215 South Cascade Street PO Box 496 Fergus Falls, Minnesota 56538-0496 218 739-8200 www.otpco.com (web site)



February 28, 2020

PUBLIC DOCUMENT – NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED

Will Seuffert Executive Secretary Minnesota Public Utilities Commission 121 7<sup>th</sup> Place East, Suite 350 St. Paul, MN 55101-2147

RE: Otter Tail Power Company 2020 Annual Automatic Adjustment of Charges Report - Electric Minn. R. 7825.2800 – 7825.2840 Docket No. E999/AA-20-171

Dear Mr. Seuffert:

Otter Tail Power Company (Otter Tail) hereby submits to the Minnesota Public Utilities Commission (Commission) its annual report pursuant to Minn. R. 7825.2800 to 7825.2840 governing Automatic Adjustment of Charges for the eighteen month period July 2018 to December 2019.

Attachment P to this response contains the hourly information requested in an Access file format (AttachmentPtoAAA\_2018-2019\_NOT PUBLIC.accdb). *This attachment will be provided separately on a cd as it is not in a format that can be electronically filed.* 

Various portions and attachments to this filing contain information that Otter Tail considers trade secret. Otter Tail believes this filing comports with the Commission's Notice relating to Revised Procedures for Handling Trade Secret and Privileged Data, pursuant to Minn. R. 7829.0500. As required by the revised procedures, a statement providing the justification for excising the trade secret data follows this letter.

Mr. Seuffert February 28, 2020 Page 2

If you have any questions regarding this filing, please contact me at 218-739-8279 or at <u>stommerdahl@otpco.com</u>.

Sincerely,

/s/ STUART TOMMERDAHL Stuart Tommerdahl Manager, Regulatory Administration

Enclosures By electronic filing c: Service List

# STATEMENT REGARDING JUSTIFICATION FOR EXCISING TRADE SECRET INFORMATION

Please note that Otter Tail Power Company has marked the following portions of this filing with the caption **NOT PUBLIC DOCUMENT – NOT FOR PUBLIC DISCLOSURE**, according to Minn. Stat. § 13.37, subd. 1(b). This statute protects certain "government data," as that term is defined at Minn. Stat. § 13.02, Subd. 7, from being disclosed by an administrative agency to the public.

- Minn. R. 7825.2810 Subpt. 1.B. Monthly Cost Components by Fuel-Type (Part E Section 2 Attachment C-2);
- Wind Curtailment Summary Report (Part E Section 9 Attachment F);
- Paragraphs 7.A.1. a) and b) of reporting requirements from Passing MISO Day 2 Costs Through Fuel Clause Order in Docket No. E-017/M-05-284 (Part E Section 10);
- MISO Module E Data (Part E Section 10 Attachment G);
- Non Asset Based columns of the Detail of MISO Day 2 Charges by Retail, Asset Based and Non Asset Based (Part H Section 3 Attachment K);
- Portion of reply to 22. of MN PUC Order Acting on Electric Utilities' Annual Reports and Requiring Additional Filings Docket Nos. E999/AA-09-961 and E999/AA-10-884 (Part H Section 6);
- Otter Tail's Forced Outage Information Change in Energy Costs Column (Part H Section 6 Attachment M);
- Otter Tail's Generation Deliverability Results for MISO Planning Year 2018/2019 (Part H Section 6 Attachment N);
- Comparison of Otter Tail's MISO Generation Deliverability Results and Otter Tail's current Integrated Resource Plan (Part H Section 6 Attachment O);
- Hourly information in an Access file format (Part H Section 8 Attachment P); and
- Portion of reply to 20. b.i. through c.iii. of MN PUC Order Acting on Electric Utilities' Annual Reports, Requiring Refund of Certain Curtailment Costs, and Requiring Additional Filings in 2010/2011 Annual Automatic Adjustment Reports Docket No. E999/AA-11-792 (Part H Section 8).

The information being supplied in this filing is considered to be a "compilation" of data that (1) was supplied by Otter Tail Power Company, (2) is the subject of reasonable efforts by Otter Tail Power Company to maintain its secrecy, and (3) derives independent economic value, actual or potential, from not being generally known to or accessible to the public.

It is Otter Tail Power Company's understanding that marking the filing in this manner is consistent with the revised procedures for handling trade secret and privileged data, as announced in the joint memorandum of the Office of Energy Security and Public Utilities Commission dated August 18, 1999 and which became effective September 1, 1999.

Date prepared: February 28, 2020

# STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Otter Tail Power Company's Annual Automatic Adjustment of Charges Report Docket No. E999/AA-20-171

# PETITION OF OTTER TAIL POWER COMPANY

# I. INTRODUCTION

Otter Tail Power Company (Otter Tail or the Company) submits this Annual Report as required in Minn. R. 7825.2800 to 7825.2840 governing Automatic Adjustment of Charges (AAA) for electric utilities for the eighteen month period of July 1, 2018 to December 31, 2019. The eighteen-month reporting period was approved by the Minnesota Public Utilities Commission in its Order dated December 12, 2018 in Docket No. E-999/CI-03-802 to facilitate transition to the new forecasted Fuel Clause Adjustment (FCA) mechanism which became effective January 1, 2020.

# II. GENERAL FILING INFORMATION

Pursuant to Minn. R. 7829.1300, subpt. 4, Otter Tail provides the following general information.

# A. Name, Address, and Telephone Number of Utility.

Otter Tail Power Company 215 South Cascade Street P. O. Box 496 Fergus Falls, MN 56538-0496 (218) 739-8200

# B. Name, Address, and Telephone Number of Utility Attorney.

Cary Stephenson Otter Tail Power Company 215 South Cascade Street P. O. Box 496 Fergus Falls, MN 56538-0496 (218) 739-8956 cstephenson@otpco.com

# C. Date of Filing.

Consistent with the filing requirement in Minn. R. 7825.2840, the date of this filing is February 28, 2020. The information contained in this filing is submitted in compliance with the aforementioned Rules concerning Automatic Adjustment of Charges.

# D. Statute Controlling Schedule for Processing the Filing.

No statute establishes a schedule for processing this filing. The applicable rules are Minn. R. 7825.2800 through 7825.2840.

# E. Title of Utility Employee Responsible for Filing.

Stuart Tommerdahl Manager, Regulatory Administration Otter Tail Power Company 215 South Cascade Street P. O. Box 496 Fergus Falls, MN 56538-0496 (218) 739-8279 stommerdahl@otpco.com

# III. DESCRIPTION OF FILING

As noted above, this filing contains the annual reporting requirements specified in the following rule sections:

# Minn. R. 7825.2800 Annual Report: Policies and Actions

Part D includes the following and a summary of the topics listed in the rule:

Section 1 Fuel Procurement Practices
Section 2 Fuel Utilization
Section 3 Procurement of Transportation Services
Section 4 Conservation Improvement Programs
Section 5 Compliance Report as Requirement by Order in Docket E017/PA-01-1391

# Minn. R. 7825.2810 Annual Report: Automatic Adjustment of Charges

Part E contains a summary of the annual reporting (by month) of all electric automatic adjustment charges for the prior year of July 1, 2018 to December 31, 2019. It includes the following:

Section 1 Subpt. 1.A. Commission Approved Base Cost of Fuel Section 2 and 3 Subpt. 1.B. and 1.C. Billing Adjustment Amounts

Section 4 Subpt. 1.D. Total Cost of Fuel Delivered to Customers
Section 5 Subpt. 1.E. Revenue Collected from Customer for Energy Delivered
Section 6 and 7 Subpt. 1.F and 1.G. The Amount of Refunds
Section 8 Compliance Report as Ordered in Docket No. E017/M-03-30
Section 9 Compliance Report as Ordered in Docket No. E017/M-03-970
Section 10 Passing MISO Day 2 Costs Through Fuel Clause Order in Docket No. E017/M-05-284
Section 11 Southwest Power Pool (SPP) Energy Costs

## Minn. R. 7825.2820 Annual Auditor's Report

Part F contains the Independent Accountants' Report for the period of July 1, 2018 to December 31, 2019.

## Minn. R. 7825.2830 Annual Five-Year Projection

Otter Tail submitted its Five-Year Projection as part of its 2020 Forecasted FCA rates filing submitted May 1, 2019 in Docket E017/AA-19-297.

## **Additional Reporting Requirements**

Part H includes reporting items from other dockets pertaining to the fuel clause.

## Minn. R. 7825.2830 Notice of Reports Availability

Part I contains the Notice of Reports Availability, Certificate of Service, and Service Lists.

# IV. CONTINGENCY PLANS AND CONTRACTOR PERFORMANCE IN DOCKET NO. AA-08-995

While Otter Tail has not understood or construed Ordering Point 12 from Docket No. E999/AA-08-995 to create an annual reporting requirement within annual AAA Dockets, Otter Tail has provided an overview of its procurement and contracting practices in Part H Section 5 of this Annual Filing.

## V. ANNUAL INDEPENDENT ACCOUNTANTS' REPORT

Otter Tail also includes in this filing a report from its Independent Accountant which addresses the specific procedures outlined in ordering point 7 from the Commission Order in Docket No. E999/AA-15-611 issued July 21, 2017. This report is included in Part F of this filing.

# VI. CONCLUSION

Otter Tail respectfully requests that the Commission approve the enclosed annual automatic adjustment of charges report.

Dated: February 28, 2020

Respectfully submitted,

# **OTTER TAIL POWER COMPANY**

By: /s/ STUART TOMMERDAHL

Stuart Tommerdahl Manager, Regulatory Administration Otter Tail Power Company 215 South Cascade Street P. O. Box 496 Fergus Falls, MN 56538-0496 (218) 739-8279 stommerdahl@otpco.com

# TABLE OF CONTENTS

חאחד	D. MININ D. 7925 2000 DOI ICIES AND ACTIONS
	D – MINN. R. 7825.2800 POLICIES AND ACTIONS
1.	
2.	Fuel Utilization
3.	Procurement of Transportation Services
4.	1 0
5.	
	Control of Transmission Facilities to the MISO in Docket No. E017/PA-01-1391
PART	E – MINN. R. 7825.2810 AUTOMATIC ADJUSTMENT CHARGES
1.	
2.	
3.	
4.	Subpart 1.D. Total Cost of Fuel Delivered to Customers
5.	
6.	Subpart 1.F. Amount of Supplier Refunds Received
7.	Subpart 1.G. Amount of Refunds Credited to Customers
8.	•
	Mechanism Docket No. E017/M-03-30
9.	Compliance Report as Ordered in Docket No. E017/M-03-970 Removal of Sunset
	Provision for Recovery of the Purchase of Wind Through the Fuel Clause
	(NOT PUBLIC)
10.	Passing MISO Day 2 Costs Through Fuel Clause Order in
	Docket No. E017/M-05-284 (NOT PUBLIC)
11.	Southwest Power Pool (SPP) Energy Costs
PART	F – MINN. R. 7825.2820 ANNUAL INDEPENDENT AUDITORS' REPORT
PART	G – MINN. R. 7825.2830 ANNUAL FIVE-YEAR PROJECTION REPORT
PART	H - ADDITIONAL REPORTING REQUIREMENTS:
1.	
1.	Agreement with Enbridge Energy, Limited Partnership in
	Docket No. E017/M-06-1332
2.	
2. 3.	•
5.	•
4.	(NOT PUBLIC) MN OES's Order Authorizing Ongoing Use of Fuel Clause Adjustment and Setting
т.	Reporting Requirements in Docket No. E001,015,002,017/M-08-528
5.	
	Requirements in Docket No. E999/AA-08-995

6.	MN PUC Order Acting on Electric Utilities' Annual Reports and Requiring Additional Filings in Docket Nos. E999/AA-09-961 and E999/AA-10-884	
	(NOT PUBLIC)	243
7.	MN OES's Order for Approval of a Power Purchase Agreement with District 45	
	Dairy, LLP in Docket No. E017/M-10-1013	255
8.	MN PUC Order Acting on Electric Utilities' Annual Reports, Requiring Refund	
	of Certain Curtailment Costs, and Requiring Additional Filings in 2010/2011	
	(FYE11) Annual Automatic Adjustment Reports in Docket No. E999/AA-11-792	
	(NOT PUBLIC)	256
9.	MN PUC Order Acting on Electric Utilities' Annual Reports and Requiring	
	Additional Filings in 2013/2014 (FYE14) Annual Automatic Adjustment Reports in	
	Docket No. E999/AA-14-579	266
10.	MN PUC Order Accepting Reports, Requiring Refund, and Setting Additional	
	Requirements in 2014/2015 (FYE 15) Annual Automatic Adjustment Reports in	
	Docket No. E999/AA-15-611	268
11.	MN PUC Order Accepting 2016-2017 (FYE 17) Reports and Setting Additional	
	Requirements in 2017/2018 (FYE 18) Annual Automatic Adjustment Reports	
	Docket No. E999/AA-17-492 and Docket No. E999/AA-18-373	270
		270
PART I	– MINN. R. 7825.2840 NOTICE OF REPORTS AVAILABILITY, CERTIFICATE O	)F

SERVICE, AND SERVICE LISTS		27	73
----------------------------	--	----	----

# LIST OF ATTACHMENTS

Part D Section 5 Attachment A - Deleted in 2017	
Part E Section 1 Attachment B – Energy Adjustment Rider	14
Part E Section 2 Attachment C – kWh Sales by Primary Energy Source	17
Part E Section 2 Attachment C-1 – Energy Cost by Primary Energy Source	19
Part E Section 2 Attachment C-2 – Monthly Cost Components by Fuel Type ( <i>NOT PUBLIC</i> )	21
Part E Section 2 Attachment D – Cost of Energy Monthly Calculations	23
Part E Section 8 Attachment E – January 30, 2020 True Up Filing	67
Part E Section 9 Attachment F – Wind Curtailment Summary Report (NOT PUBLIC)	119
Part E Section 10 Attachment G – MISO Module E Data (NOT PUBLIC)	130
Part E Section 10 Attachment H – 2020 Forecast	132
Part E Section 10 Attachment I – MISO Day 2 Charges – Estimate of Minnesota Share	133
Part E Section 10 Attachment I-1 – MISO Day 2 Charges	134
Part E Section 11 Attachment I-2 – SPP Energy Charges	176
Part H Section 2 Attachment J – Generation Maintenance Expense	186
Part H Section 3 Attachment K – MISO Day 2 Allocation by Retail, Asset and NonAsset	
(NOT PUBLIC)	188
Part H Section 4 Attachment L – Schedule 1, Schedule 2, and Schedule 3 – ASM Charges	231
Part H Section 6 Attachment M – Plant Forced Outage Information (NOT PUBLIC)	248
Part H Section 6 Attachment N – Otter Tail's Generation Deliverability Results for MISO	
Planning Year 2018/2019 (NOT PUBLIC)	251

253
This
ly
262
265

# ANNUAL AUTOMATIC ADJUSTMENT REPORT

# **DOCKET NO. E999/AA-20-171**



# PART D – MINN. R. 7825.2800 POLICIES AND ACTIONS

# MINN. R. 7825.2800 ANNUAL REPORTS - POLICIES AND ACTIONS

Otter Tail Power Company (Otter Tail) has the following general policies with regard to energy purchases and fuel consumption, as well as dispatching procedures. These policies are identified first, and then later explained with the procedures used to implement these policies.

- 1. Otter Tail seeks to minimize the total cost for energy purchases and fuel for generation to Otter Tail customers, while at the same time maintaining appropriate levels of risk exposure. Furthermore, Otter Tail seeks to operate the electrical system in a safe and reliable manner within the NERC, MISO, and MRO guidelines.
- 2. Otter Tail generating facilities will be economically dispatched within the operating constraints of the units. This economic dispatch is provided by the Midwest ISO (MISO) energy market as of April 1, 2005.

These policies involve the following procedures:

- We state that we wish to minimize the total cost of energy purchases and fuel for generation, while maintaining appropriate levels of risk exposure, because a decrease of cost in one area may cause an increase in cost in another area. As long as net savings are possible in the overall costs and the system is operated within guidelines, generation and/or energy transactions will be adjusted to affect those savings. In the long term (seasonally), computer software is used to analyze the effect of making long-term energy purchases to reduce overall costs and risk exposure. If savings can be realized by making long-term purchases, or potential risk can be mitigated, we will make such a purchase. In the short-term, the MISO energy market will automatically complete short-term energy purchases - displacing higher cost company generation.
- 2. Otter Tail generating units are dispatched by the MISO energy market according to their offer parameters relative to the offer parameters of all other units within the MISO footprint. Operating constraints are communicated to MISO, and they must be closely followed. Where Otter Tail retail load serving is concerned, Otter Tail Power Services' personnel are instructed to follow the guidelines stated above.

# FUEL PROCUREMENT PRACTICES

# COAL

Otter Tail's policy for the procurement of fuel for the Big Stone Plant is to use a competitive bidding process. A complete evaluation of all bids received is performed and supplier(s) are selected based on achieving the lowest cost to Otter Tail commensurate with adequate reliability of supply, environmental compliance and compatibility with boiler equipment. Big Stone plant has commitments for 100% of coal needs for 2020.

The Coyote Station in North Dakota burns lignite from an adjacent mine. The Coyote Station owners, including Otter Tail, entered into a lignite sales agreement (LSA) with Coyote Creek Mining Company, L.L.C. (CCMC), a subsidiary of The North American Coal Corporation, for the purchase of coal to meet the coal supply requirements of Coyote Station for the period beginning in May 2016 and ending in December 2040.

Otter Tail entered into a contract in January 2016 for the supply of fuel to the Hoot Lake Plant that would not require a minimum tonnage, but rather allow for greater flexibility of coal use should the Hoot Lake facility not operate significantly between 2016 – 2021 due to the dispatch cost of the plant relative to market prices within the MISO market. The coal is known to operate well in the Hoot Lake boilers as well as the pollution control equipment installed to meet the Federal Environmental Protection Agencies Mercury & Air Toxics Standards (MATS) rule.

# OIL

Otter Tail's policy for the purchase of fuel oil requires a competitive bidding process wherein inquiries are provided to several suppliers and the lowest cost bidder selected after an evaluation process.

# NATURAL GAS

Otter Tail purchases natural gas for the Solway unit (Otter Tail's only natural gas unit) from competitive suppliers. Since Solway is operated as a peaking facility, the dispatch of the unit is intermittent, and so is the need for gas. Because of this, long-term supply arrangements have generally not been utilized. The one exception to this occurred in the winter of 2014-15 where Otter Tail chose to hedge a portion of our expected natural gas needs. This was in response to high electricity and natural gas spot prices caused by the 2013-14 winter "Polar Vortex". Other than this specific occurrence, gas is generally purchased on a day-ahead basis using firm transfer capability. The Solway unit is located on the Great Lakes pipeline.

# FUEL UTILIZATION

- 1. The steam plants operated by Otter Tail are equipped with oxygen probes that indicate and record the readings in the flue gas at the boiler exit. The readings are used by the plant control systems and monitored by the operators to maintain levels that are efficient and safe. The operators at Big Stone, Coyote, and Hoot Lake have numerous tools to monitor and control the air flow to keep the plant running at its optimum efficiency.
- 2. In general, Otter Tail has established the following policies concerning periodic maintenance of its steam-electric generating facilities:
  - (a) Partial inspections of turbines are performed once every three to six years. A partial inspection includes such items as cleaning and inspecting of all valves, measuring and recording tolerances, inspecting the governor mechanism, inspecting couplings and bushings, valve actuators, as well as the repair when issues are found.
  - (b) Partial inspections of generators are performed on a three- to six-year interval. The inspection includes cleaning and numerous electrical tests recommended by the original equipment manufacturer (OEM). The "megger" resistance readings of the generator stator and rotor windings, the exciter field leads, rotor winding, stator high potential tests, and other critical points are performed during these inspections.
  - (c) Complete inspections of the turbines are performed at approximately six- to tenyear intervals, including lifting of covers and rotors, checking blade clearances, inspection of steam valves, bearings, lube oil systems, and bleeder line nonreturn valves. The blades will generally be cleaned and tested for cracks by professional testers, and coupling alignment is checked. Major turbine overhauls are performed on six- to ten-year intervals, per manufacturer recommendations.
  - (d) Complete inspections of generators are performed at approximately 10-year intervals, including removal of the rotor and complete visual inspection. All electrical and mechanical components are checked and tested and all clearances confirmed. "Megger" resistance tests and high potential tests are performed.
  - (e) Complete cleaning and inspection of boiler parts is performed on a one- to threeyear basis. Boiler sections are repaired/rebuilt on a scheduled basis, and on an asneeded basis as determined by inspection. Typical work includes repairing erosion and corrosion damage, supports, tube shields, etc. In addition, all instrumentation is inspected, cleaned and adjusted on an annual basis, as well as all plant auxiliary systems. Boiler maintenance is performed on an as-needed basis, with some level of repair performed annually. Major work is scheduled to coincide with longer outages, approximately every three to five years.

# FUEL UTILIZATION (Continued)

3. All coal received at Big Stone Plant and Hoot Lake Plant is weighed by certified scales at the mine when loaded onto trains, and freight billings are also based on weight at the mine. The quality of coal received is determined by sampling trains as they are loaded and daily sampling at the plants with analysis by a contract laboratory.

All coal received at Coyote is transported over a conveyor from the mine and weighed at both the mine and the plant on electronic scales. The plant scale is used for billing purposes. Daily coal samples are taken from the conveyor and analyzed by a contract laboratory.

4. Company policy is to retain fuel inventories at all of its electric generating stations in the following amounts:

Hoot Lake Plant – 20 days Big Stone Plant - 30 days Coyote Station - 20 days Combustion Turbine Plants – 3 – 6 days

# **PROCUREMENT OF TRANSPORTATION SERVICES**

 Hoot Lake Plant of Fergus Falls receives sub bituminous coal supply by a unit train consisting of cars leased by the plant. The locomotives are provided by Burlington Northern Santa Fe Railroad (BNSF) and the cars are switched at Dilworth, Minnesota. The locomotives used from Dilworth to Hoot Lake Plant are owned by Otter Tail Valley Railroad.

Transportation services are provided under the terms of a common carrier rate between the BNSF and Otter Tail. The rate is effective until December 31, 2020.

2. Big Stone Plant at Big Stone City, South Dakota, receives its coal by a unit train consisting of cars leased by the Big Stone Plant co-owners. Locomotives are supplied by BNSF Railroad.

Transportation services are provided under the terms of a common carrier rate between the BNSF and the co-owners of the Big Stone Plant. The rate is effective until December 31, 2020.

# **CONSERVATION IMPROVEMENT PROGRAMS**

(Refer to separate filing for Conservation Projects as per filing under Minn. Stat. § 216B.241)

# OTTER TAIL POWER COMPANY'S COMPLIANCE REPORT AS REQUIRED BY ORDER IN DOCKET E017/PA-01-1391

As ordered in Docket No. E017/PA-01-1391, issued May 9, 2002 (In The Matter of Otter Tail Power Company's Petition for Approval of Transfer of Operational Control of Transmission Facilities to the Midwest Independent System Operator) Otter Tail submits the following compliance report with its Annual Automatic Adjustment of Charges report (AAA) filed under Minn. R. 7825.2800.

For convenience, the conditions are listed with the same numbering system as the Order in Docket No. E017/PA-01-1391 used.

- 3. Report as part of its Annual Automatic Adjustment of Charges report (AAA) filed under Minnesota Rules part 7825.2800, the following:
  - a) The Schedule 10 administrative charges paid to the MISO under the MISO tariff, and

In compliance with the Commission's July 21, 2017 Order in Docket No. E999/AA-15-611, Otter Tail will no longer provide MISO Schedule 10 administrative charges in the Annual Automatic Adjustment filings. As stated in the July 21, 2017 Order, the Commission:

concludes it is not necessary to require these details in AAA reports because the information is filed by electric utilities in their general rates cases, which provide parties the opportunity for full record development on these issues.

b) Any amount of MISO administrative charge deferred by the MISO for later recovery.

Otter Tail is not aware of any new deferrals.

# 5. Do the following:

c) Report to the Commission, in Otter Tail Power's annual AAA report, each instance where the MISO directed Otter Tail Power to curtail Otter Tail Power's owned generation, for reliability reasons, that resulted in an interruption of firm retail electric service to Otter Tail Power's retail customers in Minnesota.

There were no instances to report for this period.

d) Report to the Commission in Otter Tail Power's annual AAA report each instance where the MISO directed the curtailment of a delivery of a firm purchased power supply that subsequently resulted in an interruption of firm retail electric service to Otter Tail Power's retail customers in Minnesota.

There were no instances to report for this period.

# 8. Do the following:

b) Report in its AAA report on changes to MISO tariffs that may ultimately affect the rates of retail customers in Minnesota, and on Otter Tail Power's efforts to minimize MISO transmission service costs.

The potential effects on the rates of retail customers in Minnesota are not a simple item to estimate. In situations where MISO membership has declined, the administrative adder has trended upward. As MISO expands its membership, the administrative adder has trended downward. Otter Tail voices its concerns and actively engages in matters when and where appropriate.

As noted in the past, Otter Tail has employees actively involved on many of the committees at MISO, similar to Otter Tail's past involvement (prior to the MISO market) in the Midcontinent Area Power Pool (MAPP). Otter Tail is a small market participant in MISO as its load is less than 1% of the total MISO Load. Otter Tail has found that being involved and having an active voice on MISO committees is the best way to impact the decisions made by organizations such as MISO.

Otter Tail is mindful of the effects our rates can have on the sensitive economies of the small towns we serve, and as such, we are always looking for ways to manage costs and maintain our low rates.

- c) Submit in its AAA reports an annual analysis of how the transfer of operational control to the MISO has affected Otter Tail Power's overall transmission costs and revenues and its overall energy costs for retail customers, including
  - i) an analysis of how MISO membership has affected Otter Tail Power's ability to use its own generating sources when they are the least-cost power source and

MISO membership has not impacted Otter Tail's ability to use its own generating resources when they are the least-cost power source.

# ii) Otter Tail Power's ability to access low-cost power on the wholesale market for its retail customers.

Otter Tail has not had difficulty accessing low-cost power from the MISO wholesale market for its retail customers. The introduction of the MISO Locational Marginal Price (LMP) market on April 1, 2005 has made wholesale purchased power readily available. MISO dispatches generating facilities based on economics. During many periods, Otter Tail has been able to buy energy at prices below our baseload generation cost - allowing Otter Tail to back down baseload units.

d) Report in its AAA report each instance where the MISO directed Otter Tail Power to redispatch Otter Tail Power's owned generation for reliability reasons, including an explanation of financial impact on rates, if any, and the reason for the redispatch, if known.

The Commission discontinued this requirement in their February 6, 2008, Order in Docket No. E017/M-05-284.

# ANNUAL AUTOMATIC ADJUSTMENT REPORT

# **DOCKET NO. E999/AA-20-171**



# PART E - MINN. R. 7825.2810 AUTOMATIC ADJUSTMENT CHARGES

PUBLIC DOCUMENT NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED

# MINN. R. 7825.2810 ANNUAL REPORT - AUTOMATIC ADJUSTMENT CHARGES PERIOD: July 1, 2018 - December 31, 2019

# Minn. R. 7825.2810 Subpart 1.A. Commission Approved Base Cost of Fuel

Refer to Energy Adjustment Rider – Electric Rate Schedule - Section 13.01 (Part E Section 1 Attachment B) - approved July 21, 2017, in Docket No. E017/GR-15-1033. This rate was effective with bills rendered on and after February 1, 2019.

# Minn. R. 7825.2810 Subpart 1.B. Billing Adjustment Amounts

Per the Office of Energy Security's March 31, 2008 letter, Otter Tail provides the following Attachments with a break down by primary energy source:

- 1. (Part E Section 2 Attachment C) kWh Sales by Primary Energy Source for the period of July 2018 to December 31, 2019.
- 2. (Part E Section 2 Attachment C-1) Energy Cost by Primary Energy Source.
- 3. (Part E Section 2 Attachment C-2) Monthly Cost Components from January 2002 to present which includes the cost of delivered coal by plant, natural gas, oil and wholesale purchases without Revenue Sufficiency Guarantee (RSG) and Revenue Neutrality Uplift (RNU) charges (marked as Not Public).

Otter Tail has included (18) monthly cost of energy calculation worksheets as Part E Section 2 Attachment D for the months ending May 2018 through October 2019. Otter Tail implemented their forecasted rates effective January 1, 2020, so calculations ending with months November and December 2019 were not filed. However, Otter Tail has provided both November and December 2019 cost of energy calculation worksheets in Attachment D for informational purposes.

## Minn. R. 7825.2810 Subpart 1.C. Billing Adjustment Amounts, By Gas Supplier

Does not apply.

## Minn. R. 7825.2810 Subpart 1.D. The Total Cost of Fuel Delivered to Customers

Amount
(System)
\$7,248,440
\$8,654,914
\$6,310,012
\$10,039,317
\$13,479,717
\$10,987,067
\$12,638,934
\$13,164,542
\$11,704,553
\$9,420,724
\$8,493,879
\$7,291,954

# Minn. R. 7825.2810 Subpart 1.D. The Total Cost of Fuel Delivered to Customers (continued)

	Amount
Date	(System)
July	\$12,924,487
August	\$8,251,761
September	\$7,175,185
October	\$7,715,440
November	\$10,573,767
December-19	<u>\$10,288,312</u>
Total	\$176,363,005

The following amounts are reflective of the July 2018 – December 2019 reporting period.

Total kWh Sales – System = 7,291,779,575 Total kWh Sales Subject to COE – Minnesota = 3,711,326,731 Percent of Minnesota Sales to System (3,711,326,731 / 7,291,779,575) = 0.508974070 Fuel Costs Allocated to Minnesota (\$176,363,005) x 0.508974070 = \$89,764,197

# Minn. R. 7825.2810 Subpart 1.E. Revenue Collected From Customers for Energy Delivered

Revenue does not include the refund of true-up during July 2018 – August 2019 in the amount of (\$849,571):

	Amount
Date	(System)
July-18	\$80,238
August	\$78,335
September	(\$74,646)
October	(\$74,016)
November	(\$82,097)
December	(\$86,239)
January-19	(\$103,883)
February	(\$105,301)
March	(\$88,525)
April	(\$81,408)
May	(\$76,968)
June	(\$75,432)
July	(\$79,591)
August	<u>(\$80,037)</u>
Total	(\$849,571)

# Minn. R. 7825.2810 Subpart 1.E. Revenue Collected From Customers for Energy Delivered (continued)

On August 16, 2019, Otter Tail made an Informational Filing in Docket No. E017/M-03-30 to inform parties that the Commission approved a request for a variance to Otter Tail's current tariff, Section 13.01, to adjust the timing and implementation of the next Annual Fuel Clause Adjustment (FCA) True-Up filing. The approval in Docket No. E999/CI-03-802 facilitated the transition from a twelve-month to eighteen-month reporting period. In the Informational Filing Otter Tail stated:

Effective September 1, 2019, the current true-up rate will be set to zero and no trueup amount will be included in monthly FCA rates for September 2019 through February 2020. The next true-up will be computed, per the approved variance, for the eighteen-month true-up period . . .

				Total
Recovery	<b>Recovery From</b>	Total Adj.	Actual Fuel	Over/(Under)
From FCA	Fuel Base	Recovery	Cost	Recovery
(\$317,105)	<sup>1</sup> \$91,491,627	\$91,174,522	\$89,764,197	<sup>2</sup> 1,410,325

# Minn. R. 7825.2810 Subpart 1.F. The Amount of Supplier Refunds Received

None

# Minn. R. 7825.2810 Subpart 1.G. The Amount of Refunds Credited to Customers

There was a refund of (\$1,008,144) for the September 2018 – August 2019 true-up period.

<sup>&</sup>lt;sup>1</sup> Recovery from fuel base cost:

Total Minnesota kWh Sales July 2018 – December 2019	3,711,326,731
Minnesota Base Cost	x \$0.024652
Amount Recovered From Base Cost	\$ 91,491,627

<sup>&</sup>lt;sup>2</sup> Refer to attached January 30, 2020, true-up implementation filing (Part E Section 8 Attachment E)

# Docket No. E999/AA-20-171 Part E Section 1 Attachment B

Minnesota Public Utilities Commission Section 13.01 ELECTRIC RATE SCHEDULE Energy Adjustment Rider

> Page 1 of 3 Fourteenth Revision

# **ENERGY ADJUSTMENT RIDER**

**<u>RULES AND REGULATIONS</u>**: Terms and conditions of this electric rate schedule and the General Rules and Regulations govern use of this rider.

There shall be added to or deducted from the monthly bill an Energy Adjustment Charge calculated by multiplying the customers applicable monthly billing kilowatt hours (kWh) by the billed Energy Adjustment Factor (EAF) per kWh. The billed EAF amount per kWh (rounded to the nearest 0.001¢) is the amount the Class Base Cost of Energy is above or below the Class EAF. The Current Period Cost of Energy shall be based upon the cost of energy during the two months immediately preceding the month when the cost of energy is calculated, divided by all Kilowatt-Hour sales exclusive of intersystem sales for the same two-month period. The applicable adjustment will be applied to each Customer's bill beginning with cycle 1 of the calendar month following the month when the adjustment is calculated. The cost of energy shall be determined as follows:

- 1. The cost of fuel, as recorded in Account 151, used in the Company's generating plants.
- 2. The energy cost of purchased power included in Account 555 when such energy is purchased on an economic dispatch basis, exclusive of Capacity or Demand charges.
- 3. The net energy cost of purchases from a qualifying facility, as that term is defined in 18 C.F.R. Part 292 and Minn. Rule 7835.0100, Subp. 19, as amended, whether or not those purchases occur on an economic dispatch basis, and all fuel and purchased energy expenses incurred by the Company over the duration of any Commission-approved contract, as provided for by Minnesota Statutes, Section 216B.1645, except any such expense identified in 216B.1645, subd. 1(1), and subd. 1(2) to satisfy the renewable energy obligations set forth in Minnesota Statutes, Section 216B.1691.
- All Midwest ISO (MISO) and Southwest Power Pool (SPP) costs and revenues associated with retail sales that have been authorized by the Commission to flow through this Energy Adjustment Rider and excluding MISO and SPP costs and revenues that are recoverable in base rates, as prescribed in applicable Commission Orders.
- 5. Renewable energy purchased for the Tail*Winds* program is not included in the cost of energy adjustment calculation.

Fergus Falls, Minnesota

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> **POWER COMPANY** Fergus Falls, Minnesota

# Docket No. E999/AA-20-171 Part E Section 1 Attachment B

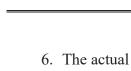
Minnesota Public Utilities Commission Section 13.01 ELECTRIC RATE SCHEDULE Energy Adjustment Rider

> Page 2 of 3 Fourteenth Revision

- 6. The actual identifiable fuel costs associated with energy purchased for reasons other than in 2 and 3 above.
- 7. Less the fuel-related costs recovered through intersystem sales.
- 8. Less a credit for asset-based margins: revenues minus costs from asset-based wholesale energy and MISO ancillary services market ("ASM") transactions (excluding ancillary services net revenues derived through OTP's FERC-approved Control Area Services Operations Tariff) shall be credited to the cost of energy. The revenues for this calculation are those received from sales of excess generation; the costs are the fuel costs (as defined in FERC Account 501) and energy costs (including MISO costs that are booked to FERC Account 555) and any transmission costs incurred that are required to make such sales.

**CLASS ENERGY ADJUSTMENT FACTOR (EAF):** A separate EAF will be determined for each customer service category defined by customer class. The EAF for each service category is the sum of the Current Period Cost of Energy multiplied by the applicable EAF Ratio, and the applicable annual true-up.

Service Category	Section	EAF Ratio
Residential	9.01, 9.02	1.0833
Farms	9.03	1.0467
General Service	10.01, 10.02, 10.03	1.0567
Large General Service	10.04, 10.05	0.9546
Irrigation Services	11.02	0.9585
Outdoor Lighting	11.03, 11.04	0.8367
OPA	11.05	1.0373
Controlled Service-Water Heating	14.01	1.0898
Controlled Service- Interruptible	14.04, 14.05	1.0945
Controlled Service - Deferred	14.06, 14.07	0.9846



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> OWER COMPANY Fergus Falls, Minnesota

# Docket No. E999/AA-20-171 Part E Section 1 Attachment B

Minnesota Public Utilities Commission Section 13.01 ELECTRIC RATE SCHEDULE **Energy Adjustment Rider** 

> Page 3 of 3 Original

CLASS BASE COST OF ENERGY: The System Average Base Cost of Energy is \$0.024652 per kWh. The class-specific Base Cost of Energy is obtained by multiplying the Average Base Cost of Energy by the applicable EAF Ratio.

Service Category	Base Cost of Energy
Residential	\$0.026706
Farms	\$0.025803
General Service	\$0.026050
Large General Service	\$0.023533
Irrigation Services	\$0.023629
Outdoor Lighting	\$0.020626
OPA	\$0.025572
Controlled Service-	\$0.026866
Water Heating	
Controlled Service-	\$0.026982
Interruptible	
Controlled Service -	\$0.024272
Deferred	

In addition there shall be an annual true-up for any amount collected over or under the actual cost of energy for the twelve months ending June 30 of each year as reported in the Annual Automatic Adjustment report filed according to Minnesota Rule 7825.2810. The annual true-up shall be based on a historic twelve-month period and shall be applied to the subsequent twelve months. The annual true-up will be effective on billings beginning September 1 of the current year through August 31 of the following year, when a new true-up rate will be calculated and applied. In years when the overor under-recovery amount is small (a rate rounded to less than  $0.001\phi$ ), an annual true-up rate shall not apply.

The annual true-up rate shall be calculated as follows. The over- or under-recovery amount as shown in the current year Annual Automatic Adjustment report will be divided by the Minnesota Kilowatt-Hours subject to the fuel adjustment clause from the same report. This calculation will produce a true-up rate per Kilowatt-Hour (rounded to the nearest 0.001¢) that will be applied to Customers' bills in the same manner as the monthly cost of energy adjustment.

MANDATORY AND VOLUNTARY RIDERS: The amount of a bill for service will be modified by any Mandatory Rate Riders that must apply and by any Voluntary Rate Riders selected by the Customer, unless otherwise noted in this schedule. See Sections 12.00, 13.00 and 14.00 of the Minnesota electric rates for the matrices of riders.

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#### Otter Tail Power Company kWh SALES BY PRIMARY ENERGY SOURCE Utilizes kWh Input Docket No. E999/DI-07-1582

Line No.	Based on Period Ending	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
1	COAL	260,846,042	274,648,771	149,068,451	124,489,617	205,741,142	305,547,583	287,879,570	250,299,769	265,668,485	160,702,151	79,577,331	96,265,522
2	BIOMASS	0	0	0	0	0	0	0	0	0	0	0	0
3	HYDRO	2,095,516	1,709,335	1,017,324	649,108	1,605,724	1,670,876	2,231,313	2,042,834	2,328,108	2,277,148	2,178,081	2,079,069
4	GAS	3,091,769	1,460,039	1,195,886	5,713,710	2,474,914	337,890	3,305,009	4,577,586	3,224,122	1,447,590	460,654	2,376,316
5	WIND	26,630,114	24,231,599	38,927,911	45,839,757	33,299,411	40,229,924	30,530,730	36,304,298	45,392,702	42,559,100	39,194,075	29,217,031
6	FUEL OIL	36,544	1,958	154,290	(7,300)	(1,048)	13,462	505,874	(390,693)	(6,793)	4,160	(12,095)	3,657
7	UNKNOWN	48,888,639	73,073,385	105,372,803	231,296,486	285,703,168	146,420,644	216,464,125	207,697,149	165,014,526	210,082,079	270,250,067	225,125,338
8	1-MONTH TOTAL	341,588,624	375,125,087	295,736,665	407,981,378	528,823,311	494,220,379	540,916,621	500,530,943	481,621,150	417,072,228	391,648,113	355,066,933

Docket No. E999/AA-20-171 Part E Section 2 Attachment C Page 2 of 2

#### Otter Tail Power Company kWh SALES BY PRIMARY ENERGY SOURCE Utilizes kWh Input Docket No. E999/DI-07-1582

Line No.	Based on Period Ending	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
1	COAL	190,438,377	194,709,304	177,617,715	145,247,799	240,701,196	222,267,380
2	BIOMASS	0	0	0	0	0	0
3	HYDRO	2,022,742	1,898,541	1,653,554	2,067,590	2,138,507	2,125,939
4	GAS	8,109,099	4,190,930	2,091,558	2,761,602	1,385,515	2,055,166
5	WIND	21,648,814	29,316,481	36,205,598	49,275,089	38,548,443	44,065,242
6	FUEL OIL	11,102	35,803	2,340	355	0	(896)
7	UNKNOWN	206,129,664	143,336,846	125,438,174	191,146,374	200,858,173	236,989,799
8	1-MONTH TOTAL	428,359,798	373,487,905	343,008,939	390,498,809	483,631,834	507,502,630

#### Otter Tail Power Company ENERGY COST BY PRIMARY ENERGY SOURCE Docket No. E999/DI-07-1582

Line		Based on Period Ending	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
No.		RGY TYPE:												
1 2 3 4 5 6 7	GENERATION	COAL BIOMASS HYDRO GAS WIND FUEL OIL UNKNOWN	\$5,363,463 \$0 \$98,262 \$0 \$23,504 \$0	\$5,990,394 \$0 \$99,816 \$0 \$7,484 \$0	\$3,255,178 \$0 \$27,607 \$0 \$49,624 \$0	\$3,239,209 \$0 \$207,736 \$0 (\$513) \$0	\$4,633,223 \$0 \$98,291 \$0 \$7,165 \$0	\$5,927,530 \$0 \$9,107 \$0 \$12,318 \$0	\$5,710,473 \$0 \$192,517 \$0 \$266,089 \$0	\$5,664,426 \$0 \$71,988 \$0 (\$205,872) \$0	\$5,969,862 \$0 \$96,036 \$0 \$12,101 \$0	\$3,467,957 \$0 \$24,012 \$0 \$4,105 \$0	\$1,720,204 \$0 \$10,970 \$0 \$4,530 \$0	\$2,106,515 \$0 \$0 \$48,057 \$0 \$4,268 \$0
8 9 10 11 12 13 14 15	PURCHASES NET	COAL BIOMASS HYDRO GAS WIND SOLAR FUEL OIL UNKNOWN	\$0 \$0 \$0 \$7777,127 \$2,260 \$0 \$983,824	\$0 \$0 \$429,489 \$2,732 \$0 \$2,124,999	\$0 \$0 \$570,101 \$2,420 \$0 \$2,405,081	\$0 \$0 \$1,257,423 \$1,769 \$0 \$5,333,694	\$0 \$0 \$0 \$1,128,961 \$1,053 \$1 \$7,611,023	\$0 \$0 \$580,254 \$457 \$0 \$4,457,401	\$0 \$0 \$1,031,297 \$626 \$0 \$5,437,932	\$0 \$0 \$479,673 \$638 \$0 \$7,153,690	\$0 \$0 \$0 \$874,425 \$490 \$0 \$4,751,639	\$0 \$0 \$1,286,874 \$1,639 \$0 \$4,636,138	\$0 \$0 \$913,461 \$2,305 \$0 \$5,842,409	\$0 \$0 \$0 \$832,349 \$2,260 \$0 \$4,298,506
16		1-MONTH TOTAL	\$7,248,440	\$8,654,914	\$6,310,012	\$10,039,317	\$13,479,717	\$10,987,067	\$12,638,934	\$13,164,542	\$11,704,553	\$9,420,724	\$8,493,879	\$7,291,954
17	RETAIL kWh SALES	1-MONTH TOTAL	372,649,137	368,431,131	358,664,864	351,799,001	413,796,707	426,917,113	533,928,769	564,122,668	455,106,991	399,191,870	369,003,110	355,787,239
18	ACTUAL COST (cents	/kWh)	1.94511	2.34913	1.75931	2.85371	3.25757	2.57358	2.36716	2.33363	2.57182	2.35995	2.30184	2.04953
	ONE-MONTH COST D BY ENERGY TYPE													
19 20 21 22 23 24 25	GENERATION	COAL BIOMASS HYDRO GAS WIND FUEL OIL UNKNOWN	1.43928 0.00000 0.00000 0.02637 0.00000 0.00631 0.00000	1.62592 0.00000 0.02709 0.00000 0.00203 0.00000	0.90758 0.00000 0.00000 0.00770 0.00000 0.01384 0.00000	0.92076 0.00000 0.05905 0.00000 -0.00015 0.00000	1.11969 0.00000 0.00000 0.02375 0.00000 0.00173 0.00000	1.38845 0.00000 0.00000 0.00213 0.00000 0.00289 0.00000	1.06952 0.00000 0.00000 0.03606 0.00000 0.04984 0.00000	1.00411 0.00000 0.00000 0.01276 0.00000 -0.03649 0.00000	1.31175 0.00000 0.00000 0.02110 0.00000 0.00266 0.00000	0.86874 0.00000 0.00000 0.00602 0.00000 0.00103 0.00000	0.46618 0.00000 0.00297 0.00000 0.00123 0.00000	0.59207 0.00000 0.00000 0.01351 0.00000 0.00120 0.00000
26 27 28 29 30 31 32 33	PURCHASES	COAL BIOMASS HYDRO GAS WIND SOLAR FUEL OIL UNKNOWN	0.00000 0.00000 0.00000 0.20854 0.00061 0.00000 0.26401	0.00000 0.00000 0.00000 0.11657 0.00074 0.00000 0.57677	0.00000 0.00000 0.00000 0.15895 0.00067 0.00000 0.67056	0.00000 0.00000 0.00000 0.35743 0.00050 0.00000 1.51612	0.00000 0.00000 0.00000 0.27283 0.00025 0.00000 1.83931	0.00000 0.00000 0.00000 0.13592 0.00011 0.00000 1.04409	0.00000 0.00000 0.00000 0.19315 0.00012 0.00000 1.01848	0.00000 0.00000 0.00000 0.08503 0.00011 0.00000 1.26811	0.00000 0.00000 0.00000 0.19214 0.00011 0.00000 1.04407	0.00000 0.00000 0.00000 0.32237 0.00041 0.00000 1.16138	0.00000 0.00000 0.00000 0.24755 0.00062 0.00000 1.58330	0.00000 0.00000 0.00000 0.23395 0.00064 0.00000 1.20817
34	ACTUAL COST (cents	/kWh)	1.94511	2.34913	1.75931	2.85371	3.25757	2.57358	2.36716	2.33363	2.57182	2.35995	2.30184	2.04953

Docket No. E999/AA-20-171 Part E Section 2 Attachment C-1 Page 2 of 2

#### Otter Tail Power Company ENERGY COST BY PRIMARY ENERGY SOURCE Docket No. E999/DI-07-1582

Line		Based on Period Ending	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
No.	FUEL COSTS BY ENE	-RGY TYPE						
110.	TOLL COOLD DI LIN							
1	GENERATION	COAL	\$7,849,223	\$5,010,453	\$3,765,927	\$3,224,053	\$5,051,597	\$4,451,806
2		BIOMASS	\$0	\$0	\$0	\$0	\$0	\$0
3		HYDRO	\$0	\$0	\$0	\$0	\$0	\$0
4		GAS	\$176,305	\$81,561	\$44,685	\$63,916	\$31,602	\$41,804
5		WIND	\$0	\$0	\$0	\$0	\$0	\$0
6		FUEL OIL	\$6,311	\$7,746	\$308	\$16,876	\$6,919	\$10,300
7		UNKNOWN	\$0	\$0	\$0	\$0	\$0	\$0
8	PURCHASES	COAL	\$0	\$0	\$0	\$0	\$0	\$0
9	NET	BIOMASS	\$0	\$0	\$0	\$0	\$0	\$0
10		HYDRO	\$0	\$0	\$0	\$0	\$0	\$0
11		GAS	\$0	\$0	\$0	\$0	\$0	\$0
12		WIND	\$507,313	\$426,095	\$861,119	\$1,000,736	\$1,509,303	\$720,948
13		SOLAR	\$2,754	\$2,810	\$2,338	\$1,249	\$1,684	\$649
14		FUEL OIL	\$0	\$0	\$0	\$0	\$0	\$0
15		UNKNOWN	\$4,382,581	\$2,723,095	\$2,500,808	\$3,408,609	\$3,972,663	\$5,062,805
16		1-MONTH TOTAL	\$12,924,487	\$8,251,761	\$7,175,185	\$7,715,440	\$10,573,767	\$10,288,312
17	RETAIL kWh SALES	1-MONTH TOTAL	373,669,362	372,524,936	353,425,401	345,265,911	413,474,339	464,021,026
18	ACTUAL COST (cents	s/kWh)	3.45880	2.21509	2.03018	2.23464	2.55730	2.21721
	ONE-MONTH COST [ BY ENERGY TYP							
	DI ENERGI I I P	Ε.						
19	GENERATION	COAL	2.10058	1.34500	1.06555	0.93379	1.22174	0.95940
20		BIOMASS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
21		HYDRO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

20		BIOMASS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
21		HYDRO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
22		GAS	0.04718	0.02189	0.01264	0.01851	0.00764	0.00901
23		WIND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
24		FUEL OIL	0.00169	0.00208	0.00009	0.00489	0.00167	0.00222
25		UNKNOWN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
26	PURCHASES	COAL	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
27		BIOMASS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
28		HYDRO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
29		GAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
30		WIND	0.13577	0.11438	0.24365	0.28985	0.36503	0.15537
31		SOLAR	0.00074	0.00075	0.00066	0.00036	0.00041	0.00014
32		FUEL OIL	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
33		UNKNOWN	1.17285	0.73098	0.70759	0.98724	0.96080	1.09107
34	ACTUAL COST (cents	/kWh)	3.45880	2.21509	2.03018	2.23464	2.55730	2.21721

Response to cost per Mbtu request from Burl Haar Letter of March 31, 2008 - Docket No. E999/DI-07-1582 Source of data: OTP Fuel cost per Million Btus for steam plants, January 2001 to present

Docket No. E999/AA-20-171 Part E Section 2 Attachment C-2 PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 1 of 2

#### MONTHLY COST COMPONENTS BY FUEL TYPE

					2.1.0 2.1	022	-					
	January	February	March	April	May	June	July	August	September	October	November	December
Cost of delivered coal by plant (1)		ED DATA BE		, <b>p</b>	may	ouno	oury	, luguot	Coptonibol	000000		5000111501
2002 Big Stone cost per Mbtu	[											
2003 Big Stone cost per Mbtu												
2004 Big Stone cost per Mbtu												
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2018 Big Stone cost per Mbtu												
2019 Big Stone cost per Mbtu												
2002 Coyote cost per Mbtu												
2003 Coyote cost per Mbtu												
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2019 Hoot Lake cost per Mbtu												
2013 HOUL LAKE COST PELINDIU										DROTE	CTED DATA	
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Docket No. E999/AA-20-171 Part E Section 2 Attachment C-2 PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 2 of 2

Response to cost per Mbtu request from Burl Haar Letter of March 31, 2008 - Docket No. E999/DI-07-1582 Source of data: OTP Fuel cost per Million Btus for steam plants, January 2001 to present

#### MONTHLY COST COMPONENTS BY FUEL TYPE

			March	April	May	June	July	August	September	October	November	December	
Cost of delivered natural gas	[PROTECTED	J DATA BEG	INS										
2003 Solway Plant cost per Mbtu													
2004 Solway Plant cost per Mbtu													
2005 Solway Plant cost per Mbtu													
2006 Solway Plant cost per Mbtu													
2007 Solway Plant cost per Mbtu													
2008 Solway Plant cost per Mbtu													
2009 Solway Plant cost per Mbtu													
2010 Solway Plant cost per Mbtu													
2011 Solway Plant cost per Mbtu													
2012 Solway Plant cost per Mbtu													
2013 Solway Plant cost per Mbtu													
2014 Solway Plant cost per Mbtu 2015 Solway Plant cost per Mbtu													
2016 Solway Plant cost per Mbtu 2017 Solway Plant cost per Mbtu													
2018 Solway Plant cost per Mbtu 2019 Solway Plant cost per Mbtu													
2019 Solway Flam Cost per Molu										PROTE	CTED DATA		
Cost of delivered nuclear fuel - not applicable	9												
Cost of delivered oil													
2002 IC Plants and FF Control Ctr diesel, \$/Mbtu	J 6.00	9.07	6.14	0.00	6.14	10.64	6.14	7.43	6.64	6.43	7.64	6.43	
2003 IC Plants and FF Control Ctr diesel, \$/Mbtu		6.86	7.36	10.43	2.71	6.93	6.64	7.07	6.93	7.14	7.00	6.93	
2004 IC Plants and FF Control Ctr diesel, \$/Mbtu	J 6.86	7.14	6.86	6.86	6.93	7.07	7.50	7.50	7.29	7.43	7.50	7.93	
2005 IC Plants and FF Control Ctr diesel, \$/Mbtu	u 7.93	7.93	7.93	9.93	9.93	10.79	11.43	12.00	11.29	12.29	12.86	13.43	
2006 IC Plants and FF Control Ctr diesel, \$/Mbtu	u 12.86	13.14	12.93	13.29	13.29	14.07	13.21	17.14	15.36	16.00	15.79	15.93	
2007 IC Plants and FF Control Ctr diesel, \$/Mbtu	J 15.79	15.07	15.07	15.21	15.43	15.50	15.86	15.43	16.07	16.00	16.07	16.07	
2008 IC Plants and FF Control Ctr diesel, \$/Mbtu	J 16.36	16.71	16.79	16.71	0	15.14	18.07	16.50	12.64	17.50	13.79	17.00	
2009 IC Plants and FF Control Ctr diesel, \$/Mbtu	u 13.57	0.00	0.00	12.64	15.36	0.00	0.00	16.79	16.07	16.07	15.79	15.79	
2010 IC Plants and FF Control Ctr diesel, \$/Mbtu		12.64	15.86	16.21	16.00	16.00	0.00	16.14	16.29	16.29		17.21	
2011 IC Plants and FF Control Ctr diesel, \$/Mbtu		17.29	16.93	0.00	17.00	16.29	13.57	21.21	20.21	17.43		17.29	
2012 IC Plants and FF Control Ctr diesel, \$/Mbtu		17.29	20.57	20.57	20.57	19.86	19.93	20.93		22.07		22.21	
2013 IC Plants and FF Control Ctr diesel, \$/Mbtu		0.00	19.36	17.86	0.00	17.79	0.00	21.36	17.86	17.79			
2014 IC Plants and FF Control Ctr diesel, \$/Mbtu		22.14	20.07	19.07	22.14	19.93	21.00	0.00	22.29	19.93			
2015 IC Plants and FF Control Ctr diesel, \$/Mbtu		21.64	22.14	14.29	20.50	21.14	21.64	15.93		16.07			
2016 IC Plants and FF Control Ctr diesel, \$/Mbtu	u 0.00	20.62	21.32	18.20	22.14	16.36	22.13	21.15	22.22	20.18	16.15	16.15	
2017 IC Plants and FF Control Ctr diesel, \$/Mbtu		20.37	19.32	16.87	20.19	16.72	20.13	20.17	21.67	21.90	17.28	22.11	
2018 IC Plants and FF Control Ctr diesel, \$/Mbtu	u 20.67	16.15	18.70	22.11	18.42	16.57	20.86	19.42	17.50	20.05	20.05	16.61	
2019 IC Plants and FF Control Ctr diesel, \$/Mbtu	u 18.78	17.74	17.13	17.82	16.80	0.00	0.00	0.00	0.00	17.11	17.81	16.72	
Cost of wholesale purchases (\$/MWh) without	t RSG or RNU	charges (2)											
2002 Purchased Power	28.01	31.19	28.19	28.65	47.04	30.61	30.99	29.49	25.27	24.17	31.94	28.92	
2003 Purchased Power	29.45	32.70	43.26	33.70	33.45	34.17	32.59	25.98		31.16			
2004 Purchased Power	36.62	40.15	23.88	34.22	41.15	38.44	45.39	41.77	38.79	35.56		36.66	
2005 Purchased Power	39.17	40.07	38.05	17.35	23.54	21.48	11.86	16.72		14.35			
2006 Purchased Power	32.43	53.34	49.82	36.19	43.46	50.81	128.29	58.97	65.01	52.14			
2007 Purchased Power	38.64	82.81	55.89	64.08	56.05	59.22	46.31	41.13	47.17	44.61	53.65	63.58	
2008 Purchased Power	61.28	74.56	69.65	68.19	39.65	49.85	57.12	52.07	42.47	45.91	49.02	52.47	
2009 Purchased Power	59.90	59.86	32.18	26.22	34.01	32.41	32.04	38.92	37.51	44.60	36.69	41.36	
2010 Purchased Power	58.11	57.90	49.57	49.04	37.80	33.02	37.69	41.60	40.25	39.47	28.31	33.43	
2011 Purchased Power	35.68	35.89	31.89	32.53	38.17	84.70	12.52	48.38	35.39	31.31	26.86	32.18	
2012 Purchased Power	31.08	30.72	30.75	25.00	29.55	34.91	38.41	45.41	38.95	28.64	30.13	31.64	
2013 Purchased Power	33.82	32.37	31.50	36.33	35.14	30.56	36.22	38.82		31.31		39.19	
2014 Purchased Power	39.32	48.75	49.66	27.76	48.69	33.97	32.60	29.36	28.60	33.58	33.55	34.85	
2015 Purchased Power	38.50	35.43	35.23	28.46	28.50	27.05	28.15	31.51	27.51	27.00		21.44	
2016 Purchased Power	27.88	25.03	23.90	23.15	22.89	24.35	34.24	36.67	29.49	24.10		27.93	
2017 Purchased Power	29.77	25.82	27.00	28.86	28.80	28.26	28.93	26.62		25.17			
2018 Purchased Power	36.16	31.00	27.24	29.54	29.23	28.62	38.93	36.53		28.62			
2019 Purchased Power	29.84	36.30	34.16	28.04	24.78	22.66	24.02	22.08	27.57	22.86	27.63	24.12	

(1) Effective July 2008 fuel oil burned for generation is included (2) Is not retail

## Docket No. E999/AA-20-171 Part E Section 2 Attachment D Page 1 of 40

EFFECTIVE 7/2/2018 CYCLE 01 RATE LEVEL 32

## **MINNESOTA**

# OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING MAY 31, 2018 FOR BILLINGS TO BE EFFECTIVE JULY 2, 2018

Line No.	ENERGY COSTS	(A) 2018 <u>April</u>	(B) 2018 <u>May</u>	-	(C) Total <u>This Period</u>
1	Plant Generation	\$ 4,143,157	\$ 6,011,919	\$	10,155,076
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 3,599,129	\$ 2,379,174	\$	5,978,303
3	Purchased Power	\$ 1,572,398	\$ 1,836,514	\$	3,408,912
4	Wind Curtailment	\$ 4,670	\$ 6,995	\$	11,665
5	Less: MISO ASM (Rev) Cost	\$ (15,677)	\$ (38,928)	\$	(54,605)
6	Less: Intersystem Sales (Rev) Cost	\$ (365,334)	\$ (864,736)	\$	(1,230,070)
7	Less: Asset Based Margins (Rev) Cost	\$ (52,617)	\$ (147,642)	\$	(200,258)
8	Total Cost of Fuel	\$ 8,885,728	\$ 9,183,296	\$	18,069,023

### **KWH SALES**

9	Total Sales of Electricity		445,963,245	418,412,892	864,376,137
10	Less Inter-System Sales		(18,009,719)	(39,284,935)	(57,294,654)
11		Total kWh	427,953,526	379,127,957	807,081,483
12 13 14		Cost per KWH Base Cost Annual True-Up F	actor	0.022388 0.024652 0.0004	
15		Energy Adjustme	nt per kWh	(0.00186)	

	kWh Information For The Billing Month of:	May 2018
Line No.	Minnesota - Retail Sales	kWh Sales
1	Subject to Energy Adjustment Rider	198,033,172 kWh
2	Non-Energy Adjustment Rider Sales	13,189,222 kWh
3	Total	211,222,394 kWh
	Non-Minnesota Sales	
4	Sales for Resale	262,553 kWh
5	Total Sales of Electricity (ND and SD)	167,643,010 kWh
6	Inter-System Sales	39,284,935 kWh
	Total kWh Sales	418,412,892 kWh

## Docket No. E999/AA-20-171 Part E Section 2 Attachment D Page 3 of 40

EFFECTIVE 8/2/2018 CYCLE 01 RATE LEVEL 32

## **MINNESOTA**

# OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING JUNE 30, 2018 FOR BILLINGS TO BE EFFECTIVE AUGUST 2, 2018

Line No.	ENERGY COSTS	(A) 2018 <u>May</u>	(B) 2018 <u>June</u>	-	(C) Total <u>This Period</u>
1	Plant Generation	\$ 6,011,919	\$ 5,733,401	\$	11,745,320
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 2,379,174	\$ 2,036,261	\$	4,415,436
3	Purchased Power	\$ 1,836,514	\$ 1,138,440	\$	2,974,953
4	Wind Curtailment	\$ 6,995	\$ (3,895)	\$	3,101
5	Less: MISO ASM (Rev) Cost	\$ (38,928)	\$ (52,694)	\$	(91,622)
6	Less: Intersystem Sales (Rev) Cost	\$ (864,736)	\$ (815,204)	\$	(1,679,940)
7	Less: Asset Based Margins (Rev) Cost	\$ (147,642)	\$ (230,051)	\$	(377,693)
8	Total Cost of Fuel	\$ 9,183,296	\$ 7,806,259	\$	16,989,555

## **KWH SALES**

9	Total Sales of Electricity		418,412,892	406,055,849	824,468,741
10	Less Inter-System Sales		(39,284,935)	(37,766,890)	(77,051,825)
11		Total kWh	379,127,957	368,288,959	747,416,916
12 13 14		Cost per KWH Base Cost Annual True-Up F	actor	0.022731 0.024652 0.0004	
15		Energy Adjustme	nt per kWh	(0.00152)	

	kWh Information For The Billing Month of:	June 2018
Line No.	Minnesota - Retail Sales	kWh Sales
	Millinesota - Retail Sales	KWIT Sales
1	Subject to Energy Adjustment Rider	200,716,187 kWh
2	Non-Energy Adjustment Rider Sales	11,867,513 kWh
3	Total	212,583,700 kWh
	Non-Minnesota Sales	
4	Sales for Resale	(35,764) kWh
5	Total Sales of Electricity (ND and SD)	155,741,023 kWh
6	Inter-System Sales	37,766,890 kWh
	Total kWh Sale	es 406,055,849 kWh

# Docket No. E999/AA-20-171 Part E Section 2 Attachment D Page 5 of 40

EFFECTIVE 9/4/2018

CYCLE 01 RATE LEVEL 32

# **MINNESOTA**

# OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING JULY 31, 2018 FOR BILLINGS TO BE EFFECTIVE SEPTEMBER 4, 2018

Line No.	ENERGY COSTS	(A) 2018 <u>June</u>	(B) 2018 <u>July</u>	-	(C) Total <u>This Period</u>
1	Plant Generation	\$ 5,733,401	\$ 6,201,092	\$	11,934,493
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 2,036,261	\$ 1,994,660	\$	4,030,921
3	Purchased Power	\$ 1,138,440	\$ (9,251)	\$	1,129,189
4	Wind Curtailment	\$ (3,895)	\$ (385)	\$	(4,280)
5	Less: MISO ASM (Rev) Cost	\$ (52,694)	\$ (42,914)	\$	(95,608)
6	Less: Intersystem Sales (Rev) Cost	\$ (815,204)	\$ (715,863)	\$	(1,531,067)
7	Less: Asset Based Margins (Rev) Cost	\$ (230,051)	\$ (178,899)	\$	(408,950)
8	Total Cost of Fuel	\$ 7,806,259	\$ 7,248,440	\$	15,054,699

9	Total Sales of Electricity		406,055,849	400,352,729	806,408,578
10	Less Inter-System Sales		(37,766,890)	(27,703,592)	(65,470,482)
11		Total kWh	368,288,959	372,649,137	740,938,096
12 13 14		Cost per KWH Base Cost Annual True-Up Factor		0.020318 0.024652 -0.0004	
15		Energy Adjustment per kWh		(0.00473)	

	kWh Information For The Billing Month of:	July 2018
Line No.	Minnesota - Retail Sales	kWh Sales
1	Subject to Energy Adjustment Rider	200,595,413 kWh
2	Non-Energy Adjustment Rider Sales	10,966,307 kWh
3	Total	211,561,720 kWh
	Non-Minnesota Sales	
4	Sales for Resale	113,627 kWh
5	Total Sales of Electricity (ND and SD)	160,973,790 kWh
6	Inter-System Sales	27,703,592 kWh
	Total kWh S	ales 400,352,729 kWh

# Docket No. E999/AA-20-171 Part E Section 2 Attachment D Page 7 of 40

EFFECTIVE 10/2/2018 CYCLE 01 RATE LEVEL 32

# **MINNESOTA**

# OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING AUGUST 31, 2018 FOR BILLINGS TO BE EFFECTIVE OCTOBER 2, 2018

Line No.	ENERGY COSTS	(A) 2018 <u>July</u>	(B) 2018 <u>August</u>	-	(C) Total <u>This Period</u>
1	Plant Generation	\$ 6,201,092	\$ 6,785,067	\$	12,986,159
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 1,994,660	\$ 1,702,276	\$	3,696,936
3	Purchased Power	\$ (9,251)	\$ 996,808	\$	987,557
4	Wind Curtailment	\$ (385)	\$ 28,189	\$	27,803
5	Less: MISO ASM (Rev) Cost	\$ (42,914)	\$ (37,811)	\$	(80,724)
6	Less: Intersystem Sales (Rev) Cost	\$ (715,863)	\$ (687,373)	\$	(1,403,237)
7	Less: Asset Based Margins (Rev) Cost	\$ (178,899)	\$ (132,241)	\$	(311,140)
8	Total Cost of Fuel	\$ 7,248,440	\$ 8,654,914	\$	15,903,354

9	Total Sales of Electricity		400,352,729	396,474,153	796,826,882
10	Less Inter-System Sales		(27,703,592)	(28,043,022)	(55,746,614)
11		Total kWh	372,649,137	368,431,131	741,080,268
12 13 14		Cost per KWH Base Cost Annual True-Up Factor		0.021460 0.024652 -0.0004	
15		Energy Adjustment per kWh		(0.00359)	

	kWh Information For The Billing Month of:	August 2018
Line No.		
	Minnesota - Retail Sales	kWh Sales
1	Subject to Energy Adjustment Rider	195,838,292 kWh
2	Non-Energy Adjustment Rider Sales	11,838,008 kWh
3	Total	207,676,300 kWh
	Non-Minnesota Sales	
4	Sales for Resale	188,630 kWh
5	Total Sales of Electricity (ND and SD)	160,566,201 kWh
6	Inter-System Sales	28,043,022 kWh
	Total kWh Sales	s 396,474,153 kWh

# Docket No. E999/AA-20-171 Part E Section 2 Attachment D Page 9 of 40

EFFECTIVE 11/1/2018 CYCLE 01 RATE LEVEL 32

# **MINNESOTA**

# OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING SEPTEMBER 30, 2018 FOR BILLINGS TO BE EFFECTIVE NOVEMBER 1, 2018

Line No.	ENERGY COSTS	(A) 2018 <u>August</u>	ŝ	(B) 2018 <u>September</u>	-	(C) Total <u>This Period</u>
1	Plant Generation	\$ 6,785,067	\$	4,142,109	\$	10,927,176
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 1,702,276	\$	2,194,512	\$	3,896,788
3	Purchased Power	\$ 996,808	\$	1,007,255	\$	2,004,063
4	Wind Curtailment	\$ 28,189	\$	27,243	\$	55,431
5	Less: MISO ASM (Rev) Cost	\$ (37,811)	\$	(31,176)	\$	(68,986)
6	Less: Intersystem Sales (Rev) Cost	\$ (687,373)	\$	(809,700)	\$	(1,497,073)
7	Less: Asset Based Margins (Rev) Cost	\$ (132,241)	\$	(220,231)	\$	(352,473)
8	Total Cost of Fuel	\$ 8,654,914	\$	6,310,012	\$	14,964,926

9	Total Sales of Electricity		396,474,153	396,282,003	792,756,156
10	Less Inter-System Sales		(28,043,022)	(37,617,139)	(65,660,161)
11		Total kWh	368,431,131	358,664,864	727,095,995
12 13 14		Cost per KWH Base Cost Annual True-Up Factor		0.020582 0.024652 -0.0004	
15		Energy Adjustment per kWh		(0.00447)	

	kWh Information For The Billing	Month of:	September 2018	
Line No.				
1101	Minnesota - Retail Sales		kWh Sales	
1	Subject to Energy Adjustment R	ider	186,614,832	kWh
2	Non-Energy Adjustment Rider S	ales	9,057,647	kWh
3	٦	Total	195,672,479	kWh
	Non-Minnesota Sales			
4	Sales for Resale		124,200	kWh
5	Total Sales of Electricity (ND an	d SD)	162,868,185	kWh
6	Inter-System Sales		37,617,139	kWh
	٦	rotal kWh Sales	396,282,003	kWh

# Docket No. E999/AA-20-171 Part E Section 2 Attachment D Page 11 of 40

EFFECTIVE 12/3/2018 CYCLE 01 RATE LEVEL 32

## **MINNESOTA**

# OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING OCTOBER 31, 2018 FOR BILLINGS TO BE EFFECTIVE DECEMBER 3, 2018

Line No.	ENERGY COSTS	5	(A) 2018 September	(B) 2018 <u>October</u>	-	(C) Total <u>This Period</u>
1	Plant Generation	\$	4,142,109	\$ 3,810,106	\$	7,952,215
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	2,194,512	\$ 5,382,770	\$	7,577,282
3	Purchased Power	\$	1,007,255	\$ 1,237,357	\$	2,244,612
4	Wind Curtailment	\$	27,243	\$ 80,194	\$	107,437
5	Less: MISO ASM (Rev) Cost	\$	(31,176)	\$ (9,551)	\$	(40,727)
6	Less: Intersystem Sales (Rev) Cost	\$	(809,700)	\$ (363,675)	\$	(1,173,374)
7	Less: Asset Based Margins (Rev) Cost	\$	(220,231)	\$ (97,884)	\$	(318,115)
8	Total Cost of Fuel	\$	6,310,012	\$ 10,039,317	\$	16,349,329

9	Total Sales of Electricity		396,282,003	366,060,700	762,342,703
10	Less Inter-System Sales		(37,617,139)	(14,261,699)	(51,878,838)
11		Total kWh	358,664,864	351,799,001	710,463,865
12 13 14		Cost per KWH Base Cost Annual True-Up Factor		0.023012 0.024652 -0.0004	
15		Energy Adjustment per kWh		(0.00204)	

	kWh Information For The Billing Month of:	October 2018
Line No.		
	Minnesota - Retail Sales	kWh Sales
1	Subject to Energy Adjustment Rider	185,038,934 kWh
2	Non-Energy Adjustment Rider Sales	12,648,015 kWh
3	Total	197,686,949 kWh
	Non-Minnesota Sales	
4	Sales for Resale	103,013 kWh
5	Total Sales of Electricity (ND and SD)	154,009,039 kWh
6	Inter-System Sales	14,261,699 kWh
	Total kWh Sa	les 366,060,700 kWh

CYCLE 01

# **MINNESOTA**

# OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING NOVEMBER 30, 2018 FOR BILLINGS TO BE EFFECTIVE JANUARY 4, 2019

Line No.	ENERGY COSTS	(A) 2018 <u>October</u>	(B) 2018 <u>November</u>	-	(C) Total <u>This Period</u>
1	Plant Generation	\$ 3,810,106	\$ 5,006,291	\$	8,816,397
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 5,382,770	\$ 7,434,618	\$	12,817,388
3	Purchased Power	\$ 1,237,357	\$ 1,474,218	\$	2,711,575
4	Wind Curtailment	\$ 80,194	\$ (46,591)	\$	33,603
5	Less: MISO ASM (Rev) Cost	\$ (9,551)	\$ 14,575	\$	5,024
6	Less: Intersystem Sales (Rev) Cost	\$ (363,675)	\$ (267,611)	\$	(631,286)
7	Less: Asset Based Margins (Rev) Cost	\$ (97,884)	\$ (135,784)	\$	(233,668)
8	Total Cost of Fuel	\$ 10,039,317	\$ 13,479,717	\$	23,519,034

9	Total Sales of Electricity		366,060,499	428,413,657	794,474,156
10	Less Inter-System Sales		(14,261,498)	(14,616,950)	(28,878,448)
11		Total kWh	351,799,001	413,796,707	765,595,708
12 13 14		Cost per KWH Base Cost Annual True-Up F	actor	0.030720 0.024652 -0.0004	
15		Energy Adjustmer	nt per kWh	0.00567	

	kWh Information For The Billing	Month of:	November 2018	
Line No.				
	Minnesota - Retail Sales		kWh Sales	
1	Subject to Energy Adjustment Ri	der	205,242,858	kWh
2	Non-Energy Adjustment Rider Sa	ales	13,147,401	kWh
3	Т	otal	218,390,259	kWh
	Non-Minnesota Sales			
4	Sales for Resale		287,066	kWh
5	Total Sales of Electricity (ND and	d SD)	195,119,382	kWh
6	Inter-System Sales		14,616,950	kWh
	Т	otal kWh Sales	428,413,657	kWh

### EFFECTIVE 2/8/2019 CYCLE 01

#### MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING DECEMBER 31, 2018 FOR BILLINGS TO BE EFFECTIVE FEBRUARY 8, 2019

		(A)	(B)	(C)
Line		2018	2018	Total
No.	ENERGY COSTS	November	December	This Period
1	Plant Generation	\$ 5,006,291	\$ 6,276,450	\$ 11,282,741
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 7,434,618	\$ 3,835,012	\$ 11,269,631
3	SPP Charges	\$ (58,843)	\$ (140,595)	\$ (199,438)
4	Purchased Power	\$ 1,533,062	\$ 1,449,640	\$ 2,982,702
5	Wind Curtailment	\$ (46,591)	\$ 208	\$ (46,383)
6	Less: MISO ASM (Rev) Cost	\$ 14,575	\$ (24,345)	\$ (9,770)
7	Less: Intersystem Sales (Rev) Cost	\$ (267,611)	\$ (327,495)	\$ (595,106)
8	Less: Asset Based Margins (Rev) Cost	\$ (135,784)	\$ (81,807)	\$ (217,591)
9	Total System Cost of Fuel	\$ 13,479,717	\$ 10,987,067	\$ 24,466,784

10	Total Sales of Electricity	428,413,657	440,251,813	868,665,470
11	Less Inter-System Sales	(14,616,950)	(13,334,700)	(27,951,650)
12	Total kWh excluding Inter-System Sales	413,796,707	426,917,113	840,713,820

13	System Cost per KWH	\$ 0.02910
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ 0.00445
16	Annual True-Up Factor	\$ (0.00040)
17	Average Energy Adjustment Factor	\$ 0.00405

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ 0.00439
18b	Farms	1.0467	\$ 0.00424
18c	General Service	1.0567	\$ 0.00428
18d	Large General Service	0.9546	\$ 0.00387
18e	Irrigation Services	0.9585	\$ 0.00388
18f	Outdoor Lighting	0.8367	\$ 0.00339
18g	OPA	1.0373	\$ 0.00420
18h	Controlled Service Water Heating	1.0898	\$ 0.00441
18i	Controlled Service Interruptible	1.0945	\$ 0.00443
18j	Controlled Service Deferred	0.9846	\$ 0.00399

kWh INFORMATION FOR THE BILLING MONTH OF: December 2018

Line		
No.	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	215,598,432 kWh
2	Non-Energy Adjustment Rider Sales	13,162,303 kWh
3	Total MN	228,760,735 kWh
	Non-Minnesota Sales	
4	Sales for Resale	568,352 kWh
5	Total Sales of Electricity (ND and SD)	197,588,026 kWh
6	Inter-System Sales	13,334,700 kWh

### EFFECTIVE 3/6/2019 CYCLE 01

#### MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING JANUARY 31, 2019 FOR BILLINGS TO BE EFFECTIVE MARCH 6, 2019

		(A)	(B)	(C)
Line		2018 December	2019	Total This Daried
No.	ENERGY COSTS	 December	<u>January</u>	This Period
1	Plant Generation	\$ 6,276,450	\$ 6,455,704	\$ 12,732,154
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 3,835,012	\$ 4,461,959	\$ 8,296,971
3	SPP Charges	\$ (140,595)	\$ (22,061)	\$ (162,656)
4	Purchased Power	\$ 1,449,640	\$ 2,056,455	\$ 3,506,095
5	Wind Curtailment	\$ 208	\$ (1,064)	\$ (856)
6	Less: MISO ASM (Rev) Cost	\$ (24,345)	\$ (18,337)	\$ (42,683)
7	Less: Intersystem Sales (Rev) Cost	\$ (327,495)	\$ (286,626)	\$ (614,121)
8	Less: Asset Based Margins (Rev) Cost	\$ (81,807)	\$ (7,096)	\$ (88,903)
9	Total System Cost of Fuel	\$ 10,987,067	\$ 12,638,934	\$ 23,626,001

10	Total Sales of Electricity	440,251,813	545,528,728	985,780,541
11	Less Inter-System Sales	(13,334,700)	(11,599,959)	(24,934,659)
12	Total kWh excluding Inter-System Sales	426,917,113	533,928,769	960,845,882

13	System Cost per KWH \$	0.02459
14	Base Cost per kWh \$	0.02465
15	Difference \$	(0.00006)
16	Annual True-Up Factor \$	(0.00040)
17	Average Energy Adjustment Factor \$	(0.00046)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ (0.00050)
18b	Farms	1.0467	\$ (0.00048)
18c	General Service	1.0567	\$ (0.00049)
18d	Large General Service	0.9546	\$ (0.00044)
18e	Irrigation Services	0.9585	\$ (0.00044)
18f	Outdoor Lighting	0.8367	\$ (0.00038)
18g	OPA	1.0373	\$ (0.00048)
18h	Controlled Service Water Heating	1.0898	\$ (0.00050)
18i	Controlled Service Interruptible	1.0945	\$ (0.00050)
18j	Controlled Service Deferred	0.9846	\$ (0.00045)

kWh INFORMATION FOR THE BILLING MONTH OF: January 2019

Line No.		
140.	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	259,708,479 kWh
2	Non-Energy Adjustment Rider Sales	14,205,730 kWh
3	Total MN	273,914,209 kWh
	Non-Minnesota Sales	
4	Sales for Resale	323,618 kWh
5	Total Sales of Electricity (ND and SD)	259,690,942 kWh
6	Inter-System Sales	11,599,959 kWh
7	Total System kWh Sales	545,528,728 kWh

### EFFECTIVE 4/3/2019 CYCLE 01

#### MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING FEBRUARY 28, 2019 FOR BILLINGS TO BE EFFECTIVE APRIL 3, 2019

			(A)	(B)	(C)
Line			2019	2019	Total
No.	ENERGY COSTS	_	<u>January</u>	February	This Period
1	Plant Generation	\$	6,455,704	\$ 6,068,241	\$ 12,523,945
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	4,461,959	\$ 6,233,366	\$ 10,695,325
3	SPP Charges	\$	(22,061)	\$ 178,313	\$ 156,251
4	Purchased Power	\$	2,056,455	\$ 1,419,828	\$ 3,476,283
5	Wind Curtailment	\$	(1,064)	\$ -	\$ (1,064)
6	Less: MISO ASM (Rev) Cost	\$	(18,337)	\$ (4,091)	\$ (22,429)
7	Less: Intersystem Sales (Rev) Cost	\$	(286,626)	\$ (537,699)	\$ (824,325)
8	Less: Asset Based Margins (Rev) Cost	\$	(7,096)	\$ (193,414)	\$ (200,511)
9	Total System Cost of Fuel	\$	12,638,934	\$ 13,164,542	\$ 25,803,476

10	Total Sales of Electricity	545,528,728	575,107,543	1,120,636,271
11	Less Inter-System Sales	(11,599,959)	(10,984,875)	(22,584,834)
12	Total kWh excluding Inter-System Sales	533,928,769	564,122,668	1,098,051,437

13	System Cost per KWH	\$ 0.02350
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ (0.00115)
16	Annual True-Up Factor	\$ (0.00040)
17	Average Energy Adjustment Factor	\$ (0.00155)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)		
10	Service Calegory	Tatio			
18a	Residential	1.0833	\$ (0.00168)		
18b	Farms	1.0467	\$ (0.00162)		
18c	General Service	1.0567	\$ (0.00164)		
18d	Large General Service	0.9546	\$ (0.00148)		
18e	Irrigation Services	0.9585	\$ (0.00149)		
18f	Outdoor Lighting	0.8367	\$ (0.00130)		
18g	OPA	1.0373	\$ (0.00161)		
18h	Controlled Service Water Heating	1.0898	\$ (0.00169)		
18i	Controlled Service Interruptible	1.0945	\$ (0.00170)		
18j	Controlled Service Deferred	0.9846	\$ (0.00153)		

kWh INFORMATION FOR THE BILLING MONTH OF: February 2019

Line		
No.	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	263,252,681 kWh
2	Non-Energy Adjustment Rider Sales	15,312,067 kWh
3	Total MN	278,564,748 kWh
	Non-Minnesota Sales	
4	Sales for Resale	601,521 kWh
4 5	Sales for Resale Total Sales of Electricity (ND and SD)	601,521 kWh 284,956,399 kWh
-		

EFFECTIVE 5/2/2019 CYCLE 01

#### MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING MARCH 31, 2019 FOR BILLINGS TO BE EFFECTIVE MAY 2, 2019

Line			(A) 2019	(B) 2019	(C) Total
No.	ENERGY COSTS	_	February	March	This Period
1	Plant Generation	\$	6,068,241	\$ 6,395,887	\$ 12,464,128
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	6,233,366	\$ 4,019,027	\$ 10,252,393
3	SPP Charges	\$	178,313	\$ 21,924	\$ 200,237
4	Purchased Power	\$	1,419,828	\$ 1,714,442	\$ 3,134,270
5	Wind Curtailment	\$	-	\$ 46	\$ 46
6	Less: MISO ASM (Rev) Cost	\$	(4,091)	\$ (14,696)	\$ (18,787)
7	Less: Intersystem Sales (Rev) Cost	\$	(537,699)	\$ (317,888)	\$ (855,588)
8	Less: Asset Based Margins (Rev) Cost	\$	(193,414)	\$ (114,190)	\$ (307,604)
9	Total System Cost of Fuel	\$	13,164,542	\$ 11,704,553	\$ 24,869,095

10	Total Sales of Electricity	575,107,543	470,329,504	1,045,437,047
11	Less Inter-System Sales	(10,984,875)	(15,222,513)	(26,207,388)
12	Total kWh excluding Inter-System Sales	564,122,668	455,106,991	1,019,229,659
			0.00440	

13	System Cost per KWH	\$ 0.02440
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ (0.00025)
16	Annual True-Up Factor	\$ (0.00040)
17	Average Energy Adjustment Factor	\$ (0.00065)

			Class Energy				
		E8760 Alloc.	Adjustment Factor				
18	Service Category	Ratio	(EAF)				
18a	Residential	1.0833	\$ (0.00070)				
18b	Farms	1.0467	\$ (0.00068)				
18c	General Service	1.0567	\$ (0.00069)				
18d	Large General Service	0.9546	\$ (0.00062)				
18e	Irrigation Services	0.9585	\$ (0.00062)				
18f	Outdoor Lighting	0.8367	\$ (0.00054)				
18g	OPA	1.0373	\$ (0.00067)				
18h	Controlled Service Water Heating	1.0898	\$ (0.00071)				
18i	Controlled Service Interruptible	1.0945	\$ (0.00071)				
18j	Controlled Service Deferred	0.9846	\$ (0.00064)				

kWh INFORMATION FOR THE BILLING MONTH OF: March 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	221,313,016 kWh
2	Non-Energy Adjustment Rider Sales	14,634,640 kWh
3	Total MN	235,947,656 kWh
	Non-Minnesota Sales	
4	Sales for Resale	324,521 kWh
5	Total Sales of Electricity (ND and SD)	218,834,814 kWh
6	Inter-System Sales	15,222,513 kWh
7	Total System kWh Sales	470,329,504 kWh

### EFFECTIVE 6/3/2019 CYCLE 01

#### MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING APRIL 30, 2019 FOR BILLINGS TO BE EFFECTIVE JUNE 3, 2019

Line			(A) 2019	(B) 2019		(C) Total
No.	ENERGY COSTS	-	March	<u>April</u>	-	This Period
1	Plant Generation	\$	6,395,887	\$ 3,753,068	\$	10,148,955
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	4,019,027	\$ 3,774,675	\$	7,793,702
3	SPP Charges	\$	21,924	\$ (67,095)	\$	(45,171)
4	Purchased Power	\$	1,714,442	\$ 2,245,889	\$	3,960,331
5	Wind Curtailment	\$	46	\$ 1,293	\$	1,339
6	Less: MISO ASM (Rev) Cost	\$	(14,696)	\$ (18,917)	\$	(33,613)
7	Less: Intersystem Sales (Rev) Cost	\$	(317,888)	\$ (256,995)	\$	(574,883)
8	Less: Asset Based Margins (Rev) Cost	\$	(114,190)	\$ (11,193)	\$	(125,383)
9	Total System Cost of Fuel	\$	11,704,553	\$ 9,420,724	\$	21,125,277

10	Total Sales of Electricity	470,329,504	410,956,896	881,286,400
11	Less Inter-System Sales	(15,222,513)	(11,765,026)	(26,987,539)
12	Total kWh excluding Inter-System Sales	455,106,991	399,191,870	854,298,861
13	System Cost n	er KWH \$	0.02473	

13	System Cost per KWH	\$ 0.02473
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ 0.00008
16	Annual True-Up Factor	\$ (0.00040)
17	Average Energy Adjustment Factor	\$ (0.00032)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ (0.00035)
18b	Farms	1.0467	\$ (0.00033)
18c	General Service	1.0567	\$ (0.00034)
18d	Large General Service	0.9546	\$ (0.00031)
18e	Irrigation Services	0.9585	\$ (0.00031)
18f	Outdoor Lighting	0.8367	\$ (0.00027)
18g	OPA	1.0373	\$ (0.00033)
18h	Controlled Service Water Heating	1.0898	\$ (0.00035)
18i	Controlled Service Interruptible	1.0945	\$ (0.00035)
18j	Controlled Service Deferred	0.9846	\$ (0.00032)

kWh INFORMATION FOR THE BILLING MONTH OF: April 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	203,519,655 kWh
2	Non-Energy Adjustment Rider Sales	15,258,380 kWh
3	Total MN	218,778,035 kWh
	Non-Minnesota Sales	
4	Sales for Resale	367,912 kWh
5	Total Sales of Electricity (ND and SD)	180,045,923 kWh
6	Inter-System Sales	11,765,026 kWh
7	Total System kWh Sales	410,956,896 kWh

EFFECTIVE 7/2/2019 CYCLE 01

#### MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING MAY 31, 2019 FOR BILLINGS TO BE EFFECTIVE JULY 2, 2019

Line			(A) 2019	(B) 2019		(C) Total
No.	ENERGY COSTS	_	<u>April</u>	<u>May</u>	-	This Period
1	Plant Generation	\$	3,753,068	\$ 1,967,503	\$	5,720,571
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	3,774,675	\$ 4,953,097	\$	8,727,773
3	SPP Charges	\$	(67,095)	\$ (130,308)	\$	(197,403)
4	Purchased Power	\$	2,245,889	\$ 1,940,513	\$	4,186,402
5	Wind Curtailment	\$	1,293	\$ (576)	\$	717
6	Less: MISO ASM (Rev) Cost	\$	(18,917)	\$ (4,293)	\$	(23,211)
7	Less: Intersystem Sales (Rev) Cost	\$	(256,995)	\$ (231,799)	\$	(488,794)
8	Less: Asset Based Margins (Rev) Cost	\$	(11,193)	\$ (258)	\$	(11,451)
9	Total System Cost of Fuel	\$	9,420,724	\$ 8,493,879	\$	17,914,603

10	Total Sales of Electricity	410,956,896	379,797,055	790,753,951
11	Less Inter-System Sales	(11,765,026)	(10,793,945)	(22,558,971)
12	Total kWh excluding Inter-System Sales	399,191,870	369,003,110	768,194,980

13	System Cost per KWH	\$ 0.02332
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ (0.00133)
16	Annual True-Up Factor	\$ (0.00040)
17	Average Energy Adjustment Factor	\$ (0.00173)

40		E8760 Alloc.	Class Energy Adjustment Factor
18	Service Category	Ratio	(EAF)
18a	Residential	1.0833	\$ (0.00187)
18b	Farms	1.0467	\$ (0.00181)
18c	General Service	1.0567	\$ (0.00183)
18d	Large General Service	0.9546	\$ (0.00165)
18e	Irrigation Services	0.9585	\$ (0.00166)
18f	Outdoor Lighting	0.8367	\$ (0.00145)
18g	OPA	1.0373	\$ (0.00179)
18h	Controlled Service Water Heating	1.0898	\$ (0.00189)
18i	Controlled Service Interruptible	1.0945	\$ (0.00189)
18j	Controlled Service Deferred	0.9846	\$ (0.00170)

kWh INFORMATION FOR THE BILLING MONTH OF: May 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	192,419,948 kWh
2	Non-Energy Adjustment Rider Sales	14,562,586 kWh
3	Total MN	206,982,534 kWh
	Non-Minnesota Sales	
4	Sales for Resale	126,776 kWh
5	Total Sales of Electricity (ND and SD)	161,893,800 kWh
6	Inter-System Sales	10,793,945 kWh
7	Total System kWh Sales	379,797,055 kWh

### EFFECTIVE 8/2/2019 CYCLE 01

#### MINNESOTA

#### OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING JUNE 30, 2019 FOR BILLINGS TO BE EFFECTIVE AUGUST 2, 2019

Line			(A) 2019	(B) 2019		(C) Total
No.	ENERGY COSTS	_	May	June	-	This Period
1	Plant Generation	\$	1,967,503	\$ 2,576,027	\$	4,543,530
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	4,953,097	\$ 3,578,517	\$	8,531,614
3	SPP Charges	\$	(130,308)	\$ (205,770)	\$	(336,078)
4	Purchased Power	\$	1,940,513	\$ 1,763,864	\$	3,704,377
5	Wind Curtailment	\$	(576)	\$ 4,253	\$	3,678
6	Less: MISO ASM (Rev) Cost	\$	(4,293)	\$ (29,174)	\$	(33,467)
7	Less: Intersystem Sales (Rev) Cost	\$	(231,799)	\$ (417,188)	\$	(648,987)
8	Less: Asset Based Margins (Rev) Cost	\$	(258)	\$ 21,424	\$	21,166
9	Total System Cost of Fuel	\$	8,493,879	\$ 7,291,954	\$	15,785,833

10	Total Sales of Electricity	379,797,055	375,834,643	755,631,698
11	Less Inter-System Sales	(10,793,945)	(20,047,404)	(30,841,349)
12	Total kWh excluding Inter-System Sales	369,003,110	355,787,239	724,790,349

13	System Cost per KWH \$	0.02178
14	Base Cost per kWh \$	0.02465
15	Difference \$	(0.00287)
16	Annual True-Up Factor \$	(0.00040)
17	Average Energy Adjustment Factor \$	(0.00327)

		E8760 Alloc.	Class Energy Adjustment Factor
18	Service Category	Ratio	(EAF)
18a	Residential	1.0833	\$ (0.00354)
18b	Farms	1.0467	\$ (0.00342)
18c	General Service	1.0567	\$ (0.00346)
18d	Large General Service	0.9546	\$ (0.00312)
18e	Irrigation Services	0.9585	\$ (0.00313)
18f	Outdoor Lighting	0.8367	\$ (0.00274)
18g	OPA	1.0373	\$ (0.00339)
18h	Controlled Service Water Heating	1.0898	\$ (0.00356)
18i	Controlled Service Interruptible	1.0945	\$ (0.00358)
18j	Controlled Service Deferred	0.9846	\$ (0.00322)

kWh INFORMATION FOR THE BILLING MONTH OF: June 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	188,580,394 kWh
2	Non-Energy Adjustment Rider Sales	11,076,561 kWh
3	Total MN	199,656,955 kWh
	Non-Minnesota Sales	
4	Sales for Resale	(18,972) kWh
5	Total Sales of Electricity (ND and SD)	156,149,256 kWh
6	Inter-System Sales	20,047,404 kWh
7	Total System kWh Sales	375,834,643 kWh

### EFFECTIVE 9/3/2019 CYCLE 01

#### MINNESOTA

#### OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING JULY 31, 2019 FOR BILLINGS TO BE EFFECTIVE SEPTEMBER 3, 2019

Line			(A) 2019	(B) 2019		(C) Total
No.	ENERGY COSTS	_	June	July	-	This Period
1	Plant Generation	\$	2,576,027	\$ 8,495,237	\$	11,071,264
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	3,578,517	\$ 3,909,250	\$	7,487,767
3	SPP Charges	\$	(205,770)	\$ (123,315)	\$	(329,084)
4	Purchased Power	\$	1,763,864	\$ 1,244,713	\$	3,008,577
5	Wind Curtailment	\$	4,253	\$ (931)	\$	3,322
6	Less: MISO ASM (Rev) Cost	\$	(29,174)	\$ (45,687)	\$	(74,861)
7	Less: Intersystem Sales (Rev) Cost	\$	(417,188)	\$ (463,399)	\$	(880,586)
8	Less: Asset Based Margins (Rev) Cost	\$	21,424	\$ (91,382)	\$	(69,958)
9	Total System Cost of Fuel	\$	7,291,954	\$ 12,924,487	\$	20,216,441

10	Total Sales of Electricity	375,834,643	396,283,456	772,118,099
11	Less Inter-System Sales	(20,047,404)	(22,614,094)	(42,661,498)
12	Total kWh excluding Inter-System Sales	355,787,239	373,669,362	729,456,601
13	System Cost o	er KWH \$	0.02771	

13	System Cost per KWH	\$ 0.02771
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ 0.00306
16	Annual True-Up Factor	\$ -
17	Average Energy Adjustment Factor	\$ 0.00306

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ 0.00331
18b	Farms	1.0467	•
18c	General Service	1.0567	\$ 0.00323
18d	Large General Service	0.9546	\$ 0.00292
18e	Irrigation Services	0.9585	\$ 0.00293
18f	Outdoor Lighting	0.8367	\$ 0.00256
18g	OPA	1.0373	\$ 0.00317
18h	Controlled Service Water Heating	1.0898	\$ 0.00333
18i	Controlled Service Interruptible	1.0945	\$ 0.00335
18j	Controlled Service Deferred	0.9846	\$ 0.00301

kWh INFORMATION FOR THE BILLING MONTH OF: July 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	198,978,709 kWh
2	Non-Energy Adjustment Rider Sales	11,723,841 kWh
3	Total MN	210,702,550 kWh
	Non-Minnesota Sales	
4	Sales for Resale	74,989 kWh
5	Total Sales of Electricity (ND and SD)	162,891,823 kWh
6	Inter-System Sales	22,614,094 kWh
7	Total System kWh Sales	396,283,456 kWh

### EFFECTIVE 10/2/2019 CYCLE 01

#### MINNESOTA

#### OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING AUGUST 31, 2019 FOR BILLINGS TO BE EFFECTIVE OCTOBER 2, 2019

Line			(A) 2019	(B) 2019	(C) Total
No.	ENERGY COSTS	_	July	August	This Period
1	Plant Generation	\$	8,495,237	\$ 5,580,918	\$ 14,076,155
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	3,909,250	\$ 2,701,029	\$ 6,610,280
3	SPP Charges	\$	(123,315)	\$ (62,417)	\$ (185,732)
4	Purchased Power	\$	1,244,713	\$ 548,418	\$ 1,793,131
5	Wind Curtailment	\$	(931)	\$ 35,681	\$ 34,750
6	Less: MISO ASM (Rev) Cost	\$	(45,687)	\$ (41,397)	\$ (87,084)
7	Less: Intersystem Sales (Rev) Cost	\$	(463,399)	\$ (481,157)	\$ (944,556)
8	Less: Asset Based Margins (Rev) Cost	\$	(91,382)	\$ (29,315)	\$ (120,697)
9	Total System Cost of Fuel	\$	12,924,487	\$ 8,251,761	\$ 21,176,248

10	Total Sales of Electricity	396,283,456	395,103,587	791,387,043
11	Less Inter-System Sales	(22,614,094)	(22,578,651)	(45,192,745)
12	Total kWh excluding Inter-System Sales	373,669,362	372,524,936	746,194,298

13	System Cost per KWH	\$	0.02838
14	Base Cost per kWh	\$	0.02465
15	Difference	\$	0.00373
16	Annual True-Up Factor	\$	-
17	Average Energy Adjustment Factor	э \$	0.00373

			Class Energy
		E8760 Alloc.	Adjustment Factor
18	Service Category	Ratio	(EAF)
18a	Residential	1.0833	\$ 0.00404
18b	Farms	1.0467	\$ 0.00390
18c	General Service	1.0567	\$ 0.00394
18d	Large General Service	0.9546	\$ 0.00356
18e	Irrigation Services	0.9585	\$ 0.00358
18f	Outdoor Lighting	0.8367	\$ 0.00312
18g	OPA	1.0373	\$ 0.00387
18h	Controlled Service Water Heating	1.0898	\$ 0.00406
18i	Controlled Service Interruptible	1.0945	\$ 0.00408
18j	Controlled Service Deferred	0.9846	\$ 0.00367

kWh INFORMATION FOR THE BILLING MONTH OF: August 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	200,092,537 kWh
2	Non-Energy Adjustment Rider Sales	10,935,019 kWh
3	Total MN	211,027,556 kWh
	Non-Minnesota Sales	
4	Sales for Resale	130,780 kWh
5	Total Sales of Electricity (ND and SD)	161,366,600 kWh
6	Inter-System Sales	22,578,651 kWh
7	Total System kWh Sales	395,103,587 kWh

### EFFECTIVE 11/1/2019 CYCLE 01

#### MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING SEPTEMBER 30, 2019 FOR BILLINGS TO BE EFFECTIVE NOVEMBER 1, 2019

			(A)	(B)	(C)
Line			2019	2019	Total
No.	ENERGY COSTS	_	August	<u>September</u>	This Period
1	Plant Generation	\$	5,580,918	\$ 4,253,949	\$ 9,834,867
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	2,701,029	\$ 1,818,502	\$ 4,519,531
3	SPP Charges	\$	(62,417)	\$ (115,729)	\$ (178,145)
4	Purchased Power	\$	548,418	\$ 1,795,153	\$ 2,343,571
5	Wind Curtailment	\$	35,681	\$ (16,303)	\$ 19,378
6	Less: MISO ASM (Rev) Cost	\$	(41,397)	\$ (43,906)	\$ (85,303)
7	Less: Intersystem Sales (Rev) Cost	\$	(481,157)	\$ (443,029)	\$ (924,187)
8	Less: Asset Based Margins (Rev) Cost	\$	(29,315)	\$ (73,451)	\$ (102,766)
9	Total System Cost of Fuel	\$	8,251,761	\$ 7,175,185	\$ 15,426,946

10	Total Sales of Electricity	395,103,587	379,431,904	774,535,491
11	Less Inter-System Sales	(22,578,651)	(26,006,503)	(48,585,154)
12	Total kWh excluding Inter-System Sales	372,524,936	353,425,401	725,950,337

13	System Cost per KWH \$	0.02125
14	Base Cost per kWh \$	0.02465
15	Difference \$	(0.00340)
16	Annual True-Up Factor\$	-
17	Average Energy Adjustment Factor \$	(0.00340)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)		
18a	Residential	1.0833	\$ (0.00368)		
18b	Farms	1.0467	\$ (0.00356)		
18c	General Service	1.0567	\$ (0.00359)		
18d	Large General Service	0.9546	\$ (0.00325)		
18e	Irrigation Services	0.9585	\$ (0.00326)		
18f	Outdoor Lighting	0.8367	\$ (0.00284)		
18g	OPA	1.0373	\$ (0.00353)		
18h	Controlled Service Water Heating	1.0898	\$ (0.00371)		
18i	Controlled Service Interruptible	1.0945	\$ (0.00372)		
18j	Controlled Service Deferred	0.9846	\$ (0.00335)		

kWh INFORMATION FOR THE BILLING MONTH OF: September 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	183,284,702 kWh
2	Non-Energy Adjustment Rider Sales	8,039,608 kWh
3	Total MN	191,324,310 kWh
	Non-Minnesota Sales	
4	Sales for Resale	100,741 kWh
5	Total Sales of Electricity (ND and SD)	162,000,350 kWh
6	Inter-System Sales	26,006,503 kWh
7	Total System kWh Sales	379,431,904 kWh

### EFFECTIVE 12/2/2019 CYCLE 01

#### MINNESOTA

#### OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING OCTOBER 31, 2019 FOR BILLINGS TO BE EFFECTIVE DECEMBER 2, 2019

Line			(A)	(B)	(C)
Line No.	ENERGY COSTS	5	2019 September	2019 <u>October</u>	Total <u>This Period</u>
1	Plant Generation	\$	4,253,949	\$ 3,479,677	\$ 7,733,626
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	1,818,502	\$ 2,519,600	\$ 4,338,102
3	SPP Charges	\$	(115,729)	\$ (174,853)	\$ (290,582)
4	Purchased Power	\$	1,795,153	\$ 2,057,299	\$ 3,852,451
5	Wind Curtailment	\$	(16,303)	\$ 5,123	\$ (11,180)
6	Less: MISO ASM (Rev) Cost	\$	(43,906)	\$ (11,936)	\$ (55,842)
7	Less: Intersystem Sales (Rev) Cost	\$	(443,029)	\$ (174,832)	\$ (617,861)
8	Less: Asset Based Margins (Rev) Cost	\$	(73,451)	\$ 15,362	\$ (58,089)
9	Total System Cost of Fuel	\$	7,175,185	\$ 7,715,440	\$ 14,890,625

10	Total Sales of Electricity	379,431,904	355,224,737	734,656,641
11	Less Inter-System Sales	(26,006,503)	(9,958,826)	(35,965,329)
12	Total kWh excluding Inter-System Sales	353,425,401	345,265,911	698,691,312

13	System Cost per KWH \$	6	0.02131
14	Base Cost per kWh _\$	5	0.02465
15	Difference \$	6	(0.00334)
16	Annual True-Up Factor\$	5	-
17	Average Energy Adjustment Factor 💲	5	(0.00334)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)		
10		. tato	(2,)		
18a	Residential	1.0833	\$ (0.00362)		
18b	Farms	1.0467	\$ (0.00350)		
18c	General Service	1.0567	\$ (0.00353)		
18d	Large General Service	0.9546	\$ (0.00319)		
18e	Irrigation Services	0.9585	\$ (0.00320)		
18f	Outdoor Lighting	0.8367	\$ (0.00279)		
18g	OPA	1.0373	\$ (0.00346)		
18h	Controlled Service Water Heating	1.0898	\$ (0.00364)		
18i	Controlled Service Interruptible	1.0945	\$ (0.00366)		
18j	Controlled Service Deferred	0.9846	\$ (0.00329)		

kWh INFORMATION FOR THE BILLING MONTH OF: October 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	177,648,801 kWh
2	Non-Energy Adjustment Rider Sales	10,366,146 kWh
3	Total MN	188,014,947 kWh
	Non-Minnesota Sales	
4	Sales for Resale	121,875 kWh
5	Total Sales of Electricity (ND and SD)	157,129,089 kWh
6	Inter-System Sales	9,958,826 kWh
7	Total System kWh Sales	355,224,737 kWh

#### DISCLAIMER: THE TOTAL SYSTEM COST OF FUEL AND kWh SALES ARE ACTUALS FOR MONTHS REFERENCED. THE AVERAGE ENERGY ADJUSTMENT FACTOR AND CLASS ENERGY ADJUSTMENT FACTORS (EAF) WERE NOT CREDITED TO CUSTOMERS. EFFECTIVE JANUARY 1, 2020, OTTER TAIL IMPLEMENTED FORECASTED RATES APPROVED OCTOBER 2019 IN DOCKET NO. E017/AA-19-297.

## MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING NOVEMBER 30, 2019

Line			(A) 2019	(B) 2019	(C) Total
No.	ENERGY COSTS	_	<u>October</u>	November	This Period
1	Plant Generation	\$	3,479,677	\$ 5,363,541	\$ 8,843,218
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	2,519,600	\$ 3,209,423	\$ 5,729,023
3	SPP Charges	\$	(174,853)	\$ (165,194)	\$ (340,047)
4	Purchased Power	\$	2,057,299	\$ 2,539,468	\$ 4,596,767
5	Wind Curtailment	\$	5,123	\$ 1,033	\$ 6,156
6	Less: MISO ASM (Rev) Cost	\$	(11,936)	\$ (23,633)	\$ (35,569)
7	Less: Intersystem Sales (Rev) Cost	\$	(174,832)	\$ (273,424)	\$ (448,256)
8	Less: Asset Based Margins (Rev) Cost	\$	15,362	\$ (77,446)	\$ (62,085)
9	Total System Cost of Fuel	\$	7,715,440	\$ 10,573,767	\$ 18,289,207

10	Total Sales of Electricity	355,224,737	428,567,924	783,792,661
11	Less Inter-System Sales	(9,958,826)	(15,093,585)	(25,052,411)
12	Total kWh excluding Inter-System Sales	345,265,911	413,474,339	758,740,250

13	System Cost per KWH	\$ 0.02410
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ (0.00055)
16	Annual True-Up Factor	\$ -
17	Average Energy Adjustment Factor	\$ (0.00055)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)	
18a	Residential	1.0833	\$ (0.00060)	
18b	Farms	1.0467	\$ (0.00058)	
18c	General Service	1.0567	\$ (0.00058)	
18d	Large General Service	0.9546	\$ (0.00053)	
18e	Irrigation Services	0.9585	\$ (0.00053)	
18f	Outdoor Lighting	0.8367	\$ (0.00046)	
18g	OPA	1.0373	\$ (0.00057)	
18h	Controlled Service Water Heating	1.0898	\$ (0.00060)	
18i	Controlled Service Interruptible	1.0945	\$ (0.00060)	
18j	Controlled Service Deferred	0.9846	\$ (0.00054)	

kWh INFORMATION FOR THE BILLING MONTH OF: November 2019

Line			
No.	Minnesota - Retail Sales		
1	Subject to Energy Adjustment Rider	207,237,586	kWh
2	Non-Energy Adjustment Rider Sales	10,512,256	kWh
3	Total MN	217,749,842	kWh
	Non-Minnesota Sales		
4	Sales for Resale	310,507	kWh
5	Total Sales of Electricity (ND and SD)	195,413,990	kWh
6	Inter-System Sales	15,093,585	kWh
7	Total System kWh Sales	428,567,924	kWh

### DISCLAIMER: THE TOTAL SYSTEM COST OF FUEL AND kWh SALES ARE ACTUALS FOR MONTHS REFERENCED. THE AVERAGE ENERGY ADJUSTMENT FACTOR AND CLASS ENERGY ADJUSTMENT FACTORS (EAF) WERE NOT CREDITED TO CUSTOMERS. EFFECTIVE JANUARY 1, 2020, OTTER TAIL IMPLEMENTED FORECASTED RATES APPROVED OCTOBER 2019 IN DOCKET NO. E017/AA-19-297.

## MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING DECEMBER 31, 2019

Line			(A) 2019	(B) 2019	(C) Total
No.	ENERGY COSTS	_	November	December	This Period
1	Plant Generation	\$	5,363,541	\$ 4,866,431	\$ 10,229,972
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	3,209,423	\$ 4,113,317	\$ 7,322,740
3	SPP Charges	\$	(165,194)	\$ (66,063)	\$ (231,257)
4	Purchased Power	\$	2,539,468	\$ 1,736,931	\$ 4,276,399
5	Wind Curtailment	\$	1,033	\$ (2,031)	\$ (998)
6	Less: MISO ASM (Rev) Cost	\$	(23,633)	\$ (30,133)	\$ (53,766)
7	Less: Intersystem Sales (Rev) Cost	\$	(273,424)	\$ (362,521)	\$ (635,945)
8	Less: Asset Based Margins (Rev) Cost	\$	(77,446)	\$ 32,381	\$ (45,066)
9	Total System Cost of Fuel	\$	10,573,767	\$ 10,288,312	\$ 20,862,079

10	Total Sales of Electricity	428,567,924	482,988,572	911,556,496
11	Less Inter-System Sales	(15,093,585)	(18,967,546)	(34,061,131)
12	Total kWh excluding Inter-System Sales	413,474,339	464,021,026	877,495,365

13	System Cost per KWH	\$ 0.02377
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ (0.00088)
16	Annual True-Up Factor	\$ -
17	Average Energy Adjustment Factor	\$ (0.00088)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)	
18a	Residential	1.0833	\$ (0.00095)	
18b	Farms	1.0467	\$ (0.00092)	
18c	General Service	1.0567	\$ (0.00093)	
18d	Large General Service	0.9546	\$ (0.00084)	
18e	Irrigation Services	0.9585	\$ (0.00084)	
18f	Outdoor Lighting	0.8367	\$ (0.00074)	
18g	OPA	1.0373	\$ (0.00091)	
18h	Controlled Service Water Heating	1.0898	\$ (0.00096)	
18i	Controlled Service Interruptible	1.0945	\$ (0.00096)	
18j	Controlled Service Deferred	0.9846	\$ (0.00087)	

kWh INFORMATION FOR THE BILLING MONTH OF: December 2019

Line No.		
110.	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	226,361,463 kWh
2	Non-Energy Adjustment Rider Sales	17,287,984 kWh
3	Total MN	243,649,447 kWh
	Non-Minnesota Sales	
4	Sales for Resale	472,221 kWh
5	Total Sales of Electricity (ND and SD)	219,899,359 kWh
6	Inter-System Sales	18,967,546 kWh

### COMPLIANCE REPORT AS ORDERED IN DOCKET NO. E017/M-03-30

As ordered in Docket No. G,E999/AA-01-838, issued December 23, 2002 (In the Matter of the Review of the 2001 Annual Automatic Adjustment of Charges for all Gas and Electric Utilities) Otter Tail filed on January 8, 2003, with the Minnesota Public Utilities Commission, a proposal for a Monthly Fuel Clause Adjustment True-up, Docket No. E017/M-03-30.

On March 4, 2003, the Department of Commerce recommended approval of Otter Tail's proposed true-up and also recommended that Otter Tail be granted rule variances, which would allow Otter Tail to implement the proposed true-up.

On January 22, 2004, the proposed true-up came before the Commission. After discussions between Otter Tail, Department of Commerce and Commission staff, the following recommendation was made: Within 60 days of the date the Department of Commerce files its initial comments in Docket E,G999/AA-03-1264, Otter Tail shall make a supplemental filing in this docket containing at least the following items: a) An annual true-up mechanism for its automatic fuel clause adjustment; b) An analysis and discussion of the current need for a fuel clause true-up; and c) An analysis and discussion of any implementation issues likely to arise with either the annual or monthly true-up.

On February 18, 2004, the Commission issued its Order requiring Otter Tail to make a supplemental filing.

On April 26, 2004, Otter Tail submitted its supplemental filing as ordered by the Commission. Otter Tail's supplemental filing requested approval of an annual true-up procedure to take effect August 1, 2004. This matter came before the Commission on December 16, 2004.

On December 27, 2004, the Commission issued its Order in Docket No. E017/M-03-30 granting Otter Tail's proposed annual true-up effective August 1, 2005, and a change from mid-month application to calendar month application of monthly fuel clause adjustment rates.

On July 27, 2005, Otter Tail filed a letter with Dr. Burl Haar where Otter Tail proposed to delay its implementation of the true-up until at least year end 2005 and use 18 months as the basis for the true-up calculation. The proposed delay was the result of circumstances that were not anticipated when Otter Tail made its request for a true-up or when the Commission's Order was issued. These circumstances relate to MISO Day 2 market activity and MPUC Docket No. E017/M-05-284. Along with the MISO Day 2 market, Otter Tail had a several week scheduled outage of one of its major baseload generating plants, which contributed to a under collection amount of \$3.5 million for the 12 months ending June 30, 2005. For reasons stated in the letter dated July 27, 2005, and a supplemental letter dated August 12, 2005, Otter Tail requested to delay its annual true-up for 2005. Since this year's true-up indicates an under collection by Otter Tail, no customer is harmed by this delay.

Compliance Report as Ordered in Docket No. E017/M-03-30 (continued)

On December 21, 2005, Otter Tail filed another letter with Dr. Burl Haar where Otter Tail proposed a second delay to its implementation of the true-up until August 1, 2006. Otter Tail proposed to determine the under recovery using 24 months which would be recovered over 12 months. The delay would allow MISO issues to be determined with more certainty. On March 30, 2006, the Commission granted Otter Tail's request.

On July 21, 2006, Otter Tail filed a notice of implementation effective August 1, 2006. On July 31, the Department of Commerce filed comments requesting Otter Tail to withdraw implementation of its true-up until it identifies and excludes MISO related costs that it asserted should be handled in another docket. On August 2 Otter Tail implemented the true-up for the period of July 2005 to June 2006 to be applied during the time period of September 1, 2006, to August 31, 2007. On August 9, 2006, Otter Tail responded to the Department's request, stating it was under Commission order to implement the true-up.

On September 28, 2006, the Minnesota Public Utilities Commission issued an Order permitting Otter Tail to continue the FCA true-up mechanism to be collected over a 12-month period, to account for the under-recovery accumulated over the 24-month period from July 2004 through July 2006.

On October 30, 2006, Otter Tail filed a compliance report detailing the true-up costs that were missing from the true-up implementation petition, proposed true-up procedures, and addressed various MISO related adjustments.

On December 27, 2006, the Minnesota Public Utilities Commission issued an Order in approving the proposed change in true-up procedures for Otter Tail's filing of its annual true-up to its Fuel Clause Adjustment.

On January 15, 2007, Otter Tail filed a letter of revision to the proposed true-up amount due to an error in a report that extracts sales information from the CIS. A copy of the letter along with the calculation of the true-up was included in the 2006/2007 AAA filing. On March 22, 2007, the Minnesota Public Utilities Commission approved the proposed reduced true-up.

On August 1, 2007, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2006 to June 2007 to be applied during the time period of September 1, 2007, to August 31, 2008. A copy of the Notice was included in the 2006/2007 AAA filing.

On August 31, 2007, Otter Tail filed a letter of change in rounding the true-up to four decimal places instead of five decimal places as previously filed. This changes the rate from a credit of \$0.00039 to a credit of \$0.0004.

On October 26, 2007, the Commission approved Otter Tail's compliance report and the new annual true-up rate of a decrease of 0.4 mills per kWh.

Compliance Report as Ordered in Docket No. E017/M-03-30 (continued)

On July 31, 2008, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2007 to June 2008 to be applied during the time period of September 1, 2008, to August 31, 2009.

On September 4, 2009, the Commission approved Otter Tail's compliance report and the new annual true-up rate of a decrease of 0.6 mills per kWh.

On July 31, 2009, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2008 to June 2009 to be applied during the time period of September 1, 2009, to August 31, 2010.

On September 14, 2009, the Commission approved Otter Tail's compliance report and the new annual true-up rate of a decrease of 0.1 mills per kWh.

On July 30, 2010, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2009 to June 2010 to be applied during the time period of September 1, 2010, to August 31, 2011.

On August 19, 2010, Otter Tail filed a Correction to Annual Fuel Clause Adjustment True-up Mechanism to correct two minor errors in the calculation.

On October 15, 2010, the Commission approved Otter Tail's compliance report and the new annual true-up rate of 0.3 mills per kWh.

On August 1, 2011, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2010 to June 2011 to be applied during the time period of September 1, 2011, to August 31, 2012.

On December 16, 2011, the Commission approved Otter Tail's compliance report and the new annual true-up rate of 0.5 mills per kWh.

On July 31, 2012, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2011 to June 2012 to be applied during the time period of September 1, 2012, to August 31, 2013.

On October 9, 2012, the Commission approved Otter Tail's compliance report and the annual true-up debit of 0.5 mills per kWh.

On July 31, 2013, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2012 to June 2013 to be applied during the time period of September 1, 2013, to August 31, 2014.

On October 18, 2013, the Commission approved Otter Tail's compliance report and the annual true-up credit of 0.2 mills per kWh.

On July 31, 2014, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2013 to June 2014 to be applied during the time period of September 1, 2014 to August 31, 2015.

On September 25, 2014, the Commission approved Otter Tail's compliance report and the annual true-up debit of 0.8 mills per kWh.

Compliance Report as Ordered in Docket No. E017/M-03-30 (continued)

On July 31, 2015, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2014 to June 2015 to be applied during the time period of September 1, 2015 to August 31, 2016.

On October 6, 2015, the Commission approved Otter Tail's compliance report and the annual true-up credit of 0.6 mills per kWh.

On July 29, 2016, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2015 to June 2016 to be applied during the time period of September 1, 2016 to August 31, 2017.

On September 15, 2016, the Commission approved Otter Tail's compliance report and the annual true-up credit of 0.3 mills per kWh.

On July 31, 2017, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2016 to June 2017 to be applied during the time period of September 1, 2017 to August 31, 2018.

On September 27, 2017, the Commission approved Otter Tail's compliance report and the annual true-up debit of 0.4 mills per kWh.

On July 31, 2018, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2017 to June 2018 to be applied during the time period of September 1, 2018 to August 31, 2019.

On October 9, 2018, the Commission approved Otter Tail's compliance report and the annual true-up credit of 0.4 mills per kWh.

Otter Tail made an Informational Filing on August 16, 2019 to inform parties in this docket that the Commission approved a request for variance to tariff, Section 13.01 in its June 12, 2019 Order in Docket E999/CI-03-802 to adjust the timing and implementation of the True-Up filing. The variance aligns the timing of the true-up filing with the timing of the eighteenmonth AAA Report.

In the Informational Filing, Otter Tail stated: "*Effective September 1, 2019, the current trueup rate will be set to zero and no true-up amount will be included in monthly FCA rates for September 2019 thru February 2020.*" The next true-up rate will be effective March 1, 2020 through February 28, 2021.

On January 30, 2020, Otter Tail filed a Notice of Implementation along with the calculation of the true-up for the period of July 2018 to December 2019 to be applied during the time period of March 1, 2020 to February 28, 2021. The amount of this year's true-up is a credit of 0.5 mills per kWh. (Part E Section 8 Attachment E)

OTTER TAIL POWER COMPANY Electric Utility - Minnesota 2018/2019 AAA Report 215 South Cascade Street PO Box 496 Fergus Falls, Minnesota 56538-0496 218 739-8200 www.otpco.com (web site)

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

January 30, 2020



Mr. Ryan Barlow Acting Executive Secretary Minnesota Public Utilities Commission 121 7<sup>th</sup> Place East, Suite 350 St. Paul, MN 55101-2147

### RE: Notice of Implementation of Otter Tail Power Company's Annual Fuel Clause Adjustment True-up Mechanism Docket No. E017/M-03-30 Annual Filing

Dear Mr. Barlow:

On December 27, 2006, the Minnesota Public Utilities Commission (Commission) issued an Order in the above docket. In the Order, the Commission approved the revised true-up procedures for Otter Tail Power Company's (Otter Tail) filing of its annual true-up to its Energy Adjustment Clause (fuel clause adjustment or FCA). This annual true-up has historically applied to annual fiscal periods running from July to June each year, aligning with Annual Automatic Adjustment (AAA) reporting periods.

In order to transition FCA related reporting and recovery to a calendar year schedule in advance of the implementation of the new FCA recovery mechanism which was implemented January 1, 2020, the Commission approved Otter Tail's request to file an eighteen month true-up for the period covering July 2018 through December 2019. This approval was granted per its Order in Docket E999/CI-03-802 issued June 12, 2019. Other than a change in timing and duration of the period being trued-up, implementation of the true-up is being handled on a basis consistent with past true-ups in the current Docket No. E017/M-03-30. Otter Tail made an Informational filing on August 16, 2019 to inform parties in Docket No. E017/M-03-30, of the change in timing of the current true-up approved by the Commission in Docket E999/CI-03-802.

### Notice of Current True-Up

This notice is to advise the Commission that Otter Tail will implement its annual true-up for the July 1, 2018, through December 31, 2019 true-up period, starting with bills dated March 1, 2020 and continuing for 12 months. The amount of this year's true-up is a credit of \$1,410,325, which equates to an annual true-up credit of .5 mills per kWh that will be refunded in the monthly rates applied to sales that are subject to the FCA from March 1, 2020 through February 28, 2021.

An Equal Opportunity Employer

OTTER TAIL POWER COMPANY Electric Utility - Minnesota 2018/2019 AAA Report Mr. Barlow January 30, 2020 Page 2

### Docket No. E999/AA-20-171 Part E Section 8 Attachment E

As noted above, the filing of this eighteen-month true-up facilitates the transition to the reformed FCA mechanism as approved in Docket E999/CI-03-802. Ordering point 10 of the June 12, 2019 Order states:

"10. Otter Tail Power shall submit one true-up filing for the period of July 1, 2018 – December 31, 2019. Otter Tail Power shall submit this filing no later than January 31, 2020 and shall implement the true-up rate for the period of March 1, 2020 – February 28, 2021, to be added to or subtracted from any applicable monthly rates in effect during that period. Any remaining balance after February 28, 2021, shall be incorporated in the annual true ups that will be processed under the new FCA reform mechanism.

This current annual true-up calculation also reflects a true-up of the previous period's actual collections. At the end of each true-up period, Otter Tail compares the true-up target amount with the amount actually refunded or collected. If Otter Tail over-collects or under-refunds a true-up amount, that amount of over-collection or under-refund is included in the subsequent year's true-up amount. For the true-up period ending August 31, 2018, Otter Tail under-collected the target amount by (\$66,322). Therefore, there is no adjustment for the prior period true-up for the period ending August 31, 2018.

Any true-up difference remaining for the period ending December 2019 will be included as a component of the true-up filing for the 2020 calendar year and included in the annual true-up calculation filed March 1, 2021.

### Future True-ups and the FCA Reform Docket

Otter Tail's current Energy Adjustment Rider, Section 13.01, Page 3 of 4, includes these two paragraphs describing the annual true-up which will be in effect for recovery periods beginning January 1, 2020:

"In addition, subject to Commission approval, there shall be an annual true-up for any amount collected over or under the actual cost of energy for the twelve months ending December 31 of each year as reported in the Annual Automatic Adjustment True-up report to be filed by March 1 following the most recent reporting period. The annual true-up shall be based on a historic twelve-month period, comparing actual costs per kWh to the forecasted costs per kWh and shall be applied to the subsequent twelve months. The annual true-up will be effective on billings beginning the first of the month following Commission approval of the true-up, or as ordered by the Commission. In years when the over- or under-recovery amount is small (resulting in a trueup rate rounded to less than  $0.001\phi$ ), the true-up balance will carry over to the next year's trueup.

The annual true-up rate for each class shall be calculated as follows. The over- or underrecovery amount as shown in the current year Annual Automatic Adjustment True-up report will be divided by the forecasted Minnesota Kilowatt-Hours subject to the fuel adjustment clause for

### Docket No. E999/AA-20-171 Part E Section 8 Attachment E

the proposed twelve-month recovery period the true-up rate will be in effect and then multiplied by the applicable EAF ratio. This calculation will produce a true-up rate per Kilowatt-Hour (rounded to the nearest  $0.001\phi$ ) for each class that will be applied to Customers' bills in the same manner as the monthly cost of energy adjustment."

As noted above, Otter Tail's annual true-up for 2020 under the new FCA mechanism will be filed on or before March 1, 2021. Any remaining balance associated with this current annual true-up filing will be included as part of that filing as well, per Ordering point 10 of the June 12, 2019 Order in Docket E999/CI-03-802.

Please contact me at (218) 739-8279 or <u>stommerdahl@otpco.com</u> if you have any questions regarding this filing.

Yours truly,

/s/ STUART TOMMERDAHL Stuart Tommerdahl Manager, Regulatory Administration

kaw Enclosures By electronic filing c: Service List

### Otter Tail Power Company True-up for kWh subject to FCA Docket E017/M-03-30 Calculation of Annual True-up - July 2018 through December 2019

### Docket No. E999/AA-20-171 Part E Section 8 Attachment E

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Month	FCA Revenue		Subtract Last Year's True-up	Net FCA Revenue	MN kWh Sales Subject to COE	Total System Energy Cost	Total System Sales
Line No.		Source: Financial Reporting	True-up Rate	(C)*(F)	(B)-(D)	FCA Calculation	FCA Calculation	FCA Calculation
1	Jul-18	(\$369,805)	\$0.0004	\$80,238	(\$450,043)	200,595,413	\$7,248,440	372,649,137
2	Aug-18	(\$298,190)	\$0.0004	\$78,335	(\$376,526)	195,838,292	\$8,654,914	368,431,131
3	Sep-18	(\$878,807)	(\$0.0004)	(\$74,646)	(\$804,161)	186,614,832	\$6,310,012	358,664,864
4	Oct-18	(\$669,143)	(\$0.0004)	(\$74,016)	(\$595,127)	185,038,934	\$10,039,317	351,799,001
5	Nov-18	(\$914,002)	(\$0.0004)	(\$82,097)	(\$831,905)	205,242,858	\$13,479,717	413,796,707
6	Dec-18	(\$454,112)	(\$0.0004)	(\$86,239)	(\$367,872)	215,598,432	\$10,987,067	426,917,113
7	Jan-19	\$1,466,026	(\$0.0004)	(\$103,883)	\$1,569,910	259,708,479	\$12,638,934	533,928,769
8	Feb-19	\$1,407,686	(\$0.0004)	(\$105,301)	\$1,512,987	263,252,681	\$13,164,542	564,122,668
9	Mar-19	\$716,670	(\$0.0004)	(\$88,525)	\$805,195	221,313,016	\$11,704,553	455,106,991
10	Apr-19	(\$112,439)	(\$0.0004)	(\$81,408)	(\$31,031)	203,519,655	\$9,420,724	399,191,870
11	May-19	(\$259,623)	(\$0.0004)	(\$76,968)	(\$182,655)	192,419,948	\$8,493,879	369,003,110
12	Jun-19	(\$114,970)	(\$0.0004)	(\$75,432)	(\$39,538)	188,580,394	\$7,291,954	355,787,239
13	Jul-19	(\$127,367)	(\$0.0004)	(\$79,591)	(\$47,776)	198,978,709	\$12,924,487	373,669,362
14	Aug-19	(\$409,768)	(\$0.0004)	(\$80,037)	(\$329,731)	200,092,537	\$8,251,761	372,524,936
15	Sep-19	(\$368,305)	\$0.0000	\$0	(\$368,305)	183,284,702	\$7,175,185	353,425,401
16	Oct-19	\$541,663	\$0.0000	\$0	\$541,663	177,648,801	\$7,715,440	345,265,911
17	Nov-19	\$427,610	\$0.0000	\$0	\$427,610	207,237,586	\$10,573,767	413,474,339
18	Dec-19	(\$749,798)	\$0.0000	\$0	(\$749,798)	226,361,463	\$10,288,312	464,021,026
13	Totals	(\$1,166,676)		(\$849,571)	(\$317,105)	3,711,326,731	\$176,363,005	7,291,779,575
14		KWH subject to COE		3,711,326,731				
15 16 17 18 19 20 21		Recovery from FC Recovery from ba Total adjusted recove Actual energy cost Over/(under) recover Plus over collection Refund to Customer	se cost (1 7y (2 (3 7y (4 from prior year (6	) \$91,174,522 ) \$89,764,197 ) <b>\$1,410,325</b>		% over/(under) Recovery (5) 1.57%		
22 23		Forecasted kWh Mar. 2020 - F Annual True-up Fact	```					
24		Base cost =	\$0.024652 N	ovember 2017 to prese	nt			

(1) Recovery from base cost: \$0.024652 x MN kWh sales subject to FCA (Nov 2017 to present)

(2) Total adjusted recovery: Sum of recovery from FCA and recovery from base cost
 (3) Actual energy cost: MN kwh sales subject to COE / total sys sales x total sys energy cost
 (4) Over/under recovery: total adjusted recovery - actual energy cost

(5) % over/under recovery: over/under recovery / actual energy cost
(6) Over(Under) Collection / MN kwh sales subject to COE:

If Otter Tail over collects (over recovers) or under refunds the prior period's true-up, the amount due the customer is included in the calculation of the next year's true-up. Otter Tail over collected the previous period's true-up, so there is an adjustment to the calculation.

Previous True-up Amount to be collected (Sep 2017 - Aug 2018) wa Amount collected (Sep 2017 - Aug 2018) was: OTP overcollected:	(\$1,078,620) \$1,012,298 (\$66,322)
(a) Current approved True-up Amt - over/(under) collection	\$967,550
(b) Amount collected (refunded) to-date (Sept 2018 - Aug 2019):	(\$1,008,144)
(c) Net Balance remaining (a) + (b)	(\$40,594)
(d) Estimated collections (refunds) to be received	\$0
(e) Projected balance yet to be refunded	(\$40,594)

(7) Forecasted kWh - Energy Adjustment Rider, Section 13.01 - "The over- or under- recovery amount as shown in the current year Annual Automatic Adjustment True-up report will be divided by the forecasted Minnesota Kilowatt-Hours subject to the fuel adjustment clause for the proposed twelve month recovery period the true-up rate will be in effect and then multiplied by the applicable EAF ratio."

(8) Refund to customers / Forecasted kWh Mar. 2020 - Feb. 2021

	OTTER Electric	: Ui	tilit	y.	- N	/ir	nn	es	ot		ANY													
rage 1 of 1 z	2018/20	19	Total	(284,765)	(23,379)	(308,144)	(890,792) <mark>5</mark>	(9,640)	(900,433)	(1,360,763)						Total	569,530	46.759	296.018	148,669	19,281	8,355	2,721,527	Docket No. E999/AA-20-171 Trt E Section 8 Attachment E
rage							(72,828) \$	(824) \$	(437) \$	(124,597) \$						Feb-21	60.823	4.363	35.831	145,656	1,648	873		
							(76,588) \$	(896) \$	(384) \$	(133,690) \$						Jan-21	68.319	4.709	38,614	153,176	1,792	769	267,379	267,379
				(32,912) \$	_	(14,243) \$	(78,107) \$	(808) \$	(362) \$	(128,719) \$						Dec-20	65.824	4.575	28,485	156,214	1,615	724	257,438	257,438
							(74,937) \$	(756) \$	(347) \$	(115,982) \$					oe Collected	Nov-20	51.028	4.933	23,922	149,874	1,512	694	231,964	231,964
	SS						(75,184) \$	(752) \$	(338) \$	(109,258) \$					es Forecast Covering Time Period that the True-Up will be Collected	Oct-20	41.160	3.601	21.207	150,368	1,504	677	218,516	218,516
	RILL INDACT BY CLISTOMED CLASS					(10,034) \$	(72,317) \$	(764) \$	(333) \$	(103,552) \$			er 2019)		me Period that t	Sep-20	36.553	3,654	20,068	144,635	1,528	665	207,104	207,104
							(74,729) \$	(807) \$	(323) \$	(109,150) \$			through Decemb	3	cast Covering Ti	Aug-20	40.433	4.289	21.860	149,458	1,614	646	218,300	218,300
							(74,584) \$	(817) \$		(110,258) \$			months July 2018		MWH Sales Fore	Jul-20	42.922	4.046	22,102	149,167	1,635	643	220,515	220,515
							(71,125) \$	(788) \$	(323) \$	(102,167) \$			ation as filed for r		2	Jun-20	37.289	3.155	19,418	142,251	1,575	645	204,334	204,334
							(72,750) \$	(803) \$	(327) \$	(102,492) \$			uel clause calcul;			Mav-20	35.307	2.887	19.030	145,501	1,606	654	204,985	204,985
				(19,581) \$			(71,813) \$	(791) \$	(336) \$	(104,145) \$			T 3 (the monthly f			Apr-20	39.162	3.039	20.209	143,626	1,583	673	208,290	208,290
	ıt 6.a. (1)			(25,355) \$			(75,830) \$	(834) \$	(346) \$	(116,754) \$	it 6.b. (1)	all calculations	8IT 1 and EXHIBI		it 6.c. (1)	Mar-20	50.710	3.508	25.271	151,660	1,667	691	233,507	233,507
	Documentation Requirement 6.a. (1)		1	ential			Large Commercial \$	OPA \$	Street Lighting \$	Total Debit	Documentation Requirement 6.b. (1)	Documentation supporting all calculations	Attached to the filing is EXHIBIT 1 and EXHIBIT 3 (the monthly fuel clause calculation as filed for months July 2018 through December 2019)	1	Documentation Requirement 6.c. (1)		Residential	Farm	Small Commercial	Large Commercial	OPA	Street Lighting	Subject to FCA true-up	Total forecast

71

Docket No. E017/M-03-30 EXHIBIT 2 Page 1 of 12

Documentation Requirement 6.d. (1) Plant Outages, Unusual Costs (From each respective monthly fuel clause filing) Otter Tail Power Company Plant Conditions for June 2018

		Unit	Equivalent			Outsaco	Fuel Prices	rices
	Net	Availability	Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	230,782	92.7	92.5	1.34	Forced	Boiler Waterwall Leak	3.20	Over
Coyote	257,673	76.5	73.5	6.58 1.19	Scheduled Scheduled	Scheduled Boiler Wash - Started 5/31/18 04:03 Scheduled Boiler Wash Extension	11.11	Under
Hoot Lake Unit 2	14,682	100.0	100.0				13.56	Under
Hoot Lake Unit 3	17,896	6.66	6.66				13.56	Under

Note:

Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/fon compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same.

Otter Tail Power Company Plant Conditions for July 2018

		Unit	Equivalent				Fuel F	Fuel Prices
	Net	Availability				Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	136,881	100.0	99.8				6.02	Over
Coyote	97,647	99.5	94.0				13.74	Under
Hoot Lake Unit 2	23,833	100.0	100.0				23.01	Under
Hoot Lake Unit 3	23,255	2.19	91.4	2.56	Forced	Tube Leak Repairs	23.01	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same. Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel

Documentation Requirement 6.d. (1) Plant Outages, Unusual Costs (From each respective monthly fuel clause filing) Otter Tail Power Company Plant Conditions for August 2018

			Equivalent			Outage	Fuel Prices	rices
_	Net	Availability	Availability					Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	145,328	99.3	97.6				4.00	Over
Coyote	97,591	92.4	89.1	2.36	Forced	Boiler Wash-Plugging	2.75	Under
Hoot Lake Unit 2	22,417	89.1	89.1	2.16	Forced	DA #4 FWH Drip Line Leak Repair	22.83	Under
Hoot Lake Unit 3	31,219	98.3	98.3				22.83	Under

Note:

Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same.

Otter Tail Power Company Plant Conditions for September 2018

		Unit	Equivalent			Outcose	Fuel F	Fuel Prices
	Net	Availability				Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	57,048	38.3	37.9	2.21 15.29	Scheduled Scheduled	Scheduled Train 2 Scrubber Cleaning Scheduled Planned Major Outage	8.32	Under
Coyote	93,191	100.0	93.6				16.11	Under
Hoot Lake Unit 2	14,870	97.6	97.6				21.96	Under
Hoot Lake Unit 3	16,384	100.0	9.6				21.96	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same. Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel

# (1) Provided per December 27, 2006 Order in this Docket.

Documentation Requirement 6.d. (1) Plant Outages, Unusual Costs (From each respective monthly fuel clause filing) Otter Tail Power Company Plant Conditions for October 2018

						Outage		
	Net	Availability	Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Birt Stone	c	00	00	31.00	Scheduled	Scheduled Planned Major Outage	ΔN	l Inder
0				3.09	Scheduled	Scheduled Boiler Wash Outage		
				1.92	Forced	Rear Lower Wall Arch Tube Leaks		
Coyote 7	75,238	78.2	72.8	1.75		Boiler Screen Tube Leaks	8.20	Over
Hoot Lake Unit 2	19.082	63.5	63.5	11.33	Forced	Turbine Joint Leak Repair	23.14	Under
	40.225	100.0	4 00				23.14	Under

Note:

Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same.

Otter Tail Power Company Plant Conditions for November 2018

		Unit	Equivalent			Outros	Fuel	Fuel Prices
_	Net	Availability	Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
				11.00	Scheduled	Scheduled   Planned Major Outage		
_				2.11	Forced	Tube Leak		
Big Stone	83,699	50.0	48.4	1.18	Forced	Tube Leak	6.19	Under
				3.70	Forced	Boiler Screen Tube Leaks		
Coyote	78,272	77.0	73.5	3.23	Forced	Wall Tube Leak 6th Floor	29.45	Over
Hoot Lake Unit 2	20,080	88.8	69.8	3.35	Forced	Precipitator Inspection	28.08	Under
				1.67	Forced	Tube Repair Economizer Roof		
Hoot Lake Unit 3	35,820	87.9	83.8	1.97	Forced	Precipitator Cleaning	28.08	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same. Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel

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Documentation Requirement 6.d. (1) Plant Outages, Unusual Costs (From each respective monthly fuel clause filing) Otter Tail Power Company Plant Conditions for December 2018

		Unit	Equivalent			Outade	Fuel Prices	rices
	Net	Availability	Availability					Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	168,616	100.0	98.8				4.32	Under
Coyote	95,507	88.8	86.6	3.46	Scheduled Boiler wash	Boiler wash	16.85	Under
Hoot Lake Unit 2	30,572	93.9	91.9	1.89	Forced	Boiler poke out and tube repair	28.28	Under
Hoot Lake Unit 3	22,144	94.9	92.0	1.33	Forced	DA line repair	28.28	Under

Note:

Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same.

### Otter Tail Power Company Plant Conditions for January 2019

		Unit	Equivalent			Outrace	Fuel	Fuel Prices
	Net	Availability	Availability Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	144,694	100.0	99.8				2.95	Over
Coyote	101,720	100.0	92.0				18.13	Under
				1.60	Forced	Tube Leak Repairs - 7 Leaks		
Hoot Lake Unit 2 20,992	20,992	86.8	80.0	2.48	Forced	Boiler Poke Out and Leak Repairs	10.25	Under
				1.92	Forced	Tube Leak Repair		
				3.63	Forced	Tube Rupture in Economizer		
Hoot Lake Unit 3	30.400	78.6	7.77	1.08	Forced	Boiler Tube Leak Waterwall	10.25	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel \$fton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same.

Documentation Requirement 6.d. (1) Plant Outages, Unusual Costs (From each respective monthly fuel clause filing) Otter Tail Power Company Plant Conditions for February 2019

		Unit	Equivalent				Fuel Prices	ices
	Net	Availability	Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	140,759	95.0	93.5	1.39	Forced	Forced Baghouse Outage	5.01	Over
Coyote	68,053	86.8	68.1	3.27	Forced	Forced Boiler Wash Outage	5.31	Over
Hoot Lake Unit 2 22,990	22,990	98.0	91.5				11.42	Under
Hoot Lake Unit 3 28,204	28,204	73.1	72.1	6.03	Forced	Forced Conservation	11.42	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same.

		Unit	Equivalent			Outano	Fuel F	Fuel Prices
	Net	Availability	Availability Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	131,726	100.0	98.7	-			4.15	Over
				1.68	Forced	Economizer tube leak		
Coyote	73,649	77.2	68.8	4.97	Scheduled	Scheduled 8 week major outage	4.07	Under
Hoot Lake Unit 2	28,397	96.3	90.9	1.14	Forced	Boiler poke out and tube leak repairs	8.38	Under
				6.23	Forced	Turbine chest repair and tube leak repairs		
Hoot Lake Unit 3 14,892	14,892	68.3	68.3	3.60	Forced	Coal Conservation	8.38	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same. Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel

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Documentation Requirement 6.d. (1) Plant Outages, Unusual Costs (From each respective monthly fuel clause filing) Otter Tail Power Company Plant Conditions for April 2019

		Unit	Equivalent			Outros	Fuel Prices	rices
	Net	Availability Availability	Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	126,927	85.7	85.6	4.22	Scheduled	Scheduled Planned Outage	3.26	Under
Coyote	-15	0.0	0.0	30.00	Scheduled	Scheduled 8 Week Major Outage	00.0	
Hoot Lake Unit 2	20,915	93.8	80.3	1.87	Forced	Turbine Bearing #3 Vibration	13.42	Under
Hoot Lake Unit 3 23,058	23,058	95.2	95.2	1.32	Forced	Overfire Air Port Repair	13.42	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same.

Otter Tail Power Company Plant Conditions for May 2019
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		Unit	Equivalent			Outcase	Fuel Prices	rices
	Net	Availability Availability	Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	75,577	66.2	64.1	10.11	Scheduled	Scheduled Planned Outage	2.23	Over
Coyote	(13)	0.0	0.0	23.75 7.25	Scheduled Scheduled	Scheduled 8 Week Major Outage Scheduled 8 Week Major Outage Extension	00.0	
Hoot Lake Unit 2	10,179	100.0	91.9				11.37	Under
Hoot Lake Unit 3	4,619	100.0	100.0				11.37	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same. Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel

(1) Provided per December 27, 2006 Order in this Docket.

Documentation Requirement 6.d. (1) Plant Outages, Unusual Costs (From each respective monthly fuel clause filing) Otter Tail Power Company Plant Conditions for June 2019

		Unit	Equivalent			Outrace	Fuel Prices	rices
	Net	Availability Avail	Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	113,300	0.66	98.4				3.44	Under
Coyote	(3)	0.0	0.0	30.00	Scheduled	Scheduled 8 Week Major Outage Extension	00.0	
Hoot Lake Unit 2	(83)	0.0	0.0	30.00	Scheduled	Scheduled Turbine Outage	00.0	
Hoot Lake Unit 3 2,444	2,444	100.0	100.0				11.07	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same.

Otter Tail Power Company Plant Conditions for July 2019
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		Unit	Equivalent			Outsoo	Fuel Prices	rices
	Net	Availability Avail	Availability			Оціаде		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	118,023	100.0	98.0				1.30	Under
Coyote	68,544	80.5	63.8	2.76 2.90	Scheduled Forced	Scheduled 8 Week Major Outage Extension Forced Econ and Primary Tube Leaks	230.17	Over
Hoot Lake Unit 2	(128)	0.0	0.0	31.00	Scheduled	Scheduled Turbine Outage Extension	0.00	
Hoot Lake Unit 3	25,536	0.66	98.9				9.06	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same. Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel

# (1) Provided per December 27, 2006 Order in this Docket.

### 78

Documentation Requirement 6.d. (1) Plant Outages, Unusual Costs (From each respective monthly fuel clause filing) Otter Tail Power Company Plant Conditions for August 2019

		Unit	Equivalent			Outraco	Fuel Prices	rices
	Net	Availability	Availability Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	102,708	100.0	98.7				1.30	Under
Coyote	98,198	100.0	96.9				230.17	Over
Hoot Lake Unit 2	4,486	62.2	62.2	11.36	Scheduled	Scheduled Turbine Outage Extension	0.00	
Hoot Lake Unit 3	9,431	100.0	9.66				90.6	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same.

Otter Tail Power Company Plant Conditions for September 2019
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		Unit	Equivalent			Outano	Fuel F	Fuel Prices
	Net	Availability	Availability Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	111,773	89.4	85.8	3.19	Scheduled	Scheduled Planned Outage	3.08	Under
Coyote	87,945	100.0	86.1				10.44	Under
Hoot Lake Unit 2	966	98.7	98.7				6.95	Under
Hoot Lake Unit 3	603	100.0	99.5				6.95	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same. Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel

(1) Provided per December 27, 2006 Order in this Docket.

Documentation Requirement 6.d. (1) Plant Outages, Unusual Costs (From each respective monthly fuel clause filing) Otter Tail Power Company Plant Conditions for October 2019

		Unit	Equivalent			Outrace	Fuel Prices	rices
	Net	Availability	Availability Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Bia Stone	85.442	62.5	62.3	11.62	Scheduled	Scheduled Planned Outage	7.37	Under
Coyote	61,662	84.6	63.9	3.25 1.25	Scheduled Scheduled	Scheduled Boiler Wash/"A" Circ Water Pump Outage Scheduled Extended Outage	2.17	Over
Hoot Lake Unit 2	6,463	87.8	87.8	2.00 1.79	Scheduled Forced	Scheduled DA Tank Inspection Forced Boiler Tube Leak Repairs	3.98	Under
Hoot Lake Unit 3	291	90.2	90.2	2.57	Scheduled	Scheduled DA Tank and Boiler Inspection	3.98	Under

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same.

		Unit	Equivalent			Outado	Fuel Prices	rices
	Net	Availability	Availability Availability			Outage		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Bid Stone	148 508	100.0	9 66				8 06	LInder
E				2.74	Scheduled	Extended Outage		
Coyote	76,216	82.1	73.8	2.64	Forced	Forced Primary Tube Leak	4.06	Over
Hoot Lake Unit 2 25.764	25,764	100.0	100.0				3.35	Under
Hoof Lake Llnit 3 3 304	3 304	100.0	1000				3 35	lnder

Note:

costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same. Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel

(1) Provided per December 27, 2006 Order in this Docket.

Documentation Requirement 6.d. (1) Plant Outages, Unusual Costs (From each respective monthly fuel clause filing) Otter Tail Power Company Plant Conditions for December 2019

		Unit	Equivalent			C. House	Fuel F	Fuel Prices
	Net	Availability	Availability Availability			Оціаде		Actual vs
Plant	MWh	%	%	Days	Type	Reason	%	Budget
Big Stone	111,914	100.0	99.4				4.83	Under
Coyote	98,784	99.8	91.2				22.04	Under
				2.21	Forced	Economizer tube leak		
				3.99	Forced	Turbine vibration		
Hoot Lake Unit 2 20,897	20,897	79.7	79.7				6.09	Under
				1.70	Forced	Steam leak in air preheater coils		
				1.22	Forced	Steam leak in air preheater coils		
Hoot Lake Unit 3	8,825	90.6	90.6				6.09	Under

Note:

Due to the infrequent and sometimes minimal operation of the Hoot Lake Units, the budget fuel price will be calculated annually with the total coal fuel costs for both units divided by the total coal tons for both units. The result will be a constant monthly budget \$/ton compared to the actual coal burned \$/ton that is calculated monthly. Both Hoot Lake Unit's Fuel Prices % and Actual vs Budget will therefore be the same.

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

Documentation of 6.e. (1) There were no additional requirements in the true-up due to the final Order in E-017/M-05-284.

EFFECTIVE 9/4/2018 CYCLE 01

Docket No. E999/AA-20-171

RATE LEVEL 32 Part E Section 8 Attachment E

### **MINNESOTA**

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING JULY 31, 2018 FOR BILLINGS TO BE EFFECTIVE SEPTEMBER 4, 2018

Line No.	ENERGY COSTS	(A) 2018 <u>June</u>	(B) 2018 <u>July</u>	-	(C) Total <u>This Period</u>
1	Plant Generation	\$ 5,733,401	\$ 6,201,092	\$	11,934,493
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 2,036,261	\$ 1,994,660	\$	4,030,921
3	Purchased Power	\$ 1,138,440	\$ (9,251)	\$	1,129,189
4	Wind Curtailment	\$ (3,895)	\$ (385)	\$	(4,280)
5	Less: MISO ASM (Rev) Cost	\$ (52,694)	\$ (42,914)	\$	(95,608)
6	Less: Intersystem Sales (Rev) Cost	\$ (815,204)	\$ (715,863)	\$	(1,531,067)
7	Less: Asset Based Margins (Rev) Cost	\$ (230,051)	\$ (178,899)	\$	(408,950)
8	Total Cost of Fuel	\$ 7,806,259	\$ 7,248,440	\$	15,054,699

9	Total Sales of Electricity		406,055,849	400,352,729	806,408,578
10	Less Inter-System Sales		(37,766,890)	(27,703,592)	(65,470,482)
11		Total kWh	368,288,959	372,649,137	740,938,096
12 13 14		Cost per KWH Base Cost Annual True-Up F	actor	0.020318 0.024652 -0.0004	
15		Energy Adjustme	nt per kWh	(0.00473)	

Docket No. E017/M-03-30 Exhibit 3 Page 2 of 32

	kWh Information For The Billing	Month of:	July 2018	
Line No.				
	Minnesota - Retail Sales		kWh Sales	
1	Subject to Energy Adjustment Ri	der	200,595,413	kWh
2	Non-Energy Adjustment Rider Sa	ales	10,966,307	kWh
3	Т	otal	211,561,720	kWh
	Non-Minnesota Sales			
4	Sales for Resale		113,627	kWh
5	Total Sales of Electricity (ND and	d SD)	160,973,790	kWh
6	Inter-System Sales		27,703,592	kWh
	т	otal kWh Sales	400,352,729	kWh

EFFECTIVE 10/2/2018 CYCLE 01

Docket No. E999/AA-20-171 RATE LEVEL 32 Part E Section 8 Attachment E

### **MINNESOTA**

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING AUGUST 31, 2018 FOR BILLINGS TO BE EFFECTIVE OCTOBER 2, 2018

Line No.	ENERGY COSTS	(A) 2018 <u>July</u>	(B) 2018 <u>August</u>	-	(C) Total <u>This Period</u>
1	Plant Generation	\$ 6,201,092	\$ 6,785,067	\$	12,986,159
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 1,994,660	\$ 1,702,276	\$	3,696,936
3	Purchased Power	\$ (9,251)	\$ 996,808	\$	987,557
4	Wind Curtailment	\$ (385)	\$ 28,189	\$	27,803
5	Less: MISO ASM (Rev) Cost	\$ (42,914)	\$ (37,811)	\$	(80,724)
6	Less: Intersystem Sales (Rev) Cost	\$ (715,863)	\$ (687,373)	\$	(1,403,237)
7	Less: Asset Based Margins (Rev) Cost	\$ (178,899)	\$ (132,241)	\$	(311,140)
8	Total Cost of Fuel	\$ 7,248,440	\$ 8,654,914	\$	15,903,354

9	Total Sales of Electricity		400,352,729	396,474,153	796,826,882
10	Less Inter-System Sales		(27,703,592)	(28,043,022)	(55,746,614)
11		Total kWh	372,649,137	368,431,131	741,080,268
12 13 14		Cost per KWH Base Cost Annual True-Up F	actor	0.021460 0.024652 -0.0004	
15		Energy Adjustme	nt per kWh	(0.00359)	

Docket No. E017/M-03-30 Exhibit 3 Page 4 of 32

kWh Information For The Billing Month of:	August 2018

Line No.				
INO.	Minnesota - Retail Sales		kWh Sales	
1	Subject to Energy Adjustment Ric	ler	195,838,292	kWh
2	Non-Energy Adjustment Rider Sa	les	11,838,008	kWh
3	Т	otal	207,676,300	kWh
	Non-Minnesota Sales			
4	Sales for Resale		188,630	kWh
5	Total Sales of Electricity (ND and	SD)	160,566,201	kWh
6	Inter-System Sales		28,043,022	kWh
	Т	otal kWh Sales	396,474,153	kWh

EFFECTIVE 11/1/2018 CYCLE 01

Docket No. E999/AA-20-171 RATE LEVEL 32 Part E Section 8 Attachment E

### **MINNESOTA**

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING SEPTEMBER 30, 2018 FOR BILLINGS TO BE EFFECTIVE NOVEMBER 1, 2018

Line No.	ENERGY COSTS	(A) 2018 <u>August</u>	(B) 2018 <u>September</u>	(C) Total <u>This Period</u>
1	Plant Generation	\$ 6,785,067	\$ 4,142,109	\$ 10,927,176
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 1,702,276	\$ 2,194,512	\$ 3,896,788
3	Purchased Power	\$ 996,808	\$ 1,007,255	\$ 2,004,063
4	Wind Curtailment	\$ 28,189	\$ 27,243	\$ 55,431
5	Less: MISO ASM (Rev) Cost	\$ (37,811)	\$ (31,176)	\$ (68,986)
6	Less: Intersystem Sales (Rev) Cost	\$ (687,373)	\$ (809,700)	\$ (1,497,073)
7	Less: Asset Based Margins (Rev) Cost	\$ (132,241)	\$ (220,231)	\$ (352,473)
8	Total Cost of Fuel	\$ 8,654,914	\$ 6,310,012	\$ 14,964,926

9	Total Sales of Electricity		396,474,153	396,282,003	792,756,156
10	Less Inter-System Sales		(28,043,022)	(37,617,139)	(65,660,161)
11		Total kWh	368,431,131	358,664,864	727,095,995
12 13 14		Cost per KWH Base Cost Annual True-Up F	actor	0.020582 0.024652 -0.0004	
15		Energy Adjustme	nt per kWh	(0.00447)	

Docket No. E017/M-03-30 Exhibit 3 Page 6 of 32

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

kWh Information For The Billing Month of:	
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Line				
No.	Minnesota - Retail Sales	kWh Sales		
1	Subject to Energy Adjustment Rider		186,614,832	kWh
2	Non-Energy Adjustment Rider Sales	6	9,057,647	kWh
3	Tota	al	195,672,479	kWh
	Non-Minnesota Sales			
4	Sales for Resale		124,200	kWh
5	Total Sales of Electricity (ND and S	D)	162,868,185	kWh
6	Inter-System Sales		37,617,139	kWh
	Tota	al kWh Sales	396,282,003	kWh

September 2018

EFFECTIVE 12/3/2018 CYCLE 01

Docket No. E999/AA-20-171 RATE LEVEL 32 Part E Section 8 Attachment E

### **MINNESOTA**

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING OCTOBER 31, 2018 FOR BILLINGS TO BE EFFECTIVE DECEMBER 3, 2018

Line No.	ENERGY COSTS	5	(A) 2018 September	(B) 2018 <u>October</u>	-	(C) Total <u>This Period</u>
1	Plant Generation	\$	4,142,109	\$ 3,810,106	\$	7,952,215
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	2,194,512	\$ 5,382,770	\$	7,577,282
3	Purchased Power	\$	1,007,255	\$ 1,237,357	\$	2,244,612
4	Wind Curtailment	\$	27,243	\$ 80,194	\$	107,437
5	Less: MISO ASM (Rev) Cost	\$	(31,176)	\$ (9,551)	\$	(40,727)
6	Less: Intersystem Sales (Rev) Cost	\$	(809,700)	\$ (363,675)	\$	(1,173,374)
7	Less: Asset Based Margins (Rev) Cost	\$	(220,231)	\$ (97,884)	\$	(318,115)
8	Total Cost of Fuel	\$	6,310,012	\$ 10,039,317	\$	16,349,329

9	Total Sales of Electricity		396,282,003	366,060,700	762,342,703
10	Less Inter-System Sales		(37,617,139)	(14,261,699)	(51,878,838)
11		Total kWh	358,664,864	351,799,001	710,463,865
12 13 14		Cost per KWH Base Cost Annual True-Up F	actor	0.023012 0.024652 -0.0004	
15		Energy Adjustme	nt per kWh	(0.00204)	

kWh Information For The Billing Month of:

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

Line		
No.	Minnesota - Retail Sales	kWh Sales
1	Subject to Energy Adjustment Rider	185,038,934 kWh
2	Non-Energy Adjustment Rider Sales	12,648,015 kWh
3	Total	197,686,949 kWh
	Non-Minnesota Sales	
4	Sales for Resale	103,013 kWh
5	Total Sales of Electricity (ND and SD)	154,009,039 kWh
6	Inter-System Sales	14,261,699 kWh
	Total kWh Sales	366,060,700 kWh

October 2018

Docket No. E017/M-03-30 Exhibit 3 Page 9 of 32

EFFECTIVE 1/4/2019 CYCLE 01 Docket No. E999/AA-20-171 Part E Section 8 Attachment E

MINNESOTA OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING NOVEMBER 30, 2018 FOR BILLINGS TO BE EFFECTIVE JANUARY 4, 2019

Line No.	ENERGY COSTS	(A) 2018 <u>October</u>	(B) 2018 <u>November</u>	-	(C) Total <u>This Period</u>
1	Plant Generation	\$ 3,810,106	\$ 5,006,291	\$	8,816,397
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 5,382,770	\$ 7,434,618	\$	12,817,388
3	Purchased Power	\$ 1,237,357	\$ 1,474,218	\$	2,711,575
4	Wind Curtailment	\$ 80,194	\$ (46,591)	\$	33,603
5	Less: MISO ASM (Rev) Cost	\$ (9,551)	\$ 14,575	\$	5,024
6	Less: Intersystem Sales (Rev) Cost	\$ (363,675)	\$ (267,611)	\$	(631,286)
7	Less: Asset Based Margins (Rev) Cost	\$ (97,884)	\$ (135,784)	\$	(233,668)
8	Total Cost of Fuel	\$ 10,039,317	\$ 13,479,717	\$	23,519,034

9	Total Sales of Electricity		366,060,499	428,413,657	794,474,156
10	Less Inter-System Sales		(14,261,498)	(14,616,950)	(28,878,448)
11		Total kWh	351,799,001	413,796,707	765,595,708
12 13 14		Cost per KWH Base Cost Annual True-Up Factor		0.030720 0.024652 -0.0004	
15		Energy Adjustmer	nt per kWh	0.00567	

Docket No. E017/M-03-30 Exhibit 3 Page 10 of 32

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

kWh Information	For	The	Billina	Month	of:
NUMBER OF THE OTHER OF THE OTHER OF	1 01	1110	Diming	101011011	01.

Line			
No.	Minnesota - Retail Sales	kWh Sales	
1	Subject to Energy Adjustment Rider	205,242,858	kWh
2	Non-Energy Adjustment Rider Sales	13,147,401	kWh
3	Total	218,390,259	kWh
	Non-Minnesota Sales		
4	Sales for Resale	287,066	kWh
5	Total Sales of Electricity (ND and SD)	195,119,382	kWh
6	Inter-System Sales	14,616,950	kWh
	Total k	Wh Sales 428,413,657	kWh

November 2018

EFFECTIVE 2/8/2019

CYCLE 01

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

### MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING DECEMBER 31, 2018 FOR BILLINGS TO BE EFFECTIVE FEBRUARY 8, 2019

			(A)	(B)	(C)
Line			2018	2018	Total
No.	ENERGY COSTS	_	<u>November</u>	December	This Period
1	Plant Generation	\$	5,006,291	\$ 6,276,450	\$ 11,282,741
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	7,434,618	\$ 3,835,012	\$ 11,269,631
3	SPP Charges	\$	(58,843)	\$ (140,595)	\$ (199,438)
4	Purchased Power	\$	1,533,062	\$ 1,449,640	\$ 2,982,702
5	Wind Curtailment	\$	(46,591)	\$ 208	\$ (46,383)
6	Less: MISO ASM (Rev) Cost	\$	14,575	\$ (24,345)	\$ (9,770)
7	Less: Intersystem Sales (Rev) Cost	\$	(267,611)	\$ (327,495)	\$ (595,106)
8	Less: Asset Based Margins (Rev) Cost	\$	(135,784)	\$ (81,807)	\$ (217,591)
9	Total System Cost of Fuel	\$	13,479,717	\$ 10,987,067	\$ 24,466,784

10	Total Sales of Electricity	428,413,657	440,251,813	868,665,470
11	Less Inter-System Sales	(14,616,950)	(13,334,700)	(27,951,650)
12	Total kWh excluding Inter-System Sales	413,796,707	426,917,113	840,713,820

13	System Cost per KWH	\$	0.02910
14	Base Cost per kWh	\$	0.02465
15	Difference	\$	0.00445
16	Annual True-Up Factor	\$	(0.00040)
17	Average Energy Adjustment Factor	r \$	0.00405

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ 0.00439
18b	Farms	1.0467	
18c	General Service	1.0567	\$ 0.00428
18d	Large General Service	0.9546	\$ 0.00387
18e	Irrigation Services	0.9585	\$ 0.00388
18f	Outdoor Lighting	0.8367	\$ 0.00339
18g	OPA	1.0373	\$ 0.00420
18h	Controlled Service Water Heating	1.0898	\$ 0.00441
18i	Controlled Service Interruptible	1.0945	\$ 0.00443
18j	Controlled Service Deferred	0.9846	\$ 0.00399

kWh INFORMATION FOR THE BILLING MONTH OF: December 2018

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	215,598,432 kWh
2	Non-Energy Adjustment Rider Sales	13,162,303 kWh
3	Total MN	228,760,735 kWh
	Non-Minnesota Sales	
4	Sales for Resale	568,352 kWh
5	Total Sales of Electricity (ND and SD)	197,588,026 kWh
6	Inter-System Sales	13,334,700 kWh
7	Total System kWh Sales	440,251,813 kWh

EFFECTIVE 3/6/2019

CYCLE 01

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

### MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING JANUARY 31, 2019 FOR BILLINGS TO BE EFFECTIVE MARCH 6, 2019

Line		(A) 2018	(B) 2019	(C) Total
No.	ENERGY COSTS	 <u>December</u>	January	This Period
1	Plant Generation	\$ 6,276,450	\$ 6,455,704	\$ 12,732,154
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 3,835,012	\$ 4,461,959	\$ 8,296,971
3	SPP Charges	\$ (140,595)	\$ (22,061)	\$ (162,656)
4	Purchased Power	\$ 1,449,640	\$ 2,056,455	\$ 3,506,095
5	Wind Curtailment	\$ 208	\$ (1,064)	\$ (856)
6	Less: MISO ASM (Rev) Cost	\$ (24,345)	\$ (18,337)	\$ (42,683)
7	Less: Intersystem Sales (Rev) Cost	\$ (327,495)	\$ (286,626)	\$ (614,121)
8	Less: Asset Based Margins (Rev) Cost	\$ (81,807)	\$ (7,096)	\$ (88,903)
9	Total System Cost of Fuel	\$ 10,987,067	\$ 12,638,934	\$ 23,626,001

10	Total Sales of Electricity	440,251,813	545,528,728	985,780,541
11	Less Inter-System Sales	(13,334,700)	(11,599,959)	(24,934,659)
12	Total kWh excluding Inter-System Sales	426,917,113	533,928,769	960,845,882

13	System Cost per KWH	\$ 0.02459
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ (0.00006)
16	Annual True-Up Factor	\$ (0.00040)
17	Average Energy Adjustment Factor	\$ (0.00046)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ (0.00050)
18b	Farms	1.0467	\$ (0.00048)
18c	General Service	1.0567	\$ (0.00049)
18d	Large General Service	0.9546	\$ (0.00044)
18e	Irrigation Services	0.9585	\$ (0.00044)
18f	Outdoor Lighting	0.8367	\$ (0.00038)
18g	OPA	1.0373	\$ (0.00048)
18h	Controlled Service Water Heating	1.0898	\$ (0.00050)
18i	Controlled Service Interruptible	1.0945	\$ (0.00050)
18j	Controlled Service Deferred	0.9846	\$ (0.00045)

kWh INFORMATION FOR THE BILLING MONTH OF: January 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	259,708,479 kWh
2	Non-Energy Adjustment Rider Sales	14,205,730 kWh
3	Total MN	273,914,209 kWh
	Non-Minnesota Sales	
4	Sales for Resale	323,618 kWh
5	Total Sales of Electricity (ND and SD)	259,690,942 kWh
6	Inter-System Sales	11,599,959 kWh
7	Total System kWh Sales	545,528,728 kWh

EFFECTIVE 4/3/2019

CYCLE 01

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

### MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING FEBRUARY 28, 2019 FOR BILLINGS TO BE EFFECTIVE APRIL 3, 2019

			(A)	(B)	(C)
Line			2019	2019	Total
No.	ENERGY COSTS	_	<u>January</u>	<u>February</u>	This Period
1	Plant Generation	\$	6,455,704	\$ 6,068,241	\$ 12,523,945
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	4,461,959	\$ 6,233,366	\$ 10,695,325
3	SPP Charges	\$	(22,061)	\$ 178,313	\$ 156,251
4	Purchased Power	\$	2,056,455	\$ 1,419,828	\$ 3,476,283
5	Wind Curtailment	\$	(1,064)	\$ -	\$ (1,064)
6	Less: MISO ASM (Rev) Cost	\$	(18,337)	\$ (4,091)	\$ (22,429)
7	Less: Intersystem Sales (Rev) Cost	\$	(286,626)	\$ (537,699)	\$ (824,325)
8	Less: Asset Based Margins (Rev) Cost	\$	(7,096)	\$ (193,414)	\$ (200,511)
9	Total System Cost of Fuel	\$	12,638,934	\$ 13,164,542	\$ 25,803,476

10	Total Sales of Electricity	545,528,728	575,107,543	1,120,636,271
11	Less Inter-System Sales	(11,599,959)	(10,984,875)	(22,584,834)
12	Total kWh excluding Inter-System Sales	533,928,769	564,122,668	1,098,051,437

13	System Cost per KWH	\$ 0.02350
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ (0.00115)
16	Annual True-Up Factor	\$ (0.00040)
17	Average Energy Adjustment Factor	\$ (0.00155)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ (0.00168)
18b	Farms	1.0467	\$ (0.00162)
18c	General Service	1.0567	\$ (0.00164)
18d	Large General Service	0.9546	\$ (0.00148)
18e	Irrigation Services	0.9585	\$ (0.00149)
18f	Outdoor Lighting	0.8367	\$ (0.00130)
18g	OPA	1.0373	\$ (0.00161)
18h	Controlled Service Water Heating	1.0898	\$ (0.00169)
18i	Controlled Service Interruptible	1.0945	\$ (0.00170)
18j	Controlled Service Deferred	0.9846	\$ (0.00153)

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

kWh INFORMATION FOR THE BILLING MONTH OF: January 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	263,252,681 kWh
2	Non-Energy Adjustment Rider Sales	15,312,067 kWh
3	Total MN	278,564,748 kWh
	Non-Minnesota Sales	
4	Sales for Resale	601,521 kWh
5	Total Sales of Electricity (ND and SD)	284,956,399 kWh
6	Inter-System Sales	10,984,875 kWh
7	Total System kWh Sales	575,107,543 kWh

EFFECTIVE 5/2/2019 CYCLE 01

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

#### **MINNESOTA**

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING MARCH 31, 2019 FOR BILLINGS TO BE EFFECTIVE MAY 2, 2019

			(A)	(B)	(C)
Line			2019	2019	Total
No.	ENERGY COSTS	_	<u>February</u>	March	<u>This Period</u>
1	Plant Generation	\$	6,068,241	\$ 6,395,887	\$ 12,464,128
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	6,233,366	\$ 4,019,027	\$ 10,252,393
3	SPP Charges	\$	178,313	\$ 21,924	\$ 200,237
4	Purchased Power	\$	1,419,828	\$ 1,714,442	\$ 3,134,270
5	Wind Curtailment	\$	-	\$ 46	\$ 46
6	Less: MISO ASM (Rev) Cost	\$	(4,091)	\$ (14,696)	\$ (18,787)
7	Less: Intersystem Sales (Rev) Cost	\$	(537,699)	\$ (317,888)	\$ (855,588)
8	Less: Asset Based Margins (Rev) Cost	\$	(193,414)	\$ (114,190)	\$ (307,604)
9	Total System Cost of Fuel	\$	13,164,542	\$ 11,704,553	\$ 24,869,095

10	Total Sales of Electricity	575,107,543	470,329,504	1,045,437,047
11	Less Inter-System Sales	(10,984,875)	(15,222,513)	(26,207,388)
12	Total kWh excluding Inter-System Sales	564,122,668	455,106,991	1,019,229,659

13	System Cost per KWH	\$ 0.02440
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ (0.00025)
16	Annual True-Up Factor	\$ (0.00040)
17	Average Energy Adjustment Factor	\$ (0.00065)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ (0.00070)
18b	Farms	1.0467	\$ (0.00068)
18c	General Service	1.0567	\$ (0.00069)
18d	Large General Service	0.9546	\$ (0.00062)
18e	Irrigation Services	0.9585	\$ (0.00062)
18f	Outdoor Lighting	0.8367	\$ (0.00054)
18g	OPA	1.0373	\$ (0.00067)
18h	Controlled Service Water Heating	1.0898	\$ (0.00071)
18i	Controlled Service Interruptible	1.0945	\$ (0.00071)
18j	Controlled Service Deferred	0.9846	\$ (0.00064)

kWh INFORMATION FOR THE BILLING MONTH OF: March 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	221,313,016 kWh
2	Non-Energy Adjustment Rider Sales	14,634,640 kWh
3	Total MN	235,947,656 kWh
	Non-Minnesota Sales	
4	Sales for Resale	324,521 kWh
5	Total Sales of Electricity (ND and SD)	218,834,814 kWh
6	Inter-System Sales	15,222,513 kWh
7	Total System kWh Sales	470,329,504 kWh

EFFECTIVE 6/3/2019 CYCLE 01

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

#### **MINNESOTA**

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING APRIL 30, 2019 FOR BILLINGS TO BE EFFECTIVE JUNE 3, 2019

			(A)	(B)	(C)
Line			2019	2019	Total
No.	ENERGY COSTS	_	March	<u>April</u>	This Period
1	Plant Generation	\$	6,395,887	\$ 3,753,068	\$ 10,148,955
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	4,019,027	\$ 3,774,675	\$ 7,793,702
3	SPP Charges	\$	21,924	\$ (67,095)	\$ (45,171)
4	Purchased Power	\$	1,714,442	\$ 2,245,889	\$ 3,960,331
5	Wind Curtailment	\$	46	\$ 1,293	\$ 1,339
6	Less: MISO ASM (Rev) Cost	\$	(14,696)	\$ (18,917)	\$ (33,613)
7	Less: Intersystem Sales (Rev) Cost	\$	(317,888)	\$ (256,995)	\$ (574,883)
8	Less: Asset Based Margins (Rev) Cost	\$	(114,190)	\$ (11,193)	\$ (125,383)
9	Total System Cost of Fuel	\$	11,704,553	\$ 9,420,724	\$ 21,125,277

10	Total Sales of Electricity	470,329,504	410,956,896	881,286,400
11	Less Inter-System Sales	(15,222,513)	(11,765,026)	(26,987,539)
12	Total kWh excluding Inter-System Sales	455,106,991	399,191,870	854,298,861

13	System Cost per KWH	\$ 0.02473
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ 0.00008
16	Annual True-Up Factor	\$ (0.00040)
17	Average Energy Adjustment Factor	\$ (0.00032)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ (0.00035)
18b	Farms	1.0467	\$ (0.00033)
18c	General Service	1.0567	\$ (0.00034)
18d	Large General Service	0.9546	\$ (0.00031)
18e	Irrigation Services	0.9585	\$ (0.00031)
18f	Outdoor Lighting	0.8367	\$ (0.00027)
18g	OPA	1.0373	\$ (0.00033)
18h	Controlled Service Water Heating	1.0898	\$ (0.00035)
18i	Controlled Service Interruptible	1.0945	\$ (0.00035)
18j	Controlled Service Deferred	0.9846	\$ (0.00032)

kWh INFORMATION FOR THE BILLING MONTH OF: April 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	203,519,655 kWh
2	Non-Energy Adjustment Rider Sales	15,258,380 kWh
3	Total MN	218,778,035 kWh
	Non-Minnesota Sales	
4	Sales for Resale	367,912 kWh
5	Total Sales of Electricity (ND and SD)	180,045,923 kWh
6	Inter-System Sales	11,765,026 kWh
7	Total System kWh Sales	410,956,896 kWh

EFFECTIVE 7/2/2019 CYCLE 01 Par

<sup>2/2019</sup> Docket No. E999/AA-20-171 Part E Section 8 Attachment E

#### MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING MAY 31, 2019 FOR BILLINGS TO BE EFFECTIVE JULY 2, 2019

			(A)	(B)	(C)
Line			2019	2019	Total
No.	ENERGY COSTS	_	<u>April</u>	<u>May</u>	This Period
1	Plant Generation	\$	3,753,068	\$ 1,967,503	\$ 5,720,571
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	3,774,675	\$ 4,953,097	\$ 8,727,773
3	SPP Charges	\$	(67,095)	\$ (130,308)	\$ (197,403)
4	Purchased Power	\$	2,245,889	\$ 1,940,513	\$ 4,186,402
5	Wind Curtailment	\$	1,293	\$ (576)	\$ 717
6	Less: MISO ASM (Rev) Cost	\$	(18,917)	\$ (4,293)	\$ (23,211)
7	Less: Intersystem Sales (Rev) Cost	\$	(256,995)	\$ (231,799)	\$ (488,794)
8	Less: Asset Based Margins (Rev) Cost	\$	(11,193)	\$ (258)	\$ (11,451)
9	Total System Cost of Fuel	\$	9,420,724	\$ 8,493,879	\$ 17,914,603

10	Total Sales of Electricity	410,956,896	379,797,055	790,753,951
11	Less Inter-System Sales	(11,765,026)	(10,793,945)	(22,558,971)
12	Total kWh excluding Inter-System Sales	399,191,870	369,003,110	768,194,980

13	System Cost per KWH	\$ 0.02332
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ (0.00133)
16	Annual True-Up Factor	\$ (0.00040)
17	Average Energy Adjustment Factor	\$ (0.00173)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ (0.00187)
18b	Farms	1.0467	\$ (0.00181)
18c	General Service	1.0567	\$ (0.00183)
18d	Large General Service	0.9546	\$ (0.00165)
18e	Irrigation Services	0.9585	\$ (0.00166)
18f	Outdoor Lighting	0.8367	\$ (0.00145)
18g	OPA	1.0373	\$ (0.00179)
18h	Controlled Service Water Heating	1.0898	\$ (0.00189)
18i	Controlled Service Interruptible	1.0945	\$ (0.00189)
18j	Controlled Service Deferred	0.9846	\$ (0.00170)

kWh INFORMATION FOR THE BILLING MONTH OF: April 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	192,419,948 kWh
2	Non-Energy Adjustment Rider Sales	14,562,586 kWh
3	Total MN	206,982,534 kWh
	Non-Minnesota Sales	
4	Sales for Resale	126,776 kWh
5	Total Sales of Electricity (ND and SD)	161,893,800 kWh
6	Inter-System Sales	10,793,945 kWh
7	Total System kWh Sales	379,797,055 kWh

EFFECTIVE 8/2/2019 CYCLE 01

<sup>01</sup> Part E S

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

#### MINNESOTA

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING JUNE 30, 2019 FOR BILLINGS TO BE EFFECTIVE AUGUST 2, 2019

		(A)	(B)		(C)
Line No.	ENERGY COSTS	2019 <u>May</u>	2019 <u>June</u>		Total <u>This Period</u>
1	Plant Generation	\$ 1,967,503	\$ 2,576,027	-	4,543,530
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$ 4,953,097	\$ 3,578,517	\$	8,531,614
3	SPP Charges	\$ (130,308)	\$ (205,770)	\$	(336,078)
4	Purchased Power	\$ 1,940,513	\$ 1,763,864	\$	3,704,377
5	Wind Curtailment	\$ (576)	\$ 4,253	\$	3,678
6	Less: MISO ASM (Rev) Cost	\$ (4,293)	\$ (29,174)	\$	(33,467)
7	Less: Intersystem Sales (Rev) Cost	\$ (231,799)	\$ (417,188)	\$	(648,987)
8	Less: Asset Based Margins (Rev) Cost	\$ (258)	\$ 21,424	\$	21,166
9	Total System Cost of Fuel	\$ 8,493,879	\$ 7,291,954	\$	15,785,833

10	Total Sales of Electricity	379,797,055	375,834,643	755,631,698
11	Less Inter-System Sales	(10,793,945)	(20,047,404)	(30,841,349)
12	Total kWh excluding Inter-System Sales	369,003,110	355,787,239	724,790,349

13	System Cost per KWH	\$ 0.02178
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ (0.00287)
16	Annual True-Up Factor	\$ (0.00040)
17	Average Energy Adjustment Factor	\$ (0.00327)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ (0.00354)
18b	Farms	1.0467	\$ (0.00342)
18c	General Service	1.0567	\$ (0.00346)
18d	Large General Service	0.9546	\$ (0.00312)
18e	Irrigation Services	0.9585	\$ (0.00313)
18f	Outdoor Lighting	0.8367	\$ (0.00274)
18g	OPA	1.0373	\$ (0.00339)
18h	Controlled Service Water Heating	1.0898	\$ (0.00356)
18i	Controlled Service Interruptible	1.0945	\$ (0.00358)
18j	Controlled Service Deferred	0.9846	\$ (0.00322)

kWh INFORMATION FOR THE BILLING MONTH OF: April 2019

Line No.		
140.	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	188,580,394 kWh
2	Non-Energy Adjustment Rider Sales	11,076,561 kWh
3	Total MN	199,656,955 kWh
	Non-Minnesota Sales	
4	Sales for Resale	(18,972) kWh
5	Total Sales of Electricity (ND and SD)	156,149,256 kWh
6	Inter-System Sales	20,047,404 kWh
7	Total System kWh Sales	375,834,643 kWh

EFFECTIVE 9/3/2019 CYCLE 01

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

#### **MINNESOTA**

#### OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING JULY 31, 2019 FOR BILLINGS TO BE EFFECTIVE SEPTEMBER 3, 2019

			(A)	(B)	(C)
Line			2019	2019	Total
No.	ENERGY COSTS	_	<u>June</u>	<u>July</u>	This Period
1	Plant Generation	\$	2,576,027	\$ 8,495,237	\$ 11,071,264
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	3,578,517	\$ 3,909,250	\$ 7,487,767
3	SPP Charges	\$	(205,770)	\$ (123,315)	\$ (329,084)
4	Purchased Power	\$	1,763,864	\$ 1,244,713	\$ 3,008,577
5	Wind Curtailment	\$	4,253	\$ (931)	\$ 3,322
6	Less: MISO ASM (Rev) Cost	\$	(29,174)	\$ (45,687)	\$ (74,861)
7	Less: Intersystem Sales (Rev) Cost	\$	(417,188)	\$ (463,399)	\$ (880,586)
8	Less: Asset Based Margins (Rev) Cost	\$	21,424	\$ (91,382)	\$ (69,958)
9	Total System Cost of Fuel	\$	7,291,954	\$ 12,924,487	\$ 20,216,441

10	Total Sales of Electricity	375,834,643	396,283,456	772,118,099
11	Less Inter-System Sales	(20,047,404)	(22,614,094)	(42,661,498)
12	Total kWh excluding Inter-System Sales	355,787,239	373,669,362	729,456,601

13	System Cost per KWH	\$ 0.02771
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ 0.00306
16	Annual True-Up Factor	\$ -
17	Average Energy Adjustment Factor	\$ 0.00306

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ 0.00331
18b	Farms	1.0467	\$ 0.00320
18c	General Service	1.0567	\$ 0.00323
18d	Large General Service	0.9546	\$ 0.00292
18e	Irrigation Services	0.9585	\$ 0.00293
18f	Outdoor Lighting	0.8367	\$ 0.00256
18g	OPA	1.0373	\$ 0.00317
18h	Controlled Service Water Heating	1.0898	\$ 0.00333
18i	Controlled Service Interruptible	1.0945	\$ 0.00335
18j	Controlled Service Deferred	0.9846	\$ 0.00301

kWh INFORMATION FOR THE BILLING MONTH OF: July 2019

Line		
No.	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	198,978,709 kWh
2	Non-Energy Adjustment Rider Sales	11,723,841 kWh
3	Total MN	210,702,550 kWh
	Non-Minnesota Sales	
4	Sales for Resale	74,989 kWh
5	Total Sales of Electricity (ND and SD)	162,891,823 kWh
6	Inter-System Sales	22,614,094 kWh
7	Total System kWh Sales	396,283,456 kWh

EFFECTIVE 10/2/2019 Docket No. E999/AA-20-171 CYCLE 01

Part E Section 8 Attachment E

#### **MINNESOTA**

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING AUGUST 31, 2019 FOR BILLINGS TO BE EFFECTIVE OCTOBER 2, 2019

			(A)	(B)	(C)
Line			2019	2019	Total
No.	ENERGY COSTS	_	<u>July</u>	<u>August</u>	This Period
1	Plant Generation	\$	8,495,237	\$ 5,580,918	\$ 14,076,155
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	3,909,250	\$ 2,701,029	\$ 6,610,280
3	SPP Charges	\$	(123,315)	\$ (62,417)	\$ (185,732)
4	Purchased Power	\$	1,244,713	\$ 548,418	\$ 1,793,131
5	Wind Curtailment	\$	(931)	\$ 35,681	\$ 34,750
6	Less: MISO ASM (Rev) Cost	\$	(45,687)	\$ (41,397)	\$ (87,084)
7	Less: Intersystem Sales (Rev) Cost	\$	(463,399)	\$ (481,157)	\$ (944,556)
8	Less: Asset Based Margins (Rev) Cost	\$	(91,382)	\$ (29,315)	\$ (120,697)
9	Total System Cost of Fuel	\$	12,924,487	\$ 8,251,761	\$ 21,176,248

10	Total Sales of Electricity	396,283,456	395,103,587	791,387,043
11	Less Inter-System Sales	(22,614,094)	(22,578,651)	(45,192,745)
12	Total kWh excluding Inter-System Sales	373,669,362	372,524,936	746,194,298

13	System Cost per KWH	\$ 0.02838
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ 0.00373
16	Annual True-Up Factor	\$ -
17	Average Energy Adjustment Factor	\$ 0.00373

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ 0.00404
18b	Farms	1.0467	\$ 0.00390
18c	General Service	1.0567	\$ 0.00394
18d	Large General Service	0.9546	\$ 0.00356
18e	Irrigation Services	0.9585	\$ 0.00358
18f	Outdoor Lighting	0.8367	\$ 0.00312
18g	OPA	1.0373	\$ 0.00387
18h	Controlled Service Water Heating	1.0898	\$ 0.00406
18i	Controlled Service Interruptible	1.0945	\$ 0.00408
18j	Controlled Service Deferred	0.9846	\$ 0.00367

kWh INFORMATION FOR THE BILLING MONTH OF: August 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	200,092,537 kWh
2	Non-Energy Adjustment Rider Sales	10,935,019 kWh
3	Total MN	211,027,556 kWh
	Non-Minnesota Sales	
4	Sales for Resale	130,780 kWh
5	Total Sales of Electricity (ND and SD)	161,366,600 kWh
6	Inter-System Sales	22,578,651 kWh
7	Total System kWh Sales	395,103,587 kWh

EFFECTIVE 11/1/2019 Docket No. E999/AA-20-171 CYCLE 01

Part E Section 8 Attachment E

#### **MINNESOTA**

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING SEPTEMBER 30, 2019 FOR BILLINGS TO BE EFFECTIVE NOVEMBER 1, 2019

			(A)	(B)	(C)
Line			2019	2019	Total
No.	ENERGY COSTS	_	<u>August</u>	<u>September</u>	This Period
1	Plant Generation	\$	5,580,918	\$ 4,253,949	\$ 9,834,867
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	2,701,029	\$ 1,818,502	\$ 4,519,531
3	SPP Charges	\$	(62,417)	\$ (115,729)	\$ (178,145)
4	Purchased Power	\$	548,418	\$ 1,795,153	\$ 2,343,571
5	Wind Curtailment	\$	35,681	\$ (16,303)	\$ 19,378
6	Less: MISO ASM (Rev) Cost	\$	(41,397)	\$ (43,906)	\$ (85,303)
7	Less: Intersystem Sales (Rev) Cost	\$	(481,157)	\$ (443,029)	\$ (924,187)
8	Less: Asset Based Margins (Rev) Cost	\$	(29,315)	\$ (73,451)	\$ (102,766)
9	Total System Cost of Fuel	\$	8,251,761	\$ 7,175,185	\$ 15,426,946

10	Total Sales of Electricity	395,103,587	379,431,904	774,535,491
11	Less Inter-System Sales	(22,578,651)	(26,006,503)	(48,585,154)
12	Total kWh excluding Inter-System Sales	372,524,936	353,425,401	725,950,337

13	System Cost per KWH	\$ 0.02125
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ (0.00340)
16	Annual True-Up Factor	\$ -
17	Average Energy Adjustment Factor	\$ (0.00340)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ (0.00368)
18b	Farms	1.0467	\$ (0.00356)
18c	General Service	1.0567	\$ (0.00359)
18d	Large General Service	0.9546	\$ (0.00325)
18e	Irrigation Services	0.9585	\$ (0.00326)
18f	Outdoor Lighting	0.8367	\$ (0.00284)
18g	OPA	1.0373	\$ (0.00353)
18h	Controlled Service Water Heating	1.0898	\$ (0.00371)
18i	Controlled Service Interruptible	1.0945	\$ (0.00372)
18j	Controlled Service Deferred	0.9846	\$ (0.00335)

kWh INFORMATION FOR THE BILLING MONTH OF: September 2019

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	183,284,702 kWh
2	Non-Energy Adjustment Rider Sales	8,039,608 kWh
3	Total MN	191,324,310 kWh
	Non-Minnesota Sales	
4	Sales for Resale	100,741 kWh
5	Total Sales of Electricity (ND and SD)	162,000,350 kWh
6	Inter-System Sales	26,006,503 kWh
7	Total System kWh Sales	379,431,904 kWh

Docket No. E999/AA-20-171 Part E Section 8 Attachment E

EFFECTIVE 12/2/2019 Docket No. E999/AA-20-171 CYCLE 01

Part E Section 8 Attachment E

#### **MINNESOTA**

OTTER TAIL POWER COMPANY ENERGY ADJUSTMENT RIDER BASED ON PERIOD ENDING OCTOBER 31, 2019 FOR BILLINGS TO BE EFFECTIVE DECEMBER 2, 2019

			(A)	(B)	(C)
Line			2019	2019	Total
No.	ENERGY COSTS	5	<u>September</u>	<u>October</u>	This Period
1	Plant Generation	\$	4,253,949	\$ 3,479,677	\$ 7,733,626
2	MISO Day 2 Charges (not Schedule 16 & 17)	\$	1,818,502	\$ 2,519,600	\$ 4,338,102
3	SPP Charges	\$	(115,729)	\$ (174,853)	\$ (290,582)
4	Purchased Power	\$	1,795,153	\$ 2,057,299	\$ 3,852,451
5	Wind Curtailment	\$	(16,303)	\$ 5,123	\$ (11,180)
6	Less: MISO ASM (Rev) Cost	\$	(43,906)	\$ (11,936)	\$ (55,842)
7	Less: Intersystem Sales (Rev) Cost	\$	(443,029)	\$ (174,832)	\$ (617,861)
8	Less: Asset Based Margins (Rev) Cost	\$	(73,451)	\$ 15,362	\$ (58,089)
9	Total System Cost of Fuel	\$	7,175,185	\$ 7,715,440	\$ 14,890,625

10	Total Sales of Electricity	379,431,904	355,224,737	734,656,641
11	Less Inter-System Sales	(26,006,503)	(9,958,826)	(35,965,329)
12	Total kWh excluding Inter-System Sales	353,425,401	345,265,911	698,691,312

13	System Cost per KWH	\$ 0.02131
14	Base Cost per kWh	\$ 0.02465
15	Difference	\$ (0.00334)
16	Annual True-Up Factor	\$ -
17	Average Energy Adjustment Factor	\$ (0.00334)

18	Service Category	E8760 Alloc. Ratio	Class Energy Adjustment Factor (EAF)
18a	Residential	1.0833	\$ (0.00362)
18b	Farms	1.0467	\$ (0.00350)
18c	General Service	1.0567	\$ (0.00353)
18d	Large General Service	0.9546	\$ (0.00319)
18e	Irrigation Services	0.9585	\$ (0.00320)
18f	Outdoor Lighting	0.8367	\$ (0.00279)
18g	OPA	1.0373	\$ (0.00346)
18h	Controlled Service Water Heating	1.0898	\$ (0.00364)
18i	Controlled Service Interruptible	1.0945	\$ (0.00366)
18j	Controlled Service Deferred	0.9846	\$ (0.00329)

Line No.		
	Minnesota - Retail Sales	
1	Subject to Energy Adjustment Rider	177,648,801 kWh
2	Non-Energy Adjustment Rider Sales	10,366,146 kWh
3	Total MN	188,014,947 kWh
	Non-Minnesota Sales	
4	Sales for Resale	121,875 kWh
5	Total Sales of Electricity (ND and SD)	157,129,089 kWh
6	Inter-System Sales	9,958,826 kWh
7	Total System kWh Sales	355,224,737 kWh

Line No.	Class	Number of Customers	Average Monthly kWh per Customer	Average Monthly Bill	Requested True-Up	Impact/ Month	% Impact
1	Residential *	48,908	970	103.56	(0.0005)	(0.49)	-0.47%
2	Farm *	1,273	3,061	306.76	(0.0005)	(1.53)	-0.50%
3	Small Commercial *	10,256	2,405	275.25	(0.0005)	(1.20)	-0.44%
4	Large Commercial *	485	25,545	19,419.88	(0.0005)	(12.77)	-0.07%
5	OPA	523	3,072	299.79	(0.0005)	(1.54)	-0.51%
6	Street Lighting	302	2,305	489.19	(0.0005)	(1.15)	-0.24%

### Average Bill Impact of True-up

\* Average Includes Controlled Service Water Heating, Controlled Service Interruptible, and Controlled Service Deferred usage related to each class

# **CERTIFICATE OF SERVICE**

# RE: Notice of Implementation of Otter Tail Power Company's Annual Fuel Clause Adjustment True-up Mechanism Docket No. E017/M-03-30

I, Kim Ward, hereby certify that I have this day served a copy of the following, or a summary thereof, on Mr. Ryan Barlow and Sharon Ferguson by e-filing, and to all other persons on the attached service list by electronic service or by First Class mail.

# **Otter Tail Power Company Annual Filing**

Dated this **30**<sup>th</sup> day of **January**, **2020**.

/s/ KIM WARD

Kim Ward, Regulatory Filing Coordinator Otter Tail Power Company 215 South Cascade Street Fergus Falls MN 56537 (218) 739-8879

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Ryan	Barlow	ryan.barlow@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350	Electronic Service	No	OFF_SL_3-30_1
				St. Paul, MN 55101214			
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.st ate.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800	Electronic Service	No	OFF_SL_3-30_1
				St. Paul, MN 55101			
Sharon	Ferguson	sharon.ferguson@state.mn Department of Commerce		85 7th Place E Ste 280	Electronic Service	No	OFF_SL_3-30_1
		2		Saint Paul, MN 551012198			
Bruce	Gerhardson	bgerhardson@otpco.com	Otter Tail Power Company	PO Box 496 215 S Cascade St Fergus Falls, MN 565380496	Electronic Service	No	OFF_SL_3-30_1
Douglas	Larson	dlarson@dakotaelectric.co m	Dakota Electric Association 4300 220th St W	4300 220th St W	Electronic Service	No	OFF_SL_3-30_1
		=		Farmington, MN 55024			
Generic Notice	Residential Utilities Division residential.utilities@ag. e.mn.us	residential.utilities@ag.stat e.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St Paul, MN 551012131	Electronic Service	No	OFF_SL_3-30_1
Stuart	Tommerdahl	stommerdahl@otpco.com	Otter Tail Power Company	215 S Cascade St PO Box 496 Fergus Falls, MN 56537	Electronic Service	Ŷ	OFF_SL_3-30_1
		-					F

### Docket No. E999/AA-20-171 Part E Section 8 Attachment E

# COMPLIANCE REPORT AS REQUIRED BY ORDER IN DOCKET NO. E017/M-03-970

On February 2, 2006, Otter Tail filed in Docket No. E017/M-03-970 to remove the sunset provision for recovery of the purchase of wind generated energy through the fuel clause under the Order issued January 13, 2005. On July 12, 2006, the Commission granted an extension of the recovery mechanism in place under the January 13, 2005 Order until a final Order is issued in this proceeding, and directs the Company to revise its tariff as appropriate. On August 10, 2006, Otter Tail filed the Purchase Power Agreement (PPA) for approval in this proceeding pursuant to the July 12, 2006 Order. The Commission deferred the issue of Renewable Energy Obligation (REO) eligibility to the resource plan proceeding concerning Otter Tail, Docket No. E017/RP 05-968. The Commission also deferred other determinations until this docket returns to the Commission for PPA approval. On November 14, 2006, in Docket No. E017/M-03-970, the Commission approved Otter Tail's request with the following reporting requirements:

# 1. Additional language to the Cost of Energy Adjustment Clause.

Part E Section 1 Attachment B – paragraph 3 (see Part E Section 1 Minn. R. 7825.2810 Subpt 1.A.).

2. Credit ratepayers through the Fuel Adjustment Clause any compensation it receives from the MISO or any other transmission authority for calling an interruption of the energy generated by the Project during the period that Otter Tail Power Company is recovering curtailment provision costs from ratepayers.

There were no credits issued for reporting period of July 2018 to December 2019.

# 3. Track all curtailments and curtailment payments and report them in its monthly fuel clause adjustment and AAA filings.

Part E Section 9 Attachment F (marked as Not Public) contains the curtailment costs incurred for the July 2018 through December 2019 time period.

#### Otter Tail Power Company Wind Curtailment Summary Report - System Wind Energy Purchase Agreement with FPL Energy North Dakota II, LLC Docket No. E017/M-03-970 Dated April 1, 2003

				* (D)	1					
	(A) Date	(B) Paid	Wind Delivered	Production			* (F) Production		* (G)	(H)
	Delivered	Lost	to OTP	Amount		Lost	Amount	[	Total	Reason
Month	MWh	MWh	MWh	OTP Paid		MWh	OTP Paid		OTP Paid	Codes
			IPROTEC	TED DATA B	EG	5INS				
Jul-18									\$0.00	
Aug-18									\$0.00	
Sep-18									\$0.00	
Oct-18									\$0.00	
Nov-18									\$0.00	
Dec-18									\$0.00	
Jan-19									\$0.00	
Feb-19									\$0.00	
Mar-19									\$0.00	
Apr-19									\$0.00	
<u>May-19</u>									\$0.00	
Jun-19									\$0.00	
Jul-19			,						\$0.00	
Aug-19									\$0.00	
Sep-19									\$0.00	
Oct-19									\$0.00	
Nov-19									\$0.00	
Dec-19									\$0.00	
Total			0	\$0.00		0 <b>PRC</b>	\$0.00 TECTED DA		\$0.00 <b>A ENDS]</b>	

Reason Code Explanation:

Reason Codes:

1 = lack of firm transmission as described in Attachment C of the MISO OATT (or equivalent successor provision)

2 = low load

3 = transmission loading relief or MISO directive for reasons other than (1) above

4 = other - please explain in detail if compensation requested

\* Columns C - G are invoiced amounts

#### Otter Tail Power Company Wind Curtailment Summary Report - System Wind Energy Purchase Agreement with Langdon Wind, LLC Docket No. E017/M-08-131 Dated August 15, 2008

				* (D)				
	(A)			Production	* (E)	* (F)	* (0)	4.0
	Date Delivered	Lost	Delivered to OTP	Amount	Lost	Production Amount	* (G) Total	(H) Reason
Month	MWh	MWh	MWh	OTP Paid	MWh	OTP Paid	OTP Paid	Codes
			[PROTEC	TED DATA BE	GINS			
Jul-18							\$0.00	
Aug-18							\$0.00	
Sep-18							\$0.00	
Oct-18							\$0.00	
Nov-18							\$0.00	
Dec-18							\$0.00	
Jan-19							\$0.00	
Feb-19							\$0.00	
Mar-19							\$0.00	
Apr-19							\$0.00	
<u>May-19</u>							\$0.00	
Jun-19							\$0.00	
Jul-19							\$0.00	
Aug-19							\$0.00	
Sep-19							\$0.00	
Oct-19							\$0.00	
Nov-19							\$0.00	
Dec-19							\$0.00	
Total			0	\$0.00		0.00\$ DTECTED DA		

Reason Code Explanation:

#### Otter Tail Power Company Wind Curtailment Summary Report - System Wind Energy Purchase Agreement with Ashtabula Wind III, LLC Docket No. E017/M-13-386 Dated August 23, 2013

	<i>(</i> <b>1</b> )		* (C)		<b>-</b>			
	(A) Date Paid	(B)	Wind	Production	* (E)	* (F)	* (G)	(H)
	Delivered	Lost	to OTP	Amount	Lost	Amount	Total	Reason
Month	MWh	MWh	MWh	OTP Paid	MWh	OTP Paid	OTP Paid	Codes
			[PROTEC	CTED DATA BE	GINS			
Jul-18	7/11, 14, 15, 17, 18, 21, 22, 31	8/21/18						4
Aug-18	8/1, 13, 19, 22, 23, 26, 29, 30	9/26/18						4
Sep-18	9/3, 11, 14, 15, 16, 19, 20, 21, 22, 23	10/18/18						4
Oct-18	10/13, 14, 15, 24	11/16/18						4
Nov-18	11/6	12/17/18						4
Dec-18		1/22/19						
<u>Jan-19</u>					-			
Feb-19	2/23	3/26/19			-			4
Mar-19	3/20, 23, 27	4/18/19						4
Apr-19	4/25	5/22/19			-			4
<u>May-19</u>	5/15, 16, 17, 21, 22	6/20/19			-		-	4
Jun-19	6/2, 7, 14, 15, 16, 17, 23, 29	7/25/19						4
Jul-19	7/9, 10, 11, 12, 14, 29	8/22/19						4
Aug-19	8/2, 5, 23, 26, 27, 28, 29	9/25/19						4
Sep-19	9/19, 24, 25, 26	10/25/19			-		-	4
Oct-19	10/1, 6, 11, 15, 16, 17, 18, 22	11/25/19						4
Nov-19								
Dec-19								
Total			0	\$0.00		\$0.00 DTECTED DA		
							-	

Reason Code Explanation:

Curtailment was called for by Otter Tail Power due to negative LMP pricing. As specified in the Ashtabula 3 power purchase agreement, "Company shall pay to seller for such Curtailment Energy net of any Non-Compensable Curtailments, **[PROTECTED DATA BEGINS ...** 

... PROTECTED DATA ENDS]

Reason Codes:

- 1 = lack of firm transmission as described in Attachment C of the MISO OATT (or equivalent successor provision)
- 2 = low load
- $\ensuremath{\texttt{3}}$  = transmission loading relief or MISO directive for reasons other than (1) above
- 4 = other please explain in detail if compensation requested

\* Columns C - G are invoiced amounts

# PASSING MISO DAY 2 COSTS THROUGH FUEL CLAUSE ORDER IN DOCKET NO. E017/M-05-284

On February 16, 2005, Otter Tail filed a request with the Commission to recover the costs resulting from participation in the "Day 2" operations of the Midwest Independent Transmission System Operator, Inc. (MISO) through the use of the fuel clause adjustment. On April 7, 2005, the Commission issued its Order in Docket No. E017/M-05-284 ordering Otter Tail to account for costs on a net basis in Account 555 and granting recovery of these costs through the fuel clause adjustment subject to refund with interest.

