40.52	40.52	40.52	40.52	40.52	40.52	40.52	40.52	40.52	
43 PSCR Factor Applied (\$/Mwh)	(1.36)	(1.36)	(1.36)	(1.36)	(1.36)	(1.36)	(1.36)	(1.36)	(7.00)	(8.00)	(4.00)	(4.00)	(7.00)	40.52 (2.19)
44														
45 PSCR Revenue Billed (\$)	\$843,806	\$843,265	\$859,411	\$854,530	\$773,144	\$880,584	\$884,029	\$726,457	\$835,029	\$767,457	\$792,600	\$823,101		\$9,883,413
46 PSCR Revenue Unbilled Current Month (\$)	\$237,033	\$215,321	\$209,909	\$194,709	\$204,038	\$166,419	\$189,187	\$193,661	\$245,980	\$147,084	\$195,582	\$210,593		\$2,409,516
47 PSCR Revenue Unbilled Prior Month (\$)	(\$230,470)	(\$237,033)	(\$215,321)	(\$209,909)	(\$194,709)	(\$204,038)	(\$166,419)	(\$189,187)	(\$193,661)	(\$245,980)	(\$147,084)	(\$195,582)		(\$2,429,393)
48 Total PSCR Revenue (\$)	\$850,369	\$821,553	\$853,999	\$839,330	\$782,473	\$842,965	\$906,797	\$730,931	\$887,348	\$668,561	\$841,098	\$838,112		\$9,863,536
49														
50 WPS Corp PSCR System Costs	\$43,167,597	\$39,088,850	\$36,887,217	\$37,108,889	\$40,182,213	\$34,816,110	\$45,748,189	\$44,915,698	\$38,815,338	\$37,772,681	\$42,628,694	\$39,980,490		\$481,111,967
51 WPS Corp Requirement Sales	1,096,783	995,314	1,019,053	981,794	1,049,076	1,119,142	1,226,267	1,213,906	1,071,983	1,027,732	1,004,315	1,074,671		12,880,035
52 WPS Corp PSCR Costs on Sales (\$/Mwh)	\$39.36	\$39.27	\$36.20	\$37.80	\$38.30	\$31.11	\$37.31	\$37.00	\$36.21	\$36.75	\$42.45	\$37.20		\$37.35
53 UMERC WSPC Rate Zone PSCR Costs (\$)	\$854,712	\$823,861	\$789,447	\$810,181	\$765,289	\$669,679	\$894,287	\$813,388	\$958,035	\$672,771	\$998,020	\$900,795		\$9,950,465
54														
55 Over/(Under) Recovery (\$)	(\$4,343)	(\$2,308)	\$64,552	\$29,149	\$17,184	\$173,286	\$12,510	(\$82,457)	(\$70,687)	(\$4,210)	(\$156,922)	(\$62,683)		(\$86,929)
56 Beginning Recovery Balance (\$)	\$8,420	\$4,077	\$1,769	\$66,321	\$95,470	\$112,654	\$285,940	\$298,450	\$215,993	\$145,306	\$141,096	(\$15,826)		\$8,420
57 Ending Recovery Balance (\$)	\$4,077	\$1,769	\$66,321	\$95,470	\$112,654	\$285,940	\$298,450	\$215,993	\$145,306	\$141,096	(\$15,826)	(\$78,509)		(\$78,509)
58 Average Recovery Balance (\$)	\$6,249	\$2,923	\$34,045	\$80,896	\$104,062	\$199,297	\$292,195	\$257,222	\$180,650	\$143,201	\$62,635	(\$47,168)		
59														
60 Interest Rate Undercollection (%)	1.500%	1.540%	1.780%	1.830%	1.820%	1.930%	1.950%	1.960%	2.060%	2.230%	2.290%	2.440%		
61 Interest Rate Overcollection (%)	10.20%	10.20%	10.20%	10.20%	10.20%	10.20%	10.20%	10.20%	10.20%	10.20%	10.20%	10.20%		
62 Days in Month	31	28	31	30	31	30	31	31	30	31	30	31		365
63 Monthly Interest (\$)	\$54	\$23	\$295	\$678	\$901	\$1,671	\$2,531	\$2,228	\$1,514	\$1,241	\$525	(\$98)		\$11,563
64 Interest Balance (\$)	\$54	\$77	\$372	\$1,050	\$1,951	\$3,622	\$6,153	\$8,381	\$9,895	\$11,136	\$11,661	\$11,563		
65 Ending Recovery Balance + Interest (\$)	\$4,131	\$1,846	\$66,693	\$96,520	\$114,605	\$289,562	\$304,603	\$224,374	\$155,201	\$152,232	(\$4,165)	(\$66,946)		(\$66,946)

