



Before the North Dakota Public Service Commission
State of North Dakota

In the Matter of the Application of Otter Tail Power Company
For Authority to Increase Rates for Electric Utility
Service in North Dakota

Case No. PU-17-398
OAH File No. 20170622

Exhibit ____

MERCER UPDATES, PENSION CONTRIBUTION AND PENSION ASSET

Supplemental Direct Testimony and Schedules of

CHRISTINE L. PETERSEN

March 23, 2018

TABLE OF CONTENTS

I. INTRODUCTION..... 1

II. PURPOSE AND OVERVIEW OF SUPPLEMENTAL TESTIMONY 1

III. MERCER UPDATES AND ASC 715..... 2

 1. FAS 87 Pension Expenses..... 3

 2. Update of OPEB Expenses 4

 3. ASC 715 4

IV. PENSION CONTRIBUTION AND PENSION ASSET 5

V. OVERALL IMPACTS AND CONCLUSION..... 8

ATTACHED SCHEDULES

Schedule 1 – Mercer 2018 Update

Schedule 2 – Calculation of Customer Benefit from Prepaid Pension Asset

Schedule 3 – Summary of Cost Savings

1 **I. INTRODUCTION**

2 Q. PLEASE STATE YOUR NAME AND OCCUPATION.

3 A. My name is Christine L. Petersen. I am employed by Otter Tail Power Company (OTP
4 or Company) as Financial/Rates Analyst, Business Planning/Regulatory Accounting
5 Department.
6

7 Q. DID YOU PREVIOUSLY FILE DIRECT TESTIMONY IN THIS PROCEEDING?

8 A. Yes. I filed Direct Testimony on behalf of OTP addressing some O&M Budget and
9 information related to pension and benefits.

10 **II. PURPOSE AND OVERVIEW OF SUPPLEMENTAL DIRECT**
11 **TESTIMONY**

12 Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL DIRECT TESTIMONY?

13 A. My Supplemental Direct Testimony explains: (1) the effects of updated information from
14 OTP's actuary, Mercer, on OTP's costs and O&M expenses for pension and Other Post-
15 Employment Benefits (OPEBs); (2) the effects of OTP's \$20 million contribution to its
16 pension made in 2018 on OTP's Pension Asset and 2018 pension cost; (3) OTP's
17 decision to retain its prior approach to capitalization of benefit costs under ASC 715
18 rather than expense all benefit costs; and (4) the overall impact of these matters on OTP's
19 2018 Test Year North Dakota revenue requirement.
20

21 Q. HOW IS YOUR SUPPLEMENTAL TESTIMONY ORGANIZED?

22 A. Section III explains the effects of the updated information from Mercer and OTP's
23 decision to maintain its prior approach under ASC 715. Section IV explains the effect of
24 OTP's \$20 million contribution to its pension. Section V presents the overall impact of
25 all these factors on OTP's 2018 Test Year North Dakota revenue requirement and my
26 conclusions.

1 Q. DID YOU USE ANY LABELING CONVENTIONS IN YOUR SUPPLEMENTAL
2 DIRECT TESTIMONY?

3 A. Yes. In the great majority of my Supplemental Direct Testimony, I am presenting the
4 discussion on an OTP Total Company basis. When doing so, I have not used any further
5 description or parenthetical notation. In some parts of my Supplemental Direct
6 Testimony, I present both OTP Total Company and North Dakota jurisdictional
7 information and I use the designations (OTP Total) and (OTP ND) when doing so.
8

9 **III. MERCER UPDATES AND ASC 715**

10 Q. HAS OTP OBTAINED UPDATED INFORMATION FROM MERCER, ITS
11 ACTUARY, PERTAINING TO ITS 2018 PENSION AND OPEB COSTS?

12 A. Yes. OTP received updates from Mercer dated March 5, 2018 (Mercer 2018 Update). A
13 copy of the Mercer 2018 Update is attached to my Supplemental Testimony as Exhibit
14 ____ (CLP-2), Schedule 1.
15

16 Q. DOES THE MERCER 2018 UPDATE PROVIDE THE ACTUAL LEVELS OF OTP'S
17 2018 PENSION AND OPEB EXPENSES?

18 A. Yes. Actual pension costs that are reflected in financial statements are determined on the
19 basis of actuarial calculations typically made at the beginning of a financial year.
20 Accordingly, the Mercer 2018 Update provides OTP's actual pension and OPEB levels
21 for 2018. My testimony will explain both the change in actual costs for pension and
22 OPEB, but there is still an estimate associated with how much actual costs will be
23 included to O&M Expenses. Throughout my testimony I will refer to either total pension
24 or OPEB costs as what the Mercer 2018 Update has provided, and I will estimate the
25 amount that will be included in OTP's O&M expense as OTP ND EST.
26

1 **1. FAS 87 Pension Expenses**

2 Q. WHAT IS THE UPDATED 2018 TEST YEAR O&M PENSION EXPENSE THAT
3 REFLECTS THE ASSUMPTIONS IN THE MERCER 2018 UPDATE?

4 A. The updated 2018 Test Year Pension O&M expense is \$4,734,907 (OTP Total) /
5 \$1,918,086 (OTP ND EST).
6

7 Q. HOW DOES THAT EXPENSE LEVEL COMPARE TO THE O&M EXPENSE LEVEL
8 INCLUDED IN OTP'S INITIAL FILING IN THIS PROCEEDING?

9 A. The 2018 pension O&M expenses have decreased by \$120,802 (OTP Total) / \$48,936
10 (OTP ND EST) from the level included in OTP's initial filing in this proceeding.
11

12 Q. DID MERCER 2018 UPDATE REFLECT A CHANGE IN THE PENSION DISCOUNT
13 RATE AND EARNED RETURN ON ASSETS (EROA) FROM THE LEVELS USED
14 IN OTP'S INITIAL FILING?

15 A. Yes. The discount rates and the EROAs contained in the Mercer 2018 Update and in
16 OTP's initial filing are as follows:

17 **Table 1**
18 **OTP Pension Discount Rates and EROAs**

	Initial Filing	Mercer 2018 Update	Increase/ (Decrease)
Discount Rate:	4.10%	3.90%	(0.20%)
EROA:	7.00%	7.50%	0.50%

19
20 Q. PLEASE BRIEFLY DESCRIBE THE EFFECT ON OTP'S PENSION COSTS OF THE
21 DECREASE IN THE DISCOUNT RATE.