On December 21, 2005, the Commission issued a second interim Order in Docket No. E017/M-05-284. On February 24, 2006, the Commission issued an Order on reconsideration. A report of the stakeholders was filed with the Commission on June 22, 2006. On November 6, 2006, supplemental comments were filed with the Commission and the Order Establishing Accounting Treatment for MISO Day 2 Costs was issued on December 20, 2006.

In the December 20, 2006, Order utilities were granted deferred accounting treatment with respect to Schedule 16 and 17 costs, and were authorized recovery of charges imposed by the MISO for MISO Day 2 costs through the calculation of our fuel clause adjustment from the period of April 1, 2005, through a period of at least three years after the date of the Order. Utilities were allowed to use deferred accounting for MISO Schedule 16 and 17 costs incurred since April 2005 without interest until the earlier of our next rate case or March 1, 2009, at which time utilities could seek to recover Schedule 16 and 17 costs at an appropriate level of base rate recovery. Over the subsequent twelve months utilities refunded through the fuel clause adjustment, all Schedule 16 and 17 costs previously recovered through the fuel clause adjustment.

In accordance with the December 2006 Order we are submitting the following additional reporting requirements:

7. A. 1. Each utility shall include in its AAA report an overview of the anticipated events and planned actions to address fuel clause costs, and the actions planned by the utility to minimize or lower such costs whenever possible.

Each utility shall provide a discussion of tools for managing fuel clause costs, including:

a) plans for use of financial instruments or other mechanisms to hedge the costs of natural gas or other fuels,

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# ... PROTECTED DATA ENDS]

[PROTECTED DATA BEGINS ...

... PROTECTED DATA ENDS]

b) plans to hedge purchased energy costs (either through forward bilateral purchases or financial instruments), including how the utility will plan for and cover fuel and energy risk during planned unit outages; and

[PROTECTED DATA BEGINS ...

... PROTECTED

## DATA ENDS]

# c) where deemed appropriate, plans for additional optimization of congestion cost hedging through the purchase and/or sale of FTRs in the MISO Day 2 Market.

At this time, the Company has no specific plans to purchase additional FTRs beyond those held through the normal allocation process. In some situations, the Company may sell allocated FTRs back to the market when a unit is offline for extended maintenance and/or a unit is expected to be

economically de-committed due to low wholesale energy prices. Under such circumstances these FTRs do not serve to hedge energy flows between generation and load. In addition, the Company may choose to purchase additional FTRs for bilateral purchases if a monthly or seasonal FTR is anticipated to provide a reasonable hedge against congestion costs. Historically, purchasing FTRs to hedge a bilateral purchase has been a very infrequent occurrence.

# 7. A. 2. These plans are subject to annual review and audit in the AAA process. Congestion costs and revenues shall be reviewed in an annual filing.

Otter Tail has addressed this later in this filing under the section Part H Section 6 ADDITIONAL REPORTING REQUIREMENTS MN PUC ORDER ACTING ON ELECTRIC UTILITIES' ANNUAL REPORTS AND REQUIRING ADDITIONAL FILINGS DOCKET NOS. E999/AA-09-961 and E999/AA-10-884 Number 25.

# 7. A. 3. Each utility shall provide and update a list of the network resources that it designates used to serve native load.

See Part E Section 10 Attachment G (marked as Not Public) - MISO Module E Data for Otter Tail.

# 7. B. To help customers manage their energy costs, each utility shall submit an annual FCA forecast of the cost per MWh of fuel and purchased power costs for the next 12 months.

Otter Tail previously supplied a forecast for calendar year 2019 in Docket No. E999/AA-18-373.

Forecasted costs for 2020 were filed and approved in Docket No. E017/AA-19-297 as part of the FCA Reform effective January 1, 2020 (Part E Section 10 Attachment H).

# 7. C. Each utility shall prepare a summary of its AAA filing stating key factors affecting costs (including Revenue Sufficiency Guarantee costs and Revenue Neutrality Uplift costs) along with the FCA Forecast.

Part E Section 10 Attachments I and I-1 are the summaries by month of MISO costs for the reporting period of July 2018 through December 2019.

The following is a general discussion of the items of note or general drivers of MISO costs in the reporting period.

# MISO Market charges during the 2018/2019 AAA Reporting Period Similar to Prior Year.

On a system basis, Otter Tail's total net MISO charges for this reporting period increased from approximately \$36.5 million during the 2017/2018 reporting period to approximately \$49.6 million for the period of July 2018 through June 2019. The total net MISO charges for the time period of July 2018 through December 2019 was \$67.8 million.

The magnitude of MISO costs which Otter Tail incurs over the course of the year is generally attributable to two key factors; the amount of energy purchased and sold in the MISO market and secondly, the cost associated with that energy. The following overview helps set some context with regard to factors that have influenced the amount of net energy and associated costs Otter Tail has procured from the MISO market over the last few years.

The primary drivers for the increase in total MISO charges in 2018/19 are driven by Otter Tail's baseload coal plants undergoing major outages. Big Stone plant had a two-month Fall major outage starting in September of 2018. Coyote plant had a three-month Spring major outage starting at the end of March 2019. When less MWhs of energy are injected into the market, wholesale revenues decrease. In addition, wholesale energy locational marginal pricing (LMP) saw an uptick in 2018/19 compared to 2017/18. At the Otter Tail load zone, peak pricing rose approximately 5%, while off-peak pricing rose approximately 10%. Please see the pricing graphs located at the end of this section.

During the six months of July 2019 through December 2019, Otter Tail did not undergo any major outages at our baseload plants. In addition, LMP pricing for this time period experienced a substantial decrease. Much of this decrease can be attributed to suppressed natural gas pricing. As compared to similar months in 2018/19, July 2019 through December 2019 LMP pricing decreased approximately 25%. This reduction in LMP pricing reduced the cost for Otter Tail load to withdraw energy from the wholesale energy market. Furthermore, it reduced payments to Otter Tail generation for injecting energy into the market. Lower LMP values also acted to reduce total dispatch and associated output of Otter Tail generation resources.

The following Table 1 summarizes the last six and one-half years of net MISO energy acquired and the associated costs. These amounts are found by combining lines 5 and 50 of Part H Section 3 Docket No. AA-07-1130 Attachment K Detail of MISO Day 2 Charges – System, for each year's respective reporting periods. (Note - This table excludes losses, congestion, and other market-related charges.) Column A and B reflect the energy acquired for Otter Tail load in the MISO market and associated costs (a small amount of real time generation true-up charges are also included). Columns C and D reflect the

# MWhs of generation sold into the MISO market (a small amount of real time load true up revenues are also included).

## TABLE 1

			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
				Ret	ail						
Line	AAA Reporting Period	Charge Type	MWh (1)	Cost (1)	MWh (2)	Revenue (2)	Net MWhs (A) + (C)	Cost/ MWh (B)/(A)	Rev/ MWh (D)/(C)	Net Cost (B) + (D)	Avg Energy Cost/ MWh (H)/(E)
1	2013/2014	Total Day Ahead & Real Time Energy	(5,329,021)	\$ (186,674,130)	4,219,570	\$ 151,016,563	(1,109,451)	\$ 35.03	\$35.79	\$ (35,657,567)	\$ 32.14
2	2014/2015	Total Day Ahead & Real Time Energy	(5,223,075)	\$ (125,130,353)	3,620,177	\$ 87,775,936	(1,602,897)	\$ 23.96	\$24.25	\$ (37,354,417)	\$ 23.30
3	2015/2016	Total Day Ahead & Real Time Energy	(5,323,501)	\$ (102,349,103)	3,389,182	\$ 63,061,746	(1,934,319)	\$ 19.23	\$18.61	\$ (39,287,357)	\$ 20.31
4	2016/2017	Total Day Ahead & Real Time Energy	(5,556,887)	\$ (120,770,949)	3,942,794	\$ 85,241,896	(1,614,093)	\$ 21.73	\$21.62	\$ (35,529,053)	\$ 22.01
5	2017/2018	Total Day Ahead & Real Time Energy	(5,859,776)	\$ (139,987,831)	4,415,230	\$ 106,485,977	(1,444,546)	\$ 23.89	\$24.12	\$ (33,501,854)	\$ 23.19
6	July 2018/June 2019	Total Day Ahead & Real Time Energy	(5,708,530)	\$ (147,014,197)	3,925,100	\$ 101,790,676	(1,783,430)	\$ 25.75	\$25.93	\$ (45,223,521)	\$ 25.36
7	July 2019/ December 2019	Total Day Ahead & Real Time Energy	(2,794,661)	\$ (55,275,335)	1,909,192	\$ 38,186,794	(885,469)	\$ 19.78	\$20.00	\$ (17,088,541)	\$ 19.30

(1) Source: Lines 5 and 52 of (B) and (C) of Annual Report: Detail of MISO Day 2 Charges - System (Part H, Section 3 Attachment K) for respective reporting periods. These amounts reflect energy costs only and do not included congestion or losses.

(2) Source: Lines 5 and 52 of (D) and (E) of Annual Report: Detail of MISO Day 2 Charges - System (Part H, Section 3 Attachment K) for respective reporting periods. These amounts reflect energy costs only and do not included congestion or losses.

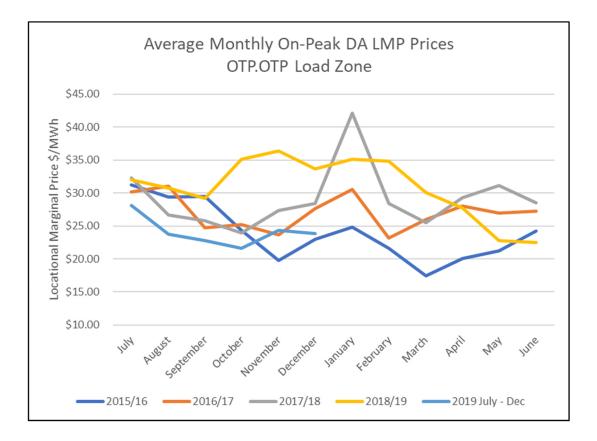
Market pricing increased slightly but remained relatively stable in 2018/19 as compared to 2017/2018. The last six months of 2019 experienced a significant drop in market pricing, in large part driven by the reduced cost of natural gas. This pricing pattern is illustrated in columns F, G, and I in the above Table. In addition to low natural gas pricing, ever increasing wind production within the MISO footprint continues to suppress wholesale energy market LMPs.

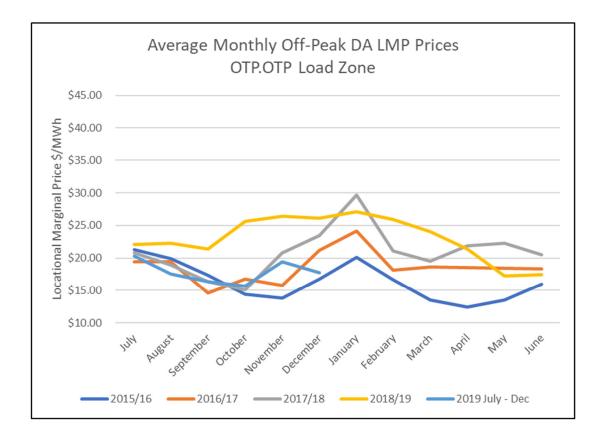
To put the amount of net energy from MISO into context with total energy recovered through the fuel clause, Table 2 below compares the net MISO MWhs (Column A) to total MWhs of energy sold to customers (Column B) as reported in the annual true-up filings in Docket No. E017/M-03-30. Total system energy costs increased to a five year high of \$119.434 million (System) in the reporting period of July 2018 through June 2019 and the average cost per MWh, as shown in Column D below, increased from \$23.75/MWh in 2017/18 to \$24.03/MWh for the reporting period of July 2018 through June 2019. This includes all costs recovered through the fuel clause, including all MISO costs approved for FCA recovery. Column E shows that approximately 36% of the energy used to serve Otter Tail load was acquired from the market in the current reporting period.

# TABLE 2

		(A) (B) (C)			(D)	(E)		
				From Annual T	rue-Up Filings D	ocke	t E017/N	1-03-30
								% of
			From Table 1	<b>Total System</b>		Α	verage	system
			Net MWhs	Sales MWhs	Total System	Co	ost per	energy
Line	e AAA Reporting Period	Charge Type	(A) + (C)	(2)	Cost (2)		NWh	served
1	2013/2014	Total Day Ahead & Real Time Energy	(1,109,451)	4,636,516	\$ 114,090,227	\$	24.61	24%
2	2014/2015	Total Day Ahead & Real Time Energy	(1,602,897)	4,588,130	\$ 112,675,821	\$	24.56	35%
3	2015/2016	Total Day Ahead & Real Time Energy	(1,934,319)	4,646,536	\$ 109,053,170	\$	23.47	42%
4	2016/2017	Total Day Ahead & Real Time Energy	(1,614,093)	4,793,992	\$ 115,253,826	\$	24.04	34%
5	2017/2018	Total Day Ahead & Real Time Energy	(1,444,546)	4,925,084	\$ 116,980,562	\$	23.75	29%
6	July 2018/June 2019	Total Day Ahead & Real Time Energy	(1,783,430)	4,969,399	\$ 119,434,053	\$	24.03	36%
7	July 2019/ December 2019	Total Day Ahead & Real Time Energy	(885,469)	2,322,381	\$ 56,928,952	\$	24.51	38%

The following charts are provided to help illustrate the average DA LMP prices for the OTP.OTP load zone for the current reporting periods as compared to the prior three reporting years.





By definition, the LMP price is made up of three different cost components; Energy, Congestion, and Losses. As noted earlier, low natural gas prices and increased wind production have helped keep energy prices relatively low in recent years. Increased transmission capability in the region has also helped reduce congestion costs and their impacts on overall energy costs customers pay.

Docket No. E999/AA-20-171 Part E Section 10 Attachment G PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HS BEEN EXCISED Page 1 of 2

#### MISO Module E Data For Otter Tail Power Company As of January 7, 2020

#### AGGREGATE RESOURCES AS DEFINED BY MISO - Values reflect the Unforced Capacity rating (UCAP)

No.	Aggregate Resources	Designation	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19
1	Big Stone Plant	OTP.BIGSTON1	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4
2	Coyote Station	OTP.COYOT1	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8
3	FPL Energy ND Wind II	OTP.EDGLYEDGL	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
4	Hoot Lake 2	OTP.HOOTL2	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9
5	Hoot Lake 3	OTP.HOOTL3	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4
6	Jamestown 1	OTP.JAMSPK1	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
7	Jamestown 2	OTP.JAMSPK2	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
8	Lake Preston	OTP.HETLA1	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
9	Solway	OTP.SOLWAY01	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4

#### LOCAL RESOURCES AS DEFINED BY MISO - Values reflect the Unforced Capacity rating (UCAP)

No.	Local Resource	Designation	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19
1	Ashtabula	OTP.ASHTABULA	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
2	FPL Energy ND Wind II	OTP.EDGLYEDGL	-	-	-	-	-	-	-	-	-	-	-	-
3	Langdon	OTP.LANGDN1	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
4	Langdon	OTP.LANGDN2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
5	Luverne	OTP.MPWR	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
6	Jamestown 1	OTP.JAMSPK1	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

#### BEHIND-THE-METER RESOURCES AS DEFINED BY MISO - Values reflect the Unforced Capacity rating (UCAP)

No.	BTM Resource	Designation	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19
1	Big Stone Diesel	OTP.OTP	-	-	-	-	-	-	-	-	-	-	-	-
2	Dayton Hollow Hydro #1	OTP.OTP	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3	Dayton Hollow Hydro #2	OTP.OTP	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4	Fergus Control Diesel	OTP.OTP	-	-	-	-	-	-	-	-	-	-	-	-
5	Hoot Lake 2A Diesel	OTP.OTP	-	-	-	-	-	-	-	-	-	-	-	-
6	Hoot Lake 3A Diesel	OTP.OTP	-	-	-	-	-	-	-	-	-	-	-	-
7	Hoot Lake Hydro	OTP.OTP	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
			[PROTECT	TED DATA	BEGINS									
8	Dakota Magic Diesel	OTP.OTP												
9	Kindred School Diesel	OTP.OTP												
10	Perham Resource Recovery Facility	OTP.OTP												
11	Stevens Community	OTP.OTP												
												PROTI	ECTED DA	FA ENDS]
12	Pisgah Hydro	OTP.OTP	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
13	Wright Hydro	OTP.OTP	-	-	-	-	-	-	-	-	-	-	-	-
14	Taplin Gorge Hydro	OTP.OTP	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
15	Bemidji 1 Hydro	OTP.OTP	-	-	-	-	-	-	-	-	-	-	-	-

#### EXTERNAL RESOURCES AS DEFINED BY MISO - Values reflect the Unforced Capacity rating (UCAP)

No. External Resources	Designation	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19
1	Garrison Hydro Plant	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
2	Garrison Hydro Plant 2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3

#### PRC TRANSACTIONS AS DEFINED BY MISO - Values reflect the Planning Resource Credit rating (PRC)

No. PRC Transaction 1 GRE Purchase	Designation	<b>Jun-18</b>	<b>Jul-18</b>	Aug-18	Sep-18	Oct-18	<b>Nov-18</b>	<b>Dec-18</b>	<b>Jan-19</b>	Feb-19	<b>Mar-19</b>	<b>Apr-19</b>	<b>May-19</b>
	GREM-OTPW	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
Total		730.2	730.2	730.2	730.2	730.2	730.2	730.2	730.2	730.2	730.2	730.2	730.2

Docket No. E999/AA-20-171 Part E Section 10 Attachment G PUBLIC DOCUMENT - NOT PUBLIC (0R PRIVILEGED) DATA HS BEEN EXCISED Page 2 of 2

MISO Module E Data For Otter Tail Power Company As of January 7, 2020

#### AGGREGATE RESOURCES AS DEFINED BY MISO - Values reflect the Unforced Capacity rating (UCAP)

No.	Aggregate Resources	Designation	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
1	Big Stone Plant	OTP.BIGSTON1	251.3	251.3	251.3	251.3	251.3	251.3	251.3
2	Coyote Station	OTP.COYOT1	126.9	126.9	126.9	126.9	126.9	126.9	126.9
3	FPL Energy ND Wind II	OTP.EDGLYEDGL	3.2	3.2	3.2	3.2	3.2	3.2	3.2
4	Hoot Lake 2	OTP.HOOTL2	55.6	55.6	55.6	55.6	55.6	55.6	55.6
5	Hoot Lake 3	OTP.HOOTL3	79.4	79.4	79.4	79.4	79.4	79.4	79.4
6	Jamestown 1	OTP.JAMSPK1	19.8	19.8	19.8	19.8	19.8	19.8	19.8
7	Jamestown 2	OTP.JAMSPK2	20.4	20.4	20.4	20.4	20.4	20.4	20.4
8	Lake Preston	OTP.HETLA1	19.3	19.3	19.3	19.3	19.3	19.3	19.3
9	Solway	OTP.SOLWAY01	42.9	42.9	42.9	42.9	42.9	42.9	42.9

#### LOCAL RESOURCES AS DEFINED BY MISO - Values reflect the Unforced Capacity rating (UCAP)

No.	Local Resource	Designation	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
1	Ashtabula	OTP.ASHTABULA	9.7	9.7	9.7	9.7	9.7	9.7	9.7
2	FPL Energy ND Wind II	OTP.EDGLYEDGL	-	-	-	-	-	-	-
3	Langdon	OTP.LANGDN1	8.6	8.6	8.6	8.6	8.6	8.6	8.6
4	Langdon	OTP.LANGDN2	4.3	4.3	4.3	4.3	4.3	4.3	4.3
5	Luverne	OTP.MPWR	11.7	11.7	11.7	11.7	11.7	11.7	11.7
6	Jamestown 1	OTP.JAMSPK1	-	-	-	-	-	-	-

#### BEHIND-THE-METER RESOURCES AS DEFINED BY MISO - Values reflect the Unforced Capacity rating (UCAP)

No.	BTM Resource	Designation	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
1	Big Stone Diesel	OTP.OTP	-	-	-	-	-	-	-
2	Dayton Hollow Hydro #1	OTP.OTP	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3	Dayton Hollow Hydro #2	OTP.OTP	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4	Fergus Control Diesel	OTP.OTP	-	-	-	-	-	-	-
5	Hoot Lake 2A Diesel	OTP.OTP	-	-	-	-	-	-	-
6	Hoot Lake 3A Diesel	OTP.OTP	-	-	-	-	-	-	-
7	Hoot Lake Hydro	OTP.OTP	0.7	0.7	0.7	0.7	0.7	0.7	0.7
			[PROTEC	TED DATA	BEGINS .				
8	Dakota Magic Diesel	OTP.OTP							
9	Kindred School Diesel	OTP.OTP							
10	Perham Resource Recovery Facility	OTP.OTP							
11	Stevens Community	OTP.OTP							
							PROTI	ECTED DA	TA ENDS]
12	Pisgah Hydro	OTP.OTP	0.6	0.6	0.6	0.6	0.6	0.6	0.6
13	Wright Hydro	OTP.OTP	-	-	-	-	-	-	-
14	Taplin Gorge Hydro	OTP.OTP	0.5	0.5	0.5	0.5	0.5	0.5	0.5
15	Bemidji 1 Hydro	OTP.OTP	-	-	-	-	-	-	-

#### EXTERNAL RESOURCES AS DEFINED BY MISO - Values reflect the Unforced Capacity rating (UCAP)

No. External Resources	Designation	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
1	Garrison Hydro Plant	4.2	4.2	4.2	4.2	4.2	4.2	4.2
2	Garrison Hydro Plant 2	4.3	4.3	4.3	4.3	4.3	4.3	4.3

#### PRC TRANSACTIONS AS DEFINED BY MISO - Values reflect the Planning Resource Credit rating (PRC)

No. PRC Transaction	Designation	<b>Jun-19</b>	<b>Jul-19</b>	Aug-19	Sep-19	<b>Oct-19</b>	<b>Nov-19</b>	Dec-19
1 GRE Purchase	GREM-OTPW	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Total		714.4	714.4	714.4	714.4	714.4	714.4	714.4

The following rates were approved in the December 18, 2019 Order in Docket No. E999/AA-19-297 (Revised Attachment 1) and implemented January 1, 2020.

			[				Prop	osed Foreca	sted EAR Rat	tes for the 20	20 Calendar Y	′ear			
Line No.	А	в	C	D	Е	F	G	н	1		к		м	N	0
NO.	~	D	Cost of	5		· ·	0			5	K		IVI	IN	
			Energy in						_		-				-
			Base Rates	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1			0.024652	0.003446	0.002734	0.001013	0.001490	0.000471	0.000205	0.002321	0.002419	0.000907	0.000358	(0.002009)	(0.000826)
			-												
							(	Class Energy	Adjustment I	Factor (EAF)	Monthly Rate				
2	Service Category	EAF Ratio	Base Rates	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
3	Residential	1.0833	0.026706	0.00373	0.00296	0.00110	0.00161	0.00051	0.00022	0.00251	0.00262	0.00098	0.00039	(0.00218)	(0.00089)
4	Farms	1.0467	0.025803	0.00361	0.00286	0.00106	0.00156	0.00049	0.00022	0.00243	0.00253	0.00095	0.00037	(0.00210)	(0.00086)
5	General Service	1.0567	0.026050	0.00364	0.00289	0.00107	0.00157	0.00050	0.00022	0.00245	0.00256	0.00096	0.00038	(0.00212)	(0.00087)
6	Large General Service	0.9546	0.023533	0.00329	0.00261	0.00097	0.00142	0.00045	0.00020	0.00222	0.00231	0.00087	0.00034	(0.00192)	(0.00079)
7	Irrigation Services	0.9585	0.023629	0.00330	0.00262	0.00097	0.00143	0.00045	0.00020	0.00222	0.00232	0.00087	0.00034	(0.00193)	(0.00079)
8	Outdoor Lighting	0.8367	0.020626	0.00288	0.00229	0.00085	0.00125	0.00039	0.00017	0.00194	0.00202	0.00076	0.00030	(0.00168)	(0.00069)
9	OPA	1.0373	0.025572	0.00357	0.00284	0.00105	0.00155	0.00049	0.00021	0.00241	0.00251	0.00094	0.00037	(0.00208)	(0.00086)
10	Controlled Service-Water Heating	1.0898	0.026866	0.00376	0.00298	0.00110	0.00162	0.00051	0.00022	0.00253	0.00264	0.00099	0.00039	(0.00219)	(0.00090)
11	Controlled Service-Interruptible	1.0945	0.026982	0.00377	0.00299	0.00111	0.00163	0.00052	0.00022	0.00254	0.00265	0.00099	0.00039	(0.00220)	(0.00090)
12	Controlled Service-Deferred	0.9846	0.024272	0.00339	0.00269	0.00100	0.00147	0.00046	0.00020	0.00229	0.00238	0.00089	0.00035	(0.00198)	(0.00081)

#### OTTER TAIL POWER COMPANY ESTIMATE OF MINNESOTA'S SHARE OF MISO CHARGE TYPES

	Charge Type Description		System - Retail July 2018 December 2019		nnesota - Retail July 2018 ecember 2019
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss	1			
1	DA Asset Energy Amount	\$	53,658,900.27	\$	27,310,988.86
2 3	DA FBT Loss Amount DA Non-asset Energy Amount	\$ \$	-	\$	-
3	RT Asset Energy Amount	ֆ \$	(2,040,517.28) 2,543,939.30	\$ \$	(1,038,570.38) 1,294,799.14
5	RT Distribution of Losses Amount	\$	(2,979,855.68)	\$	(1,516,669.27)
6	RT FBT Loss Amount	\$	-	\$	-
7	DA Loss Amount	\$	8,004,831.13	\$	4,074,251.48
8	RT Loss Amount	\$	221,641.08	\$	112,809.56
9	RT Non-Asset Energy Amount	\$ \$	2,493.80	\$	1,269.28
10	DA Losses Rebate on Option B GFA	\$	-	\$	-
	Virtual Energy				
11	DA Virtual Energy Amount	\$	-	\$	-
12	RT Virtual Energy Amount	\$	-	\$	-
	Schedules 16 & 17	1			
13	DA Mkt Admin Amount	\$	1,080,831.85	\$	550,115.39
14	RT Mkt Admin Amount	\$	101,406.05	\$	51,613.05
15	FTR Mkt Admin Amount	\$	34,070.64	\$	17,341.07
	Congest & FTRs				
16	DA FBT Congestion Amount	\$	-	\$	-
17	DA Congestion	\$	3,811,693.61	\$	1,940,053.21
18 19	RT FBT Congestion Amount RT Congestion	\$ \$	- (162 717 21)	\$ \$	- (82,818.84)
20	FTR Hourly Allocation Amount	э \$	(162,717.21) (3,978,383.93)	э \$	(2,024,894.26)
21	FTR Monthly Allocation Amount	\$	(241,051.88)	\$	(122,689.16)
22	FTR Yearly Allocation Amount	\$	(25,712.64)	\$	(13,087.07)
23	FTR Monthly Transaction Amount	\$	(122,265.02)	\$	(62,229.72)
24	FTR Full Funding Guarantee Amount	\$	(146,095.29)	\$	(74,358.71)
25	FTR Guarantee Uplift Amount	\$	144,406.43	\$	73,499.13
26 27	FTR Auction Revenue Rights Transaction Amount FTR Annual Transaction Amount	\$ \$	(3,217,859.57) 3,213,588.45	\$ \$	(1,637,807.08) 1,635,633.19
28	FTR Auction Revenue Rights Infeasible Uplift Amount	э \$	109,958.26	э \$	55,965.90
29	FTR Auction Revenue Rights Stage 2 Distribution Amount	\$	(489,561.50)	\$	(249,174.11)
30	DA Congestion Rebate on Option B GFA	\$	-	\$	-
	RSG & Make Whole Payments	1			
31	DA Revenue Sufficiency Guarantee Distribution Amount	\$	163,565.83	\$	83,250.77
32	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	\$	(68,208.35)	\$	(34,716.28)
	RT Revenue Sufficiency Guarantee First Pass Distribution Amoun		511,787.30	\$	260,486.47
34 35	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Price Volatility Make Whole Payment	\$ \$	- (102 602 61)	\$ \$	- (98,539.22)
35	RT FICE VOlatility Make Whole Fayment	φ	(193,603.61)	φ	(90,009.22)
	Revenue Neutrality Uplift				
36	RT Revenue Neutrality Uplift Amount	\$	778,062.00	\$	396,013.38
	Other Charges				
37	RT Misc Amount	\$	392,723.11	\$	199,885.88
38	RT Net Inadvertent Amount	\$	11,650.25	\$	5,929.68
39 40	RT Uninstructed Deviation Amount RT Demand Response Allocation Uplift Amount	\$ \$	(0.69)	\$ \$	(0.35)
41	DA Ramp Product	\$	(18,119.37)	\$	(9,222.29)
42	RT Ramp Product	\$	(1,217.39)	\$	(619.62)
	ASM Charges	1			
43	RT ASM Non-Excessive Energy Amount	\$	8,142,872.18	\$	4,144,510.79
44	RT ASM Excessive Energy Amount	\$	4,373.29	\$	2,225.89
	Grandfathered Charge Types	1			
45	DA Congestion Rebate on COGA	\$	-	\$	-
46	DA Losses Rebate on COGA	\$	-	\$	-
47 48	RT Congestion Rebate on COGA RT Loss Rebate on COGA	\$ \$	-	\$ \$	-
40	RT LOSS Rebaile on COGA	¢		\$	
49	TOTAL CHARGES	\$	69,247,625.42	\$	35,245,245.75
50	Less Schedule 16 & 17 (Lines 13, 14, 15)	\$	(1,216,308.54)		
51	Congestion and Losses Adjustment	\$	(103,406.56)		
	No DA generation sch., but still had output	\$	(157,301.18)		
	MISO RSG Bad Debt Settlement with another utility in Otter Tail's LBA	\$ \$	65 001 44		
04	Settlement with another utility in Otter Tail's LBA	φ	65,001.44		

Percent of Minnesota Sales to System (3,711,326,731 / 7,291,779,575) = 0.508974070

Fuel Costs Allocated to Minnesota (\$176,363,005) x 0.508974070 = \$89,764,197

1		De	tail of MISO Day 2 (	Otter Tail Power (		Ionth - System				
	Detail of MISO Day 2 Charges by Charge Group for Current Month - System July 2018 includes any adjustments									
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types with	
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss									
1	DA Asset Energy Amount	555.02		\$ (9,525,578.96)			\$ (645,119.34) \$	652,944.33	418,748	(364,227)
2	DA FBT Loss Amount		•			5 -	\$ - \$		-	-
3	DA Non-asset Energy Amount			\$ (128,994.54)				(128,994.54)	-	(4,250)
4 5	RT Asset Energy Amount			\$ (506,300.68)					4,755	(19,801)
5	RT Distribution of Losses Amount RT FBT Loss Amount			\$ (172,011.35) \$ -	\$		\$ - \$ \$ - \$		-	-
7	DA Loss Amount	555.21					φ - φ \$ - \$		-	-
8	RT Loss Amount						\$-\$		-	-
9	RT Non-Asset Energy Amount	555.26			s - 9		φ - φ \$ - \$	106.20	4	
10	DA Losses Rebate on Option B GFA	555.08	\$ -		\$- \$-		\$-\$	-	-	-
11	TOTAL		\$ 11,427,170.89	\$ (10,332,885.53)	\$ 136,855.10	1,231,140.46	\$ (645,119.34) \$	586,021.12	423,507	(388,278)
	Virtual Energy									
12	DA Virtual Energy Amount	555.12	\$-	\$-	\$-\$	ş -	\$-\$	-	-	-
13	RT Virtual Energy Amount		Ŧ			ş -	\$-\$	-	-	-
14	TOTAL		\$ -	\$-	\$	ş -	\$-\$	-	-	-
	Schedules 16 & 17					-				
15	DA Mkt Admin Amount		\$ 59,215.75		\$ - \$				-	-
16	RT Mkt Admin Amount		\$ 5,730.53		\$ (52.76) \$				-	-
17 18	FTR Mkt Admin Amount TOTAL	555.13			\$			2,021.76 69,616.91	-	-
10	Congest & FTRs		\$ 66,966.04	ə -	ə (52.76) ş	00,915.20	\$ 2,701.03 \$	09,010.91	-	
19	DA FBT Congestion Amount	555.03	\$ -	\$ -	\$ - 9	- â	\$ - \$			
20	DA Congestion	555.05	•	Ŧ	s - 5	r	φ - φ \$ - \$		-	-
20	RT FBT Congestion Amount	555.20			s - 5		\$-\$			_
22	RT Congestion	333.20					φ - φ \$ - \$		-	-
23	FTR Hourly Allocation Amount	555.14	+	¢ \$ (343,844.87)			\$-\$		-	-
24	FTR Monthly Allocation Amount			\$ (608.20)					-	-
25	FTR Yearly Allocation Amount				\$ - \$		\$ - \$	-	-	-
26	FTR Monthly Transaction Amount		•		s - s		\$ - \$	-	-	-
27	FTR Full Funding Guarantee Amount	555.36	\$ 607.84	\$ (3,204.76)	\$ 0.11 \$	(2,596.81)	\$ - \$	(2,596.81)	-	-
28	FTR Guarantee Uplift Amount	555.37	\$ 3,204.76	\$ (607.84)	\$ (0.20) \$	2,596.72	\$ - \$	2,596.72	-	-
29	FTR Auction Revenue Rights Transaction Amount			\$ (187,031.53)				(147,040.15)	-	-
30	FTR Annual Transaction Amount			\$ (39,990.39)		\$ 145,275.97			-	-
31	FTR Auction Revenue Rights Infeasible Uplift Amount		\$ 4,175.62			\$ 4,175.62			-	-
32	FTR Auction Revenue Rights Stage 2 Distribution Amount			\$ (35,930.73)		( ( ) ) )		(35,930.73)	-	-
33	DA Congestion Rebate on Option B GFA	555.07	\$ -	\$ - ·	<u> </u>	<i>*</i>	<u>\$</u> -\$		-	-
34	TOTAL RSG & Make Whole Payments		\$ 487,524.73	\$ (497,531.98)	\$ (0.20) \$	\$ (10,007.45)	ə - Ş	(10,007.45)	-	-
35	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	\$ 7,081.69	\$-	\$ (2.82) \$	5 7,078.87	\$ 532.34 \$	7,611.21		
35 36	DA Revenue Sufficiency Guarantee Distribution Amount DA Revenue Sufficiency Guarantee Make Whole Pymt Amount			» - \$ (6,593.46)					-	-
30	RT Revenue Sufficiency Guarantee First Pass Distribution Amount			+ (-,)	» - ، \$ 3,551.27				-	-
38	RT Revenue Sufficiency Guarantee Pirst Pass Distribution Amount				\$ 3,331.27 3 \$ - 9		\$ (28,193.73) \$		-	-
39	RT Price Volatility Make Whole Payment			φ - \$ (31,875.83)				(34,273.60)	-	-
40	TOTAL			\$ (38,469.29)				(15,524.23)	-	-
	Revenue Neutrality Uplift		· · · · ·			· .				
41	RT Revenue Neutrality Uplift Amount	555.28		\$ (6,875.31)				39,636.12	-	-
42	TOTAL		\$ 41,159.41	\$ (6,875.31)	\$ 2,579.21 \$	\$ 36,863.31	\$ 2,772.81 \$	39,636.12	-	-
	Other Charges		•	*	• • • • • • • •		• •			
43	RT Misc Amount		+		\$ 38,579.67		\$ - \$	38,579.67	-	-
44	RT Net Inadvertent Amount		, .	\$ (1,090.49)			\$ - \$		-	-
45	RT Uninstructed Deviation Amount		<b>T</b>		\$-9		\$ - \$		-	-
46 47	RT Demand Response Allocation Uplift Amount			\$ (0.03)					-	-
47 48	DA Ramp Product RT Ramp Product		•	\$ (2,660.90) \$ (1.001.30)		(2,660.90) (533.02)		(2,660.90) (533.02)	-	-
40	TOTAL	555.04	\$ 15,681.04					50,210.98	-	-
				- (.,. <b>--</b> )			τ Ψ			

ſ					tter Tail Power (							
		Detai				Froup for Current N	onth - System					
			J	uly 20	018 includes an	y adjustments		DEV	ISED OCT 2018			
	(A)		(B)		(C)	(D) Retail	(E)	REV	(F)	(G)	(H)** Charge typ	
	Charge Type Description Acct		Retail Debits	R	etail Credits	Adjustments	Net Retail	Ne	et Intersystem	Total	MWH for	
	ASM Charges					rajuotinonto			, interesteres			
)	RT ASM Non-Excessive Energy Amount 555.55	\$	940,777.86	\$	(243,628.10)	\$ (0.11) \$	697,149.65	\$	(227,701.10)	\$ 469,448.55	42,375	(11,07
	RT ASM Excessive Energy Amount 555.56		1,375.08		(501.37)				799.82		75	(25
t	TOTAL	\$	942,152.94		(244,129.47)				(226,901.28)		42,449	(11,33
(	Grandfathered Charge Types											
Ι	DA Congestion Rebate on COGA 555.05	\$	-	\$	-	s - s	-	\$	-	\$ -	-	
L	DA Losses Rebate on COGA 555.06	\$	-	\$	- 3	s - s		\$	-	\$ -	-	
L	RT Congestion Rebate on COGA 555.22	\$	-	\$	- 3	s - s		\$	-	\$ -	-	
	RT Loss Rebate on COGA 555.23	\$	-	\$	-	\$	-	\$	-	\$ -	-	
	TOTAL	\$	-	\$	-	ş - ş	-	\$	-	\$-	-	
I	TOTAL MISO DAY 2 CHARGES	\$	13,028,659.13	\$ (	11,124,644.30)	\$ 182,212.35	2,086,227.18	\$	(895,151.65)	\$ 1,191,075.53	465,956	(399,609
L	Less: Schedule 16 & 17 (Lines 15, 16, 17)	\$	(66,968.04)	\$	-	52.76	(66,915.28	)				
L	Less: Congestion and Losses Adjustment	*	(,,	•		(24,652.18)						
L	Less: No DA generation sch., but still had output for current month					6 - 9						
	Less: MISO RSG Bad Debt				:	5 - 9	-					
	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$	12,961,691.09	\$ (	11,124,644.30)	5 157,612.93	1,994,659.72					
l	Net MISO Charges for Retail = (B) + (C) + (D)			\$	1.994.659.72							
	Net KWH for retail = $((G) + (H))^* 1,000$			•	66,347,035							66,347,035
					,.							
I	July 2017 covers time period of 6/22/2018 7/23/2018 ** increased for los	ses of										
I		_	Net Retail	Ne	t MISO KWH				per kWh	Net Intersystem	Total	
I	MISO Book Totals	\$	1,837,046.79		66,347,035			\$	0.02769	\$ (895,612.44) \$		
I	Congestion and Losses Adjustment	\$	(24,652.18)							\$ - \$	6 (24,652.18)	
L	MISO RSG Bad Debt	\$	-							\$ - \$	-	
1	July Adjustments	\$	182,265.11		4,725,162			\$	0.03857	\$ 460.79		
	Total MISO	\$	1,994,659.72		71,072,197			\$	0.02807	\$ (895,151.65) \$	5 1,099,508.07	

2       DA FBT Loss Arrount       955.04       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       \$       17.245.55       \$       \$       52.25.75       \$       (122.062.35)       \$       5       \$       5       \$       122.26.55.35       \$       5       -       \$       \$       \$       5       5       122.26.55.35       \$       5       -       \$       \$       5       5       122.26.55.35       \$       5       -       \$       \$       5       -       \$       5       -       \$       5       7       5       7       5       7       5       7       5       7			De		Otter Tail Power ( Charges by Charge (	Group for Current N	Ionth - System				
(h)         (b)         (c)         (c) <th></th> <th></th> <th></th> <th>Aug</th> <th>ust 2018 includes a</th> <th>iny adjustments</th> <th></th> <th></th> <th></th> <th></th> <th></th>				Aug	ust 2018 includes a	iny adjustments					
Charge Type Description         Act         Retail Dealth         Adjustmest         Net Retail         Net Interrystem         Total         MWM for Retail           0         Day Market Earling Actac Market Early Allos (1990)         (0.99			(A)	(B)	(C)				(G)		with
1         0.4 Asset Energy Anount         0.550.2         \$         1.252.246.63         \$         (121,642.7)         \$         1.252.246.63         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         \$         (121,642.7)         (121,642.7)         \$         (121,642.7)			Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total		
2       DA HST Loss Amount       555.04       \$ <td>No.</td> <td></td>	No.										
1       DA Non-asset Energy Amount       555.00       \$      \$       (121,640.27)       \$      \$       (121,640.27)       \$      \$       (121,640.27)       \$      \$       (121,640.27)       \$      \$       (121,640.27)       \$      \$       (121,640.27)       \$      \$       (121,640.27)       \$      \$       (122,868.8)      \$       \$       (121,640.27)       \$       (121,640.27)       \$       (121,640.27)       \$       (121,640.27)       \$       (121,640.27)       \$       \$       (121,640.27)       \$ </td <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>393,029</td> <td>(343,435)</td>	1									393,029	(343,435)
4       RT Asset Energy Amount       555.19       \$ 117,845.65       \$ (88,370.16)       \$ 122,828.3)       \$ .       \$ (122,288.3)       \$ .       \$ (122,288.3)       \$ .       \$ (122,288.3)       \$ . <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>-</td></td<>										-	-
5         RT Distribution of Loss Amount         555.24         \$ 3.243.97         \$ (165,377.01)         \$ (167,38.86)         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ 115,200.50         \$ \$ \$ \$ 117,477.73         \$ \$ \$ \$ 117,477.73         \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$										-	(4,354)
6       6       71 FBT Loss Amount       562.1       8       1       8       1       8       1       8       1       1       4       15.80.60       5        8       4       15.80.60       5        8       4       15.80.60       5        8       8.53.43       9        8       4       15.80.60       5        8       8.53.43       9        8       8.53.43       9        8       8.53.43       9       1.774.73       2       1.774.73       2       1.774.73       2       1.774.73       5        8										4,410	(16,120)
7       DA Loss Amount       8       415,800,00       5       -       8       415,800,00       -       -       8       415,800,00       -       -       8       415,800,00       -       -       8       415,800,00       -       8       415,800,00       -       8       53,300       -       8       53,300       -       8       53,300       -       8       53,300       -       8       8,53,300       -       8       8,53,300       -       8       1,77,77,30       2       -       8       1,77,77,30       2       -       8       1,77,77,30       2       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       1,23,23,233       8       666,837,413       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       -       8       <											-
8       RT Loss Amount       55.84       5       -       5       8.534.30       -       -       5       8.534.30       -       -       5       8.534.30       -       -       5       8.534.30       -       5       8.534.30       -       5       8.534.30       -       5       8.774.73       \$       -       \$       1.774.73       \$       -       \$       1.774.73       \$       -       \$       1.774.73       \$       -       \$       1.774.73       \$       -       \$       1.774.73       \$       -       \$       1.774.73       \$       -       \$       1.774.73       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       -       \$       -       -       -       \$       -       -       -       \$       -       -       -       \$       -       \$       -       \$       -       \$       -       \$       -       >       -       -       -       -       -       -       -       -       -       -       -       -       -       -			333.21								
Is         TN Non-Asset Energy Anount         555:20         S         1.774.73         S         S         S         1.774.73         S<										-	-
10         DA Losses Relation Orghon B GFA         55:08         5         6         5         5         5         6         5         5         7         6         7         7         6         7			555.26							24	-
Virtual Energy         Virtual	10			\$ -	\$ -	\$ - 9	\$ -	\$ - \$	-	-	-
12       DA Virtual Energy Anount       565.12       \$       <	11			\$ 10,798,550.26	\$ (9,652,814.57)	\$ 148,190.64 \$	\$ 1,293,926.33	\$ (666,826.41) \$	627,099.92	397,463	(363,909)
13       RT Virtual Energy Amount       553.2       5       6       7 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>											
14       TOTAL       \$       \$       \$       \$       \$       \$       \$       - <td></td> <td></td> <td></td> <td></td> <td>+</td> <td></td> <td>•</td> <td></td> <td></td> <td>-</td> <td>-</td>					+		•			-	-
Schedules 16 & 17           De Meth Admin Amount         555 01 s         47,413.2 s         .         s         1,47.0 s         48,860.34         .           16         DA Meth Admin Amount         555 11 s         3,557.33 s         .         s         (205.8) s         3,351.95 s         942.48 s         4,294.43 c         .           17         TR Mkt Admin Amount         555 13 s         1,403.44 s         .         s         1,803.44 s         .         s         1,803.45 s         1,817.915.9 s			555.32		7	Ŧ	7	T 7		-	-
15       DA Mit Admin Amount       95501       \$         47413.22       \$         -         \$         47413.22       \$         1.477.02       \$         \$         4.4713.22       \$         1.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         4.477.02       \$         4.443.02       \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         \$         4.477.02       \$         4.477.02       \$         4.443.02       \$         4.477.02       \$         4.477.02       \$         4.477.02       \$         4.477.02       \$         4.477.02       \$         4.477.02       \$         4.477.02       \$         4.477.02       \$         4.477.02       \$         4.477.02       \$         4.477.02       \$	14			\$ -	\$ -	\$ - 3	\$	\$ - \$	-	-	-
16       RT Mkt Admin Amount       555.18       \$       3.557.33       \$       \$       (205.38)       \$       3.351.95       \$       942.48       \$       4.294.43       -         18       TOTAL       \$       557.33       \$       1.803.44       \$       \$       \$       1.803.44       -       \$       1.803.44       -       \$       5.334.45       -       \$       1.803.44       -       \$       5.333.44       \$       -       \$       5.333.44       \$       -       \$       5.333.44       \$       2.389.50       \$       5.433.44       -       \$       5.333.44       -       \$       5.333.44       -       \$       5.333.44       -       \$       5.333.51.05       \$       178.971.58       -       \$       5.33       5.333.51.05       \$       178.971.58       -       \$       5.333.51.05       \$       178.971.58       -       \$       5.333.51.05       \$       178.971.58       -       \$       178.971.58       -       \$       178.971.58       -       \$       178.971.58       -       \$       178.971.58       -       \$       178.971.58       -       \$       178.971.58       -       \$       178.971.58	45		555.04	¢ 47.440.00	<b>^</b>	<b>^</b>	17 440 00	¢ 4.447.00 ¢	40.000.04		
17       FTR. Mkt Admin Amount       555.13       \$       1.803.44       \$       .       \$       1.803.44       \$       .       \$       1.803.44       \$       .       \$       1.803.44       \$       .       \$       1.803.44       \$       .       \$       5.82,788.71       \$       2.388.50       \$       5.498.71       \$       .       \$       5.498.71       \$       .       \$       .       \$       .       \$       .       \$       1.78,971.58       \$       .										-	-
ToTAL       \$ 52,774.09 \$       -       \$ (205.38) \$       52,568.71 \$       2.389.50 \$       54,958.21       -         19       DA FBT Congestion Amount       555.03 \$       -       \$       -       \$       -						, , , , , , , , , , , , , , , , , , , ,				-	-
Congest & FTRs           19         DA FC Congestion Amount         555.03         \$			555.15								-
19       DA FBT Congestion Amount       550.0       \$ <t< td=""><td>10</td><td></td><td></td><td>• •=,</td><td>•</td><td>• (200100)</td><td>• •=,••••</td><td></td><td>0 1,000121</td><td></td><td></td></t<>	10			• •=,	•	• (200100)	• •=,••••		0 1,000121		
20       DA Congestion       \$\$       -       \$\$       178,971.58       \$\$       -       \$\$       178,971.58       \$\$       -       \$\$       -       \$\$       -       \$\$       -       \$\$       -       \$\$       -       \$\$       -       \$\$       -       \$\$       -       \$\$       -       \$\$       -       \$\$       -       \$\$       -	19		555.03	\$ -	\$ -	\$ - 5	\$ -	\$ - \$	-		-
121       RT FBT Congestion Amount       555.20       \$       -       \$       -       \$       -					\$ 178.971.58	\$ - 5					
22       FTR Hourly Allocation Amount       555.14       \$			555.20	\$-						-	-
24       FTR Monthy Allocation Amount       555.15       \$       \$       (9,202.33)       \$       \$       \$       (9,202.33)       \$	22	RT Congestion		\$ (7,008.73)	\$ -	\$ - 5	\$ (7,008.73)	\$ - \$	(7,008.73)		
25       FTR Yearly Allocation Amount       555.17       \$			555.14	\$ 110,457.39	\$ (247,563.36)	\$	\$ (137,105.97)	\$ - \$	(137,105.97)	-	-
22       FTR Monthly Transaction Amount       555.35       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       \$       27       FTR Full Funding Guarantee Amount       555.37       \$       8,648.82       \$       (8,377.81)       \$       -       \$       271.01       \$       -       \$       271.01					\$ (9,202.33)					-	-
22       FTR Full Funding Guarantee Amount       555.36       \$       8.377.81       \$       (8.648.82)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$       \$       \$       (271.01)       \$					<b>T</b>					-	-
28       FTR Guarantee Uplit Amount       555.37       \$       6.648.82       \$       (6.377.81) \$       -       \$       271.01       \$       -       \$       271.01       \$       -       \$       271.01       \$       -       \$       271.01       \$       -       \$       (147.040.15)       \$       -       \$       (147.040.15)       \$       -       \$       (147.040.15)       \$       -       \$       (147.040.15)       \$       -       \$       (147.040.15)       \$       -       \$       (147.040.15)       \$       \$       (147.040.15)       \$       \$       (147.040.15)       \$       \$       \$       (147.040.15)       \$       \$       \$       (147.040.15)       \$										-	-
22       FTR Auction Revenue Rights Transaction Amount       555.39       \$ 39.991.38       \$ (187.031.53)       -       \$ (147.040.15)       -       \$ (147.040.15)       -         30       FTR Auction Revenue Rights Infeasible Uplift Amount       555.38       \$ 185,266.36       \$ (39.990.39)       -       \$ 145,275.97       -       \$ 175.62       -       \$ 175.62       -       \$ 175.62       -       \$ 175.62       -       \$ 175.62       -       \$ 175.62       -       \$ 175.62       -       \$ 175.62       -       \$ 175.62       -       \$ 175.62       -       \$ 175.62 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>(=</td> <td>-</td> <td>-</td>									(=	-	-
30       FTR Annual Transaction Amount       555.38       \$       185,266.36       \$       (39,990.39)       \$       -       \$       145,275.97										-	-
31       FTR Auction Revenue Rights Infeasible Uplift Amount       555.40       \$       4,175.62       \$       -       \$       4,175.62       \$       -       \$       4,175.62       \$       -       \$       4,175.62       \$       -       \$       (35,930.73)       \$       (0.03)       \$       (35,930.76)       \$       -       \$       -<										-	-
32       FTR Auction Revenue Rights Stage 2 Distribution Amount       555.41       \$										-	-
33       DA Congestion Rebate on Option B GFA       555.07       \$       -<										-	-
RSG & Make Whole Payments         35       DA Revenue Sufficiency Guarantee Distribution Amount       555.10       \$ 5,579.03       \$ - \$       \$ (8,04)       \$ 5,570.99       \$ 419.06       \$ 5,990.05       -         36       DA Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.11       \$ - \$       \$ (2,165.39)       \$ (2,165.39)       \$ (544.12)       \$ (2,709.51)       -         37       RT Revenue Sufficiency Guarantee First Pass Distribution Amount       555.29       \$ 38,584.10       \$ - \$       \$ (2,165.39)       \$ (				•	φ (33,330.73) \$		,		(,)	-	-
RSG & Make Whole Payments         35       DA Revenue Sufficiency Guarantee Distribution Amount       555.10       \$ 5,579.03       \$ - \$       \$ (8,04)       \$ 5,570.99       \$ 419.06       \$ 5,990.05       -         36       DA Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.11       \$ - \$       \$ (2,165.39)       \$ (2,165.39)       \$ (544.12)       \$ (2,709.51)       -         37       RT Revenue Sufficiency Guarantee First Pass Distribution Amount       555.29       \$ 38,584.10       \$ - \$       \$ (2,165.39)       \$ (	34		300.01		\$ (357,773.39)			Ψ 4		-	-
36       DA Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.11       \$       -       \$       (2,165.39)       \$       (544.12)       \$       (2,709.51)       -         37       RT Revenue Sufficiency Guarantee First Pass Distribution Amou       555.29       \$       38,584.10       \$       -       \$       11,785.37       \$       50,369.47       \$       3,790.08       \$       54,159.55       -         38       RT Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.30       \$       -       \$       -       \$       (2,7314.88)       \$       (50.07)       \$       (8,120.40)       -       \$       (4,163.13       \$       (9,480.27)       \$       11,777.33       \$       46,460.19       \$       (5,005.85)       \$       41,454.34       - <b>Total</b> 555.28       \$       17,820.91       \$       (14,668.69)       \$       856.45       \$       4,008.67       \$       301.39       \$       4,310.06       - <b>Other Charges Total</b> \$       17,820.91       \$       (14,668.69)       \$       856.45       \$       4,008.67       \$       301.39       \$       4,310.06       - <td< td=""><td></td><td>RSG &amp; Make Whole Payments</td><td></td><td></td><td></td><td></td><td>· · · · ·</td><td></td><td><u>, , , ,</u></td><td></td><td></td></td<>		RSG & Make Whole Payments					· · · · ·		<u>, , , ,</u>		
37       RT Revenue Sufficiency Guarantee First Pass Distribution Amou       555.29       \$ <ul> <li>38,584.10</li> <li>-</li> <li>\$             <li>-</li> <li>-</li></li></li></li></li></li></li></li></li></ul>			555.10	\$ 5,579.03	\$ -	\$ (8.04) \$	\$ 5,570.99			-	-
38       RT Revenue Sufficiency Guarantee Make Whole Payment       555.30       \$       -       \$       -       \$       -       \$       -       \$       -       \$       (7,314.88)       \$       -       \$       (7,314.88)       \$       (50.47)       \$       (7,865.35)       -       \$         40       TOTAL       \$       44,163.13       \$       (9,480.27)       \$       11,777.33       \$       46,660.19       \$       (500.87)       \$       (1,865.35)       -       \$       (7,314.88)       \$       (500.87)       \$       (1,865.35)       -       \$       (7,314.88)       \$       (500.85)       \$       41,454.34       -         40       TOTAL       \$       44,163.13       \$       (9,480.27)       \$       11,777.33       \$       46,60.19       \$       (500.85)       \$       41,454.34       -         41       RT Revenue Neutrality Uplift       TOTAL       \$       17,820.91       \$       (14,668.69)       \$       856.45       \$       4,008.67       \$       301.39       \$       4,310.06       -       -       43       RT Misc Amount       555.25       \$       \$       \$       \$       \$       \$       \$										-	-
39       RT Price Volatility Maké Whole Payment       555.42       \$       \$       (7,314.88)       \$       (7,314.88)       \$       (550.47)       \$       (7,865.35)       -         40       TOTAL       \$       44,163.13       \$       (9,480.27)       \$       11,777.33       \$       46,460.19       \$       (550.47)       \$       (7,865.35)       -       -         Revenue Neutrality Uplift         41       RT Revenue Neutrality Uplift Amount       555.28       \$       17,820.91       \$       (14,668.69)       \$       856.45       \$       4,008.67       \$       301.39       \$       4,310.06       -         42       TOTAL       \$       17,820.91       \$       (14,668.69)       \$       856.45       \$       4,008.67       \$       301.39       \$       4,310.06       -         42       TOTAL       \$       17,820.91       \$       (14,668.69)       \$       856.45       \$       4,008.67       \$       301.39       \$       4,310.06       -         42       TOTAL       \$       17,820.91       \$       (14,668.69)       \$       856.45       \$       4,008.67       \$       301.39       \$       4,310										-	-
40       TOTAL       \$ 44,163.13 \$ (9,480.27) \$ 11,777.33 \$ 46,460.19 \$ (5,005.85) \$ 41,454.34       -         Revenue Neutrality Uplift         41       RT Revenue Neutrality Uplift Amount       555.28 \$ 17,820.91 \$ (14,668.69) \$ 856.45 \$ 4,008.67 \$ 301.39 \$ 4,310.06       -         42       TOTAL       \$ 17,820.91 \$ (14,668.69) \$ 856.45 \$ 4,008.67 \$ 301.39 \$ 4,310.06       -         43       RT Misc Amount       555.25 \$ - \$ - \$ 10,876.97 \$ 10,876.97 \$ - \$ 10,876.97 \$ - \$ 10,876.97 \$ - \$ 10,876.97 \$ - \$ 10,876.97 \$ - \$ 10,876.97 \$ - \$ 10,876.97 \$ - \$ 10,876.97 \$ - \$ 5,814.87 \$										-	-
Revenue Neutrality Uplift         41       RT Revenue Neutrality Uplift Amount       555.28       \$ 17,820.91       \$ (14,668.69)       \$ 856.45       \$ 4,008.67       \$ 301.39       \$ 4,310.06       -         42       TOTAL       \$ 17,820.91       \$ (14,668.69)       \$ 856.45       \$ 4,008.67       \$ 301.39       \$ 4,310.06       -         42       TOTAL       \$ 17,820.91       \$ (14,668.69)       \$ 856.45       \$ 4,008.67       \$ 301.39       \$ 4,310.06       -         43       RT Misc Amount       555.25       \$ - \$ 10,876.97       \$ 10,876.97       -       \$ 10,876.97       -         44       RT Net Inadvertent Amount       555.27       \$ 8,540.79       \$ (1,765.58)       (960.34)       \$ 5,814.87       -       \$ 5,814.87       -         45       RT Uninstructed Deviation Amount       555.59       - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$										-	-
41       RT Revenue Neutrality Uplift Amount       555.28       17,820.91       (14,668.69)       856.45       4,008.67       301.39       4,310.06       -         42       TOTAL       \$ 17,820.91       \$ (14,668.69)       856.45       \$ 4,008.67       \$ 301.39       \$ 4,310.06       -         43       RT Misc Amount       555.27       \$ 8,540.79       \$ (1,765.58)       (960.34)       \$ 5,814.87       -       \$ 5,814.87       -         44       RT Net Inadvertent Amount       555.27       \$ 8,540.79       \$ (1,765.58)       (960.34)       \$ 5,814.87       -       \$ 5,814.87       -       <	40			\$ 44,163.13	\$ (9,480.27)	\$ 11,777.33	\$ 46,460.19	\$ (5,005.85) \$	41,454.34		-
42       TOTAL       \$ 17,820.91       \$ (14,668.69)       856.45       \$ 4,008.67       \$ 301.39       \$ 4,310.06       -         Other Charges			555.00	<b>A A7</b> 000 01	¢ (4.4.000.00)	<b>a a c a c c c c c c c c c c</b>	1 000 07	¢ 004.00 f	4.040.02		
Other Charges           43         RT Misc Amount         555.25         \$         \$         \$         \$         10,876.97         \$         \$         10,876.97         \$         \$         10,876.97         \$         \$         \$         10,876.97         \$ </td <td></td> <td></td> <td>555.28</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td>			555.28								-
43       RT Misc Amount       555.25       \$       -       \$       -       \$       10,876.97       \$       -       \$       10,876.97       -       \$       10,876.97       -       \$       10,876.97       -       \$       10,876.97       -       \$       10,876.97       -       \$       10,876.97       -       \$       10,876.97       -       \$       10,876.97 </td <td>42</td> <td></td> <td></td> <td>ψ 17,020.91</td> <td>Ψ (14,000.09)</td> <td>ψ 030.43</td> <td><i>φ</i> →,000.07</td> <td>ψ 301.39 \$</td> <td></td> <td>-</td> <td>-</td>	42			ψ 17,020.91	Ψ (14,000.09)	ψ 030.43	<i>φ</i> →,000.07	ψ 301.39 \$		-	-
44       RT Net Inadvertent Amount       555.27       \$ <ul> <li>8,540.79</li> <li>(1,765.58)</li> <li>(960.34)</li> <li>5,814.87</li> <li>-</li> <li>\$             <li>5,814.87</li> <li>-</li> <li>\$             <li>5,814.87</li> <li>-</li> <li>\$             <li>-</li> <li>-</li></li></li></li></ul>	43		555 25	\$ -	\$ -	\$ 10.876.07	\$ 10.876.07	\$	10 876 97	_	
45       RT Uninstructed Deviation Amount       555.31       \$       -										-	-
46       RT Demand Response Allocation Uplift Amount       555.59       \$       -       -										-	-
47       DA Ramp Product       555.63       \$       \$       (1,613.24)       \$       -       \$       (1,613.24)       \$       -       \$       (1,613.24)										-	-
48 RT Ramp Product 555.64 \$ 162.30 \$ (257.14) \$ - \$ (94.84) \$ - \$ (94.84) -										-	-
	48						• (.,•.•.=.)		(94.84)	-	-
	49	TOTAL							14,983.76	-	-

		De	atail of MISO Day	Otter Tail Power 2 Charges by Charge		onth - System				
				ugust 2018 includes	anv adjustments	onin - Oystein				
				aguet ze te metadee			REVISED OCT 2018	3		
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge type	es with
	ge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for I	Retail
ASM Charges										
RT ASM Non-Excessive		555.55	\$ 544,910.25						24,127	(10,85
RT ASM Excessive Ene	rgy Amount	555.56	\$ 54.80							(3
TOTAL			\$ 544,965.05	\$ (242,453.58)	\$ (0.30) \$	302,511.17	\$ (150,879.42)	\$ 151,631.75	24,127	(10,89
Grandfathered Charge Ty										
DA Congestion Rebate		555.05	\$ -	\$-	\$ - \$	-	\$-	\$ -	-	
DA Losses Rebate on C		555.06	\$-	\$-	\$ - \$	-	\$-	\$-	-	
RT Congestion Rebate		555.22	\$-	\$-	\$ - \$	-	\$-	\$-	-	
RT Loss Rebate on CO     TOTAL	GA	555.23	<u></u> -	\$ -	\$ - 9	-	\$ -	<u>\$</u> -	-	
TOTAL			ş -	ş -	ş - ş	-	ş -	ş -	-	
TOTAL MISO DAY 2 C	HARGES		\$ 11,816,885.18	\$ (10,280,826.46)	\$ 170,535.34 \$	1,706,594.06	\$ (820,020.79)	\$ 886,573.27	421,590	(374,80
Less: Schedule 16 &	17 (Lines 15, 16, 17)		\$ (52,774.09	)\$-	\$ 205.38 \$	(52,568.71)				
Less: Congestion and			¢ (02,111.00	) 🕈	\$ (16,035.11) \$					
	on sch., but still had output for current	month			\$ (715.85) \$					
Less: MISO RSG Bad		montai			\$ - \$					
TOTAL FOR	MN COST OF ENERGY ADJUSTMENT		\$ 11,764,111.09	\$ (10,280,826.46)	\$ 153,989.76 \$	1,637,274.39				
Net MISO Charges for F				\$ 1,637,274.39						
Net KWH for retail = ((G	i) + (H)) * 1,000			46,788,005						46,788,00
	e period of 7/24/2018 8/23/2018 ** incre	eased for los						N - 6 I 6	<b>T</b> - 4 - 1	
MISO Book Totals			Net Retail \$ 1.483.284.63	Net MISO KWH 46.788.005			per kWh \$ 0.03170	Net Intersystem \$ (820.971.15) \$	Total 662.313	
	A diversion of			-,,			φ 0.03170	\$ (820,971.15) \$		
Congestion and Losse MISO RSG Bad Debt	es Aujustment		\$ (16,035.11	)				- 5 r	(16,035.11)	
			\$ -	E 600 500			¢ 0.00000	φ - φ ¢ 050.00 ¢	-	
August Adjustments			\$ 170,024.87	5,699,562			\$ 0.02983	\$ 950.36 \$	170,975.23	
	er utility in Otter Tail's LBA		\$ 65,001.44	(1,708,267)			\$ 0.03352	¢ (000 000 70) ¢	017 050 60	
Total MISO			\$ 1,702,275.83	50,779,300			\$ 0.03352	\$ (820,020.79) \$	817,253.60	

		Det		Otter Tail Power ( Charges by Charge ( mber 2018 includes	Group for Current M	lonth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	with
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	etail
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss									
1	DA Asset Energy Amount			\$ (6,349,992.75)			\$ (1,012,471.30) \$		315,035	(270,153)
2	DA FBT Loss Amount				\$-\$		\$ - \$		-	-
3	DA Non-asset Energy Amount			\$ (109,195.65)					-	(3,899)
4	RT Asset Energy Amount		\$ 476,116.14						12,018	(7,653)
5 6	RT Distribution of Losses Amount RT FBT Loss Amount			\$ (100,636.80)					-	-
б 7					\$-9		\$ - \$		-	-
8	DA Loss Amount RT Loss Amount		\$ 346,060.41 \$ (3.276.08)		\$-9 \$-9				-	-
0 9			+ (-,=)		p - 3 S - 9			(-,,	-	-
9 10	RT Non-Asset Energy Amount DA Losses Rebate on Option B GFA				p - 3 S - 9		⊅ - ⊅ \$ - \$		0	-
11	TOTAL			\$ (6,741,446.37)					327.054	(281,705)
	Virtual Energy		÷ 3,200,004.21	+ (0,141,440.01) ·	÷ 100,201.10 q	.,	φ (1,012,411.30) φ		027,007	(201,100)
12	DA Virtual Energy Amount	555.12	\$ -	\$ -	\$ - \$	3 -	\$ - \$	_		_
13	RT Virtual Energy Amount				\$		φ - τ \$ - \$		-	_
14	TOTAL				s - s		\$-\$		-	-
	Schedules 16 & 17									
15	DA Mkt Admin Amount	555.01	\$ 45,497.35	\$ -	\$-\$	45,497.35	\$ 3,288.03 \$	48,785.38	-	-
16	RT Mkt Admin Amount		\$ 5,467.88		\$ (153.13) \$				-	-
17	FTR Mkt Admin Amount	555.13	\$ 1,590.08	\$ -	\$ - 9	5 1,590.08			-	-
18	TOTAL		\$ 52,555.31	\$	\$ (153.13) \$	5 52,402.18	\$ 4,932.24 \$	57,334.42	-	-
	Congest & FTRs									
19	DA FBT Congestion Amount	555.03			\$-\$		\$ - \$		-	-
20	DA Congestion		Ŧ	\$ 351,964.89			\$ - \$			
21	RT FBT Congestion Amount	555.20			\$-\$		\$ - \$		-	-
22	RT Congestion		\$ (115,435.35)		\$-\$					
23	FTR Hourly Allocation Amount			\$ (379,910.88)					-	-
24	FTR Monthly Allocation Amount			\$ (4,090.53)		(.,)		(.,)	-	-
25	FTR Yearly Allocation Amount		*		\$-9		\$ - \$		-	-
26	FTR Monthly Transaction Amount		*		\$-\$		\$ - \$		-	-
27	FTR Full Funding Guarantee Amount			\$ (4,442.03)				(	-	-
28	FTR Guarantee Uplift Amount		\$ 4,442.03						-	-
29	FTR Auction Revenue Rights Transaction Amount			\$ (290,247.61)					-	-
30	FTR Annual Transaction Amount			\$ (35,833.25)					-	-
31	FTR Auction Revenue Rights Infeasible Uplift Amount		\$ 13,214.72		\$				-	-
32	FTR Auction Revenue Rights Stage 2 Distribution Amount			\$ (23,323.33)	\$(0.06) \$ \$-			( , ,	-	-
33 34	DA Congestion Rebate on Option B GFA		\$ - \$ 407,885.20	\$						-
04	RSG & Make Whole Payments		÷ +07,000.20	÷ (000,022.00)	÷ (0.00) 4	, 17,302.31	Ψ - Ψ	17,302.31	-	-
35	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	\$ 4.389.89	\$ -	\$ (0.47) \$	4.389.42	\$ 448.06 \$	4.837.48	-	
36	DA Revenue Sufficiency Guarantee Distribution Amount			 \$ (1,831.73)	• • • • • •				-	-
30	RT Revenue Sufficiency Guarantee First Pass Distribution Amou			+ (.,)	s - 3 \$ 368.43 \$				-	
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount				\$		\$ (39,162.12) \$		-	
39	RT Price Volatility Make Whole Payment			\$ (10,433.89)					-	-
40	TOTAL		\$ 43,800.73						-	-
	Revenue Neutrality Uplift			. ( ,		. ,		( )		
41	RT Revenue Neutrality Uplift Amount	555.28	\$ 24,992.41	\$ (34,153.39)	\$ 12,165.11 \$	3,004.13	\$ 306.41 \$	3,310.54		-
42	TOTAL		\$ 24,992.41			3,004.13			-	-
	Other Charges									
43	RT Misc Amount	555.25	\$ -	\$-	\$ 20,846.14	20,846.14	\$ - \$	20,846.14	-	-
44	RT Net Inadvertent Amount		\$ 9,254.76	\$ (4,488.77)	\$ (11,514.08) \$	6,748.09)	\$ - \$	(6,748.09)	-	-
45	RT Uninstructed Deviation Amount		Ŧ		\$ - \$		\$ - \$		-	-
46	RT Demand Response Allocation Uplift Amount				\$-\$		\$ - \$		-	-
47	DA Ramp Product			\$ (2,419.23)					-	-
48	RT Ramp Product	555.64		\$ (785.97)					-	-
49	TOTAL		\$ 9,307.15	\$ (7,693.97)	\$ 9,332.06	5 10,945.24	ş - Ş	10,945.24	-	-

	Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group for Current Month - System September 2018 includes any adjustments														
		(A)	(B)		(C)	(D) Retail	(E)		(F)	(G)		(H)** Charge type			
		Acct	Retail Debits	Re	etail Credits	Adjustments	Net Retail	Ne	et Intersystem	Total		MWH for F	Retail		
	ASM Charges														
50		55.55 \$	765,303.41		(317,707.53)				15,580.35			37,342	(11,022		
51		55.56 \$	591.89		(41.56)				(142.65)		5.80	4	(110)		
52	TOTAL	\$	765,895.30	\$	(317,749.09)	\$ (50.75) \$	448,095.46	\$	15,437.70	\$ 463,533	5.16	37,346	(11,133)		
	Grandfathered Charge Types			<u>^</u>				<u>^</u>		<u>^</u>					
53 54		55.05   \$ 55.06   \$	-	\$	-	5 - 5 r	-	\$	-	\$	-	-	-		
54 55		55.22 \$	-	¢	-	p - Þ r r	-	¢	-	¢	-	-	-		
55 56		55.23 \$	-	¢	-	e - 9	-	¢	-	¢	-	-	-		
57	TOTAL	چ <u>ر 5.23</u>	-	\$	-	s - 5		ŝ		\$	-				
58 59 60 61 62	TOTAL MISO DAY 2 CHARGES Less: Schedule 16 & 17 (Lines 15, 16, 17) Less: Congestion and Losses Adjustment Less: No DA generation sch., but still had output for current mon Less: MISO RSG Bad Debt	<u>\$</u> \$	9,567,940.37 (52,555.31)		(7,503,231.07) -	\$ 151,868.95 \$ \$ 153.13 \$ \$ 30,336.18 \$ \$ - \$ \$ - \$	(52,402.18) 30,336.18 -		(1,030,715.99)	\$ 1,185,862	2.26	364,400	(292,838)		
63 64	TOTAL FOR MN COST OF ENERGY ADJUSTMENT Net MISO Charges for Retail = (B) + (C) + (D)	\$	9,515,385.06	\$ \$	(7,503,231.07) 2,194,512.25	\$ 182,358.26 \$	2,194,512.25								
65 66 67	Net KWH for retail = ((G) + (H)) * 1,000 September 2017 covers time period of 8/24/2018 9/20/2018 ** incre	eased for lo	osses of 2.8% Net Retail	Ne	71,561,711				per kWh	Net Intersys	tem	Total	71,561,711		
58	MISO Book Totals	\$	2,012,153.99		71,561,711			\$		\$ (1,031,995		980,159			
59 70	Congestion and Losses Adjustment MISO RSG Bad Debt	\$	30,336.18		,			Ť	0.02012	\$ \$	- \$ - \$	30,336.18			
71	September Adjustments	\$	152,022.08		5,455,763			\$	0.02786	\$ 1,279	9.37 \$	153,301.45			
72	Total MISO	\$	2,194,512.25		77,017,473			\$	0.02849	\$ (1,030,715	5.99) \$	1,163,796.26			

		De		Otter Tail Power ( Charges by Charge ( ber 2018 includes a	Group for Current N	Ionth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	with
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss									
1	DA Asset Energy Amount	555.02		\$ (6,305,495.97)			\$ (380,706.48) \$		414,519	(235,427)
2	DA FBT Loss Amount				\$ - \$		\$ - 5		-	-
3	DA Non-asset Energy Amount			\$ (127,743.64)		\$ (127,743.64)		(.=.,		(4,452)
4	RT Asset Energy Amount			\$ (249,519.88)					8,524	(10,031)
5 6	RT Distribution of Losses Amount RT FBT Loss Amount			\$ (120,649.65)				(.==,)	-	-
0 7	DA Loss Amount	555.ZI	\$- \$383,925.47		\$		\$ - S \$ - S		-	-
8	RT Loss Amount				s - 3		5 - 3 5 - 9		-	-
9	RT Non-Asset Energy Amount	555.26				137.86			- 5	-
10	DA Losses Rebate on Option B GFA				s - 5		\$ - S		5	
11	TOTAL	000.00		\$ (6,803,409.14)					423,048	(249,910)
	Virtual Energy		· ·	••••	·	· ·	,	· ·	•	
12	DA Virtual Energy Amount	555.12	\$ -	\$ -	\$-9	ş -	\$ - 5	· -	-	-
13	RT Virtual Energy Amount	555.32	\$ -	\$-	\$-\$	ş -	\$ - 5	- 6	-	-
14	TOTAL		\$ -	\$-	\$-\$	5 -	\$ - \$	-	-	-
	Schedules 16 & 17									
15	DA Mkt Admin Amount				\$ - \$				-	-
16	RT Mkt Admin Amount		\$ 5,481.92		\$ (36.01) \$				-	-
17 18	FTR Mkt Admin Amount TOTAL	555.13	\$ 1,235.28 \$ 73,148.70		\$				-	-
	Congest & FTRs		\$ 73,140.70	÷ -	ş (30.01) (	p 73,112.03	\$ 2,000.75	75,195.42	-	-
19	DA FBT Congestion Amount	555.03	\$ -	\$ -	\$ - \$	s -	\$ - 5			-
20	DA Congestion	000.00		\$						
21	RT FBT Congestion Amount	555.20	-	,			\$ - 5		-	-
22	RT Congestion									
23	FTR Hourly Allocation Amount	555.14		\$ (630,732.42)		(328,804.99)			-	-
24	FTR Monthly Allocation Amount	555.15	\$ -	\$ (8,801.54)	\$-9	(8,801.54)	\$ - 5	(8,801.54)	-	-
25	FTR Yearly Allocation Amount	555.17	\$-			ş -	\$ - 5	-	-	-
26	FTR Monthly Transaction Amount		-	\$ (48,810.63)		\$ (48,810.63)		( - / /	-	-
27	FTR Full Funding Guarantee Amount			\$ (18,918.08)		\$ (10,225.24)		(,==	-	-
28	FTR Guarantee Uplift Amount		\$ 18,918.08						-	-
29	FTR Auction Revenue Rights Transaction Amount			\$ (290,247.61)					-	-
30	FTR Annual Transaction Amount			\$ (35,833.25)		\$ 254,454.83			-	-
31 32	FTR Auction Revenue Rights Infeasible Uplift Amount FTR Auction Revenue Rights Stage 2 Distribution Amount		\$ 13,214.72 \$ -	\$- \$(23,323.33)		\$ 13,214.72 \$ (23,323.33)			-	-
32	DA Congestion Rebate on Option B GFA		» - Տ -	ຈ (∠ວ,ວ∠ວ.ວວ) ¢		,	5 - 3 5 - 9	( ., ,	-	-
33 34	TOTAL	555.07	\$ 683,520.39	\$ (618,840.23)		64.680.16				-
	RSG & Make Whole Payments		,			,		. ,		
35	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	\$ 8,220.51	\$ -	\$ (0.94) \$	8,219.57	\$ 326.63	8,546.20	-	-
36	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount			\$ (10,935.60)					-	-
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amou				\$ 1,344.25				-	-
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount				\$		\$ (10,155.71) \$		-	-
39	RT Price Volatility Make Whole Payment			\$ (9,354.29)		(9,354.29)				-
40	TOTAL Revenue Neutrality Uplift		\$ 28,152.70	\$ (20,289.89)	\$ 1,343.31 \$	9,206.12	\$ (9,562.43) \$	6 (356.31)	-	-
41	RT Revenue Neutrality Uplift Amount	555.28	\$ 77,099.77	\$ (22,210.29)	\$ 7,382.64	62,272.12	\$ 2,476.11	64,748.23	-	
41		000.20	\$ 77,099.77						-	-
	Other Charges	_	. ,		,	. ,	. ,	. ,		
43	RT Misc Amount	555.25	\$ 1,344.99	\$ -	\$ 9,263.68	\$ 10,608.67	\$ - 5	10,608.67	-	-
44	RT Net Inadvertent Amount			\$ (2,276.50)					-	-
45	RT Uninstructed Deviation Amount	555.31	\$ -	\$ -	\$-\$	5 -	\$ - 5	-	-	-
46	RT Demand Response Allocation Uplift Amount			\$ (0.92)					-	-
47	DA Ramp Product			\$ (1,108.95)		\$ (1,108.95)			-	-
48	RT Ramp Product	555.64		\$ (56.01)	<u>\$</u>		<u>\$</u> - \$		-	-
49	TOTAL		\$ 15,854.51	\$ (3,442.38)	\$ (92.59) \$	\$	ə - 5	5 12,319.54	-	-

Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group for Current Month - System October 2018 includes any adjustments															
	(A)		(B)		(C)		(D) Retail		(E)		(F)		(G)	(H)* Charge typ	
	Charge Type Description Acct		Retail Debits	F	Retail Credits	Adj	ustments	1	Net Retail	Ne	t Intersystem		Total	MWH for	
	ASM Charges														
0	RT ASM Non-Excessive Energy Amount 555.55	\$	344,807.95		(186,985.28)		- \$	5	157,822.67		(76,079.22)		81,743.45	14,634	(8,687
1	RT ASM Excessive Energy Amount 555.56	\$	24.33 344.832.28		(75.44)		- 9	5	(51.11)		(59.99)		(111.10)	14.634	(27
2	TOTAL	\$	344,832.28	\$	(187,060.72)	\$	- \$	>	157,771.56	\$	(76,139.21)	\$	81,632.35	14,634	(8,714
_	Grandfathered Charge Types	<u></u>		<u>^</u>		<u>^</u>				<u>^</u>		<u>^</u>			
3 4	DA Congestion Rebate on COGA 555.05 DA Losses Rebate on COGA 555.06	\$	-	\$	-	\$	- 4	5	-	\$	-	\$	-	-	
4 5	RT Congestion Rebate on COGA 555.22	¢	-	¢	-	¢ Ò	- 3	P	-	¢	-	¢	-	-	
6	RT Loss Rebate on COGA 555.22 RT Loss Rebate on COGA 555.23	¢ ¢	-	¢ ¢	-	¢ ¢	- 4	P 2	-	¢ ¢	-	φ ¢	-	-	
7	TOTAL	Š	-	Š	-	\$	- 5	5	-	Š	-	Š	-	-	
8 9 0 1 2	TOTAL MISO DAY 2 CHARGES Less: Schedule 16 & 17 (Lines 15, 16, 17) Less: Congestion and Losses Adjustment Less: No DA generation sch., but still had output for current month Less: MISO RSG Bad Debt	\$ \$	12,994,269.29 (73,148.70)		(7,655,252.65)	\$ \$ \$ \$ \$	116,628.59 \$ 36.01 \$ 790.76 \$ (553.47) \$ - \$	6	5,455,645.23 (73,112.69) 790.76 (553.47) -	\$	(461,851.28)	\$	4,993,793.95	437,682	(258,624
3	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$	12,921,120.59	\$	(7,655,252.65)	\$	116,901.89 \$	5	5,382,769.83						
4 5	Net MISO Charges for Retail = (B) + (C) + (D) Net KWH for retail = $((G) + (H)) * 1,000$			\$	<b>5,382,769.83</b> 179,058,018										179,058,018
6 7	October 2017 covers time period of 9/21/2018 10/23/2018 ** increased for	or loss	es of 2.8% Net Retail	N	let MISO KWH						per kWh	Ne	t Intersystem	Total	
8	MISO Book Totals	\$	5,265,867.94		179,058,018					\$	•	\$	(462,198.28) \$	4,803,670	
9	Congestion and Losses Adjustment	\$	790.76									\$	- \$	790.76	
0	MISO RSG Bad Debt	\$	-									\$	- \$	-	
1	October Adjustments	\$	116,111.13		4,617,996					\$	0.02514	\$	347.00 \$	116,458.13	
2	Total MISO	\$	5,382,769.83		183,676,014					\$	0.02931	\$	(461,851.28) \$	4,920,918.55	

		De		Otter Tail Power ( Charges by Charge ( mber 2018 includes	Group for Current M	Ionth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	s with
_	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss									
1	DA Asset Energy Amount	555.02		\$ (6,949,121.29)			\$ (224,838.08)		444,098	(245,498)
2	DA FBT Loss Amount	555.04			\$-\$		\$ - 5		-	-
3	DA Non-asset Energy Amount			\$ (142,469.81)					-	(4,545)
4 5	RT Asset Energy Amount RT Distribution of Losses Amount	555.19 555.24	\$ 439,404.82 \$ 2,191.56						16,740	(7,423)
5 6	RT FBT Loss Amount	555.24 555.21			\$ (12,418.01) \$ \$ - \$		\$ - 3 \$ - 9	(	-	-
7	DA Loss Amount	555.21	\$ 349,694.97		s - 3 \$ - 9				-	-
8	RT Loss Amount				9 - 3 S - 9		s - 3		-	-
9	RT Non-Asset Energy Amount	555.26			s - 9				-	-
10	DA Losses Rebate on Option B GFA	555.08			s - 5		\$ - 5		0	
11	TOTAL	000.00		\$ (7,477,147.92)					460,838	(257,466)
	Virtual Energy		<u> </u>	. () / /	. , .	· , ,		<u> </u>	· ·	
12	DA Virtual Energy Amount	555.12	\$-	\$ -	\$-\$	5 -	\$ - \$	<u> </u>	-	-
13	RT Virtual Energy Amount	555.32	\$ -	\$ -	\$ - \$	5 -	\$ - 5	- 3	-	-
14	TOTAL		\$ -	\$ -	\$ - \$	<b>6</b> -	\$ - 5	; <u>-</u>	-	-
	Schedules 16 & 17									
15	DA Mkt Admin Amount	555.01			\$-9				-	-
16	RT Mkt Admin Amount	555.18	\$ 8,845.40		\$ (75.87) \$				-	-
17	FTR Mkt Admin Amount	555.13	\$ 906.24		\$\$				-	-
18	TOTAL		\$ 89,213.98	\$-	\$ (75.87) \$	\$ 89,138.11	\$ 3,025.34	5 92,163.45	-	-
	Congest & FTRs		•	•		•	•			
19	DA FBT Congestion Amount	555.03			\$-\$		\$ - 5		-	-
20 21	DA Congestion	FFF 00	7	\$ 88,366.18						
	RT FBT Congestion Amount	555.20	+		\$-9		\$ - 9		-	-
22 23	RT Congestion FTR Hourly Allocation Amount	555.14			\$-\$ \$(14.08)\$					
23 24	FTR Monthly Allocation Amount			\$ (134,103.41) \$ (13,054.46)					-	-
24 25	FTR Yearly Allocation Amount				9 14.00 4 \$ - 9		s - 3	(,)	-	-
26	FTR Monthly Transaction Amount	555.35			9 - 3 S - 9		\$ - 3 \$ - 5		-	-
20	FTR Full Funding Guarantee Amount	555.36		\$ (5,422.36)			\$ - S			-
28	FTR Guarantee Uplift Amount	555.37	\$ 5,422.36						-	-
29	FTR Auction Revenue Rights Transaction Amount	555.39		\$ (290,247.61)				( )		
30	FTR Annual Transaction Amount			\$ (35,833.25)						-
31	FTR Auction Revenue Rights Infeasible Uplift Amount		\$ 13,214.72		\$-9				-	-
32	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41		\$ (23,323.33)					-	-
33	DA Congestion Rebate on Option B GFA	555.07	\$ -	\$ -	s - 9		\$ - 5		-	-
33 34	TOTAL		\$ 412,833.19	\$ (426,762.86)	\$ (0.00) \$			(13,929.67)	-	-
	RSG & Make Whole Payments									
35	DA Revenue Sufficiency Guarantee Distribution Amount		1		\$ (100.79) \$	, , ,			-	-
36	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11		\$ (4,126.44)					-	-
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amou	555.29			\$ (3,359.70) \$				-	-
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30			\$-\$		\$ (19,672.68) \$		-	-
39	RT Price Volatility Make Whole Payment	555.42		\$ (3,840.67)					-	-
40	TOTAL Bevenue Neutrolity Unlift		\$ 64,361.45	\$ (7,967.11)	\$ (3,461.96) \$	52,932.38	\$ (17,537.48) \$	5 35,394.90	-	-
	Revenue Neutrality Uplift RT Revenue Neutrality Uplift Amount	EEE 00	¢ 05.500.50	¢ (E 004 44)	¢ 46.400.70 4	40.040.40	¢ 4.044.04 1	47,000,00		
41 42	TOTAL	555.28	\$ 35,530.53 \$ 35.530.53							-
	Other Charges		÷ 55,550.55	• (0,001.11)	· 10,102.70 4		ψ 1,511.04 C	1,323.02	-	-
43	RT Misc Amount	555.25	\$ -	\$ -	\$ 18,720.68	18,720.68	\$ - 5	18,720.68		
43	RT Net Inadvertent Amount	555.27		\$ (4,433.43)						-
44	RT Uninstructed Deviation Amount	555.31			\$ (0,091.19) 4 \$ - \$		\$ - 5		-	-
46	RT Demand Response Allocation Uplift Amount	555.59			\$ (0.02) \$				-	_
47	DA Ramp Product	555.63		\$ (492.69)					-	_
48	RT Ramp Product	555.64		\$ (106.51)				( )	-	_
49	TOTAL		\$ 2,015.15					5 10,111.99	-	-
			,	(,,,)	,			.,		

Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group for Current Month - System November 2018 includes any adjustments														
	(A)		(B)		(C)		(D) Retail	(E)		(F)		(G)	(H)** Charge typ	
	Charge Type Description Acct		Retail Debits	F	Retail Credits	Ac	djustments	Net Retail	Ne	et Intersystem	1	Total	MWH for	
	ASM Charges													
C	RT ASM Non-Excessive Energy Amount 555.55		1,011,241.54		(185,525.27)		(34.25) \$	825,682.02		(166,027.33)		659,654.69	36,652	(7,479
1	RT ASM Excessive Energy Amount 555.56	\$	13.66		(5.07)		- \$	8.59		(286.06)		(277.47)	32	(34
2	TOTAL	\$	1,011,255.20	\$	(185,530.34)	\$	(34.25) \$	825,690.61	\$	(166,313.39)	\$ 6	659,377.22	36,683	(7,82
_	Grandfathered Charge Types													
5	DA Congestion Rebate on COGA 555.05		-	\$	-	\$	- \$	-	\$	-	\$	-	-	
	DA Losses Rebate on COGA 555.06		-	\$	-	\$	- \$	-	\$	-	\$	-	-	
5	RT Congestion Rebate on COGA 555.22		-	\$	-	\$	- \$	-	\$	-	\$	-	-	
;	RT Loss Rebate on COGA 555.23 TOTAL	5	-	\$	-	\$	- \$	-	\$	-	\$	-	-	
1	IUIAL	þ	-	Þ	-	¢	- Þ	-	Þ	-	Þ	-	-	
;	TOTAL MISO DAY 2 CHARGES	\$	15,451,626.56	\$	(8,108,121.97)	\$	194,554.55 \$	7,538,059.14	\$	(403,751.97)	\$    7,′	134,307.17	497,522	(265,29
	Less: Schedule 16 & 17 (Lines 15, 16, 17)	\$	(89,213.98)	\$	-	\$	75.87 \$	(89,138.11	)					
)	Less: Congestion and Losses Adjustment					\$	(6,539.07) \$	(6,539.07	)					
	Less: No DA generation sch., but still had output for current month					\$	(7,763.67) \$	(7,763.67	)					
2	Less: MISO RSG Bad Debt					\$	- \$	-						
3	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$	15,362,412.58	\$	(8,108,121.97)	\$	180,327.68 \$	7,434,618.29						
5	Net MISO Charges for Retail = (B) + (C) + (D) Net KWH for retail = ((G) + (H)) * 1,000			\$	<b>7,434,618.29</b> 232,227,796									232,227,79
; ,	November 2017 covers time period of 10/24/2018 11/22/2018 ** increas	ed for	losses of 2.8% Net Retail	N	let MISO KWH					per kWh	Net In	tersystem	Total	
3	MISO Book Totals	\$	7,254,290.61		232,227,796				\$			404,396.42) \$	6,849,894	
	Congestion and Losses Adjustment	\$	(6,539.07)		. ,						\$	- \$	(6,539.07)	
	MISO RSG Bad Debt	\$	-								\$	- \$	-	
	November Adjustments	\$	186,866.75		6,615,623				\$	0.02825	\$	644.45 \$	187,511.20	
	Total MISO	S	7,434,618.29		238,843,419				\$	0.03113	\$ (4	403,751.97) \$	7,030,866.32	

		De		Otter Tail Power ( Charges by Charge ( mber 2018 includes	Group for Current M	Ionth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	with
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	ətail
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss									
1	DA Asset Energy Amount	555.02		\$ (12,518,753.70)		\$ 3,128,884.49			531,608	(429,775)
2	DA FBT Loss Amount	555.04				•	\$ - 9		-	-
3	DA Non-asset Energy Amount			\$ (173,357.44)		\$ (173,357.44)		. (	-	(5,580)
4 5	RT Asset Energy Amount RT Distribution of Losses Amount	555.19 555.24		\$ (463,840.07) \$ (269,785.08)					6,032	(16,016)
5	RT FBT Loss Amount	555.24 555.21					» - 3 \$ - 9		-	-
7	DA Loss Amount	555.21	\$ 755,046.78			• - \$ 755,046.78			-	-
8	RT Loss Amount						\$ - 9			
9	RT Non-Asset Energy Amount	555.26				\$ 129.50			6	-
10	DA Losses Rebate on Option B GFA	555.08	\$ -	\$ -	\$ - 9		\$ - 9	; -	-	-
11	TOTAL		\$ 16,611,425.40	\$ (13,425,736.29)	\$ 247,741.11	\$ 3,433,430.22	\$ (205,080.16) \$	5 3,228,350.06	537,646	(451,370)
	Virtual Energy									
12	DA Virtual Energy Amount		<b>T</b>			•	\$ - 9		-	-
13	RT Virtual Energy Amount	555.32	Ŧ	7	Ŧ	7	\$ - \$		-	-
14	TOTAL		<u>\$</u> -	\$ -	\$	\$-	\$ - \$	-	-	
	Schedules 16 & 17			•	•					
15 16	DA Mkt Admin Amount					\$ 88,731.48			-	-
16	RT Mkt Admin Amount FTR Mkt Admin Amount		\$ 6,173.48 \$ 1.302.48			\$			-	-
18	TOTAL	555.15	\$ 1,302.48 \$ 96,207.44		\$					
10	Congest & FTRs		• • • • • • • • • • • • • • • • • • • •	Ŷ	• • • • • • •	\$ 55,544.15	• 1,400.00 •	01,004.00		
19	DA FBT Congestion Amount	555.03	\$ -	\$ -	\$ - 3	\$ -	\$ - \$	-		
20	DA Congestion	000.00		<b>T</b>	<b>T</b>	Ŧ	\$ - 9			
21	RT FBT Congestion Amount	555.20	+				\$ - 9		-	-
22	RT Congestion		\$ (16,022.42)	\$ -	s - s	\$ (16,022.42)	\$ - 9	(16,022.42)		
23	FTR Hourly Allocation Amount	555.14	\$ 69,942.04	\$ (198,967.95)	\$ - 3	\$ (129,025.91)	\$ - 9	6 (129,025.91)	-	-
24	FTR Monthly Allocation Amount	555.15	\$ -	\$ (5,704.06)	\$	\$ (5,704.06)	\$ - \$	(5,704.06)	-	-
25	FTR Yearly Allocation Amount	555.17	\$-	\$ -	\$-3	\$ -	\$ - \$	-	-	-
26	FTR Monthly Transaction Amount	555.35	•				\$ - 9		-	-
27	FTR Full Funding Guarantee Amount	555.36		\$ (9,896.24)		\$ (4,202.07)			-	-
28	FTR Guarantee Uplift Amount	555.37		\$ (5,673.89)		\$ 4,222.36			-	-
29	FTR Auction Revenue Rights Transaction Amount	555.39		\$ (137,258.27)		\$ (120,228.93)			-	-
30 31	FTR Annual Transaction Amount FTR Auction Revenue Rights Infeasible Uplift Amount			\$ (17,906.97)		\$ 120,228.57 \$ 4,346.42			-	-
31	FTR Auction Revenue Rights Inteasible Oplift Amount FTR Auction Revenue Rights Stage 2 Distribution Amount	555.40 555.41							-	-
32	DA Congestion Rebate on Option B GFA	555.07	5 - S -	\$ (29,486.61) \$ -		( , , , , , , , , , , , , , , , , , , ,	ъ - ч \$ - 9	( , , ,	-	-
34	TOTAL	333.07	\$ 229,021.33	\$ (310,368.32)					-	
	RSG & Make Whole Payments	_	,	,			· ·	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
35	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	\$ 18,854.59	\$ -	\$ (7.76)	\$ 18,846.83	\$ 607.18	5 19,454.01	-	-
36	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount			\$ (385.60)			\$ - 9	(385.60)	-	-
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amou	555.29	\$ 20,715.12		\$ 2,394.40				-	-
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30					\$ (16,626.27) \$		-	-
39	RT Price Volatility Make Whole Payment	555.42		\$ (6,481.33)					-	-
40	TOTAL Beverne Neutrolity Unlift		\$ 39,569.71	\$ (6,866.93)	\$ 2,387.96	\$ 35,090.74	\$ (15,483.44) \$	5 19,607.30	•	-
	Revenue Neutrality Uplift	555.00	<b>*</b> 70.450.00	(04.054.00)	A 507 50 Y	50.445.00	¢ 4.000.40	00.000.00		
41 42	RT Revenue Neutrality Uplift Amount TOTAL	555.28	\$ 78,159.30 \$ 78,159.30						-	
42	Other Charges		φ /0,133.30	φ (21,251.00)	φ 1,007.00	φ <u> </u>	φ 1,005.40 3	, 00,323.20	-	
43	RT Misc Amount	555.25	\$ -	\$ -	\$ 42,071.83	\$ 42,071.83	\$ - 9	42,071.83		
44	RT Net Inadvertent Amount	555.27		\$ (4,585.38)					-	
45	RT Uninstructed Deviation Amount	555.31					\$ - 9		_	
46	RT Demand Response Allocation Uplift Amount	555.59			\$ 0.16				-	-
47	DA Ramp Product	555.63	•	\$ (305.40)		\$ (305.40)			-	-
48	RT Ramp Product	555.64		\$ (94.21)		\$ (90.15)			-	-
49	TOTAL		\$ 15,907.51	\$ (4,984.99)	\$ 40,044.89	\$ 50,967.41	\$ - \$	50,967.41	-	

