EXHIBIT

OTP-3

Before the South Dakota Public Utilities Commission
State of South Dakota

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

Docket No. EL18-___

Exhibit___

FINANCIAL SOUNDNESS, CAPITAL STRUCTURE AND COST OF CAPITAL

Direct Testimony and Schedules of

Kevin G. Moug

April 20, 2018

TABLE OF CONTENTS

ATTACHED SCHEDULES

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. My name is Kevin G. Moug. I am the Chief Financial Officer and Senior Vice President of Otter Tail Corporation and the Treasurer for Otter Tail Power Company (OTP). OTP is a wholly owned subsidiary of Otter Tail Corporation.

Q. PLEASE SUMMARIZE YOU QUALIFICATIONS AND EXPERIENCE.

A. I have been Senior Vice President and Chief Financial Officer of Otter Tail Corporation since 2001. A copy of my resume is included as Exhibit___(KGM-1), Schedule 1.

II. PURPOSE AND OVERVIEW OF DIRECT TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my Direct Testimony is to demonstrate the reasonableness of the capital structure, cost of Long-Term Debt (LTD), and the overall Rate of Return (ROR) to be used for OTP's 2017 Test Year. As I will explain, that capital structure is based on the OTP's 2018 projected capital structure. I will discuss the financial impacts and scope of OTP's recent capital expenditures and OTP's estimated future capital expenditures. I will also discuss the importance of the decisions of the South Dakota Public Utilities Commission (Commission) in this proceeding, including granting a reasonable Return on Equity (ROE), to: (1) maintaining OTP strong credit ratings; (2) the long-term cost of completing OTP's capital expenditures plans; and (3) OTP's ability to attract capital and provide service at a fair and reasonable cost.

Q. PLEASE PROVIDE A BRIEF OVERVIEW OF YOUR DIRECT TESTIMONY.

A. OTP's proposed capital structure, cost of LTD, and ROR are reasonable for the 2017 Test Year and should be adopted for determining OTP's rates. OTP's proposed capital structure, cost of LTD, and ROR for the 2017 Test Year are based on the forecast of OTP's 2018 capital structure, cost of LTD, and ROR. That forecast reflects the issuance of $100 million of LTD in February 2018, which has the effects of reducing OTP's equity ratio, cost of LTD, and ROR below the levels that would have resulted from using OTP's actual equity ratio, cost of LTD, and ROR for 2017. As a result, OTP's approach provides a significant benefit to South Dakota customers.

OTP has been engaged in an extensive capital expenditure program, involving capital expenditures of approximately $806 million from 2013 through 2017.[1] OTP required external sources of debt and equity capital to fund those investments, in addition to substantial amounts of internally generated equity. OTP's extensive capital expenditures plan is expected to continue from 2018 through 2022 with an additional approximately $901 million of further capital expenditures by OTP in that 5-year period.[2] Completion of OTP's capital expenditures plan will also require external sources of equity and debt capital in addition to internally generated cash flow from operations.

The Commission's decisions in this proceeding, including the Commission's decisions with respect to OTP's capital structure and ROE, may significantly affect investors' perceptions of OTP's regulatory environment, which has important implications for OTP's financial outlook and OTP's senior unsecured credit ratings. The credit ratings in effect when OTP places LTD to help finance the rest of its capital expenditures plan will affect OTP's cost of service for 10 to 30 years. As a result, the Commission's decisions in this proceeding may affect OTP's cost of service for a 10 to 30-year period.

Q. PLEASE SUMMARIZE OTP'S RECOMMENDED ROR, INCLUDING CAPITAL STRUCTURE, COST OF LTD, AND ROE.

A. OTP recommends an overall ROR of 7.96 percent. This ROR is based on the capital components and related costs summarized in Table 1 and shown on attached Exhibit

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[1] Otter Tail Corporation Form 10-K for year ended December 31, 2015, p 50 and Otter Tail Corporation Form 10-K for year ended December 31, 2017, p 49.
[2] Otter Tail Corporation Form 10-K for year ended December 31, 2017, p 49.

___(KMG-1), Schedule 2.

Table 1
Recommended Capital Structure and ROR
for the 2017 Test Year

Component	Percentage	Cost	Weighted Cost
Long-Term Debt	46.90%	5.30%	2.49%
Common Equity	53.1%	10.30%	5.47%
Total	100.0%		7.96%

OTP's recommended 7.96 percent ROR is 54 basis points lower than the 8.50 percent ROE approved by the Commission for OTP's 2009 Test Year in OTP's last South Dakota general rate case.

Q. HOW IS THE BALANCE OF YOUR DIRECT TESTIMONY ORGANIZED?

A. Section III provides a brief description of the financial characteristics of OTP and Otter Tail Corporation. Section IV compares the equity ratio in OTP's proposed capital structure to the equity ratios of other utilities. Section V describes our historic and planned financing and capital expenditures and credit ratings and explains the importance of OTP's regulatory environment and investor perceptions to our long-term capital costs, and the impacts on our capital expenditures plans and costs. Section VI explains OTP's credit ratings and their effect on the costs of borrowing. Section VII explains the effects of business and financial risks on OTP's credit ratings. Section VIII provides a detailed description of the components of OTP's capital structure and costs of LTD to be used for the 2017 Test Year. Section IX includes my conclusions and recommendations.