22 A. The Mercer 2018 Update decrease in the pension discount rate from 4.10 percent to 3.90
23 percent reflected declining interest rates on high quality bonds. If all other factors had
24 remained unchanged, the decrease in the discount rate would increase OTP's pension
25 costs by approximately \$900,000 (OTP Total) / \$365,000 (OTP ND).
26

1 Q. PLEASE BRIEFLY DESCRIBE THE EFFECT ON OTP'S PENSION COSTS OF THE
2 INCREASE IN THE EROA.

3 A. The Mercer 2018 Update increase in the EROA for 2018 from 7.00 percent to 7.50
4 percent reflects improved forward market views bolstered by positive market returns for
5 year 2017. If all other factors had remained unchanged, the increase in the EROA would
6 decrease OTP's pension costs by approximately \$1.41 million (OTP Total) / \$570,000
7 (OTP ND).

8

9 **2. Update of OPEB Costs**

10 Q. DID MERCER 2018 UPDATE ALSO AFFECT THE DETERMINATION OF OTP'S
11 OPEB COSTS?

12 A. Yes. The Mercer 2018 Update also decreased the discount rate used to determine OTP'S
13 OPEB costs as follows:

14

15

Table 2
OTP OPEB Discount Rates

	Initial Filing	Mercer 2018 Update	Increase/ (Decrease)
Discount Rate:	4.00%	3.81%	(0.19%)

16

17 Q. PLEASE SUMMARIZE THE EFFECTS OF THOSE UPDATES ON OTP'S OPEB
18 COSTS IN 2018 AND THE 2018 REVENUE REQUIREMENT.

19 A. The Mercer 2018 Update decrease in the OPEB discount rate from 4.00 percent to 3.81
20 percent reflected declining interest rates on high quality bonds. If all other factors had
21 remained unchanged, the decrease in the discount rate would increase OTP's Retiree
22 Medical and LTD Medical costs by approximately \$389,000 (OTP Total) and \$46,000
23 (OTP Total).

24

25 **3. ASC 715**

26 Q. PLEASE DESCRIBE OTP'S CHOICE OF ACCOUNTING METHOD UNDER ASC
27 715 THAT WAS DESCRIBED IN YOUR DIRECT TESTIMONY?

1 A. OTP chose not to make the GAAP ASC 715 change and will continue to use its prior
2 approach of capitalizing portions of all components of retirement benefits as had been
3 approved by FERC.
4

5 Q. WHAT EFFECT WILL THIS CHOICE HAVE ON OTP'S PENSION O&M EXPENSE
6 FOR 2018?

7 A. If all other factors had remained unchanged, OTP's decision to maintain its accounting
8 treatment of capitalizing Pension expenses would decrease OTP's O&M expense by
9 approximately \$2.73 million (OTP Total) / \$1.10 million (OTP ND).
10

11 Q. WHAT EFFECT WILL THIS CHOICE HAVE ON OTP'S RETIREE MEDICAL
12 O & M EXPENSE FOR 2018?

13 A. If all other factors had remained unchanged, OTP's decision to maintain its accounting
14 treatment of capitalizing Retiree Medical expenses would decrease OTP's O&M expense
15 by approximately \$3.70 million (OTP Total) / \$1.50 million (OTP ND).
16

17 **IV. PENSION CONTRIBUTION AND PENSION ASSET**

18 Q. HAS OTP MADE AN ADDITIONAL CONTRIBUTION TO ITS PENSION PLAN
19 SINCE OTP'S INITIAL FILING?

20 A. Yes. OTP has made an additional \$20 million contribution to the pension plan in 2018
21 after OTP's initial filing.
22

23 Q. HOW DID THAT 2018 CONTRIBUTION AFFECT TOTAL CONTRIBUTIONS
24 SINCE 2009?

25 A. Total contributions to OTP's pension plan since 2009 are now \$104 million as shown on
26 Table 3 below:
27

Table 3
Updated OTP Pension Contributions 2009-2018
 (OTP Total, \$ millions)

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
OTP Pension Contribution	\$4	\$20	\$0	\$10	\$10	\$10	\$20	\$10	\$0	\$20	\$104

The OTP Total and OTP ND portions of that contribution are \$104 million (OTP Total) / \$37.5 million (OTP ND).

Q. HAS OTP ADJUSTED THE AMOUNT OF THE PREPAID PENSION ASSET INCLUDED IN RATE BASE TO REFLECT THE 2018 CONTRIBUTION?

A. Yes. Table 4 below summarizes the result of a net rate base impact of \$16.99 million (OTP Total) / \$6.13 million (OTP ND).

Table 4
Updated Prepaid Pension Asset
 (\$millions)

Component	Non-Plant Rate Base Asset/ (Liability)	Associated ADIT Asset/(Liability)	Net Rate Base Impact Asset/(Liability)
Prepaid Pension Asset (OTP Total)	\$34.53	\$(17.54)	\$16.99
Prepaid Pension Asset (OTP ND)	\$12.46	\$(6.33)	\$6.13

Q. HOW DOES OTP'S UPDATED PREPAID PENSION ASSET AFFECT OTP'S 2018 PENSION COSTS AS COMPARED TO THE PREPAID PENSION ASSET IN OTP'S INITIAL FILING?

A. OTP's updated prepaid pension asset reduces 2018 Test Year pension cost by \$2.59 million (OTP Total) / \$934,000 (OTP ND), which is \$880,000(OTP Total) / \$318,000 (OTP ND) more than the reduction of \$1.71 million (OTP Total) / \$616,000 (OTP ND) reflected in OTP's initial filing.

1 Q. HAVE YOU DETERMINED THE NET EFFECT ON THE 2018 TEST YEAR
2 REVENUE REQUIREMENT OF OTP'S UPDATED PREPAID PENSION ASSET,
3 CONSIDERING BOTH REDUCED EXPENSES AND RATE BASE EFFECTS?

4 A. Yes. The benefit of the \$934,000 decrease in OTP's updated pension cost will be offset
5 in part by the rate base effect of OTP's updated prepaid pension asset (after reduction for
6 the associated ADIT), which will increase the 2018 Test Year OTP ND revenue
7 requirement by \$593,000. The net effect is a reduction in the 2018 Test Year OTP ND
8 revenue requirement of \$342,000. The calculation of the net effect is shown on
9 Exhibit __ (CLP-1), Schedule 2.

10
11 Q. WHAT IS THE UPDATED 2018 TEST YEAR NET RATE BASE IMPACT OF
12 INCLUDING THE UPDATED PREPAID PENSION ASSET AND 106 AND FAS 112
13 LIABILITIES?