		Deta		Charges I	oy Charge G	roup for Current M	Ionth - System	Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group for Current Month - System December 2018 includes any adjustments														
	(A	)	(B)	(0	2)	(D) Retail	(E)		(F)	(G)	1	(H)* Charge typ										
	Charge Type Description Ac	ct	Retail Debits	Retail	Credits	Adjustments	Net Retail	Ne	et Intersystem	Tota	al	MWH for	Retail									
Α	ASM Charges																					
	RT ASM Non-Excessive Energy Amount 555.		689,583.35		\$8,157.94) \$				(191,731.32)		863.04	27,976	(9,46									
	RT ASM Excessive Energy Amount 555.	56 \$	5.66		(32.28) \$				(533.77)		550.54)		(6									
	TOTAL	\$	689,589.01	\$ (26	58,190.22) \$	5 2,178.80	\$ 423,577.59	\$	(192,265.09)	\$ 231	312.50	27,976	(9,53									
G	Grandfathered Charge Types																					
	DA Congestion Rebate on COGA 555.		-	\$	- \$	-	\$-	\$	-	\$	-	-										
	DA Losses Rebate on COGA 555.		-	\$	- \$		\$-	\$	-	\$	-	-										
	RT Congestion Rebate on COGA 555.		-	\$	- \$	-	\$-	\$	-	\$	-	-										
	RT Loss Rebate on COGA 555.	23 \$	-	\$	- \$	-	<u>\$</u> -	\$	-	\$	-	-										
	TOTAL	\$	-	\$	- \$	-	\$ -	\$	-	\$	-	-										
	TOTAL MISO DAY 2 CHARGES	\$	17,759,879.70	\$ (14,03	57,397.75) \$	294,424.82	\$ 4,016,906.77	\$	(409,505.33)	\$ 3,607	401.44	565,622	(460,90									
	Less: Schedule 16 & 17 (Lines 15, 16, 17)	\$	(96,207.44)	\$	- \$	(337.29)	\$ (96,544.73)															
	Less: Congestion and Losses Adjustment		(	*	\$	(14,895.56)																
	Less: No DA generation sch., but still had output for current month				ę.	(70,454.26)																
	Less: MISO RSG Bad Debt				\$		\$ (**,****)															
	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$	17,663,672.26	\$ (14,03	7,397.75) \$	208,737.71	\$ 3,835,012.22															
	Net MISO Charges for Retail = (B) + (C) + (D) Net KWH for retail = ((G) + (H)) * 1,000				<b>35,012.22</b> 1,718,427								104.718.42									
				10-	,110,421								104,710,42									
	December 2017 covers time period of 11/23/2018 12/25/2018 ** incre	ased for	losses of 2.8%																			
	,		Net Retail	Net MIS	о кwн				per kWh	Net Inters	svstem	Total										
	MISO Book Totals	\$	3,626,274.51		1,718,427			\$			626.59) \$	3,216,648										
	Congestion and Losses Adjustment	\$	(14,895.56)							\$	- \$	(14,895.56)										
	MISO RSG Bad Debt	\$	-							\$	- \$	-										
	December Adjustments	\$	223,633.27	8	3,534,771			\$	0.02620	\$	121.26 \$	223,754.53										
	Total MISO	Ś	3,835,012.22		3,253,197			¢	0.03386	\$ (409	505.33) \$	3,425,506.89										

		De		Otter Tail Power ( Charges by Charge ( uary 2019 includes a	Group for Current N	Ionth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	s with
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for R	
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss									
1	DA Asset Energy Amount	555.02		\$ (8,810,149.35)		, . , .			492,660	(361,704)
2	DA FBT Loss Amount	555.04					\$ - \$		-	-
3	DA Non-asset Energy Amount	555.09 555.19		\$ (113,446.83)		§ (113,446.83)			-	(4,998)
4 5	RT Asset Energy Amount RT Distribution of Losses Amount	555.19 555.24		\$ (244,908.38) \$ (217.603.92)					10,311	(9,664)
5 6	RT FBT Loss Amount	555.24 555.21			\$ (12,141.61) \$ \$ - \$		\$ - 3	. (,,	-	-
7	DA Loss Amount	555.21	\$ 569,498.14			569,498.14			-	-
8	RT Loss Amount					9,109.23			-	-
9	RT Non-Asset Energy Amount	555.26		\$ (9.64)		§ (9.64)				(1)
10	DA Losses Rebate on Option B GFA	555.08	•	()	φ \$		φ - 9 \$ - 9	()	-	(1)
11	TOTAL	000.00		\$ (9,386,118.12)					502,970	(376,367)
	Virtual Energy		· ·	••••	·	· ·	• • •	· ·	·	
12	DA Virtual Energy Amount	555.12	\$ -	\$ -	\$	ş -	\$ - 9	; -	-	-
13	RT Virtual Energy Amount	555.32	\$-	\$-	\$	ş -	\$ - \$	-	-	-
14	TOTAL		\$ -	\$-	\$	-	\$ - \$	-	-	-
	Schedules 16 & 17									
15	DA Mkt Admin Amount	555.01	\$ 50,841.13		\$ - \$				-	-
16	RT Mkt Admin Amount	555.18	\$ 4,006.15		\$ 318.02				-	-
17	FTR Mkt Admin Amount	555.13	\$ 2,038.00		\$ - 3	L,000.00			-	-
18	TOTAL Congest & FTRs		\$ 56,885.28	\$-	\$ 318.02	57,203.30	\$ 793.62	5 57,996.92	-	-
19	DA FBT Congestion Amount	555.03	¢	¢	¢ (	1	¢ (1)	<b>、</b>		
20	DA FBT Congestion Amount DA Congestion	555.05		\$- \$238,305.85			\$-\$ \$-9		-	-
20	RT FBT Congestion Amount	555.20	<b>T</b>				s - 9			
22	RT Congestion	333.20	•			26,692.40			_	-
23	FTR Hourly Allocation Amount	555.14		\$ (389,632.06)		(276,556.29)			-	-
24	FTR Monthly Allocation Amount			\$ (10,414.07)		\$ (10,414.07)			-	_
25	FTR Yearly Allocation Amount			\$ (25,712.96)		\$ (25,712.96)			-	_
26	FTR Monthly Transaction Amount	555.35	•	, , , , , ,		( .,,	\$ - 9	. (==;=.=.)	-	-
27	FTR Full Funding Guarantee Amount	555.36		\$ (13,144.00)		- 5 21.847.02		21.847.02	-	-
28	FTR Guarantee Uplift Amount	555.37	\$ 13,144.00			(20,444.89)	\$ - 9	(20,444.89)	-	-
29	FTR Auction Revenue Rights Transaction Amount	555.39	\$ 17,029.34	\$ (137,258.27)	\$ - 9	(120,228.93)	\$ - 9	(120,228.93)	-	-
30	FTR Annual Transaction Amount	555.38	\$ 138,135.54	\$ (17,906.97)	\$ - 5	120,228.57	\$ - 9	120,228.57	-	-
31	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	\$ 4,346.94		\$ 1.04 \$				-	-
32	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	\$ 0.01	\$ (29,396.50)	\$ 452.85	\$ (28,943.64)	\$ - 9	(28,943.64)	-	-
33 34	DA Congestion Rebate on Option B GFA	555.07		\$-	\$		\$ - 9		-	-
	TOTAL		\$ 347,415.02	\$ (418,747.94)	\$ 453.96	6 (70,878.96)	\$ - 9	6 (70,878.96)	-	-
	RSG & Make Whole Payments	EEE 40	¢ 0.040.07	¢	¢ (40.00) (	0.007.45	¢ 044.00 1	0.440.04		
35	DA Revenue Sufficiency Guarantee Distribution Amount				\$ (40.82) \$				-	-
36 37	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Revenue Sufficiency Guarantee First Pass Distribution Amou	555.11 555.29	•	\$ (732.33) \$ -					-	-
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amou RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.29 555.30			\$		\$ (12,638.10) \$		-	-
38 39	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Price Volatility Make Whole Payment	555.30 555.42	•	\$- \$(8,916.37)					-	-
40		000.42	\$ 21,293.34						-	-
	Revenue Neutrality Uplift	_		÷ (0,010110)			÷ (,			
41	RT Revenue Neutrality Uplift Amount	555.28	\$ 28,059.17	\$ (20,408.83)	\$ 1,739.23	9,389.57	\$ 255.24 \$		-	-
42	TOTAL		\$ 28,059.17						-	-
	Other Charges									
43	RT Misc Amount	555.25			\$ 25,643.70				-	-
44	RT Net Inadvertent Amount	555.27		\$ (7,711.25)				(., )	-	-
45	RT Uninstructed Deviation Amount	555.31	<b>T</b>		\$ - 5		\$ - \$		-	-
46	RT Demand Response Allocation Uplift Amount	555.59			\$ 0.02 \$				-	-
47	DA Ramp Product	555.63	<b>T</b>	\$ (381.76)		6 (381.76)			-	-
48	RT Ramp Product	555.64	\$ 1.71 \$ 8,846.98	\$ (214.49)				<u>(212.78)</u> 21,288.44	-	-
49	TOTAL		ə 0,040.98	\$ (8,307.50)	<b>φ ∠0,/40.9</b> 6 \$	₽ 21,200.44	φ - 3	21,200.44	-	-

	Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group for Current Month - System January 2019 includes any adjustments													
	(A)		(B)		(C)	(D) Retail		(E)		(F)		(G)	(H)* Charge typ	
	Charge Type Description Acct	I	Retail Debits	F	Retail Credits	Adjustments		Net Retail	Ne	t Intersystem		Total	MWH for	
	ASM Charges													
50	RT ASM Non-Excessive Energy Amount 555.55	\$	849,572.89		(60,396.40)		7)\$	789,104.32		(268,917.64)		520,186.68	36,057	(3,169)
51	RT ASM Excessive Energy Amount 555.56 TOTAL	<u></u>	4.86 849.577.75		(318.00) \$		<u>\$</u>	(313.14) 788.791.18		(298.58)		(611.72) 519.574.96	36.057	(125) (3,294)
52	Grandfathered Charge Types	¢	649,577.75	þ	(60,714.40)	o (72.1	() <b>ə</b>	/00,/91.10	Þ	(209,210.22)	Þ	519,574.96	36,057	(3,294)
		<u>^</u>		<b>^</b>	4	<b>、</b>	¢		¢		¢			
53 54	DA Congestion Rebate on COGA 555.05 DA Losses Rebate on COGA 555.06	\$ \$	-	¢	- 3		\$ ¢	-	\$	-	\$ ¢	-	-	-
54 55	RT Congestion Rebate on COGA 555.22	¢	-	¢	- 3	-	¢ Ò	-	¢	-	¢	-	-	-
55 56	RT Loss Rebate on COGA 555.22 RT Loss Rebate on COGA 555.23	¢ ¢	-	¢ ¢	- 3	-	¢ ¢	-	ф Ф	-	φ ¢	-	-	-
57	TOTAL	ŝ	-	\$		-	ŝ	-	\$	-	\$	-		-
58 59 60 61 62	TOTAL MISO DAY 2 CHARGES Less: Schedule 16 & 17 (Lines 15, 16, 17) Less: Congestion and Losses Adjustment Less: No DA generation sch., but still had output for current month Less: MISO RSG Bad Debt	\$	14,057,145.62 (56,885.28)		(9,903,945.49) { - { } ; ; ; ; ;	371,992.8           (318.0           (5,637.7           (393.1	2) \$ 0) \$	4,525,192.96 (57,203.30) (5,637.70) (393.16)	\$	(293,875.59)	\$	4,231,317.37	539,027	(379,661)
63	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$	14,000,260.34	\$	(9,903,945.49)	365,643.9	5\$	4,461,958.80						
64 65	Net MISO Charges for Retail = (B) + (C) + (D) Net KWH for retail = ((G) + (H)) $*$ 1,000			\$	<b>4,461,958.80</b> 159,366,385									159,366,385
66 67	January 2017 covers time period of 12/26/2018 1/23/2019 ** increased for	r loss	es of 2.8% Net Retail	N	let MISO KWH					per kWh	No	t Intersystem	Total	
68	MISO Book Totals	\$	4.096.314.85	IN	159.366.385				\$	0.02570	\$	(295,106.61) \$	3.801.208	
69	Congestion and Losses Adjustment	\$	(5,637.70)		100,000,000				Ψ	0.02010	ŝ	- \$	(5,637.70)	
70	MISO RSG Bad Debt	ŝ	-								\$	- \$	-	
71	January Adjustments	ŝ	371,281.65		10.543.107				\$	0.03522	\$	1.231.02 \$	372,512.67	
72	Total MISO	Š	4,461,958.80		169,909,492				Š	0.02626	Š		4,168,083.21	

International Construction         International Constructin         International Construction			De		Otter Tail Power ( Charges by Charge ( uary 2019 includes	Group for Current M	Ionth - System					
Charge Type Description         Acct         Relail Corell         Match Teacher Market Entry Accus         Note Relail         Net Relai         Net Relail         Net			(A)	(B)	(C)		(E)	(F)	(G)		with	
1         DA Assel Energy Anount         55:02         8         101, 75:04:30         5         6			Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total			
2         D         APT Lose Amount         55.04         S	No.											
3         D         Non-asset Energy Anount         55:09         \$         (12,503.49)         .         \$         (12,503.49)         .         \$         (12,503.49)         .         \$         (12,503.49)         .         \$         (12,503.49)         .         .         \$         (12,503.49)         .         .         \$         (12,503.49)         .         \$         (12,503.49)         .         \$         (12,503.49)         \$         (12,503.49)         \$         (12,503.49)         \$         (12,503.49)         \$         (12,503.49)         \$         \$         (12,503.49) </td <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>518,268</td> <td>(350,034)</td>	1									518,268	(350,034)	
4       PT Asset Energy Amount       550.10       \$         \$             100, 150.203       \$             (180,442.35)       \$										-	-	
6       PT Delabilition of Losse Amount       552.24       \$ 3.065.35       \$ (342,7194) \$ (322,7194) \$5       \$ (322,7194) \$5 </td <td></td>												
6       PT FT BT Los Amount       55.21       \$ <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5,271</td> <td>(20,825)</td>										5,271	(20,825)	
7       DA Loss Amount       8       091.448.56       \$       -       \$       091.448.56       \$       -       \$       01.448.56       \$       -       \$       0550.06       \$       -       \$       5550.06       \$       -       \$       5550.06       \$       -       \$       5550.06       \$       -       \$       5550.06       \$       -       \$       5550.06       \$       -       \$       5550.06       \$       5500.06       \$       -       \$       5550.05       \$       5520.56       \$       5233.36       7523.588       7535.785       7523										-	-	
6       RT Loss Amount       55:00 - 8       -       5       -       5       5       5:00 - 8       - <t< td=""><td></td><td></td><td>555.21</td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>-</td></t<>			555.21							-	-	
9         FI Non-Asset Energy Amount         555.20         8         . <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>-</td></t<>										-	-	
10       D A Losses Rehate: "Option B GFA       55.08       5       5       5       5       5       7       5       5       7       7			555.00							-	-	
11       077L       \$ 17,288,320.33       \$ (21,786,866.83)       \$ 226,350.45       \$ 5,323,305.17       \$ 523,538       (376,009)         12       DA Vitual Energy Amount       655.12       \$				•			r			-	-	
Unital Energy         Image: Control of the contr			555.06							523 538	(376.009)	
12       DA Virtual Energy Anount       555.12       \$       <			_	+,200,020.00	+ (.1,100,000.00)	÷ 220,000.40 q	,010,0004.00	÷ (÷,000.00) (	,	020,000	(07 0,000)	
13       RT Virtual Energy Anount       555.2       \$ <t< td=""><td></td><td></td><td>555 12</td><td>\$ -</td><td>\$ -</td><td>\$ - 9</td><td>- â</td><td>\$ - 9</td><td>3 -</td><td></td><td></td></t<>			555 12	\$ -	\$ -	\$ - 9	- â	\$ - 9	3 -			
14       170 TAL       \$<		RT Virtual Energy Amount								-		
15       DA Mik Admin Amount       555.01 \$       696.83.37 \$       -       \$       -       \$       586.83.37 \$       10.16 \$       58.648.53 -       -       -       -       -       17       FTR Mik Admin Amount       555.18 \$       1.004.80 \$       -       \$       1.084.80 \$       -       \$       1.084.80 \$       -       \$       1.084.80 \$       -       \$       1.084.80 \$       -       \$       1.084.80 \$       -       \$       1.084.80 \$       -       \$       1.084.80 \$       -       \$       1.084.80 \$       -       \$       1.084.80 \$       -       \$       1.084.80 \$       -       \$       1.084.80 \$       -       \$       1.084.80 \$       -       \$       1.084.80 \$       -       \$       -       -       -       0.087.81 \$       0.087.81 \$       0.84.80 \$       -       \$       1.084.80 \$       -       \$       -       -       -       0.087.81 \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       -       \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       0.081.81 \$       0.081							5 -	\$ - 5	-	-	-	
16       RT Mit Admin Amount       555.18       \$         5,022.8       \$         4,674.95       \$         77.249       \$         5,327.93       -       -         18       TOTAL       \$         464.85.43       \$         -       \$         1.084.80       -       -       1.084.80       -       -       1.084.80       -       -       1.084.80       -       -       1.084.80       -       -       1.084.80       -       -       1.084.80       -       -       1.084.80       -       -       1.084.80       -       -       1.084.80       -       -       1.084.80       -       -       1.084.80       -       -       1.084.80       -       -       1.084.80       -       -       -       -       -       1.084.80       -       <		Schedules 16 & 17										
17       FTR. Mut Admin Amount       555.13       \$       1.048.00       \$       \$       \$       1.048.00       \$       \$       \$       1.048.00       \$       \$       \$       1.048.00       \$	15	DA Mkt Admin Amount	555.01	\$ 58,638.37	\$-	\$-9	58,638.37	\$ 10.16 \$	58,648.53	-	-	
18       TOTAL       \$ 64,383.4 \$       - \$       (455.31) \$       64,382.12 \$       723.14 \$       65,121.28       -       -         19       DA FBT Congestion Amount       555.03 \$       - \$       \$       - \$       \$       - \$       \$       - \$       \$       - \$       \$       - \$       \$       - \$       \$       - \$       - \$       -		RT Mkt Admin Amount	555.18	\$ 5,130.26	\$ -	\$ (455.31) \$	\$ 4,674.95	\$ 712.98 \$	5,387.93	-	-	
Congest & FTRs         Congest & FTRs           10         DA FTRs         555.0         \$			555.13							-	-	
19       DA FBT Congestion Amount       55.03       \$ <t< td=""><td></td><td></td><td></td><td>\$ 64,853.43</td><td>\$-</td><td>\$ (455.31) \$</td><td>64,398.12</td><td>\$ 723.14 \$</td><td>65,121.26</td><td>-</td><td>-</td></t<>				\$ 64,853.43	\$-	\$ (455.31) \$	64,398.12	\$ 723.14 \$	65,121.26	-	-	
DA Congestion       \$       <							-					
21       RT FBT Congestion Amount       555.20       \$       -       -       <			555.03							-	-	
22       RT Congestion       \$ 26,519.85 \$       - \$ 26,519.85 \$       - \$ 28,528 \$       - \$ 28,528 \$       - \$ 28,528 \$       - \$ 28,528 \$       - \$ 28,528 \$       - \$ 28,519.85 \$       - \$ 28,519.85 \$       - \$ 28,519.85 \$       - \$ 28,519.85 \$       - \$ 28,519.85 \$       - \$ 28,519.85 \$       - \$ 28,519.85 \$       - \$ 28,519.85 \$       - \$ 28,519.85 \$       - \$ 28,519.85 \$       - \$ 28,519.85 \$       - \$ 28,519.85 \$       - \$ 28,517,71	20			<b>T</b>								
23       FTR Hourly Allocation Amount       555.14       \$       198,825.25       \$       (672,240.63)       \$       (0.01)       \$       (474,415.39)       \$       \$       (17,836.05)       \$       \$       \$       (17,836.05)       \$       \$       \$       (17,836.05)       \$       \$       \$       (17,836.05)       \$<			555.20	•						-	-	
24       FTR Monthy Allocation Amount       555.17       \$       0.16       \$       (17,835.00)       \$       (17,836.05)       - <td></td> <td></td> <td>555 A A</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			555 A A									
25       FTR Yearly Allocation Amount       555.17       \$       \$       \$       0.32       \$       0.32       \$       0.32       \$       -										-	-	
26       FTR Monthly Transaction Amount       555.35       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       20.867.77       >       \$       (20.867.77)       -       -       \$       24.028.72       \$       \$       24.028.72       \$       \$       24.028.72       \$       \$       24.028.77       >       \$       (20.867.77)       -       \$       (20.228.93)       -       \$       24.028.72       \$       \$       24.028.83       -       \$       24.028.83       -       \$       24.028.83       -       \$       120.228.83       -       \$       \$       24.028.93       -       -       \$       120.228.93       -       \$       120.228.93       -       \$       \$       120.228.93       -       \$       \$       120.228.93       -       \$       \$       120.228.93       -       \$       \$       120.228.93       -       \$       \$       120.228.93       -       \$       \$       120.228.93       -       \$       \$       120.228.93       -       \$       \$       120.228.93       -       \$ </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>(,)</td> <td>-</td> <td>-</td>									(,)	-	-	
27       FTR Full Full Funding Guarantee Amount       555.38       \$ <ul> <li>\$             (13,09,35)</li> <li>\$             (13,7258,27)</li> <li>\$             (12,0228,93)</li> <li>\$             (12,028,94)</li> <li>\$             (12,028,94)</li> <li>\$             (10,029,94)</li> <li>\$             (10,029,94)</li>             (10,029,94)</ul>								-		-	-	
28       FTR Guarantee Üplift Amount       555.37       \$       37.518.07       \$       (13.489.35)       \$       \$       24.028.72       \$       \$       24.028.72       \$       \$       24.028.72       \$       \$       54.028.93       \$       \$       37.208.93       \$       \$       (12.028.93)       \$       \$       \$       (12.028.93)       \$       \$       \$       12.028.57       \$       \$       \$       4.346.94       \$       \$       \$       3.345.94       \$       \$       \$       12.028.67       \$       \$       \$       4.346.94       \$       \$       \$       4.346.94       \$       \$       \$       4.346.94       \$       \$       \$       \$       \$       4.346.94       \$       \$       \$       \$       \$       4.346.94       \$ <td></td> <td></td> <td></td> <td>•</td> <td>Ŧ</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td>				•	Ŧ					-	-	
29       FTR Auction Revenue Rights Transaction Amount       555.39       \$ 17,029.34       \$ (137,258.27)       \$ \$ (120,228.93)       \$ \$ \$ (120,228.93)       \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$							(20,001.11)			-	-	
30       FTR Annual Transaction Amount       555.48       \$ 138,135.54       \$ (17,906.97)       \$ - \$ 120,228.57'       \$ - \$ 120,228.57'          31       FTR Auction Revenue Rights Stage 2 Distribution Amount       555.40       \$ - \$ - \$ 4,346.94       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ (29,396.54)       \$ - \$ \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$												
31       FTR Auction Revenue Rights Infeasible Uplift Amount       555.40       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       4,346.94       \$       -       \$       (29,396.54)       \$										-	_	
32       FTR Auction Revenue Rights Stage 2 Distribution Amount       555.41       \$       \$       (29,396.54)       \$       -       \$       (29,396.54)       \$       -       \$       (29,396.54)       \$       -       \$       - <td></td> <td>-</td>											-	
33       DA Congestion Rebate on Option B GFA       555.07       \$<										-	-	
RSG & Make Whole Payments         Control         State	33				\$ -	\$-\$	5 -	\$ - 5	-	-	-	
35       DA Revenue Sufficiency Guarantee Distribution Amount       555.10       \$ 14,263.01       \$ - \$       \$ (9.36)       \$ 14,253.65       \$ 293.11       \$ 14,546.76       -       -       -       -       -       -       -       -       5       682.84)       \$ - \$       \$ (82.84)       \$ - \$       \$ (82.84)       \$ - \$       \$ (82.84)       \$ - \$       \$ (82.84)       \$ - \$       \$ (82.84)       \$ - \$       \$ (82.84)       \$ - \$       \$ (82.84)       \$ - \$       \$ (82.84)       \$ - \$       \$ (82.84)       \$ - \$       \$ (82.84)       \$ - \$       \$ (82.84)       \$ - \$       \$ (82.84)       \$ - \$       \$ (250.339.31)       \$ (250.339.31)       - \$ - \$       \$ (250.339.41)       \$ (250.339.31)       - \$ - \$       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.35)       \$ (7,485.45)       \$ (7,485.45)       \$ (7,485.45)       \$ (208,678.61)       \$ (168,024.51)		TOTAL			\$ (475,356.65)	s <u>-</u> s			5 (34 <u>,</u> 331.04)	-	-	
36       DA Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.11       \$       -       \$       (82.84)       \$       -       \$       (82.84)       \$       -       \$       (82.84)       \$       -       \$       (82.84)       \$       -       \$       (82.84)       \$       -       \$       (82.84)       \$       -       \$       (82.84)       \$       -       \$       (82.84)       \$       -       \$       (82.84)       \$       -       \$       <												
37       RT Revenue Sufficiency Guarantee First Pass Distribution Amou       555.29       \$       61,033.79       \$       -       \$       12,934.85       \$       73,968.64       \$       1,521.58       \$       75,490.22       -       -       3         38       RT Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.30       \$       -       \$       -       \$       -       \$       (76,533.93.11)       \$       (250,339.31)       -       -       -       \$       -       \$       (76,539.39)       \$       (76,539.39)       (76,639.34)       -       -       -       \$       (76,583.15)       \$       (168,024.51)       -       -       -       -       -       -       *       - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td>										-	-	
38       RT Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.30       \$       -       \$       -       \$										-	-	
39       RT Price Volatility Make Whole Payment       555.42       •       (7,485.35)       •       (7,485.35)       •       (7,485.35)       •       •       (7,485.35)       • <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>-</td></t<>										-	-	
40       TOTAL       \$ 75,296.80 \$ (7,568.19) \$ 12,925.49 \$ 80,654.10 \$ (248,678.61) \$ (168,024.51)       -         Revenue Neutrality Uplift         41       RT Revenue Neutrality Uplift Amount       555.28 \$ 192,491.71 \$ (4,519.43) \$ 16,443.68 \$ 204,415.96 \$ 4,205.45 \$ 208,621.41 -       -         42       TOTAL       \$ 192,491.71 \$ (4,519.43) \$ 16,443.68 \$ 204,415.96 \$ 4,205.45 \$ 208,621.41 -       -         43       RT Misc Amount       555.25 \$ - \$ - \$ 19,866.13 \$ 19,866.13 \$ - \$ 19,866.13 \$ - \$ 19,866.13 \$ - \$ 19,866.13 \$ - \$ 19,866.13 \$ - \$ 19,866.13 \$ - \$ 19,866.13 \$ - \$ 19,866.13 \$ - \$ - \$ 19,866.13 \$ - \$ 19,866.13 \$ - \$ - \$ - \$ 19,866.13 \$ - \$ 19,866.13 \$ - \$ - \$ - \$ 19,866.13 \$ - \$ - \$ - \$ - \$ - \$ 19,866.13 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$										-	-	
Revenue Neutrality Uplift           41         RT Revenue Neutrality Uplift Amount         555.28         \$ 192,491.71         \$ (4,519.43)         \$ 16,443.68         \$ 204,415.96         \$ 4,205.45         \$ 208,621.41         -         -         -           42         TOTAL         \$ 192,491.71         \$ (4,519.43)         \$ 16,443.68         \$ 204,415.96         \$ 4,205.45         \$ 208,621.41         -         -         -           42         TOTAL         \$ 192,491.71         \$ (4,519.43)         \$ 16,443.68         \$ 204,415.96         \$ 4,205.45         \$ 208,621.41         -         -         -           43         RT Misc Amount         555.25         \$ - \$         \$ 19,866.13         \$ 19,866.13         \$ 19,866.13         \$ -         \$ 19,866.13         -			555.42							-	-	
41       RT Revenue Neutrality Uplift Amount       555.28       192,491.71       (4,519.43)       16,443.68       204,415.96       4,205.45       208,621.41       -       -         42       TOTAL       \$ 192,491.71       \$ (4,519.43)       \$ 16,443.68       \$ 204,415.96       \$ 4,205.45       \$ 208,621.41       -       -       -         42       TOTAL       \$ 192,491.71       \$ (4,519.43)       \$ 16,443.68       \$ 204,415.96       \$ 4,205.45       \$ 208,621.41       -       -       -         42       TOTAL       \$ 192,491.71       \$ (4,519.43)       \$ 16,443.68       \$ 204,415.96       \$ 4,205.45       \$ 208,621.41       -       <				ə 75,296.80	ə (7,568.19)	ə 12,925.49 \$	o 80,654.10	ə (248,678.61) S	o (168,024.51)	-	-	
42       TOTAL       \$ 192,491.71 \$ (4,519.43) \$ 16,443.68 \$ 204,415.96 \$ 4,205.45 \$ 208,621.41       -       -         Other Charges       -        -       - <th -<<="" td=""><td></td><td></td><td>555.00</td><td>¢ 100 401 71</td><td>¢ (4 540 40)</td><td>¢ 10,440,00 4</td><td>204 445 00</td><td>¢ 4 005 45 4</td><td>200.001.44</td><td></td><td></td></th>	<td></td> <td></td> <td>555.00</td> <td>¢ 100 401 71</td> <td>¢ (4 540 40)</td> <td>¢ 10,440,00 4</td> <td>204 445 00</td> <td>¢ 4 005 45 4</td> <td>200.001.44</td> <td></td> <td></td>			555.00	¢ 100 401 71	¢ (4 540 40)	¢ 10,440,00 4	204 445 00	¢ 4 005 45 4	200.001.44		
Other Charges           43         RT Misc Amount         555.25         -         \$         -         \$         19,866.13         \$         -         \$         19,866.13         \$         -         -			JJJ.∠0						208,621.41		-	
43       RT Misc Amount       555.25       -       \$       -       \$       19,866.13       \$       -       \$       19,866.13       \$       -       \$       19,866.13       \$       -       \$       19,866.13       \$       -       \$       19,866.13       \$       -       \$       19,866.13       \$       -       \$       \$       -       -       -       -       -       -       -       -       -       -       -				v 132,431./1	• ( <del>+</del> ,010.40)	· 10,445.00 4	- 20-7,410.30	÷ -,200.40 0	200,021.41	-	-	
44       RT Net Inadvertent Amount       555.27       \$       1,916.01       \$       (8,083.69)       \$       (7,664.61)       \$       (13,832.29)       \$       -       \$       -			555 25	\$ -	\$ -	\$ 19,866,13	19 866 13	\$ - 9	19 866 13	-		
45       RT Uninstructed Deviation Amount       555.31       \$       -       \$       4       \$										-	-	
46       RT Demand Response Allocation Uplift Amount       555.59       \$       -       >       -       >       -       >       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -										-	_	
47       DA Ramp Product       555.63       \$ - \$       (292.04)       \$ - \$       (292.04)       \$ - \$       (292.04)       \$ - \$       \$       (292.04)       \$ - \$										-	-	
48 RT Ramp Product 555.64 \$ 17.59 \$ (41.83) \$ - \$ (24.24) \$ - \$ (24.24)										-	-	
						\$ - \$	6 (24.24)			-	-	
										-	-	

	De		Otter Tail Power Charges by Charge ruary 2019 includes	Group for Current N	lonth - System				
	(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge type	es with
Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for F	
ASM Charges									
RT ASM Non-Excessive Energy Amount	555.55	\$ 841,164.49			654,402.70	, , , , , ,		30,301	(7,93
RT ASM Excessive Energy Amount	555.56	\$ 13.70			(276.69)			3	(8
TOTAL		\$ 841,178.19	\$ (187,052.18)	\$ - 3	654,126.01	\$ (482,497.97)	\$ 171,628.04	30,304	(8,02
Grandfathered Charge Types							•		
DA Congestion Rebate on COGA	555.05	\$ -	\$ -	\$ - S	5 -	\$ -	\$ -	-	
DA Losses Rebate on COGA	555.06	\$ -	\$ -	\$ - S	ь —	\$ -	\$ -	-	
RT Congestion Rebate on COGA	555.22	\$ -	\$ -	\$ - S		\$ -	\$ -	-	
RT Loss Rebate on COGA TOTAL	555.23	\$ - ¢	\$ - ¢	\$-3 ¢	• -	5 - c	s - s -	-	
IOTAL		Ψ -	Ψ -	Ψ	-	Ψ -	Ψ -		
TOTAL MISO DAY 2 CHARGES		\$ 18,905,600.27	\$ (12,869,780.84)	\$ 267,465.83	\$ 6,303,285.26	\$ (731,247.37)	\$ 5,572,037.89	553,842	(384,03
Less: Schedule 16 & 17 (Lines 15, 16, 17)		\$ (64,853.43)	\$ -	\$ 455.31	64,398.12)				
Less: Congestion and Losses Adjustment		¢ (01,000.10)	Ŷ	\$ (5,219.64) \$					
Less: No DA generation sch., but still had output for current m	nonth			\$ (301.59) \$					
Less: MISO RSG Bad Debt				\$ - 5					
TOTAL FOR MN COST OF ENERGY ADJUSTMENT		\$ 18,840,746.84	\$ (12,869,780.84)	\$ 262,399.91	6,233,365.91				
Net MISO Charges for Retail = (B) + (C) + (D)			\$ 6,233,365.91						
Net KWH for retail = ((G) + (H)) * 1,000			169,806,613						169,806,61
February 2017 covers time period of 1/24/2019 2/20/2019 ** incr	eased for lo								
		Net Retail	Net MISO KWH			per kWh	Net Intersystem	Total	
MISO Book Totals		\$ 5,970,966.00	169,806,613			\$ 0.03516	\$ (731,851.46) \$	5,239,115	
Congestion and Losses Adjustment		\$ (5,219.64)					\$ - \$	(5,219.64)	
MISO RSG Bad Debt		\$ -					\$ - \$	-	
February Adjustments		\$ 267,619.55	9,706,114			\$ 0.02757	\$ 604.09 \$	268,223.64	
Total MISO		\$ 6,233,365.91	179,512,727			\$ 0.03472	\$ (731,247.37) \$	5,502,118.54	

		De		Otter Tail Power C Charges by Charge C ch 2019 includes ar	Froup for Current M	lonth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	with
_	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss									
1	DA Asset Energy Amount			\$ (10,131,109.94)					474,335	(379,865)
2	DA FBT Loss Amount			\$			\$ - \$		-	-
3	DA Non-asset Energy Amount			\$ (120,237.21)					-	(4,852)
4 5	RT Asset Energy Amount RT Distribution of Losses Amount		\$ 203,514.51 \$ 8,198.49						8,610	(11,065)
5	RT Distribution of Losses Amount RT FBT Loss Amount			\$ (250,469.01) \$ -	\$ (8,566.07) \$ \$ - \$		\$-3 \$-9	(====;=====)	-	-
7	DA Loss Amount				p - 3 6 - 9		• - •		-	-
8	RT Loss Amount				p - 3 6 - 9		• - •		-	-
9	RT Non-Asset Energy Amount				, - 4 5 - 5		\$			
10	DA Losses Rebate on Option B GFA		\$ -	Ŧ	\$ \$ - \$		\$ - 9		-	-
11	TOTAL		\$ 13,772,873.10	\$ (10,829,640.65)	\$ 369,807.97 \$	3,313,040.42	\$ (153,937.17)	3,159,103.25	482,945	(395,782)
	Virtual Energy									
12	DA Virtual Energy Amount			\$;	\$-\$		\$ - \$	-	-	-
13	RT Virtual Energy Amount	555.32	7	7	\$ - \$		\$ - \$		-	-
14	TOTAL		\$ -	\$	\$-\$		\$-\$	-	-	-
	Schedules 16 & 17		A 7/	<b>^</b>	• -		A			
15	DA Mkt Admin Amount		\$ 74,007.76		\$				-	-
16	RT Mkt Admin Amount		\$ 6,355.26		\$ (49.91) \$				-	-
17 18	FTR Mkt Admin Amount TOTAL	555.13	\$ 1,874.40 \$ 82,237.42		5 - § \$ (49.91) \$				-	-
	Congest & FTRs		φ 02,237. <del>4</del> 2	Ψ,	φ (43.31) 4	02,107.01	φ 1,000.00 <b>φ</b>	00,704.44	-	-
19	DA FBT Congestion Amount	555.03	\$ -	\$ - 5	\$ - \$	-	\$ - \$	-		-
20	DA Congestion	000.00	Ŧ	\$	· ·	-	\$ - \$			
21	RT FBT Congestion Amount	555.20	<b>T</b>		\$ - \$		\$ - \$		-	-
22	RT Congestion		\$ 11.780.95		S	5 11.780.95				
23	FTR Hourly Allocation Amount	555.14	\$ 75,498.29	\$ (362,870.75)	\$ (23.83) \$	(287,396.29)	\$ - \$	(287,396.29)	-	-
24	FTR Monthly Allocation Amount	555.15	\$ -	\$ (29,367.37)	\$ (5.27) \$	(29,372.64)	\$ - \$	(29,372.64)	-	-
25	FTR Yearly Allocation Amount	555.17	\$ -	\$ - 3			\$ - \$	-	-	-
26	FTR Monthly Transaction Amount	555.35	\$ -	\$ (4,316.67)	\$-\$	6 (4,316.67)	\$ - \$	(4,316.67)	-	-
27	FTR Full Funding Guarantee Amount			\$ (25,391.62)					-	-
28	FTR Guarantee Uplift Amount		\$ 25,391.62						-	-
29	FTR Auction Revenue Rights Transaction Amount		\$ 25,581.47						-	-
30	FTR Annual Transaction Amount			\$ (25,596.50)					-	-
31	FTR Auction Revenue Rights Infeasible Uplift Amount		\$ 5,651.23		\$- <b>\$</b>				-	-
32	FTR Auction Revenue Rights Stage 2 Distribution Amount			\$ (11,496.83) \$	\$-\$ \$-\$	( , ,		(,)	-	-
33 34	DA Congestion Rebate on Option B GFA TOTAL		\$ - \$ 327,755.66	Ψ				·	-	-
	RSG & Make Whole Payments			- (000,010.00)	. (01.00) 4	(00,004.21)	- •	(00,004.21)		-
35	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	\$ 13,214.24	\$ - 3	\$ (47.86) \$	13,166.38	\$ 355.13 \$	13,521.51	-	-
36	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount			\$ (0.01) \$					-	-
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amou		\$ 42,917.35		\$ 4,250.56 \$				-	-
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount		\$ -		\$ - \$	- 6	\$ (15,601.28) \$		-	-
39	RT Price Volatility Make Whole Payment			\$ (7,279.52)					-	-
40	TOTAL		\$ 56,131.59	\$ (7,279.53)	\$ 4,202.70 \$	53,054.76	\$ (14,170.01) \$	38,884.75	-	-
	Revenue Neutrality Uplift		<b>A A A A A A A A A A</b>	(7.000 - C)		50 550	A 1570.00	00.400.65		
41 42	RT Revenue Neutrality Uplift Amount TOTAL		\$ 61,230.83 \$ 61.230.83						-	-
42	Other Charges		φ 01,230.03	ψ (1,009.03) ÷	¢ ⊶,410.43 ₹	, 30,330.73	ψ 1,5/9.90 <b>3</b>	00,130.09	-	-
43	RT Misc Amount	555.25	\$ -	\$ - :	\$ 27,140.30 \$	27,140.30	\$ - \$	27,140.30		
43	RT Net Inadvertent Amount		\$ 15,757.52				\$		-	-
44	RT Uninstructed Deviation Amount				s (576.45) 4 S - S		\$- \$-		-	-
46	RT Demand Response Allocation Uplift Amount				\$ \$-\$		\$-9		-	-
47	DA Ramp Product			\$ (227.21) \$					-	-
48	RT Ramp Product		\$ 143.90	\$ (110.26)	\$-\$	33.64	\$ - \$	33.64	-	-
49	TOTAL		\$ 15,901.42	\$ (11,861.95)	\$ 26,761.85 \$	30,801.32	\$ - \$	30,801.32	-	-

ſ		Detai		Ch	Otter Tail Power arges by Charge 2019 includes a	Grou	p for Current M	onth - System					
	(A)		(B)		(C)		(D) Retail	(E)		(F)	(G)	(H)* Charge typ	
	Charge Type Description Acct		Retail Debits	I	Retail Credits	A	djustments	Net Retail	Ne	et Intersystem	Total	MWH for	
	ASM Charges												
0	RT ASM Non-Excessive Energy Amount 555.55		809,394.77		(163,707.85)		- \$	645,686.92		(267,264.49)		34,824	(7,738
1	RT ASM Excessive Energy Amount 555.56	\$	0.78		(192.64)		- \$	(191.86)		(86.07)		-	(4
2	TOTAL	\$	809,395.55	\$	(163,900.49)	\$	- \$	645,495.06	\$	(267,350.56)	\$ 378,144.50	34,824	(7,77
_	Grandfathered Charge Types	_					<b>.</b>		<u> </u>				
3 1	DA Congestion Rebate on COGA 555.05 DA Losses Rebate on COGA 555.06		-	\$	-	\$	- \$	-	\$	-	\$- *	-	
	DA Losses Rebate on COGA 555.00 RT Congestion Rebate on COGA 555.22		-	¢	-	¢ ¢	- Þ	-	¢	-	ф -	-	
5	RT Loss Rebate on COGA 555.22 RT Loss Rebate on COGA 555.23		-	¢	-	¢ Ò	- þ	-	¢ ¢	-	ቅ - ፍ	-	
7	TOTAL	ŝ		\$	-	\$ \$	- \$		ŝ		\$- \$-		
3 9 0 1 2	TOTAL MISO DAY 2 CHARGES Less: Schedule 16 & 17 (Lines 15, 16, 17) Less: Congestion and Losses Adjustment Less: No DA generation sch., but still had output for current month Less: MISO RSG Bad Debt	\$	15,125,525.57 (82,237.42)		(11,406,150.48) -	\$ \$ \$ \$	405,106.44 \$ 49.91 \$ (12,093.87) \$ (11,173.05) \$ - \$	(82,187.51) (12,093.87) (11,173.05)		(432,310.85)	\$ 3,692,170.68	517,769	(403,55
	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$	15,043,288.15	\$	(11,406,150.48)	\$	381,889.43 \$	4,019,027.10					
	Net MISO Charges for Retail = $(B) + (C) + (D)$ Net KWH for retail = $((G) + (H))^* 1,000$			\$	<b>4,019,027.10</b> 114,209,362								114,209,362
	March 2017 covers time period of 2/21/2019 3/21/2019 ** increased for	osses	of 2.8% Net Retail	,	Net MISO KWH					per kWh	Net Intersystem	Total	
3	MISO Book Totals	\$	3,637,137.67		114,209,362				\$		\$ (432,526.22)	\$ 3,204,611	
	Congestion and Losses Adjustment MISO RSG Bad Debt	\$ \$	(12,093.87)								\$ - \$ -	\$ (12,093.87) \$ -	
	March Adjustments	\$	393,983.30		12,121,341				\$	0.03250	\$ 215.37	\$ 394,198.67	
	Total MISO	\$	4.019.027.10		126,330,703				\$	0.03181	\$ (432,310.85)	\$ 3,586,716.25	

		De		Otter Tail Power ( Charges by Charge ( ril 2019 includes an	Group for Current M	lonth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	s with
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss									
1	DA Asset Energy Amount	555.02		\$ (7,063,683.77)			\$ (93,747.56) \$		422,916	(312,192)
2	DA FBT Loss Amount				\$-\$		\$ - 5		-	-
3	DA Non-asset Energy Amount			\$ (114,174.58)					-	(4,959)
4	RT Asset Energy Amount		\$ 335,761.21					,	17,901	(6,136)
5 6	RT Distribution of Losses Amount			\$ (125,184.05)				(	-	-
6 7	RT FBT Loss Amount DA Loss Amount	555.21			\$-9		\$ - 5		-	-
8	RT Loss Amount				\$-9 \$-9		\$ - S \$ - S		-	-
9	RT Non-Asset Energy Amount	555.26			9 - 9 S - 9		s - 3	,	-	-
10	DA Losses Rebate on Option B GFA		•		s - 5		\$ - S		-	-
11	TOTAL	333.00		\$ (7,453,100.44)					440.817	(323,287)
	Virtual Energy		,,.	, (, , ,	,			., .,	- / -	
12	DA Virtual Energy Amount	555.12	\$ -	\$-	\$-9	6 -	\$ - 5	; -	-	-
13	RT Virtual Energy Amount	555.32	\$ -	\$ -	\$ - \$	- 6	\$ - 5	- 3	-	-
14	TOTAL		\$ -	\$-	\$-\$	· -	\$ - 5	; -	-	-
	Schedules 16 & 17									
15	DA Mkt Admin Amount				\$ - \$				-	-
16	RT Mkt Admin Amount		\$ 6,763.48		\$ (452.73) \$			,	-	-
17	FTR Mkt Admin Amount	555.13	\$ 2,907.04		<u>- 9</u>				-	-
18	TOTAL Congest & FTRs		\$ 77,804.13	\$-	\$ (452.73) \$	5 77,351.40	\$ 1,313.91	5 78,665.31	-	-
19	DA FBT Congestion Amount	555.03	\$ -	\$ -	\$ - \$	6 -	\$ - 5	<b>、</b>		
20	DA FBT Congestion Amount DA Congestion	555.03		\$- \$115,835.55					-	-
20	RT FBT Congestion Amount	555.20	<b>T</b>		9 - 3 S - 9		s - 3			
22	RT Congestion	333.20	•		\$				-	-
23	FTR Hourly Allocation Amount	555.14		¢ (194,177.07)						-
24	FTR Monthly Allocation Amount			\$ (14,448.88)					-	-
25	FTR Yearly Allocation Amount			,	\$-9		\$ - 5	. (,	-	-
26	FTR Monthly Transaction Amount		•	• \$ (11,997.79)				(11,997.79)	-	-
27	FTR Full Funding Guarantee Amount	555.36	\$ 14,375.48	\$ (6,962.17)	\$ - \$	7,413.31	\$ - 5	7,413.31	-	-
28	FTR Guarantee Uplift Amount	555.37	\$ 6,962.17	\$ (13,807.04)	\$ - \$	6,844.87)	\$ - 5	6,844.87)	-	-
29	FTR Auction Revenue Rights Transaction Amount	555.39	\$ 25,581.47	\$ (154,650.65)	\$-\$	6 (129,069.18)	\$ - 5	(129,069.18)	-	-
30	FTR Annual Transaction Amount			\$ (25,596.50)					-	-
31	FTR Auction Revenue Rights Infeasible Uplift Amount				\$-\$				-	-
32	FTR Auction Revenue Rights Stage 2 Distribution Amount			\$ (11,496.83)				( , ,	-	-
33 34	DA Congestion Rebate on Option B GFA	555.07	\$ -	\$ - -	<u> </u>		<u>\$</u>		-	-
	TOTAL RSG & Make Whole Payments		\$ 312,056.00	\$ (317,301.38)	\$ (0.02) \$	5 (5,245.40)	\$ - 9	5 (5,245.40)	-	-
35	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	\$ 10.940.87	\$ -	\$ 169.48 \$	5 11.110.35	\$ 286.98	5 11.397.33		
36	DA Revenue Sufficiency Guarantee Distribution Amount			⊸ - \$ (5,588.14)					-	-
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amou		\$ 13,513.47		\$ 459.03				-	-
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount				\$-\$		\$ (10,851.09) \$		-	_
39	RT Price Volatility Make Whole Payment		•	\$ (13,368.05)					-	-
40	TOTAL		\$ 24,454.34						-	-
	Revenue Neutrality Uplift									
41	RT Revenue Neutrality Uplift Amount	555.28	\$ 44,544.88					45,994.51	-	-
42	TOTAL		\$ 44,544.88	\$ (10,897.43)	\$ 11,188.32 \$	44,835.77	\$ 1,158.74	45,994.51	-	-
	Other Charges	555.05	¢	<b>^</b>	<b>*</b> 00.045.01 <b>*</b>	00.045.01	<b>^</b>	00.045.01		
43	RT Misc Amount				\$ 32,045.01				-	-
44 45	RT Net Inadvertent Amount RT Uninstructed Deviation Amount			\$ (8,180.30)				(.,,	-	-
45 46	RT Demand Response Allocation Uplift Amount		<b>T</b>		\$-9 \$-9		\$ - S \$ - S		-	-
40	DA Ramp Product		•	∍ - \$ (472.65)					-	-
47	RT Ramp Product			\$ (199.18)					-	-
40	TOTAL	300.04	\$ 7,393.32					24,974.33	-	-
<u> </u>			, <b>-</b>	(,,)	,	,		,		

		Detail		Cha	Otter Tail Power C Irges by Charge G 2019 includes any	roup for Cu		onth - System						
	(A)		(B)		(C)	(D) Retail		(E)		(F)		(G)	(H)* Charge typ	
	Charge Type Description Acct	F	Retail Debits	F	Retail Credits	Adjustmer	ts	Net Retail	Ne	t Intersystem		Total	MWH for	
	ASM Charges													
50	RT ASM Non-Excessive Energy Amount 555.55	\$	561,730.67		(353,828.83) \$		9.32) \$	207,592.52		(166,163.09)		41,429.43	28,744	(6,497
51	RT ASM Excessive Energy Amount 555.56	\$	852.72		- \$		1.84) \$	850.88		(183.96)		666.92		(245
52	TOTAL	\$	562,583.39	\$	(353,828.83) \$	(31	1.16) \$	208,443.40	\$	(166,347.05)	\$	42,096.35	28,744	(6,742
_	Grandfathered Charge Types													
53	DA Congestion Rebate on COGA 555.05	\$	-	\$	- \$		- \$	-	\$	-	\$	-	-	-
54	DA Losses Rebate on COGA 555.06	\$	-	\$	- \$		- \$	-	\$	-	\$	-	-	-
55	RT Congestion Rebate on COGA 555.22	\$	-	\$	- \$		- \$	-	\$	-	\$	-	-	-
56	RT Loss Rebate on COGA 555.23 TOTAL	<u></u>	-	\$	- \$		- \$	-	\$	-	\$	-	-	-
57	IUIAL	þ	-	\$	- >		- >	-	Þ	-	\$	-	-	-
58	TOTAL MISO DAY 2 CHARGES	\$	11,560,000.80	\$	(8,162,936.40) \$	466,50	0.74 \$	3,863,565.14	\$	(268,388.49)	\$	3,595,176.65	469,561	(330,029
59	Less: Schedule 16 & 17 (Lines 15, 16, 17)	\$	(77,804.13)	\$	- \$	45	2.73 \$	(77,351.40)						
60	Less: Congestion and Losses Adjustment	+	(,)	-	ŝ		4.57) \$	(11,164.57)						
61	Less: No DA generation sch., but still had output for current month				ŝ		4.00) \$	(374.00)						
62	Less: MISO RSG Bad Debt				\$	<b>X</b> -	- \$	-						
63	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$	11,482,196.67	\$	(8,162,936.40) \$	455,41	4.90 \$	3,774,675.17						
64 65	Net MISO Charges for Retail = $(B) + (C) + (D)$ Net KWH for retail = $((G) + (H)) * 1,000$			\$	<b>3,774,675.17</b> 139.532.424									139,532,424
					100,002,121									,
66	April 2017 covers time period of 3/22/2019 4/22/2019 ** increased for loss	ses of	2.8%											
67	· ·		Net Retail	Ν	let MISO KWH					per kWh	Net	t Intersystem	Total	
68	MISO Book Totals	\$	3,319,260.27		139,532,424				\$	0.02379	\$	(268,697.94) \$	3,050,562	
69	Congestion and Losses Adjustment	\$	(11,164.57)								\$	- \$	(11,164.57)	
70	MISO RSG Bad Debt	\$	- 1								\$	- \$		
71	April Adjustments	\$	466,579.47		15,676,966				\$	0.02976	\$	309.45 \$	466,888.92	
72	Total MISO	\$	3,774,675.17		155,209,390				\$	0.02432	\$	(268,388.49) \$	3,506,286.68	

		Det		Otter Tail Power C Charges by Charge C ay 2019 includes any	Group for Current M	lonth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	with
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss									
1	DA Asset Energy Amount			\$ (3,320,508.49)			\$ (81,523.54)		371,036	(167,366)
2	DA FBT Loss Amount				\$-\$		\$ - 5		-	-
3 4	DA Non-asset Energy Amount			\$ (94,908.83)					-	(4,039)
4	RT Asset Energy Amount RT Distribution of Losses Amount			\$ (162,187.35) \$ (78,616.15)					9,117	(7,931)
5 6	RT FBT Loss Amount				\$ (10,517.55) 3 \$ - §		\$ - 3 \$ - 9	()	-	-
7	DA Loss Amount				s - 5		\$ - 5			-
8	RT Loss Amount				s - 9		\$ - 5			
9	RT Non-Asset Energy Amount				\$-9		\$ - 5		_	-
10	DA Losses Rebate on Option B GFA			÷ .	\$-9		\$ - 5		-	-
11	TOTAL			\$ (3,656,220.82)		4,789,740.13	\$ (81,523.54)	4,708,216.59	380,153	(179,336)
	Virtual Energy									
12	DA Virtual Energy Amount		\$-	\$ - 3	\$-\$	-	\$ - \$	-	-	-
13	RT Virtual Energy Amount		7	Ŧ	\$-9		\$ - 5		-	-
14	TOTAL		\$ -	\$ - :	\$-\$	; -	\$ - 5	5 -	-	-
	Schedules 16 & 17			•						
15 16	DA Mkt Admin Amount		\$ 49,799.83 \$ 5,159.67		\$-\$ \$511.91 \$				-	-
10	RT Mkt Admin Amount FTR Mkt Admin Amount		\$ 5,159.67 \$ 2.135.12		\$				-	-
18	TOTAL	555.13	\$ 2,135.12 \$ 57,094.62		\$	2,100.12				
10	Congest & FTRs		• •••,••• …•=	•	• • • • • •	,	• .,•••			
19	DA FBT Congestion Amount	555.03	\$-	\$ - 3	\$-9	; -	\$ - 5	- S	-	-
20	DA Congestion			\$ 81,870.63						
21	RT FBT Congestion Amount	555.20	\$-		\$-9		\$ - 5		-	-
22	RT Congestion		\$ 3,455.86	\$ - 5	\$-9	3,455.86	\$ - 5	3,455.86		
23	FTR Hourly Allocation Amount	555.14	\$ 122,631.84	\$ (348,423.79)	\$ 1.10 \$	6 (225,790.85)	\$ - 5	(225,790.85)	-	-
24	FTR Monthly Allocation Amount			\$ (16,607.01)	\$ (9.28) \$	6 (16,616.29)			-	-
25	FTR Yearly Allocation Amount		-		\$-\$		\$ - 5		-	-
26	FTR Monthly Transaction Amount		+	\$ (8,752.27)				(-, - )	-	-
27	FTR Full Funding Guarantee Amount			\$ (19,462.31)					-	-
28	FTR Guarantee Uplift Amount		\$ 19,462.31						-	-
29 30	FTR Auction Revenue Rights Transaction Amount FTR Annual Transaction Amount		\$ 25,581.47 \$ 154,665.97						-	-
30	FTR Auction Revenue Rights Infeasible Uplift Amount			\$ (25,596.50) \$ -	\$-9 \$-9				-	-
32	FTR Auction Revenue Rights Inteasible Opini Amount			\$					-	-
33	DA Congestion Rebate on Option B GFA		φ - \$ -	\$ (11,430.03)	\$ (0.02) \$ - 9		\$ - 5	( , ,		
33 34	TOTAL		\$ 347,902.98	\$ (519,653.08)					-	-
	RSG & Make Whole Payments			· · ·		,				
35	DA Revenue Sufficiency Guarantee Distribution Amount				\$ (19.34) \$				-	-
36	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount			\$ (1,506.30)					-	-
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amou				\$ (548.23) \$				-	-
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount				\$		\$ (161.46) \$		-	-
39 40	RT Price Volatility Make Whole Payment TOTAL		Ŷ	\$ (19,183.54) \$ (20,689,84) \$					-	-
40	Revenue Neutrality Uplift		\$ 20,313.50	\$ (20,689.84)	\$ (568.00) \$	6 (944.34)	\$ (406.14) \$	6 (1,350.48)	-	-
41	RT Revenue Neutrality Uplift Amount	555.28	\$ 49,146.06	\$ (7,645.12) \$	\$ 7,013.91 \$	48,514.85	\$ 1,311.66	49,826.51	-	
42	TOTAL		\$ 49,146.06						-	-
	Other Charges		,	<u>, , ,</u> -		,				
43	RT Misc Amount	555.25	\$-	\$ - \$	\$ (11,806.62) \$	6 (11,806.62)	\$ - 5	6 (11,806.62)	-	-
44	RT Net Inadvertent Amount		\$ 2,391.33	\$ (1,195.29)	\$ (3,711.45) \$	(2,515.41)	\$ - 5	(2,515.41)	-	-
45	RT Uninstructed Deviation Amount		-		\$-\$		\$ - 5		-	-
46	RT Demand Response Allocation Uplift Amount				\$-\$		\$ - 5		-	-
47	DA Ramp Product		Ŷ	\$ (492.90)					-	-
48 49	RT Ramp Product TOTAL	555.64		\$ (222.70) \$				56.29 5 (14,758.64)	-	-
49	IVIAL		φ 2,070.32	\$ (1,910.89)	ې (۱۵,۵۱۵,۵۱) پ	, (14,/00.04)	φ - 3	, (14,/00.04)	-	-

	De		Otter Tail Power Charges by Charge Iay 2019 includes ar	Group for Current M	onth - System				
	(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge typ	
	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for	
ASM Charges									
	555.55	\$ 425,099.44						20,113	(6,8
	555.56	\$ 2,046.00						224	(2
TOTAL		\$ 427,145.44	\$ (123,513.10)	\$ (729.18) \$	302,903.16	\$ (153,044.45)	\$ 149,858.71	20,337	(7,*
Grandfathered Charge Types			•			•			
	555.05	\$ -	\$ -	\$ - \$	-	\$ -	\$ -	-	
	555.06	ş -	\$ -	\$ - \$	-	\$ -	\$ -	-	
	555.22	ş -	\$ -	\$ - \$	-	ş -	\$ -	-	
RT Loss Rebate on COGA 5 TOTAL 5	555.23	<u>ş</u> -	<u>\$</u> -	<u>5</u> -5	-	<u>s</u> -	<u>s</u> -	-	
IUTAL		ş -	ф <del>-</del>	ş - ş	-	ş -	<b>р</b> -	-	
TOTAL MISO DAY 2 CHARGES	-	\$ 9,024,923.76	\$ (4,329,632.85)	\$ 316,010.49 \$	5,011,301.40	\$ (232,268.34)	\$ 4,779,033.06	400,489	(186,
Less: Schedule 16 & 17 (Lines 15, 16, 17)		\$ (57,094.62)	\$ -	\$ (511.91) \$	(57,606.53)				
Less: Congestion and Losses Adjustment		• (••,•••)	Ŧ	\$ 862.51 \$					
Less: No DA generation sch., but still had output for current mo	onth			\$ (1,459.90) \$	(1,459.90)				
Less: MISO RSG Bad Debt				\$ - \$					
TOTAL FOR MN COST OF ENERGY ADJUSTMENT		\$ 8,967,829.14	\$ (4,329,632.85)	\$ 314,901.19 \$	4,953,097.48				
Net MISO Charges for Retail = (B) + (C) + (D)			\$ 4,953,097.48						
Net KWH for retail = $((G) + (H))^* 1,000$			213,988,867						213,988,
May 2019 covers time period of 4/23/2019 5/23/2019 ** increased	for losses								
	_	Net Retail	Net MISO KWH			per kWh	Net Intersystem	Total	
MISO Book Totals		\$ 4,638,196.29	213,988,867			\$ 0.02167	\$ (232,172.12) \$	4,406,024	
Congestion and Losses Adjustment		\$ 862.51					\$ - \$	862.51	
MISO RSG Bad Debt		\$ -	44 700 000			• • • • • • • • •	\$ - \$	-	
May Adjustments		\$ 314,038.68	14,720,620			\$ 0.02133		313,942.46	
Total MISO		\$ 4,953,097.48	228,709,486			\$ 0.02166	\$ (232,268.34) \$	4,720,829.14	

		Det		Otter Tail Power ( Charges by Charge ( ne 2019 includes an	Group for Current N	Ionth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	s with
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss									
1	DA Asset Energy Amount			\$ (2,739,003.56)			\$ (88.42) \$		325,939	(154,137)
2	DA FBT Loss Amount				\$-\$		\$ - 3		-	-
3	DA Non-asset Energy Amount			\$ (79,864.19)					-	(3,512)
4 5	RT Asset Energy Amount		\$ 184,676.72						7,497	(7,067)
	RT Distribution of Losses Amount			\$ (83,225.04)				(,)	-	-
6 7	RT FBT Loss Amount				\$-9		\$ - 9		-	-
8	DA Loss Amount RT Loss Amount		\$ 208,886.18 \$ (3,966.89)			5 208,886.18 5 (3,966.89)			-	-
9	RT Loss Amount RT Non-Asset Energy Amount						ъ - с \$ - б	( , , , , , , , , , , , , , , , , , , ,	-	-
10	DA Losses Rebate on Option B GFA			Ŧ	s - 3	-	s - 3		-	-
11	TOTAL			\$ (3,021,720.93)					333.435	(164,715)
	Virtual Energy		,,	. (-,),()	,•	,,	. (001.12) (	,,		(
12	DA Virtual Energy Amount	555.12	\$ -	\$ -	\$ - 9	6 -	\$ - 5	6 -		-
13	RT Virtual Energy Amount						\$ - 5		-	-
14	TOTAL			\$ -	\$ - \$		\$ - 9		-	-
	Schedules 16 & 17									
15	DA Mkt Admin Amount	555.01	\$ 50,000.03	\$ -	\$-9	\$ 50,000.03	\$ 0.41 \$	50,000.44	-	-
16	RT Mkt Admin Amount	555.18	\$ 5,361.76	\$ -	\$ 244.05 \$	\$ 5,605.81	\$ 2,152.11	5 7,757.92	-	-
17	FTR Mkt Admin Amount	555.13	\$ 2,254.40			\$ 2,254.40			-	-
18	TOTAL		\$ 57,616.19	\$ -	\$ 244.05 \$	57,860.24	\$ 2,152.52	60,012.76	-	-
	Congest & FTRs					-		-		
19	DA FBT Congestion Amount						\$ - 5		-	-
20	DA Congestion		<b>T</b>	\$ 100,169.06						
21	RT FBT Congestion Amount						\$ - 9		-	-
22	RT Congestion		\$ (18,613.90)			\$ (18,613.90) (101,011,07)				
23 24	FTR Hourly Allocation Amount			\$ (230,216.89)					-	-
24 25	FTR Monthly Allocation Amount FTR Yearly Allocation Amount			\$ (11,941.64) \$ -		,		(,•	-	-
25 26	FTR Monthly Transaction Amount			∍ - \$ (48,387.66) ∶		• - 5 (48,387.66)			-	-
20	FTR Full Funding Guarantee Amount			\$ (29,027.56)					-	-
28	FTR Guarantee Uplift Amount			\$ (12,591.35) \$				(,	-	-
29	FTR Auction Revenue Rights Transaction Amount			\$ (163,056.09)				,		
30	FTR Annual Transaction Amount			\$ (15,999.47)		\$ 147,457.41			-	
31	FTR Auction Revenue Rights Infeasible Uplift Amount			( )		2,796.83			-	-
32	FTR Auction Revenue Rights Stage 2 Distribution Amount			\$ (39,410.70)					-	-
33 34	DA Congestion Rebate on Option B GFA		\$ -	\$ -	\$ - 9		\$ - 5		-	-
34	TOTAL		\$ 273,365.85	\$ (450,462.30)	\$ 2.07			(177,094.38)	-	-
	RSG & Make Whole Payments									
35	DA Revenue Sufficiency Guarantee Distribution Amount		\$ 4,774.77		\$ (31.89) \$	, ,			-	-
36	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount			\$ (300.48)					-	-
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amou		\$ 22,085.14		\$ (439.48) \$				-	-
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount				\$-\$		\$ (3,649.02)		-	-
39 40	RT Price Volatility Make Whole Payment TOTAL			\$ (3,296.20)		§ (3,296.20)			-	-
40	Revenue Neutrality Uplift		\$ 26,859.91	\$ (3,596.68)	\$ (471.37) \$	\$ 22,791.86	\$ (2,394.83) \$	20,397.03	-	-
41	RT Revenue Neutrality Uplift Amount	555.28	¢ 26.429.42	¢ (4.410.49)	¢ (0.250.76)	13,668.48	\$ 742.44	14,410.92		
41 42	TOTAL		\$ 26,438.42 \$ 26,438.42							-
74	Other Charges	_	¥ 20,400.42	÷ (+,+10.10)	÷ (0,000.70) (	, 10,000.40	¥ 172.44 (	, 17,710.JZ	-	-
43	RT Misc Amount	555.25	\$ 17.82	\$ -	\$ 29,448.85	29,466.67	\$ - 3	29,466.67	-	- 1
44	RT Net Inadvertent Amount			\$ (553.81)		2,688.34	\$ - 9		-	_
45	RT Uninstructed Deviation Amount			()			\$ - 5	,	-	_
46	RT Demand Response Allocation Uplift Amount						\$ - 5		-	-
47	DA Ramp Product			\$ (713.63)		(713.63)			-	-
48	RT Ramp Product		\$ -	\$ (96.78)	\$ - 9	(96.78)	\$ - 5	(96.78)	-	-
49	TOTAL			\$ (1,364.22)		31,344.60		31,344.60	-	-
				., 1						

Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group for Current Month - System June 2019 includes any adjustments													
	(A	)	(B)		(C)	(D) Retail	(E)		(F)	(G)	(H)* Charge typ		
	Charge Type Description Act	ct	Retail Debits	F	Retail Credits	Adjustments	Net Retail	N	et Intersystem	Total	MWH for	Retail	
	ASM Charges			_	(00 ( ) = ( = )				(	• //•/ ••• /•>		(	
)	RT ASM Non-Excessive Energy Amount 555.		328,351.90	\$	(93,417.17)	( ) .	234,816.4	45 \$	(396,419.91)	\$ (161,603.46)	17,733	(5,76	
	RT ASM Excessive Energy Amount 555.	<u>56 Ş</u>	328.351.90	\$	(93,417.17)	5 - \$ 5 (118.28) <b>\$</b>	234,816.4	<u>\$</u>	(396,419.91)	<u>\$</u> \$ (161,603.46)	17.733	(5,7	
2	Grandfathered Charge Types	\$	326,351.90	\$	(93,417.17)	5 (116.26) \$	234,016.	40 Đ	(396,419.91)	\$ (101,003.40)	17,733	(5,7	
_		05 0		<u>^</u>		<u> </u>				•			
\$	DA Congestion Rebate on COGA 555. DA Losses Rebate on COGA 555.		-	\$	- 3	5 - \$	-	\$	-	\$ -	-		
;			-	ð	- 3	·	-	¢ Þ	-	ъ -	-		
;	RT Congestion Rebate on COGA 555. RT Loss Rebate on COGA 555.		-	\$	- 3	- 5 - 6	-	\$	-	5 - e	-		
,	TOTAL 555.	<u>23 ş</u> \$	-	ŝ						» - Տ -			
3 ) 2	TOTAL MISO DAY 2 CHARGES Less: Schedule 16 & 17 (Lines 15, 16, 17) Less: Congestion and Losses Adjustment Less: No DA generation sch., but still had output for current month Less: MISO RSG Bad Debt	\$	7,008,938.67 (57,616.19)	\$ \$	(3,574,971.48) \$ - \$ \$ \$	5       198,579.19       \$         6       (244.05)       \$         5       3,830.48       \$         6       -       \$         5       -       \$         6       -       \$	(57,860. 3,830.	24)	(396,008.20)	\$ 3,236,538.18	351,169	(170,4	
	TOTAL FOR MN COST OF ENERGY ADJUSTMENT Net MISO Charges for Retail = (B) + (C) + (D) Net KWH for retail = ((G) + (H)) * 1,000	\$	6,951,322.48	\$ \$	(3,574,971.48) \$ 3,578,516.62 180,686,358	5 202,165.62 \$	3,578,516.	62				180,686,3	
	June 2017 covers time period of 5/24/2019 6/20/2019 ** increased for	losses o	of 2.8% Net Retail	N	let MISO KWH				per kWh	Net Intersystem	Total		
;	MISO Book Totals	\$	3,376,351.00		180,686,358			\$	0.01869	\$ (395,528.21) \$			
	Congestion and Losses Adjustment MISO RSG Bad Debt	\$ \$	3,830.48							\$ - S \$ - S	3,830.48 -		
	June Adjustments	\$	198,335.14		6,721,993			\$	0.02951	\$ (479.99) \$			
	Total MISO	\$	3,578,516.62		187,408,352			\$	0.01909	\$ (396,008.20) \$	\$ 3,182,508.42		

		De		Otter Tail Power C Charges by Charge C ly 2019 includes any	Froup for Current M	onth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	with
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss									
1	DA Asset Energy Amount			\$ (6,409,829.49)			\$ (4,478.13) \$		419,375	(265,013)
2	DA FBT Loss Amount			\$			\$ - \$		-	-
3	DA Non-asset Energy Amount			\$ (107,975.71)				(	-	(4,394)
4 5	RT Asset Energy Amount RT Distribution of Losses Amount		\$ 347,166.77 \$ 1.624.58					. ,	5,538	(17,791)
5 6	RT FBT Loss Amount			\$ (174,171.59) \$ -			ə - ə \$ - \$	(	-	-
7	DA Loss Amount		\$ 361,100.52						-	-
8	RT Loss Amount			φ - \$ - \$	· ·					-
9	RT Non-Asset Energy Amount			\$			\$ - \$		-	-
10	DA Losses Rebate on Option B GFA			\$ - 9			\$ - \$		-	-
11	TOTAL		\$ 10,492,703.96	\$ (7,085,876.82)	\$ 139,293.34 \$	3,546,120.48	\$ (4,478.13) \$	3,541,642.35	424,913	(287,197)
	Virtual Energy									
12	DA Virtual Energy Amount			\$	· ·		\$ - \$		-	-
13	RT Virtual Energy Amount	555.32	7	\$ - 3	7 · · · · ·		<u>\$</u> -\$	-	-	-
14	TOTAL Schedules 16 & 17		\$ -	\$	\$-\$	· -	\$ - \$	-	-	-
45		555.04	¢ 57.504.04	¢	÷ •	57.504.04	¢ 0.04 ¢	57 500 00		
15 16	DA Mkt Admin Amount RT Mkt Admin Amount		\$ 57,521.61 \$ 6,468.89	\$- \$-					-	-
17	FTR Mkt Admin Amount		\$ 0,400.09 \$ 2.556.96		• (•) •				-	-
18		555.15	\$ 66,547.46						-	-
10	Congest & FTRs		• •••,• ····•	•	• (•, •		• .,			
19	DA FBT Congestion Amount	555.03	\$ -	\$ - 3	\$-\$	-	\$ - \$	-		-
20	DA Congestion		\$ -	\$	- s					
21	RT FBT Congestion Amount	555.20	\$ -	\$ - 3			\$ - \$		-	-
22	RT Congestion		\$ (186,641.87)	\$ - 3	\$-\$	(186,641.87)	\$ - \$	(186,641.87)		
23	FTR Hourly Allocation Amount	555.14	\$ 396,001.72	\$ (938,322.64)	\$-\$	(542,320.92)	\$ - \$	(542,320.92)	-	-
24	FTR Monthly Allocation Amount			\$ (7,625.41) \$					-	-
25	FTR Yearly Allocation Amount		<b>T</b>	\$			\$ - \$		-	-
26	FTR Monthly Transaction Amount		Ŧ	\$ - 3			\$ - \$		-	-
27	FTR Full Funding Guarantee Amount			\$ (74,578.66)				(,)	-	-
28	FTR Guarantee Uplift Amount		\$ 74,578.66						-	-
29 30	FTR Auction Revenue Rights Transaction Amount		\$ 15,598.61						-	-
30	FTR Annual Transaction Amount FTR Auction Revenue Rights Infeasible Uplift Amount		\$ 163,456.88 \$ 2,796.83	\$ (15,999.47) \$ -					-	-
32	FTR Auction Revenue Rights Stage 2 Distribution Amount			 \$ (39,615.46)					-	-
	DA Congestion Rebate on Option B GFA		\$ -	\$ (00,010.40) \$	\$ (200.07) \$ \$ - \$		φ - φ \$ - \$		_	
33 34	TOTAL		\$ 473,392.29	\$ (668,435.31)					-	-
	RSG & Make Whole Payments	_		. , ,	. , , ,	. , ,		/		
35	DA Revenue Sufficiency Guarantee Distribution Amount			\$;					-	-
36	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount			\$ (5,485.60)					-	-
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amou		\$ 34,975.91						-	-
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount			\$ - 3			\$ (17,863.27) \$		-	-
39 40	RT Price Volatility Make Whole Payment			\$ (17,855.77) \$					-	-
40	TOTAL Revenue Neutrality Uplift		\$ 42,044.49	\$ (23,341.37)	\$ 1,807.11 \$	20,510.23	\$ (16,211.94) \$	4,298.29	-	-
41	RT Revenue Neutrality Uplift Amount	555.28	\$ 38,301.79	\$ (4,998.57)	\$ 7,074.27 \$	40,377.49	\$ 2,564.66 \$	42,942.15	-	
41	TOTAL		\$ 38,301.79 \$ 38,301.79							-
	Other Charges	_		. (.,	,			,		
43	RT Misc Amount	555.25	\$ -	\$ - ;	\$ 22,319.77 \$	22,319.77	\$ - \$	22,319.77	-	-
44	RT Net Inadvertent Amount			\$ (1,568.14)					-	-
45	RT Uninstructed Deviation Amount	555.31	\$ -	\$ - 3	\$ - \$	; - ´	\$ - \$		-	-
46	RT Demand Response Allocation Uplift Amount			\$ - 3			\$ - \$		-	-
47	DA Ramp Product		Ŷ	\$ (1,776.22)		(.,			-	-
48	RT Ramp Product	555.64		\$ (85.91)					-	-
49	TOTAL		\$ 2,681.76	\$ (3,430.27)	\$21,429.30	20,680.79	ə - \$	20,680.79	-	-

	Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group for Current Month - System July 2019 includes any adjustments (A) (B) (C) (D) (E) (F) (G) (H)**														
	(/	A)	(B)		(C)	(E Ret			(E)		(F)		(G)	(H)* Charge typ	
	Charge Type Description Ac	ct	Retail Debits	R	Retail Credits	Adjust	ments	N	Net Retail	Ne	t Intersystem		Total	MWH for	Retail
	ASM Charges														
50		5.55 \$	664,306.53		(192,174.39)		(511.61)		471,620.53		(538,544.34)		(66,923.81)	39,032	(2,591
i1 i2	RT ASM Excessive Energy Amount 555 TOTAL	5.56 \$	57.37		(83.90) (192,258.29)		(511.61)		(26.53)		(278.06)		(304.59) (67,228.40)	39.032	(50 (2,641
	Grandfathered Charge Types	\$	664,363.90	\$	(192,256.29)	э	(511.61) 3	Þ	471,594.00	\$	(538,822.40)	Þ	(67,228.40)	39,032	(2,641
i3		5.05 \$		¢		¢		ŕ		¢		¢			
53 54		5.05 \$ 5.06 \$	-	ф Ф	-	¢ Q	- 4	₽ t	-	ф ¢	-	¢ ¢	-	-	-
55	RT Congestion Rebate on COGA 555			φ ¢		¢	- 4	ρ t		φ ¢	-	φ ¢			
6		5.23 \$	_	\$	_	φ \$	- 9	\$	-	\$	-	\$	-		-
57	TOTAL	\$	-	\$	-	<u>\$</u>		\$	-	\$	-	\$	-	-	-
68 69	TOTAL MISO DAY 2 CHARGES Less: Schedule 16 & 17 (Lines 15, 16, 17)	\$	(66,547.46)	\$	(7,978,340.63)	\$ 16	3,718.79 \$		3,970,413.81	\$	(555,049.32)	\$	3,415,364.49	463,945	(289,838
50 51 52	Less: Congestion and Losses Adjustment Less: No DA generation sch., but still had output for current mont Less: MISO RSG Bad Debt	φ h	(00,547.40)	Ψ	-	\$ \$ \$	5,209.27 - \$	5 5	5,209.27 - -						
53	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$	11,713,488.19	\$	(7,978,340.63)	\$ 17	4,102.82 \$	\$ :	3,909,250.38						
64 65	Net MISO Charges for Retail = (B) + (C) + (D) Net KWH for retail = $((G) + (H)) * 1,000$			\$	<b>3,909,250.38</b> 174,106,404										174,106,404
66 67	July 2019 covers time period of 6/21/2019 7/23/2019 ** increased for	losses o	f 2.8% Net Retail	N	et MISO KWH						per kWh	Ne	t Intersystem	Total	
88	MISO Book Totals	\$	3,735,147.56		174,106,404					\$		\$	(555,505.90) \$	3,179,642	
9	Congestion and Losses Adjustment	\$	5,209.27									\$	- \$	5,209.27	
0	MISO RSG Bad Debt	\$	-									\$	- \$	-	
'1	July Adjustments	\$	168,893.55		7,941,320					\$	0.02127	\$	456.58 \$	169,350.13	
2	Total MISO	\$	3,909,250.38		182,047,723					\$	0.02147	\$	(555,049.32) \$	3.354.201.06	

Charge Type Description         Acta         Retail Cedits         Adjustments         Net Retail         Net Interregise         Total         MM           1         DA Asset Energy Amount         5550 4         \$         7.655,656.7         \$         (568,0690.0)         \$         \$         \$         1.769,988.85         \$         (174,866.44)         \$         1.564,720.1         369           3         DA Non-asset Energy Amount         5550.4         \$         \$         (170,888.45)         \$         (174,866.44)         \$         1.664,720.1         369           3         DA Non-asset Energy Amount         5552.4         \$         (272,820.3)         \$         (181,064.1)         \$         (180,064.55)         \$         \$         (180,064.5)         \$         \$         (153,447.41)         \$	
Bb. Day, Ahada & Real Time Asset Energy Anount         555 02         7,455,055.87         5         5         5         7,456,056.87         5         5         7,456,056.87         5         5         7,456,056.87         5         5         7,456,056.87         5         5         7,456,056.87         5         5         7,456,056.87         5         5         7,456,056.87         5         7,456,056.87         5         7,456,056.87         5         7,456,056.87         5         7,456,056.87         5         7,456,056.87         5         7,456,056.87         5         7,476,060.99         5         5         7,476,060.99         5         5         7,476,056.97         5         7,476,056.97         5         7,456,056.87         5         7,456,056.87         5         7,456,056.87         5         7,456,056.87         5         7,456,056.87         5         5         7,456,056.87         5         7,556,056.87         5         7,556,056.87         5         7,555,056.87         5         7,555,056.87         5         7,556,067         5         7,556,067         5         7,556,067         5         7,556,067         5         7,556,067         7,556,067         7,556,067         7,556,067         7,556,067         7,556,067         7,556,06	(H)** e types with
1       DA Asset Energy Amount       055.02       \$       -       \$       1.769.08.85       \$       (174.806.44)       \$       1.594.720.41       306         3       DA Non-asset Energy Amount       555.04       \$       \$       \$       (06.005.99)       -       \$       (06.005.99)       -       \$       (06.005.99)       -       \$       (06.005.99)       -       \$       (06.005.99)       -       \$       (06.005.99)       -       \$       (06.005.99)       -       \$       (06.005.99)       -       \$       (06.005.99)       -       \$       (06.005.99)       -       \$       (06.005.99)       -       \$       (01.0222.70)       -       \$       (01.0222.70)       -       \$       (01.0222.70)       -       \$       (01.0227.01)       -       \$       (01.0227.01)       -       \$       (01.0227.01)       -       \$       (01.0227.01)       -       \$       (01.0227.01)       -       \$       (01.0227.01)       -       \$       (01.0227.01)       -       \$       (01.0227.01)       -       \$       \$       \$       \$       \$       \$       \$       \$       \$       \$       \$       \$       \$       \$       \$       \$	for Retail
2       DA FBT Less Amount       555.09       \$ <td></td>	
3       DA Non-asset Energy Amount       555.09       \$       \$       (06.600.99)       \$       \$       \$       (06.600.99)       \$       \$       \$       (06.600.99)       \$	09 (278,249)
4       RT Asset Energy Amount       555.19       \$       14, 125.90       \$       17, 125.90       \$       \$       153,068.55       \$       \$       \$       53,068.55       \$ <td< td=""><td></td></td<>	
5       RT Distribution closes Amount       555.24       \$       2.729.30       \$       (132,848.36)       \$       (810.64)       \$       (130,929.70)       \$       -       \$	- (4,228)
6       RT FBT Loss Amount       555.21       S <td>49 (11,541)</td>	49 (11,541)
7       DA Loss Amount       \$             354,938.67 \$             \$             . \$	
8       RT Loss Amount       \$       (15,344,74) \$       .       .       \$       .       \$       .       \$       .	
9       RT Non-Asset Energy Amount       552.26       S	1
10       DA Losses Relate on Option B GFA       555.08       \$ <td></td>	
11       TOTAL       \$ 8,145,105.00 \$ (6,327,483.78) \$ 117,087.42 \$ 1,934,702.64 \$ (174,866.44) \$ 1,759,336.20       374         12       DA Virtual Energy       Total       555.32 \$ . \$ . \$ . \$ . \$ . \$ . \$ . \$ . \$ . \$	
12       DA Virtual Energy Amount       655.12       \$       <	58 (294,019)
13       RT Virtual Energy Amount       555.32       \$<       \$	
14       TOTAL       \$       \$       \$       \$       \$       \$       \$       \$       \$         15       Schedules 16 & 17       -       \$       35,155,06 \$       287,02 \$       35,442.08       -       \$       135,155,06 \$       287,02 \$       35,442.08       -       \$       (203,49) \$       3,266,42 \$       1,351,87 \$       4,618,29       -       \$       1,196,32 \$       \$       -       \$       1,206,42 \$       1,351,87 \$       4,618,29       -       \$       1,206,32 \$       \$       1,196,32 \$       \$       1,2576,10 \$       \$       \$       \$       \$       \$ <td></td>	
Schedules 16 ± 17           15         DA Mik Admin Amount         555.01         35,155.06         \$         287.02         35,442.08           16         RT Miki Admin Amount         555.18         \$         3,469.91         \$         \$         \$         1,169.32         \$         \$         1,169.32         \$         \$         1,169.32         \$         \$         1,169.32         \$         \$         1,169.32         \$         \$         1,169.32         \$         \$         1,169.32         \$         \$         1,169.32         \$         \$         1,169.32         \$         \$         1,169.32         \$         \$         1,169.32         \$         \$         1,169.32         \$         \$         \$         1,169.32         \$         \$         \$         \$         1,169.32         \$         \$         \$         1,169.32         \$         \$         \$         \$         \$         1,169.32         \$         \$         \$         1,169.32         \$	
15       DA MKI Admin Amount       555.01       \$ 35,155.06       \$       -       \$       -       \$       35,155.06       \$       287.02       \$       35,442.08         16       RT MkI Admin Amount       555.18       \$       3,469.91       \$       -       \$       (203.49)       \$       32,664.2       \$       1,51.87       \$       4,618.29         17       FTR MkI Admin Amount       555.03       \$       -       \$       -       \$       1,96.32       \$       \$       1,96.32         18       TOTAL       \$       33,821.29       \$       -       \$       -       \$       1,65.20       \$       -       \$       -       \$       1,24576.10       \$       124,576.10       \$       124,576.10       \$       124,576.10       \$       124,576.10       \$       124,576.10       \$       \$       163,646.48       \$       \$       163,646.48       \$       \$       163,646.48       \$       \$       164,666       \$       \$       163,646.48       \$       \$       163,646.48       \$       \$       163,646.48       \$       \$       163,646.48       \$       \$       163,646.48       \$       \$       163,646.48 <td< td=""><td></td></td<>	
16       RT Mkt Admin Amount       555:18       \$       346.991       \$       -       \$       (203.49)       \$       3.266.42       \$       1.196.32       -       \$       1.196.32       \$       \$       1.196.32       \$       \$       1.196.32       \$       \$       1.196.32       \$       \$       \$       1.196.32       \$	
17       FTR Mkt Admin Amount       555.13       1/196.32       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       \$       1/196.32       \$       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       1/196.32       \$       \$       \$       1/196.32       \$       \$       \$       1/196.32       \$       \$       \$       1/196.32       \$       \$       \$       1/196.32       \$       \$       \$       1/196.32       \$ </td <td></td>	
18       TOTAL       \$ 39,821.29 \$       \$ (203.49) \$ 39,617.80 \$ 1,638.89 \$ 41,256.69         Congest & FTRS       DA FBT Congestion Amount       555.03 \$       \$ <td></td>	
Congest & FTRs         Congestion         Status	
19       DA FBT Congestion Amount       555.03       \$       -       \$       10.46.6       \$       -       \$       10.46.6       \$       -       \$       10	
20       DA Congestion       \$\$       -       \$\$       124,576.10       \$\$       - <td< td=""><td></td></td<>	
21       RT FBT Congestion Amount       555.20       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       \$       (8,148.66)       \$       -       \$       \$       (8,148.66)       \$       -       \$       \$       \$       (8,148.66)       \$       -       \$ <td></td>	
22       RT Congestion       \$ (8,148.66) \$       -       \$ (18,06,54) \$       -       \$ (44,906.54) \$       -       \$ (44,906.54) \$       -       \$ (44,906.54) \$       -       \$ (10,815.78) \$       -       \$ (17,81) \$       -       \$ (19,815.78) \$       -       \$ (19,815.78) \$       -       \$ (147,457.41) \$       -<	
23       FTR Hourly Allocation Amount       555.14       \$       606,395.43       \$       (420,748.95)       \$       -       \$       185,646.48       \$       -       \$       185,646.48       \$       -       \$       (44,906.54)       \$       -       \$       (44,906.54)       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,047.457.41       \$       - <td></td>	
25       FTR Yearly Allocation Amount       555.17       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       147,457.41       \$       -       \$       147,457.41       \$       147,457.41       \$<	
26       FTR Monthly Transaction Amount       555.35       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       11,038.66       \$       -       \$       (19,815.78)       >       \$       (19,815.78)       >       \$       (147,457.48)       >       \$       (147,457.41)       \$       -       \$       147,457.41       \$       >       \$       2,796.83       >       -       \$       2,796.83       >       -       \$       2,796.83       >       -       \$       2	
27       FTR Full Funding Guarantee Amount       555.36       \$ 43,954.74       \$ (32,916.08)       \$ - \$ 11,038.66       \$ - \$ 11,038.66         28       FTR Guarantee Uplift Amount       555.37       \$ 32,916.45       \$ (52,732.23)       \$ - \$ (19,815.78)       \$ - \$ (19,815.78)         29       FTR Auction Revenue Rights Transaction Amount       555.39       \$ 15,598.61       \$ (163,056.09)       \$ - \$ (147,457.48)       \$ - \$ (147,457.48)         30       FTR Anual Transaction Amount       555.38       \$ 1163,456.88       \$ (15,99.47)       \$ - \$ \$ (147,457.48)       \$ - \$ \$ (147,457.41)         31       FTR Auction Revenue Rights Infeasible Uplift Amount       555.40       \$ 2,796.83       \$ - \$ \$ 2,796.83       \$ - \$ \$ 2,796.83       \$ - \$ \$ 2,796.83         32       FTR Auction Revenue Rights Stage 2 Distribution Amount       555.41       \$ - \$ \$ \$ - \$ \$ \$ \$ \$ 2,796.83       \$ - \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
28       FTR Guarantee Üplift Amount       555.37       \$ 32,916.45       \$ (52,732.23) \$ - \$ (19,815.78) \$ - \$ (19,815.78) \$ - \$ (19,815.78) \$         29       FTR Auction Revenue Rights Transaction Amount       555.39       \$ 15,598.61 \$ (163,056.09) \$ - \$ (147,457.48) \$ - \$ (147,457.48) \$         30       FTR Annual Transaction Amount       555.38       \$ 163,456.88 \$ (15,999.47) \$ - \$ 147,457.41 \$ - \$ 147,457.41 \$         31       FTR Auction Revenue Rights Infeasible Uplift Amount       555.40 \$ 2,796.83 \$ - \$ 2,796.83 \$       - \$ - \$ (39,611.25) \$ 1.35 \$ (39,610.20) \$ - \$ (39,610.20) \$         32       FTR Auction Revenue Rights Stage 2 Distribution Amount       555.41 \$ - \$ (45,395.65) \$       1.35 \$ (39,610.20) \$ - \$ (39,610.20) \$         34       TOTAL       \$ 856,971.12 \$ (45,395.65) \$       1.35 \$ 211,576.82 \$       - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	
29       FTR Auction Revenue Rights Transaction Amount       555.39       \$       15,598.61       \$       (163,056.09)       \$       -       \$       (147,457.48)       \$       -       \$       (147,457.48)       \$       -       \$       (147,457.48)       \$       -       \$       (147,457.48)       \$       -       \$       (147,457.48)       \$       -       \$       (147,457.41)       \$       -       \$       (147,457.41)       \$       -       \$       147,457.41       \$       -       \$       147,457.41       \$       -       \$       147,457.41       \$       -       \$       147,457.41       \$       -       \$       147,457.41       \$       -       \$       147,457.41       \$       -       \$       147,457.41       \$       -       \$       147,457.41       \$       -       \$       147,457.41       \$       -       \$       147,457.41       \$       -       \$       2,796.83       \$       -       \$       147,457.41       \$       -       \$       2,796.83       \$       -       \$       2,796.83       \$       -       \$       2,796.83       \$       -       \$       2,796.83       \$       -       \$       2	
30       FTR Annual Transaction Amount       555.38       \$ 163,456.88       \$ (15,999,47)       \$ - \$ 147,457.41       \$ - \$ 147,457.41         31       FTR Auction Revenue Rights Infeasible Uplift Amount       555.40       \$ 2,796.83       \$ - \$ 3,796.82       \$ - \$ 3,796.82       \$ - \$ 3,796.82       \$ - \$ \$ - \$ 3,796.82       \$ - \$ \$	
31       FTR Auction Revenue Rights Infeasible Uplift Amount       555.40       \$ 2,796.83       \$ - \$ 2,796.83       \$ - \$ 2,796.83       \$ - \$ 2,796.83         32       FTR Auction Revenue Rights Stage 2 Distribution Amount       555.41       \$ - \$ (39,611.55)       \$ 1.35       \$ (39,610.20)       \$ - \$ (39,610.20)         33       DA Congestion Rebate on Option B GFA       555.07       \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	
32       FTR Auction Revenue Rights Stage 2 Distribution Amount       555.41       \$       -       \$       (39,611.55)       \$       1.35       \$       (39,610.20)       \$       -       \$       (39,610.20)       \$       -       \$       211,576.82       \$       211,576.82       \$       211,576.82       \$       211,576.82       \$       211,576.82       \$       211,576.82       \$       211,576.82       \$       211,576.82       \$       211,576.82       \$       211,576.82       \$       211,576.82       \$ <td></td>	
33       DA Congestion Rebate on Option B GFA       555.07       \$<	
RSG & Make Whole Payments           35         DA Revenue Sufficiency Guarantee Distribution Amount         555.10         \$ 4,750.32         \$ - \$ (144.36)         \$ 4,605.96         \$ 278.39         \$ 4,884.35           36         DA Revenue Sufficiency Guarantee Make Whole Pymt Amount         555.11         \$ - \$ (1,534.29)         \$ 4,605.96         \$ 278.39         \$ 4,884.35           36         DA Revenue Sufficiency Guarantee Make Whole Pymt Amount         555.11         \$ - \$ (1,534.29)         \$ (1,534.29)         \$ (1,534.39)         \$ (2,439.40)           37         RT Revenue Sufficiency Guarantee First Pass Distribution Amount         555.29         \$ 20,258.34         \$ - \$ (2,044.41)         \$ 18,213.39         \$ 1,100.97         \$ 19,314.90           38         RT Revenue Sufficiency Guarantee Make Whole Pymt Amount         555.30         \$ - \$ \$ - \$ \$ - \$ \$ (1,693.83)         \$ (1,693.83)         \$ (1,693.83)         \$ (1,693.83)         \$ (1,693.83)         \$ (1,693.83)         \$ (1,693.83)         \$ (16,066.87)         \$ 25,008.66         \$ (14,321.51)         \$ (829.52)         \$ (15,151.03)         \$ (915.84)         \$ (16,066.87)           40         TOTAL         \$ 25,008.66         \$ (15,855.80)         \$ (3,018.29)         \$ 6,134.57         \$ (2,135.42)         \$ 3,999.15	
RSG & Make Whole Payments           35         DA Revenue Sufficiency Guarantee Distribution Amount         555.10         \$ 4,750.32         \$ - \$ (144.36)         \$ 4,605.96         \$ 278.39         \$ 4,884.35           36         DA Revenue Sufficiency Guarantee Make Whole Pymt Amount         555.11         \$ - \$ (1,534.29)         \$ 4,605.96         \$ 278.39         \$ 4,884.35           36         DA Revenue Sufficiency Guarantee Make Whole Pymt Amount         555.11         \$ - \$ (1,534.29)         \$ (1,534.29)         \$ (1,534.39)         \$ (2,439.40)           37         RT Revenue Sufficiency Guarantee First Pass Distribution Amount         555.29         \$ 20,258.34         \$ - \$ (2,044.41)         \$ 18,213.39         \$ 1,100.97         \$ 19,314.90           38         RT Revenue Sufficiency Guarantee Make Whole Pymt Amount         555.30         \$ - \$ \$ - \$ \$ - \$ \$ (1,693.83)         \$ (1,693.83)         \$ (1,693.83)         \$ (1,693.83)         \$ (1,693.83)         \$ (1,693.83)         \$ (1,693.83)         \$ (16,066.87)         \$ 25,008.66         \$ (14,321.51)         \$ (829.52)         \$ (15,151.03)         \$ (915.84)         \$ (16,066.87)           40         TOTAL         \$ 25,008.66         \$ (15,855.80)         \$ (3,018.29)         \$ 6,134.57         \$ (2,135.42)         \$ 3,999.15	
35       DA Revenue Sufficiency Guarantee Distribution Amount       555.10       \$ 4,750.32       -       \$ (144.36)       \$ 4,605.96       \$ 278.39       \$ 4,884.35         36       DA Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.11       \$ -       \$ (1,534.29)       -       \$ (1,534.29)       \$ (905.11)       \$ (2,439.40)         37       RT Revenue Sufficiency Guarantee First Pass Distribution Amount       555.29       \$ 20,258.34       -       \$ (2,044.41)       \$ 18,213.93       \$ 1,100.97       \$ 19,314.90         38       RT Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.30       \$ -       \$ -       \$ -       \$ -       \$ (1,693.83)       \$ (1,693.83)       \$ (1,693.83)       \$ (1,693.83)       \$ (1,693.83)       \$ (16,066.87)         39       RT Revolue Sufficiency Guarantee Make Whole Payment       555.42       \$ -       \$ (14,321.51)       \$ (829.52)       \$ (15,151.03)       \$ (915.84)       \$ (16,066.87)         40       TOTAL       \$ 25,008.66       \$ (15,855.80)       \$ (3,018.29)       \$ 6,134.57       \$ (2,135.42)       \$ 3,999.15	
36       DA Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.11       \$       -       \$       (1,534.29)       \$       (905.11)       \$       (2,439.40)         37       RT Revenue Sufficiency Guarantee First Pass Distribution Amou       555.29       \$       20,258.34       \$       -       \$       (1,534.29)       \$       (1,00.97       \$       19,314.90         38       RT Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.30       \$       -       \$       -       \$       -       \$       (1,693.83)       \$       (1,693.83)       \$       (1,693.83)       \$       (1,693.83)       \$       (1,693.83)       \$       (1,696.87)       \$       (16,066.87)       \$       (15,855.80)       \$       (3,018.29)       \$       6,134.57       \$       (2,135.42)       \$       3,999.15       \$	
37       RT Revenue Sufficiencý Guarantee First Pass Distribution Amou       555.29       \$       20,258.34       \$       -       \$       (2,044.41)       \$       18,213.93       \$       1,100.97       \$       19,314.90         38       RT Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.30       \$       -       \$       -       \$       -       \$       (1,693.83)       \$       (1,693.83)       \$       (1,693.83)       \$       (16,068.87)       \$       (16,068.87)       \$       (2,135.42)       \$       (16,066.87)       \$       (2,135.42)       \$       (3,018.29)       \$       6,134.57       \$       (2,135.42)       \$       3,999.15       \$       3,999.15       \$       3,999.15       \$       \$       3,999.15       \$       \$       3,999.15       \$       \$       3,999.15       \$       \$       \$       \$       \$       \$       3,999.15       \$ <t< td=""><td></td></t<>	
38       RT Revenue Sufficiency Guarantee Make Whole Pymt Amount       555.30       \$       -	
40 TOTAL \$ 25,008.66 \$ (15,855.80) \$ (3,018.29) \$ 6,134.57 \$ (2,135.42) \$ 3,999.15	
Revenue Neutrality Uplift	
41         RT Revenue Neutrality Uplift Amount         555.28         \$ 38,082.33         \$ (6,324.06)         \$ 4,854.30         \$ 36,612.57         \$ 2,213.10         \$ 38,825.67           42         TOTAL         \$ 38,082.33         \$ (6,324.06)         \$ 4,854.30         \$ 36,612.57         \$ 2,213.10         \$ 38,825.67	
42         TOTAL         \$ 38,082.33         \$ (6,324.06)         \$ 4,854.30         \$ 36,612.57         \$ 2,213.10         \$ 38,825.67           Other Charges         \$ 36,012.57         \$ 2,213.10         \$ 38,825.67	· ·
43         RT Misc Amount         555.25         -         \$         -         \$         16,074.77         \$         -         \$         16,074.77	
44         RT Net Indvertent Amount         555.27         7,953.03         (1,602.60)         (867.39)         5,483.04         \$         -         5,483.04	
45         RT Uninstructed Deviation Amount         555.31         \$         -	
46 RT Demand Response Allocation Uplift Amount 555.59 \$ - \$ - \$ - \$ - \$ - \$ -	
47 DA Ramp Product 555.63 \$ - \$ (2,384.66) \$ - \$ (2,384.66) \$ - \$ (2,384.66)	
48 RT Ramp Product 555.64 \$ 173.71 \$ (13.79) \$ - \$ 159.92 \$ - \$ 159.92	
49 TOTAL \$ 8,126.74 \$ (4,001.05) \$ 15,207.38 \$ 19,333.07 \$ - \$ 19,333.07	

Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group for Current Month - System August 2019 includes any adjustments														
	(A)		(B)		(C)	(D) Retail		(E)		(F)		(G)	(H)* Charge typ	
	Charge Type Description Acct		Retail Debits	F	Retail Credits	Adjustments		Net Retail	Ne	et Intersystem		Total	MWH for	
	ASM Charges													
50	RT ASM Non-Excessive Energy Amount 555.55		610,291.90	\$	(70,687.00) \$			539,516.63		(334,479.77)		205,036.86	38,859	(3,646)
51	RT ASM Excessive Energy Amount 555.56	\$		\$	(204.87)		\$	(204.87)		(3,153.76)		(3,358.63)	5	(229)
52	TOTAL	\$	610,291.90	\$	(70,891.87) \$	6 (88.27)	\$	539,311.76	\$	(337,633.53)	\$	201,678.23	38,864	(3,875)
	Grandfathered Charge Types													
53	DA Congestion Rebate on COGA 555.05		-	\$	- 9		\$	-	\$	-	\$	-	-	-
54	DA Losses Rebate on COGA 555.06		-	\$	- 9		\$	-	\$	-	\$	-	-	-
55	RT Congestion Rebate on COGA 555.22		-	\$	- 9		\$	-	\$	-	\$	-	-	-
56	RT Loss Rebate on COGA 555.23	\$	-	\$	- 9	-	Ş	-	\$	-	\$	-	-	-
57	TOTAL	\$	-	\$	- 3		\$	-	\$	-	\$	-	-	-
58	TOTAL MISO DAY 2 CHARGES	\$	9,723,407.04	\$	(7,069,958.21)	\$ 133,840.40	\$	2,787,289.23	\$	(510,783.40)	\$	2,276,505.83	413,422	(297,894)
59	Less: Schedule 16 & 17 (Lines 15, 16, 17)	\$	(39,821.29)	\$	- 9	203.49	\$	(39,617.80)						
60	Less: Congestion and Losses Adjustment		(**,*=*)	Ŧ	9	(23,615.59)		(23,615.59)						
61	Less: No DA generation sch., but still had output for current month				9	(23,026.49)		(23,026.49)						
62	Less: MISO RSG Bad Debt				9	s - :	\$	-						
63	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$	9,683,585.75	\$	(7,069,958.21)	87,401.81	\$	2,701,029.35						
64 65	Net MISO Charges for Retail = (B) + (C) + (D) Net KWH for retail = ((G) + (H)) $*$ 1,000			\$	<b>2,701,029.35</b> 115,528,253									115,528,253
66 67	August 2019 covers time period of 7/24/2019 8/22/2019 ** increased for	losse	s of 2.8% Net Retail	N	let MISO KWH					per kWh	Ne	t Intersystem	Total	
68	MISO Book Totals	\$	2.613.627.54		115.528.253				\$		\$	(510,944.93) \$	2,102,683	
69	Congestion and Losses Adjustment	\$	(23,615.59)								\$	- \$	(23,615.59)	
70	MISO RSG Bad Debt	\$	-								\$	- \$	-	
71	August Adjustments	\$	111,017.40		6,205,697				\$	0.01789	\$	161.53 \$	111,178.93	
72	Total MISO	Ś	2,701,029.35		121,733,950				Ś	0.02219	\$		2,190,245.95	

		De		Otter Tail Power ( Charges by Charge ( mber 2019 includes	Group for Current N	Ionth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	s with
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss									
1	DA Asset Energy Amount			\$ (5,074,116.42)					352,803	(284,112)
2	DA FBT Loss Amount				\$-\$		\$ - \$		-	-
3	DA Non-asset Energy Amount			\$ (94,360.28)					-	(4,321)
4	RT Asset Energy Amount			\$ (180,831.23)					4,867	(9,680)
5 6	RT Distribution of Losses Amount			\$ (114,786.10)				(=,	-	-
ю 7	RT FBT Loss Amount				\$-9		\$ - 9		-	-
8	DA Loss Amount RT Loss Amount		\$ 337,693.15 \$ (428.93)		\$-9 \$-9				-	-
о 9	RT Loss Amount RT Non-Asset Energy Amount				5 - 3 S - 9		5 - 3 S - 9		-	-
10	DA Losses Rebate on Option B GFA				s - 3	-	5 - 3 S - 9		-	-
11	TOTAL			\$ (5,464,094.03)					357.670	(298,113)
	Virtual Energy			• (0, 10 1,0000)			÷ (,			(200,110)
12	DA Virtual Energy Amount	555.12	\$ -	\$ -	\$ - \$	6 -	\$ - 9	; -	-	- 1
13	RT Virtual Energy Amount				s - 5		\$ - 9		_	_
14	TOTAL				š - š	5 -	\$ - 9	-	-	-
	Schedules 16 & 17	_								
15	DA Mkt Admin Amount	555.01	\$ 43,275.48	\$ - :	\$-9	\$ 43,275.48	\$ 496.25	43,771.73	-	-
16	RT Mkt Admin Amount	555.18	\$ 3,977.49	\$ -	\$ (281.65) \$		\$ 1,649.86	5,345.70	-	-
17	FTR Mkt Admin Amount	555.13	\$ 2,301.04	\$ -	\$ - 9				-	-
18	TOTAL		\$ 49,554.01	\$ -	\$ (281.65) \$	\$ 49,272.36	\$ 2,146.11 \$	5 51,418.47	-	-
	Congest & FTRs									
19	DA FBT Congestion Amount	555.03			\$-9		\$ - 9		-	-
20	DA Congestion		<b>T</b>	\$ 176,215.81						
21	RT FBT Congestion Amount				\$-9		\$ - \$		-	-
22	RT Congestion				\$ - \$					
23	FTR Hourly Allocation Amount			\$ (343,672.85)					-	-
24	FTR Monthly Allocation Amount			\$ (15,598.66)				(,	-	-
25	FTR Yearly Allocation Amount				\$-\$		\$ - \$		-	-
26	FTR Monthly Transaction Amount		Ŧ		\$ - \$		\$ - 9		-	-
27	FTR Full Funding Guarantee Amount			\$ (18,520.92)				(0,	-	-
28	FTR Guarantee Uplift Amount		\$ 18,520.92						-	-
29 30	FTR Auction Revenue Rights Transaction Amount FTR Annual Transaction Amount		\$ 13,997.54 \$ 255,222.87						-	-
30	FTR Auction Revenue Rights Infeasible Uplift Amount		\$ 255,222.87 \$ 6,318.03	\$ (14,103.74)	s - 3				-	-
32	FTR Auction Revenue Rights Stage 2 Distribution Amount			» - \$ (25,169.56)					-	-
32	DA Congestion Rebate on Option B GFA			\$ (25,169.56) \$ -	\$ (5.10) 3 \$ - 9		5 - 3 S - 9	( . , ,	-	-
33 34	TOTAL		\$ 482,001.31						-	-
	RSG & Make Whole Payments	_	,	. (,	. (	. (,		(,)		
35	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	\$ 4,678.59	\$ -	\$ 18.91 \$	\$ 4,697.50	\$ 327.78	5,025.28	-	-
36	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount		, ,, , , , ,	\$ (3,702.47)		,			-	-
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amou			, (., . )	\$ (281.72)				-	-
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount				\$ - 9		\$ (3,508.31) \$		-	-
39	RT Price Volatility Make Whole Payment	555.42		\$ (7,392.83)			\$ (524.30) \$	(8,034.91)	-	-
40	TOTAL		\$ 15,363.87	\$ (11,095.30)	\$ (380.59) \$	3,887.98	\$ (4,710.38) \$	(822.40)	-	-
	Revenue Neutrality Uplift									
41	RT Revenue Neutrality Uplift Amount		\$ 15,556.19						-	-
42	TOTAL		\$ 15,556.19	\$ (6,210.98)	\$ 2,990.74 \$	\$ 12,335.95	\$ 860.96 \$	5 13,196.91	-	-
	Other Charges									
43	RT Misc Amount				\$ 25,117.40 \$				-	-
44	RT Net Inadvertent Amount		, ,	\$ (5,046.23)			\$ - \$		-	-
45	RT Uninstructed Deviation Amount		<b>T</b>		\$-9		\$ - 9		-	-
46	RT Demand Response Allocation Uplift Amount				\$-9		\$ - 9		-	-
47	DA Ramp Product			\$ (943.31)					-	-
48 49	RT Ramp Product TOTAL	555.64	\$ 234.00 \$ 7,284.48	\$ (14.58) \$ (6,004.12)		219.42 26,281.17		219.42 26,281.17	-	-
45			ψ 1,204.40	φ (0,004.12)	φ 20,000.01 ξ	¥ 20,201.17	Ψ - 4	20,201.17	=	-

	Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group for Current Month - System September 2019 includes any adjustments														
	(A	.)	(B)		(C)	(D) Retail	(E)		(F)	(G)	(H)** Charge typ				
	Charge Type Description Ac	ct	Retail Debits	F	Retail Credits	Adjustments	Net Retail	Ne	et Intersystem	Total	MWH for	Retail			
A	SM Charges									•					
	RT ASM Non-Excessive Energy Amount 555.		417,383.14	\$	(116,962.13)				(356,046.21)		29,872	(7,86			
	RT ASM Excessive Energy Amount 555.	.56		\$		<u>\$</u> - <u></u> \$		\$	(920.19)		29.872	3)			
0	TOTAL	1	5 417,383.14	\$	(116,962.13)	\$ (29.96) \$	300,391.05	Þ	(356,966.40)	\$ (56,575.35)	29,872	(7,95			
G	Grandfathered Charge Types														
	DA Congestion Rebate on COGA 555.		- -	\$	-	5 - 5	-	\$	-	\$ -	-				
	DA Losses Rebate on COGA 555.		-	\$	-	5 - 5	-	\$	-	\$ -	-				
	RT Congestion Rebate on COGA 555.		- -	\$	-	ş - ş	-	\$	-	\$ -	-				
	RT Loss Rebate on COGA 555. TOTAL	.23 3	-	÷	-	• - 3 • •	-	÷ ¢	-	s - s -					
			-	Ψ		Ψ	-	Ψ	-	Ψ -					
	TOTAL MISO DAY 2 CHARGES	9	5 7,767,446.90	\$	(6,116,354.47)	\$ 232,716.33	1,883,808.76	\$	(516,830.30)	\$ 1,366,978.46	387,542	(306,06			
	Less: Schedule 16 & 17 (Lines 15, 16, 17)	9	(49,554.01)	\$	-	\$ 281.65 \$	(49,272.36)								
	Less: Congestion and Losses Adjustment		(,)	Ŧ		\$ (11,699.49) \$									
	Less: No DA generation sch., but still had output for current month	ı				\$ (4,335.25) \$									
	Less: MISO RSG Bad Debt				:	\$ - \$									
	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	9	5 7.717.892.89	\$	(6,116,354.47)	\$ 216.963.24 \$	1,818,501.66								
			, ,		(-, -, ,	,	,,								
	Net MISO Charges for Retail = $(B) + (C) + (D)$			\$	1,818,501.66										
	Net KWH for retail = $((G) + (H)) * 1,000$				81,477,624							81,477,62			
	Contember 2010 covers time period of 8/22/2010 0/22/2010 tt increase	and for l	of 0.00/												
	September 2019 covers time period of 8/23/2019 9/22/2019 ** increase	sed for i	Net Retail		let MISO KWH						Total				
	MISO Book Totals	-	5 1.601.538.42	N	81.477.624			¢	per kWh 0.01966	Net Intersystem \$ (517,086.11) \$					
	Congestion and Losses Adjustment	4	5 1,001,538.42 5 (11,699.49)		01,477,024			φ	0.01900	\$ (517,000.11) 4					
	MISO RSG Bad Debt	4	. (11,055.49)							φ - 4 \$ - 4	- (11,055.48)				
	September Adjustments	4	228.662.73		8,443,948			\$	0.02708	\$ 255.81	, - 5 228,918.54				
	Total MISO	4	5 1,818,501.66		89,921,572			Ψ		\$ (516,830.30)					

		De		Otter Tail Power ( Charges by Charge ( ober 2019 includes a	Group for Current M	lonth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	with
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss			• • • • • • • • • • • • • • • • • • • •						
1	DA Asset Energy Amount			\$ (3,781,747.13)			\$ (96,157.35) \$		377,809	(240,658)
2	DA FBT Loss Amount				\$-9		\$ - \$		-	-
3	DA Non-asset Energy Amount			\$ (82,918.95)				. (-=,)	-	(4,186)
4 5	RT Asset Energy Amount			\$ (201,021.96)					6,277	(12,820)
	RT Distribution of Losses Amount RT FBT Loss Amount			\$ (84,016.34)				(= ., . = =	-	-
6 7	DA Loss Amount				\$-9		\$ - 9		-	-
8	RT Loss Amount		\$ 303,016.54 \$ 17,807.89		\$-9 \$-9		\$ - 9 \$ - 9		-	-
9	RT Non-Asset Energy Amount				s - 9 5 - 9				- 16	-
10	DA Losses Rebate on Option B GFA			+	s - 9		\$ - 9		10	-
11	TOTAL	000.00		\$ (4,149,704.38)					384.102	(257,664)
	Virtual Energy		,,	( ( ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )	,	,,.	( ( , , , , , , , , , , , , , , , , , ,	, ,		( - , ,
12	DA Virtual Energy Amount	555.12	\$ -	\$ -	\$-9	6 -	\$ - 9	; -		-
13	RT Virtual Energy Amount	555.32	\$ -	\$ - :	\$ - \$	- 6	\$ - 9	- 3	-	-
14	TOTAL		\$ -	\$-	\$-\$	· -	\$ - \$	i -	-	-
	Schedules 16 & 17									
15	DA Mkt Admin Amount		\$ 56,257.92		\$ - \$				-	-
16	RT Mkt Admin Amount		\$ 5,787.64		\$ (49.51) \$				-	-
17	FTR Mkt Admin Amount	555.13	\$ 2,498.64		\$ - \$				-	-
18	TOTAL Congest & FTRs		\$ 64,544.20	\$ -	\$ (49.51) \$	64,494.69	\$ 1,394.04 \$	65,888.73	-	-
19	DA FBT Congestion Amount	555.03	\$ -	\$ -	\$-9	•	\$ - 9	-		
20	DA FBT Congestion Amount DA Congestion	555.03		\$- \$35,530.77					-	-
20	RT FBT Congestion Amount	555.20	<b>T</b>		s - 1 5 - 9		s - 9			
22	RT Congestion				\$				-	-
23	FTR Hourly Allocation Amount			\$ (428,089.96)					-	-
24	FTR Monthly Allocation Amount			\$ (5,162.93)					-	-
25	FTR Yearly Allocation Amount				\$ - 9		\$ - 9		-	-
26	FTR Monthly Transaction Amount				- 		\$ - 9		-	-
27	FTR Full Funding Guarantee Amount		\$ 4,909.90	\$ (29,988.69)			\$ - 9	(25,079.28)	-	-
28	FTR Guarantee Uplift Amount	555.37	\$ 29,988.69	\$ (2,577.18)					-	-
29	FTR Auction Revenue Rights Transaction Amount	555.39	\$ 13,997.54	\$ (255,289.83)	\$-9	(241,292.29)	\$ - 9	(241,292.29)	-	-
30	FTR Annual Transaction Amount	555.38	\$ 255,222.87	\$ (14,103.74)	\$-9	241,119.13	\$ - \$	241,119.13	-	-
31	FTR Auction Revenue Rights Infeasible Uplift Amount				\$-\$	6,318.03	\$ - \$	6,318.03	-	-
32	FTR Auction Revenue Rights Stage 2 Distribution Amount			\$ (25,168.06)				( . , )	-	-
33 34	DA Congestion Rebate on Option B GFA		<u>\$</u> -	\$ - :	\$ - \$		\$ - \$		-	-
34	TOTAL RSG & Make Whole Payments		\$ 517,242.31	\$ (724,849.62)	\$ 6.06 \$	6 (207,601.25)	\$ - 9	6 (207,601.25)	-	-
35	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	\$ 8.365.26	\$ -	\$ (0.98) \$	8.364.28	\$ 235.55	8.599.83		
35 36	DA Revenue Sufficiency Guarantee Distribution Amount DA Revenue Sufficiency Guarantee Make Whole Pymt Amount			\$ - \$ (13,475.75)					-	-
36	RT Revenue Sufficiency Guarantee First Pass Distribution Amount			+ (,	\$				-	-
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount				\$ (322.49) 4 \$ - \$		\$ (2,678.40)		-	-
39	RT Revenue Sunciency Guarantee Make Whole Pytht Amount RT Price Volatility Make Whole Payment			\$ (10,705.59)					-	-
40	TOTAL		\$ 17,283.90						-	-
	Revenue Neutrality Uplift	_	,	, ,	<u>, · · · / ·</u>	., -,				
41	RT Revenue Neutrality Uplift Amount	555.28	\$ 47,550.97	\$ (18,199.25)	\$ 4,757.57 \$			35,070.25	-	-
42	TOTAL		\$ 47,550.97	\$ (18,199.25)			\$ 960.96		-	-
	Other Charges									
43	RT Misc Amount				\$ 22,135.82				-	-1
44	RT Net Inadvertent Amount		\$ 6,645.62						-	-
45	RT Uninstructed Deviation Amount		<b>T</b>		\$-9		\$ - 9		-	-
46	RT Demand Response Allocation Uplift Amount				\$-9				-	-
47	DA Ramp Product		Ŷ	\$ (281.65)					-	-
48 49	RT Ramp Product TOTAL	555.64	\$ 1.84 \$ 6,647.56	\$ (13.09) <b>\$ (1,822.77)</b>				<u>(11.25)</u> 23,787.04	-	-
-J	IVIOF		÷ 0,0÷7.30	Ψ (1,022.11)	φ 10,302.20 ¢	20,101.04	Ψ - 4	20,101.04	-	-

	Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group for Current Month - System October 2019 includes any adjustments														
	(A)		(B)		(C)	(D) Retail		(E)		(F)		(G)	(H)* Charge typ		
	Charge Type Description Acct		Retail Debits	F	Retail Credits	Adjustments		Net Retail	Ne	et Intersystem		Total	MWH for		
	ASM Charges														
50	RT ASM Non-Excessive Energy Amount 555.55	\$	327,062.53		(133,871.38) \$			193,362.63		(63,196.65)		130,165.98	26,219	(8,867)	
51	RT ASM Excessive Energy Amount 555.56 TOTAL	\$	1,453.12		(1.88) \$	0.52 172.00		1,451.76		(133.76)		1,318.00	26.224	(217)	
52		¢	328,515.65	\$	(133,873.26) \$	172.00	\$	194,814.39	\$	(63,330.41)	\$	131,483.98	26,224	(9,083)	
	Grandfathered Charge Types	ć		¢	<u>^</u>		¢		¢		¢				
53 54	DA Congestion Rebate on COGA 555.05 DA Losses Rebate on COGA 555.06	\$ \$	-	\$	- \$	-	\$	-	\$	-	\$	-	-	-	
54 55	RT Congestion Rebate on COGA 555.22	¢	-	¢	- Þ	-	¢ Þ	-	¢	-	¢	-	-	-	
55 56	RT Loss Rebate on COGA 555.22 RT Loss Rebate on COGA 555.23	¢ ¢	-	ф Ф		-	φ ¢	-	¢ ¢	-	φ ¢	-	-	-	
57	TOTAL	ŝ		\$	- \$	-	\$ \$		\$		\$			-	
58 59 60 61 62	TOTAL MISO DAY 2 CHARGES Less: Schedule 16 & 17 (Lines 15, 16, 17) Less: Congestion and Losses Adjustment Less: No DA generation sch., but still had output for current month Less: MISO RSG Bad Debt	\$ \$	7,511,751.10 (64,544.20)		(5,052,630.62) \$ - \$ \$ \$ \$ \$	145,908.36 49.51 (1,854.33) (19,079.62)	\$ \$	2,605,028.84 (64,494.69) (1,854.33) (19,079.62)	\$	(159,665.30)	\$	2,445,363.54	410,326	(266,747)	
63	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$	7,447,206.90	\$	(5,052,630.62) \$	125,023.92	\$	2,519,600.20							
64 65	Net MISO Charges for Retail = (B) + (C) + (D) Net KWH for retail = $((G) + (H)) * 1,000$			\$	<b>2,519,600.20</b> 143,578,424									143,578,424	
66 67	October 2019 covers time period of 9/23/2019 10/23/2019 ** increased for	r loss	ses of 2.8% Net Retail	N	let MISO KWH					per kWh	Ne	et Intersystem	Total		
68	MISO Book Totals	\$	2,394,576.28		143,578,424				\$		\$	(159,832.21) \$	2,234,744		
69	Congestion and Losses Adjustment	\$	(1,854.33)								\$	- \$	(1,854.33)		
70	MISO RSG Bad Debt	\$	-								\$	- \$	- 1		
71	October Adjustments	\$	126,878.25		6,853,181				\$	0.01851		166.91 \$	127,045.16		
72	Total MISO	\$	2,519,600.20		150,431,605				\$	0.01675	\$	(159,665.30) \$	2,359,934.90		

		De		Otter Tail Power ( Charges by Charge ( mber 2019 includes	Group for Current N	Ionth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	with
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	etail
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss					-				
1	DA Asset Energy Amount	555.02		\$ (6,898,717.79)			\$ (21,325.66) \$		432,079	(321,340)
2	DA FBT Loss Amount	555.04			\$\$		\$ - \$		-	
3	DA Non-asset Energy Amount			\$ (101,372.67)					-	(4,421)
4	RT Asset Energy Amount	555.19		\$ (162,091.51)				- /	14,589	(7,238)
5 6	RT Distribution of Losses Amount RT FBT Loss Amount	555.24 555.21		\$ (115,718.76)				()	-	-
6 7		555.21			\$-9		\$ - 9 \$ - 9		-	-
8	DA Loss Amount RT Loss Amount				\$-9 \$-9		\$ - 3 \$ - 9		-	-
о 9	RT Loss Amount RT Non-Asset Energy Amount	555.26			s - 3		5 - 3 S - 9		-	-
10	DA Losses Rebate on Option B GFA	555.08			9 - 3 S - 9	-	s - 9		-	-
11	TOTAL	333.00		\$ (7,277,900.73)					446.668	(333,000)
	/irtual Energy		,,	. (.,,cccd)		,,	. (,e_e.e.e.e) (	_, ,		(110,000)
12	DA Virtual Energy Amount	555.12	\$ -	\$ -	\$ - \$	5 -	\$ - 9			-
13	RT Virtual Energy Amount	555.32			\$-9		\$ - 9		-	-
14	TOTAL				\$ - \$	5 -	\$ - 9	-	-	-
5	Schedules 16 & 17									
15	DA Mkt Admin Amount	555.01	\$ 66,733.49	\$ -	\$-9	66,733.49	\$ 82.83	66,816.32	-	-
16	RT Mkt Admin Amount	555.18	\$ 6,071.87	\$ -	\$ (19.54) \$	6,052.33	\$ 1,333.71	7,386.04	-	-
17	FTR Mkt Admin Amount	555.13	\$ 2,050.08		\$ - \$				-	-
18	TOTAL		\$ 74,855.44	\$ -	\$ (19.54) \$	\$ 74,835.90	\$ 1,416.54 \$	5 76,252.44	-	-
	Congest & FTRs									
19	DA FBT Congestion Amount	555.03			\$ - \$		\$ - \$		-	-
20	DA Congestion		7	\$ 185,154.69						
21	RT FBT Congestion Amount	555.20			\$-\$		\$ - 9		-	-
22	RT Congestion		\$ (28,451.67)		\$ - \$					
23	FTR Hourly Allocation Amount	555.14		\$ (345,353.02)					-	-
24	FTR Monthly Allocation Amount			\$ (12,404.24)				. (.=,,	-	-
25 26	FTR Yearly Allocation Amount FTR Monthly Transaction Amount				\$- \$-				-	-
20 27	FTR Full Funding Guarantee Amount	555.35 555.36	+	\$ - \$ (23,403.09)	Ψ ·		Ψ		-	-
27	FTR Guarantee Uplift Amount	555.30 555.37	\$ 12,256.93 \$ 23,403.09					( , . ,	-	-
20	FTR Auction Revenue Rights Transaction Amount	555.39	\$ 23,403.09 \$ 13,997.54					-,	-	-
30	FTR Annual Transaction Amount			\$ (14,103.74)					-	-
31	FTR Auction Revenue Rights Infeasible Uplift Amount		\$ 6,318.03		\$-9				_	
32	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41		\$ (25,168.06)					-	-
33	DA Congestion Rebate on Option B GFA	555.07		\$ -	\$\$		\$ - 9	( ., ,	-	-
33 34	TOTAL		\$ 399,969.78						-	-
	RSG & Make Whole Payments									
35	DA Revenue Sufficiency Guarantee Distribution Amount		\$ 9,728.82	\$ -	\$ (0.78) \$				-	-
36	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11		\$ (4,931.91)					-	-
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amou	555.29	\$ 12,816.31		\$ (163.37) \$				-	-
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30			\$-9		\$ (7,177.40) \$		-	-
39	RT Price Volatility Make Whole Payment	555.42		\$ (2,855.18)					-	-
40	TOTAL		\$ 22,545.13	\$ (7,787.09)	\$ (164.15) \$	5 14,593.89	\$ (6,374.87) \$	8,219.02	-	-
	Revenue Neutrality Uplift				• • • • • •					
41 42	RT Revenue Neutrality Uplift Amount	555.28	\$ 45,303.39 <b>45</b> 202 20					18,031.19	-	-
	TOTAL Dther Charges		\$ 45,303.39	\$ (28,061.96)	\$ 34.50 \$	5 17,275.93	\$ 755.26 \$	5 18,031.19	-	-
43	RT Misc Amount	555 <u>25</u>	¢	¢	¢ 10,002,64 4	19 002 64	¢ 4	18 002 64		
43 44	RT Net Inadvertent Amount	555.25 555.27			\$		\$-\$ \$-\$		-	-
44 45	RT Uninstructed Deviation Amount	555.27 555.31		(-,,	\$ (929.74) \$ \$ - 9		\$ - 3 \$ - 9	,	-	-
45 46	RT Demand Response Allocation Uplift Amount	555.59			s - 3		s - 9		-	-
40	DA Ramp Product	555.63		\$					-	-
47	RT Ramp Product	555.64		\$ (669.34) \$ (55.91)					-	-
40	TOTAL	000.04		\$ (4,251.25)		20,869.50	\$ - 9	20,869.50	-	-
			,					,		

ſ	Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group for Current Month - System November 2019 includes any adjustments														
	(	A)	(B)		(C)	(D) Retail		(E)		(F)		(G)	(H)* Charge typ		
		cct	Retail Debits	Reta	ail Credits	Adjustments	Ne	et Retail	Net I	Intersystem		Total	MWH for	Retail	
	ASM Charges														
50		5.55 \$	529,603.04		(129,271.23)			400,363.56		(325,261.56)		75,102.00	29,322	(7,198	
51 52	RT ASM Excessive Energy Amount 55: TOTAL 55:	5.56 \$	529.603.04	\$	(66.44) (129,337.67)		\$	(66.44)		(271.68)		(338.12) 74,763.88	12 29.334	(20 (7,218	
	Grandfathered Charge Types	\$	529,603.04	\$	(129,337.67)	\$ 31.75	à	400,297.12	ð.	(325,533.24)	ð	74,763.00	29,334	(7,210	
3		5.05 \$		¢		۴	¢		¢		¢				
54 54		5.05 \$ 5.06 \$	-	¢ ¢		¢ -	¢ ¢	-	¢	-	¢ ¢	-	-	-	
55		5.22 \$	-	¢ ¢		φ - \$	¢	-	φ ¢	_	φ ¢		_		
6		5.23 \$	-	\$		φ - \$ -	\$	-	\$	-	\$	-	_		
57	TOTAL	\$	-	\$		š -	\$	-	\$	-	\$	-	-	-	
i8 i9	TOTAL MISO DAY 2 CHARGES	<u> </u>	11,147,225.49		7,948,016.77)			(74,825,00)	\$	(351,061.97)	\$	2,941,564.67	476,002	(340,218	
9 60 61 62	Less: Schedule 16 & 17 (Lines 15, 16, 17) Less: Congestion and Losses Adjustment Less: No DA generation sch., but still had output for current mon Less: MISO RSG Bad Debt	ծ th	(74,855.44)	Þ	- :	Ŧ		(74,835.90) (8,367.80) - -							
53	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$	11,072,370.05	\$ (7	7,948,016.77)	\$ 85,069.66	\$3	,209,422.94							
64 65	Net MISO Charges for Retail = (B) + (C) + (D) Net KWH for retail = ((G) + (H)) * 1,000				<b>3,209,422.94</b> 135,783,795									135,783,795	
66 67	November 2017 covers time period of 10/24/2019 11/21/2019 ** incr	reased for	losses of 2.8% Net Retail	Net	MISO KWH				r	oer kWh	Net	t Intersystem	Total		
8	MISO Book Totals	\$	3,124,353.28		135,783,795				\$		\$	(351,062.45) \$	2,773,291		
9	Congestion and Losses Adjustment	\$	(8,367.80)								\$	- \$	(8,367.80)		
0	MISO RSG Bad Debt	\$	-								\$	- \$	- /		
1	November Adjustments	\$	93,437.46		5,379,752				\$	0.01737	\$	0.48 \$	93,437.94		
2	Total MISO	\$	3,209,422.94		141,163,548				\$	0.02274	\$	(351,061.97) \$	2,858,360.97		

		De		Otter Tail Power ( Charges by Charge ( mber 2019 includes	Group for Current M	lonth - System				
		(A)	(B)	(C)	(D) Retail	(E)	(F)	(G)	(H)** Charge types	with
	Charge Type Description	Acct	Retail Debits	Retail Credits	Adjustments	Net Retail	Net Intersystem	Total	MWH for Re	
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss						(			(0.0.0.0.0.)
1	DA Asset Energy Amount	555.02		\$ (7,134,915.09)			\$ (8,295.55)		554,103	(369,261)
2	DA FBT Loss Amount	555.04			\$-\$		\$ - 5		-	-
3 4	DA Non-asset Energy Amount			\$ (105,286.20)					-	(5,725)
4	RT Asset Energy Amount RT Distribution of Losses Amount			\$ (359,173.28) \$ (195,214.68)					5,820	(18,783)
5 6	RT FBT Loss Amount				\$ (10,296.92) 3 \$ - \$		ъ	()	-	-
7	DA Loss Amount	555.21	\$ 470,021.47		s - 4				-	-
8	RT Loss Amount				s - 4		\$ - 5			
9	RT Non-Asset Energy Amount	555.26			\$ 5 - 5		\$ - 5		_	
10	DA Losses Rebate on Option B GFA	555.08	•	Ŧ	\$-\$		\$ - 9		-	-
11	TOTAL		\$ 11,383,158.92	\$ (7,794,589.25)		3,737,308.38	\$ (8,295.55)	3,729,012.83	559,923	(393,769)
	Virtual Energy									
12	DA Virtual Energy Amount				\$-\$		\$ - \$		-	-
13	RT Virtual Energy Amount	555.32	Ŧ	Ŧ	\$-\$		\$ - 3		-	-
14	TOTAL		\$ -	\$-	\$-\$	ş -	\$ - 9	; -	-	-
15	Schedules 16 & 17	FFF 04	A 00 745 05	¢	•	00 715 05	<b>A</b> 05 76	00 711 55		
15 16	DA Mkt Admin Amount		\$ 83,715.82 \$ 8.400.45		\$-\$ \$(4.54)\$				-	-
10	RT Mkt Admin Amount FTR Mkt Admin Amount		\$ 8,400.45 \$ 2.314.56		\$(4.54)\$ \$-\$				-	-
18	TOTAL	555.15	\$ 2,314.50 \$ 94,430.83		s (4.54) s				-	-
10	Congest & FTRs		• • • • • • • • • • • • • • • • • • • •	•	· () ·	• • • • • • •	• .,			
19	DA FBT Congestion Amount	555.03	\$ -	\$ -	\$ - \$	s -	\$ - 3	; -	-	-
20	DA Congestion		•	\$ 191,440.56						
21	RT FBT Congestion Amount	555.20	\$ -		\$-\$		\$ - 5		-	-
22	RT Congestion		\$ 15,179.34	\$ -	\$-\$	5 15,179.34	\$ - 5	5 15,179.34		
23	FTR Hourly Allocation Amount	555.14	\$ 169,396.52	\$ (570,836.69)	\$ 0.23 \$	6 (401,439.94)	\$ - 5	6 (401,439.94)	-	-
24	FTR Monthly Allocation Amount			\$ (13,289.39)				(,======)	-	-
25	FTR Yearly Allocation Amount		<b>T</b>		\$-\$		\$ - 5		-	-
26	FTR Monthly Transaction Amount		+		\$-\$		\$ - 5		-	-
27	FTR Full Funding Guarantee Amount			\$ (46,093.57)				(02,101.20)	-	-
28	FTR Guarantee Uplift Amount		\$ 46,093.57						-	-
29 30	FTR Auction Revenue Rights Transaction Amount			\$ (249,456.27)					-	-
30 31	FTR Annual Transaction Amount			\$ (4,092.58) \$					-	-
31	FTR Auction Revenue Rights Infeasible Uplift Amount FTR Auction Revenue Rights Stage 2 Distribution Amount			\$	\$-\$ \$-\$				-	-
32	DA Congestion Rebate on Option B GFA		5 - S -	φ (31,200.37) \$	p - 3 6 - 9		ъ	(, , , , , , ,	-	-
33 34	TOTAL	000.07	\$ 501,917.31	\$ (735,668.68)					-	-
	RSG & Make Whole Payments		•			/		,		
35	DA Revenue Sufficiency Guarantee Distribution Amount		\$ 10,521.97	\$-	\$ (5.32) \$	10,516.65	\$ 482.23		-	-
36	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount			\$ (4,830.01)					-	-
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amou				\$ 560.94 \$				-	-
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount				\$-\$		\$ (5,052.30) \$		-	-
39 40	RT Price Volatility Make Whole Payment TOTAL			\$ (10,686.22)					-	-
40	Revenue Neutrality Uplift	_	\$ 21,918.85	\$ (15,516.23)	\$ 555.62 \$	6,958.24	\$ (4,512.02) \$	5 2,446.22	-	-
41	RT Revenue Neutrality Uplift Amount	555.28	\$ 53,587.34	\$ (5,198.22)	\$ (1,026.00) \$	47,363.12	\$ 2,172.60	49,535.72	-	
41		000.20	\$ 53,587.34							-
	Other Charges	_		(,,,)	(,-=) +	,	,	.,		
43	RT Misc Amount	555.25	\$ -	\$ -	\$ 24,112.59 \$	24,112.59	\$ - 5	24,112.59	-	-
44	RT Net Inadvertent Amount		\$ 10,370.19	\$ (4,287.62)	\$ (4,372.79) \$	1,709.78	\$ - 5	1,709.78	-	-
45	RT Uninstructed Deviation Amount		<b>T</b>		\$\$		\$ - 5		-	-
46	RT Demand Response Allocation Uplift Amount				\$-\$		\$ - 5		-	-
47	DA Ramp Product	555.63	Ŷ	\$ (663.59)					-	-
48 49	RT Ramp Product	555.64		\$ (9.39)						-
49	TOTAL		\$ 10,398.61	\$ (4,960.60)	\$ 19,739.80 \$	5 25,177.81	φ - 3	5 25,177.81	-	-

Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group for Current Month - System December 2019 includes any adjustments														
	(A)		(B)		(C)	(D) Retail		(E)		(F)	(G)	(H)* Charge typ		
	Charge Type Description Acct		Retail Debits	I	Retail Credits	Adjustments		Net Retail	Ne	t Intersystem	Total	MWH for	Retail	
	ASM Charges			_	(1=0 ==0 00)	(= = ( = = = )	_		_	(				
	RT ASM Non-Excessive Energy Amount 555.55		737,134.04	\$	(178,572.03)		\$	550,618.41		(321,127.04)		45,833	(11,566	
+	RT ASM Excessive Energy Amount 555.56 TOTAL	ş	737,134.04	\$	(26.27) (178,598.30)		\$	(26.27) 550,592.14		(389.51) (321,516.55)		45.833	(121) (11,688)	
	Grandfathered Charge Types	¢	737,134.04	Þ	(176,596.30)	6 (7,943.60)	Þ	550,592.14	Þ	(321,516.55)	\$ 229,075.59	45,633	(11,000	
C	DA Congestion Rebate on COGA 555.05	\$		¢		•	¢		¢		¢			
	DA Congesiion Rebate on COGA 555.05 DA Losses Rebate on COGA 555.06		-	¢ ¢	- 3		¢ Ø	-	¢	-	ቅ - ድ	-		
	RT Congestion Rebate on COGA 555.22		-	ф Ф	- 3	-	¢ ¢	-	ф Ф	-	φ - ¢	-	-	
	RT Loss Rebate on COGA 555.22 RT Loss Rebate on COGA 555.23		-	¢	- 3		¢ Þ	-	¢	-	φ -	-		
-	TOTAL	ŝ		\$		-	ŝ		\$	-	φ - \$-	-		
	TOTAL MISO DAY 2 CHARGES Less: Schedule 16 & 17 (Lines 15, 16, 17) Less: Congestion and Losses Adjustment Less: No DA generation sch., but still had output for current month Less: MISO RSG Bad Debt	\$ \$	12,802,545.90 (94,430.83)		(8,734,531.28) \$ - \$ \$ \$	4.54 (2,660.85) (17,670.87)	\$ \$	4,228,074.84 (94,426.29) (2,660.85) (17,670.87)	\$	(330,375.56)	\$ 3,897,699.28	605,756	(405,45)	
	TOTAL FOR MN COST OF ENERGY ADJUSTMENT Net MISO Charges for Retail = (B) + (C) + (D)	\$	12,708,115.07	\$ \$	(8,734,531.28) 4,113,316.83	139,733.04	\$	4,113,316.83						
	Net KWH for retail = ((G) + (H)) * 1,000 December 2019 covers time period of 11/22/2019 12/25/2019 ** increas	ed for	losses of 2.8% Net Retail	N	200,298,811					per kWh	Net Intersystem	Total	200,298,811	
1	MISO Book Totals	\$	3,973,583.79		200,298,811				\$	0.01984		3,643,056		
	Congestion and Losses Adjustment MISO RSG Bad Debt	\$ \$	(2,660.85)								\$-\$ \$-\$	(2,660.85)		
1	December Adjustments	\$	142,393.89		(128,265)				\$	(1.11016)				
1	Total MISO	\$	4,113,316.83		200.170.546				\$	0.02055	\$ (330,375.56) \$	3,782,941.27		

## Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group - Net Retail - System July 2018 through June 2019 includes any adjustments

ĺ	Ohana Tana Daarahitan	(A)	(B)	(C)	(D) SEPTEMBER	(E)	(F) NOVEMBER	(G) DECEMBER	(H)	(I) FEBRUARY	(J) MARCH	(K) APRIL	(L) MAY	(M) JUNE	YEAR TO DATE
No	Charge Type Description Day Ahead & Real Time Asset & Non Asset Energy & Loss	Acct	JULY 2018	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY 2019	FEBRUART	MARCH	APRIL	MAY	JUNE	2018 - 2019
NU.	· · · · · · · · · · · · · · · · · · ·	555.02 \$	5 1.298.063.67 \$	1.285.244.66	\$ 1.089.021.06	4 0 4 0 0 4 4 0 0	6.067.512.88	\$ 3,128,884.49	\$ 3,131,491.12	C 000 004 00	\$ 2.665.108.63	\$ 2.549.772.90	\$ 4.352.628.81 \$	3,163,802,29	\$ 38,843,669,26
1	DA Asset Energy Amount			1,285,244.00		4,843,314.66			\$ 3,131,491.12 \$ - !	\$ 5,268,824.09 \$ - !				-1 - 1	, ,
2	DA FBT Loss Amount	555.04 \$						÷	- ·	•	*	-			÷
3	DA Non-asset Energy Amount	555.09 \$	. (.==,==			\$ (127,743.64)	( ) )								\$ (1,451,996.48)
4	RT Asset Energy Amount	555.19 \$				\$ 73,811.53		\$ (51,007.63)				\$ 632,763.90			\$ 2,139,452.51
5	RT Distribution of Losses Amount	555.24 \$	( .,, .	(167,398.86)		\$ (128,117.86)			\$ (227,109.25)	\$ (352,171.94) \$		\$ (133,086.24)	,, .	(80,451.86)	\$ (2,166,563.32)
6	RT FBT Loss Amount	555.21 \$			\$	s - :		\$-	\$	\$	ş -	\$	\$-\$		\$-
7	DA Loss Amount	\$	466,309.59 \$	415,680.60	\$ 346,060.41	\$ 383,925.47	349,694.97	\$ 755,046.78	\$ 569,498.14	\$ 691,448.56	\$ 737,462.28	\$ 559,506.00	\$ 240,294.60 \$	208,886.18	\$ 5,723,813.58
8	RT Loss Amount	\$	9,901.01 \$	8,534.30	\$ (3,276.08)	30,955.02	28,484.69	\$ 46,231.54	\$ 9,109.23	\$ 35,609.68	\$ 27,479.25	\$ 12,297.38	\$ 11,666.33 \$	(3,966.89)	\$ 213,025.46
9	RT Non-Asset Energy Amount	555.26 \$	5 106.20 \$	1,774.73	\$ 4.72	137.86	6.85	\$ 129.50	\$ (9.64)	\$-3	\$-	\$	\$-\$		\$ 2,150.22
10	DA Losses Rebate on Option B GFA	555.08 \$	- \$		\$	s - :		s -	s - :	\$- \$	ş -	\$ - :	s - s		s -
11	TOTAL	\$	5 1,231,140.46 \$	1,293,926.33	\$ 1,652,265.66	5,076,283.04	6,528,103.54	\$ 3,433,430.22	\$ 3,701,078.39	\$ 5,328,304.55	\$ 3,313,040.42	\$ 3,507,079.36	\$ 4,789,740.13 \$	3,449,159.13	\$ 43,303,551.23
	Virtual Energy														
12	DA Virtual Energy Amount	555.12 \$	; - \$		\$ - 3	6 - 1	- í	ŝ -	s - :	\$ - \$	\$ -	\$ -	s - s		ŝ -
13	RT Virtual Energy Amount	555.32 \$	- \$		s - 1		-	S -	s - :	S - S	5 -	s - :	s - s		s -
14	TOTAL	s	- S	-	s - 1	s - 1	- 1	s -	s - :	s - :	5 -	s -	s - s	-	s -
	Schedules 16 & 17					-									
15	DA Mkt Admin Amount	555.01 \$	59,215.75 \$	47,413.32	\$ 45.497.35	66,431.50	79,462.34	\$ 88.731.48	\$ 50,841.13	\$ 58,638.37	\$ 74.007.76	\$ 68,133.61	\$ 49,799.83 \$	50.000.03	\$ 738.172.47
16	RT Mkt Admin Amount	555.18 \$							\$ 4.324.17			\$ 6.310.75			
17	FTR Mkt Admin Amount	555.13 \$		- ,		,		,	\$ 2.038.00		,	\$ 2.907.04			
18	TOTAL	333.13 ¢													
10	Congest & FTRs	4	00,910.20 ¢	52,500.71	ə <u>52,402.10</u>	p 73,112.09	09,130.11	\$ 50,044.73	\$ 57,203.30	φ 04,350.12 ·	\$ 62,167.51	\$ 11,331.40	ə 57,000.55 ə	57,860.24	\$ 027,200.00
10	DA FBT Congestion Amount	555.03 \$	; - \$		s - :	s - :		s -	s - :	s - :	•	s - :	s - s		
19					<del>,</del>			÷	- ·	•	*	-			÷
20	DA Congestion	\$				446,519.47			\$ 238,305.85	,	,	\$ 115,835.55			\$ 2,518,002.65
21	RT FBT Congestion Amount	555.20 \$			<del>,</del>			Ŧ	\$ - 3	\$- \$	*	\$ - :	· ·		÷
22	RT Congestion	\$	,	(1,000.10)		,			\$ 26,692.40		,	\$ 72,901.50	• •,••••• •	(18,613.90)	\$ 36,973.92
23	FTR Hourly Allocation Amount	555.14 \$	6 (100,993.26) \$	(137,105.97)	\$ (204,368.14)	\$ (328,804.99)	(103,639.19)	\$ (129,025.91)	\$ (276,556.29)	\$ (474,415.39)	\$ (287,396.29)	\$ (162,268.45)		(161,041.27)	\$ (2,591,406.00)
24	FTR Monthly Allocation Amount	555.15 \$	608.33) \$	(9,202.33)	\$ (4,090.53)	8 (8,801.54)	(13,040.38)	\$ (5,704.06)	\$ (10,414.07) \$	\$ (17,836.05)	\$ (29,372.64)	\$ (14,439.32)	\$ (16,616.29) \$	(11,941.64)	\$ (142,067.18)
25	FTR Yearly Allocation Amount	555.17 \$	- \$		\$	\$		\$-	\$ (25,712.96)	\$ 0.32	\$ -	\$ - :	\$-\$		\$ (25,712.64)
26	FTR Monthly Transaction Amount	555.35 \$	5 - \$		\$	\$ (48,810.63)		\$-	\$ - :	\$	\$ (4,316.67)	\$ (11,997.79)	\$ (8,752.27) \$	(48,387.66)	\$ (122,265.02)
27	FTR Full Funding Guarantee Amount	555.36 \$	(2,596.81) \$	(271.01)	\$ (402.14)	\$ (10,225.24)	7,623.85	\$ (4,202.07)	\$ 21,847.02	\$ (20,867.77) \$	3.823.61	\$ 7.413.31	\$ (2,999.83) \$	(17,103.31)	\$ (17,960,39)
28	FTR Guarantee Uplift Amount	555.37 \$		, ,					\$ (20,444,89)			\$ (6,844.87)		,	,
29	FTR Auction Revenue Rights Transaction Amount	555.39 \$							\$ (120,228.93)						
30	FTR Annual Transaction Amount	555.38 \$		,		254,454,83					,				,
31	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40 \$	.,	- ,	,			,	\$ 4,347.98	,		\$ 5.651.23		1 -	
22	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41 \$													
22	DA Congestion Rebate on Option B GFA	555.07 \$		(33,930.70)	¢ (20,020.09)	(23,323.33)	(20,020.00)		¢ (20,543.04) ¢	¢ (29,390.34) v	p (11,450.03)	¢ (11,450.00)	a (11,450.05) a e e	(35,410.72)	¢ (303,302.40)
24	TOTAL	555.07 3		(7,864.77)	\$ 17,962.51	64,680.16			\$ (70,878.96)	\$ (34,331.04)	58,654.27)	⇒ - € /E24E40\	\$ (171,760.29) \$	(177 004 29)	5 - 5 (548,273.36)
34	RSG & Make Whole Payments	4	5 (10,007.43) \$	(7,004.77)	¢ 17,902.01	04,000.10	(13,323.07)	ə (81,149.00)	\$ (10,878.50)	ə (34,331.04) i	\$ (30,034.27)	\$ (3,243.40)	ş (171,700.23) ş	(177,054.30)	¢ (340,273.30)
25	DA Revenue Sufficiency Guarantee Distribution Amount	555.10 \$	7.078.87 \$	5.570.99	\$ 4.389.42	8,219.57	14.437.77	\$ 18.846.83	\$ 8.907.45	\$ 14.253.65	\$ 13,166,38	\$ 11.110.35	\$ 8.519.07 \$	4,742.88	\$ 119.243.23
33		555.11 \$									,				
30	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount														
37	RT Revenue Sufficiency Guarantee First Pass Distribution Amour		γ 11,111.00 φ						\$ 19,063.53	• ••••••••	,	\$ 13,972.50	+		
38	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30 \$			•			÷	\$	•	*	\$			
39	RT Price Volatility Make Whole Payment	555.42 \$													
40	TOTAL	\$	5 13,081.24 \$	46,460.19	\$ 31,903.07	9,206.12	52,932.38	\$ 35,090.74	\$ 18,321.04	\$ 80,654.10	\$ 53,054.76	\$ 6,126.28	\$ (944.34) \$	22,791.86	\$ 368,677.44
	Revenue Neutrality Uplift														
41	RT Revenue Neutrality Uplift Amount	555.28 \$		4,008.67				\$ 58,445.88	\$ 9,389.57			\$ 44,835.77		13,668.48	
42	TOTAL	\$	36,863.31 \$	4,008.67	\$ 3,004.13	62,272.12	46,012.18	\$ 58,445.88	\$ 9,389.57	\$ 204,415.96	\$ 58,556.73	\$ 44,835.77	\$ 48,514.85 \$	13,668.48	\$ 589,987.65
	Other Charges														
43	RT Misc Amount	555.25 \$		10,876.97		\$ 10,608.67	18,720.68	\$ 42,071.83	\$ 25,643.70	\$ 19,866.13		\$ 32,045.01	+ (,	29,466.67	\$ 264,059.15
44	RT Net Inadvertent Amount	555.27 \$		-,					\$ (3,760.74)			+ (-,)			- (-,)
45	RT Uninstructed Deviation Amount	555.31 \$							\$ - 3						
46	RT Demand Response Allocation Uplift Amount	555.59 \$			Ψ.	(0.02)			\$ 0.02	Ψ ·		\$ -	Ψ Ψ		¢ (0.70)
47	DA Ramp Product	555.63 \$													
48	RT Ramp Product	555.64 \$										\$ (102.65)		(96.78)	
49	TOTAL	\$	50,210.98 \$	14,983.76	\$ 10,945.24	12,319.54	5 10,111.99	\$ 50,967.41	\$ 21,288.44	\$ 5,717.56	\$ 30,801.32	\$ 24,974.33	\$ (14,758.64) \$	31,344.60	\$ 248,906.53

#### Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group - Net Retail - System July 2018 through June 2019 includes any adjustments

Γ	Charge Type Description	(A) Acct	(B) JULY 2018	(C) AUGUST	(D) SEPTEMBER	(E) OCTOBER	(F) NOVEMBER	(G) DECEMBER	(H) JANUARY 2019	(I) FEBRUARY	(J) MARCH	(K) APRIL	(L) MAY	(M) JUNE	YEAR TO DATE 2018 - 2019
4	SM Charges	AUU	5021 2010	A00001	OLI TEMBER	OUTOBER	NOVEMBER	DECEMBER	UARCAICE 2013	LEROART	MARCON	ALINE		JONE	2010-2013
50	RT ASM Non-Excessive Energy Amount	555.55 \$	697,149.65	\$ 302,664.77	\$ 447,547.01	\$ 157,822.67	\$ 825,682.02	\$ 423,594.36	\$ 789,104.32	\$ 654,402.70 \$	645,686.92 \$	207,592.52	300,935.98 \$	234,816.45	\$ 5,686,999.37
51	RT ASM Excessive Energy Amount	555.56 \$	873.71	\$ (153.60)	\$ 548.45	\$ (51.11)	\$ 8.59	\$ (16.77)	\$ (313.14)	\$ (276.69) \$	(191.86) \$	850.88	1,967.18 \$	-	\$ 3,245.64
52	TOTAL	\$	698,023.36	\$ 302,511.17	\$ 448,095.46	\$ 157,771.56	\$ 825,690.61	\$ 423,577.59	\$ 788,791.18	\$ 654,126.01 \$	645,495.06 \$	208,443.40	302,903.16 \$	234,816.45	\$ 5,690,245.01
C	randfathered Charge Types														
53	DA Congestion Rebate on COGA	555.05 \$	-	\$ -	\$ -	\$-	\$-	\$ -	\$-	\$ - \$	- \$	- 9	- \$	-	\$-
54	DA Losses Rebate on COGA	555.06 \$	-	\$-	\$ -	s -	\$-	s -	s -	\$ - \$	- \$	- \$	- \$	-	s -
55	RT Congestion Rebate on COGA	555.22 \$	-	\$ -	\$ -	\$-	\$-	s -	s -	\$ - \$	- \$	- \$	- \$	-	\$-
56	RT Loss Rebate on COGA	555.23 \$	-	\$-	\$ -	s -	\$-	ş -	\$-	\$ - \$	- \$	- \$	- \$		\$-
57	TOTAL	\$	-	\$-	\$-	\$-	\$-	\$-	\$-	\$ - \$	- \$	- \$	- \$	-	\$-
58	TOTAL MISO DAY 2 CHARGES	\$	2,086,227.18	\$ 1,706,594.06	\$ 2,216,578.25	\$ 5,455,645.23	\$ 7,538,059.14	\$ 4,016,906.77	\$ 4,525,192.96	\$ 6,303,285.26 \$	4,124,481.53 \$	3,863,565.14	5,011,301.40 \$	3,632,546.38	\$ 50,480,383.30
59	Less: Schedule 16 & 17 (Lines 15, 16, 17)	\$	(66,915.28)	\$ (52,568.71)	\$ (52,402.18)	\$ (73,112.69)	\$ (89,138.11)	\$ (96,544.73)	\$ (57,203.30)	\$ (64,398.12) \$	(82,187.51) \$	(77,351.40) \$	(57,606.53) \$	(57,860.24)	\$ (827,288.80)
60	Less: Congestion and Losses Adjustment	\$	(24,652.18)	\$ (16,035.11)	\$ 30,336.18	\$ 790.76	\$ (6,539.07)	\$ (14,895.56)	\$ (5,637.70)	\$ (5,219.64) \$	(12,093.87) \$	(11,164.57) \$	862.51 \$	3,830.48	\$ (60,417.77)
61	Less: No DA generation sch., but still had output for current r	nonth \$	-	\$ (715.85)	\$-	\$ (553.47)	\$ (7,763.67)	\$ (70,454.26)	\$ (393.16)	\$ (301.59) \$	(11,173.05) \$	(374.00) \$	(1,459.90) \$		\$ (93,188.95)
62	Less: MISO RSG Bad Debt	\$	-	\$-	\$-	s -	s -	s -	s -	\$ - \$	- \$	- 9	- \$		s -
63	Settlement with another utility in Otter Tail's LBA	\$	-	\$ 65,001.44	\$ -	s -	s -	s -	s -	\$ - \$	- \$	- 9	- s		\$ 65,001.44
	•														
64	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$	1,994,659.72	\$ 1,702,275.83	\$ 2,194,512.25	\$ 5,382,769.83	\$ 7,434,618.29	\$ 3,835,012.22	\$ 4,461,958.80	\$ 6,233,365.91 \$	4,019,027.10 \$	3,774,675.17	4,953,097.48 \$	3,578,516.62	\$ 49,564,489.22

#### Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group - Net Retail - System July 2019 through December 2019 includes any adjustments

Γ	Charge Type Description	(A) Acct		(B) JULY 2019	(C) AUGUST	(D) SEPTEMBER	(E) OCTOBER	(F) NOVEMBER	(G) DECEMBER	JUL-DEC TOTAL 2019		July 2018 thru December 2019
No.	Day Ahead & Real Time Asset & Non Asset Energy & Loss											
1	DA Asset Energy Amount	555.02	\$	3,403,922.98 \$	1,769,586.85	\$ 1,268,980.73	\$ 2,332,229.09	\$ 2,364,378.09	\$ 3,676,133.27	\$ 14,815,231.01	\$	53,658,900.27
2	DA FBT Loss Amount	555.04	\$	- \$	-	\$ - \$	\$	s -	\$-	\$-	\$	-
3	DA Non-asset Energy Amount	555.09	\$	(107,975.71) \$	(96,606.99)	\$ (94,360.28)	\$ (82,918.95)	\$ (101,372.67)	\$ (105,286.20)	\$ (588,520.80)	\$	(2,040,517.28)
4	RT Asset Energy Amount	555.19	\$	94,144.55 \$	53,058.55	\$ 121,927.00	\$ 16,271.19	\$ 248,994.14	\$ (129,908.64)	\$ 404,486.79	\$	2,543,939.30
5	RT Distribution of Losses Amount	555.24	\$	(174,131.48) \$	(130,929.70)	\$ (112,169.36) \$	\$ (84,103.48)	\$ (108,730.30)	\$ (203,228.04)	\$ (813,292.36)	\$	(2,979,855.68)
6	RT FBT Loss Amount	555.21	\$	- \$	-	\$ - \$	\$	s -	\$-	\$-	\$	-
7	DA Loss Amount		\$	361,100.52 \$	354,938.67	\$ 337,693.15	\$ 303,016.54	\$ 454,247.20	\$ 470,021.47	\$ 2,281,017.55	\$	8,004,831.13
8	RT Loss Amount		\$	(30,940.38) \$					\$ 29,576.52		\$	221,641.08
9	RT Non-Asset Energy Amount		\$	- \$			\$ 343.58		\$ -	\$ 343.58	\$	2,493.80
10	DA Losses Rebate on Option B GFA	555.08		- \$		\$ - 9	÷		\$ -	\$ -	\$	-
11	TOTAL		\$	3,546,120.48 \$	1,934,702.64	\$ 1,521,642.31	\$ 2,502,645.86	5 2,865,461.72	\$ 3,737,308.38	\$ 16,107,881.39	\$	59,411,432.62
_	/irtual Energy	555.12	¢	- \$		\$ - 5	\$ - <u>-</u>	s -	¢	\$ -	\$	
12 13	DA Virtual Energy Amount RT Virtual Energy Amount	555.32		- >		\$- \$-			\$- \$-	\$- \$-	ֆ Տ	-
13		555.3Z	ֆ \$	- >					⇒ - \$ -	» - Տ -	э \$	-
	Schedules 16 & 17		Ψ	- φ	-	Ψ - 、	φ - ,	, -	Ψ -	Ψ -	÷	-
15	DA Mkt Admin Amount	555.01	\$	57,521.61 \$	35,155.06	\$ 43,275.48	\$ 56,257.92	66,733.49	\$ 83,715.82	\$ 342,659.38	\$	1,080,831.85
16	RT Mkt Admin Amount	555.18		6,294.13 \$							э \$	101,406.05
17	FTR Mkt Admin Amount	555.13		2,556.96 \$							\$	34.070.64
18	TOTAL	000.10	\$	66,372.70 \$							\$	
(	Congest & FTRs				,.	,		, ,	,			, ,,
19	DA FBT Congestion Amount	555.03	\$	- \$	-	\$ - 3	\$ - <u>;</u>	6 -	\$ -	\$-	\$	-
20	DA Congestion		\$	580,773.03 \$			\$			\$ 1,293,690.96	\$	3,811,693.61
21	RT FBT Congestion Amount	555.20	\$	- \$		\$ - 9			\$ -	\$ -	\$	-
22	RT Congestion		\$	(186,641.87) \$	(8,148.66)	\$ 3,091.53	\$ 5,280.20	(28,451.67)	\$ 15,179.34	\$ (199,691.13)	\$	(162,717.21)
23	FTR Hourly Allocation Amount	555.14	\$	(542,320.92) \$	185,646.48	\$ (174,166.71) \$	\$ (226,564.89)	(228,131.95)	\$ (401,439.94)	\$ (1,386,977.93)	\$	(3,978,383.93)
24	FTR Monthly Allocation Amount	555.15	\$	(7,624.26) \$	(44,906.54)	\$ (15,597.61) \$	\$ (5,162.43)	\$ (12,404.47)	\$ (13,289.39)	\$ (98,984.70)	\$	(241,051.88)
25	FTR Yearly Allocation Amount	555.17	\$	- \$		\$ - 5			\$ -	\$ -	\$	(25,712.64)
26	FTR Monthly Transaction Amount	555.35	\$	- \$	-	\$ - 9	\$	s -	\$ -	\$ -	\$	(122,265.02)
27	FTR Full Funding Guarantee Amount	555.36	\$	(66,978.35) \$	11,038.66	\$ (3,177.69) \$	\$ (25,079.28)	\$ (11,144.01)	\$ (32,794.23)	\$ (128,134.90)	\$	(146,095.29)
28	FTR Guarantee Uplift Amount	555.37	\$	64,570.06 \$	(19,815.78)	\$ 2,662.40	\$ 27,413.53	13,290.64	\$ 34,021.43	\$ 122,142.28	\$	144,406.43
29	FTR Auction Revenue Rights Transaction Amount			(147,457.48) \$	(147,457.48)	\$ (241,292.29)	\$ (241,292.29)	\$ (241,292.29)			\$	(3,217,859.57)
30	FTR Annual Transaction Amount	555.38		147,457.41 \$			\$ 241,119.13	\$ 241,119.13			\$	
31	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	\$	2,796.83 \$	2,796.83	\$ 6,318.03	\$ 6,318.03	6,318.03	\$ 4,623.25	\$ 29,171.00	\$	109,958.26
32	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41		(39,816.33) \$	· · · · · ·			,		\$ (186,199.10)	\$	(489,561.50)
33	DA Congestion Rebate on Option B GFA	555.07		- \$		\$ - 3			\$ -	\$-	\$	-
34	TOTAL		\$	(195,241.88) \$	211,576.82	\$ (30,002.06)	\$ (207,601.25)	\$ (100,707.42)	\$ (233,751.14)	\$ (555,726.93)	\$	(1,104,000.29)
	RSG & Make Whole Payments	/ *										
35	DA Revenue Sufficiency Guarantee Distribution Amount	555.10		6,410.17 \$							\$	163,565.83
36	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11		(5,485.60) \$		,		,			\$	(68,208.35)
37 38	RT Revenue Sufficiency Guarantee First Pass Distribution Amount RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.29 555.30		37,448.25 \$ - \$		\$ 10,403.56 \$ - 9			\$ 11,957.82 \$ -	\$ 99,272.65 \$ -	\$ \$	511,787.30
38 39	RT Price Volatility Make Whole Payment	555.30 555.42		- » (17,862.59) \$						Ŧ	э \$	- (193,603.61)
40		JJJJ.4Z	ֆ \$	20,510.23 \$							э \$	413.541.17
	Revenue Neutrality Uplift		Ŷ	20,010.20 \$	0,104.07	+ 0,007.00	· (1,221.10)	- 14,000.00	- 3,350.24	+ ++,000.73	L L	410,041.17
41	RT Revenue Neutrality Uplift Amount	555.28	\$	40,377.49 \$	36,612.57	\$ 12,335.95	\$ 34,109.29	17,275.93	\$ 47,363.12	\$ 188,074.35	\$	778,062.00
41	TOTAL	555.20	\$	40,377.49 \$		\$ 12,335.95					۰ \$	778,062.00
	Dther Charges		-	••••••		,		,	,	,	Í	
43	RT Misc Amount	555.25	\$	22,319.77 \$	16,074.77	\$ 25,117.40	\$ 22,135.82	18,903.61	\$ 24,112.59	\$ 128,663.96	\$	392,723.11
44	RT Net Inadvertent Amount	555.27		(68.76) \$							\$	11.650.25
45	RT Uninstructed Deviation Amount		\$	- \$					\$ -	\$ -	\$	
46	RT Demand Response Allocation Uplift Amount	555.59	\$	- \$		\$ - 5	φ 0.10 V		\$ -	\$ 0.10	\$	(0.69)
47	DA Ramp Product			(1,776.22) \$							\$	(18,119.37)
48	RT Ramp Product	555.64		206.00 \$							\$	(1,217.39)
49	TOTAL		\$	20,680.79 \$	19,333.07	\$ 26,281.17	\$ 23,787.04	\$ 20,869.50	\$ 25,177.81	\$ 136,129.38	\$	385,035.91

#### Otter Tail Power Company Detail of MISO Day 2 Charges by Charge Group - Net Retail - System July 2019 through December 2019 includes any adjustments

	(A) Charge Type Description Acct	(B) JULY 2019	(C) AUGUST	s	(D) EPTEMBER	(E) OCTOBER	I	(F) NOVEMBER	[	(G) DECEMBER	JU	IL-DEC TOTAL 2019	July 2018 thru December 2019
	ASM Charges												
50	RT ASM Non-Excessive Energy Amount 555.55	\$ 471,620.53	\$ 539,516.63	\$	300,391.05	\$ 193,362.63	\$	400,363.56	\$	550,618.41	\$	2,455,872.81	\$ 8,142,872.18
51	RT ASM Excessive Energy Amount 555.56	\$ (26.53) \$	\$ (204.87)	\$	-	\$ 1,451.76	\$	(66.44)	\$	(26.27)	\$	1,127.65	\$ 4,373.29
52	TOTAL	\$ 471,594.00	\$ 539,311.76	\$	300,391.05	\$ 194,814.39	\$	400,297.12	\$	550,592.14	\$	2,457,000.46	\$ 8,147,245.47
	Grandfathered Charge Types												
53	DA Congestion Rebate on COGA 555.05	\$ - 9	\$ -	\$	-	\$ -	\$	-	\$	-	\$	-	\$ -
54	DA Losses Rebate on COGA 555.06	\$ - 9	\$ -	\$	-	\$ -	\$	-	\$	-	\$	-	\$ -
55	RT Congestion Rebate on COGA 555.22	\$ - 9	\$ -	\$	-	\$ -	\$	-	\$	-	\$	-	\$ -
56	RT Loss Rebate on COGA 555.23	\$ - 9	\$ -	\$	-	\$ -	\$	-	\$	-	\$	-	\$ -
57	TOTAL	\$ - \$	\$ -	\$	-	\$ -	\$	-	\$	-	\$	-	\$ -
58	TOTAL MISO DAY 2 CHARGES	\$ 3,970,413.81	\$ 2,787,289.23	\$	1,883,808.76	\$ 2,605,028.84	\$	3,292,626.64	\$	4,228,074.84	\$	18,767,242.12	\$ 69,247,625.42
59	Less: Schedule 16 & 17 (Lines 15, 16, 17)	\$ (66,372.70) \$	\$ (39,617.80)	\$	(49,272.36)	\$ (64,494.69)	\$	(74,835.90)	\$	(94,426.29)	\$	(389,019.74)	\$ (1,216,308.54)
60	Less: Congestion and Losses Adjustment	\$ 5,209.27	\$ (23,615.59)	\$	(11,699.49)	\$ (1,854.33)	\$	(8,367.80)	\$	(2,660.85)	\$	(42,988.79)	\$ (103,406.56)
61	Less: No DA generation sch., but still had output for current month	\$ - 9	\$ (23,026.49)	\$	(4,335.25)	\$ (19,079.62)	\$	-	\$	(17,670.87)	\$	(64,112.23)	\$ (157,301.18)
62	Less: MISO RSG Bad Debt	\$ - 9	\$ -	\$	-	\$ -	\$	-	\$	-	\$	-	\$ -
63	Settlement with another utility in Otter Tail's LBA	\$ - 9	\$ -	\$	-	\$ -	\$	-	\$	-	\$	-	\$ 65,001.44
64	TOTAL FOR MN COST OF ENERGY ADJUSTMENT	\$ 3,909,250.38	\$ 2,701,029.35	\$	1,818,501.66	\$ 2,519,600.20	\$	3,209,422.94	\$	4,113,316.83	\$	18,271,121.36	\$ 67,835,610.58

#### SOUTHWEST POWER POOL (SPP) ENERGY COSTS

Otter Tail began incurring Southwest Power Pool (SPP) energy market charges on October 1, 2015 as a result of Western Area Power Administration (WAPA) joining SPP. Additional SPP market exposure was incurred as a result of the expiration of an integrated transmission agreement with Central Power Electric Cooperative effective January 1, 2016. SPP charges include monthly day ahead and real time energy charges assessed by SPP, as well as other energy-market related charges.

Otter Tail has included the monthly day ahead and real time energy charges assessed by SPP in the monthly fuel clause, consistent with paragraph 2 of the Energy Adjustment Rider, Rate Schedule 13.01 (Part E Section 1 Attachment B):

2. The energy cost of purchased power included in Account 555 when such energy is purchased on an economic dispatch basis, exclusive of Capacity or Demand charges.

The SPP energy charges for the July 2018 through December 2019 reporting period included in the Energy Adjustment Rider are shown in Lines 1-5 of Part E Section 11 Attachment I-2.

In rate case Docket No. E017/GR-15-1033, the Commission approved Otter Tail's request to recover SPP market-related costs through the energy adjustment.

Effective with bills rendered on and after November 1, 2017, Otter Tail began to include SPP market related costs in the monthly fuel clause, consistent with paragraph 4 of the Energy Adjustment Rider, Rate Schedule 13.01 (Part E Section 1 Attachment B):

4. All Midwest ISO (MISO) and South Power Pool (SPP) costs and revenues associated with retail sales that have been authorized by the Commission to flow through this Energy Adjustment Rider and excluding MISO and SPP costs and revenues that are recoverable in base rates, as prescribed in applicable Commission Orders.

These SPP market-related charges are reflected in Lines 6-29 of Part E Section 11 Attachment I-2.

#### Further Information on Otter Tail Load in SPP

Otter Tail maintains load served within the SPP Balancing Authority (BA). Prior to WAPA joining SPP, Otter Tail would schedule energy out of the MISO system and into the WAPA system. This was an energy export out of MISO and therefore was charged under the MISO DA Non-Asset Energy Amount charge type. In response to WAPA joining the SPP market, Otter Tail determined it was in our customers' best interest to pseudo tie that load in the SPP BA out of SPP and back into MISO. Pseudo tying load allows for MISO to serve and regulate load outside their BA as if it were inside their BA. As a result, this eliminated the need for a daily export of energy and the DA Non-Asset Energy charge for Otter Tail load in WAPA/SPP BA dropped to zero. WAPA still maintains some of its municipal and agency loads within MISO, which requires WAPA to inject energy into MISO for which Otter Tail

receives credit. While these credits have always been included in prior MISO reporting, they are now much more visible as they are no longer netted against the charges associated with energy exports used to serve Otter Tail load in the WAPA/SPP BA.

Otter Tail Power Company Detail of Southwest Power Pool (SPP) Charges by Charge Group - Net Retail - System															
					July 2018 to .	June 2019 Include (Revenue) Expe		nts							
						(Revenue) Expe	lise								JULY 2018 TO
			2018						2019						JUNE 2019
	Charge Type Description	Acct	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	YEAR TO DATE
No.	Day Ahead & Real Time Asset & Non Asset Energy														
1	DA Asset Energy Amount		\$ - 5	,	\$-\$									-	\$-
2	DA Non-asset Energy Amount		\$ - 5		\$-\$		, , , , , , , , , , , , , , , , , , ,						Ý.		\$-
3	RT Asset Energy Amount		\$ 3,586.30											440.54	\$ 16,497.50
4	RT Non-Asset Energy Amount		\$ - 5		\$ - \$							- \$		-	\$ -
5	TOTAL (1)		\$ 3,586.30	5 1,039.91	\$ 886.97 \$	899.51	\$ 2,929.60	3,144.12	\$ 601.47 \$	855.89	\$ 838.00 \$	691.87 \$	583.32 \$	440.54	\$ 16,497.50
	RSG & Make Whole Payments														
6	DA Make-Whole-Payment Distribution Amount	555.02													\$ -
7	RT Make-Whole-Payment Distribution Amount		\$ 87.84 \$											20.73	\$ 704.42
8 9	RT Revenue Sufficiency Guarantee Distribution Amount TOTAL	555.18	\$ - 3 \$ 87.84 5									- \$		- 20.73	\$- \$704.42
			\$ 87.84	<b>47.87</b>	\$ 39.88	34.5/ \$	53.47	5 214.11	\$ 25.72	37.56	5 64.46 <b>\$</b>	42.35 \$	35.86 \$	20.73	\$ 704.42
	Revenue Neutrality Uplift		A 4.05 /			5 40 4		(0.04)				0.70	0.40	0.00	
10 11	RT Revenue Neutrality Uplift Distribution Amount		\$ 4.95											6.99	\$ 88.34
	TOTAL Other Charges		\$ 4.95	5 1.99	\$ 11.37 \$	5.40	36.36	5 (0.31) \$	3.85	5 4.99 <b>\$</b>	5 1.83 \$	2.76 \$	8.16 \$	6.99	\$ 88.34
12	DA Regulation-Down Distribution Amount	555.04	\$ 3.96 \$	6 0.79	\$ 2.54 \$	5 1.11 \$	5 3.98 S	48.85	6 0.94 \$	5 0.32 \$	0.64 \$	1.71 \$	0.90 \$	0.51	\$ 66.25
	5		\$ 3.90 3 \$ 9.34 §												\$ 66.25 \$ 82.53
13 14	DA Regulation-Up Distribution Amount DA Spinning Reserve Distribution Amount		\$ 9.34 3 \$ 9.90 \$			,									\$ 82.53 \$ 109.58
14	DA Supplemental Reserve Distribution Amount		\$ 9.90 a \$ 1.35 a												\$ 109.58 \$ 11.70
16	RT Contingency Reserve Deployment Failure Amount		\$ (0.06) \$											0.55	\$ (10.39)
17	RT Over-Collected Losses Distribution Amount		\$ (11.742.85) \$	,			,	(. ) ,			5 (13.697.35) \$		+	(5.304.29)	\$ (132.579.71)
18	RT Regulation-Down Distribution Amount		\$ (11,742.85) \$	(-,,		( ) ) (	( ( ) ) ) )	( , , .		(	( .,, ,	(-,,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-	(0,012.00) \$	(5,504.29)	\$ (132,579.71) \$ (5.11)
19	RT Regulation Non-Performance Distribution Amount		\$ (0.48) \$											-	\$ (1.36)
20	RT Regulation-Up Distribution Amount		\$ (1.69) \$							(=:=:) ;			- ψ • ε	_	\$ (9.43)
21	RT Spinning Reserve Distribution Amount		\$ - 5		\$ (0.07) \$					( , ,			÷ ÷		¢ (3.43) \$
22	RT Supplemental Reserve Distribution Amount		\$ - S	-								- \$	- \$		s -
23	RT Pseudo Tie Congestion Amount		\$ (71,945.36) \$	,								(41.781.91) \$	(103,248.50) \$	(70,004.56)	\$ (248.010.20)
23 24	RT Pseudo Tie Loss Amount	555.21	\$ (27.543.31) \$												\$ (147.645.77)
25	Miscellaneous Amount		\$ (0.82) \$	( ., ,			( ,,, , , , , , , , , , , , , , , , , ,				(,, .		( , , , ,	(20,002.00)	\$ (147,46)
26	ARR Closeout Yearly Amount		\$ - 5		\$ - 9									. ,	\$ (107.353.99)
26 27	TOTAL	000.20	\$ (111.211.06)		Ŧ					5 177,415.51			(130,936.14) \$		\$ (635.493.36)
	Grandfathered Charge Types		• (,2	(00,110.00)	• (102,101100) (		(01,011100)	(110,001.00)	(,000.1.1)	,,		(07,000,000) \$	(100,000111) \$	(100,211.00)	• (000,100.00)
	DA GFA Carve Out Distribution Deployment Daily Amount	555.01	\$ 11.02 \$	6 4.62	\$ (1.73) \$	3.51 \$	8.87 \$	8.07	\$ 0.73 §	6 (1.23) \$	6 0.02 \$	0.75 \$	0.77 \$	3.24	\$ 38.64
28 28	DA GFA Carve Out Distribution Deployment Monthly Amount		\$ - 5		\$ - \$	s - s				s - s	s - \$		- \$	-	\$ -
28	DA GFA Carve Out Distribution Deployment Yearly Amount	555.27	\$ - 5		\$ - \$	,							Ψ	-	\$ -
29	TOTAL		\$ 11.02 \$	<b>4.62</b>	\$ (1.73) \$	5 3.51 <b>\$</b>	8.87	5 8.07 <b>\$</b>	\$ 0.73 \$	5 (1.23) \$	\$	0.75 \$	0.77 \$	3.24	\$ 38.64
30	TOTAL SPP CHARGES		\$ (107.520.95)	(54.045.00)	(404 F04 40) 4	69.309.58	(50.040.00)	(4.40 505 04) 4	(00.004.07)	470 040 70 4		(07.005.00) 6	(400 000 00) 6	(205.769.50)	\$ (618,164,46)
30	IUTAL OFF CHARGES		ə (107,5∠0.95) S	p (54,015.96)	\$ (101,501.49) \$	6 69,309.58	o (58,843.29) \$	6 (140,595.01)	¢ (22,061.37) \$	0 1/8,312./2	21,924.20 \$	(07,095.36) \$	(130,308.03) \$	(205,769.50)	φ (018,104.46)
	Summary:														
31	DA & RT Asset Energy Amounts Total (Line 5) (1)		\$ 3,586.30	\$ 1,039.91	\$ 886.97 \$	899.51	\$ 2,929.60	3,144.12	\$ 601.47 \$	855.89	838.00 \$	691.87 \$	583.32 \$	440.54	\$ 16,497.50
32	RSG, RNU, Other, Grandfather Charges (Line 9 + Line 11 + Line 23 + Li		\$ (111,107.25) \$							3 177,456.83			(130,891.35) \$		\$ (634,661.96)
33	TOTAL SPP CHARGES		\$ (107,520.95) \$	(54,015.96)	\$ (101,501.49) \$	69,309.58	58,843.29	6 (140,595.01) \$	\$ (22,061.37) \$	5 178,312.72	5 21,924.20 \$	(67,095.36) \$	(130,308.03) \$	(205,769.50)	\$ (618,164.46)

(1) DA and RT Energy Charges currently included in the monthly MN Energy Adjustment Rider calculation.

The MN Energy Adjustment Rider effective November 1, 2017, contains costs and revenues associated with retail sales authorized by the Commission in Rate Case Docket No. E017/GR-15-1033.

	Otter Tail Power Company Detail of Southwest Power Pool (SPP) Charges by Charge Group - Net Retail - System July 2019 to December 2019 Includes Any Adjustments (Revenue) Expense JULY TO													
			2019						DECEMBER 2019	TOTAL JULY 2018 TO				
	Charge Type Description Acc	t	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	YEAR TO DATE	DECEMBER 2019				
No.	Day Ahead & Real Time Asset & Non Asset Energy													
1	DA Asset Energy Amount 555.1	9 \$	ş - S	\$ -	\$ -	\$ -	\$-	\$ -	\$-	\$ -				
2	DA Non-asset Energy Amount 555.0	3 \$	ş - s	\$-	\$ -	\$ -	\$-	\$ -	\$-	\$-				
3	RT Asset Energy Amount 555.0	9 \$	\$ 541.44	\$ 2,030.25	\$ 3,451.17	\$ 4,554.98	\$ 553.68	\$ 583.27	\$ 11,714.79	\$ 28,212.29				
4	RT Non-Asset Energy Amount 555.0	0 \$	\$	\$-	\$-	\$-	\$-	\$-	\$-	\$-				
5	TOTAL (1)	\$	\$541.44	\$ 2,030.25	\$ 3,451.17	\$ 4,554.98	\$ 553.68	\$ 583.27	\$ 11,714.79	\$ 28,212.29				
	RSG & Make Whole Payments													
6	DA Make-Whole-Payment Distribution Amount 555.0	2 \$	ş - s	\$-	\$-	\$-	\$-	\$-	\$-	\$-				
7	RT Make-Whole-Payment Distribution Amount 555.1	0 \$	\$ 81.64	\$ 108.38	\$ 608.14	\$ 444.86	\$ 44.17	\$ 30.53	\$ 1,317.72	\$ 2,022.14				
8	RT Revenue Sufficiency Guarantee Distribution Amount 555.1	8 \$	\$	\$-	\$-	\$-	\$-	\$-	\$-	\$-				
9	TOTAL	\$	\$ 81.64	\$ 108.38	\$ 608.14	\$ 444.86	\$ 44.17	\$ 30.53	\$ 1,317.72	\$ 2,022.14				
	Revenue Neutrality Uplift													
10	RT Revenue Neutrality Uplift Distribution Amount 555.1					1 1				\$ 209.57				
11	TOTAL	\$	\$ 1.62	\$ 2.04	\$ 69.14	\$ 32.43	\$ 12.19	\$ 3.81	\$ 121.23	\$ 209.57				
	Other Charges													
12	DA Regulation-Down Distribution Amount 555.0									\$ 121.99				
13	DA Regulation-Up Distribution Amount 555.0									\$ 188.45				
14	DA Spinning Reserve Distribution Amount 555.0	6 \$	\$	\$ 12.90	\$ 19.56	\$ 52.00	\$ 3.46	\$ 2.49	\$ 97.40	\$ 206.98				
15	DA Supplemental Reserve Distribution Amount 555.0	7 \$	\$ 1.98 \$	\$ 3.53	\$ 2.77	\$ 7.02	\$ 0.14	\$ (0.06	) \$ 15.38	\$ 27.08				
16	RT Contingency Reserve Deployment Failure Amount 555.0	8 \$	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$-	\$ (10.39)				
17	RT Over-Collected Losses Distribution Amount 555.1	1 \$	\$ (8,287.78) \$	\$ (8,156.21)	\$ (11,087.77)	\$ (9,400.28)	\$ (11,710.99)	\$ (10,708.14	) \$ (59,351.17)	\$ (191,930.88)				
18	RT Regulation-Down Distribution Amount 555.1	2 \$	\$ (0.05) \$	\$ (0.40)	\$ (0.81)	\$ (1.14)	\$-	\$ (0.04	) \$ (2.44)	\$ (7.55)				
19	RT Regulation Non-Performance Distribution Amount 555.1	3 \$	\$ (0.02) \$	\$ (0.19)	\$ (0.72)	\$ (1.47)	\$-	\$ 0.21	\$ (2.19)	\$ (3.55)				
20	RT Regulation-Up Distribution Amount 555.1	4 \$	\$ (0.01) \$	\$ (0.98)	\$ (1.71)	\$ (0.24)	\$ -	\$ 0.05	\$ (2.89)					
21	RT Spinning Reserve Distribution Amount 555.1	6 \$	\$	\$ -	\$ (0.11)	\$ -	\$ -	\$ -	\$ (0.11)	\$ (0.11)				
22	RT Supplemental Reserve Distribution Amount 555.1	7 \$	\$	\$-	\$-	\$-	\$-	\$ -	\$-	\$-				
23	RT Pseudo Tie Congestion Amount 555.2	0 \$	\$ (86,252.86) \$	\$ (31,667.93)	\$ (78,090.05)	\$ (143,990.65)	\$ (130,592.43)	\$ (42,148.13	) \$ (512,742.05)	\$ (760,752.25)				
24	RT Pseudo Tie Loss Amount 555.2	1 \$	\$ (29,414.98)	\$ (24,768.53)	\$ (30,771.63)	\$ (26,673.52)	\$ (23,508.64)	\$ (13,835.03	) \$ (148,972.33)	\$ (296,618.10)				
25	Miscellaneous Amount 555.2	3 \$	\$ (0.21) \$	\$ 0.24	\$ -	\$ 0.14	\$ 0.14	\$ 0.93	\$ 1.24	\$ (146.22)				
26	ARR Closeout Yearly Amount 555.2	6 \$	ş - s	\$-	\$ -	\$ -	\$-	\$ -	\$-	\$ (107,353.99)				
27	TOTAL	4	\$ (123,941.93)	\$ (64,561.95)	\$ (119,885.53)	\$ (179,918.33)	\$ (165,804.21)	\$ (66,685.55	) \$ (720,797.50)	\$ (1,356,290.86)				
	Grandfathered Charge Types													
28	DA GFA Carve Out Distribution Deployment Daily Amount 555.0									\$ 112.03				
28	DA GFA Carve Out Distribution Deployment Monthly Amoun 555.2			•		•		\$ -	\$ -	\$ -				
28 29	DA GFA Carve Out Distribution Deployment Yearly Amoun 555.2 TOTAL	7 9						<u>\$</u> - \$4.99	\$ - \$ 73.39	\$- \$112.03				
29		1	y 2.33 i	φ 4.03	ψ 20.30	ψ 33.02	ψ 0.12	Ψ 4.99	ψ 13.39	φ 112.03				
30	TOTAL SPP CHARGES	5	(123,314.90)	\$ (62,416.65)	\$ (115,728.78)	\$ (174,853.04)	\$ (165,194.05)	\$ (66,062.95	) \$ (707,570.37)	\$ (1,325,734.83)				
00		4	(120,014.30)	v (02,+10.03)	· (110,720.70)	÷ (114,000.04)	÷ (100,104.00)	÷ (00,002.33	(101,010.01)	÷ (1,020,704.00)				
$\vdash$	Summary:								1					
31	DA & RT Asset Energy Amounts Total (Line 5) (1)	\$	\$ 541.44	\$ 2,030.25	\$ 3,451.17	\$ 4,554.98	\$ 553.68			\$ 28,212.29				
32	RSG, RNU, Other, Grandfather Charges (Line 9 + Line 11 + Line 23 + Line 25	9								\$ (1,353,947.12)				
33	TOTAL SPP CHARGES	-	\$ (123,314.90)	\$ (62,416.65)	\$ (115,728.78)	\$ (174,853.04)	\$ (165,194.05)	\$ (66,062.95	) \$ (707,570.37)	\$ (1,325,734.83)				

(1) DA and RT Energy Charges currently included in the monthly MN Energy Adjustment Rider calculation

The MN Energy Adjustment Rider effective November 1, 2017, contains costs and revenues associated with retail sales authorized by the Commission in Rate Case Docket No. E017/GR-15-1033.

### ANNUAL AUTOMATIC ADJUSTMENT REPORT

**DOCKET NO. E999/AA-20-171** 



### PART F – MINN. R. 7825.2820 ANNUAL INDEPENDENT AUDITORS' REPORT



## INDEPENDENT ACCOUNTANTS' REPORT ON APPLYING AGREED UPON PROCEDURES

Otter Tail Power Company:

**Deloitte & Touche LLP** 50 South 6th Street Suite 2800 Minneapolis, MN 55402-1538 USA Tel: +1 612 397 4000 Fax: +1 612 397 4450 www.deloitte.com

We have performed the procedures enumerated below, which were agreed to by Otter Tail Power Company (the "Company") and the MN Public Utilities Commission (the "Commission"), solely to assist you with the compliance of Rules 7825.2500 to 7825.2820 governing automatic adjustment of energy charges, and with the Fuel Clause Rider as defined in Docket No. E-017/MR-15-1034 and E-999/CI-03-802 by order of the Commission. The Company's management is responsible for maintaining compliance with those requirements. The sufficiency of these procedures is solely the responsibility of the parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures enumerated below either for the purpose for which this report has been requested or for any other purpose.

Our procedures and findings are as follows:

- a. We compared a sample of eighteen invoices received from the Company's energy providers to the amount recorded and paid by the Company and found them to be in agreement.
- b. We obtained the base costs of power approved by the Commission (MN Public Utilities Commission – Approved Base Costs of Power, Docket E-017/MR-15-1034) and compared the base costs of power to the bases used by the Company in calculating the billing adjustment each month and found them to be in agreement.
- c. We recalculated the billing adjustment charge (credit) per kWh charged customers for purchased power on a monthly basis for the period July 1, 2018 through December 31, 2019, by customer class, and noted no exceptions between our recalculation and the Company's reported adjustment.
- d. We obtained the accounting records for the revenues billed to customers for energy delivered for the period July 1, 2018 through December 31, 2019. We compared the total sales of electric energy to the Company's general ledger and found them to be in agreement.
- e. We examined twelve individual billings across all customer classes and compared the automatic adjustment charges and credits included in the bills to the billing adjustment charge (credit) reported by the Company and found them to be in agreement.
- f. We did not identify any corrections to prior FCA charges or other billing errors included in the Company's monthly billing adjustment charges (credits) for the period July 1, 2018 through December 31, 2019.
- g. We performed a reconciliation of total revenue and cost of power from the billing adjustment (charge) calculation to the Company's general ledger for the period July 1, 2018 to December 31, 2019, noting no exceptions.
- h. We recalculated the true-up calculation for the period from July 1, 2017 to June 30, 2018 and from July 1, 2018 to December 31, 2019 and traced the related revenue and expense amounts to the Company's general ledger and found them to be in agreement.

This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to and did not conduct an examination or review, the objective of which would be the expression of an opinion or conclusion, respectively, on management's assertions. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of the Company and the Commission and is not intended to be, and should not be, used by anyone other than the specified parties.

Delitte & Touche UP

February 27, 2020

### ANNUAL AUTOMATIC ADJUSTMENT REPORT

### **DOCKET NO. E999/AA-20-171**



### PART G – MINN. R. 7825.2830 ANNUAL FIVE-YEAR PROJECTION REPORT

#### OTTER TAIL POWER COMPANY MINN. R. 7825.2830 - ANNUAL FIVE-YEAR PROJECTION

Otter Tail's five-year forecast has been filed in Docket No. E017/AA-19-297 as part of the FCA Reform effective January 1, 2020.

### ANNUAL AUTOMATIC ADJUSTMENT REPORT

### **DOCKET NO. E999/AA-20-171**



### PART H - ADDITIONAL REPORTING REQUIREMENTS

### PUBLIC DOCUMENT NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED

#### OTTER TAIL POWER COMPANY COMPLIANCE REPORT AS REQUIRED BY ORDER IN DOCKET E017/M-06-1332

As ordered in Docket No. E017/M-06-1332, issued January 16, 2007, (In The Matter of Otter Tail Power Company's Petition for Approval of an Electric Service Agreement with Enbridge Energy, Limited Partnership) Otter Tail submits the following compliance report with its Annual Automatic Adjustment of Charges report (AAA) filed under Minn. R. 7825.2800.

For convenience, the conditions are listed with the same numbering system as the Order in Docket No. E017/M-06-1332 used.

- b. As part of its annual automatic adjustment filing, Otter Tail shall report the following information:
- the amount of incremental energy purchased by the customer under the LGS Rider,
- the retail rate paid by the customer on Fixed Rate Energy Pricing,
- and the retail rate of the energy had System Marginal Energy Pricing been used to determine the retail rate paid by the customer

In Docket No. E999/AA-14-579 Otter Tail requested that consideration be given to drop this compliance reporting requirement from future Annual Automatic Adjustment filings.

In the June 2, 2016 Order (item 9.6) of Docket No. E999/AA-14-579, the Commission:

Accepts Otter Tail's compliance filing on its electric service agreement with Enbridge Energy, and permits Otter Tail to stop reporting this information.

#### MN DOC'S REVIEW OF 2005/2006 AAA REPORT DOCKET NO. E,G999/AA-06-1208

In the Minnesota Department of Commerce's Review of the 2005-2006 Annual Automatic Adjustment Report dated April 16, 2007, the DOC recommended:

# On page 63, that the utilities comment on why utilities are using virtual transactions for retail and/or non-retail and the significance of virtual energy in the next AAA docket.

For retail load serving purposes, the Company may occasionally use virtual transactions to convert bilateral purchases between the day-ahead and real-time markets. For instance, some bilateral purchases are designed to settle in the real-time market while the Company clears its load in the day-ahead market. Therefore, a virtual transaction might be used to convert the real-time purchase to the day-ahead market so that the purchase more accurately hedges the Company's load. For the most recent AAA period (July 2018 through December 2019), the Company did not use any virtual transactions on behalf of retail customers. The Company has very rarely used virtual transactions in the Asset-Based sales category. As of January 1, 2015, the Company discontinued all Non-Asset Based (non-retail) trading activities.

In accordance with the February 6, 2008, Order issued by the Commission, on page 9:

16. The Commission discontinues the requirement that all electric utilities subject to automatic adjustment requirements report in these annual filings "each instance where MISO directed Companies to redispatch Companies' owned generation for reliability reasons, including an explanation of financial impact on rates, in any, and the reason for the redispatch, if known."

Otter Tail has addressed this earlier in this filing under PART D - RULE 7825.2800 POLICIES AND ACTIONS - SECTION 5 COMPLIANCE REPORT AS REQUIRED BY ORDER IN DOCKET NO. E017/PA-01-1391 8. d).

18. All electric utilities shall include in future annual automatic adjustment filings the actual expenses pertaining to maintenance of generation plants, with a comparison to the generation maintenance budget from the utility's most recent rate case.

Part H Section 2 Attachment J contains maintenance expenses for test year 2016 and actual for 2016 through 2019.

21. All electric utilities shall provide information requested by the Department in Docket E,G999/AA-07-1130 according to the spreadsheet attached to the 2007 Report pertaining to MISO Day 2 charges, one for every month in the AAA period and as a summary of MISO Day 2 charges for the entire AAA period, for a total of 13 pages in each utility's AAA filing.

See Part E Section 10 Attachment I-1.

#### OTTER TAIL POWER COMPANY GENERATION MAINTENANCE EXPENSE

		Test Year <sup>1</sup> 2016	Actual 2016	Actual 2017	Actual 2018	Actual 2019
STEAM POWER MAINTENANCE:						
SUPERVISION AND ENGINEERING	402 - 510	\$ 1,039,393	\$ 861,972	\$ 842,512	\$ 937,306	\$ 964,831
STRUCTURES	402 - 511	1,104,085	1,150,873	1,202,457	989,059	883,200
BOILER	402 - 512	8,325,886	7,510,932	7,207,999	9,023,720	8,465,029
ELECTRIC	402 - 513	1,571,499	1,239,787	797,052	2,241,699	2,869,209
MISCELLANEOUS	402 - 514	1,532,984	1,354,726	1,063,183	1,010,467	1,394,309
Total Steam Power Maintenance		13,573,847	12,118,290	11,113,203	14,202,252	14,576,578
HYDRO POWER MAINTENANCE:						
SUPERVISION & ENGINEERING	402 - 541	5,995	12,384	3,449	2,731	881
STRUCTURES	402 - 542	7,312	1,824	5,016	12,239	40
RESERVOIRS - DAMS	402 - 543	272,577	284,145	277,357	221,684	250,983
ELECTRIC	402 - 544	30,920	6,319	50,242	907	9,908
MISCELLANEOUS EXPENSE	402 - 545	2,339	-	-	38	
Total Hydro Maintenance		319,143	304,672	336,064	237,599	261,812
IC POWER MAINTENANCE WITHOUT	WIND:					
SUPERVISION AND ENGINEERING	402 - 551	50,102	124,683	85,285	67,972	39,346
STRUCTURES	402 - 552	38,803	34,076	124,923	37,358	25,836
GENERATING AND ELECTRIC	402 - 553	825,029	518,892	656,222	631,963	443,752
MISCELLANEOUS EXPENSE	402 - 554	10,878	143,507	26,008	36,124	23,904
Total IC Maintenance without wind		924,812	821,158	892,438	773,417	532,839
IC POWER MAINTENANCE WIND ONL	Y:					
SUPERVISION AND ENGINEERING	402 - 551	-	-	-	3,698	-
GENERATING AND ELECTRIC	402 - 553	2,077	10,369	12,986	42,680	6,919
MISCELLANEOUS EXPENSE	402 - 554	68,900	112,579	6,338	8,408	87,649
		70,977	122,948	19,324	54,787	94,568
Additional Contracted Wind Maintenance	)*	210,284	206,358	179,277	97,888	123,439
Total Maintenance		\$ 15,099,063	\$ 13,573,426	\$ 12,540,306	\$ 15,365,943	\$ 15,589,236

**Note:** <sup>1</sup> Budgeted amounts were used in the most recent rate case.

The above numbers are on a calendar year basis.

Please see V. Additional Reporting Requirements - MN PUC Order Acting on

Electric Utilities' Annual Reports and Requiring Additional Filings

Docket Nos. E999/AA-09-961 and E999/AA-10-884 Number 22. for outage information.

\*These amounts reflect the appropriate maintenance portion of combined O & M contracts for OTP wind facilities.

#### MN OES'S REVIEW OF 2006/2007 AAA REPORT DOCKET NO. E,G999/AA-07-1130

In the Minnesota Office of Energy Security's (OES) Review of the 2006-2007 Annual Automatic Adjustment Report dated June 30, 2008, the OES recommended that Otter Tail provide a more summarized approach in the next AAA, such as MISO Daily Settlement Summaries that tie out to Asset and Non-Asset Based Transactions.

Part H Section 3 Attachment K (marked as Not Public) contains a monthly and year to date breakdown of MISO Day 2 Charges – System between Retail, Asset Based Wholesale, and Non-Asset Based Wholesale.

The OES also recommended Otter Tail address how the Auction Revenue Rights (ARR) process will be treated for retail and wholesale purposes and provide information regarding what ARRs if any a utility purchased, how much they paid, and what FTR revenues and costs were received to date for ARRs purchases.

Otter Tail has no activity to report for this item.

The OES also recommended the Commission require electric utilities to report on the number and size of transformers on their systems and to assess whether they have a reasonable number of spares in the event of an outage. Require this information to be included in the AAA reports starting with fiscal year 2011).

Otter Tail addresses this later in this filing under PART H - ADDITIONAL REPORTING REQUIREMENTS – SECTION 8 ORDER ACTING ON ELECTRIC UTILITIES' ANNUAL REPORTS, REQUIRING REFUND OF CERTAIN CURTAILMENT COSTS, AND REQUIRING ADDITIONAL FILINGS IN 2010/2011 (FYE11) ANNUAL AUTOMATIC ADJUSTMENT REPORTS DOCKET NO. E999/AA-11-792.