Wisconsin Electric Power Company														
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL	
1	<b>PSCR SYSTEM COSTS</b>													
2	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	
3	54,345,160	47,682,765	37,519,332	31,936,557	29,230,026	37,941,182	38,548,031	46,514,074	38,691,608	37,482,863	37,152,992	44,718,260	481,762,850	
4	4,798,309	3,692,226	4,006,288	3,535,236	2,098,727	1,961,400	2,073,290	2,462,220	1,898,963	3,944,679	3,955,122	3,826,455	38,252,915	
5	32,873,158	32,054,073	31,070,826	30,237,212	44,020,811	44,821,566	54,228,821	55,557,064	43,518,075	30,383,313	30,364,868	33,727,109	462,856,895	
6	(26,239,033)	(20,841,087)	(16,643,188)	(7,595,462)	(1,385,724)	(8,102,562)	(10,272,959)	(10,197,152)	(10,556,602)	(13,178,855)	(13,060,295)	(15,630,436)	(153,703,354)	
7	28,444,524	3,716,867	24,111,606	25,766,445	25,643,466	12,822,581	28,662,613	29,124,919	27,480,320	27,178,732	26,602,548	26,752,417	286,307,037	
8	<b>94,222,118</b>	<b>66,304,844</b>	<b>80,064,863</b>	<b>83,879,988</b>	<b>99,607,307</b>	<b>89,444,166</b>	<b>113,239,795</b>	<b>123,461,126</b>	<b>101,032,364</b>	<b>85,810,732</b>	<b>85,015,235</b>	<b>93,393,804</b>	<b>1,115,476,343</b>	
9	<b>PSCR NET SYSTEM REQUIREMENTS</b>													
10	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	
11	2,196,539	2,191,761	1,988,689	1,445,150	1,314,684	1,748,714	2,114,971	2,087,744	1,728,692	1,703,860	1,635,597	1,888,262	22,044,663	
12	61,324	47,319	51,334	45,348	26,532	24,530	26,721	32,168	23,729	50,567	51,306	49,349	490,227	
13	762,249	664,739	763,713	809,245	902,888	786,352	829,013	821,516	805,689	780,788	774,790	742,149	9,443,131	
14	(672,888)	(838,254)	(680,244)	(256,851)	(43,377)	(260,093)	(339,340)	(327,525)	(310,632)	(401,933)	(338,186)	(462,600)	(4,931,923)	
15	<b>2,347,224</b>	<b>2,065,565</b>	<b>2,123,492</b>	<b>2,042,892</b>	<b>2,200,727</b>	<b>2,299,503</b>	<b>2,631,365</b>	<b>2,613,903</b>	<b>2,247,478</b>	<b>2,133,282</b>	<b>2,123,507</b>	<b>2,217,160</b>	<b>27,046,098</b>	
16														
17														
18	<b>Wisconsin Public Service Corporation</b>													
19														
20	<b>PSCR SYSTEM COSTS</b>													
21	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	
22	27,357,107	19,931,790	18,264,998	17,241,386	18,002,036	23,982,303	29,638,393	30,742,243	23,773,297	17,100,135	17,704,158	24,375,797	268,113,642	
23	11,550,695	10,678,638	12,301,391	12,521,373	15,233,343	9,978,693	8,947,448	6,715,707	10,116,906	15,071,343	18,165,365	10,337,134	141,618,035	
24	(9,140,529)	(4,490,751)	(4,436,246)	(4,742,266)	(5,500,719)	(5,442,157)	(5,996,827)	(5,592,801)	(7,804,308)	(6,699,476)	(5,432,090)	(6,810,179)	(72,088,349)	
25	13,400,324	12,969,173	10,757,074	12,088,397	12,447,553	6,297,271	13,159,175	13,050,550	12,729,444	12,300,679	12,191,261	12,077,738	143,468,639	
26	<b>43,167,597</b>	<b>39,088,850</b>	<b>36,887,217</b>	<b>37,108,889</b>	<b>40,182,213</b>	<b>34,816,110</b>	<b>45,748,189</b>	<b>44,915,698</b>	<b>38,815,338</b>	<b>37,772,681</b>	<b>42,628,694</b>	<b>39,980,490</b>	<b>481,111,967</b>	
27	<b>PSCR NET SALES REQUIREMENTS</b>													
28	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	
29	1,049,885	844,452	889,092	800,307	779,359	1,022,304	1,197,904	1,237,491	1,046,074	827,355	709,037	1,010,201	11,413,459	
30	276,873	301,057	313,720	345,627	444,940	286,940	244,465	219,143	246,716	390,499	465,260	256,898	3,792,137	
31	(185,802)	(120,378)	(133,107)	(127,189)	(129,918)	(155,629)	(176,689)	(196,232)	(184,428)	(160,138)	(117,187)	(175,565)	(1,862,261)	
32	(44,173)	(29,816)	(50,652)	(36,950)	(45,306)	(34,473)	(39,413)	(46,496)	(36,378)	(29,984)	(52,795)	(16,863)	(463,300)	
33	<b>1,096,783</b>	<b>995,314</b>	<b>1,019,053</b>	<b>981,794</b>	<b>1,049,076</b>	<b>1,119,142</b>	<b>1,226,267</b>	<b>1,213,906</b>	<b>1,071,983</b>	<b>1,027,732</b>	<b>1,004,315</b>	<b>1,074,671</b>	<b>12,880,035</b>	