14 A. Table 4 below shows the net rate base impact of including the updated 2018 Test Year
15 prepaid pension asset, FAS 106 and FAS 112 balances is \$8.23 million (OTP Total) /
16 \$3.34 million (OTP ND) decrease to OTP's 2018 Test Year rate base:

17 **Table 5**
18 **Updated 2018 Test Year Rate Base Impact of**
19 **Prepaid Pension Asset, FAS 106 and FAS 112 Liabilities**
20 **(OTP ND)**
21 **(\$thousands)**
22

Component	Non-Plant Rate Base Asset/ (Liability)	Associated ADIT Asset/(Liability)	Net Rate Base Impact Asset/(Liability)
Prepaid Pension Asset	\$12,459	\$(6,328)	\$ 6,131
FAS 106 Liability	(21,833)	7,681	(14,152)
FAS 112 Liability	(579)	170	(409)
Total Net Impact	(\$9,953)	\$ 1,523	(\$8,430)

23

1 **V. OVERALL IMPACTS AND CONCLUSION**

2 Q. HAVE YOU PREPARED A SUMMARY OF THE OVERALL IMPACT OF ALL OF
3 THESE FACTORS ON OTP'S 2018 TOTAL COMPANY COSTS AND IN THE 2018
4 TEST YEAR NORTH DAKOTA REVENUE REQUIREMENT?

5 A. Exhibit ___(CLP-2), Schedule 3-Summary of Cost Savings presents that calculation
6 which shows that the overall impact of all these adjustments is a decrease in OTP's 2018
7 total company expense of approximately \$3.2 million (OTP Total) and a decrease in in
8 the 2018 Test Year North Dakota revenue requirement of approximately \$963,442.

9

10

11 Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL DIRECT TESTIMONY?

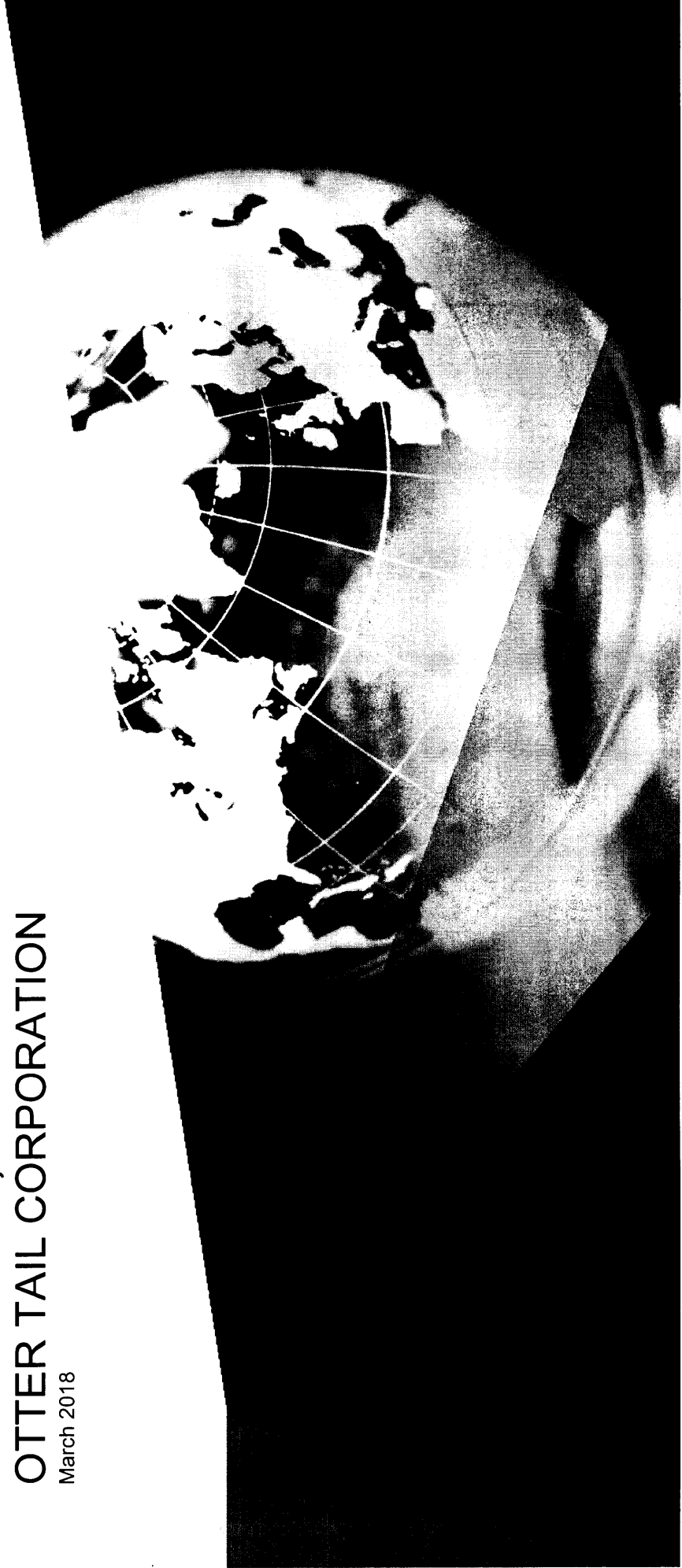
12 A. Yes, it does.



TALENT • HEALTH • RETIREMENT • INVESTMENTS

**ASC 715 AND ASC 712 (US GAAP)
ACCOUNTING EXPENSE FOR FISCAL YEAR ENDING
DECEMBER 31, 2018
OTTER TAIL CORPORATION**

March 2018



ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

CONTENTS

1. Report Highlights.....	1
2. Data, Assumptions, Methods, and Provisions	6
3. Important Notices.....	7
Appendix A: Net Periodic Benefit Cost Information.....	A
Appendix B: Pension Plan Assets	B
Appendix C: Historical Information.....	C

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

1

Report Highlights

Mercer has prepared this report for Otter Tail Corporation to provide the net periodic benefit cost for the fiscal year ending December 31, 2018, for the following plans:

- Otter Tail Corporation Pension Plan
- Otter Tail Corporation Postretirement Medical and Life Insurance Plan
- Otter Tail Corporation Postemployment (LTD) Medical Benefit Plan

for Otter Tail Corporation to incorporate, as Otter Tail Corporation deems appropriate, in its financial statements under US accounting standards.

All figures in this report are expressed in USD, unless otherwise stated.

Please see Section 3 of this report for further explanation as to the purposes and limitations of this report.

MERCER

u:\vet\constimp\otl\tmsp\2018\yr\penacct\6-report\otl\tmsp_expensereport_2018.doc

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

Summary of Results

Below are the net periodic benefit cost amounts (NPBC) for the fiscal year ending December 31, 2018, compared to the corresponding figures for the fiscal years ending December 31, 2017 and December 31, 2016.