Pa	ge	1	of	42

					Otter Tail Pov Detail of MISO Day July 2018 includes	2 Charges - Syster								
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)
		•	MWh		TAIL	Revenue	MWh	ASSET BASED	WHOLESALE MWh		MWh	NON ASSET BA Cost	SED WHOLESA	
No.	Charge Type Description Day Ahead & Real Time Energy	Acct	wwn	Cost	MWh	Revenue	NIVVN	Cost	MWN	Revenue		DATA BEGINS .	MWh	Revenue
1	DA Asset Energy Amount	555.02	(418,748) \$	(10,823,642.63)	364,227 \$	9,525,578.96	0 \$		18,474 \$	645,119.34				
2	DA Non-asset Energy Amount	555.09	0 \$	-	4,250 \$	128,994.54	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(10,442) \$	(282,322.33)	20,763 \$	526,284.41	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount SUBTOTAL	555.26	(4) \$	(106.20)	0 \$ 389.240 \$	- 10,180,857.91	0 \$ 0 \$	<u> </u>	0 \$ 18,474 \$	- 645,119.34				
	Day Ahead & Real Time Energy Loss		(423,134) \$	(11,100,071.10)	303,240 \$	10,100,037.31	0.3		10,474 \$	043,113.34				
6	DA FBT Loss Amount	555.04	0 \$	-	0 \$		0 \$	-	0 \$	-				
7	RT Distribution of Losses Amount	555.24	0 \$	(3,489.46)	0 \$	173,772.85	0 \$	-	0 \$	-				
8	RT FBT Loss Amount	555.21	0 \$		0 \$	-	0 \$	-	0 \$	-				
9 10	DA Loss Amount		0 \$	(466,309.59)	0 \$	-	0 \$	-	0 \$	-				
10	RT Loss Amount DA Losses Rebate on Option B GFA	555.08	0 \$ 0 \$	(9,901.01)	0 \$ 0 \$	-	0 \$ 0 \$		0 \$ 0 \$	-				
12	SUBTOTAL	000.00	0 \$	(479,700.06)	0 \$	173,772.85	0 \$	-	0 \$	-				
	Virtual Energy													
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14 15	RT Virtual Energy Amount SUBTOTAL	555.32	0 \$		0 \$ 0 \$	-	0 \$		0 \$					
	SUBTOTAL Schedules 16 & 17		υ \$		υ \$	-	0 \$	•	υ\$	-				
16	DA Mkt Admin Amount	555.01	0 \$	(59,215.75)	0 \$	-	0 \$	(1,426.89)	0 \$					
17	RT Mkt Admin Amount	555.18	0\$	(5,885.21)	0 \$	207.44	0 \$	(1,274.74)	0\$	_				
18	FTR Mkt Admin Amount	555.13	0 \$	(2,021.76)	0 \$	-	0 \$		0 \$	-				
19	SUBTOTAL		0\$	(67,122.72)	0 \$	207.44	0 \$	(2,701.63)	0\$	-				
	Congestion & FTRs								0 \$					
20 21	DA FBT Congestion Amount DA Congestion	555.03	0 \$ 0 \$	-	0 \$ 0 \$	- (113,686.34)	0 \$ 0 \$	-	0\$	-				
22	RT FBT Congestion Amount	555.20	0\$	-	0 \$	(113,000.34)	0\$	-	0\$					
23	RT Congestion	000.20	0\$	(11,427.18)	0 \$	-	0\$	-	0\$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(242,852.57)	0 \$	343,845.83	0 \$	-	0 \$	-				
25	FTR Monthly Allocation Amount	555.15	0 \$	-	0 \$	608.33	0 \$	-	0 \$	-				
26 27	FTR Yearly Allocation Amount	555.17	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
27	FTR Monthly Transaction Amount FTR Full Funding Guarantee Amount	555.35 555.36	0 \$ 0 \$	- (607.97)	0 \$ 0 \$	3.204.78	0 \$ 0 \$		0 \$ 0 \$	-				
29	FTR Guarantee Uplift Amount	555.37	0\$	(3,204.78)	0 \$	608.06	0 \$	-	0\$	_				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0 \$	(39,991.38)	0 \$	187,031.53	0 \$	-	0 \$	-				
31	FTR Annual Transaction Amount	555.38	0 \$	(185,266.36)	0 \$	39,990.39	0 \$	-	0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$	(4,175.62)	0 \$	-	0 \$	-	0 \$	-				
33 34	FTR Auction Revenue Rights Stage 2 Distribution Amount DA Congestion Rebate on Option B GFA	555.41 555.07	0 \$ 0 \$	-	0 \$ 0 \$	35,930.73	0 \$ 0 \$	-	0 \$ 0 \$	-				
35	SUBTOTAL	555.07	0 \$	(487,525.86)	0 \$	497,533.31	0 \$		0 \$	-				
	RSG & Make Whole Payments			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,								
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(7,083.13)	0 \$	4.26	0 \$	(532.66)	0 \$	0.32				
37	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11	0 \$	-	0 \$	6,593.46	0 \$	-	0 \$	1,891.22				
38	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.29	0\$	(44,676.04)	0 \$	204.38	0 \$	(3,360.22)	0\$	15.31				
39 40	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Price Volatility Make Whole Payment	555.30 555.42	0 \$ 0 \$	-	0 \$ 0 \$	- 31.875.83	0 \$ 0 \$	-	0 \$ 0 \$	28,193.73 2.397.77				
40	SUBTOTAL	000.42	0 \$	(51,759.17)	0 \$	38,677.93	0 \$	(3,892.88)	0 \$	32,498.35				
	RNU & Misc Charges		· · ·											
42	RT Misc Amount	555.25	0 \$	(38,604.31)	0 \$	24.64	0 \$	-	0 \$	-				
43	RT Net Inadvertent Amount	555.27	0 \$	(16,084.81)	0 \$	1,259.55	0 \$		0 \$	-				
44 45	RT Revenue Neutrality Uplift Amount RT Uninstructed Deviation Amount	555.28 555.31	0 \$ 0 \$	(45,807.60)	0 \$ 0 \$	8,944.29	0 \$ 0 \$	(3,445.42)	0 \$ 0 \$	672.61				
45 46	RT Demand Response Allocation Uplift Amount	555.31 555.59	0\$	-	0 \$	0.03	0 \$	-	0\$	-				
47	DA Ramp Product	555.63	0\$	-	0 \$	2,660.90	0 \$	-	0\$	_				
48	RT Ramp Prodcut	555.64	0 \$	(468.28)	0 \$	1,001.30	0 \$	-	0 \$	-				
49	SUBTOTAL		0 \$	(100,965.00)	0 \$	13,890.71	0 \$	(3,445.42)	0\$	672.61				
	ASM Charges		(40.075) \$	(0.40.777.00)	11.075	040.000.00	(1.100) 1	(70 700 7 1)	40.000 +	007.407.61				
50 51	RT ASM Non-Excessive Energy Amount RT ASM Excessive Energy Amount	555.55 555.56	(42,375) \$ (75) \$	(940,777.90) (1,375.08)	11,075 \$ 257 \$	243,628.25 501.37	(4,420) \$ (28) \$	(79,796.74) (966.93)	13,666 \$ 11 \$	307,497.84 167.11				
51	SUBTOTAL	00.000	(42,449) \$	(1,375.08)	257 \$ 11.331 \$	244,129.62	(4,447) \$	(966.93)	13,677 \$	307.664.95				
52			(- <u>-</u> ,++0) \$	(0.12,102.00)	11,001 \$	,120.02	(-,,-, V	(00,100.01)	, Ø	001,004.00	1			

				Otter Tail Pov Detail of MISO Day July 2018 includes	2 Charges - Syster								
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Charge Type Description	Acct	MWh	RE1 Cost	MWh	Revenue	MWh	ASSET BASED Cost	MWh	Revenue	MWh	Cost	BASED WHOLES MWh	ALE Revenue
Grandfathered Charge Types													
DA Congestion Rebate on COGA	555.05	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
DA Losses Rebate on COGA	555.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
RT Congestion Rebate on COGA	555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
RT Loss Rebate on COGA	555.23	0 \$	-	0 \$	-	0 \$		0 \$	-				
SUBTOTAL		0 \$	-	0 \$	-	0 \$	-	0\$	-				
TOTAL MISO DAY 2 CHARGES		(471.643) \$	(13,235,296.95)	400.571 \$	11,149,069.77	(4,447) \$	(90.803.60)	32,151 \$	985.955.25				
Less Schedule 16 & 17 (Lines 16, 17, 18)		(4/1,643) \$	(67,122.72)	400,571 \$	207.44	(4,447) \$	(90,803.60)	32,151 \$	985,955.25				
Congestion and Losses Adjustment		÷	(24,652.18)	ş	207.44								
No DA generation sch., but still had output for current month		e e	(24,052.10)										
MISO RSG Bad Debt		ç	-										
		Ŷ											
Total for MN Energy Adjustment Rider		\$	(13,143,522.05)	s	11,148,862.33								
Net Retail for MN Energy Adjustment Rider		•		(1,994,659.72)	,								
Retail MWh include losses of 2.8%				(),									
ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASE	DIDANGACI												
NET MISO (Rev-Cost and MWh)	DIRANSACI	IONS							895,151.65				
Less: Fuel Cost								ې 27,704 \$	715,863.48				
Less: Misc Cost Adjustment								21,104 \$	- 13,003.40				
Plus: Capacity Revenue								Ŷ	-				
Plus: Bilateral Sales													
Less: Bilateral Purchases													
Less: Schedule 24 for Asset Based Sales								s	389.40				
								•					
TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	178,898.77				
												PROTEC	TED DATA EN

					Otter Tail Por Detail of MISO Day August 2018 includ	2 Charges - System								
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)
				RE	TAIL			ASSET BASED		_		NON ASSET B		
lo Da	Charge Type Description y Ahead & Real Time Energy	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost DATA BEGINS	MWh	Revenue
1	DA Asset Energy Amount	555.02	(393,029) \$	(10,251,471.10)	343,435 \$	8,966,226.44	0 \$		22,122 \$	666,826.41	[I KOTEOTED	DAIADEGING	•••	
2	DA Non-asset Energy Amount	555.09	0 \$	-	4,354 \$	121,640.27	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(12,071) \$	(317,779.50)	18,081 \$	446,048.33	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount	555.26	(24) \$	(1,774.73)	0 \$	-	0 \$	-	0 \$	-				
5	SUBTOTAL y Ahead & Real Time Energy Loss		(405,124) \$	(10,571,025.33)	365,870 \$	9,533,915.04	0 \$		22,122 \$	666,826.41	-			
6	DA FBT Loss Amount	555.04	0 \$		0 \$		0 \$		0 \$		-			
7	RT Distribution of Losses Amount	555.24	0\$	(5,209.81)	0 \$	172.608.67	0 \$		0\$					
8	RT FBT Loss Amount	555.21	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
9	DA Loss Amount		0 \$	(415,680.60)	0 \$	-	0 \$	-	0 \$	-				
10	RT Loss Amount		0 \$	(8,534.30)	0 \$	-	0 \$	-	0 \$	-				
11	DA Losses Rebate on Option B GFA	555.08	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
12	SUBTOTAL		0 \$	(429,424.71)	0 \$	172,608.67	0 \$		0 \$	-	-			
13	tual Energy DA Virtual Energy Amount	555.12	0 \$	-	0 \$		0 \$	-	0 \$	-				
13	RT Virtual Energy Amount	555.32	0 \$	-	0 \$	-	0 \$	-	0 \$					
15	SUBTOTAL	000.02	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
	hedules 16 & 17								· •					-
16	DA Mkt Admin Amount	555.01	0 \$	(47,413.32)	0 \$	-	0 \$	(1,447.02)	0 \$	-				
17	RT Mkt Admin Amount	555.18	0 \$	(3,693.42)	0 \$	341.47	0 \$	(942.48)	0 \$	-				
18	FTR Mkt Admin Amount	555.13	0 \$	(1,803.44)	0 \$	-	0 \$		0 \$	-				
19	SUBTOTAL ongestion & FTRs		0 \$	(52,910.18)	0 \$	341.47	0 \$	(2,389.50)	0 \$	-				
20	DA FBT Congestion Amount	555.03	0 \$		0 \$		0 \$		0 \$	-	-			
21	DA Congestion	555.05	0\$		0 \$	(178,971.58)	0 \$	-	0\$					
22	RT FBT Congestion Amount	555.20	0\$	-	0 \$	-	0 \$	-	0\$	-				
23	RT Congestion		0 \$	7,008.73	0 \$	-	0 \$	-	0 \$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(110,457.39)	0 \$	247,563.36	0 \$	-	0 \$	-				
25	FTR Monthly Allocation Amount	555.15	0 \$	-	0 \$	9,202.33	0 \$	-	0 \$	-				
26	FTR Yearly Allocation Amount	555.17	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
27 28	FTR Monthly Transaction Amount	555.35	0 \$	-	0 \$	-	0 \$	-	0\$	-				
28 29	FTR Full Funding Guarantee Amount FTR Guarantee Uplift Amount	555.36 555.37	0 \$ 0 \$	(8,377.81) (8,648.82)	0 \$ 0 \$	8,648.82 8,377.81	0 \$ 0 \$	-	0 \$ 0 \$	-				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0\$	(39,991.38)	0 \$	187,031.53	0 \$	-	0\$	-				
31	FTR Annual Transaction Amount	555.38	0\$	(185,266.36)	0 \$	39,990.39	0 \$		0 \$					
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$	(4,175.62)	0 \$	-	0 \$	-	0 \$	-				
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0 \$	-	0 \$	35,930.76	0 \$	-	0 \$	-				
34	DA Congestion Rebate on Option B GFA	555.07	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
35	SUBTOTAL GG & Make Whole Payments		0 \$	(349,908.65)	0 \$	357,773.42	0 \$		0 \$	-				
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(5,579.03)	0 \$	8.04	0 \$	(419.65)	0 \$	0.59				
36 37	DA Revenue Sufficiency Guarantee Distribution Amount DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.10	0 \$	(0,019.00)	0 \$	8.04 2,165.39	0\$	(419.00)	0 \$	0.59 544.12				
38	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.29	0\$	(50,517.11)	0 \$	147.64	0\$	(3,801.12)	0\$	11.04				
39	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30	0 \$	-	0 \$	-	0 \$	-	0\$	8,120.40				
40	RT Price Volatility Make Whole Payment	555.42	0 \$	-	0 \$	7,314.88	0 \$	-	0 \$	550.47				
41	SUBTOTAL		0 \$	(56,096.14)	0 \$	9,635.95	0 \$	(4,220.77)	0 \$	9,226.62	<u> </u>			
	IU & Misc Charges RT Misc Amount	555.05	0 0	(11, 100, 10)		505 10	0.0		0. *					
42 43	RT Misc Amount RT Net Inadvertent Amount	555.25 555.27	0 \$ 0 \$	(11,402.40) (10,581.06)	0 \$ 0 \$	525.43 4,766.19	0 \$ 0 \$	-	0 \$ 0 \$	-				
43 44	RT Net inadvertent Amount RT Revenue Neutrality Uplift Amount	555.27 555.28	0\$	(10,581.06) (23,258.62)	0 \$	4,766.19 19,249.95	0\$	- (1,749.87)	0\$	1,448.48				
45	RT Uninstructed Deviation Amount	555.31	0\$	(20,200.02)	0\$	-	0 \$	-	0\$					
46	RT Demand Response Allocation Uplift Amount	555.59	0 \$	-	0\$	-	0 \$	-	0\$	-				
47	DA Ramp Product	555.63	0 \$	-	0 \$	1,613.24	0 \$	-	0 \$	-				
48	RT Ramp Prodcut	555.64	0 \$	(162.30)	0 \$	257.14	0 \$	-	0 \$	-	1			
19	SUBTOTAL		0 \$	(45,404.38)	0 \$	26,411.95	0 \$	(1,749.87)	0 \$	1,448.48				
50 AS	M Charges RT ASM Non-Excessive Energy Amount	555.55	(24,127) \$	(544,911.95)	10,856 \$	242,247.18	(4,184) \$	(92,337.67)	10,100 \$	243,110.70				
50 51	RT ASM Non-Excessive Energy Amount RT ASM Excessive Energy Amount	555.55 555.56	(24,127) \$ 0 \$	(544,911.95) (54.80)	10,856 \$	242,247.18 208.40	(4,184) \$	(92,337.07)	10,100 \$ 5 \$	243,110.70 106.39				

				Otter Tail Pov Detail of MISO Day 2 August 2018 include	2 Charges - Syste								
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Charge Type Description	Acct	MWh	Cost RE	TAIL MWh	Revenue	MWh	ASSET BASED Cost	WHOLESALE MWh	Revenue	MWh	NON ASSET E Cost	ASED WHOLES MWh	ALE Revenue
Grandfathered Charge Types	ACCI	IVIVVII	COST		Revenue	WIVVII	0031		Revenue	WWW	COSt	IVIVVII	Revenue
DA Congestion Rebate on COGA	555.05	0 \$	-	0 \$	-	0 \$		0 \$	-				
DA Losses Rebate on COGA	555.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
RT Congestion Rebate on COGA	555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
RT Loss Rebate on COGA	555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
SUBTOTAL		0 \$	-	0 \$	-	0 \$	-	0 \$	-				
TOTAL MISO DAY 2 CHARGES		(429,251) \$	(12,049,736.14)	376,763 \$	10,343,142.08	(4,184) \$	(100,697.81)	32,227 \$	920,718.60				
Less Schedule 16 & 17 (Lines 16, 17, 18)		\$	(52,910.18)	\$	341.47								
Congestion and Losses Adjustment		\$	(16,035.11)										
No DA generation sch., but still had output for current month		\$	(715.85)										
MISO RSG Bad Debt		\$											
Settlement with another utility in Otter Tail's LBA Total for MN Energy Adjustment Rider		\$	(65,001.44)										
Total for MN Energy Adjustment Rider		\$	(12,045,076.44)	\$	10,342,800.61								
Net Retail for MN Energy Adjustment Rider	•		\$	(1,702,275.83)									
Retail MWh include losses of 2.8%													
ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASE	ED TRANSAC	TIONS											
NET MISO (Rev-Cost and MWh)								\$	820,020.79				
Less: Fuel Cost								28,043 \$	687,373.25				
Less: Misc Cost Adjustment								\$	-				
Plus: Capacity Revenue													
Plus: Bilateral Sales													
Less: Bilateral Purchases													
Less: Schedule 24 for Asset Based Sales								\$	406.19				
TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	132,241.35				
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Ра	ge	5	of	42

				;	Otter Tail Pow Detail of MISO Day 2 September 2018 inclu	Charges - Systen								
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(L)	(K)	(L)	(M)
					TAIL			ASSET BASED				NON ASSET B		
o. Day Ahead & Real Time Energy	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh [PROTECTED		MWh	Revenue
DA Asset Energy Amour		555.02	(315,035) \$	(7,439,013.81)	270,153 \$	6,349,992.75	0 \$		39,401 \$	1,012,471.30	IPROTECTED	DATA BEGINS	•••	
2 DA Asset Energy Amount 2 DA Non-asset Energy Ar		555.09	(313,033) \$	(7,439,013.01)	3.899 \$	109.195.65	0 \$	-	0 \$	1,012,471.30				
3 RT Asset Energy Amour		555.19	(18.037) \$	(637,409.72)	8,215 \$	195,185.84	0 \$	_	0\$	_				
4 RT Non-Asset Energy A		555.26	(10,001) \$	(4.72)	0 \$	-	0 \$		0 \$	-				
5 SUBTOTAL			(333,072) \$	(8,076,428.25)	282,268 \$	6,654,374.24	0 \$	-	39,401 \$	1,012,471.30				
Day Ahead & Real Time Energy	Loss													
6 DA FBT Loss Amount		555.04	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
7 RT Distribution of Losses	Amount	555.24	0 \$	(6,529.57)	0 \$	119,102.25	0 \$	-	0 \$	-				
B RT FBT Loss Amount		555.21	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
DA Loss Amount			0 \$	(346,060.41)	0 \$	-	0 \$	-	0 \$	-				
0 RT Loss Amount 1 DA Losses Rebate on O		555.08	0 \$ 0 \$	3,276.08	0 \$ 0 \$	-	0 \$	-	0 \$ 0 \$	-				
2 SUBTOTAL	DUDI B GFA	555.06	0 \$	(349,313.90)	0 \$	119,102.25	0 \$		0 \$	-				
Virtual Energy			νψ	(040,010.00)	5.9	110,102.20		-	υ φ	-				
3 DA Virtual Energy Amou	nt	555.12	0 \$		0 \$	- 1	0 \$		0 \$	-				
4 RT Virtual Energy Amou		555.32	0 \$	-	0 \$	-	0 \$	-	0\$	-				
5 SUBTOTAL			0 \$	-	0 \$	-	0 \$	-	0\$	-	1			
Schedules 16 & 17														
6 DA Mkt Admin Amount		555.01	0 \$	(45,497.35)	0 \$	-	0 \$	(3,288.03)	0 \$	-				
7 RT Mkt Admin Amount		555.18	0 \$	(5,540.41)	0 \$	225.66	0 \$	(1,644.21)	0 \$	-				
8 FTR Mkt Admin Amoun		555.13	0 \$	(1,590.08)	0 \$	-	0 \$	-	0 \$	-				
9 SUBTOTAL			0 \$	(52,627.84)	0 \$	225.66	0 \$	(4,932.24)	0\$	-				
Congestion & FTRs														
0 DA FBT Congestion Am 1 DA Congestion	punt	555.03	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
		555.00	0 \$	-	0 \$	(351,964.89)	0 \$	-	0\$ 0\$	-				
2 RT FBT Congestion Am 3 RT Congestion	bunt	555.20	0 \$ 0 \$	- 115,435.35	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$	-				
4 FTR Hourly Allocation A	nount	555.14	0\$	(175,542.74)	0 \$	379,910.88	0\$		0\$	_				
5 FTR Monthly Allocation A		555.15	0\$	(173,342.74)	0\$	4,090.53	0\$		0\$	_				
6 FTR Yearly Allocation A		555.17	0\$	-	0 \$	-	0 \$		0\$	_				
7 FTR Monthly Transaction		555.35	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
8 FTR Full Funding Guara		555.36	0 \$	(4,039.89)	0 \$	4,442.03	0 \$		0 \$	-				
9 FTR Guarantee Uplift Ar	nount	555.37	0 \$	(4,442.03)	0 \$	4,039.89	0 \$	-	0\$	-				
0 FTR Auction Revenue R	ights Transaction Amount	555.39	0 \$	(35,793.09)	0 \$	290,247.61	0 \$	-	0\$	-				
1 FTR Annual Transaction		555.38	0 \$	(290,288.08)	0 \$	35,833.25	0 \$	-	0 \$	-				
	ights Infeasible Uplift Amount	555.40	0 \$	(13,214.72)	0 \$	-	0 \$	-	0\$	-				
	ights Stage 2 Distribution Amount	555.41	0 \$	-	0 \$	23,323.39	0 \$	-	0 \$	-				
4 DA Congestion Rebate of	n Option B GFA	555.07	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
5 SUBTOTAL RSG & Make Whole Payments			0 \$	(407,885.20)	0 \$	389,922.69	0 \$	-	0 \$	-				
	Guarantee Distribution Amount	555.10	0 \$	(4,391.37)	0 \$	1.95	0 \$	(448.22)	0 \$	0.16				
	Guarantee Distribution Amount Guarantee Make Whole Pymt Amount	555.10	0 \$	(4,391.37)	0\$	1,831.73	0 \$	(440.22)	0 \$	3,202.99				
	Guarantee First Pass Distribution Amount	555.29	0\$	(40,834.53)	0\$	1,055.26	0\$	(4,168.93)	0\$	107.61				
	Guarantee Make Whole Pymt Amount	555.30	0\$	-	0 \$	-	0 \$	-	0\$	39,162.12				
0 RT Price Volatility Make		555.42	0\$	-	0 \$	10,433.89	0 \$	-	0\$	1,065.31				
1 SUBTOTAL	· ·		0 \$	(45,225.90)	0 \$	13,322.83	0 \$	(4,617.15)	0 \$	43,538.19				
RNU & Misc Charges														
2 RT Misc Amount		555.25	0 \$	(20,846.14)	0 \$	- 1	0 \$	-	0 \$	-				
3 RT Net Inadvertent Amo		555.27	0 \$	(9,355.25)	0 \$	16,103.34	0 \$	-	0 \$					
4 RT Revenue Neutrality L		555.28	0 \$	(38,299.90)	0 \$	35,295.77	0 \$	(3,910.04)	0 \$	3,603.63				
5 RT Uninstructed Deviatio		555.31	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
6 RT Demand Response / 7 DA Ramp Product	Allocation Uplift Amount	555.59	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
		555.63	0 \$	-	0 \$ 0 \$	2,419.23 785.97	0 \$	-	0 \$	-				
8 RT Ramp Prodcut 9 SUBTOTAL		555.64	0 \$ 0 \$	(52.39) (68,553.68)	0 \$	785.97 54,604.31	0 \$	(3,910.04)	0 \$	3,603.63	1			
ASM Charges			ν φ	(00,000.00)	J Ø	04,004.01	~ <b>, ,</b>	(0,010.04)	υ φ	0,000.00				
0 RT ASM Non-Excessive	Energy Amount	555.55	(37,342) \$	(765,303.41)	11,023 \$	317,756.40	(10,964) \$	(230,339.44)	9,166 \$	214,759.09				
1 RT ASM Excessive Ener		555.56	(5) \$	(591.89)	110 \$	43.44	0 \$	,200,000.14)	13 \$	142.65				

Page	6 of 42

				5	Otter Tail Pow Detail of MISO Day 2 September 2018 inclu	Charges - System								
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	Charge Type Description	Acct	MWh	RE <sup>-</sup> Cost	TAIL MWh	Revenue	MWh	ASSET BASED Cost	WHOLESALE MWh	Revenue	MWh	NON ASSET E Cost	BASED WHOLES MWh	ALE Revenue
Gra	andfathered Charge Types	Acct	NIVI	Cost	WW	Revenue	WWW	Cost	IVIVVII	Revenue	WIVYN	Cost	IVIVI	Revenue
53	DA Congestion Rebate on COGA	555.05	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
54	DA Losses Rebate on COGA	555.06	0 \$	_	0 \$	_	0 \$	_	0 \$	_				
55	RT Congestion Rebate on COGA	555.22	0 \$		0 \$	-	0 \$	-	0 \$	-				
56	RT Loss Rebate on COGA	555.23	0 \$		0 \$	-	0 \$	-	0 \$	-				
57	SUBTOTAL	000.20	0 \$	-	Ŭ Š		Ŭ Š	-	0 \$					
58 TO	TAL MISO DAY 2 CHARGES		(370,419) \$	(9,765,930.07)	293,402 \$	7,549,351.82	(10,964) \$	(243,798.87)	48,581 \$	1,274,514.86				
59	Less Schedule 16 & 17 (Lines 16, 17, 18)		\$	(52,627.84)	\$	225.66								
60	Congestion and Losses Adjustment		\$	30,336.18										
61	No DA generation sch., but still had output for current month		\$	-										
62	MISO RSG Bad Debt		\$	-										
63	Settlement with another utility in Otter Tail's LBA		\$	-										
64	Total for MN Energy Adjustment Rider		\$	(9,743,638.41)	\$	7,549,126.16								
65	Net Retail for MN Energy Adjustment Rider			\$	(2,194,512.25)									
66 Ref	ail MWh include losses of 2.8%													
	DITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASED	TRANSAC	TIONS											
67	NET MISO (Rev-Cost and MWh)	DIRANJAC	TIONS						\$	1,030,715.99				
68	Less: Fuel Cost								ۍ 37,617 \$	809.699.73	1			
69	Less: Misc Cost Adjustment								57,017 \$	003,099.73	1			
70	Plus: Capacity Revenue								Ŷ	-	1			
70	Plus: Bilateral Sales										1			
72	Less: Bilateral Purchases										1			
73	Less: Schedule 24 for Asset Based Sales								\$	784.94	1			
74									÷	704.54	1			
75	TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	220,231.32				
													PROTEC	TED DATA ENDS

	Pa	aç	ge	7	' (	of	42

					Otter Tail Pov Detail of MISO Day 3 October 2018 includ	2 Charges - Syster								
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)
					TAIL	_		ASSET BASED		_			ASED WHOLES	
No	Charge Type Description Day Ahead & Real Time Energy	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh [PROTECTED		MWh	Revenue
1	DA Asset Energy Amount	555.02	(414,519) \$	(11,148,810.63)	235,427 \$	6,305,495.97	0 \$		11,920 \$	380,706.48	INGIEGIED	DATA DEGINO	•••	
2	DA Non-asset Energy Amount	555.09	0 \$	-	4,452 \$	127,743.64	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(13,524) \$	(334,574.26)	10,413 \$	260,762.73	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount	555.26	(5) \$	(137.86)	0 \$	-	0 \$	-	0 \$	-				
5	SUBTOTAL Day Ahead & Real Time Energy Loss		(428,048) \$	(11,483,522.75)	250,293 \$	6,694,002.34	0 \$		11,920 \$	380,706.48				
6	DA FBT Loss Amount	555.04	0 \$		0 \$		0 \$		0 \$	-				
7	RT Distribution of Losses Amount	555.24	0 \$	(11,073.09)	0 \$	139,190,95	0 \$	-	0\$	-				
8	RT FBT Loss Amount	555.21	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
9	DA Loss Amount		0 \$	(383,925.47)	0 \$	-	0 \$	-	0 \$	-				
10	RT Loss Amount		0 \$	(30,955.02)	0 \$	-	0 \$	-	0 \$	-				
11 12	DA Losses Rebate on Option B GFA SUBTOTAL	555.08	0 \$ 0 \$	- (425,953.58)	0 \$ 0 \$	- 139,190.95	0 \$		0 \$	-				
	/irtual Energy		U \$	(423,953.50)	U \$	155,150.35	0 \$		U \$	-				
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14	RT Virtual Energy Amount	555.32	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
15	SUBTOTAL	-	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
_	Schedules 16 & 17													
16	DA Mkt Admin Amount	555.01	0 \$	(66,431.50)	0 \$	-	0 \$	(1,308.20)	0 \$	-				
17 18	RT Mkt Admin Amount FTR Mkt Admin Amount	555.18 555.13	0 \$ 0 \$	(5,568.62) (1,235.28)	0 \$	122.71	0 \$ 0 \$	(772.53)	0 \$ 0 \$	-				
19	SUBTOTAL	555.15	0 \$	(73,235.40)	0 \$	122.71	0 \$	(2,080.73)	0 \$	-				
(	Congestion & FTRs		· · ·	,	· · ·		· ·	<u>, , , ,</u>	· · ·					
20	DA FBT Congestion Amount	555.03	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(446,519.47)	0 \$	-	0\$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
23 24	RT Congestion FTR Hourly Allocation Amount	555.14	0 \$ 0 \$	(14,686.15) (301,927.43)	0 \$ 0 \$	- 630.732.42	0 \$ 0 \$	-	0 \$ 0 \$	-				
24 25	FTR Monthly Allocation Amount	555.14 555.15	0\$	(301,927.43)	0 \$	8,801.54	0 \$	-	0 \$					
26	FTR Yearly Allocation Amount	555.17	0\$	-	0 \$	-	0 \$	_	0\$	_				
27	FTR Monthly Transaction Amount	555.35	0 \$	-	0 \$	48,810.63	0 \$	-	0 \$	-				
28	FTR Full Funding Guarantee Amount	555.36	0 \$	(8,692.84)	0 \$	18,918.08	0 \$	-	0 \$	-				
29	FTR Guarantee Uplift Amount	555.37	0\$	(18,918.08)	0 \$	8,692.84	0 \$	-	0 \$	-				
30 31	FTR Auction Revenue Rights Transaction Amount FTR Annual Transaction Amount	555.39	0 \$	(35,793.09)	0 \$	290,247.61	0 \$	-	0 \$ 0 \$	-				
31 32	FTR Annual Transaction Amount FTR Auction Revenue Rights Infeasible Uplift Amount	555.38 555.40	0 \$ 0 \$	(290,288.08) (13,214.72)	0 \$ 0 \$	35,833.25	0 \$	-	0 \$	-				
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0\$	(13,214.72)	0 \$	23,323.33	0 \$		0\$	-				
34	DA Congestion Rebate on Option B GFA	555.07	0 \$	-	0 \$		0 \$	-	0 \$	-				
35	SUBTOTAL		0\$	(683,520.39)	0 \$	618,840.23	0 \$	-	0 \$	-				
	RSG & Make Whole Payments													
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(8,220.51)	0 \$	0.94	0 \$	(326.66)	0 \$	0.03				
37 38	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.11 555.29	0 \$ 0 \$	- (22,347.49)	0 \$ 0 \$	10,935.60 1,071.05	0 \$ 0 \$	- (888.15)	0 \$ 0 \$	207.19 42.36				
30 39	RT Revenue Sufficiency Guarantee Pirst Pass Distribution Amount RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.29 555.30	0 \$	(22,347.49)	0 \$	1,071.05	0 \$	(000.15)	0 \$	42.36				
40	RT Price Volatility Make Whole Payment	555.42	0\$	-	0\$	9,354.29	0 \$	-	0\$	371.95				
41	SUBTOTAL		0\$	(30,568.00)	0 \$	21,361.88	0 \$	(1,214.81)	0 \$	10,777.24				
	RNU & Misc Charges													
42	RT Misc Amount	555.25	0 \$	(10,910.19)	0 \$	301.52	0 \$	-	0 \$	-				
43 44	RT Net Inadvertent Amount RT Revenue Neutrality Uplift Amount	555.27 555.28	0 \$ 0 \$	(16,648.10) (92,416.06)	0 \$ 0 \$	13,818.23 30,143.94	0 \$ 0 \$	- (3,674.30)	0 \$ 0 \$	- 1,198.19				
44	RT Uninstructed Deviation Amount	555.31	0\$	(32,410.00)	0 \$	- 50,145.94	0 \$	(3,074.30)	0 \$	1,150.19				
46	RT Demand Response Allocation Uplift Amount	555.59	0\$	-	0\$	0.92	0 \$	-	0\$					
47	DA Ramp Product	555.63	0 \$	-	0 \$	1,108.95	0 \$	-	0 \$	-				
48	RT Ramp Prodcut	555.64	0 \$	(46.88)	0 \$	56.01	0 \$	-	0 \$	-				
49	SUBTOTAL		0 \$	(120,021.23)	0 \$	45,429.57	0 \$	(3,674.30)	0 \$	1,198.19				
	ASM Charges	555.55	(44.024)	(244,007,05)	0.007	400.005.00	(4.740) 0	(27,000,04)	4.054	442,000,42				
50	RT ASM Non-Excessive Energy Amount RT ASM Excessive Energy Amount	555.55 555.56	(14,634) \$ 0 \$	(344,807.95) (24.33)	8,687 \$ 27 \$	186,985.28 75.44	(1,716) \$ 0 \$	(37,900.94)	4,054 \$ 3 \$	113,980.16 59.99				
51														

				Otter Tail Pow Detail of MISO Day 2 October 2018 include	Charges - Syster								
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Charge Type Description	Acct	MWh	RET Cost	MWh	Revenue	MWh	ASSET BASED Cost	MWh MWh	Revenue	MWh	NON ASSET B Cost	ASED WHOLES MWh	ALE Revenue
Grandfathered Charge Types	Acci		0031		Revenue		0031		Revenue		0031		Revenue
DA Congestion Rebate on COGA	555.05	0 \$		0 \$	-	0 \$		0 \$	-				
DA Losses Rebate on COGA	555.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
RT Congestion Rebate on COGA	555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
RT Loss Rebate on COGA	555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
SUBTOTAL		0 \$	-	0 \$	-	0 \$	-	0 \$	-				
TOTAL MISO DAY 2 CHARGES		(442,682) \$	(13,161,653.63)	259,006 \$	7,706,008.40	(1,716) \$	(44,870.78)	15,978 \$	506,722.06				
Less Schedule 16 & 17 (Lines 16, 17, 18)		\$	(73,235.40)	\$	122.71								
Congestion and Losses Adjustment		\$	790.76										
No DA generation sch., but still had output for current month		\$	(553.47)										
MISO RSG Bad Debt		\$	-										
Settlement with another utility in Otter Tail's LBA		\$	-										
Total for MN Energy Adjustment Rider		\$	(13,088,655.52)	\$	7,705,885.69								
Net Retail for MN Energy Adjustment Rider			\$	(5,382,769.83)									
Retail MWh include losses of 2.8%													
ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASED													
	JIRANSACI	TIONS							101 051 00				
NET MISO (Rev-Cost and MWh)								\$	461,851.28				
Less: Fuel Cost Less: Misc Cost Adjustment								14,262 \$	363,674.50				
Less: Misc Cost Adjustment Plus: Capacity Revenue								\$	-				
Plus: Capacity Revenue Plus: Bilateral Sales													
Less: Bilateral Purchases													
Less: Schedule 24 for Asset Based Sales								e	292.86				
Less. Schedule 24 IVI Asset Dased Sales								ş	292.00				
TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	97,883.92				
												PROTECT	ED DATA P

Γ					Otter Tail Pov									
				I	Detail of MISO Day 2 November 2018 inclu									
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)
				RE	TAIL			ASSET BASED	WHOLESALE			NON ASSET BA	SED WHOLES	ALE
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
No. L	Day Ahead & Real Time Energy DA Asset Energy Amount	555.02	(444,098) \$	(13,016,634.17)	245.498 \$	6.949.121.29	0 \$		8.761 \$	224,838.08	[PROTECTED	DATA BEGINS .	••	
2	DA Asset Energy Amount DA Non-asset Energy Amount	555.02	(444,098) \$ 0 \$	(13,010,034.17)	245,498 \$ 4.545 \$	142.469.81	0 \$	-	0,701 \$	224,636.06				
3	RT Asset Energy Amount	555.19	(25,304) \$	(675,068.55)	9,371 \$	268.559.95	0 \$	-	0\$	_				
4	RT Non-Asset Energy Amount	555.26	(0) \$	(6.85)	0 \$		0 \$	-	0 \$	-				
5	SUBTOTAL		(469,403) \$	(13,691,709.57)	259,414 \$	7,360,151.05	0 \$	-	8,761 \$	224,838.08				
	Day Ahead & Real Time Energy Loss													
6 7	DA FBT Loss Amount RT Distribution of Losses Amount	555.04 555.24	0 \$ 0 \$	- (5,488.88)	0 \$ 0 \$	- 187,123.52	0 \$ 0 \$	-	0 \$ 0 \$	-				
8	RT FBT Loss Amount	555.24	0 \$	(0,400.00)	0 \$	167,123.52	0 \$	-	0 \$	-				
9	DA Loss Amount	555.21	0 \$	(349,694.97)	0 \$	-	0\$		0\$					
10	RT Loss Amount		0 \$	(28,484.69)	0 \$	-	0 \$	-	0 \$	-				
11	DA Losses Rebate on Option B GFA	555.08	0 \$		0 \$	-	0 \$	-	0 \$	-				
12	SUBTOTAL		0 \$	(383,668.54)	0 \$	187,123.52	0 \$		0 \$					
13	/irtual Energy DA Virtual Energy Amount	555.12	0 \$		0 \$		0 \$		0 \$					
13	RT Virtual Energy Amount	555.12 555.32	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14	SUBTOTAL	000.02	0 \$		0 \$	-	0 \$		0 \$	-	1			
	Schedules 16 & 17													
16	DA Mkt Admin Amount	555.01	0 \$	(79,462.34)	0 \$	-	0 \$	(1,039.94)	0 \$	-				
17	RT Mkt Admin Amount	555.18	0 \$	(9,090.76)	0 \$	321.23	0 \$	(1,985.40)	0 \$	-				
18 19	FTR Mkt Admin Amount SUBTOTAL	555.13	0 \$	(906.24) (89,459.34)	0 \$ 0 \$	321.23	0 \$	(3,025.34)	0 \$ 0 \$	-				
	Congestion & FTRs		0 \$	(03,433.34)	0 \$	521.25	0.4	(3,023.34)	0 \$	-				
20	DA FBT Congestion Amount	555.03	0 \$		0 \$		0 \$		0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(88,366.18)	0 \$	-	0 \$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
23	RT Congestion		0 \$	(24,590.43)	0 \$	-	0 \$	-	0 \$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(30,495.25)	0 \$	134,134.44	0 \$	-	0 \$	-				
25 26	FTR Monthly Allocation Amount FTR Yearly Allocation Amount	555.15 555.17	0 \$ 0 \$	(14.08)	0 \$ 0 \$	13,054.46	0 \$ 0 \$	-	0 \$ 0 \$	-				
27	FTR Monthly Transaction Amount	555.35	0\$		0 \$	-	0 \$	-	0\$	_				
28	FTR Full Funding Guarantee Amount	555.36	0 \$	(13,068.09)	0 \$	5,444.24	0 \$	-	0 \$	-				
29	FTR Guarantee Uplift Amount	555.37	0 \$	(5,444.24)	0 \$	13,166.50	0 \$	-	0 \$	-				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0 \$	(35,793.09)	0 \$	290,247.61	0 \$	-	0 \$	-				
31	FTR Annual Transaction Amount	555.38	0 \$	(290,288.08)	0 \$	35,833.25	0 \$	-	0 \$	-				
32 33	FTR Auction Revenue Rights Infeasible Uplift Amount FTR Auction Revenue Rights Stage 2 Distribution Amount	555.40 555.41	0 \$ 0 \$	(13,214.72)	0 \$ 0 \$	23,323.33	0 \$ 0 \$	-	0 \$ 0 \$	-				
34	DA Congestion Rebate on Option B GFA	555.07	0\$	-	0 \$	-	0 \$	-	0\$	_				
35	SUBTOTAL		0 \$	(412,907.98)	0 \$	426,837.65	0 \$	-	0 \$	-				
	RSG & Make Whole Payments													
36 37	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(14,538.56)	0 \$	100.79	0 \$	(603.89)	0 \$	4.18				
37 38	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.11 555.29	0 \$ 0 \$	- (50,082.68)	0 \$ 0 \$	4,126.44 3.619.49	0 \$ 0 \$	- (2,080.64)	0 \$ 0 \$	235.42 150.10				
39	RT Revenue Sufficiency Guarantee First Pass Distribution Amount RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30	0\$	(50,062.08)	0 \$	3,019.49	0 \$	(2,000.04)	0 \$	19,672.68				
40	RT Price Volatility Make Whole Payment	555.42	0\$	-	0 \$	3,842.14	0 \$	-	0\$	159.63				
41	SUBTOTAL		0 \$	(64,621.24)	0 \$	11,688.86	0 \$	(2,684.53)	0 \$	20,222.01				
	RNU & Misc Charges													
42	RT Misc Amount	555.25	0 \$	(18,720.83)	0 \$	0.15	0 \$	-	0 \$	-				
43 44	RT Net Inadvertent Amount RT Revenue Neutrality Uplift Amount	555.27 555.28	0 \$ 0 \$	(2,213.77) (52,748.50)	0 \$ 0 \$	10,261.69 6,736.32	0 \$ 0 \$	- (2,191.28)	0 \$ 0 \$	- 279.64				
44	RT Uninstructed Deviation Amount	555.31	0\$	(02,740.00)	0 \$		0 \$	(2,101.20)	0 \$	- 215.04				
46	RT Demand Response Allocation Uplift Amount	555.59	0\$	-	0 \$	0.02	0\$	-	0\$	-				
47	DA Ramp Product	555.63	0 \$	-	0 \$	492.69	0 \$	-	0 \$	-				
48	RT Ramp Prodcut	555.64	0 \$	(38.45)	0 \$	106.51	0 \$		0 \$	-	-			
49	SUBTOTAL ASM Charges		0 \$	(73,721.55)	0 \$	17,597.38	0 \$	(2,191.28)	0 \$	279.64				
50	RT ASM Non-Excessive Energy Amount	555.55	(36,652) \$	(1,011,241.54)	7,480 \$	185,559.52	(4,714) \$	(113,437.17)	10,553 \$	279,464.50				
51	RT ASM Non-Excessive Energy Amount	555.56	(30,032) \$	(1,011,241.54)	7,480 \$ 349 \$	5.07	(4,714) \$	(110,407.17)	10,555 \$	279,404.50				
52	SUBTOTAL		(36,683) \$	(1,011,255.20)	7,829 \$	185,564.59	(4,714) \$	(113,437.17)	10,570 \$	279,750.56				

				Otter Tail Pow Detail of MISO Day 2 November 2018 inclue	2 Charges - Syster								
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Charge Type Description	Acct	MWh	RE1 Cost	MWh	Revenue	MWh	ASSET BASED Cost	MWh	Revenue	MWh	NON ASSET B Cost	ASED WHOLES MWh	ALE Revenue
Grandfathered Charge Types	ACCI	WWWII	COSI	WWWII	Revenue	IVIVVII	COSI	WWWII	Revenue	IVIVVII	COSI	WWW	Revenue
DA Congestion Rebate on COGA	555.05	0 \$		0 \$	-	0 \$		0 \$	-	-			
DA Losses Rebate on COGA	555.06	0 \$	-	0 \$	_	0 \$	-	0\$	_				
RT Congestion Rebate on COGA	555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
RT Loss Rebate on COGA	555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
SUBTOTAL	000.20	0 \$	-	Ŭ Š	-	Ŭ Š	-	0 \$	-				
TOTAL MISO DAY 2 CHARGES		(506,086) \$	(15,727,343.42)	267,243 \$	8,189,284.28	(4,714) \$	(121,338.32)	19,331 \$	525,090.29				
Less Schedule 16 & 17 (Lines 16, 17, 18)		\$	(89,459.34)	\$	321.23								
Congestion and Losses Adjustment		\$	(6,539.07)										
No DA generation sch., but still had output for current month		\$	(7,763.67)										
MISO RSG Bad Debt		\$	-										
Settlement with another utility in Otter Tail's LBA		\$	-										
Total for MN Energy Adjustment Rider		\$	(15,623,581.34)	\$	8,188,963.05								
Net Retail for MN Energy Adjustmen	t Rider		\$	(7,434,618.29)									
Retail MWh include losses of 2.8%													
ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSE													
	I BASED IRANSACI								403,751.97	-			
NET MISO (Rev-Cost and MWh) Less: Fuel Cost								14,617 \$	267,611.17				
Less: Misc Cost Adjustment								14,017 \$ \$	207,011.17				
Plus: Capacity Revenue								Ŷ	-				
Plus: Bilateral Sales													
Less: Bilateral Purchases													
Less: Bilateral Purchases Less: Schedule 24 for Asset Based Sales								s	356.85				
								Ŷ					
TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	135,783.95				
												PROTECT	ED DATA EN

					Otter Tail Pow Detail of MISO Day 2		_							
					December 2018 includ									
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	Charge Type Description	Acct	MWh	Cost	TAIL MWh	Revenue	MWh	ASSET BASED V Cost	MWh	Revenue	MWh	NON ASSET BA Cost	SED WHOLESAL MWh	E Revenue
No.	Day Ahead & Real Time Energy	ACCI		COST	WIVVII	Kevenue	IVIVVII	COST		Revenue		D DATA BEGINS .		Revenue
1	DA Asset Energy Amount	555.02	(531,608) \$	(15,647,638.19)	429,775 \$	12,518,753.70	0 \$		7,180 \$	205,080.16				
2	DA Non-asset Energy Amount	555.09	0 \$	-	5,580 \$	173,357.44	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(17,236) \$	(479,703.08)	18,799 \$	530,710.71	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount	555.26	(6) \$	(129.50)	0 \$	-	0 \$	-	0 \$	-				
5	SUBTOTAL Day Ahead & Real Time Energy Loss		(548,850) \$	(16,127,470.77)	454,154 \$	13,222,821.85	0 \$	-	7,180 \$	205,080.16	_			
6	DAY Allead & Real Time Energy Loss DA FBT Loss Amount	555.04	0 \$		0 \$		0 \$		0 \$		-			
7	RT Distribution of Losses Amount	555.24	0 \$	(13,404.77)	0 \$	285,901.79	0\$	-	0\$	-				
8	RT FBT Loss Amount	555.21	0 \$	-	0 \$	-	0 \$	-	0\$	-				
9	DA Loss Amount		0 \$	(755,046.78)	0 \$	-	0 \$	-	0\$	-				
10	RT Loss Amount		0 \$	(46,231.54)	0 \$	-	0 \$	-	0 \$	-				
11	DA Losses Rebate on Option B GFA	555.08	0 \$	-	0 \$	-	0 \$	-	0 \$	-	_			
12	SUBTOTAL		0 \$	(814,683.09)	0 \$	285,901.79	0 \$		0 \$	-				
13	Virtual Energy DA Virtual Energy Amount	555.12	0 \$		0 \$		0 \$		0 \$	-				
13	RT Virtual Energy Amount	555.32	0 \$	-	0 \$	-	0 \$	-	0\$	-				
15	SUBTOTAL	000.02	0 \$		0 \$	-	0 \$		0 \$	-				
	Schedules 16 & 17													-
16	DA Mkt Admin Amount	555.01	0 \$	(88,731.48)	0 \$	-	0 \$	(655.41)	0 \$	-				
17	RT Mkt Admin Amount	555.18	0 \$	(6,803.98)	0 \$	293.21	0 \$	(789.82)	0 \$	5.27				
18 19	FTR Mkt Admin Amount SUBTOTAL	555.13	0 \$ 0 \$	(1,302.48) (96,837.94)	0 \$ 0 \$	- 293.21	0 \$	- (1,445.23)	0 \$	- 5.27				
19	SUBTOTAL Congestion & FTRs		υ\$	(96,837.94)	U Ş	293.21	U Ş	(1,445.23)	υ\$	5.27				
20	DA FBT Congestion Amount	555.03	0 \$		0 \$		0 \$		0 \$					
20	DA Congestion	333.03	0 \$	-	0 \$	(94,525.67)	0 \$	-	0\$	-				
22	RT FBT Congestion Amount	555.20	0\$		0 \$	-	0 \$	-	0\$	-				
23	RT Congestion		0 \$	16,022.42	0 \$	-	0 \$	-	0\$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(69,942.04)	0 \$	198,967.95	0 \$	-	0 \$	-				
25	FTR Monthly Allocation Amount	555.15	0 \$	-	0 \$	5,704.06	0 \$	-	0 \$	-				
26	FTR Yearly Allocation Amount	555.17	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
27	FTR Monthly Transaction Amount	555.35	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
28 29	FTR Full Funding Guarantee Amount	555.36 555.37	0 \$	(5,694.17)	0 \$	9,896.24	0 \$	-	0 \$ 0 \$	-				
29	FTR Guarantee Uplift Amount FTR Auction Revenue Rights Transaction Amount	555.37 555.39	0 \$ 0 \$	(9,896.25) (17,029.34)	0 \$ 0 \$	5,673.89 137.258.27	0 \$	-	0\$	-				
30	FTR Auction Revenue Rights Transaction Amount FTR Annual Transaction Amount	555.39	0\$	(17,029.34) (138,135.54)	0 \$	137,258.27 17,906.97	0 \$	-	0\$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0\$	(4,346.42)	0\$	-	0 \$	-	0\$	-				
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0\$	(197.18)	0 \$	29,486.61	0 \$	-	0\$	_				
34	DA Congestion Rebate on Option B GFA	555.07	0 \$	-	0 \$		0 \$	-	0 \$	-				
35	SUBTOTAL		0 \$	(229,218.52)	0 \$	310,368.32	0 \$	-	0 \$	-				
	RSG & Make Whole Payments						-	1000 171						
36 37	DA Revenue Sufficiency Guarantee Distribution Amount	555.10 555.11	0 \$	(18,854.59)	0 \$	7.76	0 \$	(607.43)	0 \$	0.25				
37	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.11 555.29	0 \$ 0 \$	- (27,145.48)	0 \$ 0 \$	385.60 4,035.96	0 \$ 0 \$	- (874.37)	0 \$ 0 \$	- 129.88				
30	RT Revenue Sufficiency Guarantee First Pass Distribution Amount RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30	0\$	(21,143.40)	0 \$		0 \$	(0/4.3/)	0\$	16,626.27				
40	RT Price Volatility Make Whole Payment	555.42	0\$	(1.32)	0\$	6,481.33	0 \$	(0.04)	0\$	208.88				
41	SUBTOTAL		0 \$	(46,001.39)	0 \$	10,910.65	0 \$	(1,481.84)	0\$	16,965.28				
	RNU & Misc Charges													
42	RT Misc Amount	555.25	0 \$	(42,251.61)	0 \$	179.78	0 \$	-	0 \$	-				
43	RT Net Inadvertent Amount	555.27	0 \$	(18,326.30)	0 \$	9,035.33	0 \$	-	0 \$	-				
44 45	RT Revenue Neutrality Uplift Amount RT Uninstructed Deviation Amount	555.28 555.31	0 \$ 0 \$	(87,518.52)	0 \$ 0 \$	29,072.64	0 \$ 0 \$	(2,820.02)	0 \$ 0 \$	936.62				
45	RT Demand Response Allocation Uplift Amount	555.59	0\$	(0.16)	0 \$	-	0 \$	-	0\$	-				
40	DA Ramp Product	555.63	0\$	-	0 \$	305.40	0 \$	-	0\$	-				
48	RT Ramp Product	555.64	0\$	(4.06)	0 \$	94.21	0 \$	-	0\$	-				
49	SUBTOTAL		0\$	(148,100.65)	0\$	38,687.36	0 \$	(2,820.02)	0\$	936.62				
	ASM Charges													
50	RT ASM Non-Excessive Energy Amount	555.55	(28,095) \$	(691,752.30)	9,468 \$	268,157.94	(699) \$	(16,486.50)	6,829 \$	208,217.82				
51 52	RT ASM Excessive Energy Amount SUBTOTAL	555.56	0 \$ (28,095) \$	(15.51)	70 \$ 9.538 \$	32.28	0 \$	-	25 \$	533.77 208.751.59				
52	JUDIUIAL		(∠o,U95) \$	(691,767.81)	9,538 \$	268,190.22	(699) \$	(16,486.50)	6,854 \$	200,/51.59	1			

					Otter Tail Pov									
					Detail of MISO Day 2 December 2018 inclu									
				•	December 2016 Inclu	ues any aujustine	lits							
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)
				REI				ASSET BASED	WHOLESALE			NON ASSET BA	SED WHOLESA	LE
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
Grandfathered Charge Types														
3 DA Congestion Rebate		555.05	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
4 DA Losses Rebate on		555.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
5 RT Congestion Rebate		555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
6 RT Loss Rebate on CO	DGA	555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
7 SUBTOTAL			0 \$	-	0 \$	-	0 \$	-	0 \$	-				
8 TOTAL MISO DAY 2 CHARGE			(576,945) \$	(18,154,080.17)	463,691 \$	14,137,173.40	(699) \$	(22,233.59)	14,034 \$	431,738.92				
9 Less Schedule 16 &			\$	(96,837.94)	\$	293.21								
0 Congestion and Loss			\$	(14,895.56)										
	h., but still had output for current month		\$	(70,454.26)										
2 MISO RSG Bad Debt			\$	-										
	her utility in Otter Tail's LBA		\$	-										
4 Total for MN Energy			\$	(17,971,892.41)	\$	14,136,880.19								
5	Net Retail for MN Energy Adjustment Rider	•		\$	(3,835,012.22)									
6 Retail MWh include losses of 2	8%													
	AND NON ADOFT BASED AND NON ADOFT BASE													
	COSTS OF ASSET BASED AND NON ASSET BASE	DIRANSAC	IUNS											
7 NET MISO (Rev-Cost	and wwwn)								\$	409,505.33	1			
8 Less: Fuel Cost	P								13,335 \$	327,495.31	1			
9 Less: Misc Cost A									\$	-	1			
0 Plus: Capacity Rev														
1 Plus: Bilateral Sale											1			
2 Less: Bilateral Pur									-		1			
3 Less: Schedule 24	for Asset Based Sales								\$	203.21	1			
	N ASSET BASED WHOLESALE								\$	81,806.81				
	NASSET BASED WHOLESALE								\$	01,000.01				
											1			
											1		PROTECT	ED DATA END

					Otter Tail Pow Detail of MISO Day 2 January 2019 include	Charges - System								
		(A)	(B)	(C)	(D) TAIL	(E)	(F)	(G) ASSET BASED V		(I)	(J)	(K)	(L) SED WHOLESAL	(M)
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
No.	Day Ahead & Real Time Energy										[PROTECTED	DATA BEGINS .	••	
1	DA Asset Energy Amount	555.02	(492,660) \$	(11,941,640.47)	361,704 \$	8,810,149.35	0 \$	-	531 \$	13,580.65				
2	DA Non-asset Energy Amount	555.09	0 \$	-	4,998 \$	113,446.83	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(23,889) \$	(655,165.96)	12,697 \$	323,620.34	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount SUBTOTAL	555.26	0 \$	(12,596,806.43)	<u>1 \$</u> 379,400 \$	9.64 9,247,226.16	0 \$		0 \$ 531 \$	- 13,580.65	-			
	Day Ahead & Real Time Energy Loss		(010,040) \$	(12,000,000.40)	010,400 \$	3,247,220.10			001 \$	10,000.00				
6	DA FBT Loss Amount	555.04	0 \$		0 \$	-	0 \$		0 \$	-				
7	RT Distribution of Losses Amount	555.24	0 \$	(8,125.58)	0 \$	235,234.83	0 \$	-	0 \$	-				
8	RT FBT Loss Amount	555.21	0 \$	-	0 \$	-	0 \$		0 \$	-				
9	DA Loss Amount		0 \$	(569,498.14)	0 \$	-	0 \$	-	0 \$	-				
10	RT Loss Amount		0 \$	(9,109.23)	0 \$	-	0 \$	-	0 \$	-				
11	DA Losses Rebate on Option B GFA	555.08	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
12	SUBTOTAL /irtual Energy		0 \$	(586,732.95)	0 \$	235,234.83	0 \$	•	0 \$	-				
13	DA Virtual Energy Amount	555.12	0 \$		0 \$		0 \$		0 \$	-				
14	RT Virtual Energy Amount	555.32	0 \$	-	0 \$	-	0 \$	-	0\$	-				
15	SUBTOTAL	000.02	0 \$	-	0 \$	-	0\$	-	0 \$	-	1			
	Schedules 16 & 17													
16	DA Mkt Admin Amount	555.01	0 \$	(50,841.13)	0 \$	-	0 \$	(40.77)	0 \$	-				
17	RT Mkt Admin Amount	555.18	0 \$	(4,718.17)	0 \$	394.00	0 \$	(835.95)	0 \$	83.10				
18 19	FTR Mkt Admin Amount	555.13	0 \$	(2,038.00)	0 \$	- 394.00	0 \$	-	0 \$	- 83.10				
	SUBTOTAL Congestion & FTRs		0 \$	(57,597.30)	0 \$	394.00	0 \$	(876.72)	0 \$	83.10				
20	DA FBT Congestion Amount	555.03	0 \$		0 \$		0 \$		0 \$	-				
20	DA Congestion	555.05	0\$	-	0 \$	(238,305.85)	0 \$	-	0\$	-				
22	RT FBT Congestion Amount	555.20	0\$	-	0 \$	(200,000.00)	0 \$		0 \$	-				
23	RT Congestion	000.20	0\$	(26,692.40)	0 \$	-	0 \$	-	0\$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(113,075.77)	0 \$	389,632.06	0 \$	-	0 \$	-				
25	FTR Monthly Allocation Amount	555.15	0 \$	-	0 \$	10,414.07	0 \$	-	0 \$	-				
26	FTR Yearly Allocation Amount	555.17	0 \$	-	0 \$	25,712.96	0 \$	-	0 \$	-				
27	FTR Monthly Transaction Amount	555.35	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
28	FTR Full Funding Guarantee Amount	555.36	0 \$	(34,991.02)	0 \$	13,144.00	0 \$	-	0 \$	-				
29	FTR Guarantee Uplift Amount	555.37	0 \$	(13,144.07)	0 \$	33,588.96	0 \$	-	0 \$	-				
30 31	FTR Auction Revenue Rights Transaction Amount FTR Annual Transaction Amount	555.39 555.38	0 \$ 0 \$	(17,029.34) (138,135.54)	0 \$ 0 \$	137,258.27 17,906.97	0 \$ 0 \$	-	0 \$ 0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0\$	(4,347.98)	0 \$	17,500.57	0 \$		0\$					
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0\$	(452.86)	0 \$	29,396.50	0 \$	-	0\$	_	1			
34	DA Congestion Rebate on Option B GFA	555.07	0 \$	-	0 \$		0 \$	-	0 \$	-				
35	SUBTOTAL		0 \$	(347,868.98)	0 \$	418,747.94	0 \$	-	0 \$	-				
	RSG & Make Whole Payments													
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(8,954.83)	0 \$	47.38	0 \$	(243.16)	0 \$	1.27				
37 38	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.11 555.29	0 \$ 0 \$	-	0 \$ 0 \$	732.33 535.76	0 \$ 0 \$	-	0 \$ 0 \$	6.82 14.47				
38 39	R1 Revenue Sufficiency Guarantee First Pass Distribution Amount RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.29 555.30	0\$	(19,599.29)	U \$ 0 \$	535.76	0 \$	(532.22)	0\$	14.47 12,638.10				
39 40	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Price Volatility Make Whole Payment	555.30 555.42	0\$	-	0 \$	8.917.61	0 \$	-	0\$	12,638.10				
40	SUBTOTAL	000.42	0 \$	(28,554.12)	0 \$	10,233.08	0 \$	(775.38)	0 \$	12,902.96				
	RNU & Misc Charges													
42	RT Misc Amount	555.25	0 \$	(25,643.70)	0 \$	-	0 \$	-	0 \$	-				
43	RT Net Inadvertent Amount	555.27	0 \$	(12,125.48)	0 \$	15,886.22	0 \$	-	0 \$	-				
44	RT Revenue Neutrality Uplift Amount	555.28	0 \$	(39,498.78)	0 \$	30,109.21	0 \$	(1,073.06)	0 \$	817.82	1			
45	RT Uninstructed Deviation Amount	555.31	0 \$	-	0 \$	-	0 \$	-	0\$	-				
46 47	RT Demand Response Allocation Uplift Amount DA Ramp Product	555.59 555.63	0 \$ 0 \$	(0.02)	0 \$ 0 \$	- 381.76	0 \$ 0 \$	-	0 \$ 0 \$	-				
47	DA Ramp Product RT Ramp Product	555.63 555.64	0\$	- (1.71)	0 \$	381.76 214.49	0\$	-	0\$					
40	SUBTOTAL	333.04	0 \$	(77,269.69)	0\$	46,591.68	0\$	(1,073.06)	0 \$	817.82				
	ASM Charges													
50	RT ASM Non-Excessive Energy Amount	555.55	(36,060) \$	(849,632.54)	3,174 \$	60,528.22	(138) \$	(3,420.18)	11,192 \$	272,337.82				
51	RT ASM Excessive Energy Amount	555.56	0 \$	(4.86)	125 \$	318.00	0 \$	-	16 \$	298.58	1			
52	SUBTOTAL		(36,060) \$	(849,637.40)	3,299 \$	60,846.22	(138) \$	(3,420.18)	11,208 \$	272,636.40				

					Otter Tail Pov Detail of MISO Day 2 January 2019 includ	Charges - System								
		(A)	(B)	(C)	(D)	(E)	(F)	(G) ASSET BASED	(H)	(I)	(J)	(K)		(M)
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
G	Grandfathered Charge Types	71001								noronao				noronao
53		555.05	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
54		555.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
55	RT Congestion Rebate on COGA	555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
56	RT Loss Rebate on COGA	555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
57	SUBTOTAL		0 \$	-	0 \$	-	0 \$	-	0\$	-				
	TOTAL MISO DAY 2 CHARGES		(552,609) \$	(14,544,466.87)	382,699 \$	10,019,273.91	(138) \$	(6,145.34)	11,738 \$	300,020.93				
59	Less Schedule 16 & 17 (Lines 16, 17, 18)		\$	(57,597.30)	\$	394.00								
60	Congestion and Losses Adjustment		\$	(5,637.70)										
61	No DA generation sch., but still had output for current month		\$	(393.16)										
62														
63 64	Table Mill Frank Alfred and Piller		•	(1 4 400 000 74)	•	10.018.879.91								
	Total for MN Energy Adjustment Rider		\$	(14,480,838.71)	\$	10,018,879.91								
65	Net Retail for MN Energy Adjustment Rider Retail MWh include losses of 2.8%			\$	(4,461,958.80)									
00 P	Vetali MWVIT Include losses of 2.8%									I				
A	ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASED	TRANSACT	TIONS											
67	NET MISO (Rev-Cost and MWh)								\$	293,875.59				
68	Less: Fuel Cost								11,600 \$	286,625.73				
69	Less: Misc Cost Adjustment								\$					
70	Plus: Capacity Revenue													
71	Plus: Bilateral Sales													
72	Less: Bilateral Purchases													
73	Less: Schedule 24 for Asset Based Sales								\$	153.57				
74														
75	TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	7,096.29				
													PROTECT	ED DATA ENDS

r					Otton Tail Dave									
					Otter Tail Pow Detail of MISO Day 2		n							
					February 2019 include									
		(A)	(B)	(C) RE1	(D)	(E)	(F)	(G) ASSET BASED V		(I)	(J)		(L) SED WHOLESAL	(M)
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
No.	Day Ahead & Real Time Energy										[PROTECTE	D DATA BEGINS .		
1	DA Asset Energy Amount	555.02	(518,268) \$	(16,385,868.39)	350,034 \$	11,117,044.30	0 \$	-	138 \$	4,999.38				
2	DA Non-asset Energy Amount	555.09	0 \$	-	5,150 \$	125,963.49	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(18,256) \$	(506,813.46)	24,104 \$	696,255.81	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount SUBTOTAL	555.26	0 \$ (536,524) \$	- (16,892,681.85)	0 \$ 379,289 \$	- 11,939,263.60	0 \$	-	0 \$ 138 \$	- 4,999.38				
	Day Ahead & Real Time Energy Loss		(330,324) \$	(10,032,001.03)	513,203 \$	11,333,203.00	0.2		150 \$	4,333.30				
6	DA FBT Loss Amount	555.04	0 \$		0 \$	-	0 \$	-	0 \$	-				
7	RT Distribution of Losses Amount	555.24	0 \$	(8,177.83)	0 \$	360,349.77	0 \$	-	0 \$	-				
8	RT FBT Loss Amount	555.21	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
9	DA Loss Amount		0 \$	(691,448.56)	0 \$	-	0 \$	-	0 \$	-				
10	RT Loss Amount		0 \$	(35,609.68)	0 \$	-	0 \$	-	0 \$	-				
11 12	DA Losses Rebate on Option B GFA SUBTOTAL	555.08	0 \$	(735,236.07)	0 \$ 0 \$	360,349.77	0 \$		0 \$	-	+			
	Virtual Energy		0 \$	(135,230.07)	U \$	300,349.77	0 \$	-	U \$					
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14	RT Virtual Energy Amount	555.32	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
15	SUBTOTAL		0 \$	-	0 \$	-	0 \$	-	0 \$	-				
	Schedules 16 & 17													
16	DA Mkt Admin Amount	555.01	0 \$	(58,638.37)	0 \$	-	0 \$	(10.16)	0 \$					
17 18	RT Mkt Admin Amount	555.18 555.13	0 \$	(5,324.49) (1,084.80)	0 \$ 0 \$	649.54	0 \$	(713.09)	0 \$	0.11				
18	FTR Mkt Admin Amount SUBTOTAL	555.13	0 \$	(1,084.80)	0 \$	- 649.54	0 \$	(723.25)	0 \$	0.11				
	Congestion & FTRs		- +	(,)	- +		- +	(120120)	- +					
20	DA FBT Congestion Amount	555.03	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(451,289.24)	0 \$	-	0 \$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
23	RT Congestion		0 \$	(28,519.85)	0 \$	-	0 \$	-	0 \$	-				
24 25	FTR Hourly Allocation Amount	555.14	0 \$	(198,825.94)	0 \$	673,241.33	0 \$	-	0 \$	-				
25 26	FTR Monthly Allocation Amount FTR Yearly Allocation Amount	555.15 555.17	0 \$ 0 \$	(0.16) (0.32)	0 \$ 0 \$	17,836.21	0 \$ 0 \$	-	0 \$ 0 \$	-				
20	FTR Monthly Transaction Amount	555.35	0\$	(0.32)	0 \$	-	0\$	-	0 \$	-				
28	FTR Full Funding Guarantee Amount	555.36	0 \$	(16,650.78)	0 \$	37,518.55	0 \$	-	0\$	-				
29	FTR Guarantee Uplift Amount	555.37	0 \$	(37,518.40)	0 \$	13,489.68	0 \$	-	0 \$	-				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0 \$	(17,029.34)	0 \$	137,258.27	0 \$	-	0 \$	-				
31	FTR Annual Transaction Amount	555.38	0 \$	(138,135.54)	0 \$	17,906.97	0 \$	-	0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$	(4,346.94)	0 \$	-	0 \$	-	0 \$	-				
33 34	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0 \$	-	0 \$	29,396.54	0 \$	-	0 \$	-				
34	DA Congestion Rebate on Option B GFA SUBTOTAL	555.07	0 \$	(441,027.27)	0 \$ 0 \$	475,358.31	0 \$	-	0 \$	-	+			
	RSG & Make Whole Payments			(					Ψ					
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(14,274.26)	0 \$	20.61	0 \$	(293.52)	0 \$	0.41				
37	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11	0 \$	-	0 \$	82.84	0 \$	- '	0 \$	-				
38	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.29	0 \$	(74,135.84)	0 \$	167.20	0 \$	(1,524.93)	0 \$	3.35				
39	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30	0 \$	-	0 \$	-	0 \$	-	0 \$	250,339.31				
40 41	RT Price Volatility Make Whole Payment SUBTOTAL	555.42	0 \$	(88.410.10)	0 \$	7,485.35 7.756.00	0 \$ 0 \$	- (1.818.45)	0 \$	153.99 250.497.06	+			
41	RNU & Misc Charges			(00,410.10)		1,100.00	~ ~ ~	(1,010.40)	~ 4	200,401.00				
42	RT Misc Amount	555.25	0 \$	(20,426.53)	0 \$	560.40	0 \$	-	0 \$	-				
43	RT Net Inadvertent Amount	555.27	0 \$	(2,317.50)	0 \$	16,149.79	0 \$	-	0 \$	-				
44	RT Revenue Neutrality Uplift Amount	555.28	0 \$	(213,174.54)	0 \$	8,758.58	0 \$	(4,385.48)	0 \$	180.03				
45	RT Uninstructed Deviation Amount	555.31	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
46 47	RT Demand Response Allocation Uplift Amount DA Ramp Product	555.59	0 \$	-	0 \$	-	0 \$	-	0\$	-				
47 48	DA Ramp Product RT Ramp Prodcut	555.63 555.64	0 \$	- (17.59)	0 \$	292.04 41.83	0 \$	-	0\$	-				
48	SUBTOTAL	555.04	0 \$	(235,936.16)	0 \$	25,802.64	0 \$	(4,385.48)	0 \$	180.03	1			
	ASM Charges													
50	RT ASM Non-Excessive Energy Amount	555.55	(30,301) \$	(841,164.49)	7,939 \$	186,761.79	(29) \$	(767.54)	10,860 \$	482,937.96				
51	RT ASM Excessive Energy Amount	555.56	(3) \$	(13.70)	88 \$	290.39	0 \$	-	16 \$	327.55	1			
52	SUBTOTAL		(30,304) \$	(841,178.19)	8,026 \$	187,052.18	(29) \$	(767.54)	10,876 \$	483,265.51	1			

	Otter Tail Power Company Detail of MISO Day 2 Charges - System February 2019 includes any adjustments													
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	Charge Type Description	Acct	MWh	RE1 Cost	MWh	Revenue	MWh	ASSET BASED Cost	MWh	Revenue	MWh	Cost	ASED WHOLES/ MWh	Revenue
	Grandfathered Charge Types			0000		1010100		0000				0001		iterende
53		55.05	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
54		55.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
55	RT Congestion Rebate on COGA 55	55.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
56	RT Loss Rebate on COGA 55	55.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
57	SUBTOTAL		0 \$	-	0 \$	-	0 \$		0\$	-				
	TOTAL MISO DAY 2 CHARGES		(566,828) \$	(19,299,517.30)	387,315 \$	12,996,232.04	(29) \$	(7,694.72)	11,014 \$	738,942.09				
59	Less Schedule 16 & 17 (Lines 16, 17, 18)		\$	(65,047.66)	\$	649.54								
60	Congestion and Losses Adjustment		\$	(5,219.64)										
61	No DA generation sch., but still had output for current month		\$	(301.59)										
62														
63 64			•	(40.000.040.44)	•	12.995.582.50								
-	Total for MN Energy Adjustment Rider		\$	(19,228,948.41)	\$	12,995,582.50								
65	Net Retail for MN Energy Adjustment Rider Retail MWh include losses of 2.8%			\$	(6,233,365.91)									
00	Retail WWH Include losses of 2.6%													
	ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASED TR		ONS											
67	NET MISO (Rev-Cost and MWh)								\$	731,247.37				
68	Less: Fuel Cost								10,985 \$	537,699.22				
69	Less: Misc Cost Adjustment								\$					
70	Plus: Capacity Revenue								•					
71	Plus: Bilateral Sales													
72	Less: Bilateral Purchases													
73	Less: Schedule 24 for Asset Based Sales								\$	133.86				
74														
75	TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	193,414.29				
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													PROTECT	ED DATA ENDS]

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					Otter Tail Pow Detail of MISO Day 2		,							
					March 2019 includes									
		(A)	(B)	(C) RE1	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	ASSET BASED V Cost	MWh	Revenue	MWh	Cost	ASED WHOLESAL MWh	.E Revenue
No.	Day Ahead & Real Time Energy	ACCI	WIVVII	COST		Revenue	IVIVII	0031		Revenue		ED DATA BEGINS		Revenue
1	DA Asset Energy Amount	555.02	(474,335) \$	(12,796,218.57)	379,865 \$	10.131.109.94	0 \$		4.982 \$	153,937.17	•			
2	DA Non-asset Energy Amount	555.09	0 \$	-	4,852 \$	120,237.21	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(22,537) \$	(637,767.05)	12,871 \$	383,702.99	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount	555.26	0 \$	-	0 \$	-	0 \$		0 \$	-				
5	SUBTOTAL		(496,873) \$	(13,433,985.62)	397,588 \$	10,635,050.14	0 \$	· ·	4,982 \$	153,937.17				
	Day Ahead & Real Time Energy Loss DA FBT Loss Amount	555.04	0 \$		0 \$				0 \$					
6 7	RT Distribution of Losses Amount	555.04 555.24	0\$	(9,695.86)	0 \$	- 260,532.45	0 \$ 0 \$	-	0\$	-				
8	RT FBT Loss Amount	555.24 555.21	0 \$	(9,095.00)	0 \$	200,532.45	0 \$	-	0\$	-				
9	DA Loss Amount	555.21	0 \$	(737,462.28)	0 \$	-	0 \$	-	0\$	-				
10	RT Loss Amount		0\$	(27,479.25)	0 \$	_	0 \$		0\$	_				
11	DA Losses Rebate on Option B GFA	555.08	0\$	-	0 \$	-	0 \$	-	0\$	-				
12	SUBTOTAL		0 \$	(774,637.39)	0 \$	260,532.45	0 \$	-	0\$	-				
	/irtual Energy													
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	- 1	0 \$	-	0 \$	-				
14	RT Virtual Energy Amount	555.32	0 \$	-	0 \$	-	0 \$		0 \$	-	1			
15	SUBTOTAL Schedules 16 & 17		0 \$	-	0 \$	-	0 \$		0 \$	-				
16	DA Mkt Admin Amount	555.01	0 \$	(74,007.76)	0 \$		0 \$	(462.41)	0 \$					
17	RT Mkt Admin Amount	555.18	0 \$	(6,558.35)	0 \$	253.00	0 \$	(462.41) (1,122.19)	0\$	17.67				
18	FTR Mkt Admin Amount	555.13	0\$	(1,874.40)	0 \$	-	0 \$	-	0\$	-				
19	SUBTOTAL		0 \$	(82,440.51)	0 \$	253.00	0 \$	(1,584.60)	0 \$	17.67				
	Congestion & FTRs													
20	DA FBT Congestion Amount	555.03	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(256,498.19)	0 \$	-	0 \$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
23 24	RT Congestion FTR Hourly Allocation Amount	555.14	0 \$ 0 \$	(11,780.95) (120,086.96)	0 \$ 0 \$	407.483.25	0 \$	-	0\$	-				
24 25	FTR Monthly Allocation Amount	555.14 555.15	0 \$	(120,086.96)	0 \$	29.372.64	0 \$	-	0 \$	-				
25	FTR Yearly Allocation Amount	555.17	0\$	-	0 \$	29,372.04	0\$	-	0\$	-				
27	FTR Monthly Transaction Amount	555.35	0\$	-	0 \$	4,316.67	0 \$	-	0 \$	-				
28	FTR Full Funding Guarantee Amount	555.36	0 \$	(29,216.80)	0 \$	25,393.19	0 \$	-	0 \$	-				
29	FTR Guarantee Uplift Amount	555.37	0 \$	(25,393.19)	0 \$	29,219.30	0 \$	-	0 \$	-				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0 \$	(25,581.47)	0 \$	154,650.65	0 \$	-	0 \$	-				
31	FTR Annual Transaction Amount	555.38	0 \$	(154,665.97)	0 \$	25,596.50	0 \$	-	0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$	(5,651.23)	0 \$	-	0 \$	-	0 \$	-				
33 34	FTR Auction Revenue Rights Stage 2 Distribution Amount DA Congestion Rebate on Option B GFA	555.41 555.07	0 \$	-	0 \$	11,496.83	0 \$	-	0 \$	-				
34	SUBTOTAL	555.07	0 \$ 0 \$	(372,376.57)	0 \$ 0 \$	431,030.84	0 \$		0 \$	-				
	RSG & Make Whole Payments		~ 4	(0.2,010.01)				-	v	-				
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(13,214.24)	0 \$	47.86	0 \$	(356.42)	0 \$	1.29	1			
37	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11	0 \$		0 \$	0.01	0 \$	- 1	0 \$	-				
38	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.29	0 \$	(47,663.73)	0 \$	495.82	0 \$	(1,285.85)	0 \$	13.29				
39	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30	0 \$	-	0 \$	-	0 \$	-	0 \$	15,601.28				
40	RT Price Volatility Make Whole Payment	555.42	0 \$	-	0 \$	7,279.52	0 \$	-	0 \$	196.42	-			
41	SUBTOTAL RNU & Misc Charges		0 \$	(60,877.97)	0 \$	7,823.21	0 \$	(1,642.27)	0 \$	15,812.28				
42	RT Misc Charges	555.25	0 \$	(27,140.31)	0 \$	0.01	0 \$		0 \$	-				
42	RT Net Inadvertent Amount	555.25 555.27	0 \$	(27,140.31) (16,467.04)	0 \$	12,612.45	0 \$	-	0\$	-				
43	RT Revenue Neutrality Uplift Amount	555.28	0\$	(69,741.21)	0 \$	11,184.48	0 \$	(1,881.59)	0\$	301.63				
45	RT Uninstructed Deviation Amount	555.31	0\$		0 \$	-	0 \$	-	0\$	-				
46	RT Demand Response Allocation Uplift Amount	555.59	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
47	DA Ramp Product	555.63	0 \$	-	0 \$	227.21	0 \$	-	0 \$	-				
48	RT Ramp Prodcut	555.64	0 \$	(143.90)	0 \$	110.26	0 \$	-	0 \$	-	1			
49	SUBTOTAL		0 \$	(113,492.46)	0 \$	24,134.41	0 \$	(1,881.59)	0 \$	301.63	-		_	_
50	ASM Charges RT ASM Non-Excessive Energy Amount	555.55	(34,824) \$	(809,394.77)	7,738 \$	163,707.85	(655) *	(13,434.36)	10,891 \$	280,698.85				
50 51	RT ASM Non-Excessive Energy Amount RT ASM Excessive Energy Amount	555.55 555.56	(34,824) \$ 0 \$	(809,394.77) (0.78)	7,738 \$ 40 \$	163,707.85	(655) \$ 0 \$	(13,434.36)	10,891 \$	280,698.85 86.07				
52	SUBTOTAL	555.50	(34,824) \$	(809,395.55)	7,778 \$	163,900.49	(655) \$	(13,434.36)	10,895 \$	280,784.92	1			
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Г					Otter Tail Pov	ver Company								
					Detail of MISO Day	2 Charges - System								
					March 2019 include	s any adjustments								
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)
		(,,,	(2)	REI		(=/	(. )	ASSET BASED		(9	(0)		ASED WHOLESA	
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
	Grandfathered Charge Types													
53	DA Congestion Rebate on COGA	555.05	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
54	DA Losses Rebate on COGA	555.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
55	RT Congestion Rebate on COGA	555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
56	RT Loss Rebate on COGA	555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
57	SUBTOTAL		0 \$	-	0 \$	-	0 \$	-	0\$	-				
			(75) (75) (7)				(							
	TOTAL MISO DAY 2 CHARGES		(531,696) \$		405,365 \$		(655) \$	(18,542.82)	15,877 \$	450,853.67				
59 60	Less Schedule 16 & 17 (Lines 16, 17, 18)		\$	(82,440.51)	\$	253.00								
60 61	Congestion and Losses Adjustment No DA generation sch., but still had output for current month		\$	(12,093.87) (11,173.05)										
62	No DA generation sch., but still had output for current month		ş	(11,173.05)										
62 63														
63 64	Total for MN Energy Adjustment Rider			(15,541,498.64)		11,522,471.54								
65	Net Retail for MN Energy Adjustment Rider		ş		چ (4,019,027.10)	11,522,471.54								
	Retail MWh include losses of 2.8%			\$	(4,019,027.10)									
00														
A	ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASE	D TRANSAC	TIONS											
67	NET MISO (Rev-Cost and MWh)								\$	432,310.85				
68	Less: Fuel Cost								15,223 \$	317,888.32				
69	Less: Misc Cost Adjustment								\$	-				
70	Plus: Capacity Revenue										1			
71	Plus: Bilateral Sales													
72	Less: Bilateral Purchases													
73	Less: Schedule 24 for Asset Based Sales								\$	232.57	1			
74											1			
75	TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	114,189.96				
											1			
													PROTECT	ED DATA ENDS]

					Otton Tail Dav									
					Otter Tail Pow Detail of MISO Day 2		n							
					April 2019 includes									
		(A)	(B)	(C)	(D) TAIL	(E)	(F)	(G) ASSET BASED V		(1)	(J)	(K)	(L) ASED WHOLESAL	(M)
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
No.	Day Ahead & Real Time Energy										[PROTECTE	D DATA BEGINS	••	
1	DA Asset Energy Amount	555.02	(422,916) \$	(9,613,456.67)	312,192 \$	7,063,683.77	0 \$	-	3,799 \$	93,747.56				
2	DA Non-asset Energy Amount	555.09	0 \$	-	4,959 \$	114,174.58	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(34,061) \$	(794,973.42)	6,578 \$	162,209.52	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount SUBTOTAL	555.26	0 \$ (456,976) \$	(10,408,430.09)	0 \$ 323,729 \$	7,340,067.87	0 \$	-	0 \$ 3,799 \$	93,747.56				
	Day Ahead & Real Time Energy Loss		(100,010) \$	(10,100,100.00)	010,110 \$	1,010,001101			0,100 \$	00,11100				
6	DA FBT Loss Amount	555.04	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
7	RT Distribution of Losses Amount	555.24	0 \$	(19,872.75)	0 \$	152,958.99	0 \$	-	0 \$	-				
8	RT FBT Loss Amount	555.21	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
9	DA Loss Amount		0 \$	(559,506.00)	0 \$	-	0 \$	-	0 \$	-				
10 11	RT Loss Amount DA Losses Rebate on Option B GFA	555.08	0 \$ 0 \$	(12,297.38)	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$ 0 \$	-				
11	SUBTOTAL	500.UQ	0 \$	(591,676.13)	0 \$	152.958.99	0 \$	-	0 \$	-	1			
	Virtual Energy			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,000.00								
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14	RT Virtual Energy Amount	555.32	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
15	SUBTOTAL		0 \$	· ·	0 \$	-	0 \$	-	0 \$	-				
-	Schedules 16 & 17	555.01	0 *	(00.400.01)	C		0.0	(250.00)	0 0					
16 17	DA Mkt Admin Amount RT Mkt Admin Amount	555.01 555.18	0 \$ 0 \$	(68,133.61) (6,905.60)	0 \$ 0 \$	- 594.85	0 \$ 0 \$	(358.33) (956.00)	0 \$ 0 \$	- 0.42				
18	FTR Mkt Admin Amount	555.13	0\$	(2,907.04)	0 \$	-	0 \$	(350.00)	0\$	-				
19	SUBTOTAL		0 \$	(77,946.25)	0 \$	594.85	0 \$	(1,314.33)	0 \$	0.42				
	Congestion & FTRs													
20	DA FBT Congestion Amount	555.03	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(115,835.55)	0 \$	-	0 \$	-				
22 23	RT FBT Congestion Amount RT Congestion	555.20	0 \$ 0 \$	- (72,901.50)	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$ 0 \$	-				
23	FTR Hourly Allocation Amount	555.14	0\$	(52,499,17)	0 \$	214.767.62	0 \$	-	0\$	-				
25	FTR Monthly Allocation Amount	555.15	0\$	(9.56)	0 \$	14,448.88	0 \$	-	0\$	_				
26	FTR Yearly Allocation Amount	555.17	0 \$	-	0 \$	-	0 \$	-	0\$	-				
27	FTR Monthly Transaction Amount	555.35	0 \$	-	0 \$	11,997.79	0 \$	-	0 \$	-				
28	FTR Full Funding Guarantee Amount	555.36	0 \$	(14,385.01)	0 \$	6,971.70	0 \$	-	0 \$	-				
29	FTR Guarantee Uplift Amount	555.37	0 \$	(6,971.70)	0 \$	13,816.57	0 \$	-	0 \$	-				
30 31	FTR Auction Revenue Rights Transaction Amount FTR Annual Transaction Amount	555.39 555.38	0 \$ 0 \$	(25,581.47) (154,665.97)	0 \$ 0 \$	154,650.65 25,596.50	0 \$	-	0 \$ 0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0\$	(154,005.97) (5,651.23)	0 \$	25,590.50	0\$	-	0\$	-				
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0\$	(0,001.20)	0\$	11,496.85	0 \$	-	0\$	-				
34	DA Congestion Rebate on Option B GFA	555.07	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
35	SUBTOTAL		0 \$	(332,665.61)	0 \$	337,911.01	0 \$	-	0\$	-				
	RSG & Make Whole Payments													
36 37	DA Revenue Sufficiency Guarantee Distribution Amount	555.10 555.11	0 \$	(11,179.40)	0 \$	69.05	0 \$	(288.75)	0 \$	1.77				
37	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.11 555.29	0 \$ 0 \$	- (14,513.62)	0 \$ 0 \$	5,588.14 541.12	0 \$ 0 \$	- (374.80)	0 \$ 0 \$	217.70 13.92				
39	RT Revenue Sufficiency Guarantee Pirst Pass Distribution Amount RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30	0\$	(14,010.02)	0 \$		0\$	(374.00)	0\$	10,851.09				
40	RT Price Volatility Make Whole Payment	555.42	0\$	-	0 \$	13,368.43	0 \$	-	0\$	345.60				
41	SUBTOTAL		0 \$	(25,693.02)	0 \$	19,566.74	0 \$	(663.55)	0 \$	11,430.08				
	RNU & Misc Charges													
42	RT Misc Amount	555.25	0 \$	(32,045.01)	0 \$	-	0 \$	-	0 \$	-				
43 44	RT Net Inadvertent Amount RT Revenue Neutrality Uplift Amount	555.27 555.28	0 \$ 0 \$	(10,161.50) (59,498.11)	0 \$ 0 \$	16,656.88 14,662.34	0 \$ 0 \$	- (1,537.69)	0 \$ 0 \$	- 378.95				
44 45	RT Revenue Neutrality Uplift Amount RT Uninstructed Deviation Amount	555.28 555.31	0\$	(39,490.11)	0 \$	14,002.34	0 \$	(1,007.08)	0 \$	3/8.95				
46	RT Demand Response Allocation Uplift Amount	555.59	0\$	-	0\$	1	0 \$	-	0\$	-				
47	DA Ramp Product	555.63	0\$	-	0\$	472.65	0 \$	-	0\$	-				
48	RT Ramp Prodcut	555.64	0 \$	(96.53)	0 \$	199.18	0 \$	-	0 \$	-				
49	SUBTOTAL		0 \$	(101,801.15)	0 \$	31,991.05	0 \$	(1,537.69)	0 \$	378.95				
	ASM Charges	555 55	(00.710) 6	(504 300 00)	0.510	054 175 75	(500) 6	(40, 405, 04)	0.540	470.040.70				
50 51	RT ASM Non-Excessive Energy Amount RT ASM Excessive Energy Amount	555.55 555.56	(28,746) \$ 0 \$	(561,768.28) (852.72)	6,518 \$ 266 \$	354,175.76 1.84	(569) \$ (20) \$	(12,485.64)	8,518 \$ 13 \$	178,648.73 183.96				
51	SUBTOTAL	000.00	(28,746) \$	(852.72)	6.784 \$	1.84 354,177.60	(20) \$	(12,485.64)	8,531 \$	178,832.69	1			
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# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 20 of 42

				Otter Tail Pow Detail of MISO Day 2 April 2019 includes	Charges - System	1							
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
			RE				ASSET BASED					ASED WHOLES	
Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
Grandfathered Charge Types	555.05												
53 DA Congestion Rebate on COGA 54 DA Losses Rebate on COGA	555.05 555.06	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$ 0 \$	-				
		0\$	-		-		-		-				
55 RT Congestion Rebate on COGA 56 RT Loss Rebate on COGA	555.22 555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
57 SUBTOTAL	555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
		0 4	-	U Ģ		0 \$	-	υφ		1			
58 TOTAL MISO DAY 2 CHARGES		(485,723) \$	(12,100,833.25)	330,513 \$	8,237,268.11	(590) \$	(16,001.21)	12,330 \$	284,389.70				
59 Less Schedule 16 & 17 (Lines 16, 17, 18)	1	\$	(77,946.25)	\$	594.85								
60 Congestion and Losses Adjustment		\$	(11,164.57)										
61 No DA generation sch., but still had output for current month		\$	(374.00)										
62													
63													
64 Total for MN Energy Adjustment Rider		\$	(12,011,348.43)	\$	8,236,673.26								
65 Net Retail for MN Energy Adjustmen	nt Rider		\$	(3,774,675.17)									
66 Retail MWh include losses of 2.8%													
ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSE	T BASED TRANSACT	IONS											
67 NET MISO (Rev-Cost and MWh)								\$	268,388.49	1			
68 Less: Fuel Cost								11,765 \$	256,994.55				
69 Less: Misc Cost Adjustment								\$	-				
70 Plus: Capacity Revenue										1			
71 Plus: Bilateral Sales													
72 Less: Bilateral Purchases										1			
73 Less: Schedule 24 for Asset Based Sales 74								\$	200.93				
75 TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	11,193.01				
						1		÷	,				
												PROTECT	ED DATA ENDS]

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 21 of 42

Ī					Otter Tail Pov Detail of MISO Day May 2019 includes	2 Charges - Syster	n							
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
					TAIL			ASSET BASED V					ASED WHOLES	
No	Charge Type Description Day Ahead & Real Time Energy	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh [PROTECTED		MWh	Revenue
1	DA Asset Energy Amount	555.02	(371,036) \$	(7,673,137.30)	167,366 \$	3,320,508.49	0 \$		3,230 \$	81,523.54	IFROIECIED	DATA BEGINS	•••	
2	DA Asset Energy Amount	555.09	(371,030) \$	(7,073,137.30)	4,039 \$	94,908.83	0\$		0 \$	-				
3	RT Asset Energy Amount	555.19	(24,932) \$	(562,813.36)	8.997 \$	192,351.15	0 \$		0 \$	-				
4	RT Non-Asset Energy Amount	555.26	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
5	SUBTOTAL		(395,968) \$	(8,235,950.66)	180,402 \$	3,607,768.47	0 \$	-	3,230 \$	81,523.54				
	Day Ahead & Real Time Energy Loss													
6	DA FBT Loss Amount	555.04	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
7	RT Distribution of Losses Amount	555.24	0 \$	(8,706.85)	0 \$	99,109.84	0 \$	-	0 \$	-				
8 9	RT FBT Loss Amount DA Loss Amount	555.21	0 \$ 0 \$	(240,294.60)	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$ 0 \$	-				
10	RT Loss Amount		0 \$	(11,666.33)	0 \$		0 \$		0\$					
11	DA Losses Rebate on Option B GFA	555.08	0\$	-	0 \$	_	0 \$		0 \$	_				
12	SUBTOTAL		0 \$	(260,667.78)	0 \$	99,109.84	0 \$	-	0\$	-				
	/irtual Energy			,										
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14	RT Virtual Energy Amount	555.32	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
15	SUBTOTAL		0 \$	•	0 \$		0 \$		0 \$					
16	Chedules 16 & 17 DA Mkt Admin Amount	555.01	0 \$	(40 700 00)	0 \$		0 \$	(000.00)	0 \$					
16	DA MKT Admin Amount RT Mkt Admin Amount	555.01 555.18	0\$	(49,799.83) (5,848.61)	0 \$	177.03	0\$	(306.82) (1,101.85)	0\$	- 14.54				
18	FTR Mkt Admin Amount	555.13	0\$	(2,135.12)	0 \$	177.03	0 \$	(1,101.05)	0 \$	14.54				
19	SUBTOTAL	555.15	0 \$	(57,783.56)	0 \$	177.03	0 \$	(1,408.67)	0 \$	14.54				
	Congestion & FTRs			( , ,				( ) )						
20	DA FBT Congestion Amount	555.03	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(81,870.63)	0 \$	-	0 \$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$	-	0 \$	-	0\$	-				
23	RT Congestion		0 \$	(3,455.86)	0 \$	-	0 \$	-	0 \$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(123,736.94)	0 \$	349,527.79	0 \$	-	0 \$	-				
25	FTR Monthly Allocation Amount	555.15	0 \$	-	0 \$	16,616.29	0 \$	-	0 \$	-				
26 27	FTR Yearly Allocation Amount FTR Monthly Transaction Amount	555.17 555.35	0 \$ 0 \$	-	0 \$ 0 \$	- 8.752.27	0 \$ 0 \$	-	0 \$	-				
28	FTR Full Funding Guarantee Amount	555.36	0\$	(16,463.58)	0 \$	19,463.41	0 \$	-	0 \$	-				
29	FTR Guarantee Uplift Amount	555.37	0\$	(19,463.41)	0 \$	16,545.62	0 \$		0\$	_				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0\$	(25,581.47)	0 \$	154,650.65	0 \$	-	0 \$	-				
31	FTR Annual Transaction Amount	555.38	0 \$	(154,665.97)	0 \$	25,596.50	0 \$		0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$	(5,651.23)	0 \$	-	0 \$	-	0 \$	-				
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0 \$	-	0 \$	11,496.85	0 \$	-	0 \$	-				
34	DA Congestion Rebate on Option B GFA	555.07	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
35	SUBTOTAL RSG & Make Whole Payments		0 \$	(349,018.46)	0 \$	520,778.75	0 \$		0 \$	-			_	_
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(8.538.41)	0 \$	19.34	0 \$	(230.70)	0 \$	0.52				
30	DA Revenue Sufficiency Guarantee Distribution Amount DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.10	0 \$	(0,000.41)	0 \$	1,506.30	0 \$	(230.70)	0 \$	259.62				
38	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.29	0\$	(11,879.62)	0 \$	652.76	0\$	(320.93)	0\$	17.49				
39	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30	0\$	-	0 \$	-	0 \$	-	0\$	161.46				
40	RT Price Volatility Make Whole Payment	555.42	0 \$	-	0 \$	19,183.97	0 \$	-	0 \$	518.68	<u> </u>			
41	SUBTOTAL		0 \$	(20,418.03)	0 \$	21,362.37	0 \$	(551.63)	0\$	957.77				
	RNU & Misc Charges				-		-							
42	RT Misc Amount	555.25	0 \$	(27,987.09)	0 \$	39,793.71	0 \$	-	0 \$	-				
43 44	RT Net Inadvertent Amount	555.27 555.28	0 \$	(4,651.83)	0 \$	7,167.24 12,488.21	0 \$	- (1 640 47)	0 \$	-				
44 45	RT Revenue Neutrality Uplift Amount RT Uninstructed Deviation Amount	555.28 555.31	0 \$ 0 \$	(61,003.06)	0 \$ 0 \$	12,488.21	0 \$ 0 \$	(1,649.17)	0 \$ 0 \$	337.51				
45 46	RT Demand Response Allocation Uplift Amount	555.59	0\$	-	0 \$	-	0 \$	-	0 \$	-				
40	DA Ramp Product	555.63	0\$		0 \$	492.90	0 \$	-	0\$					
48	RT Ramp Product	555.64	0\$	(278.99)	0 \$	222.70	0 \$	-	0\$	-				
49	SUBTOTAL		0 \$	(93,920.97)	0 \$	60,164.76	0 \$	(1,649.17)	0\$	337.51				
	ASM Charges													
50	RT ASM Non-Excessive Energy Amount	555.55	(20,120) \$	(425,269.05)	6,925 \$	124,333.07	(419) \$	(5,053.01)	7,967 \$	157,874.06				
51 52	RT ASM Excessive Energy Amount SUBTOTAL	555.56	(224) \$	(2,046.00) (427,315.05)	276 \$ 7.200 \$	78.82 124,411.89	0 \$ (419) \$	- (5,053.01)	16 \$ 7,983 \$	223.40 158,097.46				
52	JUDIVIAL		(20,344) \$	(427,315.05)	1,200 \$	124,411.89	(419) \$	(5,053.01)	1,903 \$	158,097.46	1			

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 22 of 42

					Otter Tail Pow									
					Detail of MISO Day 2 May 2019 includes									
		A) (B)		(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	Charge Type Description A	cct MWh		Cost RE1	MWh	Revenue	MWh	ASSET BASED Cost	MWh	Revenue	MWh	Cost	ASED WHOLES MWh	Revenue
	Grandfathered Charge Types					10101100		0001		novenue		0001		novonuo
53		5.05	0\$		0 \$	-	0 \$	-	0 \$	-				
54			0\$	-	0 \$	-	0 \$	-	0 \$	-				
55	RT Congestion Rebate on COGA 55	5.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
56		5.23	0\$	-	0 \$	-	0 \$	-	0 \$	-				
57	SUBTOTAL		0\$	-	0 \$	-	0 \$		0\$	-				
	TOTAL MISO DAY 2 CHARGES	(416,31	2)\$	(9,445,074.51)	187,602 \$	4,433,773.11	(419) \$	(8,662.48)	11,213 \$	240,930.82				
59			\$	(57,783.56)	\$	177.03								
60			\$	862.51										
61	No DA generation sch., but still had output for current month		\$	(1,459.90)										
62														
63														
64	Total for MN Energy Adjustment Rider		\$	(9,386,693.56)	\$	4,433,596.08								
65	Net Retail for MN Energy Adjustment Rider Retail MWh include losses of 2.8%			\$	(4,953,097.48)									
00	Retail MW/h Include losses of 2.8%													
	ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASED TR	NSACTIONS												
67	NET MISO (Rev-Cost and MWh)								ŝ	232,268.34	-			
68	Less: Fuel Cost								10,794 \$	231,799.29				
69	Less: Misc Cost Adjustment								\$					
70	Plus: Capacity Revenue													
71	Plus: Bilateral Sales													
72	Less: Bilateral Purchases													
73	Less: Schedule 24 for Asset Based Sales								\$	210.66				
74														
75	TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	258.39				
													PROTECT	ED DATA ENDS]