Upper Michigan Energy Resources Corporation  
2018 Power Supply Cost Recovery Reconciliation  
Comparison of Actual to Plan PSCR System Costs Included in Purchased Power Agreements

Case No: U-20208  
Exhibit: A-1 (JGG-1)  
Witness: John G. Guntlisbergen  
Page 4 of 4

1 Wisconsin Electric Power Company

2

3 PSCR SYSTEM COSTS	2018 PSCR Plan	2018 PSCR Actual	Variance
4 Generation-Fuel Related Costs	\$576,371,995	\$481,762,850	(\$94,609,145)
5 Renewable Generation with Transfer Prices	\$45,713,019	\$38,252,915	(\$7,460,104)
6 Purchased Power Costs	\$485,756,649	\$462,856,895	(\$22,899,753)
7 Opportunity Sales	(\$277,877,085)	(\$153,703,354)	\$124,173,731
8 Transmission Costs	\$358,982,441	\$286,307,037	(\$72,675,404)
9 Total PSCR System Costs	\$1,188,947,018	\$1,115,476,343	(\$73,470,675)

10

11 PSCR NET SYSTEM REQUIREMENTS

12 Generation (Mwh)	26,841,406	22,044,663	(4,796,743)
13 Renewable Generation with Transfer Prices (Mwh)	587,969	490,227	(97,742)
14 Purchased Power (Mwh)	10,015,216	9,443,131	(572,085)
15 Opportunity Sales (Mwh)	(10,646,093)	(4,931,923)	5,714,171

16

17 Total PSCR Net System Requirements (Mwh)	26,798,497	27,046,098	247,601
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18

19 PSCR SYSTEM COSTS PER MWH

20 Generation-Fuel Related Costs	\$21.47	\$21.85	\$0.38
21 Renewable Generation with Transfer Prices	\$77.75	\$78.03	\$0.28
22 Purchased Power Costs	\$48.50	\$49.02	\$0.51
23 Opportunity Sales	\$26.10	\$31.16	\$5.06

24

25 Total PSCR System Costs per Mwh	\$44.37	\$41.24	(\$3.12)
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26

27

28

29 Wisconsin Public Service Corporation

30

31 PSCR SYSTEM COSTS	2018 PSCR Plan	2018 PSCR Actual	Variance
32 Generation-Fuel Related Costs	\$253,579,329	\$268,113,642	\$14,534,312
33 Purchased Power Costs	\$141,528,365	\$141,618,035	\$89,670
34 Opportunity Sales	(\$59,971,247)	(\$72,088,349)	(\$12,117,102)
35 Transmission Costs	\$158,056,000	\$143,468,639	(\$14,587,361)
36 Total PSCR System Costs	\$493,192,447	\$481,111,967	(\$12,080,480)

37

38 PSCR NET SALES REQUIREMENTS

39 Generation (Mwh)	11,277,736	11,413,459	135,723
40 Purchased Power (Mwh)	3,490,661	3,792,137	301,476
41 Opportunity Sales (Mwh)	(1,781,417)	(1,862,261)	(80,845)
42 Less Distribution Losses & Company Use	(391,569)	(463,300)	(71,730)
43 Total PSCR Net Sales Requirements (Mwh)	12,595,411	12,880,035	284,625

44

45 PSCR SYSTEM COSTS PER MWH

46 Generation-Fuel Related Costs	\$22.48	\$23.49	\$1.01
47 Purchased Power Costs	\$40.54	\$37.35	(\$3.20)
48 Opportunity Sales	\$33.66	\$38.71	\$5.05

49

50 Total PSCR System Costs per Mwh	\$39.16	\$37.35	(\$1.80)
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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: \_\_\_\_\_ Docket No. \_\_\_\_\_

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

1. (Name)
2. (Name)
3. (Name)
4. (Name)
5. (Name)
6. (Name)
7. (Name)

Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Zip \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

Email \_\_\_\_\_

Date \_\_\_\_\_

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

Signature: \_\_\_\_\_

Save Form

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS  
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Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Zip \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

Email \_\_\_\_\_

Date \_\_\_\_\_

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<input type="checkbox"/> I am an attorney whose:
Michigan Bar # is P- _____
_____ Bar # is: _____
( state )

Signature: \_\_\_\_\_

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