Plan	Estimated NPBC for FYE December 31, 2018	NPBC for FYE December 31, 2017	NPBC for FYE December 31, 2016
Other Tail Corporation Pension Plan	\$ 6,046,539	\$ 5,877,221	\$ 5,732,605
Other Tail Corporation Postretirement Medical and Life Insurance Plan			
• Gross benefits	\$ 6,268,703	\$ 5,652,591	\$ 5,252,546
• Medicare Part D offset	(469,700)	(560,803)	(923,345)
• Net cost	\$ 5,799,003	\$ 5,091,788	\$ 4,329,201
Other Tail Corporation Postemployment (LTD) Medical Benefit Plan	771,925	167,538	721,846
Total	\$ 12,617,467	\$ 11,136,547	\$ 10,783,652

The estimated net periodic benefit cost for the fiscal year ending December 31, 2018, includes no charges/credits due to special events. This amount may be revised and could be substantially different if liabilities are remeasured during the year due to a significant event and/or cash flows are updated.

The liability reflected in this report for LTD medical benefits (ASC 712) is based only on those participants who were on LTD as of September 30, 2017, and does not include any liability for individuals who may become disabled after this date or were in the elimination period and did not enter LTD until after September 30, 2017. Mercer understands that Otter Tail Corporation and its auditors have agreed to not include this potential liability at this time.

MERCER

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

Review of Results

- The following assumption changes are reflected in this report:
 - Based on the 12/31/2017 Mercer Bond Model and Mercer Yield Curve results, the discount rate for the pension plan was changed from 4.60% for 2017 expense to 3.90% for 2018 expense. For the retiree medical / life and LTD medical plans, the discount rate was changed from 4.46% to 3.81%.
 - Based on an experience study completed in 2017, the salary increase assumption for utility employees participating in the pension plan was updated. Previously it was 3.00% for all participants. It was changed to the following age based table:

To age 39	4.50%
Age 40 to age 49	3.50%
Age 50 and older	2.75%

- The company also negotiated contracts with its unions, and salary increases stipulated in the contracts are recognized in the short-term with the table above as the long-term assumption.
- In accordance with agreed upon procedures, the starting per capita claims costs and Part D subsidy estimates for 2018 for the retiree and LTD medical plans, were updated to reflect recent experience.
- Based on an experience study completed in 2017, the percent married, form of pension benefit election, retiree medical participation and retirement rate assumptions were updated. See our disclosure letter dated 1/17/2018 for more details about these changes.
- There were no plan changes other than the 2018 retiree medical contribution rate updates.
- Pension expense increased from \$5.9 million in 2017 to \$6.0 million in 2018. The change in discount rate increased expense approximately \$3.1 million. The salary scale and demographic assumption changes listed above decreased expense about \$0.3 million. There were better than expected asset returns in 2017 and prior asset gains were reflected in the market-related asset value. This decreased expense about \$0.2 million. The company made \$20 million in contributions early in 2018. This decreased expense about \$1.4 million. Demographic experience and the passage of time decreased expense about \$1.1 million.

MERCER

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

- Retiree medical / life expense increased from \$5.1 million in 2017 to \$5.8 million in 2018. The change in discount rate increased expense approximately \$0.4 million. The demographic assumption changes listed above decreased expense about \$0.7 million. The starting medical claims and 2018 premium updates increased expense about \$1.0 million.
- LTD expenses increased from \$168,000 in 2017 to \$772,000 in 2018. The change in discount rate increased expense approximately \$150,000. Demographic experience and the passage of time increased expense about \$450,000.

Details of the net periodic benefit cost information are shown in Appendix A. Details of plan assets are shown in Appendix B.

Please refer to the remainder of the report for more information about these summary numbers.

MERCER

u:\vet\const\mpt\otitmsp\2018\yrb\penacct\6-report\otitmsp_expensereport_2018.doc

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

Allocation of Results

Results are allocated between Utility and Corporate operations based on pension participant headcounts. Following are the allocation results for 2018:

Pension Participant Counts (as of January 1, 2017)			
	Utility	Corporate	Total
Active participants	525	17	542
Deferred vested	110	14	124
Receiving benefits	<u>751</u>	<u>4</u>	<u>755</u>
Total	1,386	35	1,421
Allocation percentage	97.5%	2.5%	100.0%

Expense Allocation			
	Utility	Corporate	Total
Pension	\$5,895,376	\$151,163	\$6,046,539
Retiree medical/life*	5,654,028	144,975	5,799,003
LTD medical	<u>752,627</u>	<u>19,298</u>	<u>771,925</u>
Total	\$12,302,031	\$315,436	\$12,617,467

* Reflects Medicare Part D subsidy offset.

MERCER

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

2

Data, Assumptions, Methods, and Provisions

Except as noted below, this report is based on the participant data, assumptions, methods, and provisions summarized in the reports titled *Data, Assumptions, Methods, and Provisions as of January 1, 2017* for:

- Otter Tail Corporation Pension Plan
- Otter Tail Corporation Postretirement Medical and Life Insurance Plan and Postemployment (LTD) Medical Benefit Plan

dated August 2017. It is also based on our report titled *2017 Year-End Qualified Pension, Retiree Medical Plan, and LTD Medical Plan Disclosure Exhibits* dated January 17, 2018. These reports are incorporated herein by reference. Authorized users of this report should contact Mercer to request copies of the above reports, if they do not already have the reports, in order to understand all aspects of the calculations that are incorporated by reference.

The 2018 LTD medical plan expense calculations are based on the following data as of October 1, 2017:

	Medicare Primary	Medicare Ineligible	Total
Counts			
- Disabled participants	11	6	17
- Covered spouses of disabled	0	14	14
Total	11	20	31
Average age			59.2

We used financial data submitted by the company as of the valuation date without further audit. Customarily, this information would not be verified by a plan's actuary. We have reviewed the information for internal consistency and general reasonableness.

MERCER

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

3

Important Notices

Mercer has prepared this report exclusively for Otter Tail Corporation; subject to this limitation, Otter Tail Corporation may direct that this report be provided to its auditors in connection with the audit of its financial statements. Mercer is not responsible for use of this report by any other party.

The only purpose of this report is to present the net periodic benefit cost for the fiscal year ending December 31, 2018, for the following plans:

- Otter Tail Corporation Pension Plan
- Otter Tail Corporation Postretirement Medical and Life Insurance Plan
- Otter Tail Corporation Postemployment (LTD) Medical Benefit Plan

for Otter Tail Corporation to incorporate, as Otter Tail Corporation deems appropriate, in its financial statements under US accounting standards.

This report may not be used for any other purpose. Mercer is not responsible for the consequences of any unauthorized use. Its content may not be modified, incorporated into or used in other material, sold or otherwise provided, in whole or in part, to any other person or entity, without Mercer's permission.

This report was prepared in accordance with generally accepted actuarial principles and procedures. The actuarial assumptions were selected by Otter Tail Corporation. Based on the information provided to us, we believe that the actuarial assumptions are reasonable for the purposes described in this report.