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 23 of 42

					Otter Tail Pow Detail of MISO Day 2 June 2019 includes	Charges - System								
		(A)	(B)	(C)	(D) TAIL	(E)	(F)	(G) ASSET BASED V		(I)	(J)			(M)
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
No.	Day Ahead & Real Time Energy										[PROTECTED	DATA BEGINS		
1	DA Asset Energy Amount	555.02	(325,939) \$	(5,902,805.85)	154,137 \$	2,739,003.56	0 \$	-	4 \$	88.42				
2	DA Non-asset Energy Amount	555.09	0 \$	-	3,512 \$	79,864.19	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(14,664) \$	(367,939.19)	7,507 \$	127,185.59	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount	555.26	0 \$	-	0 \$	-	0 \$		0 \$	-				
5	SUBTOTAL Day Ahead & Real Time Energy Loss		(340,603) \$	(6,270,745.04)	165,156 \$	2,946,053.34	0 \$		4 \$	88.42				
	DA FBT Loss Amount	555.04	0 \$		0 \$		3.0		0 \$					
6	RT Distribution of Losses Amount	555.24	0\$	(4,487.21)	0 \$	84,939.07	0 \$	-	0\$	-				
8	RT FBT Loss Amount	555.21	0\$	(4,407.21)	0 \$	04,333.07	0\$	-	0\$	-				
9	DA Loss Amount	555.21	0 \$	(208,886.18)	0 \$		0 \$		0\$					
10	RT Loss Amount		0 \$	3.966.89	0 \$		0 \$		0 \$					
11	DA Losses Rebate on Option B GFA	555.08	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
12	SUBTOTAL		0 \$	(209,406.50)	0 \$	84,939.07	0 \$	-	0 \$	-				
	Virtual Energy													
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14	RT Virtual Energy Amount	555.32	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
15	SUBTOTAL Schedules 16 & 17		0 \$	•	0 \$		0 \$		0 \$					
				(========)				(* 11)						
16 17	DA Mkt Admin Amount RT Mkt Admin Amount	555.01 555.18	0 \$ 0 \$	(50,000.03) (5,656.68)	0 \$ 0 \$	- 50.87	0 \$ 0 \$	(0.41) (2,152.11)	0 \$ 0 \$	-				
18	FTR Mkt Admin Amount	555.18	0 \$	(2,254.40)	0 \$	0.07	0 \$	(2,152.11)	0\$	-				
10	SUBTOTAL	555.15	0 \$	(57,911.11)	0 \$	50.87	0 \$	(2,152.52)	0 \$					
	Congestion & FTRs			(	- +		- +	(_,)						
20	DA FBT Congestion Amount	555.03	0 \$		0 \$	-	0 \$		0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(100,169.06)	0 \$	-	0\$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$		0 \$	-	0 \$	-				
23	RT Congestion		0 \$	18,613.90	0 \$	-	0 \$	-	0 \$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(81,330.92)	0 \$	242,372.19	0 \$	-	0 \$	-				
25	FTR Monthly Allocation Amount	555.15	0 \$	-	0 \$	11,941.64	0 \$	-	0 \$	-				
26	FTR Yearly Allocation Amount	555.17	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
27	FTR Monthly Transaction Amount	555.35	0 \$	-	0 \$	48,387.66	0 \$	-	0 \$	-				
28	FTR Full Funding Guarantee Amount	555.36	0 \$	(11,926.81)	0 \$	29,030.12	0 \$	-	0 \$	-				
29	FTR Guarantee Uplift Amount	555.37	0 \$	(29,030.12)	0 \$	12,591.82	0 \$	-	0 \$	-				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0 \$	(15,598.61)	0 \$	163,056.09	0 \$	-	0 \$	-				
31 32	FTR Annual Transaction Amount	555.38	0 \$	(163,456.88)	0 \$	15,999.47	0 \$	-	0 \$ 0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount FTR Auction Revenue Rights Stage 2 Distribution Amount	555.40 555.41	0 \$ 0 \$	(2,796.83)	0 \$ 0 \$	39,410.72	0 \$ 0 \$	-	0\$	-				
33 34	DA Congestion Rebate on Option B GFA	555.07	0 \$	-	0 \$	39,410.72	0 \$	-	0\$	-				
35	SUBTOTAL	555.07	0 \$	(285,526.27)	0 \$	462,620.65	0 \$		0 \$	-				
	RSG & Make Whole Payments													
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(4,775.34)	0 \$	32.46	0 \$	(259.27)	0 \$	1.74				
37	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11	0 \$	-	0 \$	300.48	0 \$	-	0 \$	-				
38	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.29	0 \$	(22,800.55)	0 \$	1,154.89	0 \$	(1,238.38)	0 \$	62.64	1			
39	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30	0 \$	-	0 \$	-	0 \$	-	0 \$	3,649.02				
40	RT Price Volatility Make Whole Payment	555.42	0 \$	-	0 \$	3,296.20	0 \$	-	0 \$	179.08	-			
41	SUBTOTAL RNU & Misc Charges		0 \$	(27,575.89)	0 \$	4,784.03	0 \$	(1,497.65)	0 \$	3,892.48				
42	RNU & Misc Charges RT Misc Amount	555.25	0 \$	(29,641.80)	0 \$	175.13	0 \$		0 \$					
42	RT Misc Amount RT Net Inadvertent Amount	555.25 555.27	0 \$	(29,641.80) (3,875.05)	0 \$	1/5.13	0 \$	-	0\$	-	1			
43	RT Net inadvertent Amount RT Revenue Neutrality Uplift Amount	555.27 555.28	0\$	(3,875.05) (36,181.14)	0 \$	1,186.71 22,512.66	0 \$	- (1,965.39)	0\$	- 1,222.95				
44	RT Uninstructed Deviation Amount	555.31	0\$	(30,101.14)	0 \$	22,012.00	0 \$	(1,505.59)	0\$	1,222.90	1			
40	RT Demand Response Allocation Uplift Amount	555.59	0\$	-	0 \$	-	0 \$	-	0 \$	-				
40	DA Ramp Product	555.63	0\$	-	0 \$	713.63	0 \$	-	0\$	_				
48	RT Ramp Product	555.64	0\$	-	0 \$	96.78	0 \$	-	0\$	-	1			
49	SUBTOTAL		0 \$	(69,697.99)	0 Š	24,684.91	Ŭ Ŝ	(1,965.39)	0 \$	1,222.95				
	ASM Charges													
50	RT ASM Non-Excessive Energy Amount	555.55	(17,733) \$	(328,351.90)	5,772 \$	93,535.45	(8) \$	(157.63)	20,050 \$	396,577.54				
51	RT ASM Excessive Energy Amount	555.56	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
52	SUBTOTAL		(17,733) \$	(328,351.90)	5,772 \$	93,535.45	(8) \$	(157.63)	20,050 \$	396,577.54				

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 24 of 42

					Otter Tail Pow Detail of MISO Day 2 June 2019 includes	Charges - Syster								
		(A)	(B)	(C)	(D)	(E)	(F)	(G) ASSET BASED	(H)	(I)	(J)	(K)		(M)
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
	Grandfathered Charge Types	71001				noronao		0000		noronao				novenue
53	DA Congestion Rebate on COGA	555.05	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
54	DA Losses Rebate on COGA	555.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
55	RT Congestion Rebate on COGA	555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
56	RT Loss Rebate on COGA	555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
57	SUBTOTAL		0 \$	-	0 \$	-	0 \$	-	0 \$	-				
	TOTAL MISO DAY 2 CHARGES		(358,336) \$	(7,249,214.70)	170,928 \$	3,616,668.32	(8) \$	(5,773.19)	20,055 \$	401,781.39				
59	Less Schedule 16 & 17 (Lines 16, 17, 18)		\$	(57,911.11)	\$	50.87								
60	Congestion and Losses Adjustment		\$	3,830.48										
61	No DA generation sch., but still had output for current month		\$	-										
62														
63														
64	Total for MN Energy Adjustment Rider		\$	(7,195,134.07)	\$	3,616,617.45								
65	Net Retail for MN Energy Adjustment Rider			\$	(3,578,516.62)									
66	Retail MWh include losses of 2.8%													
	ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASED	TRANSAC												
67	NET MISO (Rev-Cost and MWh)	INANJAC							¢	396,008.20				
68	Less: Fuel Cost								پ 20,047 \$	417,187.59				
69	Less: Misc Cost Adjustment								20,047 Ş	417,107.59				
70	Plus: Capacity Revenue								Ŷ	-				
71	Plus: Bilateral Sales													
72	Less: Bilateral Purchases													
73	Less: Schedule 24 for Asset Based Sales								s	244.91				
74									·					
75	TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	(21,424.30)				
										, ,				
													PROTECT	ED DATA ENDS]

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 25 of 42

					Otter Tail Pow Detail of MISO Day 2 July 2019 includes	Charges - System								
		(A)	(B)	(C)	(D)	(E)	(F)	(G) ASSET BASED		(I)	(J)			(M)
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
No.	Day Ahead & Real Time Energy										[PROTECTED	DATA BEGINS .	••	
1	DA Asset Energy Amount	555.02	(419,375) \$	(9,813,752.47)	265,013 \$	6,409,829.49	0 \$	-	109 \$	4,478.13				
2	DA Non-asset Energy Amount	555.09	0 \$	-	4,394 \$	107,975.71	0\$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(13,830) \$	(497,482.90)	18,175 \$	403,338.35	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount SUBTOTAL	555.26	(433 205) \$	- (10,311,235.37)	0 \$ 287,581 \$	- 6,921,143.55	0 \$ 0 \$		0 \$ 109 \$	4,478.13				
	Day Ahead & Real Time Energy Loss		(433,205) \$	(10,311,235.37)	207,501 \$	0,921,143.55	0.3		109 \$	4,470.13				
6	DA FBT Loss Amount	555.04	0 \$		0 \$		0 \$		0 \$	-				
7	RT Distribution of Losses Amount	555.24	0\$	(3,847.67)	0 \$	177,979.15	0\$		0\$	-				
8	RT FBT Loss Amount	555.21	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
9	DA Loss Amount		0 \$	(361,100.52)	0 \$	-	0 \$	-	0 \$	-				
10	RT Loss Amount		0 \$	30,940.38	0 \$	-	0 \$	-	0 \$	-				
11	DA Losses Rebate on Option B GFA	555.08	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
12	SUBTOTAL		0 \$	(334,007.81)	0 \$	177,979.15	0 \$	•	0 \$	-				
	/irtual Energy													
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0\$	-				
14 15	RT Virtual Energy Amount SUBTOTAL	555.32	0 \$		0 \$ 0 \$		0 \$ 0 \$	-	0 \$	-	+			
	Schedules 16 & 17		U \$	-	υş	-	0 \$		0 \$	-				
16	DA Mkt Admin Amount	555.01	0 \$	(57,521.61)	0 \$		0 \$	(8.31)	0 \$					
17	RT Mkt Admin Amount	555.18	0\$	(6,607.07)	0 \$	312.94	0 \$	(1,892.81)	0\$	2.63				
18	FTR Mkt Admin Amount	555.13	0 \$	(2,556.96)	0 \$	-	0 \$	(1,002:01)	0\$	-				
19	SUBTOTAL		0 \$	(66,685.64)	0 \$	312.94	0\$	(1,901.12)	0 \$	2.63				
	Congestion & FTRs													
20	DA FBT Congestion Amount	555.03	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(580,773.03)	0 \$	-	0 \$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
23	RT Congestion		0 \$	186,641.87	0 \$	-	0\$	-	0 \$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(396,001.72)	0 \$	938,322.64	0 \$	-	0 \$	-				
25 26	FTR Monthly Allocation Amount	555.15	0 \$	(1.15)	0 \$	7,625.41	0 \$	-	0 \$	-				
26 27	FTR Yearly Allocation Amount FTR Monthly Transaction Amount	555.17 555.35	0 \$ 0 \$	-	0 \$	-	0 \$ 0 \$	-	0 \$ 0 \$	-				
27	FTR Full Funding Guarantee Amount	555.36	0 \$	(7,601.46)	0 \$ 0 \$	74,579.81	0 \$	-	0 \$	-				
20	FTR Guarantee Uplift Amount	555.37	0\$	(74,580.67)	0 \$	10,010.61	0\$	-	0\$	-				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0\$	(15,598.61)	0 \$	163,056.09	0 \$	_	0\$	_				
31	FTR Annual Transaction Amount	555.38	0 \$	(163,456.88)	0 \$	15,999.47	0 \$	-	0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$	(2,796.83)	0 \$	-	0 \$	-	0 \$	-				
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0 \$	-	0 \$	39,816.33	0 \$	-	0 \$	-				
34	DA Congestion Rebate on Option B GFA	555.07	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
35	SUBTOTAL		0 \$	(473,395.45)	0 \$	668,637.33	0 \$	-	0 \$	-				
	RSG & Make Whole Payments													
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(7,068.58)	0 \$	658.41	0 \$	(448.84)	0 \$	41.50				
37 38	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.11 555.29	0 \$ 0 \$	- (37,976.00)	0 \$	5,485.60	0 \$	-	0 \$ 0 \$	- 33.38				
38 39	RT Revenue Sufficiency Guarantee First Pass Distribution Amount RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.29 555.30	0\$	(37,970.00)	0 \$ 0 \$	527.75	0 \$ 0 \$	(2,412.12)	0\$	33.38 17.863.27				
39 40	RT Revenue Sufficiency Guarantee Make Whole Pyrnt Amount RT Price Volatility Make Whole Payment	555.42	0 \$	(124.82)	0 \$	17.987.41	0 \$	(7.92)	0 \$	1,142.67				
40	SUBTOTAL	000.72	0 \$	(45,169.40)	0 \$	24,659.17	0 \$	(2,868.88)	0 \$	19,080.82				
	RNU & Misc Charges							,						
42	RT Misc Amount	555.25	0 \$	(22,399.06)	0 \$	79.29	0 \$	-	0 \$	-				
43	RT Net Inadvertent Amount	555.27	0 \$	(2,978.95)	0 \$	3,047.71	0 \$	-	0 \$	-				
44	RT Revenue Neutrality Uplift Amount	555.28	0 \$	(47,101.98)	0 \$	6,724.49	0 \$	(2,991.75)	0 \$	427.09				
45	RT Uninstructed Deviation Amount	555.31	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
46	RT Demand Response Allocation Uplift Amount	555.59	0 \$	-	0 \$		0 \$	-	0 \$	-				
47	DA Ramp Product	555.63	0 \$	-	0 \$	1,776.22	0 \$	-	0 \$	-				
48 49	RT Ramp Prodcut SUBTOTAL	555.64	0 \$ 0 \$	(291.91) (72,771.90)	0 \$	85.91 11,713.62	0 \$ 0 \$	- (2,991.75)	0 \$	- 427.09	+			
	ASM Charges		0.9	(12,111.30)	0 3	11,713.02	0 \$	(2,331.75)	0 \$	421.09				
50	RT ASM Non-Excessive Energy Amount	555.55	(39,101) \$	(664,406.54)	2,627 \$	192,786.01	(4) \$	(108.68)	22,551 \$	538,653.02				
51	RT ASM Recessive Energy Amount	555.56	(33,101) \$	(57.37)	50 \$	83.90	0 \$	(100.00)	22,331 \$	278.06				
52	SUBTOTAL		(39,101) \$	(664,463.91)	2,677 \$	192,869.91	(4) \$	(108.68)	22,572 \$	538,931.08				
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# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 26 of 42

					Otter Tail Pow									
					Detail of MISO Day 2 July 2019 includes									
		(A)	(B)	(C)	(D)	(E)	(F)	(G) ASSET BASED		(I)	(J)	(K)		(M)
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
	Grandfathered Charge Types													
53	DA Congestion Rebate on COGA	555.05	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
54	DA Losses Rebate on COGA	555.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
55	RT Congestion Rebate on COGA	555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
56		555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
57	SUBTOTAL		0 \$	-	0 \$	-	0 \$	-	0\$	-				
	TOTAL MISO DAY 2 CHARGES		(472,306) \$	(11,967,729.48)	290,258 \$	7,997,315.67	(4) \$	(7,870.43)	22,681 \$	562,919.75				
59			\$	(66,685.64)	\$	312.94								
60			\$	5,209.27										
61	No DA generation sch., but still had output for current month		\$	-										
62														
63														
64	Total for MN Energy Adjustment Rider		\$	(11,906,253.11)	\$	7,997,002.73								
65	Net Retail for MN Energy Adjustment Rider Retail MWh include losses of 2.8%			\$	(3,909,250.38)									
66	Retail MWN Include losses of 2.8%													
	ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASED T	RANSACT	TIONS											
67	NET MISO (Rev-Cost and MWh)	10 110A0							¢	555,049.32				
68	Less: Fuel Cost								22,614 \$	463,398.53	1			
69	Less: Misc Cost Adjustment								,014		1			
70	Plus: Capacity Revenue								·		1			
71	Plus: Bilateral Sales										1			
72	Less: Bilateral Purchases										1			
73	Less: Schedule 24 for Asset Based Sales								\$	268.83	1			
74									÷		1			
75	TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	91,381.96				
ı											1			
													PROTECT	ED DATA ENDS]

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 27 of 42

					Otter Tail Pov Detail of MISO Day August 2019 include	2 Charges - System								
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(L)	(K)	(L)	(M)
				RE				ASSET BASED			NON		SED WHOLES	
No F	Charge Type Description Day Ahead & Real Time Energy	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh [PROTECTED DAT.	Cost	MWh	Revenue
1	DA Asset Energy Amount	555.02	(369,009) \$	(7,655,655.87)	278.249 \$	5.886.069.02	0 \$		5.491 \$	174.866.44	[PROTECTED DAT	A DEGINS	•	
2	DA Asset Energy Amount DA Non-asset Energy Amount	555.09	(309,009) \$	(7,000,000.07)	4,228 \$	96,606.99	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(11,676) \$	(268,253.04)	11,678 \$	215,194.49	0 \$		0\$	-				
4	RT Non-Asset Energy Amount	555.26	0 \$	-	0 \$		0 \$	-	0 \$	-				
5	SUBTOTAL		(380,685) \$	(7,923,908.91)	294,156 \$	6,197,870.50	0 \$	-	5,491 \$	174,866.44				
	ay Ahead & Real Time Energy Loss													
6	DA FBT Loss Amount	555.04	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
7	RT Distribution of Losses Amount	555.24	0 \$	(4,779.42)	0 \$	135,709.12	0 \$	-	0 \$	-				
8 9	RT FBT Loss Amount DA Loss Amount	555.21	0 \$ 0 \$	- (354,938.67)	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$ 0 \$					
9 10	RT Loss Amount		0\$	(354,958.07) 15,344.74	0 \$	-	0 \$	-	0 \$					
11	DA Losses Rebate on Option B GFA	555.08	0\$	-	0 \$	_	0 \$	-	0\$	_				
12	SUBTOTAL		0 \$	(344,373.35)	0 \$	135,709.12	0 \$	-	0 \$	-				
V	/irtual Energy			-										
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14	RT Virtual Energy Amount	555.32	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
15	SUBTOTAL Schedules 16 & 17		0 \$		0 \$		0 \$		0 \$	-				
		555.04		(05.455.00)				(007.00)						
16 17	DA Mkt Admin Amount RT Mkt Admin Amount	555.01 555.18	0 \$ 0 \$	(35,155.06) (3,576.10)	0 \$ 0 \$	- 309.68	0 \$ 0 \$	(287.02) (1,351.87)	0 \$ 0 \$	-				
18	FTR Mkt Admin Amount	555.13	0\$	(1.196.32)	0 \$	309.00	0 \$	(1,351.67)	0 \$	-				
19	SUBTOTAL	333.13	0 \$	(39,927.48)	0 \$	309.68	0 \$	(1,638.89)	0 \$					
С	Congestion & FTRs		· ·	. ,										
20	DA FBT Congestion Amount	555.03	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(124,576.10)	0 \$	-	0 \$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
23	RT Congestion		0 \$	8,148.66	0 \$	-	0 \$	-	0 \$	-				
24 25	FTR Hourly Allocation Amount	555.14	0 \$	(606,395.43)	0 \$	420,748.95	0 \$	-	0 \$	-				
25 26	FTR Monthly Allocation Amount FTR Yearly Allocation Amount	555.15 555.17	0 \$ 0 \$	(0.84)	0 \$ 0 \$	44,907.38	0 \$ 0 \$	-	0 \$ 0 \$	-				
27	FTR Monthly Transaction Amount	555.35	0\$		0 \$		0\$		0\$					
28	FTR Full Funding Guarantee Amount	555.36	0\$	(43,954.74)	0 \$	32,916,08	0 \$	_	0 \$					
29	FTR Guarantee Uplift Amount	555.37	0 \$	(32,916.45)	0 \$	52,732.23	0 \$	-	0 \$	-				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0 \$	(15,598.61)	0 \$	163,056.09	0 \$	-	0 \$	-				
31	FTR Annual Transaction Amount	555.38	0 \$	(163,456.88)	0 \$	15,999.47	0 \$	-	0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$	(2,796.83)	0 \$	-	0 \$	-	0 \$	-				
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0 \$	(1.35)	0 \$	39,611.55	0 \$	-	0 \$	-				
34 35	DA Congestion Rebate on Option B GFA SUBTOTAL	555.07	0 \$	(856,972.47)	0 \$ 0 \$	- 645,395.65	0 \$	-	0 \$	-				
	SOBTOTAL RSG & Make Whole Payments		υş	(050,372.47)	0 \$	040,000.00	0.\$	-	υş	-				
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(4,750.32)	0 \$	144.36	0 \$	(287.03)	0 \$	8.64				
37	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11	0 \$	-	0 \$	1,534.29	0\$	-	0\$	905.11				
38	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.29	0 \$	(20,768.20)	0 \$	2,554.27	0 \$	(1,255.20)	0 \$	154.23				
39	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30	0 \$	-	0 \$	-	0 \$	-	0 \$	1,693.83				
40	RT Price Volatility Make Whole Payment	555.42	0 \$	(0.03)	0 \$	15,151.06	0 \$		0 \$	915.84				
41 P	SUBTOTAL RNU & Misc Charges		0 \$	(25,518.55)	0 \$	19,383.98	0 \$	(1,542.23)	0 \$	3,677.65				
42 42	RT Misc Charges	555.25	0 \$	(16,376.30)	0 \$	301.53	0 \$	-	0 \$					
42	RT Misc Amount RT Net Inadvertent Amount	555.25 555.27	0\$	(16,376.30) (8,336.51)	0 \$	2.853.47	0 \$	-	0\$	-				
43 44	RT Revenue Neutrality Uplift Amount	555.28	0\$	(43,664.14)	0 \$	7,051.57	0 \$	(2,639.28)	0 \$	426.18				
45	RT Uninstructed Deviation Amount	555.31	0\$	-	0 \$	-	0 \$	-	0\$	-				
46	RT Demand Response Allocation Uplift Amount	555.59	0\$	-	0 \$	-	0 \$	-	0 \$	-				
47	DA Ramp Product	555.63	0 \$	-	0 \$	2,384.66	0 \$	-	0 \$	-				
48	RT Ramp Prodcut	555.64	0 \$	(173.71)	0 \$	13.79	0 \$	-	0 \$	-				
49	SUBTOTAL		0 \$	(68,550.66)	0 \$	12,605.02	0 \$	(2,639.28)	0 \$	426.18				
	SM Charges	555.55	(20.069) *	(610.204.00)	3,652 \$	70,778.35	(1,342) \$	(25.644.54)	18,476 \$	360,124.31				
	RT ASM Non-Excessive Energy Amount		(39,068) \$	(610,294.98)		70,778.35 204.87		(25,644.54)						
50 51	RT ASM Excessive Energy Amount	555.56	(16) \$		229 \$		0 \$		198 \$	3,153,76				

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 28 of 42

Γ				Otter Tail Pov									
				Detail of MISO Day 2 August 2019 include									
	(	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	Charge Type Description A	ct MWh	Cost	ETAIL MWh	Revenue	MWh	ASSET BASED Cost	MWh	Revenue	MWh	Cost	ASED WHOLES MWh	Revenue
	Grandfathered Charge Types		0031		Itevenue		0031		Revenue		0031		Revenue
53		.05 0	\$-	0 \$	-	0 \$		0 \$	-				
54		.06 0		0 \$	-	0 \$	-	0 \$	-				
55	RT Congestion Rebate on COGA 55	.22 0	\$ -	0 \$	-	0 \$	-	0 \$	-				
56		.23 0	\$ -	0 \$	-	0 \$		0 \$	-				
57	SUBTOTAL	0	\$ -	0 \$	-	0 \$		0\$	-				
	TOTAL MISO DAY 2 CHARGES	(419,770)		298,036 \$	7,082,257.17	(1,342) \$	(31,464.94)	24,165 \$	542,248.34				
59	Less Schedule 16 & 17 (Lines 16, 17, 18)		\$ (39,927.48)	\$	309.68								
60	Congestion and Losses Adjustment		\$ (23,615.59)										
61	No DA generation sch., but still had output for current month		\$ (23,026.49)										
62													
63	The first Mill The second strategies in Distance												
64	Total for MN Energy Adjustment Rider		\$ (9,782,976.84)	\$	7,081,947.49								
65	Net Retail for MN Energy Adjustment Rider Retail MWh include losses of 2.8%		•	\$ (2,701,029.35)									
00	Retail MWH Include losses of 2.6%									L			
	ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASED TRA	NSACTIONS											
67	NET MISO (Rev-Cost and MWh)							\$	510,783.40				
68	Less: Fuel Cost							22,579 \$	481,157.37				
69	Less: Misc Cost Adjustment							\$	-				
70	Plus: Capacity Revenue												
71	Plus: Bilateral Sales									1			
72	Less: Bilateral Purchases									1			
73	Less: Schedule 24 for Asset Based Sales							\$	310.75	1			
74													
75	TOTAL ASSET or NON ASSET BASED WHOLESALE							\$	29,315.28				
										1			
												PROTECT	ED DATA ENDS

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 29 of 42

				s	Otter Tail Pow Detail of MISO Day 2 September 2019 includ	Charges - System								
		(A)	(B)	(C)	(D)	(E)	(F)	(G) ASSET BASED V		(I)	(J)	(K)		(M)
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
No. D	ay Ahead & Real Time Energy										[PROTECT	ED DATA BEGINS		
1	DA Asset Energy Amount	555.02	(352,803) \$	(6,343,097.15)	284,112 \$	5,074,116.42	0 \$	-	6,416 \$	158,160.59				
2	DA Non-asset Energy Amount RT Asset Energy Amount	555.09 555.19	0 \$ (13,387) \$	-	4,321 \$ 9,844 \$	94,360.28 184,071.08	0 \$	-	0 \$ 0 \$	-				
3	RT Non-Asset Energy Amount	555.26	(13,367) \$	(305,998.08)	9,844 \$ 0 \$	164,071.06	0 \$	-	0 \$	-				
5	SUBTOTAL	333.20	(366,190) \$	(6,649,095.23)	298,277 \$	5,352,547.78	0 \$	-	6,416 \$	158,160.59				
D	ay Ahead & Real Time Energy Loss		(	()		.,								
6	DA FBT Loss Amount	555.04	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
7	RT Distribution of Losses Amount	555.24	0 \$	(7,643.98)	0 \$	119,813.34	0 \$	-	0 \$	-				
8	RT FBT Loss Amount	555.21	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
9	DA Loss Amount		0 \$	(337,693.15)	0 \$	-	0 \$	-	0 \$	-				
10 11	RT Loss Amount DA Losses Rebate on Option B GFA	555.08	0 \$ 0 \$	428.93	0 \$ 0 \$	-	0 \$	-	0 \$ 0 \$	-				
12	SUBTOTAL	555.06	0 \$	(344,908.20)	0 \$	119,813.34	0 \$		0 \$	-				
	irtual Energy		- +	(***)******			- +		- +					
13	DA Virtual Energy Amount	555.12	0 \$		0 \$	-	0 \$	-	0 \$	-				
14	RT Virtual Energy Amount	555.32	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
15	SUBTOTAL		0 \$	<u> </u>	0 \$	-	0 \$	-	0 \$	-				
	chedules 16 & 17			(10 000 10)				(100.00)						
16 17	DA Mkt Admin Amount RT Mkt Admin Amount	555.01 555.18	0 \$ 0 \$	(43,275.48)	0 \$ 0 \$	- 325.15	0 \$ 0 \$	(496.25)	0 \$ 0 \$	- 5.01				
17	FTR Mkt Admin Amount	555.18	0 \$	(4,020.99) (2,301.04)	0 \$	325.15	0 \$	(1,654.87)	0\$	5.01				
19	SUBTOTAL	555.15	0 \$	(49,597.51)	0 \$	325.15	0 \$	(2,151.12)	0 \$	5.01				
C	ongestion & FTRs			( ,,, , , , , , , , , , , , , , , , , ,										
20	DA FBT Congestion Amount	555.03	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(176,215.81)	0 \$	-	0 \$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
23	RT Congestion		0 \$	(3,091.53)	0 \$	-	0 \$	-	0 \$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(170,950.14)	0 \$	345,116.85	0 \$	-	0 \$	-				
25	FTR Monthly Allocation Amount	555.15	0 \$	(1.05)	0 \$	15,598.66	0 \$	-	0 \$	-				
26 27	FTR Yearly Allocation Amount FTR Monthly Transaction Amount	555.17 555.35	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$ 0 \$	-				
28	FTR Full Funding Guarantee Amount	555.36	0\$	(15,344.28)	0 \$	18,521.97	0 \$	-	0\$	-				
29	FTR Guarantee Uplift Amount	555.37	0\$	(18,525.04)	0 \$	15,862.64	0 \$	-	0 \$	_				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0 \$	(13,997.54)	0 \$	255,289.83	0 \$	-	0 \$	-				
31	FTR Annual Transaction Amount	555.38	0 \$	(255,222.87)	0 \$	14,103.74	0 \$	-	0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$	(6,318.03)	0 \$	-	0 \$	-	0 \$	-				
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0 \$	-	0 \$	25,174.66	0 \$	-	0 \$	-				
34	DA Congestion Rebate on Option B GFA	555.07	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
35	SUBTOTAL SG & Make Whole Payments		0 \$	(483,450.48)	0 \$	513,452.54	0 \$	-	0 \$	-				
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(4,697.50)	0 \$		0 \$	(327.78)	0 \$					
30	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11	0 \$	(4,007.00)	0 \$	3.702.47	0 \$	(321.10)	0\$	1.731.75				
38	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.29	0\$	(10,810.84)	0 \$	407.28	0\$	(754.44)	0\$	28.24				
39	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30	0 \$	-	0 \$	-	0 \$	-	0 \$	3,508.31				
40	RT Price Volatility Make Whole Payment	555.42	0 \$	-	0 \$	7,510.61	0 \$	-	0 \$	524.30				
41	SUBTOTAL		0 \$	(15,508.34)	0 \$	11,620.36	0 \$	(1,082.22)	0 \$	5,792.60				
42	NU & Misc Charges RT Misc Amount	555.25	0 \$	(25.246.20)	0 \$	228.89	0.0		0 \$					
42	RT Net Inadvertent Amount	555.25 555.27	0\$	(25,346.29) (8,045.47)	0 \$	6,157.81	0 \$ 0 \$	-	0\$	-				
43	RT Revenue Neutrality Uplift Amount	555.28	0 \$	(20,311.58)	0 \$	7,975.63	0 \$	(1,417.62)	0\$	556.66				
44	RT Uninstructed Deviation Amount	555.31	0\$	-	0 \$	-	0 \$	-	0\$	-				
46	RT Demand Response Allocation Uplift Amount	555.59	0\$	-	0\$	-	0\$	-	0 \$	-				
47	DA Ramp Product	555.63	0 \$	-	0 \$	943.31	0 \$	-	0 \$	-				
48	RT Ramp Prodcut	555.64	0 \$	(234.00)	0 \$	14.58	0 \$	-	0 \$	-				
49	SUBTOTAL		0 \$	(53,937.34)	0 \$	15,320.22	0 \$	(1,417.62)	0 \$	556.66				
50 A	SM Charges RT ASM Non-Excessive Energy Amount	555.55	(29,961) \$	(417,391.35)	7,863 \$	117,000.30	(624) \$	(11.062.05)	20,230 \$	367,309.26				
50 51	RT ASM Non-Excessive Energy Amount RT ASM Excessive Energy Amount	555.55 555.56	(29,961) \$ 0 \$	(417,391.35)	7,863 \$ 89 \$	117,000.30	(624) \$	(11,263.05)	20,230 \$ 74 \$	367,309.26 920.19				
52	SUBTOTAL	000.00	(29,961) \$	(417,391.35)	7.952 \$	117,000.30	(624) \$	(11,263.05)	20,304 \$	368,229.45				
<u> </u>			(, <b>~~</b> , <b>/ /</b>	,	., <b>.</b> V	,	(J=1) V	(,200.00)	,• ¥	,==00	1			

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 30 of 42

ſ					Otter Tail Pow	er Company								
					Detail of MISO Day 2									
				:	September 2019 inclue	des any adjustme	nts							
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)
		( )			TAIL			ASSET BASED	WHOLESALE	, v			ASED WHOLES	
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
	Grandfathered Charge Types													
53		555.05	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
54		555.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
55		555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
56		555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
57	SUBTOTAL		0 \$	-	0 \$	-	0 \$	-	0\$	-				
	TOTAL MISO DAY 2 CHARGES		(396,151) \$	(8,013,888.45)	306,229 \$	6,130,079.69	(624) \$	(15,914.01)	26,720 \$	532,744.31				
59	Less Schedule 16 & 17 (Lines 16, 17, 18)		\$	(49,597.51)	\$	325.15								
60	Congestion and Losses Adjustment		\$	(11,699.49)										
61	No DA generation sch., but still had output for current month		\$	(4,335.25)										
62														
63														
64	Total for MN Energy Adjustment Rider		\$	(7,948,256.20)	\$	6,129,754.54								
65	Net Retail for MN Energy Adjustment Rider			\$	(1,818,501.66)									
66	Retail MWh include losses of 2.8%													
	ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASED	TDANCAC	TIONS											
		TRANSAC	HONS							540.000.00				
67	NET MISO (Rev-Cost and MWh)								\$	516,830.30				
68	Less: Fuel Cost								26,007 \$	443,029.47				
69	Less: Misc Cost Adjustment								\$	-				
70	Plus: Capacity Revenue													
/1	Plus: Bilateral Sales													
72	Less: Bilateral Purchases													
73	Less: Schedule 24 for Asset Based Sales								\$	349.91				
74											+			
75	TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	73,450.92	+			
,														
													PROTECT	ED DATA ENDS]

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 31 of 42

					Otter Tail Pov Detail of MISO Day 2 October 2019 includ	2 Charges - System								
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(L)	(K)	(L)	(M)
				REI		-		ASSET BASED V		_			SED WHOLES	
No D	Charge Type Description Day Ahead & Real Time Energy	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh [PROTECTED DAT	Cost	MWh	Revenue
1	DA Asset Energy Amount	555.02	(377,809) \$	(6,113,976.22)	240.658 \$	3.781.747.13	0 \$		4,372 \$	96,157.35	[INGIEGIED BA	A DEGINO .	••	
2	DA Non-asset Energy Amount	555.09	0 \$	-	4,186 \$	82,918.95	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(13,608) \$	(235,353.42)	13,443 \$	219,082.23	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount	555.26	(16) \$	(343.58)	0 \$	-	0 \$	-	0 \$	-				
5	SUBTOTAL		(391,432) \$	(6,349,673.22)	258,287 \$	4,083,748.31	0 \$	-	4,372 \$	96,157.35				
	Day Ahead & Real Time Energy Loss DA FBT Loss Amount	555.04	0 \$		0 \$		0 \$		0 \$					
6 7	RT Distribution of Losses Amount	555.04 555.24	0\$	- (10,474.59)	0 \$	- 94,578.07	0 \$	-	0\$	-				
8	RT FBT Loss Amount	555.21	0\$	(10,474.59)	0 \$	94,576.07	0 \$	-	0\$					
9	DA Loss Amount	000.21	0 \$	(303,016.54)	0 \$	_	0 \$	-	0 \$	_				
10	RT Loss Amount		0 \$	(17,807.89)	0 \$	-	0 \$	-	0 \$	-				
11	DA Losses Rebate on Option B GFA	555.08	0 \$		0 \$	-	0 \$	-	0 \$	-				
12	SUBTOTAL		0 \$	(331,299.02)	0 \$	94,578.07	0 \$	-	0\$	-				
_	/irtual Energy	555.46												
13 14	DA Virtual Energy Amount RT Virtual Energy Amount	555.12 555.32	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$	-	0 \$ 0 \$	-				
14 15	SUBTOTAL	555.32	0 \$	-	0 \$	-	0 \$	-	0 \$	-	+			
	Schedules 16 & 17		<del>-</del>	-		-	~ ~	-	ų ų	-			_	
16	DA Mkt Admin Amount	555.01	0 \$	(56,257.92)	0 \$	-	0 \$	(352.69)	0 \$	-				
17	RT Mkt Admin Amount	555.18	0 \$	(5,876.19)	0 \$	138.06	0 \$	(1,041.96)	0 \$	0.61				
18	FTR Mkt Admin Amount	555.13	0 \$	(2,498.64)	0 \$	-	0 \$	-	0 \$	-				
19	SUBTOTAL		0 \$	(64,632.75)	0 \$	138.06	0 \$	(1,394.65)	0 \$	0.61				
	Congestion & FTRs	555.00					0 \$		0 \$					
20 21	DA FBT Congestion Amount DA Congestion	555.03	0 \$ 0 \$	-	0 \$ 0 \$	- (35,530.77)	0 \$	-	0\$	-				
22	RT FBT Congestion Amount	555.20	0\$	-	0 \$	(00,000.77)	0 \$	-	0\$	_				
23	RT Congestion	000.20	0\$	(5,280.20)	0 \$	-	0\$	-	0\$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(201,990.58)	0 \$	428,555.47	0 \$	-	0 \$	-				
25	FTR Monthly Allocation Amount	555.15	0 \$	(0.50)	0 \$	5,162.93	0 \$	-	0 \$	-				
26	FTR Yearly Allocation Amount	555.17	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
27	FTR Monthly Transaction Amount	555.35	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
28 29	FTR Full Funding Guarantee Amount FTR Guarantee Uplift Amount	555.36 555.37	0 \$ 0 \$	(4,909.91) (29,990.72)	0 \$ 0 \$	29,989.19 2.577.19	0 \$	-	0 \$ 0 \$	-				
29 30	FTR Auction Revenue Rights Transaction Amount	555.37	0\$	(29,990.72) (13,997.54)	0 \$	255,289.83	0 \$	-	0\$	-				
31	FTR Annual Transaction Amount	555.38	0\$	(255,222.87)	0 \$	14,103.74	0\$	-	0\$					
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$	(6,318.03)	0 \$	-	0 \$	-	0 \$	-				
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0 \$	(4.04)	0 \$	25,168.06	0 \$	-	0 \$	-				
34	DA Congestion Rebate on Option B GFA	555.07	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
35	SUBTOTAL		0 \$	(517,714.39)	0 \$	725,315.64	0 \$		0 \$	-				
36 R	tsG & Make Whole Payments DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(8,365.26)	0 \$	0.98	0 \$	(235.57)	0 \$	0.02				
36 37	DA Revenue Sufficiency Guarantee Distribution Amount DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.10 555.11	0\$	(0,305.20)	0 \$	0.98 13,475.75	0\$	(230.07)	0\$	30.04				
38	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.29	0\$	(9,575.20)	0 \$	979.05	0\$	(269.47)	0\$	27.45				
39	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30	0\$		0 \$	-	0 \$	(0.42)	0\$	2,678.82				
40	RT Price Volatility Make Whole Payment	555.42	0 \$	(0.11)	0 \$	10,705.97	0 \$	-	0 \$	301.67				
41	SUBTOTAL		0 \$	(17,940.57)	0 \$	25,161.75	0 \$	(505.46)	0 \$	3,038.00				
	RNU & Misc Charges			(00.627.00)										
42 43	RT Misc Amount RT Net Inadvertent Amount	555.25 555.27	0 \$ 0 \$	(22,887.68) (8.238.17)	0 \$ 0 \$	751.86 6.294.15	0 \$ 0 \$	-	0 \$ 0 \$	-				
43 44	RT Revenue Neutrality Uplift Amount	555.27	0\$	(8,238.17) (54,833.82)	0 \$	6,294.15	0 \$	- (1,544.77)	0\$	- 583.81				
44 45	RT Uninstructed Deviation Amount	555.31	0\$	(04,000.02)	0 \$	20,724.00	0 \$	(1,044.77)	0\$					
46	RT Demand Response Allocation Uplift Amount	555.59	0\$	(0.10)	0 \$	-	0\$	-	0\$	_				
47	DA Ramp Product	555.63	0 \$	-	0 \$	281.65	0 \$	-	0\$	-				
48	RT Ramp Prodcut	555.64	0 \$	(1.84)	0 \$	13.09	0 \$	-	0 \$	-				
49	SUBTOTAL		0 \$	(85,961.61)	0 \$	28,065.28	0 \$	(1,544.77)	0 \$	583.81				
	SM Charges	555.55	(26.266) *	(327,235.63)	8,868 \$	133,873.00	(2,096) 6	(40.066.84)	7,801 \$	103,263.49				
50	RT ASM Non-Excessive Energy Amount RT ASM Excessive Energy Amount	555.55 555.56	(26,366) \$ (4) \$	(327,235.63) (1.453.64)	8,868 \$ 217 \$	133,873.00	(2,086) \$ (0) \$	(40,066.84) (7.60)	7,801 \$	103,263.49				
51														

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 32 of 42

Г					Otter Tail Pow	ver Company								
					Detail of MISO Day 2									
					October 2019 includ	es any adjustment	S							
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)
		Ì		RET				ASSET BASED				NON ASSET BA		LE
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
_	Grandfathered Charge Types													
53	DA Congestion Rebate on COGA	555.05	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
54	DA Losses Rebate on COGA	555.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
55	RT Congestion Rebate on COGA	555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
56	RT Loss Rebate on COGA	555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
57	SUBTOTAL		0\$	-	0 \$	-	0 \$	-	0\$	-				
							(							
	TOTAL MISO DAY 2 CHARGES		(417,803) \$	(7,695,910.83)	267,372 \$	5,090,881.99	(2,086) \$	(43,519.32)	12,189 \$	203,184.62				
59	Less Schedule 16 & 17 (Lines 16, 17, 18)		\$	(64,632.75)	\$	138.06								
60	Congestion and Losses Adjustment No DA generation sch., but still had output for current month		\$	(1,854.33)										
61 62	No DA generation sch., but still had output for current month		\$	(19,079.62)										
63														
64	Total for MN Energy Adjustment Rider		s	(7,610,344.13)	s	5,090,743.93								
65	Net Retail for MN Energy Adjustment Rider		Ŷ	(7,010,344.13)	•	3,030,743.33								
	Retail MWh include losses of 2.8%			Ŷ	(2,313,000.20)									
00											L			
	ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASED	TRANSACT	IONS											
67	NET MISO (Rev-Cost and MWh)								\$	159,665.30				
68	Less: Fuel Cost						1		9,959 \$	174,831.87				
69	Less: Misc Cost Adjustment						1		\$					
70	Plus: Capacity Revenue						1							
71	Plus: Bilateral Sales						1							
72	Less: Bilateral Purchases						1							
73	Less: Schedule 24 for Asset Based Sales						1		\$	195.30				
74														
75	TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	(15,361.87)				
							1							
							1							
													PROTECT	ED DATA ENDS]

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 33 of 42

				1	Otter Tail Pow Detail of MISO Day 2 November 2019 includ	Charges - System								
		(A)	(B)	(C)	(D)	(E)	(F)	(G) ASSET BASED V		(I)	(J)	(K)	(L) ASED WHOLESA	(M)
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
No.	Day Ahead & Real Time Energy										[PROTECT	ED DATA BEGINS		
1	DA Asset Energy Amount	555.02	(432,079) \$	(9,263,095.88)	321,340 \$	6,898,717.79	0 \$	-	916 \$	21,325.66				
2	DA Non-asset Energy Amount	555.09	0 \$	-	4,421 \$	101,372.67	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(21,150) \$	(437,214.09)	8,419 \$	188,219.95	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount SUBTOTAL	555.26	0 \$ (453,228) \$	- (9,700,309.97)	0 \$ 334,181 \$	- 7,188,310.41	0 \$		0 \$ 916 \$	- 21,325.66				
	Day Ahead & Real Time Energy Loss		(455,226) \$	(9,700,309.97)	334,101 \$	7,100,310.41	0.3		910 \$	21,325.00				
6	DA FBT Loss Amount	555.04	0 \$		0 \$		0 \$		0 \$	-				
7	RT Distribution of Losses Amount	555.24	0 \$	(9,526.74)	0 \$	118.257.04	0 \$	_	0\$					
8	RT FBT Loss Amount	555.21	0 \$	-	0 \$	-	0 \$		0\$	-				
9	DA Loss Amount		0 \$	(454,247.20)	0 \$	-	0 \$	-	0 \$	-				
10	RT Loss Amount		0 \$	(7,945.26)	0 \$	-	0 \$	-	0 \$	-				
11	DA Losses Rebate on Option B GFA	555.08	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
12	SUBTOTAL		0 \$	(471,719.20)	0 \$	118,257.04	0 \$	-	0 \$	-				
	Virtual Energy													
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14 15	RT Virtual Energy Amount SUBTOTAL	555.32	0 \$	-	0 \$ 0 \$	-	0 \$		0 \$ 0 \$	-				
	Schedules 16 & 17		υ \$	-	U \$	-	0 \$	•	υ\$	-				
16	DA Mkt Admin Amount	555.01	0 \$	(66,733.49)	0 \$		0 \$	(82.83)	0 \$	-				
17	RT Mkt Admin Amount	555.18	0\$	(6,246.87)	0 \$	194.54	0 \$	(1,333.71)	0 \$	-				
18	FTR Mkt Admin Amount	555.13	0\$	(2,050.08)	0 \$	-	0 \$	(1,000.71)	0\$					
19	SUBTOTAL	000.10	Ŭ Š	(75,030.44)	Ŭ Š	194.54	Ŭ Š	(1,416.54)	0 \$	-				
	Congestion & FTRs													
20	DA FBT Congestion Amount	555.03	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(185,154.69)	0 \$	-	0 \$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
23	RT Congestion		0 \$	28,451.67	0 \$	-	0 \$	-	0 \$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(117,554.05)	0 \$	345,686.00	0 \$	-	0 \$	-				
25	FTR Monthly Allocation Amount	555.15	0 \$	-	0 \$	12,404.47	0 \$	-	0 \$	-				
26	FTR Yearly Allocation Amount	555.17	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
27 28	FTR Monthly Transaction Amount FTR Full Funding Guarantee Amount	555.35 555.36	0 \$ 0 \$	- (12,259.08)	0 \$ 0 \$	23,403.09	0 \$ 0 \$	-	0 \$ 0 \$	-				
20	FTR Guarantee Uplift Amount	555.30	0\$	(23,403.34)	0 \$	10,112.70	0 \$	-	0\$	-				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0\$	(13,997.54)	0 \$	255,289,83	0 \$	-	0\$					
31	FTR Annual Transaction Amount	555.38	0 \$	(255,222.87)	0 \$	14,103.74	0 \$	_	0 \$	_				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$	(6,318.03)	0 \$	_	0 \$	-	0 \$	-				
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0 \$	(2.54)	0 \$	25,168.06	0 \$	-	0 \$	-				
34	DA Congestion Rebate on Option B GFA	555.07	0 \$		0 \$	-	0 \$	-	0 \$	-				
35	SUBTOTAL		0 \$	(400,305.78)	0 \$	501,013.20	0 \$	-	0 \$	-				
	RSG & Make Whole Payments						-							
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(9,728.90)	0 \$	0.86	0 \$	(425.18)	0\$	0.03				
37 38	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.11 555.29	0 \$ 0 \$	(12 202 45)	0 \$ 0 \$	4,931.91 649.51	0 \$ 0 \$	- (581.14)	0 \$ 0 \$	50.67 28.28				
38 39	RT Revenue Sufficiency Guarantee First Pass Distribution Amount RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.29 555.30	0\$	(13,302.45)	0 \$	- 649.51	0 \$	(581.14) (0.61)	0\$	28.28 7,178.01				
39 40	RT Price Volatility Make Whole Payment	555.42	0\$	-	0 \$	2,855.18	0 \$	(0.01)	0 \$	124.81				
40	SUBTOTAL	000.72	0 \$	(23,031.35)	0 \$	8,437.46	0 \$	(1,006.93)	0 \$	7,381.80	1			
	RNU & Misc Charges			,					· ·					
42	RT Misc Amount	555.25	0 \$	(18,903.62)	0 \$	0.01	0 \$	-	0 \$	-				
43	RT Net Inadvertent Amount	555.27	0 \$	(7,078.64)	0 \$	4,288.20	0 \$	-	0 \$	-				
44	RT Revenue Neutrality Uplift Amount	555.28	0 \$	(47,195.38)	0 \$	29,919.45	0 \$	(2,062.96)	0 \$	1,307.70				
45	RT Uninstructed Deviation Amount	555.31	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
46	RT Demand Response Allocation Uplift Amount	555.59	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
47	DA Ramp Product	555.63	0 \$		0 \$	889.34	0 \$	-	0 \$	-				
48 49	RT Ramp Prodcut SUBTOTAL	555.64	0 \$	(120.70)	0 \$	55.91 35,152.91	0 \$	(2,062.96)	0 \$	- 1,307.70				
	ASM Charges		0 \$	(73,298.34)	0 \$	35,152.91	0 \$	(2,062.96)	υ\$	1,307.70				
50	RT ASM Non-Excessive Energy Amount	555.55	(29,322) \$	(529,634.79)	7,198 \$	129,271.23	(121) \$	(2,445.60)	14,381 \$	327,707.16				
50 51	RT ASM Non-Excessive Energy Amount	555.56	(29,322) \$ (12) \$	(029,004.79)	20 \$	66.44	(121) \$ (5) \$	(2,440.00)	21 \$	271.68				
52	SUBTOTAL	555.50	(29,334) \$	(529,634.79)	7,218 \$	129,337.67	(126) \$	(2,445.60)	14,403 \$	327,978.84				
			(==;== ;, ¥	······································	· ,= · · · •		(·=-, +	(=,	., 🗸		1			

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 34 of 42

				Otter Tail Pov	ver Company								
				Detail of MISO Day 2		1							
			1	November 2019 inclu	des any adjustmen	ts							
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)
	(4)	(8)	RET		(=)	(1)	ASSET BASED		(1)	(0)		ASED WHOLES	
Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
Grandfathered Charge Types													
3 DA Congestion Rebate on COGA	555.05	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
4 DA Losses Rebate on COGA	555.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
5 RT Congestion Rebate on COGA	555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
RT Loss Rebate on COGA	555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
7 SUBTOTAL		0 \$	-	0 \$	-	0 \$	-	0\$	-				
TOTAL MISO DAY 2 CHARGES		(482,563) \$	(11,273,329.87)	341,399 \$	7,980,703.23	(126) \$	(6,932.03)	15,319 \$	357,994.00				
Less Schedule 16 & 17 (Lines 16, 17, 18)		(482,583) \$	(75,030.44)	341,399 \$	194.54	(126) \$	(6,932.03)	15,319 \$	357,994.00				
Congestion and Losses Adjustment		Ψ ¢	(8,367.80)	ş	154.54								
No DA generation sch., but still had output for current month		ý ¢	(0,507.00)										
		•											
-													
Total for MN Energy Adjustment Rider		\$	(11,189,931.63)	s	7,980,508.69								
Net Retail for MN Energy Adjustment Ric	der			(3,209,422.94)	,,								
Retail MWh include losses of 2.8%			•	(-,,, ,									
						L							
ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BA	SED TRANSACT	TIONS											
NET MISO (Rev-Cost and MWh)								\$	351,061.97				
Less: Fuel Cost								15,094 \$	273,423.88	1			
Less: Misc Cost Adjustment								\$	-				
Plus: Capacity Revenue										1			
Plus: Bilateral Sales													
Less: Bilateral Purchases													
Less: Schedule 24 for Asset Based Sales								\$	191.69	1			
TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	77,446.40				
TOTAL ASSET OF NON ASSET BASED WHOLESALE								Ŷ	11,440.40	+			
										1			
										1		PROTECT	ED DATA END

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 35 of 42

				ļ	Otter Tail Pow Detail of MISO Day 2 December 2019 includ	Charges - System	5							
		(A)	(B)	(C)	(D)	(E)	(F)	(G) ASSET BASED V		(1)	(J)	(K)		(M)
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
No.	Day Ahead & Real Time Energy										[PROTECTED	DATA BEGINS .	••	
1	DA Asset Energy Amount	555.02	(554,103) \$	(10,811,048.36)	369,261 \$	7,134,915.09	0 \$	-	289 \$	8,295.55				
2	DA Non-asset Energy Amount	555.09	0 \$	-	5,725 \$	105,286.20	0\$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(6,044) \$	(240,264.79)	18,783 \$	370,173.43	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount SUBTOTAL	555.26	0 \$	- (11,051,313.15)	0 \$ 393,769 \$	7,610,374.72	0 \$ 0 \$		0 \$ 289 \$	- 8,295.55				
	Day Ahead & Real Time Energy Loss		(300,147) \$	(11,031,313.13)	333,703 \$	7,010,374.72	U Ş		203 φ	0,233.33				
6	DA FBT Loss Amount	555.04	0 \$		0 \$		0 \$		0 \$	-				
7	RT Distribution of Losses Amount	555.24	0\$	(3,437.14)	0 \$	206,665.18	0\$	-	0\$	-				
8	RT FBT Loss Amount	555.21	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
9	DA Loss Amount		0 \$	(470,021.47)	0 \$	-	0 \$	-	0 \$	-				
10	RT Loss Amount		0 \$	(29,576.52)	0 \$	-	0 \$	-	0 \$	-				
11	DA Losses Rebate on Option B GFA	555.08	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
12	SUBTOTAL		0 \$	(503,035.13)	0 \$	206,665.18	0 \$	-	0 \$	-				
	/irtual Energy													
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14 15	RT Virtual Energy Amount SUBTOTAL	555.32	0 \$		0 \$ 0 \$		0 \$ 0 \$		0 \$	-				
	Schedules 16 & 17		0 \$	-	0 \$	-	0 \$	-	U \$	-			_	
16	DA Mkt Admin Amount	555.01	0 \$	(83,715.82)	0 \$		0 \$	(25.70)	0 \$	_				
17	RT Mkt Admin Amount	555.18	0\$	(8,583.77)	0\$	187.86	0 \$	(1,788.06)	0\$	37.80				
18	FTR Mkt Admin Amount	555.13	0\$	(2,314.56)	0 \$	-	0 \$	-	0\$	-				
19	SUBTOTAL		0 \$	(94,614.15)	0 \$	187.86	0 \$	(1,813.76)	0 \$	37.80				
	Congestion & FTRs													
20	DA FBT Congestion Amount	555.03	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(191,440.56)	0 \$	-	0 \$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
23	RT Congestion		0 \$	(15,179.34)	0 \$	-	0\$	-	0 \$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(170,702.03)	0 \$	572,141.97	0 \$	-	0 \$	-				
25 26	FTR Monthly Allocation Amount	555.15	0 \$	-	0 \$	13,289.39	0 \$	-	0 \$	-				
26 27	FTR Yearly Allocation Amount FTR Monthly Transaction Amount	555.17 555.35	0 \$ 0 \$	-	0 \$	-	0 \$ 0 \$	-	0 \$ 0 \$	-				
27	FTR Full Funding Guarantee Amount	555.36	0 \$	(13,299.57)	0 \$ 0 \$	46,093.80	0 \$	-	0 \$	-				
20	FTR Guarantee Uplift Amount	555.37	0\$	(46,093.80)	0 \$	12,072.37	0 \$	-	0 \$	-				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0\$	(3,184.20)	0 \$	249,456.27	0 \$	-	0\$	_				
31	FTR Annual Transaction Amount	555.38	0\$	(250,140.86)	0 \$	4,092.58	0 \$	-	0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$	(4,623.25)	0 \$	-	0 \$	-	0 \$	-				
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0 \$	-	0 \$	31,268.37	0 \$	-	0 \$	-				
34	DA Congestion Rebate on Option B GFA	555.07	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
35	SUBTOTAL		0 \$	(503,223.05)	0 \$	736,974.19	0 \$	-	0\$	-				
	RSG & Make Whole Payments													
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(10,522.34)	0 \$	5.69	0 \$	(482.49)	0 \$	0.26				ļ
37	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11	0 \$	-	0 \$	4,830.01	0 \$	-	0 \$	-				
38 39	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.29 555.30	0 \$ 0 \$	(12,181.91)	0 \$ 0 \$	224.09	0 \$ 0 \$	(558.42)	0 \$ 0 \$	10.15 5.052.30				
39 40	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Price Volatility Make Whole Payment	555.30 555.42	0\$	-	0 \$ 0 \$	- 10.686.22	0 \$	-	0\$	5,052.30 490.22				
40	SUBTOTAL	555.42	0 \$	(22,704.25)	0 \$	15,746.01	0 \$	(1,040.91)	0 \$	5,552.93				
	RNU & Misc Charges		- +	(,	- •		- •	(.,	- •	-,				
42	RT Misc Amount	555.25	0 \$	(24,241.89)	0 \$	129.30	0 \$	-	0 \$	-				
43	RT Net Inadvertent Amount	555.27	0 \$	(10,651.41)	0 \$	8,941.63	0 \$	-	0 \$	-	1			
44	RT Revenue Neutrality Uplift Amount	555.28	0 \$	(59,561.19)	0 \$	12,198.07	0 \$	(2,731.96)	0 \$	559.36				
45	RT Uninstructed Deviation Amount	555.31	0 \$	- 1	0 \$	-	0\$	- 1	0 \$	-				
46	RT Demand Response Allocation Uplift Amount	555.59	0 \$	-	0 \$	-	0 \$	-	0 \$	-	1			
47	DA Ramp Product	555.63	0 \$	-	0 \$	663.59	0 \$	-	0 \$	-				
48	RT Ramp Prodcut	555.64	0 \$	(28.42)	0 \$	9.39	0 \$	-	0 \$	-	-			
49	SUBTOTAL		0 \$	(94,482.91)	0 \$	21,941.98	0 \$	(2,731.96)	0 \$	559.36				
	ASM Charges	555 55	(45.021) *	(720.224.64)	12,007 \$	188,706.20	(475)	(12 625 27)	19 694	334,762.31				
50 51	RT ASM Non-Excessive Energy Amount RT ASM Excessive Energy Amount	555.55 555.56	(45,921) \$ 0 \$	(739,324.61)	12,007 \$	188,706.20 26.27	(475) \$ 0 \$	(13,635.27)	18,684 \$ 25 \$	334,762.31 389.51	1			
52	SUBTOTAL	333.00	(45,921) \$	(739,324.61)	12,129 \$	188,732.47	(475) \$	(13,635.27)	25 \$ 18,708 \$	335,151.82	1			
02			(	(100,021.01)	,• V		(	(,	Ψ	000,.01.01				

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 36 of 42

					Otter Tail Pow	ver Company								
					Detail of MISO Day 2									
					December 2019 inclue	des any adjustme	nts							
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)
		. ,		RE	TAIL	. /		ASSET BASED	WHOLESALE			NON ASSET B	ASED WHOLES	LE
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
	thered Charge Types													
	DA Congestion Rebate on COGA	555.05	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
	DA Losses Rebate on COGA	555.06	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
	RT Congestion Rebate on COGA	555.22	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
	RT Loss Rebate on COGA	555.23	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
57	SUBTOTAL		0 \$	-	0 \$	-	0 \$	-	0\$	-				
			(000.000)	(10 000 007 05)			(175) 0	(10.001.00)	10.007 0					
	MISO DAY 2 CHARGES		(606,069) \$	(13,008,697.25)	405,898 \$	8,780,622.41	(475) \$	(19,221.90)	18,997 \$	349,597.46				
	Less Schedule 16 & 17 (Lines 16, 17, 18)		\$	(94,614.15)	\$	187.86								
	Congestion and Losses Adjustment No DA generation sch., but still had output for current month		\$	(2,660.85) (17,670.87)										
52	No DA generation sch., but still had output for current month		ş	(17,670.87)										
52														
	Total for MN Energy Adjustment Rider		•	(12,893,751.38)	s	8,780,434.55								
5	Net Retail for MN Energy Adjustment Ride		Ŷ		(4,113,316.83)	0,700,434.33								
	Whinclude losses of 2.8%	•		Ŷ	(4,113,310.03)									
	Minimidde 103363 01 2.070						L				L			
ADDITIO	NAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BAS	ED TRANSACT	LIONS											
7	NET MISO (Rev-Cost and MWh)								\$	330,375.56				
8	Less: Fuel Cost								18,968 \$	362,520.78				
9	Less: Misc Cost Adjustment								\$					
0	Plus: Capacity Revenue													
71	Plus: Bilateral Sales													
2	Less: Bilateral Purchases													
'3	Less: Schedule 24 for Asset Based Sales								\$	235.64				
74														
5	TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	(32,380.86)				
													PROTECT	ED DATA END

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 37 of 42

Ī				ıı	Otter Tail Powe Detail of MISO Day 2 ( uly 2018 - June 2019 Inclu	Charges - System	ts							
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	Charge Type Description	Acct	MWh	RE Cost	ETAIL MWh	Revenue	MWh	ASSET BASED Cost	WHOLESALE MWh	Revenue	MWh	NON ASSET BA	SED WHOLES MWh	SALE Revenue
No.	lay Ahead & Real Time Energy	ACCI	WWW	COSI	IVIVVII	Revenue	IVIVVII	COSI		Revenue		ED DATA BEGIN		Revenue
1	DA Asset Energy Amount	555.02	(5,122,190) \$	(132,640,337.78)	3,613,815 \$	93,796,668.52	0 \$	-	120,543 \$	3,482,918.49				
2	DA Non-asset Energy Amount	555.09	0 \$	-	54,590 \$	1,451,996.48	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(234,954) \$	(6,252,329.88)	158,396 \$	4,112,877.37	0 \$	-	0 \$	-				
4	RT Non-Asset Energy Amount SUBTOTAL	555.26	(39) \$ (5,357,183) \$	(2,159.86) (138,894,827.52)	<u>1 \$</u> 3,826,801 \$	9.64 99,361,552.01	0 \$	-	0 \$ 120,543 \$	- 3,482,918.49				
	ay Ahead & Real Time Energy Loss		(0,001,100) \$	(100,004,021.02)	0,020,001 \$	55,501,502.01		-	120,040 0	0,402,010.40				
6	DA FBT Loss Amount	555.04	0 \$		0 \$	-	0 \$	-	0 \$	-				
7	RT Distribution of Losses Amount	555.24	0 \$	(104,261.66)	0 \$	2,270,824.98	0 \$	-	0 \$	-				
8	RT FBT Loss Amount	555.21	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
9	DA Loss Amount		0 \$	(5,723,813.58)	0 \$	-	0 \$	-	0 \$	-				
10 11	RT Loss Amount	555.08	0 \$	(213,025.46)	0 \$	-	0 \$	-	0\$	-				
11	DA Losses Rebate on Option B GFA SUBTOTAL	505.06	0 \$ 0 \$	(6,041,100.70)	0 \$ 0 \$	2,270,824.98	0 \$		0 \$	-	1			
	irtual Energy		-	(2,2 : .,		_, ,0	.,		~ *					
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14	RT Virtual Energy Amount	555.32	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
15	SUBTOTAL		0 \$	•	0 \$	-	0 \$	-	0 \$	-				
	chedules 16 & 17			(200 120 12)										
16 17	DA Mkt Admin Amount RT Mkt Admin Amount	555.01 555.18	0 \$ 0 \$	(738,172.47) (71,594.30)	0 \$ 0 \$	- 3,631.01	0 \$ 0 \$	(10,344.39) (14,290.37)	0 \$ 0 \$	- 121.11				
18	FTR Mkt Admin Amount	555.18	0\$	(21,153.04)	0\$	3,031.01	0 \$	(14,290.37)	0\$	121.11				
19	SUBTOTAL	555.15	0 \$	(830,919.81)	0 \$	3,631.01	0 \$	(24,634.76)	0 \$	121.11				
0	Congestion & FTRs													
20 21	DA FBT Congestion Amount	555.03	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
21	DA Congestion		0 \$	-	0 \$	(2,518,002.65)	0 \$	-	0 \$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
23	RT Congestion	<b>FFF</b> 44	0\$	(36,973.92)	0 \$	-	0 \$ 0 \$	-	0 \$	-				
24 25	FTR Hourly Allocation Amount FTR Monthly Allocation Amount	555.14 555.15	0 \$ 0 \$	(1,620,773.12) (23.80)	0 \$ 0 \$	4,212,179.12 142,090.98	0 \$	-	0 \$ 0 \$	-				
26	FTR Yearly Allocation Amount	555.17	0 \$	(23.80)	0 \$	25,712.96	0 \$	-	0 \$	-				
27	FTR Monthly Transaction Amount	555.35	0 \$	-	0 \$	122,265.02	0 \$	-	0 \$	-				
28	FTR Full Funding Guarantee Amount	555.36	0 \$	(164,114.77)	0 \$	182,075.16	0 \$	-	0 \$	-				
29	FTR Guarantee Uplift Amount	555.37	0 \$	(182,075.09)	0 \$	159,810.94	0 \$	-	0 \$	-				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0 \$	(330,793.07)	0 \$	2,283,588.74	0 \$	-	0 \$	-				
31	FTR Annual Transaction Amount	555.38	0 \$	(2,283,258.37)	0 \$	333,990.41	0 \$	-	0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40 555.41	0 \$ 0 \$	(80,787.26)	0 \$ 0 \$	- 304.012.44	0 \$	-	0\$	-				
33 34	FTR Auction Revenue Rights Stage 2 Distribution Amount DA Congestion Rebate on Option B GFA	555.41 555.07	0 \$ 0 \$	(650.04)	U \$ 0 \$	304,012.44	0\$	-	0\$	-				
35	SUBTOTAL	555.07	0 \$	(4,699,449.76)	0 \$	5,247,723.12	0 \$		0 \$	-	1			
	SG & Make Whole Payments											-		-
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(119,603.67)	0 \$	360.44	0 \$	(4,610.33)	0 \$	12.53				
37	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11	0 \$	-	0 \$	34,248.32	0 \$	-	0 \$	6,565.08				
38	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.29	0 \$	(426,195.98)	0 \$	13,681.33	0 \$	(20,450.54)	0\$	581.46				
39 40	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount RT Price Volatility Make Whole Payment	555.30 555.42	0 \$ 0 \$	- (1.32)	0 \$ 0 \$	- 128.833.44	0 \$ 0 \$	- (0.04)	0 \$ 0 \$	415,171.17 6.390.08				
40	SUBTOTAL	əəə.42	0 \$	(545,800.97)	0 \$	128,833.44	0 \$	(25,060.91)	0 \$	428.720.32				
	NU & Misc Charges		- •	(,,,-)))	,	,		(==,====)	- *					
42	RT Misc Amount	555.25	0 \$	(305,619.92)	0 \$	41,560.77	0 \$	-	0 \$	-				
43	RT Net Inadvertent Amount	555.27	0 \$	(122,807.69)	0 \$	124,903.62	0 \$	-	0 \$	-				
44	RT Revenue Neutrality Uplift Amount	555.28	0 \$	(819,146.04)	0 \$	229,158.39	0 \$	(30,283.31)	0 \$	11,378.06				
45	RT Uninstructed Deviation Amount	555.31	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
46 47	RT Demand Response Allocation Uplift Amount DA Ramp Product	555.59 555.63	0 \$ 0 \$	(0.18)	0 \$ 0 \$	0.97 11,180.60	0 \$ 0 \$	-	0 \$ 0 \$	-				
47 48	RT Ramp Product	555.63 555.64	0 \$	- (1,311.08)	0 \$	3.186.38	0 \$	-	0 \$	-				
40	SUBTOTAL	555.04	0\$	(1,248,884.91)	0 \$	409,990.73	0\$	(30,283.31)	0 \$	11,378.06				
4	SM Charges													
50	RT ASM Non-Excessive Energy Amount	555.55	(351,008) \$	(8,114,376.08)	96,655 \$	2,427,376.71	(28,514) \$	(605,616.82)	123,846 \$	3,136,105.07				
51	RT ASM Excessive Energy Amount	555.56	(338) \$	(4,993.33)	1,644 \$	1,747.69	(48) \$	(966.93)	141 \$	2,415.53				
52	SUBTOTAL		(351,346) \$	(8,119,369.41)	98,299 \$	2,429,124.40	(28,562) \$	(606,583.75)	123,987 \$	3,138,520.60	1			

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 38 of 42

			Ju	Otter Tail Pow Detail of MISO Day 2 Ily 2018 - June 2019 Inc	Charges - System	nts							
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)
			RE	TAIL			ASSET BASED	WHOLESALE			NON ASSET BA	SED WHOLES	ALE
	Charge Type Description Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
	Grandfathered Charge Types												
53			-	0 \$	-	0 \$	-	0\$	-				
54	DA Losses Rebate on COGA 555.0		-	0 \$	-	0 \$	-	0\$	-				
55	RT Congestion Rebate on COGA 555.2		-	0 \$	-	0 \$	-	0\$	-				
56	RT Loss Rebate on COGA 555.2		-	0 \$	-	0 \$	-	0 \$	-				
57	SUBTOTAL	0 \$	-	0 \$	-	0\$	-	0 \$	-				
50		(5 700 500) 6	(400 200 252 00)	2 0 0 5 4 0 0 6	109,899,969.78	s	(000 500 70)	044 504 6	7.061.658.58				
58 59	TOTAL MISO DAY 2 CHARGES	(5,708,530) \$	(160,380,353.08)	3,925,100 \$	3,631.01	\$	(686,562.73)	244,531 \$	7,061,658.58				
59 60		\$	(830,919.81) (60,417.77)	\$	-								
61	Congestion and Losses Adjustment No DA generation sch., but had usage for current month	\$ ¢	(93,188.95)	\$	-								
62	MISO RSG Bad Debt	\$ ¢	(93,100.95)	3	-								
63	Settlement with another utility in Otter Tail's LBA	a c	(65,001.44)	3	-								
64	Total for MN Energy Adjustment Rider	φ e	(159,460,827.99)	ý e	109,896,338.77								
65	Net Retail for MN Energy Adjustment Rider	φ	(133,400,027.33)	پ (49,564,489.22)	103,030,330.77								
	Retail MWh include losses of 2.8%		Ψ	(43,304,403.22)									
00						L							
	ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASED TRANS	ACTIONS											
67	NET MISO (Rev-Cost and MWh) 1							\$	6,375,095.85				
68	Less: Fuel Cost							215,991 \$	5,219,912.14				
69	Less: Misc Cost Adjustment							\$	-				
70	Plus: Capacity Revenue												
71	Plus: Bilateral Sales												
72	Less: Bilateral Purchases												
73	Less: Schedule 24 for Asset Based Sales							\$	3,609.95				
74													
75	TOTAL ASSET or NON ASSET BASED WHOLESALE					_		\$	1,151,573.76				
	<sup>1</sup> Schedule 24 Costs and Revenues are not included in this calculation prior to October 2011											PROTECTE	D DATA ENDS]

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 39 of 42

				July	Otter Tail Powe Detail of MISO Day 2 2019 - December 2019 Ir	Charges - System	ents							
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	Charge Type Description	Acct	MWh	Cost RE	TAIL MWh	Revenue	MWh	ASSET BASED	MWh MWh	Revenue	MWh	NON ASSET BAS Cost	ED WHOLES MWh	SALE Revenue
No.	Day Ahead & Real Time Energy	AUU		0031		Revenue		0031		Revenue		ED DATA BEGINS		Revenue
1	DA Asset Energy Amount	555.02	(2,505,178) \$	(50,000,625.95)	1,758,634 \$	35,185,394.94	0 \$	-	17,594 \$	463,283.72				
2 3	DA Non-asset Energy Amount	555.09	0 \$	-	27,275 \$	588,520.80	0 \$	-	0 \$	-				
3	RT Asset Energy Amount RT Non-Asset Energy Amount	555.19 555.26	(79,694) \$ (16) \$	(1,984,566.32) (343.58)	80,343 \$ 0 \$	1,580,079.53	0 \$ 0 \$	-	0 \$ 0 \$	-				
5	SUBTOTAL	555.20	(2,584,888) \$	(51,985,535.85)	1,866,251 \$	37,353,995.27	0 \$		17,594 \$	463,283.72				
	Day Ahead & Real Time Energy Loss													
6	DA FBT Loss Amount	555.04	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
7	RT Distribution of Losses Amount RT FBT Loss Amount	555.24	0 \$ 0 \$	(39,709.54)	0 \$ 0 \$	853,001.90	0 \$ 0 \$	-	0 \$	-				
8	DA Loss Amount	555.21	0 \$	- (2,281,017.55)	0 \$	-	0 \$	-	0 \$ 0 \$	-				
10	RT Loss Amount		0 \$	(8,615.62)	0 \$		0\$	-	0\$					
11	DA Losses Rebate on Option B GFA	555.08	0\$	-	0 \$	-	0 \$	-	0 \$	-				
12	SUBTOTAL		0 \$	(2,329,342.71)	0 \$	853,001.90	0 \$	-	0 \$	-				
	/irtual Energy	15												
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14 15	RT Virtual Energy Amount SUBTOTAL	555.32	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$	-				
	Schedules 16 & 17			-	5.4	-		-	5 \$	-				
16	DA Mkt Admin Amount	555.01	0 \$	(342,659.38)	0 \$	-	0 \$	(1,252.80)	0 \$	-				
17	RT Mkt Admin Amount	555.18	0 \$	(34,910.99)	0 \$	1,468.23	0 \$	(9,063.28)	0 \$	46.05				
18	FTR Mkt Admin Amount	555.13	0 \$	(12,917.60)	0 \$	-	0 \$		0 \$	-				
19	SUBTOTAL Congestion & FTRs		0 \$	(390,487.97)	0 \$	1,468.23	0 \$	(10,316.08)	0 \$	46.05	-			
20	DA FBT Congestion Amount	555.03	0 \$		0 \$		0 \$		0 \$		-			
20	DA Congestion	555.05	0 \$	-	0 \$	(1,293,690.96)	0 \$	-	0 \$	-				
22	RT FBT Congestion Amount	555.20	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
23	RT Congestion		0 \$	199,691.13	0 \$	-	0 \$	-	0 \$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(1,663,593.95)	0 \$	3,050,571.88	0 \$	-	0 \$	-				
25	FTR Monthly Allocation Amount	555.15	0 \$	(3.54)	0 \$	98,988.24	0 \$	-	0 \$	-				
26 27	FTR Yearly Allocation Amount	555.17	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
27	FTR Monthly Transaction Amount FTR Full Funding Guarantee Amount	555.35 555.36	0 \$	(97,369.04)	0 \$ 0 \$	225.503.94	0 \$		0\$	-				
29	FTR Guarantee Uplift Amount	555.37	0 \$	(225,510.02)	0 \$	103,367.74	0 \$	-	0 \$	_				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0 \$	(76,374.04)	0 \$	1,341,437.94	0 \$	-	0 \$	-				
31	FTR Annual Transaction Amount	555.38	0 \$	(1,342,723.23)	0 \$	78,402.74	0 \$	-	0 \$	-				
32	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$	(29,171.00)	0 \$	-	0 \$	-	0 \$	-				
33	FTR Auction Revenue Rights Stage 2 Distribution Amount	555.41	0 \$	(7.93)	0 \$	186,207.03	0 \$	-	0 \$	-				
34 35	DA Congestion Rebate on Option B GFA SUBTOTAL	555.07	0 \$ 0 \$	(3,235,061.62)	0 \$ 0 \$	- 3,790,788.55	0 \$		0 \$	-				
	RSG & Make Whole Payments		U \$	(3,233,001.02)	J Ş	5,130,100.35	0.9	-	0 \$	-				
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(45,132.90)	0 \$	810.30	0 \$	(2,206.89)	0 \$	50.45				
37	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11	0 \$	-	0\$	33,960.03	0\$	-	0 \$	2,717.57				
38	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	555.29	0 \$	(104,614.60)	0 \$	5,341.95	0 \$	(5,830.79)	0 \$	281.73				
39	RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.30	0 \$	-	0 \$	-	0 \$	(1.03)	0 \$	37,974.54				
40 41	RT Price Volatility Make Whole Payment SUBTOTAL	555.42	0 \$ 0 \$	(124.96) (149,872.46)	0 \$ 0 \$	64,896.45 105,008.73	0 \$ 0 \$	(7.92)	0 \$ 0 \$	3,499.51 44,523.80	+			
	RNU & Misc Charges		0 \$	(143,0/2.40)	U \$	105,000.73	0 \$	(0,040.03)	0 \$	44,523.80				
42	RT Misc Amount	555.25	0 \$	(130,154.84)	0 \$	1,490.88	0 \$		0 \$	-				
43	RT Net Inadvertent Amount	555.27	0 \$	(45,329.15)	0\$	31,582.97	0 \$	-	0\$	-				
44	RT Revenue Neutrality Uplift Amount	555.28	0 \$	(272,668.09)	0 \$	84,593.74	0 \$	(13,388.34)	0 \$	3,860.80				
45	RT Uninstructed Deviation Amount	555.31	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
46 47	RT Demand Response Allocation Uplift Amount	555.59	0 \$	(0.10)	0 \$	-	0 \$	-	0 \$	-				
47 48	DA Ramp Product RT Ramp Product	555.63 555.64	0 \$	- (850.58)	0 \$ 0 \$	6,938.77 192.67	0 \$	-	0 \$	-				
48	SUBTOTAL	555.04	0 \$	(449,002.76)	0 \$	192.67	0 \$	(13,388.34)	0 \$	3,860.80	-			
	ASM Charges			, ,,,,, -,				( ,,,	· · ·	.,				
50	RT ASM Non-Excessive Energy Amount	555.55	(209,740) \$	(3,288,287.90)	42,215 \$	832,415.09	(4,651) \$	(93,163.98)	102,123 \$	2,031,819.55				
51	RT ASM Excessive Energy Amount	555.56	(33) \$	(1,511.01)	726 \$	383.36	(6) \$	(7.60)	354 \$	5,154.56				
52	SUBTOTAL		(209,773) \$	(3,289,798.91)	42,941 \$	832,798.45	(4,656) \$	(93,171.58)	102,477 \$	2,036,974.11				

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 40 of 42

				July	Otter Tail Pow Detail of MISO Day 2 2019 - December 2019 I	Charges - System	nents							
	(A)	(B)		(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
					TAIL			ASSET BASED				NON ASSET BA		
	Charge Type Description Acc	t MWh		Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
	Grandfathered Charge Types													
53	DA Congestion Rebate on COGA 555.0		0\$	-	0 \$	-	0 \$	-	0 \$	-				
54	DA Losses Rebate on COGA 555.0		0\$	-	0 \$	-	0 \$	-	0 \$	-				
55	RT Congestion Rebate on COGA 555.2		0\$	-	0 \$	-	0 \$	-	0 \$	-				
56	RT Loss Rebate on COGA 555.2	3	0 \$		0 \$	-	0 \$		0 \$	-				
57	SUBTOTAL		0\$	-	0 \$	-	0 \$	-	0 \$	-				
58	TOTAL MISO DAY 2 CHARGES	(2,794,6	(1) ¢	(61,829,102.28)	1.909.192 \$	43,061,860.16	\$	(124,922.63)	120,070 \$	2.548.688.48				
59	Less Schedule 16 & 17 (Lines 16, 17, 18)	(2,704,0	<u>κ</u>	(390,487.97)	1,000,102 ¢	1.468.23	Ŷ	(124,322.00)	120,070 \$	2,040,000.40				
60	Congestion and Losses Adjustment		ŝ	(42,988.79)	ŝ	-								
61	No DA generation sch., but had usage for current month		ŝ	(64,112.23)	ŝ	-								
62	MISO RSG Bad Debt		ŝ	(,=	ŝ	-								
63	Settlement with another utility in Otter Tail's LBA		•		•									
64	Total for MN Energy Adjustment Rider		\$	(61,331,513.29)	s	43,060,391.93								
65	Net Retail for MN Energy Adjustment Rider			\$	(18,271,121.36)									
	Retail MWh include losses of 2.8%			•										
	ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASED TRAN	RACTIONS												
67	NET MISO (Rev-Cost and MWh) <sup>1</sup>	SACTIONS							s	2,423,765.85				
68	Less: Fuel Cost								ۍ 115,219 \$	2,198,361.90				
69	Less: Misc Cost Adjustment								115,219 \$	2,190,301.90				
70	Plus: Capacity Revenue								φ	-				
70	Plus: Bilateral Sales													
72	Less: Bilateral Purchases													
73	Less: Schedule 24 for Asset Based Sales								s	1.552.12				
74									÷	.,002.112				
75	TOTAL ASSET or NON ASSET BASED WHOLESALE								\$	223,851.83				
	<sup>1</sup> Schedule 24 Costs and Revenues are not included in this calculation prior to October 2011												PROTECTE	D DATA ENDS]

# Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 41 of 42

ſ				July	Otter Tail Powe Detail of MISO Day 2 ( 2018 - December 2019 Ir	Charges - System	ents							
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)
				RE	TAIL			ASSET BASED	WHOLESALE	V		NON ASSET BAS		SALE
No D	Charge Type Description Pay Ahead & Real Time Energy	Acct	MWh	Cost	MWh	Revenue	MWh	Cost	MWh	Revenue	MWh	Cost ED DATA BEGIN	MWh	Revenue
1	DA Asset Energy Amount	555.02	(7,627,368) \$	(182,640,963.73)	5,372,448 \$	128,982,063.46	0 \$	-	138,137 \$	3,946,202.21	Interret	ED DAIA DEGIN		
2	DA Non-asset Energy Amount	555.09	0 \$	-	81,865 \$	2,040,517.28	0 \$	-	0 \$	-				
3	RT Asset Energy Amount	555.19	(314,648) \$	(8,236,896.20)	238,739 \$	5,692,956.90	0 \$	-	0\$	-				
4	RT Non-Asset Energy Amount SUBTOTAL	555.26	(55) \$ (7,942,072) \$	(2,503.44)	<u>1 \$</u> 5,693,052 \$	9.64 136,715,547.28	0 \$ 0 \$		0 \$ 138,137 \$	- 3,946,202.21				
	lay Ahead & Real Time Energy Loss		(1,342,012) \$	(150,000,000.01)	0,000,002 \$	100,110,041.20		-	100,101 ψ	0,040,202.21				
6	DA FBT Loss Amount	555.04	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
7	RT Distribution of Losses Amount	555.24	0 \$	(143,971.20)	0 \$	3,123,826.88	0 \$	-	0 \$	-				
8	RT FBT Loss Amount	555.21	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
9 10	DA Loss Amount RT Loss Amount		0 \$ 0 \$	(8,004,831.13) (221,641.08)	0 \$ 0 \$	-	0 \$ 0 \$	-	0 \$ 0 \$	-				
11	DA Losses Rebate on Option B GFA	555.08	0 \$	(221,041.00)	0 \$	-	0 \$		0 \$	-				
12	SUBTOTAL	000.00	0\$	(8,370,443.41)	0 \$	3,123,826.88	0 \$	-	0 \$	-				
	irtual Energy													
13	DA Virtual Energy Amount	555.12	0 \$	-	0 \$	-	0 \$	-	0 \$	-				
14 15	RT Virtual Energy Amount SUBTOTAL	555.32	0 \$ 0 \$		0 \$ 0 \$	-	0 \$	-	0 \$	-	+			
	ichedules 16 & 17		0 \$	•	U \$	-	0 \$		U \$	-				
16	DA Mkt Admin Amount	555.01	0 \$	(1,080,831.85)	0 \$	-	0 \$	(11,597.19)	0 \$	-				
17	RT Mkt Admin Amount	555.18	0 \$	(106,505.29)	0 \$	5,099.24	0 \$	(23,353.65)	0\$	167.16				
18	FTR Mkt Admin Amount	555.13	0 \$	(34,070.64)	0 \$	-	0 \$	-	0 \$	-				
19	SUBTOTAL Congestion & FTRs		0 \$	(1,221,407.78)	0 \$	5,099.24	0 \$	(34,950.84)	0 \$	167.16				
20	DA FBT Congestion Amount	555.03	0 \$	-	0 \$		0 \$		0 \$	-				
21	DA Congestion Amount	555.05	0 \$		0\$	(3.811.693.61)	0 \$		0\$	-				
22	RT FBT Congestion Amount	555.20	0 \$		0 \$	-	0 \$	-	0 \$	-				
23	RT Congestion		0 \$	162,717.21	0 \$	-	0 \$	-	0 \$	-				
24	FTR Hourly Allocation Amount	555.14	0 \$	(3,284,367.07)	0 \$	7,262,751.00	0 \$	-	0 \$	-				
25 26	FTR Monthly Allocation Amount FTR Yearly Allocation Amount	555.15 555.17	0 \$ 0 \$	(27.34)	0 \$ 0 \$	241,079.22 25,712.96	0 \$	-	0 \$ 0 \$	-				
26	FTR Monthly Transaction Amount	555.17	0 \$	(0.32)	0\$	25,712.96	0 \$	-	0\$	-				
28	FTR Full Funding Guarantee Amount	555.36	0 \$	(261,483.81)	0 \$	407,579.10	0 \$		0\$	-				
29	FTR Guarantee Uplift Amount	555.37	0 \$	(407,585.11)	0 \$	263,178.68	0 \$	-	0 \$	-				
30	FTR Auction Revenue Rights Transaction Amount	555.39	0 \$	(407,167.11)	0 \$	3,625,026.68	0 \$	-	0 \$	-				
31	FTR Annual Transaction Amount	555.38	0 \$	(3,625,981.60)	0 \$	412,393.15	0 \$	-	0 \$	-				
32 33	FTR Auction Revenue Rights Infeasible Uplift Amount	555.40	0 \$ 0 \$	(109,958.26)	0 \$ 0 \$	- 490,219.47	0 \$ 0 \$	-	0 \$ 0 \$	-				
33 34	FTR Auction Revenue Rights Stage 2 Distribution Amount DA Congestion Rebate on Option B GFA	555.41 555.07	0 \$	(657.97)	0\$	490,219.47	0 \$	-	0\$	-				
35	SUBTOTAL	555.07	0 \$	(7,934,511.38)	0 \$	9,038,511.67	0 \$		0 \$	-				
R	SG & Make Whole Payments								•					
36	DA Revenue Sufficiency Guarantee Distribution Amount	555.10	0 \$	(164,736.57)	0 \$	1,170.74	0 \$	(6,817.22)	0 \$	62.98				
37	DA Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.11	0 \$	-	0 \$	68,208.35	0 \$	-	0\$	9,282.65				
38 39	RT Revenue Sufficiency Guarantee First Pass Distribution Amount RT Revenue Sufficiency Guarantee Make Whole Pymt Amount	555.29 555.30	0 \$ 0 \$	(530,810.58)	0 \$ 0 \$	19,023.28	0 \$ 0 \$	(26,281.33) (1.03)	0 \$ 0 \$	863.19 453.145.71				
39 40	RT Revenue Sunciency Guarantee Make Whole Pyrin Amount RT Price Volatility Make Whole Payment	555.42	0 \$	(126.28)	0 \$	193.729.89	0 \$	(7.96)	0\$	453,145.71 9.889.59				
41	SUBTOTAL		0\$	(695,673.43)	0 \$	282,132.26	0\$	(33,107.54)	0\$	473,244.12				
	NU & Misc Charges													
42	RT Misc Amount	555.25	0 \$	(435,774.76)	0 \$	43,051.65	0 \$	-	0\$	-				
43 44	RT Net Inadvertent Amount RT Revenue Neutrality Uplift Amount	555.27 555.28	0 \$ 0 \$	(168,136.84) (1,091,814.13)	0 \$ 0 \$	156,486.59 313,752,13	0 \$ 0 \$	- (43,671.65)	0 \$ 0 \$	- 15,238.86				
44 45	RT Revenue Neutrality Oplit Amount	555.31	0 \$	(1,091,014.13)	0 \$	313,732.13	0 \$	(43,071.05)	0\$	10,200.00				
46	RT Demand Response Allocation Uplift Amount	555.59	0\$	(0.28)	0 \$	0.97	0\$	-	0\$	-				
47	DA Ramp Product	555.63	0 \$	-	0 \$	18,119.37	0 \$	-	0\$	-				
48	RT Ramp Product	555.64	0 \$	(2,161.66)	0 \$	3,379.05	0 \$	-	0 \$	-				
49	SUBTOTAL SM Charges		0 \$	(1,697,887.67)	0 \$	534,789.76	0 \$	(43,671.65)	0 \$	15,238.86				
50	RT ASM Non-Excessive Energy Amount	555.55	(560,748) \$	(11,402,663.98)	138,870 \$	3,259,791.80	(33,165) \$	(698,780.80)	225,969 \$	5,167,924.62				
51	RT ASM Excessive Energy Amount	555.56	(300,740) \$	(11,402,003.30) (6,504.34)	2,370 \$	2,131.05	(54) \$	(974.53)	495 \$	7,570.09				
52	SUBTOTAL		(561,119) \$	(11,409,168.32)	141,240 \$	3,261,922.85	(33,218) \$	(699,755.33)		5,175,494.71				
<u> </u>			(σσ., πο) φ	(,,)	.71,270 Ø	0,207,022.00	(00,210) \$	(000,100.00)		0,0,707.71				

### Docket No. E999/AA-20-171 Part H Section 3 Attachment K PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED 2

Page	42	of	42

				July 2	Otter Tail Pow Detail of MISO Day 2 2018 - December 2019 I	Charges - System	nents								
		(A)	(B)	(C)	(D)	(E)	(F)		(G)	(H)	(1)	(J)	(K)	(L)	(M)
				RET					ASSET BASED				NON ASSET BA		
	Charge Type Description	Acct	MWh	Cost	MWh	Revenue	MWh		Cost	MWh	Revenue	MWh	Cost	MWh	Revenue
_	Grandfathered Charge Types														
53	DA Congestion Rebate on COGA	555.05	0 \$	-	0 \$	-		0\$	-	0\$	-				
54	DA Losses Rebate on COGA	555.06	0 \$	-	0 \$	-		0\$	-	0\$	-				
55	RT Congestion Rebate on COGA	555.22	0 \$	-	0 \$	-		0\$	-	0\$	-				
56	RT Loss Rebate on COGA	555.23	0 \$	-	0 \$	-		0 \$	-	0 \$	-				
57	SUBTOTAL		0 \$	-	0 \$	-		0\$	-	0\$	-				
	TOTAL MISO DAY 2 CHARGES		(8,503,191) \$	(222,209,455.36)	5,834,292 \$	152,961,829.94		\$	(811,485.36)	364,601 \$	9,610,347.06				
59	Less Schedule 16 & 17 (Lines 16, 17, 18)		\$	(1,221,407.78)	\$	5,099.24									
60	Congestion and Losses Adjustment		\$	(103,406.56)	\$	-									
61	No DA generation sch., but had usage for current month		\$	(157,301.18)	\$	-									
62	MISO RSG Bad Debt		\$	-	\$	-									
63	Settlement with another utility in Otter Tail's LBA		\$	(65,001.44)	\$	-									
64	Total for MN Energy Adjustment Rider		\$	(220,792,341.28)	\$	152,956,730.70									
65	Net Retail for MN Energy Adjustment Rider Retail MWh include losses of 2.8%			\$	(67,835,610.58)										
00	Retail MWM Include losses of 2.8%														
	ADDITIONAL REVENUE AND COSTS OF ASSET BASED AND NON ASSET BASE	DTRANSACT													
67	NET MISO (Rev-Cost and MWh) <sup>1</sup>	DIRANJAC					-				8,798,861.70				
68	Less: Fuel Cost									331,210 \$					
69	Less: Misc Cost Adjustment									331,210 \$	7,410,274.04				
70	Plus: Capacity Revenue									Ψ	-				
70	Plus: Bilateral Sales						1								
72	Less: Bilateral Purchases						1								
73	Less: Schedule 24 for Asset Based Sales						1			¢	5.162.07				
74	Less. Concluie 14 for Asset Dased Sales						1			Ŷ	3,102.07				
75	TOTAL ASSET or NON ASSET BASED WHOLESALE									\$	1,375,425.59				
-											,,				
1	<sup>1</sup> Schedule 24 Costs and Revenues are not included in this calculation prior to Octob	er 2011													
1							1							PROTECTE	D DATA ENDS]

### MN OES'S ORDER AUTHORIZING ONGOING USE OF FUEL CLAUSE ADJUSTMENT AND SETTING REPORTING REQUIREMENTS DOCKET NO. E001,015,002,017/ M-08-528

In the Minnesota Public Utilities Commission's August 23, 2010, Order the MNPUC ordered:

5. The three utilities shall include costs and revenues from their participation in the MISO ancillary services market in future automatic adjustment reports filed under Minn. Rules, parts 7825.2390 *et seq.*, including the annual filing required thereunder. They shall include costs/revenues through June 30, 2010 in the 2011 annual filings, which are due in September 2010; they shall include costs/revenues beginning July 1, 2010 in the 2012 annual filings, which are due in September 2011.

Schedule 1 of Part H Section 4 Attachment L summarizes the 15 ancillary services market (ASM) charge types by month for the AAA period. In May of 2016, MISO initiated a new product, ramp capability. The MISO ramp capability product is often referred to as another ancillary service product. As such, we have included discussion of this product in both this document and in our corresponding ASM charge summary tables.

8. In their annual summaries on the 12 MISO ancillary services charges the utilities shall use a format similar to that used by Minnesota Power in its Attachment 1 to its February 5, 2010 filing (4th quarter report) and shall work with the OES to develop a format that is acceptable.

See Part H Section 4 Attachment L - Schedule 1, Schedule 2, and Schedule 3.

9. In reporting daily ancillary services market activity and overall net savings created by participation in the ancillary services market, utilities shall use a format similar to that used by Xcel in Attachment A to its February 5, 2010 filing and shall work with the OES to develop a format that is acceptable.

Otter Tail does not have the software to perform a daily activity and savings report. Otter Tail is providing a monthly breakdown of charges (see Part H Section 4 Attachment L - Schedule 1 and Schedule 2).

10. The utilities' written narratives on the benefits of the ancillary services market and the market's impact on their systems shall be formatted consistent with Xcel's and Minnesota Power's 4th quarter report in this docket.

See Part H Section 4 Attachment L.

11. The utilities shall file detailed and specific explanations for all Contingency Reserve Deployment Failure and Excess/Deficient Energy Charges incurred, including an explanation as to why they should be recovered and what actions the utility took to minimize these charges.

See Part H Section 4 Attachment L.

In the Matter of Xcel Energy, Minnesota Power, Otter Tail Power Company, and Interstate Power and Light Company's Petition for Approval of Revisions to Riders for Fuel Adjustment to Recover Costs and Pass-Through Related to MISO Ancillary Services Market - Docket No. E001,E015,E002,E017/M-08-528

### I. Introduction

In an Order dated March 17, 2009, in the above-referenced Docket, the Minnesota Public Utilities Commission (Commission) authorized the four investor owned utilities in the State of Minnesota conditional approval to recover 12 charge types to each utility's fuel clause. These 12 charges (credits and costs) were new charges passed on to the utilities for participating in the Midwest Independent Transmission System Operator (MISO) ancillary services market (ASM) that began on January 6, 2009.

The Commission's Order at Paragraph 1.a. required that no later than February 6, 2010, the utilities shall file a request to validate recovery to date and continue to recover ASM charges (credits and costs) by an analysis of the costs and benefits of each utility's participation in the ASM Market. The utilities were also to address the potential for double recovery of these costs, and the impacts of ASM on Schedule 17 costs.

In May of 2016, MISO initiated a new product, ramp capability. The MISO ramp capability product is often referred to as another ancillary service product. As such, we have included discussion of this product in both this document and in our corresponding ASM charge summary tables (Schedule 1 of Part H Section 4 Attachment L).

### II. The Benefits to Otter Tail Power Company Customers of ASM Participation Otter Tail Power's ASM Cost and Benefit Analysis

### **Overview**

Otter Tail has been participating in Midwest ISO's (MISO) Ancillary Service Market (ASM) since it started on January 6, 2009. Since market start, Otter Tail has not seen any major changes to operation or clearing of our units for energy in the market. Otter Tail has had additional opportunities in the ASM to optimize generation portfolio revenues by providing regulation and spinning reserve without creating a negative impact on available energy necessary to meet customer needs. In addition, and as noted above, in May of 2016, MISO also began offering the ramp capability product. Otter Tail qualified resources participate in the ramp capability process.

### Spinning Reserves

Currently, Otter Tail has 8 generating units that are qualified to supply energy, regulation, or spinning reserves service for MISO.

The ASM has also added value for customers when generating units have backed down to minimum generation levels due to low energy prices. The generators can be backed down and still provide spinning reserves at the lower operating levels. MISO's Spinning Reserves process has provided a net benefit of \$26,012 for the July 2018 through June 2019 period (Page 1 of Schedule 1 of Part H Section 4 Attachment L, column R, line 8)

and a net benefit of \$595 for the July 2019 through December 2019 period (Page 2 of Schedule 1 of Part H Section 4 Attachment L, column J, line 8).

### **Supplemental Reserves**

MISO Supplemental Reserves resulted in a net benefit of \$854 for the July 2018 through June 2019 period (Page 1 of Schedule 1 of Part H Section 4 Attachment L, column R, line 12) and a net benefit of \$2,768 for the July 2019 through December 2019 period (Page 2 of Schedule 1 of Part H Section 4 Attachment L, column J, line 12). Prior to August of 2015, Otter Tail's three oil-fueled peaking units, Lake Preston and the Jamestown units #1 and #2, were qualified to provide supplemental reserves to the MISO ASM market. However, testing in July and August of 2015 indicated those units were no longer able to meet the required operating specifications to be eligible to provide such reserves. During the 2017/2018 AAA period, the Company upgraded systems and operating procedures on these plants in order to regain eligibility. In June of 2018, eligibility was restored and these units were qualified to offer limited supplemental reserves into the MISO energy markets.

### **Regulation**

Prior to ASM, Otter Tail scheduled regulation on our system on an hourly basis to meet Balancing Authority control performance criteria requirements. Under ASM, Otter Tail units are only selected by MISO for regulation when it is cost effective. Most of the time our units are cleared for energy instead of being held back to provide the MW we used to reserve for regulation. Under ASM, due to regulation clearing and our ability to purchase affordable regulation service, we have more economic energy available from our lowcost generation facilities to serve our customers. Including ASM charge type impact only, MISO's Regulation Reserves resulted in a net benefit of \$126,298 for the July 2018 through June 2019 period (Page 1 of Schedule 1 of Part H Section 4 Attachment L, column R, line 4) and a net benefit of \$109,043 for the July 2019 through December 2019 period (Page 2 of Schedule 1 of Part H Section 4 Attachment L, column J, line 4).