All parts of this report, including any documents incorporated by reference, are integral to understanding and explaining its contents; no part may be taken out of context, used, or relied upon without reference to the report as a whole.

MERCER

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

Decisions about benefit changes, granting new benefits, investment policy, funding policy, benefit security, and/or benefit-related issues should not be made solely on the basis of this valuation but only after careful consideration of alternative economic, financial, demographic, and societal factors, including financial scenarios that assume future sustained investment losses.

Otter Tail Corporation is ultimately responsible for selecting the plan's accounting policies, methods, and assumptions. This information is referenced or described in Section 2 of this report. Otter Tail Corporation is solely responsible for communicating to Mercer any changes required to those policies, methods, and assumptions.

Otter Tail Corporation is solely responsible for selecting the plan's investment policies, asset allocations, and individual investments. The Mercer actuaries who prepared this report have not provided any investment advice to the Otter Tail Corporation.

This report is based on our understanding of applicable law and regulations as of the valuation date. Mercer is not an accountant or auditor and is not responsible for the interpretation of or compliance with accounting standards; citations to and descriptions of accounting standards provided in this report are for reference purposes only. Mercer is not engaged in the practice of law. This report does not constitute and is not a substitute for legal advice.

Otter Tail Corporation should notify Mercer promptly after receipt of this valuation report if Otter Tail Corporation disagrees with anything contained herein or is aware of any information that would affect the results of this report that has not been communicated to Mercer or incorporated therein. The valuation report will be deemed final and acceptable to Otter Tail Corporation unless Otter Tail Corporation promptly provides such notice to Mercer.

MERCER

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

Professional Qualifications

We are available to answer any questions on the material contained in this report, or to provide explanations or further details as may be appropriate. Collectively, the undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. We are not aware of any direct or material indirect financial interest or relationship, including investments or other services that could create a conflict of interest, that would impair the objectivity of our work.



Gregory T. Trapp, ASA, MAAA
(Long-term Aspect)

March 5, 2018

Date



Theodore J. Hoffman, FSA, MAAA
(Health Care Aspect)

March 5, 2018

Date



Sam Lee, FSA, MAAA
(Health Care Aspect)

March 5, 2018

Date

Mercer
333 South 7th Street, Suite 1400
Minneapolis, MN 55402-2427

612 642 8600

MERCER

ASC 715 and ASC 712 (US GAAP)
 ACCOUNTING EXPENSE FOR FISCAL YEAR ENDING DECEMBER 31, 2018

APPENDIX A

Net Periodic Benefit Cost Information

Plan Name	Otter Tail Corporation Pension Plan		Otter Tail Corporation Postretirement Medical and Life Insurance Plan*		Otter Tail Corporation Postemployment (LTD) Medical Benefit Plan		All Plans	
	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018
A. Net Periodic Benefit Cost								
1. Service cost	\$ 6,459,413	\$ 1,526,143	\$ -	\$ -	\$ -	\$ 7,985,556		
2. Interest cost	13,452,150	2,582,469	65,152			16,099,771		
3. Expected return on plan assets	(21,198,845)	-	-			(21,198,845)		
4. Amortization of prior service cost	15,995	-	-			15,995		
5. Amortization of net (gain) loss	7,317,826	1,690,391	706,773			9,714,990		
6. Curtailment (gain) / loss recognized	-	-	-			-		
7. Settlement (gain) / loss recognized	-	-	-			-		
8. Special termination benefit recognized	-	-	-			-		
9. Net periodic benefit cost	\$ 6,046,539	\$ 5,799,003	\$ 771,925	\$ -	\$ 12,617,467			
B. Additional Items For Net Periodic Benefit Cost Calculations								
1. Fair Value of Assets	\$ 285,318,508	\$ -	\$ -	\$ -	\$ 285,318,508			
2. Market-related value of assets	271,976,606	-	-	-	271,976,606			
3. a. Expected expenses, taxes and insurance premiums	-	-	-	-	-			
b. Weighted for timing	-	-	-	-	-			
4. a. Expected benefits paid from plan assets	14,383,555	-	-	-	14,383,555			
b. Weighted for timing	7,791,092	-	-	-	7,791,092			
5. a. Expected benefits paid by company	-	3,985,991	385,746	-	4,371,737			
b. Weighted for timing	-	1,992,996	192,873	-	2,185,869			
6. a. Expected employer contributions to plan assets	20,000,000	-	-	-	20,000,000			
b. Weighted for timing	18,465,753	-	-	-	18,465,753			
7. a. Expected employee contributions	-	-	-	-	-			
b. Weighted for timing	-	-	-	-	-			
8. Average future years of service	10.6410	7.0034	1.0000	-	N/A			

*Reflects estimated impact of Medicare Part D.

ASC 715 and ASC 712 (US GAAP)
 ACCOUNTING EXPENSE FOR FISCAL YEAR ENDING DECEMBER 31, 2018

Plan Name	Otter Tail Corporation Pension Plan		Otter Tail Corporation Postretirement Medical and Life Insurance Plan*		Otter Tail Corporation Postemployment (LTD) Medical Benefit Plan		All Plans	
	Dec 31, 2018		Dec 31, 2018		Dec 31, 2018		Dec 31, 2018	
Fiscal year ending on								
C. Benefit Obligations and assets								
Funded Status								
1. Projected benefit obligation (PBO) / Accumulated postretirement benefit obligation (APBO)								
a. Total	(352,718,004)	(69,774,337)	(1,902,893)	(424,395,234)				
2. Fair value of plan assets	285,318,508	-	-	285,318,508				
3. Funded status (1. + 2.)	\$ (67,399,496)	\$ (69,774,337)	\$ (1,902,893)	\$ (139,076,726)				
Amounts to be reflected in future periods								
1. Prior service cost (credit)	29,754	-	-	29,754				
2. Net loss (gain)	99,798,885	18,815,919	706,773	119,321,577				
3. Total not yet recognized in net periodic benefit cost (1. + 2.)	\$ 99,828,639	\$ 18,815,919	\$ 706,773	\$ 119,351,331				
Cumulative employer contributions in excess of net periodic benefit cost	\$ 32,429,143	\$ (50,958,418)	\$ (1,196,120)	\$ (19,725,395)				

*Reflects estimated impact of Medicare Part D.

ASC 715 and ASC 712 (US GAAP)
 ACCOUNTING EXPENSE FOR FISCAL YEAR ENDING DECEMBER 31, 2018

Plan Name	Otter Tail Corporation Pension Plan		Otter Tail Corporation Postretirement Medical and Life Insurance Plan*		Otter Tail Corporation Postemployment (LTD) Medical Benefit Plan		All Plans	
	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018
D. Amortization amounts								
1. Prior service cost (credit) - separate bases shown below								
a. Net total unrecognized amount as of beginning of fiscal year	\$ 29,754	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 29,754	15,995
b. Net total amortization of prior service cost	15,995	-	-	-	-	-	15,995	
2. (Gain) loss								
a. Net amount as of beginning of fiscal year	\$ 99,798,885	\$ 18,815,919	\$ 18,815,919	\$ 706,773	\$ 706,773	\$ 119,321,577	13,341,902	
b. Excess of fair value over market-related value	13,341,902	-	-	-	-	-	-	
c. Net (gain) loss potentially subject to amortization (a. + b.)	113,140,787	18,815,919	18,815,919	706,773	706,773	132,663,479	N/A	
d. Corridor	35,271,800	6,977,434	6,977,434	N/A	N/A	N/A	N/A	
e. Amount subject to amortization (c. - d.)	77,868,987	11,838,485	11,838,485	706,773	706,773	706,773	N/A	
f. Amortization period	10.6410	7.0034	7.0034	1.0000	1.0000	N/A	N/A	
g. Annual amortization	\$ 7,317,826	\$ 1,690,391	\$ 1,690,391	\$ 706,773	\$ 706,773	\$ 9,714,990		

E. Assumptions to determine net cost

1. Discount rate 3.90%
2. Expected return on assets 7.50%
3. Salary scale Table
4. Assumed health care trend rate - Pre 65
 - a. Immediate trend rate N/A
 - b. Ultimate trend rate N/A
 - c. Year that the rate reaches ultimate trend rate N/A
5. Assumed health care trend rate - Post 65
 - a. Immediate trend rate N/A
 - b. Ultimate trend rate N/A
 - c. Year that the rate reaches ultimate trend rate N/A

* Reflects estimated impact of Medicare Part D.

ASC 715 and ASC 712 (US GAAP)
 ACCOUNTING EXPENSE FOR FISCAL YEAR ENDING DECEMBER 31, 2018

Plan Name	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018
	Otter Tail Corporation Pension Plan	Otter Tail Corporation Postretirement Medical and Life Insurance Plan*	Otter Tail Corporation Postemployment (LTD) Medical Benefit Plan	All Plans
Fiscal year ending on	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018	Dec 31, 2018

F. Net Periodic Benefit Cost Ignoring Impact of Medicare Part D

1. Service cost	\$ 1,671,013
2. Interest cost	3,147,031
3. Expected return on plan assets	-
4. Amortization of initial net obligation (asset)	-
5. Amortization of prior service cost	-
6. Amortization of net (gain) loss	1,450,659
7. Curtailment (gain) / loss recognized	-
8. Settlement (gain) / loss recognized	-
9. Special termination benefit recognized	-
10. Net periodic benefit cost	\$ 6,268,703

G. Additional Items For Net Periodic Benefit Cost Calculations

1. Fair Value of Assets	\$ -
2. Market-related value of assets	-
3. a. Expected expenses, taxes and insurance premiums	-
b. Weighted for timing	-
4. a. Expected benefits paid from plan assets	-
b. Weighted for timing	-
5. a. Expected benefits paid by company	-
b. Weighted for timing	-
6. a. Expected employer contributions to plan assets	4,401,650
b. Weighted for timing	2,200,825
7. a. Expected employee contributions	-
b. Weighted for timing	-
8. Average future years of service	7.0034

*Ignores estimated impact of Medicare Part D.

ASC 715 and ASC 712 (US GAAP)
 ACCOUNTING EXPENSE FOR FISCAL YEAR ENDING DECEMBER 31, 2018

OTTER TAIL CORPORATION

Prior Service Cost (Credit) Amounts

Fiscal year ending on

	Dec 31, 2018		
	Unrecognized Prior Service Cost Base	Years remaining	Amortization of Prior Service Cost Base
A. Otter Tail Corporation Pension Plan			
September 1, 2005 plan amendment	29,754	1.86	15,995
Total	\$ 29,754		\$ 15,995
B. Otter Tail Corporation Postretirement Medical and Life Insurance Plan			
Total	\$ -		\$ -
C. Otter Tail Corporation Postemployment (LTD) Medical Benefit Plan			
Total	N/A		N/A

ASC 715 (US GAAP)
 ACCOUNTING EXPENSE FOR FISCAL YEAR ENDING DECEMBER 31, 2018

OTTER TAIL CORPORATION

APPENDIX B

Plan Assets

Plan Name Fiscal year ending on	Otter Tail Corporation Pension Plan Dec 31, 2018	Original Amount
A. Development of Market-Related Value of Assets		
1. Fair value of assets at beginning of previous fiscal year	\$ 254,345,642	
2. Contributions during previous fiscal year	-	
3. Distributions during previous fiscal year	(13,208,215)	
4. Expected return on assets at 7.50%	<u>18,539,339</u>	
5. Expected market value as of Dec 31, 2017 (1. + 2. + 3. + 4.)	\$ 259,676,766	
6. Market value of assets as of Dec 31, 2017	<u>285,318,508</u>	
7. Prior year fair value gain/(loss) (6. - 5.)	\$ 25,641,742	
8. Phase in of gains/(losses)		
a. Prior fiscal year gain/(loss) * 4/5	20,513,394	25,641,742
b. 2 years ago gain/(loss) * 3/5	3,315,843	5,526,405
c. 3 years ago gain/(loss) * 2/5	(11,345,550)	(28,363,875)
d. 4 years ago gain/(loss) * 1/5	<u>858,215</u>	4,291,078
9. Market-related value of assets at beginning of fiscal year (6. - 8a. - 8b. - 8c. - 8d.)	\$ 271,976,606	

OTTER TAIL CORPORATION

ASC 715 (US GAAP)
 ACCOUNTING EXPENSE FOR FISCAL YEAR ENDING DECEMBER 31, 2018

Plan Name Fiscal year ending on	Otter Tail Corporation Pension Plan Dec 31, 2018
B. Expected contributions for fiscal year ending	
Dec 31, 2018	
Employer contributions	\$ 10,000,000
January 12, 2018	
February 13, 2018	10,000,000
Total	\$ 20,000,000