### Ramp Capability

The MISO ramp capability product was introduced in May of 2016. It was designed to increase reliability and decrease the cost of serving load. MISO adjusts (fine-tunes) system ramp capability in each dispatch interval as needed, using a 10-minute forecast of Net Load plus forecast uncertainty. Creating additional ramp involves shifting energy MWs between slower-ramping and faster-ramping units. Generators providing ramp capability are entitled to potential revenues/charges in both the day ahead and real time markets. The cost MISO incurs by creating additional ramp capability is offset by the reduced likelihood of insufficient ramp and shortage pricing. MISO's ramp capability product has resulted in a net benefit of \$6,645 for the July 2018 through June 2019 period (Page 1 of Schedule 1 of Part H Section 4 Attachment L, column R, line 15) and a net benefit of \$3,197 for the July 2019 through December 2019 period (Page 2 of Schedule 1 of Part H Section 4 Attachment L, column R, line 15).

### Real-Time Excessive/Deficient Energy Deployment Charge Amount and Real-Time <u>Contingency Deployment Failure Charge Amount</u>

The Real-Time Excessive/Deficient Energy Deployment Charge Amount represents the charge to an Asset Owner owning Generation where the Asset Owner's unit fails to

follow Setpoint instructions for four consecutive intervals within 1 hour without an Exemption. This charge consists of taking back any cleared Day Ahead Regulation Operating Reserve payment and any cleared Net Real Time Regulation payment and also assesses a prorated share of the Day Ahead and Real Time Regulation Market cost. During the reporting period of July 2018 through June 2019 there was a total (\$17,493) of penalties assessed to Otter Tail units (Page 1 of Schedule 1 of Part H Section 4 Attachment L, column R, line 17) and (\$7,359) of penalties for the July 2019 through December 2019 period (Page 2 of Schedule 1 of Part H Section 4 Attachment L, column J, line 17). These are normally mechanical failure situations where the unit fails to follow dispatch for a short time period while small repairs are made.

The Real-Time Contingency Deployment Failure Charge Amount represents the charge incurred by Resources that fail to deploy Contingency Reserves at or above the Contingency Reserve Deployment Instruction. Again, these would normally be short intervals where some mechanical failure occurred. For the July 2018 through June 2019 period, there was a total of (\$9,425) in charges (Page 1 of Schedule 1 of Part H Section 4 Attachment L, column R, line 16) and no charges for the July 2019 through December 2019 period (Page 2 of Schedule 1 of Part H Section 4 Attachment L, column J, line 16).

### ASM Charge Summary

The transition to the ASM market has been smooth from an operational standpoint. There has also been a positive economic benefit for Otter Tail. Otter Tail has been able to maximize the capabilities of our units to a greater extent, which ultimately has led to greater operational efficiencies for Otter Tail. Otter Tail will continue to develop strategies that will continue to allow the ASM to have a positive impact for our customers.

Otter Tail reviews all MISO charges and credits including ASM charge types on a daily basis.

Schedule 1 of Part H Section 4 Attachment L provides the summary of ASM hourly charges for the July 2018 through June 2019 period, which has provided \$118,991(column R, line 21 of Page 1) of net ASM revenue. The July 2019 through December 2019 period provided \$103,308 (column J, line 21 of Page 2) of net ASM revenue.

Schedule 2 of Part H Section 4 Attachment L provides a summary of hourly MWh related to ASM products for the periods of July 2018 through June 2019 and July 2019 through December 2019.

### **III. Schedule 17 Costs**

MISO took on additional system and analysis responsibilities with the start of the ASM and as a result, additional costs were incurred at MISO. These costs were recovered from Market Participants including Otter Tail through increased Schedule 17 charges. Schedule 3 of Part H Section 4 Attachment L provides a summary of the Schedule 17 rates before and after the start of ASM.

### **IV. No Double Recovery of Costs**

The Commission requested the utilities other than Otter Tail address the potential double recovery of costs associated with Operating Reserves costs and revenues from MISO being collected through the FCA and the costs of the generation being recovered in base rates. As a result of Otter Tail's 2010 general rate case, Docket E017/GR-10-239 (2010 Rate Case), Otter Tail passes on ASM charges and credits through its FCA. First and foremost, the potential for any double recovery of such costs is eliminated by operation of the fuel clause pass through of ASM charges. In addition, there is no double recovery of costs because there are two kinds of reserve requirements the Company must meet.

The fixed costs of generation included in base rates reflect the Capacity reserve requirement established under Module E of the MISO Tariff (resource adequacy) costs. In addition, the start of the ASM and MISO's role as regional balancing authority means Otter Tail (as a balancing authority) can purchase rather than self-provide the regulating reserve and spinning reserve requirements imposed by NERC reliability standards. The costs of regulating reserve and spinning reserve are distinct from capacity reserve costs, and reflect either direct energy costs or the incremental costs of holding generation in reserve (*i.e.*, the cost of energy generated in place of the energy that could have been produced by the unit(s) providing the regulation and/or spinning reserves), which have always been recovered through the fuel clause rather than base rates.

### V. As Requested in Docket No. E017/GR-10-239, the Commission Should Allow Continued ASM Charge Recovery

Otter Tail's 2010 report, and this report, continue to validate the net savings of ASM participation to Otter Tail. The ancillary services markets are achieving significant benefits in terms of generation resource optimization, with the savings flowing through the fuel clause to Otter Tail's customers. Otter Tail has been required since its 2010 Rate Case to utilize FCA treatment of ASM charges (credits and costs) in its fuel clause on an ongoing basis.

### Summary

MISO ASM has allowed Otter Tail the ability to more fully utilize our generation assets for the benefit of our customers. Otter Tail fully expects these benefits to continue due to our ability to offer generation into both markets which better utilizes the full benefits of our generation facilities relative to current market conditions.

### SUMMARY OF 12 ASM CHARGE TYPES (Dollars) Revenue (Cost) July 2018 - June 2019

	_					_					_	0019 2011				_							
		(A)	(B)	(C)	(D)		(E)	(F)	(G)	(H)		(I)	(J)	(K)	(L)		(M)	(N)	(0)	(P)		(Q)	(R)
ine No.		Jul-18	Aug-18	3 Sep-18	Brd Qtr 2018 Total		Oct-18	Nov-18	41 Dec-18	h Qtr 2018 Total		Jan-19	Feb-19	Mar-19	1st Qtr 2019 Total		Apr-19	May-19	Jun-19	2nd Qtr 2019 Total		2018 - June 2019 2-Month Total	MN Amount @ 0.508974070
Day Ahead Regulation Amount	\$	49,894 \$	45,041 \$	39,688 \$	134,622	\$	8,259 \$	12,974 \$	55,726 \$	76,959	\$	44,978 \$	25,639	\$ 30,721	\$ 101,338	\$	36,324 \$	27,297 \$	56,328	\$ 119,949	s	432,868	\$ 220,319
Real Time Regulation Amount	s	(1,099) \$	7,128 \$	7,135 \$	12 164	s	6,226 \$	(3,151) \$	(7.262) ¢	(4,187)	s	(4,515) \$	3,691	\$ 6,598	\$ 5.774	s	1,294 \$	(7,220) \$	(12.060)	¢ (17.004)	s	(2.042)	¢ (1.651)
Regulation Cost Distribution Amount	s	(1,099) \$		(10,103) \$		s	(17,722) \$	(21,322) \$	(7,263) \$		ə 5	(16,076) \$		\$ 0,596 \$ (16,109)		э 5	(14,023) \$				s	(3,243) (181,483)	
Regulation Subtotal	\$	37,107 \$	, .		115,267	\$	(3,237) \$	(11,498) \$		9,795	\$	24,388 \$	,	\$ 21,210		\$	23,595 \$	, .	,	,	\$	248,142	
Day Ahead Spinning Reserve Amount	s	22,829 \$	27.258 \$	24.997 \$	75,084	s	38.059 \$	23.438 \$	26,279 \$	87,777	\$	15,797 \$	16,058	\$ 16,254	\$ 48,110	\$	21.665 \$	26.283 \$	5 11,923	\$ 59,871	s	270,841	\$ 137,851
Real Time Spinning Reserve Amount	\$	(215) \$		(173) \$	.,	\$	(1,835) \$	(2,030) \$	(1,519) \$		\$	(1,744) \$	(1,662)			\$	(4,788) \$	.,	,		\$	(26,136)	
Spinning Reserve Cost Distribution Amount	\$	(11,558) \$	(12,151) \$	(13,029) \$	(36,738)	\$	(23,681) \$	(22,916) \$	(21,147) \$	(67,743)	\$	(14,326) \$	(16,700)	\$ (16,146)	\$ (47,171)	\$	(16,700) \$	(16,222) \$	(9,024)	\$ (41,947)	s	(193,598)	\$ (98,537)
Spinning Reserve Subtotal	\$	11,057 \$	14,494 \$	11,795 \$	37,345	\$	12,544 \$	(1,507) \$	3,614 \$	14,650	\$	(272) \$	(2,304)	\$ (1,436)	\$ (4,011)	\$	177 \$	4,079 \$	; (1,133)	\$ 3,123	\$	51,107	\$ 26,012
Day Ahead Supplemental 9 Reserve Amount	\$	6,052 \$	6,543 \$	16,774 \$	29,368	\$	7,593 \$	2,963 \$	4,097 \$	14,653	\$	2,095 \$	5,675	\$ 6,113	\$ 13,883	\$	2,742 \$	5,014 \$	2,446	\$ 10,202	s	68,106	\$ 34,664
Real Time Supplemental Reserve Amount	\$	(1,065) \$	(4,947) \$	(6,881) \$	(12,893)	\$	(850) \$	(1,128) \$	(1,224) \$	(3,202)	\$	(1,196) \$	(4,464)	\$ (531)	\$ (6,190)	\$	(1,123) \$	(1,128) \$	(1,012)	\$ (3,263)	s	(25,548)	\$ (13,003)
Supplemental Reserve Cost Distribution Amount	\$	(2,176) \$	(2,388) \$	(4,902) \$	(9,466)	\$	(4,819) \$	(2,692) \$	(3,351) \$	(10,863)	\$	(2,089) \$	(5,115)	\$ (4,978)	\$ (12,182)	\$	(2,605) \$	(3,941) \$	(1,823)	\$ (8,369)	s	(40,879)	\$ (20,806)
Supplemental Reserve 2 Subtotal	\$	2,810 \$	(792) \$	4,992 \$	7,009	\$	1,924 \$	(858) \$	(478) \$	589	\$	(1,190) \$	(3,904)	\$ 604	\$ (4,489)	\$	(985) \$	(55) \$	; (389)	\$ (1,430)	\$	1,679	\$ 854
Day Ahead Ramp Capability Amount Real Time Ramp Capability	\$	2,661 \$	1,613 \$	2,419 \$	6,693	\$	1,109 \$	493 \$	305 \$	1,907	\$	382 \$	292	\$ 227	\$ 901	\$	473 \$	493 \$	5 714	\$ 1,679	\$	11,181	\$ 5,691
14 Amount	\$	533 \$	95 \$	734 \$	1,361	\$	9 \$	68 \$	90 \$	167	\$	213 \$	24	\$ (34)	\$ 203	\$	103 \$	(56) \$	97	\$ 143	\$	1,875	\$ 954
Ramp Capability Subtotal	\$	3,194 \$	1,708 \$	3,153 \$	8,055	\$	1,118 \$	561 \$	396 \$	2,074	\$	595 \$	316	\$ 194	\$ 1,104	\$	575 \$	437 \$	6 810	\$ 1,822	\$	13,056	\$ 6,645
Contingency Reserve Deployment Failure Charge 6 Amount	\$	- \$	(2,418) \$	(16,000) \$	(18,419)	\$	- \$	- \$	(98) \$	(98)	\$	- \$	-	\$-	ş -	\$	- \$	- \$	; -	\$-	s	(18,517)	\$ (9,425)
Real Time Excessive Deficient Energy Deployment Charge Amount	s	(3,778) \$	(7,248) \$	(1,900) \$	(12,926)	s	(1,284) \$	(734) \$	(1,929) \$	(3,948)	s	(1,899) \$	(3,312)	\$ (4,520)	\$ (9,731)	\$	(2,123) \$	(3,963) \$	6 (1,678)	\$ (7,764)	s	(34,369)	\$ (17,493)
Net Regulation Adjustment Amount	s	(4,282) \$		(4,430) \$		\$	(396) \$	22 \$	(1,294) \$	(1,667)	\$	(2,690) \$	(571)			\$	(1,746) \$				ľ	(27,312)	
Real Time Miscellaneous 9	s	- \$	- \$	- \$	-	\$	- \$	- \$	- \$	-	\$	- \$		\$ -	s -	\$	- \$	- \$	; -	\$ -	s	-	\$ -
Other Charge Subtotal	\$	(8,060) \$	(17,331) \$	(22,331) \$	(47,722)	\$	(1,680) \$	(712) \$	(3,321) \$	(5,713)	\$	(4,589) \$	(3,883)	\$ (5,683)	\$ (14,155)	\$	(3,869) \$	(5,163) \$	(3,575)	\$ (12,607)	\$	(80,197)	\$ (40,818)
21 TOTAL	s	46.108 \$	39,519 \$	34,328 \$	119,955	\$	10,670 \$	(14,015) \$	24,741 \$	21,396	\$	18,932 \$	4,408	\$ 14,889	\$ 38,229	\$	19,493 \$	4,730 \$	29,984	\$ 54,207	s	233,786	\$ 118,991

### SUMMARY OF 12 ASM CHARGE TYPES (Dollars) Revenue (Cost) July 2019 - December 2019

			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(AA)	(BB)
Line No.		J	ul-19	Aug-19	3 Sep-19	rd Qtr 2019 Total	Oct-19	Nov-19	Dec-19	4th Qtr 2019 Total	July - December 2019 12-Month Total	MN Amount @ 0.508974070	July 2018 - December 2019 18- Month Total	MN Amount @ 0.508974070
1	Day Ahead Regulation Amount	\$	67,792 \$	76,068 \$	77,420 \$	221,280	\$ 42,658 \$	58,191 \$	83,872	\$ 184,720	\$ 406,001	\$ 206,644	\$ 838,869	\$ 426,962
2	Real Time Regulation Amount	\$	(19,336) \$	(21,704) \$	(14,129) \$	(55,168)	\$ (10,969) \$	(12,616) \$	(31,426)	\$ (55,011)	\$ (110,180)	\$ (56,079)	\$ (113,423)	\$ (57,729)
3	Regulation Cost Distribution Amount	\$	(11,882) \$	(10,858) \$	(11,096) \$	(33,836)	\$ (13,124) \$	(16,512) \$	(18,108)		\$ (81,580)		\$ (263,063)	
4	Regulation Subtotal	\$	36,573 \$	43,507 \$	52,195 \$	132,276	\$ 18,564 \$	29,063 \$	34,337	\$ 81,965	\$ 214,241	\$ 109,043	\$ 462,382	\$ 235,341
5	Day Ahead Spinning Reserve Amount	\$	26,508 \$	20,298 \$	6,600 \$	53,406	\$ 4,354 \$	12,768 \$	6,183	\$ 23,304	\$ 76,710	\$ 39,043	\$ 347,551	\$ 176,895
6	Real Time Spinning Reserve Amount	\$	(4,964) \$	(3,402) \$	(1,251) \$	(9,617)	\$ 294 \$	(7,135) \$	215	\$ (6,626)	\$ (16,243)	\$ (8,267)	\$ (42,379)	\$ (21,570)
7	Spinning Reserve Cost Distribution Amount	\$	(12,971) \$	(10,886) \$	(8,844) \$	(32,701)	\$ (9,941) \$	(9,615) \$	(7,041)	\$ (26,597)	\$ (59,298)	\$ (30,181)	\$ (252,896)	\$ (128,718)
8	Spinning Reserve Subtotal	\$	8,573 \$	6,010 \$	(3,495) \$	11,087	\$ (5,293) \$	(3,982) \$	(643)	\$ (9,918)	\$ 1,169	\$ 595	\$ 52,277	\$ 26,607
9	Day Ahead Supplemental Reserve Amount	\$	10,408 \$	3,124 \$	2,830 \$	16,362	\$ 4,482 \$	2,802 \$	1,867	\$ 9,152	\$ 25,514	\$ 12,986	\$ 93,619	\$ 47,650
10	Real Time Supplemental Reserve Amount	\$	(368) \$	(1,038) \$	(1,073) \$	(2,478)	\$ (816) \$	(590) \$	(1,094)	\$ (2,501)	\$ (4,979)	\$ (2,534)	\$ (30,527)	\$ (15,537)
11	Supplemental Reserve Cost Distribution Amount	\$	(5,211) \$	(1,855) \$	(1,890) \$	(8,955)	\$ (2,852) \$	(1,168) \$	(2,121)	\$ (6,141)	\$ (15,096)	\$ (7,684)	\$ (55,976)	\$ (28,490)
12	Supplemental Reserve Subtotal	\$	4,829 \$	231 \$	(133) \$	4,928	\$ 814 \$	1,044 \$	(1,348)	\$ 510	\$ 5,438	\$ 2,768	\$ 7,117	\$ 3,622
13	Day Ahead Ramp Capability Amount Real Time Ramp Capability	\$	1,776 \$	2,385 \$	943 \$	5,104	\$ 282 \$	889 \$	664	\$ 1,835	\$ 6,939	\$ 3,532	\$ 18,119	\$ 9,222
14	Amount	\$	(206) \$	(160) \$	(219) \$	(585)	\$ 11 \$	(65) \$	(19)	\$ (73)	\$ (658)	\$ (335)	\$ 1,217	\$ 620
15	Ramp Capability Subtotal	\$	1,570 \$	2,225 \$	724 \$	4,519	\$ 293 \$	825 \$	645	\$ 1,762	\$ 6,281	\$ 3,197	\$ 19,337	\$ 9,842
16	Contingency Reserve Deployment Failure Charge Amount	\$	- \$	- \$	- \$	-	\$ - \$	- \$	-	\$-	\$-	\$-	\$ (18,517)	\$ (9,425)
	Real Time Excessive Deficient Energy Deployment Charge													
17	Amount Net Regulation Adjustment	\$	(1,220) \$	(4,735) \$	(2,783) \$	(8,739)	\$ (1,393) \$	(2,455) \$	(1,873)	\$ (5,720)	\$ (14,459)	\$ (7,359)	\$ (48,827)	\$ (24,852)
18	Amount	\$	(3,068) \$	(3,616) \$	(1,879) \$	(8,562)	\$ (757) \$	(38) \$	(341)	\$ (1,135)	\$ (9,698)	\$ (4,936)	\$ (37,010)	\$ (18,837)
19	Real Time Miscellaneous	\$	- \$	- \$	- \$	-	\$ - \$	- \$	-	\$-	\$-	\$-	s -	\$ -
20	Other Charge Subtotal	\$	(4,288) \$	(8,351) \$	(4,662) \$	(17,301)	\$ (2,149) \$	(2,492) \$	(2,214)	\$ (6,855)	\$ (24,156)	\$ (12,295)	\$ (104,354)	\$ (53,113)
21	TOTAL	\$	47,257 \$	43,622 \$	44,630 \$	135,509	\$ 12,229 \$	24,458 \$	30,777	\$ 67,464	\$ 202,973	\$ 103,308	\$ 436,759	\$ 222,299

#### Summary of 12 ASM Charge Types (MWh) Revenue (Cost) July 2018 - June 2019

		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)	(N)	(0)	(P)	(Q)	(R)
Line No.		Jul-18	Aug-18	Sep-18	3rd Qtr 2018 Total	Oct-18	Nov-18	Dec-18	4th Qtr 2018 Total	Jan-19	Feb-19	Mar-19	1st Qtr 2019 Total	Apr-19	May-19	Jun-19	2nd Qtr 2019 Total	July 2018 - June 2019 12-Month Total	MN Amount @ 0.508974070
1	Day Ahead Regulation Amount	5,723.00	5,457.10	4,312.80	15,492.90	699.60	910.70	5,051.80	6,662.10	5,723.40	3,017.60	3,268.10	12,009.10	3,371.10	2,991.80	7,043.90	13,406.80	47,570.90	24,212.35
2	Real Time Regulation Amount	(308.47)	0.00	0.00	(308.47)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(308.47)	(157.00)
3	Regulation Cost Distribution Amount	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Regulation Subtotal	5,414.53	5,457.10	4,312.80	15,184.43	699.60	910.70	5,051.80	6,662.10	5,723.40	3,017.60	3,268.10	12,009.10	3,371.10	2,991.80	7,043.90	13,406.80	47,262.43	24,055.35
5	Day Ahead Spinning Reserve Amount	6,605.80	8,391.20	4,440.60	19,437.60	7,451.00	5,211.40	7,532.30	20,194.70	5,936.40	6,492.20	5,126.20	17,554.80	4,667.10	6,786.20	2,210.00	13,663.30	70,850.40	36,061.02
6	Real Time Spinning Reserve Amount	(209.29)	0.00	0.00	(209.29)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(209.29)	(106.52)
7	Spinning Reserve Cost Distribution Amount	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Spinning Reserve Subtotal	6,396.51	8,391.20	4,440.60	19,228.31	7,451.00	5,211.40	7,532.30	20,194.70	5,936.40	6,492.20	5,126.20	17,554.80	4,667.10	6,786.20	2,210.00	13,663.30	70,641.11	35,954.49
9	Day Ahead Supplemental Reserve Amount	11,325.90	14,221.90	13,663.60	39,211.40	9,187.50	6,524.60	9,361.40	25,073.50	7,208.10	5,737.60	7,217.20	20,162.90	5,682.50	8,412.10	6,638.50	20,733.10	105,180.90	53,534.35
10	Real Time Supplemental Reserve Amount	(68.45)	0.00	0.00	(68.45)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(68.45)	(34.84)
11	Supplemental Reserve Cost Distribution Amount	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Supplemental Reserve Subtotal	11,257.45	14,221.90	13,663.60	39,142.95	9,187.50	6,524.60	9,361.40	25,073.50	7,208.10	5,737.60	7,217.20	20,162.90	5,682.50	8,412.10	6,638.50	20,733.10	105,112.45	53,499.51
13	Day Ahead Ramp Capability Amount	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	Real Time Ramp Capability Amount	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	Ramp Capability Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	Real Time Excessive Deficient Energy Deployment Charge Amount	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	Net Regulation Adjustment Amount	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	Real Time Miscellaneous	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	Other Charge Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	TOTAL	23,068.50	28,070.20	22,417.00	73,555.70	17,338.10	12,646.70	21,945.50	51,930.30	18,867.90	15,247.40	15,611.50	49,726.80	13,720.70	18,190.10	15,892.40	47,803.20	223,016.00	113,509.36

Other Charge Subtotal

0.00

18,037.30

0.00

18,459.10

0.00

17,065.20

0.00

53,561.60

0.00

14,068.20

0.00

18,721.80

0.00

21,922.60

20

21 TOTAL

#### (A) (B) (C) (D) (E) (F) (G) (H) (I) (J) (AA) (BB) July 2018 -3rd Qtr 2019 July - December 2019 December 2019 18-4th Qtr 2019 MN Amount @ MN Amount @ Line No. 12-Month Total 0.508974070 Month Total 0.508974070 Jul-19 Aug-19 Sep-19 Total Oct-19 Nov-19 Dec-19 Total Day Ahead Regulation Amount 1 6,461.00 7,531.70 8,385.70 22,378.40 4,759.60 6,490.60 9,751.30 21,001.50 43,379.90 22,079.24 90,950.80 46,291.60 Real Time Regulation Amount 2 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 (308,47) (157.00) Regulation Cost Distribution Amount 3 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Regulation Subtotal 4 7.531.70 8.385.70 22.378.40 4.759.60 9.751.30 21.001.50 43.379.90 22.079.24 90.642.33 46.134.60 6.461.00 6.490.60 Day Ahead Spinning Reserve Amount 5 4,141.70 3,614.80 1,220.60 8,977.10 1,121.20 4,625.30 5,280.90 11,027.40 20,004.50 10,181.77 90,854.90 46,242.79 Real Time Spinning Reserve 6 Amount (209.29) (106.52) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Spinning Reserve Cost Distribution Amount 7 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Spinning Reserve Subtotal 8 4,141.70 3.614.80 1.220.60 8.977.10 1.121.20 4.625.30 5.280.90 11.027.40 20.004.50 10.181.77 90.645.61 46.136.27 Day Ahead Supplemental Reserve Amount 9 7,434.60 7,312.60 7,458.90 22,206.10 8,187.40 7,605.90 6,890.40 22,683.70 44,889.80 22,847.74 150,070.70 76,382.09 Real Time Supplemental Reserve Amount 10 0.00 (34.84 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 (68.45) Supplemental Reserve Cost 11 Distribution Amount 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Supplemental Reserve 12 Subtotal 22.206.10 8.187.40 22.683.70 44.889.80 22.847.74 150.002.25 76.347.26 7.434.60 7.312.60 7.458.90 7.605.90 6.890.40 Day Ahead Ramp Capability Amount 13 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Real Time Ramp Capability 14 Amount 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Ramp Capability Subtotal 15 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Contingency Reserve Deployment Failure Charge 16 Amount 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Real Time Excessive Deficient Energy Deployment Charge Amount 17 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Net Regulation Adjustment Amount 18 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Real Time Miscellaneous 19 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

#### Summary of 12 ASM Charge Types (MWh) Revenue (Cost) July 2019 - December 2019

0.00

54,712.60

0.00

108,274.20

0.00

55,108.76

0.00

168,618.12

0.00

331,290.20

### Comparison of MISO Schedule 17 Rates and Amounts before and after the start of the ASM Market

#### Monthly Average Schedule 17 Amount

January '10 through December '10	\$ 67,171.00
January '11 through June '11	\$ 67,418.00
July '11 through July '12	\$ 60,573.57
July '12 through June '13	\$ 62,582.95
July '13 through June '14	\$ 59,249.43
July '14 through June '15	\$ 52,206.79
July '15 through June '16	\$ 52,282.71
July '16 through June '17	\$ 54,561.27
July '17 through June '18	\$ 64,940.78
July '18 through June '19	\$ 67,177.98
July '19 through December '19	\$ 62,683.69

Average monthly increase from July 17' - June '18 to July '18 - June '19 \$ 2,237.20

#### Monthly Average Schedule 17 Rate per MWh

January '10 through December '10	\$ 0.09380
January '11 through June '11	\$ 0.09300
July '11 through July '12	\$ 0.09040
July '12 through June '13	\$ 0.08820
July '13 through June '14	\$ 0.07656
July '14 through June '15	\$ 0.07337
July '15 through June '16	\$ 0.07479
July '16 through June '17	\$ 0.07312
July '17 through June '18	\$ 0.08239
July '18 through June '19	\$ 0.08867
July '19 through December '19	\$ 0.08033

Average monthly increase from July 17' - June '18 to July '18 - June '19 \$ 0.00627

### MINNESOTA PUBLIC UTILITIES COMMISSION (MNPUC) ORDER ACTING ON ELECTRIC UTILITIES' ANNUAL REPORTS AND SETTING FURTHER REQUIREMENTS DOCKET NO. E999/AA-08-995

In the Minnesota Public Utilities Commission's Order of March 15, 2010, the MNPUC ordered:

12. All electric utilities required to file annual automatic adjustment reports shall work with their contractors to identify and develop reasonable contingency plans to mitigate against the risk of delays or lack of performance when contractors perform poorly and increase costs during plant outages. The Commission asks the Office of Energy Security (OES) to continue monitoring this issue and to include a report on the electric utilities' plans in its next review.

While Otter Tail has not understood or construed Ordering Point 12 to create an annual reporting requirement within annual AAA dockets, Otter Tail takes contractor performance seriously and has processes and procedures in place to select its vendors and contractors, and subsequently manage their work. A key step in mitigating delays is the selection of qualified contractors and ensuring that appropriate contractual terms are in place to address poor performance. This is combined with project management processes and procedures to hold contractors accountable. Otter Tail believes its current program serves Otter Tail's needs very well. A summary of Otter Tail's processes and procedures specifically related to Procurement, Contracting and Quality Assurance are listed below.

#### **Procurement and Contracting**

Standardized contracts are used as much as possible, with formal legal review required of all contracts over \$250,000 and for any contracts that have material changes to template language to key risk articles. Formal legal review is also required for certain contracts regardless of contract value. Request for proposals as part of a competitive bidding/selection process is the norm. Otter Tail believes that the use of competition in the contractor selection process helps Otter Tail achieve reasonable pricing and contractual terms.

Otter Tail strives to have appropriate contractual assurances in place for each transaction by using Otter Tail standardized base contracts. A required step in Otter Tail's contracting process is the development of a Contract Risk Assessment (CRA). The CRA is a worksheet listing the main risks in the particular transaction(s) the contractor is hired for, what sections of the contract the risk is covered, and a narrative describing how each particular risk is addressed in the contract. The CRA allows for an appropriate contract to be developed as the transaction is negotiated. The CRA documentation enhances the risk assessment of a project and is a useful tool for Otter Tail subject matter experts (SME), Sourcing, Legal, and Insurance personnel in developing risk mitigation strategies. The CRA helps ensure the SME is aware of the risks of the work being done by the contractor and how the risk is addressed in the contract. It also assists the SME in holding the contractor responsible.

Depending on the nature of the project additional financial assurances may be sought, including retainage, liquidated damages, performance guarantees, letters of credit, and bonds. For instance, retainage - the withholding of a portion of each invoice during a large construction project - is often an effective way to ensure performance. The leverage that retainage provides helps ensure Otter Tail's work remains a priority for the contractor, which is especially critical if there is an issue that requires immediate attention. Time-sensitive project contracts include a work schedule with milestone dates that are often linked to liquidated damages for delays, all of which helps Otter Tail hold contractors accountable.

The contract approval process ensures the contract is reviewed at the appropriate levels within Otter Tail. The CRA is included with the contract as the contract moves through various levels of organizational approvals. During this process risks and key terms are reviewed.

For major procurements on large construction projects, Otter Tail often holds internal pre-Request for Proposal and pre-contract execution meetings between the SME, Project Management, Sourcing, Legal and Insurance personnel. These meetings allow for robust discussion of project risks and ultimately help Otter Tail identify vendors well suited for the project and to negotiate contracts with appropriate terms protecting Otter Tail. Otter Tail also conducts contractor pre-bid meetings to answer any questions prospective contractors may have before submitting their bid and to discuss risk mitigation options.

### Quality Assurance (QA) Quality Control (QC)/ Project Management

Each SME is responsible for reviewing the Scope of Work and monitoring the quality of the work of the contractor. The size and nature of the project will often dictate what resources are used to ensure quality work is completed. On large projects, Otter Tail uses a separate quality assurance SME and a quality assurance firm. For the smaller construction projects, Otter Tail uses the SME and possibly an outside firm. Formal quality assurance/quality control programs are developed for the larger projects, many times with the input of the contractor selected to complete the work. These plans are vetted by Otter Tail's engineering staff, outside quality assurance firms, and senior Otter Tail engineering management.

The scope of Project Management (PM) required depends on the size and complexity of the project / transaction. Otter Tail's larger projects require that a Risk Register is completed by the Project Manager. The Risk Register is a worksheet or table listing the risks associated with the respective project as a whole. These are items that, if they occur, may cause the project to be delayed, cost more than expected, or to be postponed altogether. Each risk is analyzed and an estimated cost as well approximate probability of occurring is listed. The Risk Register assists Project Management in proactively managing the project and increasing the quality of work performed by all involved, including contractors. If needed, items identified in the Risk Register are incorporated into the contractual terms of the contractor. There are other requirements, all of which assist in the project being well run and the respective contractors held accountable.

Contract articles define the contractor's responsibilities for staying on schedule, working safely, and staying within the agreed upon price. Otter Tail also requires daily updates on work progress that are discussed in pre-scheduled meetings.

Given the size and nature of Otter Tail's business and the types of projects Otter Tail is involved in, the sourcing strategies and resources outlined above help Otter Tail to prudently scale and deploy resources as needed to effectively manage contractor performance and achieve desired performance outcomes.

#### **Use of Risk Management Provisions**

Otter Tail has sought Liquidated Damages (LDs) in the past, as reported in the 2015/2016 AAA report. Otter Tail did not have any contractor performance issues during the 2016/2017 reporting period. During the 2017/2018 reporting period Otter Tail successfully used contract provisions to recover costs relating to a Warranty Claim on an installed Selective Catalytic Reduction (SCR) Catalyst. The contract performance guarantee provisions were used to require the Original Equipment Manufacturer (OEM) to provide and install an additional new catalyst layer valued at \$975,910 and installation cost of \$132,090 for a total recovered amount of \$1,108,200. Also, on a large transmission project, Otter Tail collected damages of \$119,530 related to a consultant's error in calculating item quantities on their drawings. The contract warranty provision and insurance provision enabled the recovery of these damages. During the 2018/2019 reporting period Otter Tail successfully used contract provisions for delay liquidated damages to recover costs related to delay in achieving substantial completion on a project at Coyote Station. The contractor was late in achieving substantial completion and was charged \$2,000 per day for being 10 days late for an amount of \$20,000. Also, during 2018/2019 period, as part of a large construction project, Otter Tail successfully used contract provisions for delay liquidated damages to recover costs related to late delivery of engineering equipment drawings. The OEM failed to deliver 7 drawings on time and was charged liquidated damages of \$20,000 per drawing for a total liquidated damage amount of \$140,000.

### MN PUC ORDER ACTING ON ELECTRIC UTILITIES' ANNUAL REPORTS AND REQUIRING ADDITIONAL FILINGS DOCKET NOS. E999/AA-09-961 and E999/AA-10-884

In the Minnesota Public Utilities Commission's April 6, 2012 Order, the following was ordered for Otter Tail Power Company:

8. Interstate, Minnesota Power, Otter Tail, and Xcel shall report in future AAA filings any offsetting revenues or compensation recovered by the utilities as a result of contracts, investments, or expenditures paid for by their ratepayers. If any offsetting revenues and/or compensation are not credited back to a utility's ratepayers through the fuel clause, the IOUs shall clearly identify such revenues or compensation by source and amount and fully justify their action in the relevant AAA filings.

Otter Tail is not aware of any offsetting revenues for contracts that are not passed back through the energy adjustment.

22. The Commission requests Interstate, Minnesota Power, Otter Tail, and Xcel to comment on sharing lessons learned regarding the handling of forced outages. The Commission also requests the companies to discuss amongst themselves whether and what kind of information sharing would be beneficial. The companies shall provide in supplemental filings to their fiscal-year 2011 AAA reports, in Docket No. E999/AA-11-792, and in future AAA reports, a simple annual identification of forced outages and a short discussion of how such outages could have been avoided or alleviated.

### **Information Sharing/Lessons Learned:**

Otter Tail continues to utilize multiple forums and resources deemed most beneficial in gathering and sharing information relevant to the unique aspects of Otter Tail's generation fleet. In Reply Comments submitted by Otter Tail in Docket No. E999/AA-13-599, Otter Tail provided a list of resources (Conferences, Consultants/Vendors/Contractors, Publications, and Trade Organizations) in Attachment 1 of those Reply Comments, which Otter Tail and the other utilities within Minnesota take advantage of to address each utility's specific needs.

Additionally, Otter Tail noted the following points in those Reply Comments, which continue to hold true today:

As noted earlier, each utility's generation fleet is different. Otter Tail's base load generating fleet is small, consisting of three plants:

Big Stone Plant, of which Otter Tail is a 53.9% co-owner; Coyote Plant, of which Otter Tail is a 35% co-owner; Hoot Lake Plant, of which Otter Tail is a 100% owner. Otter Tail plant personnel participate in various user groups, training events, and conferences related to our steam based generation units. Otter Tail believes that some of the most beneficial information sharing takes place at specific technology user groups often hosted by the original equipment manufacturers, for example, "B&W Cyclone Users Association or B&W Environmental Users Group." It is Otter Tail's experience that focusing on technologies that are specific to our generation units is the most productive use of time with regards to sharing best practices in operation and minimizing forced outages.

As noted above, Otter Tail is part owner of two co-owned generation facilities; the Big Stone Plant and the Coyote Plant (Otter Tail is also the Operating Agent for these plants). The co-owners at Big Stone and Coyote are also operators or part owners of other similar sized facilities. Regularly scheduled owner's meetings, as necessitated by these joint ownership arrangements, provides Otter Tail with the opportunity to gather additional information and gain perspectives from peers on forced outage rates and other plant operations issues that occur in the natural course of being part of jointly-owned generating units.

Otter Tail notes that there are occasions when discussions and information sharing does take place between Minnesota utilities. Recent examples include Otter Tail and Xcel Energy staff meeting at the July 2014 Boiler conference to discuss best cyclone boiler practices. In addition, Xcel Energy met with Otter Tail consultants regarding details of the company's 2015 outage work at Otter Tail's Big Stone plant and Xcel Energy recently visited Big Stone plant to discuss best boiler outage/reliability/combustion practices. When opportunities arise for information sharing, Otter Tail is willing take advantage of them.

Plant personnel also attend general conferences such as the local Energy Manager Associations, The Energy Generation Conference in Bismarck, ND or the much larger Power-Gen conference. These conferences provide useful venues for gathering and sharing information but are generally not as informative as specific equipment users groups.

One additional source of information which Otter Tail finds beneficial is through Otter Tail's insurance provider. When issues occur at other plants which the insurance provider is involved, it is common for the provider to share information with other companies so that similar situations can be avoided or mitigated if possible.

In general, attendance or participation at relevant conferences, training, or users groups is more effective than information sharing between utilities that may be neighbors, but that do not have similar generation technologies and/or equipment.

### **Forced Outages:**

Otter Tail's generators experienced an aggregate of thirty-six forced outages in excess of 24 hours over the July 2018– December 2019 period; three at the Big Stone Plant, nine at Coyote Station and twenty-four at the Hoot Lake Plant units #2 and #3. Note that Hoot Lake Plant is being retired in the spring of 2021 and maintenance efforts are being managed accordingly as that plant reaches the end of its useful life. A summary of these forced outages for this reporting period can be found in Part H, Section 6, Attachment M (marked as Not Public), providing a brief overview of the following aspects of each forced outage:

- a. Dates of Outage
- b. Primary Reason for Outage
- c. Duration of Outage
- d. Description of Equipment Failure
- e. Change in Energy Costs
- f. Steps Taken to Alleviate Reoccurrence

Of the thirty-six forced outages experienced during the reporting period, twenty-four of those outages were tube leaks. Other than outages relating to tube leaks, Otter Tail's plants experienced twelve forced outages: one at Big Stone, two at Coyote, and nine at Hoot Lake units #2 and #3. Otter Tail estimates that the aggregate cost of the replacement power for these outages was **PROTECTED DATA BEGINS** ...

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25. Otter Tail shall correctly report congestion and firm transmission rights costs and revenues (currently reflected in the Day-Ahead and Real-Time Energy sections of its AAA report) in the congestion and firm transmission rights sections of its report starting with a revised or supplemental filing for the fiscal-year 2011 report, in Docket No. E999/AA-11-792.

Otter Tail incurs congestion costs when moving energy from its resources (generators and purchased power agreements) to load. The congestion costs incurred within MISO for the July 2018 through June 2019 period were (\$2,554,976) (system basis) and July 2019 through December 2019 period were (\$1,094,000) (system basis). Congestion within SPP resulted in a revenue of \$248,010 for the period of July 2018 through June 2019 and revenue of \$512,742 for July 2019 through December 2019. To offset these congestion costs, the company is allocated Auction Revenue Rights (ARRs) which can subsequently be self-scheduled into Financial Transmission Rights (FTRs). For the AAA period, the total of the congestion offsets was \$4,752,977(system basis) for a net congestion revenue of \$1,864,753(system basis).

Part H Section 3 Attachment K (marked as Not Public) reflect year to date (July 2018 - June 2019, July 2019 – December 2019 and total for July 2018 – December 2019) MISO Day 2 Charges.

Part E Section 11\_SPP\_Attachment I-2 reflect year to date (July 2018 – June 2019, July 2019 – December 2019 and total for July 2018 – December 2019) SPP Charges.

28. Interstate, Minnesota Power, Otter Tail, and Xcel shall continue to provide a comparison and reconciliation of the MISO accredited value of their generators using MISO accredited UCAP values and integrated resource plan capacity ratings in future AAA filings. This comparison and reconciliation should be prepared in sufficient detail to allow the Department to understand: (a) the impacts of generation resources that are not network deliverable (i.e., not interconnected), and (b) the possible constraints of utilities' systems and the impact of those constraints.

Please see Part H Section 6 Attachment N (marked as Not Public) for Otter Tail's Generation Deliverability Results for MISO Planning Years 2018/2019 and 2019/2020. The MISO planning year starts on June 1 and ends on May 31.

Please see Attachment O (marked as Not Public) for a side-by-side comparison of Otter Tail's MISO accredited capacity values and Otter Tail's Integrated Resource Plan capacity values. Otter Tail uses the most recent MISO Unforced Capacity (UCAP) accredited capacity values to establish its Integrated Resource Plan capacity values. The most recent MISO UCAP values vary slightly from those filed in Otter Tail's 2016 Integrated Resource Plan because they are from different MISO planning years.

For MISO Planning Year 2018/2019, six resources, excluding behind-the-metergeneration, were designated as local resources in full or in part: OTP.ASHTUBULA (Ashtabula), OTP.LANGDN1 (Langdon Owned), OTP.LANGDN2 (Langdon PPA), OTP.MPWR (Luverne), OTP.ASHTAIII (Ashtabula III PPA), and a small portion of OTP.JAMSPK1.

OTP.JAMSPK1 was partly designated as a local resource for planning year 2018/2019 because its UCAP value exceeded its Network Resource Interconnection Service (NRIS) value.

Ashtabula, Langdon Owned, Langdon PPA, Luverne, and Ashtabula III PPA are interconnected to a neighboring utility's transmission system (Minnkota Power Cooperative) which is not a MISO transmission owner. Minnkota does not offer aggregate deliverable interconnection service, but Otter Tail does have an agreement with Minnkota allowing for these resources to have transmission rights for delivery to Otter Tail load. Therefore, Otter Tail can only obtain local deliverability of these resources to Otter Tail load.

There is no impact on the integrated resource plan as a result of these resources being available only locally. Otter Tail has obtained local deliverability rights for these resources to adequately serve Otter Tail's load with firm transmission service.

Otter Tail does not plan to address the limited local resources to make them network resources. All local resources have acquired adequate firm transmission rights to serve

Otter Tail's load on the Otter Tail transmission system. In addition, Otter Tail has an agreement with Minnkota to allow resources interconnected to Minnkota's transmission system to have firm transmission rights to deliver to Otter Tail load.

#### Docket No. E999/AA-20-171 Part H Section 6 Attachment M PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 1 of 3

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Rio	Stone	Plant	Forced	Outage	Info
Dig	Stone	папи	rorceu	Outage	IIIIU

#### Outage Dates Duration Change in Primary Reason for Outage (days) Energy Costs Steps Taken to Alleviate Reoccurrence Start End Description of Equipment Failure Secondary Superheater Tube Leak - Contractor caused during outage and didn't report it. We missed finding the leak during inspection. OTP identified Contractor's responsibility and per OTP's request Contractor waived entire 1) Will require better contract supervision in the future and bill of \$204,979. 11/12/2018 11/14/2018 Tube Leak 2.11 2) We will take more time inspecting this type of work. Furnace wall tube leak in the windbox casing area. This was the second time We contacted B&W (OEM) and received some guidance 11/15/2018 11/17/2018 Tube Leak this area had been repaired in the past two years. on this repair to relieve the stress causing the leak. 1.18 Modifications made to new filters which should eliminate Bag house filter failures. This failure mode was persisent leading up to 2/3/2019 Baghouse Outage 1.39 replacement of all filters in 2019. the premature failure mode experienced with original units 2/1/2019 ... PROTECTED

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#### **Coyote Station Forced Outage Info**

Outage	e Dates			Change in	1	
Start	End	Primary Reason for Outage	(days)	Description of Equipment Failure	Energy Costs	Steps Taken to Alleviate Reoccurrence
8/1/2018	8/3/2018	Boiler Wash - Plugging	2.36	Ash is sticking in the reheat outlets and SSH outlets causing high differential around those tube banks. The tubes were also coated with so much ash that they were not absorbing heat any longer.		Plant personnel meet with the mine believing that coal ash & sodium content were the issues. This is at the time a coa analyzer was installed.
10/24/2018	10/26/2018	Rear Lower Wall Arch Tube Leaks	1.92	Sootblower erosion on the wall arch.		Plans were made during the upcoming major outage to inspect the sootblowers and UT the wall arch.
10/30/2018	11/1/2018	Boiler Screen Tube Leaks	1.75	Sootblower erosion.		Plans were made during the upcoming major outage to UT the boiler tubes.
11/1/2018	11/4/2018	Boiler Screen Tube Leaks	3.7	Sootblower erosion.		Plans were made during the upcoming major outage to UT the boiler tubes.
11/5/2018	11/9/2018	Wall Tube Leak 6th Floor	3.23	Sootblower erosion on the wall arch.		Plans were made during the upcoming major outage to inspect the sootblowers and UT the wall arch.
2/17/2019	2/21/2019	Boiler Wash Outage	3.27	Ash is sticking in the reheat outlets and SSH outlets causing high differential around those tube banks. The tubes were also coated with so much ash that they were not absorbing heat any longer.		B&W was contacted about OFA operations. Plans were made to repair OFA metal during major outage.
3/18/2019	3/19/2019	Economizer tube leak	1.68	A tube off the econ header was leaking water in the boiler causing hoppers to plug with wet/sticky ash.		During fix ICI was hired to UT around the stub tube.
7/9/2019	7/12/2019	Econ and Primary Tube Leaks	2.9	Unit was brought off line due to a primary tube leak, caused by a sootblower.		Operators were made aware of the issue and instructed to monitor and lessen blowing when possible.
11/26/2019	11/29/2019	Primary Tube Leak	2.64	A primary tube completely split in half due to sootblower erosion.		The operations department has experienced large turnover, a training coordinator was hired to assist in training operators. One of the first subject that he training on was sootblowing.
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Duration

1.915

3.63

#### Docket No. E999/AA-20-171 Part H Section 6 Attachment M PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 2 of 3

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Outag	c Dates		Duration	1 1	Change in	
Start	End	Primary Reason for Outage	(days)	Description of Equipment Failure	Energy Costs	Steps Taken to Alleviate Reoccurrence
	Hoot Lake Pl	ant #2				
8/4/2018	8/6/2018	DA #4 FWH Drip Line Leak Repair	2.16	Replaced section of piping between DA and first valve off vessel		Due to age of replaced piping and life remaining, no furthe steps needed.
10/20/2018	10/31/2018	Turbine Joint Leak Repair	11.33	Found loose turbine hardware. Tightened bolting and sealed leak.		Planned outage was scheduled for spring 2019 and bolting hardware was replaced and repaired cracks found in casing
11/18/2018	11/22/2018	Precipitator Inspection/Cleaning	3.35	Inspected and cleaned precipitator.		Continue to monitor and clean as needed.
12/12/2018	12/14/2018	Boiler poke out and tube repair	1.89	The boiler was poked clean to restore normal gas flow. Two tube leaks were found and repaired in reheat section of the boiler.		Continue to monitor and clean as needed. Boiler age has resulted in increased tube leaks. Due to upcoming retirement, tube leaks will be repaired as they occur.
1/10/2019	1/11/2019	Tube Leak Repairs 7 leaks	1.604	Repaired two leaks in firebox waterwall tubing and five leak indications in reheat section of the boiler.		Boiler age has resulted in increased tube leaks. Due to upcoming retirement, tube leaks will be repaired as they occur.
1/23/2019	1/25/2019	Boiler Poke out and leak repairs	2.478	Repaired three leaks in firebox waterwall tubing and performed preventive pao welding in reheat section		Boiler age has resulted in increased tube leaks. Due to upcoming retirement, tube leaks will be repaired as they occur.
3/7/2019	3/8/2019	Boiler poke out and tube leak repairs	1.14	The boiler was poked clean to restore normal gas flow. Repaired one tube leak found in economizer and one in firebox waterwall tubing.		Continue to monitor and clean as needed. Boiler age has resulted in increased tube leaks. Due to upcoming retirement, tube leaks will be repaired as they occur.
4/25/2019	4/27/2019	Turbine Bearing #3 Vibration	1.87	High vibration of #3 bearing.		Investigate occurrence and develop plan for upcoming planned outage. Modified bearing to take more load.
10/16/2019	10/17/2019	Boiler Tube Leak Repairs	1.79	Repaired two tube leaks found in economizer and one in firebox waterwall tubing.		Boiler age has resulted in increased tube leaks. Due to upcoming retirement, tube leaks will be repaired as they occur.
12/22/2019	12/24/2019	Economizer tube leak	2.21	Repaired leak in economizer inlet header.		Boiler age has resulted in increased tube leaks. Due to upcoming retirement, tube leaks will be repaired as they occur.
12/24/2019	12/28/2019	Turbine vibration	3.99	High vibration of #3 bearing on startup		Analyzed occurrence and modified startup procedure to alleviate likelihood of future occurrences.
	Hoot Lake Pl	ant #3				
7/17/2018	7/19/2018	Tube Leak Repairs	2.56	Repaired tube leak in overfire air box tubing. Tube leak was found on weld between tube and structure.		Tube leak was caused by cycling of boiler. Additional leaks of this type are anticipated and will be repaired as they occur.
11/6/2018	11/8/2018	Tube Repair Economizer Roof	1.67	Repaired tube leak on waterwall tube that makes up the economizer roof.		Monitor tubing and repair or replaced section as needed.
11/29/2018	12/1/2018	Precipitator Inspection/Cleaning	1.97	Inspected and cleaned precipitator.		Continue to monitor and clean as needed.
12/15/2018	12/16/2018	DA line repair	1.33	Weld repair of #4 drip line into DA vessel.		Monitor piping and replaced section of pipe if needed.
1/1/2010		Tala Lab Daraia	1.015			Boiler age has resulted in increased tube leaks. Due to upcoming retirement, tube leaks will be repaired as they

Repaired leak found in waterwall slope are of boiler

Removed ruptured section of tubing and replaced with new tubing.

Hoot Lake Plant Forced Outage Info

Outage Dates

1/1/2019

1/12/2019

1/3/2019

Tube Leak Repair

1/16/2019 Tube Rupture in economizer

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occur

occur.

Boiler age has resulted in increased tube leaks. Due to upcoming retirement, tube leaks will be repaired as they

Hoot Lake Plant Forced Outage Info

# Docket No. E999/AA-20-171 Part H Section 6 Attachment M PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 3 of 3

Outag	ge Dates		Duration		Change in	1
Start	End	Primary Reason for Outage	(days)	Description of Equipment Failure	Energy Costs	Steps Taken to Alleviate Reoccurrence
	Hoot Lake Pla	ant #3 (CONTINUED)				
1/28/2019	1/30/2019	Boiler Tube Leak Waterwall	1.078	Repaired tube leak on south waterwall of boiler		Boiler age has resulted in increased tube leaks. Due to upcoming retirement, tube leaks will be repaired as they occur.
2/18/2019	2/24/2019	Coal Conservation	6.03	Forced the Unit offline to conserve coal		The outage was outside management control due to weather conditions between plant and mine.
3/8/2019	3/15/2019	Turbine chest repair and tube leak repairs	6.23	Leak is steam chest due to erosion. Area was ground out and weld buildup was applied with appropriate heat treatment.		The Hoot Lake Steam turbines are over 50 years old and some increase in steam leaks can be expected in the final years of operation. We continue to monitor the equipment but have no current plants to invest millions to overhaul the steam turbines near the end of the plant life.
3/22/2019	3/26/2019	Coal Conservation	3.6	Forced the Unit offline to conserve coal		The outage was outside management control due to weather conditions between plant and mine.
4/7/2019	4/8/2019	Overfire Air Port Repair	1.32	Repaired tube leak in overfire air box tubing. Tube leak was found on weld between tube and structure.		Tube leak was caused by cycling of boiler. Additional leaks of this type are anticipated and will be repaired as they occur.
12/10/2019	12/12/2019	Steam leak in air preheater coils	1.7	Repaired steam leaks in air preheater steam coils caused by freezing.		Changed procedure to drain coils when Unit is offline.
12/15/2019	12/16/2019	Steam leak in air preheater coils		Repaired additional steam leaks in air preheater steam coils caused by freezing. Leaks developed after previous repair from the same event.		Changed procedure to drain coils when Unit is offline.

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#### Docket No. E999/AA-20-171 Part H Section 6 Attachment N PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 1 of 2

Otter Tail's Generation Deliverability Results for MISO Planning Year 2018-2019

Plan Year: 2018-2019 Asset Owner: All

Resource Name	LRZ	Asset Owner	Туре	Effective ICAP	GVTC	Total IS	NRIS	ERIS	XEFORd	Wind %	TL% Inc	UCAP (Total)	UCAP (ERIS)
DAYTON HOLLOW I	1	OTPW	BTMG	0.5	0.5	0.5	0	0.5	0.00000	0	3.1	0.5	0.5
DAYTON HOLLOW II	1	OTPW	BTMG	0.5	0.5	0.5	0	0.5	0	0	3.1	0.5	0.5
GARRISON HYDRO PLANT	1	OTPW	ER	4.3	4.3	4.3	0	4.3	0.01435	0	0	4.2	4.2
GARRISON HYDRO PLT 2	1	OTPW	ER	4.4	4.4	4.4	0	4.4	0.01435	0	0	4.3	4.3
HOOT LAKE HYDRO	1	OTPW	BTMG	0.7	0.7	0.7	0	0.7	0.00000	0	3.1	0.7	0.7
OTP LOAD CONTROL	1	OTPW	DR	20.1	0	20.1	20.1	0	0.00000	0	3.1	20.1	0
OTP.ASHTAIII	1	OTPW	CPNode	62.4	62.4	9999	0	9999	0.00000	0.2071	0	12.9	12.9
OTP.ASHTUBULA	1	OTPW	CPNode	48	48	9999	0	9999	0	0.1983	0	9.5	9.5
OTP.BIGSTON1	1	OTPW	CPNode	256.4	256.4	318.7	318.7	0	0.03884	0	0	246.4	0
OTP.COYOT1	1	OTPW	CPNode	151.1	151.1	174	174	0	0.25367	0	0	112.8	0
OTP.EDGLYEDGL	1	OTPW	CPNode	21	21	21	4.2	16.8	0.00000	0.1473	0	3.1	0
OTP.HETLA	1	OTPW	CPNode	20.1	20.1	29	21	8	0.04273	0	0	19.2	0
OTP.HOOTL2	1	OTPW	CPNode	58.7	58.7	65	65	0	0.0138	0	0	57.9	0
OTP.HOOTL3	1	OTPW	CPNode	82.3	82.3	88	88	0	0.02286	0	0	80.4	0
OTP.JAMSPK1	1	OTPW	CPNode	21.7	21.7	29	21	8	0.00000	0	0	21.7	0.7
OTP.JAMSPK2	1	OTPW	CPNode	21.6	21.6	29	21	8	0.03220	0	0	20.9	0
OTP.LANGDN1	1	OTPW	CPNode	40.5	40.5	9999	0	9999	0.00000	0.2041	0	8.3	8.3
OTP.LANGDN2	1	OTPW	CPNode	19.5	19.5	9999	0	9999	0	0.2099	0	4.1	4.1
OTP.MPWR	1	OTPW	CPNode	49.5	49.5	9999	0	9999	0	0.2302	0	11.4	11.4
OTP.SLWAYO1	1	OTPW	CPNode	42.8	42.8	50	50	0	0.00977	0	0	42.4	0
PISGAH HYDRO	1	OTPW	BTMG	0.7	0.7	0.7	0	0.7	0	0	3.1	0.7	0.7
TAPLIN GORGE HYDRO	1	OTPW	BTMG	0.5	0.5	0.5	0	0.5	0.00000	0	3.1	0.5	0.5
			[PROTE	ECTED DATA BE	EGINS								
KINDRED SCHOOL DISTR	1	OTPW	BTMG										
PERHAM RESOURCE RECO	1	OTPW	BTMG										
STEVENS COMMUNITY ME	1	OTPW	BTMG										
											000	TEATED DATA	

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#### Docket No. E999/AA-20-171 Part H Section 6 Attachment N PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED Page 2 of 2

Otter Tail's Generation Deliverability Results for MISO Planning Year 2019-2020

Plan Year: 2019-2020 Asset Owner: All

Resource Name	LRZ	Asset Owner	Туре	Effective ICAP	GVTC	Total IS	NRIS	ERIS	XEFORd	Wind %	TL% Inc	UCAP (Total)	UCAP (ERIS)
DAYTON HOLLOW I	1	OTPW	BTMG	0.5	0.5	0.5	0	0.5	0.00000	0	4.2	0.5	0.5
DAYTON HOLLOW II	1	OTPW	BTMG	0.5	0.5	0.5	0	0.5	0	0	4.2	0.5	0.5
GARRISON HYDRO PLANT	1	OTPW	ER	4.3	4.3	4.3	0	4.3	0.01491	0	0	4.2	4.2
GARRISON HYDRO PLT 2	1	OTPW	ER	4.4	4.4	4.4	0	4.4	0.01491	0	0	4.3	4.3
HOOT LAKE HYDRO	1	OTPW	BTMG	0.7	0.7	0.7	0	0.7	0.00000	0	4.2	0.7	0.7
OTP LOAD CONTROL	1	OTPW	DR	20.2	0	20.2	20.2	0	0.00000	0	4.2	20.2	0
OTP.ASHTAIII	1	OTPW	CPNode	62.4	62.4	9999	0	9999	0.00000	0.211	0	13.2	13.2
OTP.ASHTUBULA	1	OTPW	CPNode	48	48	9999	0	9999	0.00000	0.203	0	9.7	9.7
OTP.BIGSTON1	1	OTPW	CPNode	257.6	257.6	318.7	318.7	0	0.02459	0	0	251.3	0
OTP.COYOT1	1	OTPW	CPNode	149.5	149.5	174	174	0	0.15148	0	0	126.9	0
OTP.EDGLYEDGL	1	OTPW	CPNode	21	21	21	4.2	16.8	0	0.154	0	3.2	0
OTP.HETLA	1	OTPW	CPNode	20.4	20.4	29	21	8	0.05558	0	0	19.3	0
OTP.HOOTL2	1	OTPW	CPNode	58.6	58.6	65	65	0	0.05118	0	0	55.6	0
OTP.HOOTL3	1	OTPW	CPNode	83	83	88	88	0	0.04378	0	0	79.4	0
OTP.JAMSPK1	1	OTPW	CPNode	19.9	19.9	29	21	8	0.00637	0	0	19.8	0
OTP.JAMSPK2	1	OTPW	CPNode	21.3	21.3	29	21	8	0.04320	0	0	20.4	0
OTP.LANGDN1	1	OTPW	CPNode	40.5	40.5	9999	0	9999	0.00000	0.213	0	8.6	8.6
OTP.LANGDN2	1	OTPW	CPNode	19.5	19.5	9999	0	9999	0.00000	0.219	0	4.3	4.3
OTP.MPWR	1	OTPW	CPNode	49.5	49.5	9999	0	9999	0	0.236	0	11.7	11.7
OTP.SLWAYO1	1	OTPW	CPNode	43.5	43.5	50	50	0	0.01319	0	0	42.9	0
PISGAH HYDRO	1	OTPW	BTMG	0.6	0.6	0.6	0	0.6	0	0	4.2	0.6	0.6
TAPLIN GORGE HYDRO	1	OTPW	BTMG	0.5	0.5	0.5	0	0.5	0	0	4.2	0.5	0.5
			[PROTE	ECTED DATA BI	EGINS.								
KINDRED SCHOOL DISTR	1	OTPW	BTMG										
STEVENS COMMUNITY ME	1	OTPW	BTMG										
												TECTED DATA	

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Plan Year: 2018-2019

PRC Type	CP Node	LMR Resource Name	MISO UCAP (MW)	Resource Plan Capacity Ratings	Difference	% Difference	Explanation
external	Garrison Hydro Plant_1		4.2	5.1	-0.9	-21%	
external	Garrison Hydro Plant_2		4.3	4.4	-0.1	-2%	
local	OTP.ASHTUBULA		9.5	11.5	-2	-21%	
aggregate	OTP.BIGSTON1		246.4	236.5	9.9	4%	
aggregate	OTP.COYOT1		112.8	112.5	0.3	0%	
aggregate	OTP.EDGLYEDGL		3.1	3.6	-0.5	-16%	
aggregate	OTP.HETLA1		19.2	20.4	-1.2	-6%	
aggregate	OTP.HOOTL2		57.9	55.2	2.7	5%	
aggregate	OTP.HOOTL3		80.4	80.8	-0.4	0%	
aggregate	OTP.JAMSPK1		21.7	20.2	1.5	7%	
aggregate	OTP.JAMSPK2		20.9	21.1	-0.2	-1%	
local	OTP.LANGDN1		8.3	9.5	-1.2	-14%	Our most recent Resource Plan
local	OTP.LANGDN2		4.1	4.7	-0.6	-15%	capacity ratings were based on the
local	OTP.MPWR		11.4	13.5	-2.1	-18%	MISO assigned UCAP values for
local	OTP.ASHTAIII		12.9	15.4	-2.5	-19%	Planning Year 2016-2017. The
btmg(local)	OTP.OTP	Bemidji 1 Hydro	0	0	0	0%	MISO assigned UCAP values for
btmg(local)	OTP.OTP	Big Stone Diesel	0	1	-1	-100%	Planning Year 2018-2019 had two
btmg(local)	OTP.OTP	Dayton Hollow Hydro I	0.5	0.5	0	0%	more years of operating data that
btmg(local)	OTP.OTP	Dayton Hollow II	0.5	0.5	0	0%	went into the calculation which is
btmg(local)	OTP.OTP	Fergus Control Center Diesel	0	1.6	-1.6	-100%	why there is a discrepancy. The
btmg(local)	OTP.OTP	Hoot Lake Diesel 2A	0	0.3	-0.3	-100%	total discrepancy is less than 1%.
btmg(local)	OTP.OTP	Hoot Lake Diesel 3A	0	0.2	-0.2	-100%	
btmg(local)	OTP.OTP	Hoot Lake Hydro	0.7	0.5	0.2	29%	
btmg(local)	OTP.OTP	Pisgah Hydro	0.7	0.6	0.1	14%	
btmg(local)	OTP.OTP	Taplin Gorge Hydro	0.5	0.4	0.1	20%	
btmg(local)	OTP.OTP	Wright Hydro	0	0	0	0%	
aggregate	OTP.SLWAYO1		43.4	42.2	1.2	3%	
			[PROTECTED DATA E	BEGINS			
btmg(local)	OTP.OTP	Dakota Magic Casino					
btmg(local)	OTP.OTP	Kindred School District					
btmg(local)	OTP.OTP	Perham Resource Recovery Facility					
btmg(local)	OTP.OTP	Stevens Community Medical Cntr					
					DDOTECTE		

...PROTECTED DATA ENDS]

Plan Year: 2019-2020

PRC Type	CP Node	LMR Resource Name	MISO UCAP (MW)	Resource Plan Capacity Ratings	Difference	% Difference	Explanation
external	Garrison Hydro Plant_1		4.2	5.1	-0.9	-21%	
external	Garrison Hydro Plant_2		4.3	4.4	-0.1	-2%	
local	OTP.ASHTUBULA		9.7	11.5	-1.8	-19%	
aggregate	OTP.BIGSTON1		251.3	236.5	14.8	6%	
aggregate	OTP.COYOT1		126.9	112.5	14.4	11%	
aggregate	OTP.EDGLYEDGL		3.2	3.6	-0.4	-13%	
aggregate	OTP.HETLA1		19.3	20.4	-1.1	-6%	
aggregate	OTP.HOOTL2		55.6	55.2	0.4	1%	
aggregate	OTP.HOOTL3		79.4	80.8	-1.4	-2%	
aggregate	OTP.JAMSPK1		19.8	20.2	-0.4	-2%	
aggregate	OTP.JAMSPK2		20.4	21.1	-0.7	-3%	
local	OTP.LANGDN1		8.6	9.5	-0.9	-10%	Our most recent Resource Plan
local	OTP.LANGDN2		4.3	4.7	-0.4	-9%	capacity ratings were based on the
local	OTP.MPWR		11.7	13.5	-1.8	-15%	MISO assigned UCAP values for
local	OTP.ASHTAIII		13.2	15.4	-2.2	-17%	
btmg(local)	OTP.OTP	Bemidji 1 Hydro	0	0	0	0%	Planning Year 2016-2017. The MISO assigned UCAP values for
btmg(local)	OTP.OTP	Big Stone Diesel	0	1	-1	-100%	0
btmg(local)	OTP.OTP	Dayton Hollow Hydro I	0.5	0.5	0	0%	Planning Year 2019-2020 had three
btmg(local)	OTP.OTP	Dayton Hollow II	0.5	0.5	0	0%	more years of operating data that went into the calculation which is
btmg(local)	OTP.OTP	Fergus Control Center Diesel	0	1.6	-1.6	-100%	why there is a discrepancy. The
btmg(local)	OTP.OTP	Hoot Lake Diesel 2A	0	0.3	-0.3	-100%	total discrepancy is roughly 2%.
btmg(local)	OTP.OTP	Hoot Lake Diesel 3A	0	0.2	-0.2	-100%	total discrepancy is roughly 2%.
btmg(local)	OTP.OTP	Hoot Lake Hydro	0.7	0.5	0.2	29%	
btmg(local)	OTP.OTP	Pisgah Hydro	0.6	0.6	0	0%	
btmg(local)	OTP.OTP	Taplin Gorge Hydro	0.5	0.4	0.1	20%	
btmg(local)	OTP.OTP	Wright Hydro	0	0	0	0%	
aggregate	OTP.SLWAYO1		42.9	42.2	0.7	2%	
			[PROTECTED DATA E	BEGINS			
btmg(local)	OTP.OTP	Dakota Magic Casino					
btmg(local)	OTP.OTP	Kindred School District					
btmg(local)	OTP.OTP	Perham Resource Recovery Facility					
btmg(local)	OTP.OTP	Stevens Community Medical Cntr					
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### MN OES'S ORDER FOR APPROVAL OF A POWER PURCHASE AGREEMENT WITH DISTRICT 45 DAIRY, LLP DOCKET NO. E017/M-10-1013

In the Minnesota Public Utilities Commission's January 26, 2011, Order the following disposition was made:

3. Require Otter Tail Power to report in its automatic adjustment reports whether Otter Tail Power obtains any revenue from any source as a result of unit specific sales relating to the power purchase agreement and to itemize any such revenues by source and amount.

Otter Tail has no activity to report for this item.

### MN PUC ORDER ACTING ON ELECTRIC UTILITIES' ANNUAL REPORTS, REQUIRING REFUND OF CERTAIN CURTAILMENT COSTS, AND REQUIRING ADDITIONAL FILINGS IN 2010/2011 (FYE11) ANNUAL AUTOMATIC ADJUSTMENT REPORTS - DOCKET NO. E999/AA-11-792

In the Minnesota Public Utilities Commission's August 16, 2013 Order, the following was ordered for Otter Tail Power Company and other electric utilities:

18. The Commission finds that the Companies' responses have complied generally with all of the AAA MISO Day 1 compliance reporting requirements. The electric utilities shall provide in the initial filing of all future electric AAA reports the Minnesota jurisdictional Schedule 10 costs together with the allocation factor used and support for why the allocator is reasonable. Additionally, the electric utilities shall provide information to support increases in MISO Schedule 10 costs of five percent or higher over the prior year's costs, including an explanation of benefits received by customers for these added costs.

In compliance with the Commission's July 21, 2017 Order in Docket No. E999/AA-15-611, Otter Tail will no longer provide MISO Schedule 10 administrative charges in the Annual Automatic Adjustment filings. As stated in the July 21, 2017 Order, the Commission:

concludes it is not necessary to require these details in AAA reports because the information is filed by electric utilities in their general rates cases, which provide parties the opportunity for full record development on these issues.

- 20. Beginning with the fiscal year 2012 AAA filing, to assist the Department with its plans to do more detailed review of congested paths, including related costs and revenues in the fiscal year 2012 AAA, the electric utilities shall:
  - a. Provide hourly data on Day-Ahead Locational Marginal Price (LMP) basis, including energy, line losses, and congestion charges for each generation node, each load node, and Minnesota Hub for the current AAA period. The Department requests that utilities send this data to the DOC in Access file format and include a separate reference guide defining all column headers.

Attachment P to this response contains the hourly information requested in an Access file format (AttachmentPtoAAA\_2018-2019\_NOT PUBLIC.accdb) (marked as Not Public). *This attachment will be provided separately on a cd as it is not in a format that can be electronically filed.* 

Attachment Q contains a description of the fields contained in Attachment P.

- b. Perform the following analysis based on the above requested data:
  - i. Identify hours in which congestion costs are incurred between a generation node and load node (path);

- ii. Sum the qualifying congestion costs by path (multiplying MW times difference in Marginal congestion costs Mcc for each path); and
- iii. Identify the ten paths with the highest amount of congestion costs for the current AAA period.
- c. Include the ten paths identified above and the total of their congestion costs. For each path, also answer the following questions:
  - i. What is the Company's Financial Transmission Rights (FTRs) hedging positions and Auction Revenue Rights (ARRs) for these ten paths?
  - ii. Identify all FTR revenues, ARR revenues, congestion expenses, and the resulting net congestion cost or revenue for these ten paths.
  - iii. Based on the Company responses to a, b, and c.i. and c.ii., what costeffective improvements could be considered to reduce the congestion amounts for the identified paths?

In response to b.i. through c.iii.:

The Company serves load at three locations (within the Otter Tail balancing authority, within the Xcel balancing authority, and in the WAPA balancing authority which is now part of SPP as a result of WAPA joining SPP in October 2015). Since almost all of Otter Tail's load is contained in the Otter Tail balancing authority, we only examined the paths from generators to this load (OTP.OTP) for simplicity.

A summary of the FTR revenues, congestion expenses, and resulting net congestion on each of the top 10 paths sinking at the Otter Tail balancing authority load zone follows:

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## [PROTECTED DATA BEGINS ...

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The Company's plans to continue reducing congestion costs include:

- Annually analyzing and reviewing Option A versus Option B grandfathered rights treatment for our Big Stone and Coyote generation units.
- Reviewing and reporting on congestion costs, offsets, and net costs in the AAA report.
- Reviewing congestion costs and nomination/allocation strategy during the process completed annually.
- Nominating additional MW of ARRs for existing and future generation resources as feasibility allows.
- 22. In future AAA filings, Xcel, Minnesota Power, Otter Tail Power, and Interstate Power and Light shall provide the information needed for the Department's Table 8 in its Report (Actual Transmission Maintenance Expense Compared to Amounts Built into Rates).

See Attachment R.

- 23. In future AAA filings starting with the filings for fiscal year 2012, Xcel, Minnesota Power, Otter Tail Power, and Interstate Power and Light shall include the following for Annual Transformer Reporting:
  - a. use Xcel's reporting format for the table found in Part H, Sections 1-8, page 3 of 6, but with the incorporation of all transformers on a utility's system, and with status of each transformer identified as one of these four categories: inservice stand-alone, in-service duplicate, on-order, or storage.
  - b. provide information regarding policy on backup strategies for transformers like MP did in their Attachment 13.
  - c. provide their policy for transformer maintenance.

Transmission level transformers on Otter Tail's system operated with a low side voltage of 100 kV or above include the following:

Primary Voltage (kV)	Secondary Voltage (kV)	Maximum MVA	Location (Substation)	State	Status
345	230	448	Big Stone South	SD	In-Service Stand Alone
345	230	448	Big Stone South	SD	In-Service Stand Alone
345	230	336	Maple River	ND	In-Service Stand Alone
345	230	336	Maple River	ND	In-Service Stand Alone
345	115	336	Jamestown	ND	In-Service Stand Alone
345	115	336	Jamestown	ND	In-Service Stand Alone
345	115	112	Buffalo	ND	In-Service Stand Alone
345	115	112	Buffalo	ND	In-Service Stand Alone
230	115	140	Forman	ND	In-Service Stand Alone
230	115	140	Rugby	ND	In-Service Stand Alone
230	115	140	Rugby	ND	In-Service Stand Alone
230	115	140	Winger	MN	In-Service Stand Alone
230	115	233	Big Stone	SD	In-Service Stand Alone
230	115	187	Cass Lake	MN	In-Service Stand Alone
345	115	112	Wahpeton	ND	Storage

### **Backup Strategies**

Otter Tail's transmission system is planned and operated through the Midcontinent Independent System Operator (MISO) in compliance with the reliability standards enforced by the North American Electric Reliability Corporation (NERC). Under NERC's transmission planning standard (TPL), the system must be designed to withstand the loss of a transformer and still be able to reliably serve all load.

For the size and types of the transformers shown in the table above, Otter Tail's spare transformer inventory is typically driven by the availability of transformers that had been previously replaced on its system. Otter Tail replaced two 345/115 kV transformers at Jamestown during 2016 due to a new wind farm interconnection. Due to other reliability needs on its system that could be addressed by these transformers, one of the existing 345/115 kV transformers from Jamestown was moved to Buffalo in 2017 and the other 345/115 kV transformer was kept as a spare transformer at a storage yard in Wahpeton, North Dakota. This spare 345/115 kV transformer is scheduled to be moved to Astoria in 2020 to address a system need in South Dakota.

In the event of a permanent failure of a transformer, Otter Tail would evaluate any option available to restore the system capability back to its original level and proceed with the least cost option. Options could include, but are not limited to, repairing or replacing the failed transformer, contacting neighboring utilities or other utility partners that Otter Tail has a relationship with through participation agreements, such as the Midwest Transmission Assistance Group (MTAG).

At our two largest generating stations (Big Stone and Coyote), Otter Tail along with other co-owners, have invested in on-site spare generator step-up transformers at each location. This provides a way to reduce the downtime of these generators in the event of a transformer failure.

### **Transformer Maintenance Policy**

Otter Tail's policy for transformer maintenance for the transmission level transformers is similar to the maintenance policy used for all transformers on the Otter Tail system with a capacity of 10 MVA or higher.

For new transformer installations, the following tests are performed to ensure the transformer will operate as expected.

- Meggar testing to identify if there is adequate insulation protection to ground and between windings within the transformer.
- Transformer Turns Ratio (TTR) test to verify the turns ratio of the transformer is as specified on the nameplate.
- Doble insulation power factor test to verify the electrical insulation level of the transformer and its components (oil, paper, bushings, etc.) are within specifications.
- Winding resistance test to identify if there is consistent and comparable resistance measurements between windings within the transformer.
- Dissolved Gas in Oil Analysis (DGA) to determine the level of dissolved gases and moisture present in the transformer oil.

For existing transformers on the system, Otter Tail performs the following transformer tests on an annual basis, with the frequency of these tests increasing to as often as monthly if transformers are showing signs of internal failures:

- Routine inspections to assess the physical condition of the transformer and its components.
- Thermal imaging of transformer connections and bushings for hot spots to ensure appropriate conductivity between terminal connections.
- Dissolved Gas in Oil Analysis (DGA), on transformers 10 MVA and above, to determine the level of gases and moisture present in the transformer oil.

The annual frequency of this testing allows for the comparison of test results to transformer nameplate values, and from year-to-year, to help identify the early signs of transformer breakdown in order to prevent a catastrophic failure of a transformer.

# **REFERENCE GUIDE FOR Table DA LMP\_YR 2018-2019**

Note that we included the dates from June 22, 2018 – December 25, 2019 since this matches our accounting months for which data was supplied for the other requests in this year's AAA Audit response. This was done so that we could validate numbers against our monthly reports which are on an accounting period basis.

**Column Headings:** 

#### NODES:

Generation Nodes include:

**OTP.ASHTUBULA** – wind unit OTP.ASHIII - wind unit OTP.BIGSTON1 - baseload unit OTP.COYOT1 - baseload unit OTP.EDGLYEDGL - wind unit OTP.HETLA - peaking unit OTP.HOOTL2 - baseload unit OTP.HOOTL3 - baseload unit OTP.JAMSPK1 - peaking unit OTP.JAMSPK2 - peaking unit OTP.LANGDN1 - wind unit OTP.LANGDN2 - wind unit OTP.MPWR -wind unit OTP.SLWAYO1 - peaking unit Load Nodes include: MDU.OTP – Our load in MDU control area NSP.OTP – Our load in NSP control area OTP.MUAG - Municipal load in OTP control area OTP.OTP - Otter Tail load in our control area Hubs include: MINN.HUB

#### DATE:

Includes the dates of June 22, 2018 – December 25, 2019 corresponding to our accounting practices.

#### HE:

Hour ending.

#### DALMP:

Day Ahead LMP for this node, date and hour.

#### **ENERGY:**

The energy component of the DA LMP calculated by subtracting the congestion and loss components from the DA LMP.

### MLC:

Marginal Loss component of the LMP.

#### MCC:

Marginal Congestion component of the LMP.

# **REFERENCE GUIDE FOR Table Top 10**

Note that we included the dates from June 22, 2018 – December 25, 2019 since this matches our accounting months for which data was supplied for the other requests in this year's AAA Audit response. This was done so that we could validate numbers against our monthly reports which are on an accounting period basis.

**Column Headings:** 

#### **GENERATOR NODE**:

Generation Nodes include:

OTP.ASHTUBULA – wind unit OTP.BIGSTON1 – baseload unit OTP.COYOT1 – baseload unit OTP.EDGLYEDGL – wind unit OTP.HETLA – peaking unit OTP.HOOTL2 – baseload unit OTP.JAMSPK2 – peaking unit OTP.LANGDN1 – wind unit OTP.LANGDN2 – wind unit SWPP – external resource, federal power allocation

#### FIELD 2:

Text field valued "TO".

#### LOAD NODE:

OTP.OTP – Otter Tail load in our control area. For simplification, all congestion was calculated between the generators and the primary OTP load zone. Other load zones are so small as to be irrelevant to the calculation.

#### TOTAL NET CONGESTION:

This equals the MWs generated at the node times the difference between the MCC at the generator node and the MCC at the load node totaled for the AAA Audit year 2018-2019 for each path.

# **REFERENCE GUIDE FOR ACCESS TABLE NAMED Path Detail**

Note that we included the dates from June 22, 2018 – December 25, 2019 since this matches our accounting months for which data was supplied for the other requests in this year's AAA Audit response. This was done so that we could validate numbers against our monthly reports which are on an accounting period basis.

**Column Headings:** 

#### DATE:

Includes the dates of June 22, 2018 – December 25, 2019 corresponding to our accounting practices.

#### NODE:

Generation Nodes include:

OTP.ASHTUBULA – wind unit OTP.ASHIII – wind unit OTP.BIGSTON1 – baseload unit OTP.COYOT1 – baseload unit OTP.EDGLYEDGL – wind unit OTP.HETLA – peaking unit OTP.HOOTL2 – baseload unit OTP.HOOTL3 – baseload unit OTP.JAMSPK1 – peaking unit OTP.JAMSPK2 – peaking unit OTP.LANGDN1 – wind unit OTP.LANGDN2 – wind unit OTP.SLWAYO1 – Peaking unit SWPP – external resource, federal power allocation

#### **Product**:

OTP internal transaction type:

"<u>DA Gen Sched Customer – NETMCCPrice</u>" is the hourly DA MCC congestion difference between OTP.OTP load zone and the named generator. It is defined as the hourly DA MCC at the OTP.OTP load zone minus the hourly DA MCC at the named generator.

"<u>DA Gen Sched Customer – TOTAL NETMCC</u>" is the hourly congestion between the OTP.OTP load zone and the named generator. It is defined as the "DA Gen Sched Customer – NetMCCPrice" multiplied by the DA cleared MW schedule at the generator.

"DA Phys Sched Customer – NETMCCPrice" is the hourly DA MCC congestion difference between OTP.OTP load zone and the SWPP interface with MISO where the federal power allocation is injected to the MISO system. It is defined as the hourly DA MCC at the OTP.OTP load zone minus the hourly DA MCC at the SWPP interface.

"DA Phys Sched Customer – TOTAL\_NETMCC" is the hourly congestion between the OTP.OTP load zone and the SWPP interface with MISO. It is defined as the "DA Phys Sched Customer – NetMCCPrice" multiplied by the DA cleared MW schedule at the interface delivered to those Otter Tail Power Company customers who have contractual rights to the federal power allocation.

"<u>MTRADJGEN-NETMCCPrice</u>" is the hourly congestion difference between the DA congestion at OTP.OTP and the RT congestion at the named generator. It is defined as the DA MCC at OTP.OTP minus the RT MCC at the named generator.

"<u>MTRADJGEN – TOTAL\_NETMCC</u>" is the additional hourly congestion charges/revenues accrued in the RT market due to the difference between actual RT generation and DA cleared MW schedules and also the difference between the DA congestion at the load and RT congestion at the generator. It is defined as the "MTRADJGEN-NETMCCPrice" multiplied by the meter adjustments to the generation (seen in the RT market as compared to DA cleared generation).

#### HE = Hour Ending (1-24):

Total: Sum of the hourly net congestions for this node on this date.

#### Docket No. E999/AA-20-171 Part H Section 8 Attachment R

#### Otter Tail Power Company Transmission Maintenance Expense Approved in Docket No. E017/GR-15-1033 Compared to 2018 / 2019 Actual

		FERC	20	16 Test Year	201	L7 Actual Year	201	L8 Actual Year	201	9 Actual Year
Line No.	Account Description	Account		Amount		Amount		Amount		Amount
1	Maintenance Supervision and Engineering	568.0	\$	266,866	\$	207,223	\$	249,415	\$	180,614
2	Maintenance of Computer Hardware, Software, etc	569.1; 569.2; 569.3		1,057,156		876,627		707,699		832,999
3	Maintenance of Station Equipment	570.0		1,383,614		1,219,312		1,376,573		1,168,342
4	Maintenance of Overhead System	571.0		2,304,890		1,936,497		2,017,323		1,219,884
5	Maintenance of Underground Lines	572.0		0		14		5,272		2,126
6	Maintenance of Computer Software	576.3		260,165		212,635		280,206		239,647
7	Total System Historical Transmission Maintenance Expense		\$	5,272,691	\$	4,452,308	\$	4,636,488	\$	3,643,611
8	Jurisdictional D2 Allocation Factor (2016 Rate Case)			50.297428%		50.297428%		50.297428%		50.297428%
9	Total MN Jurisdictional Transmission Maintenance Expense		\$	2,652,028	\$	2,239,396	\$	2,332,034	\$	1,832,643

The above numbers are on a calendar year basis.

### MN PUC ORDER ACTING ON ELECTRIC UTILITIES' ANNUAL REPORTS AND REQUIRING ADDITIONAL FILINGS IN 2013/2014 (FYE14) ANNUAL AUTOMATIC ADJUSTMENT REPORTS - DOCKET NO. E999/AA-14-579

In the Minnesota Public Utilities Commission's June 2, 2016 Order, the following was ordered for Otter Tail Power Company and other electric utilities:

4. The Commission accepts Otter Tail's identification of and explanation for its higher Revenue Sufficiency Guarantee Make-Whole Payments in May 2013. The Commission disallows recovery of \$37,058.

In Otter Tail's Energy Adjustment effective July 1, 2016, a credit of (\$37,058) was a line item on the monthly calculation (Part E Section 2 Attachment D of Docket No. E999/AA-17-492).

- 9. The Commission accepts the uncontested comments, conclusions and recommendations in the Department's Response Comments at 35-40 (August 26, 2015) and takes the following actions:
  - 6) Accepts Otter Tail's compliance filing on its electric service agreement with Enbridge Energy (January 26, 2007 Order) and permits Otter Tail to stop reporting this information.

This reporting item is no longer required as stated in Docket No E999/AA-14-579 June 2, 2016 Order.

18) Accepts Otter Tail's reporting with respect to fuel costs associated with coal shortages during FYE14. Requires Otter Tail to report in future AAA filings any coal conservation measures taken in response to coal delivery issues during the relevant reporting period, along with a discussion of Otter Tail's efforts to minimize coal, coal delivery and any replacement power costs if needed to address issues with coal supplies for Otter Tail.

Within the reporting period, July 2018 thru December 2019, Hoot Lake Plant experienced two instances that required coal conservation measures to be implemented. In each occurrence Hoot Lake limited operation of the plant to one unit to conserve coal. The first instance started February 18, 2019 lasting 6 days until February 24, 2019. Extreme cold weather had caused a delay in Burlington Northern's scheduling that caused a delay in Hoot Lake's train movement. The second instance started on March 22, 2019 lasting almost 4 days until March 26, 2019. Melting snow had caused flooded tracks on Burlington Northern's network delaying Hoot Lake's train on its return from the mine.

21) Requires the Companies to continue to provide in the initial filing of all future electric AAA reports the Minnesota jurisdictional Schedule 10 costs together with the allocation factor used and support for why the allocator is reasonable.

See Part H Section 8 Docket No E999/AA-11-792, 18. for response.

22) Requires the Companies to provide in the initial filing of all future electric AAA reports, information to support MISO Schedule 10 cost increases of five percent or higher over the prior year's costs, including an explanation of benefits received by customers for these added costs.

See Part H Section 8 Docket No E999/AA-11-792, 18. for response.

25) Accepts Otter Tail's MISO Day 2 reporting for FYE14. Requires Otter Tail to provide in future AAA filings information and narrative to explain why the selected option for Financial Transmission Rights and ARRs is better for rate payers than the alternative.

The company's two largest generating stations (Big Stone and Coyote) have grandfathered transmission rights. These grandfathered transmission rights allow the company to choose between two different congestion hedging instruments on an annual, ARR market year, basis; namely Option A and Option B.

Option A is the equivalent of holding an FTR between Otter Tail's generating stations and Otter Tail's load zone. Option A treatment is not dependent on accurately forecasting the clearing of day-ahead (DA) schedules from the generating stations.

Option B status allows the company to receive a refund of congestion costs incurred on the energy scheduled between generator and load. However, the MISO scheduling rules under Option B require that the companion, Option B, financial schedule, be less than or equal to the DA clearing from the unit. If the Option B financial schedule exceeds the DA, cleared, MWs from the unit, the hourly congestion hedge is lost.

Otter Tail chose to switch its grandfathered status from Option B to Option A beginning June 2013.

The transition from Option B to Option A was made due to increased volatility and difficulty in predicting DA, cleared, MW values from Otter Tail's Big Stone and Coyote generating stations and the resulting elimination of the rebate of congestion between the generation and the load for those hours, often during hours when the congestion hedge is needed the most.

Otter Tail preserves the right to change the grandfathered status on a yearly basis. This enables Otter Tail to revert back to Option B should system conditions change. The choice between Option A and Option B grandfathered rights treatment is reviewed on a yearly basis.

Since the volatility and difficulty in predicting the DA, cleared, MW values from Big Stone and Coyote generation units remain; Otter Tail continues to choose Option A treatment.

### MN PUC ORDER ACCEPTING REPORTS, REQUIRING REFUND, AND SETTING ADDITIONAL REQUIREMENTS IN 2014/2015 (FYE 15) ANNUAL AUTOMATIC ADJUSTMENT REPORTS - DOCKET NO. E999/AA-15-611

In the Minnesota Public Utilities Commission's July 21, 2017 Order, the following was ordered for Otter Tail Power Company and other electric utilities:

### FINDINGS AND CONCLUSIONS IV. MISO Schedule 10 Costs

The Commission concludes it is not necessary to require these details in AAA reports because the information is filed by electric utilities in their general rate cases, which provide parties the opportunity for full record development on these issues.

The MISO Schedule 10 information has been removed from Part D Section 5 and Part H Section 8.

### ORDER

- 7. In future AAA filings, Xcel, Minnesota Power, and Otter Tail must include in their independent auditors' reports the following:
  - a. comparison of the documentation in support of payments and invoices received from energy suppliers;
  - b. comparison of the base costs of power approved by the Commission to the bases used by the utility;
  - c. recalculation of the billing adjustment charge (credit) per kWh charged to customers for purchased power for the entire applicable period by customer clsss;
  - d. comparison of the accounting records for the revenues billed to customers for energy delivered for the relevant period to the total sales of electric energy;
  - e. on a test basis, an examination of individual billings in each customer class by recalculating the automatic adjustment of charges and credits and tracing to individual customers' subsidiary records to ensure that the calculated credit or charge was correctly recorded;
  - f. an examination of any corrections to FCA charges or other billing errors;
  - g. a reconciliation of total revenue and cost of power in the utility's general ledger; and

h. a recalculation of any true-up, and tracing of the related revenue and expense amounts to the utility's accounting records.

See Part F - Minn. R. 7825.2820 Annual Independent Auditors' Report

8. All electric utilities shall identify all dockets in which the Commission has granted rule variances to a utility's FCA (such as those authorizing true-up provisions, those allowing costs of purchased power adjustments to flow through FCA, and those allowing MISO costs and revenues to be included in the FCA).

MN Docket No. E017/PA-01-1391 dated May 9, 2002

MN Docket No. E017/M-03-30 dated September 28, 2006

MN Docket No. E017/M-03-970 dated November 14, 2006

MN Docket No. E017/M-05-284 dated December 20, 2006

MN Docket No. E017/M-06-1332 dated January 16, 2007

MN Docket No. E999/AA-06-1208 dated February 6, 2008

MN Docket No. E017/M-08-528 dated August 23, 2010

MN Docket No. E999/AA-07-1130 dated October 20, 2010

MN Docket No. E017/M-10-1013 dated January 26, 2011

MN Docket No. E017/GR-10-239 approved April 25, 2011 with an effective date of October 1, 2011

MN Docket Nos. E999/AA-09-961 and E999/AA-10-884 dated April 6, 2012

MN Docket No. E999/AA-11-792 dated August 16, 2013

MN Docket No. E017/MR-15-1034 and E017/GR-15-1033 dated April 14, 2016

MN Docket No. E999/CI-03-802 and E999/AA-12-757 and E999/AA-13-599 and E999/AA-14-579 dated June 2, 2016 and December 12, 2018

MN Docket No. E999/AA-15-611 dated July 21, 2017

MN Docket No. E999/AA-17-492 and E999/AA-18-373 dated February 7, 2019 and November 13, 2019

### MN PUC ORDER ACCEPTING 2016-2017 (FYE 17) REPORTS AND SETTING ADDITIONAL REQUIREMENTS IN 2017/2018 (FYE 18) ANNUAL AUTOMATIC ADJUSTMENT REPORTS - DOCKET NO. E999/AA-17-492 and DOCKET NO. E999/AA-18-373

In the Minnesota Public Utilities Commission's February 7, 2019 Order, the following was ordered for Otter Tail Power Company and other electric utilities:

### FINDINGS AND CONCLUSIONS

### III. Cost of Self-Commitment and Self-Scheduling

MISO markets identify the supply of electric generation available throughout the MISO regions, and the anticipated (and, in real time, the actual) demand for electricity in each area, selecting generators for dispatch in a manner designed to minimize overall costs to the system while meeting reliability requirements. MISO unit commitment is the process that determines which generators (and other resources) will operate to meet the upcoming need. MISO scheduling and dispatch sets the hourly output for each committed resource, using simultaneously co-optimized Security Constrained Unit Commitment and Security Constrained Economic Dispatch to clear and dispatch the energy and reserve markets. A market participant-that is, anyone registered for participation in MISO markets-can specify the production cost of its generator, and MISO will refrain from dispatching the resource until market prices meet or exceed that level, again, subject to reliability requirements. But under some circumstances a participant will prefer to commit its generator to be available for MISO dispatch ("selfcommit"), and unilaterally set the generator's output level ("self-schedule"), accepting whatever market price results rather than awaiting economic dispatch by MISO.<sup>3</sup>

Renewable sources of generation have the advantage of incurring no fuel costs, which tends to reduce their operating costs and make them attractive options for MISO dispatch. However, self-committed and self-scheduled generators may displace these resources—even if, at any given moment, the renewable resource had lower operating costs.

To further explore this matter, the Commission will direct Minnesota Power, Otter Tail Power, and Xcel to make compliance filings containing an initial analysis of the impacts of self-commitment and self-scheduling of their generators, including the annual difference between production costs and corresponding prevailing market prices both for FYE17 and FYE18. And the Commission will direct these utilities to provide a complete analysis and discussion of the impacts of self-commitment and self-scheduling of their generators, including the annual difference between production costs and corresponding prevailing market prices, in their future AAA reports.

<sup>&</sup>lt;sup>3</sup> See generally MISO Business Practices Manual No. 002, "Energy and Operating Reserve Markets" (October 15, 2018).

### ORDER

5. In future AAA Reports, Minnesota Power, Otter Tail Power, and Xcel shall each provide a complete analysis and discussion of the consequences of selfcommitment and self-scheduling of their generators, including the annual difference between production costs and corresponding prevailing market prices.

The Commission's November 13, 2019 Order in Docket No E999/AA-18-373 opens an investigation in a separate docket (Docket No E999/CI-19-704) for this matter.

### ORDER

9. The Commission will open an investigation in a separate docket<sup>8</sup> and require Minnesota Power, Otter Tail, and Xcel to report their future selfcommitment and self-scheduling analyses using a consistent methodology by including fuel cost and variable O&M costs, matching the offer curve submitted to MISO energy markets.

<sup>&</sup>lt;sup>8</sup> In the Matter of an Investigation into Self-Commitment and Self-Scheduling of Large Baseload Generation Facilities, Docket No. E-999/CI-19-704.

# ANNUAL AUTOMATIC ADJUSTMENT REPORT

## **DOCKET NO. E999/AA-20-171**



### PART I – MINN. R. 7825.2840 NOTICE OF REPORTS AVAILABILITY, CERTIFICATE OF SERVICE, AND SERVICE LISTS



February 28, 2020

### Notice of Availability of Reports

To: All Intervenors in Otter Tail Power Company Retail Rate Proceedings Docket No. E017/GR-10-239 Docket No. E017/GR-15-1033

The Minnesota Public Utilities Commission requires Otter Tail Power Company and other Minnesota public utilities to file various annual reports concerning utility operations with the Commission as specified in Minn. R. 7825.2800 to 7825.2830. The subject matter of the reports filed includes the following:

Minn. R. 7825.2800 Policies and Actions
Minn. R. 7825.2810 Automatic Adjustment Charges
Minn. R. 7825.2820 Annual Independent Auditors' Report
Minn. R. 7825.2830 Annual Five-Year Projection Report
Minn. R. 7825.2840 Notice of Reports Availability, Certificate of Service, and Service Lists

Also included in the report are the additional fuel clause related reporting requirements along with MISO Day 2 and ASM compliance requirements under various Commission Orders.

Minn. R. 7825.2840 requires Otter Tail Power Company to provide this notice of availability of such reports to all intervenors in the previous two general rate cases. The above report is available for public inspection at the MPUC offices or on the Minnesota Department of Commerce edockets website (<u>https://www.edockets.state.mn.us/efiling</u>). Copies of the above reports are also available upon written request to Otter Tail Power Company. Please note that certain information contained in these reports is considered trade secret and is unavailable to the public.

Sincerely,

/s/ STUART TOMMERDAHL Stuart Tommerdahl Manager, Regulatory Administration

# **CERTIFICATE OF SERVICE**

### RE: 2020 Annual Automatic Adjustment of Charges Report - Electric Minnesota Rules 7825.2800 – 7825.2840 Docket No. E999/AA-20-171

I, Kim Ward, hereby certify that I have this day served a copy of the following, or a summary thereof, on Will Seuffert and Sharon Ferguson by e-filing, and Letters of Availability to all other persons on the attached service list by electronic service or by first class mail.

### Otter Tail Power Company Annual Report

Dated: February 28, 2020

#### /s/ KIM WARD

Kim Ward Regulatory Filing Coordinator Otter Tail Power Company 215 South Cascade Street Fergus Falls MN 56537 (218) 739-8268

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No	GEN_SL_Otter Tail Power Company_AAA Service List 2018-2019
Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	GEN_SL_Otter Tail Power Company_AAA Service List 2018-2019
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.st ate.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	No	GEN_SL_Otter Tail Power Company_AAA Service List 2018-2019
James C.	Erickson	jericksonkbc@gmail.com	Kelly Bay Consulting	17 Quechee St Superior, WI 54880-4421	Electronic Service	No	GEN_SL_Otter Tail Power Company_AAA Service List 2018-2019
Sharon	Ferguson	sharon.ferguson@state.mn .us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	GEN_SL_Otter Tail Power Company_AAA Service List 2018-2019
Shane	Henriksen	shane.henriksen@enbridge .com	Enbridge Energy Company, Inc.	1409 Hammond Ave FL 2 Superior, WI 54880	Electronic Service	No	GEN_SL_Otter Tail Power Company_AAA Service List 2018-2019
Douglas	Larson	dlarson@dakotaelectric.co m	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	GEN_SL_Otter Tail Power Company_AAA Service List 2018-2019
James D.	Larson	james.larson@avantenergy .com	Avant Energy Services	220 S 6th St Ste 1300 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Otter Tail Power Company_AAA Service List 2018-2019
Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting, LLC	961 N Lost Woods Rd Oconomowoc, WI 53066	Electronic Service	No	GEN_SL_Otter Tail Power Company_AAA Service List 2018-2019
Andrew	Moratzka	andrew.moratzka@stoel.co m	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Otter Tail Power Company_AAA Service List 2018-2019

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Generic Notice	Residential Utilities Division	residential.utilities@ag.stat e.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	No	GEN_SL_Otter Tail Power Company_AAA Service List 2018-2019
Larry L.	Schedin	Larry@LLSResources.com	LLS Resources, LLC	332 Minnesota St, Ste W1390 St. Paul, MN 55101	Electronic Service	No	GEN_SL_Otter Tail Power Company_AAA Service List 2018-2019
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Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	OFF_SL_15-1033_Official Service List
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.st ate.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_15-1033_Official Service List
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Rate Case Inbox	Rate Case Inbox	mnratecase@otpco.com	Otter Tail	N/A	Electronic Service	No	OFF_SL_15-1033_Official Service List
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Generic Notice	Residential Utilities Division	residential.utilities@ag.stat e.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_10-239_Official
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Larry L.	Schedin	Larry@LLSResources.com	LLS Resources, LLC	332 Minnesota St, Ste W1390 St. Paul, MN 55101	Electronic Service	No	OFF_SL_10-239_Official
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_10-239_Official
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