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

APPENDIX C

Historical Information

MERCER

u:\reitcons\mmp\ottrmsp2018\yrpenacct16-report\ottrmsp_expensereport_2018.doc

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

Pension Participant Counts

Date 1/1	Participant Counts			Total	Pension expense \$
	Active ¹	Retired ¹	Termin. Vested ¹		
1987 ²	823	353	28	1,204	772,867
1988	810	377	32	1,219	1,079,433
1989	787	397	35	1,219	1,205,428
1990	788	409	39	1,236	800,466
1991	802	426	39	1,267	1,122,950
1992	840	439	40	1,319	1,292,872
1993	837	461	39	1,337	1,332,532
1994	839	470	46	1,355	1,356,178
1995	839	478	46	1,363	1,009,395
1996	852	489	49	1,390	1,291,877
1997	842	478	48	1,368	1,103,508
1998	835	504	56	1,395	3,670,090 ³
1999	844	562	52	1,458	(26,179)
2000	840	562	57	1,459	(3,761,894) ⁴
2001	816	575	73	1,464	(4,328,234)
2002	837	581	74	1,492	(2,640,260)
2003	846	594	90	1,530	1,507,213
2004	822	604	89	1,515	1,980,237
2005	800	618	86	1,504	4,434,809
2006	812	621	85	1,518	5,790,102
2007	830	609	93	1,532	4,511,835
2008	816	627	92	1,535	2,897,218
2009	804	637	91	1,532	3,145,366
2010	783	629	95	1,507	5,694,765
2011	745	642	105	1,492	5,992,328
2012	706	659	112	1,477	8,568,484
2013	685	670	122	1,477	10,314,465
2014	674	673	123	1,470	4,781,142
2015	624	694	131	1,449	8,060,012
2016	581	727	129	1,437	5,732,605
2017 ⁵	581	727	129	1,437	5,877,221
2018	542	755	124	1,421	6,046,539

¹ Effective January 1, 2001, LTD participants are included in terminated vested counts instead of active counts.

² FAS 87 applies for the first time

³ Includes one-time charge of \$4,025,936 due to early retirement window.

⁴ Includes one-time charge of \$125,513 due to early retirement window.

⁵ Effective in 2017, current year expense is based on prior year census data.

MERCER

OTTER TAIL CORPORATION

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

Pension Plan Assets

Date 1/1	Assets		
	Market Value ⁶	Rate of Return (Prior Year)	Average of Prior 5 Years
1987	\$ 50,182,033	12.1%	N/A
1988	52,345,466	5.2%	N/A
1989	56,301,263	8.6%	N/A
1990	69,356,463	24.0%	N/A
1991	69,786,532	2.5%	10.2%
1992	86,408,020	25.8%	12.8%
1993	91,416,360	7.3%	13.3%
1994	94,944,780	8.7%	13.3%
1995	87,313,583	(3.5%)	7.7%
1996	110,478,313	30.8%	13.1%
1997	121,505,808	14.6%	11.0%
1998	137,560,193	17.8%	13.1%
1999	150,025,917	14.2%	14.2%
2000	159,554,870	11.4%	17.6%
2001	153,648,513	1.0%	11.6%
2002	138,793,945	(4.9%)	7.6%
2003	114,938,007	(12.8%)	1.3%
2004	136,810,903	23.6%	2.9%
2005	145,685,103	10.3%	2.7%
2006	150,981,649	7.1%	3.9%
2007	171,507,654	17.5%	8.4%
2008	173,237,613	5.6%	12.6%
2009	127,534,802	(22.0%)	2.7%
2010	140,547,472	15.5%	3.7%
2011	171,308,612	14.2%	5.0%
2012	168,602,995	4.2%	2.5%
2013	191,017,576	13.3%	3.9%
2014	213,616,704	11.9%	11.8%
2015	244,589,183	9.8%	10.6%
2016	233,638,822	(3.7%)	6.9%
2017	254,345,642	10.1%	8.1%
2018	285,318,508	17.8%	8.9%

⁶ Includes accrued contributions prior to January 1, 2010.

MERCER

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

Retiree Medical Participant Count

Summary of Data

<u>Date 1/1</u>	<u>Retired</u>	<u>Disabled</u>	Participants		<u>Total</u>
			<u>Actives Fully Eligible</u>	<u>Actives Not Yet Fully Eligible</u> ⁷	
1997	685	21	146	232	1,084
1998	712	21	128	226	1,087
1999	815	22	106	253	1,196
2000	817	20	122	262	1,221
2001	834	20	119	264	1,237
2002	853	23	123	298	1,297
2003	884	22	109	320	1,335
2004	866	21	113	337	1,337
2005	904	24	125	332	1,385
2006	917	22	145	331	1,415
2007	887	22	158	326	1,393
2008	894	20	165	332	1,411
2009	873	20	172	328	1,393
2010	866	18	199	302	1,385
2011	885	18	218	272	1,393
2012	904	22	220	263	1,409
2013	925	21	217	258	1,421
2014	924	23	216	248	1,411
2015	953	24	234	201	1,412
2016	988	21	225	200	1,434
2017 ⁸	988	21	225	200	1,434
2018	1,013	17	213	183	1,426

⁷ Excludes employees under age 45.

⁸ Effective in 2017, current year expense is based on prior year census data.

MERCER

ASC 715 AND ASC 712 (US GAAP)
 ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

Accounting Information – Postretirement Medical and Life Insurance Plan

Fiscal Year	1/1 APBO	NPPBC	Net Company Contribution	12/31 (Accrued)/ Prepaid Cost
1997	\$ 16,323,402	\$ 2,234,382	\$ 690,990	(9,933,364)
1998	17,706,581	3,337,403 ⁹	919,263	(12,351,504)
1999	22,570,802	3,043,919	1,118,601	(14,276,822)
2000	22,552,028	4,112,500 ¹⁰	1,422,544 ¹¹	(16,966,778)
2001	23,542,708	3,256,767	1,582,512	(18,641,033)
2002	29,736,559	3,224,000	1,482,798	(20,382,235)
2003	39,870,644	4,778,559	1,930,499	(23,230,295)
2004	37,551,230	4,137,986	2,315,103	(25,053,178)
2005	35,469,330	3,720,865	1,792,009	(26,982,034)
2006	32,026,305	3,331,316	2,050,905	(28,262,445)
2007	30,713,601	3,148,686	1,459,527	(29,951,604)
2008	31,147,894	3,605,563	1,576,603	(31,980,564)
2009	31,446,772	3,730,712	1,253,894	(34,457,382)
2010	39,769,385	4,553,987	1,769,303	(37,242,066)
2011	42,668,235	4,617,940	2,066,216	(39,793,790)
2012	52,363,958	5,735,951	1,955,774	(43,573,967)
2013	49,492,184	3,706,377	2,012,693	(45,267,651)
2014	44,396,324	3,465,134	2,333,816	(46,398,969)
2015	51,189,309	3,604,068	2,350,917	(47,652,120)
2016	56,330,562	4,329,201	2,825,117	(49,156,204)
2017	62,571,421	5,091,788	3,289,574	(50,958,418)
2018	69,774,337	5,799,003	N/A	N/A

⁹ Effective in 2017, current year expense is based on prior year census data.

¹⁰ Includes one-time charge of \$16,675 for early retirement window and \$865,105 for retiree life insurance

¹¹ Includes a \$127,561 adjustment for incorrectly reported claims.

MERCER

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

Accounting Information – Postemployment (LTD) Medical Benefit Plan

Fiscal Year	1/1 APBO	NPPBC	Net Contribution	12/31 (Accrued)/ Prepaid Cost
1998	\$ 848,819	\$ 196,247	\$ 273,480	\$ (771,576)
1999	933,700	37,867	217,720	(591,723)
2000	1,049,054	405,810	1,589 ¹²	(995,944)
2001	1,285,676	382,788	266,044	(1,112,688)
2002	1,807,154	820,782	223,782	(1,709,688)
2003	1,563,674	(47,800)	252,725	(1,409,163)
2004	1,869,749	569,970	332,922	(1,646,211)
2005	2,867,475	2,088,841	335,120	(3,399,932)
2006	3,485,349	274,332	393,558	(3,280,706)
2007	3,325,516	232,271	261,834	(3,251,143)
2008	3,363,828	309,859	172,782	(3,388,220)
2009	3,487,380	155,703	147,135	(3,396,788)
2010	2,403,976	(864,155)	160,771	(2,371,862)
2011	1,403,097	(894,450)	221,535	(1,255,877)
2012	1,889,989	721,519	490,817	(1,486,579)
2013	1,422,302	(8,967)	684,566	(813,046)
2014	1,406,000	721,617	854,488	(680,175)
2015	1,497,982	873,223	394,776	(1,158,622)
2016	1,807,471	721,846	489,190	(1,391,278)
2017	1,498,798	167,538	362,696	(1,196,120)
2018	1,902,893	771,925	N/A	N/A

¹² Includes a (\$127,478) adjustment for incorrectly reported claims.

MERCER

u:\ret\cons\mnp\otm\mp\2018\y\penacct16-report\otm\mp_expensereport_2018.doc

ASC 715 AND ASC 712 (US GAAP)
ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2018

OTTER TAIL CORPORATION

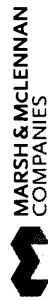
Medical Claims Information

Period	Paid Claims \$	Part D subsidy Received	Adult Equivalent	Net Claims Per Adult	Pre-65 Starting Cost at 65	Post-65 Starting Cost at 65	Medicare Part D subsidy at 65
1996	901,694	N/A	682	1,322	N/A	N/A	N/A
1997	1,211,504	N/A	710	1,706	N/A	N/A	N/A
1998	1,181,018	N/A	762	1,550	3,921	1,161	N/A
1999	1,617,414	N/A	814	1,987	3,206	1,282	N/A
2000	1,845,948	N/A	817	2,259	3,569	1,443	N/A
2001	2,198,382	N/A	831	2,645	4,263	1,551	N/A
2002	2,399,000	N/A	836	2,870	5,197	1,749	N/A
2003	2,927,330	N/A	874	3,349	5,721	2,004	N/A
2004	3,334,605	N/A	883	3,776	6,391	2,206	N/A
2005	3,050,220	N/A	911	3,348	7,833	2,381	N/A
2006	3,546,722	N/A	887	3,999	8,069	2,663	N/A
2007	3,655,477	\$ 595,079	894	3,423	8,793	2,706	412
2008	3,599,393	262,322	893	3,737	9,820	2,848	420
2009	3,530,290	467,218	884	3,465	10,587	2,933	432
2010	3,980,011	274,956	903	4,103	9,299	3,148	450
2011	4,558,427	474,688	926	4,410	9,900	3,156	454
2012	4,594,056	360,450	946	4,475	10,819	3,441	476
2013	4,715,453	218,168	947	4,748	10,497	3,344	427
2014	5,316,430	331,014	977	5,102	10,594	3,385	399
2015	5,707,136	422,399	963	5,488	11,748	3,804	445
2016	6,214,474	337,720	1,044	5,629	12,634	4,054	406
2017	6,828,063	303,875	1,044	6,249	13,646	4,376	412
2018	N/A	N/A	N/A	N/A	14,869	4,743	406

MERCER



Mercer (US) Inc.
333 South 7th Street, Suite 1400
Minneapolis, MN 55402-2427
612 642 8600



Calculation of Customer Benefits from Prepaid Pension Asset (thousands)

Line No.		Ave balance	ADIT	Net (Total)	Net (ND)
1	Expected Return on Plan Assets (EROA) @ 7.50% times 13 mo ave l	\$34,529		\$2,590	\$934
2	13 Month Average Prepaid Pension Balance (see CLP-1, Sch. 3)	\$34,529	(\$17,537)	\$16,992	\$6,131
3	Revenue Requirement @ 7.92% ROR	2,735	(1,389)	1,346	\$486
4	Tax impact	604	(307)	297	\$107
5	Total Revenue Impact on Prepaid Pension Asset	3,339	(1,696)	1,643	593
6	Revenue Requirement Impact of prepaid pension less costs offset by prepaid pension asset			(\$947)	(\$342)

Otter Tail Power Company

Test Year Ending December 31, 2018

Summary of Overall Impacts of Pension, Retiree Medical and LTD Medical
Total Company Costs

Component	Initial Filing	Mercer 2018 Update	Increase/ (Decrease)	
Pension	\$ 8,775,000	\$ 5,895,375	\$ (2,879,625)	
FAS 106	5,265,000	5,654,028	389,028	
FAS 112	706,875	752,627	45,752	
Total Costs	\$ 14,746,875	\$ 12,302,030	\$ (2,444,845)	
Reversal of ASC 715				
Pension			(2,730,000)	
FAS 106			(3,705,000)	
100% reduction to O&M Expense			(6,435,000)	
Difference between total costs and reversal of 100% reduction of O&M			3,990,155	
Approximate amount posting to O&M Expense			-81%	
Approximate Total Company Savings			(3,221,545)	
ND Savings for Pension and OPEB Updates				
Pension			(1,147,789)	(1)
FAS 106			(160,884)	(2)
FAS 112			14,871	(3)
Total Decrease to Revenue for Pension and OPEB Cost updates			\$ (1,293,802)	
Net Change in Prepaid Pension Asset			\$ 4,380,427	
Revenue Requirement @7.92% ROR			346,930	
Total Revenue Requirement Adjustment before tax			\$ (946,872)	
Tax Impact			(16,570)	
Approximate Net Revenue Requirement Impact			\$ (963,442)	

(1) Ties to Supplemental Bridge Schedule Operating Statement Adjustments Column B

(2) Ties to Supplemental Bridge Schedule Operating Statement Adjustments Column C

(3) Ties to Supplemental Bridge Schedule Operating Statement Adjustments Column D