Q. HAS OTP ALSO PROVIDED SUPPLEMENTAL COST OF CAPITAL INFORMATION?

A. Yes. Information is included in Volume 4A, Section 3, Rate of Return/Cost of Capital Schedules D-1 through D-4.

III. DESCRIPTION OF OTP AND OTTER TAIL CORPORATION

Q. PLEASE PROVIDE A SUMMARY DESCRIPTION OF OTP AND OTTER TAIL CORPORATION.

A. OTP is a wholly owned subsidiary of Otter Tail Corporation and is a separate legal entity from Otter Tail Corporation. OTP issues its own LTD and has its own credit facility with banks that provide OTP's short-term borrowings. Otter Tail Corporation owns all of OTP's outstanding common stock. There are no loans outstanding between OTP and Otter Tail Corporation. Otter Tail Corporation is publicly held and traded on the NASDAQ. OTP is Otter Tail Corporation's only utility operating company.

Q. HOW DOES OTTER TAIL CORPORATION COMPARE IN SIZE TO OTHER ELECTRIC UTILITIES?

A. Otter Tail Corporation is the second smallest publicly traded investor owned utility in the United States,[3] and it is much smaller than the average of publicly traded investor owned utilities. Otter Tail Corporation's total market capitalization is $1.67 billion[4] while the average total market capitalization of publicly traded investor owned utilities is $16.7 billion.[5] Otter Tail Corporation is also the smallest publicly traded investor owned utilities doing business in South Dakota, including Northwestern Energy NWE) with market capitalization of $2.54 billion[6], Black Hills (BKH) with market capitalization of $2.79 billion[7], Montana-Dakota Utilities (MDU) with market

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[3]http://www.eei.org/resourcesandmedia/industrydataanalysis/industryfinancialanalysis/QtrlyFinancialUpdates/Documents/QFU_Stock/2017_Q4_Stock_Performance.pdf.

[4] http://www.nasdaq.com/symbol/ottr 3-12-18.

[5] EEI 2017 Stock Performance, Q4 2017 Financial Update, total industry $720,427 million divided by 43 utilities http://www.eei.org/resourcesandmedia/industrydataanalysis/industryfinancialanalysis/QtrlyFinancialUpdates/Documents/QFU_Stock/2017_Q4_Stock_Performance.pdf.

[6] http://www.nasdaq.com/symbol/NWE 3-12-18.

[7] http://www.nasdaq.com/symbol/BKH 3-12-18.

capitalization of $5.3 billion[8] and Xcel Energy (XE) with market capitalization of $21.95 billion.[9]

Q. HOW DOES OTTER TAIL CORPORATION'S COMMON STOCK OWNERSHIP PROFILE COMPARE TO OTHER ELECTRIC UTILITIES?

A. Otter Tail Corporation also has a level of institutional ownership of its common stock which is substantially lower than the average institutional ownership of the electric utilities in the comparable group of OTP witness Mr. Robert B. Hevert, and lower than all other investor owned utilities providing electric service in South Dakota.

Q. DOES OTTER TAIL CORPORATION'S LOWER LEVEL OF INSTITUTIONAL OWNERSHIP HAVE AN EFFECT ON OTP's COST OF EQUITY?

A. Yes. As Mr. Hevert explains in his Direct Testimony, institutional investors are an important and efficient source of equity capital. Otter Tail Corporation's significantly lower level of institutional common stock ownership indicates there is a lower level of equity capital available (from institutional demand) to Otter Tail Corporation and OTP, with lower demand leading to a higher cost of equity for OTP.

Q. HOW DOES OTTER TAIL CORPORATION'S AVERAGE DAILY TRADING VOLUME COMPARE TO OTHER ELECTRIC UTILITIES?

A. Otter Tail Corporation daily trading volume of approximately 100,000 shares per day is far below the average daily trading volume of Mr. Hevert's comparable group and the levels of NWE, BKH, MDU and XE, as described in Mr. Hevert's Direct Testimony.

Q. IS THIS LOWER TRADING VOLUME RELATED TO LIQUIDITY RISK AND LOWER INSTITUTIONAL OWNERSHIP?

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[8] http://www.nasdaq.com/symbol/mdu 3-12-18.
[9] http://www.nasdaq.com/symbol/xel 3-12-18.

A. Yes. The lower trading volume creates a challenge for an institutional investor's ability to acquire or sell the large blocks of stock that are typically held by an institutional investor. This has an adverse effect on liquidity for owners of Otter Tail Corporation common stock and implications for OTP's cost of equity, as Mr. Hevert also explains.

IV. OTP CAPITAL STRUCTURE AND EQUITY RATIO

Q. HOW DID OTP DETERMINE ITS PROPOSED CAPITAL STRUCTURE?

A. OTP's proposed capital structure for its 2017 Test Year is based on the 13 month average of OTP's 2018 forecast capital structure.

Q. WHY IS OTP PROPOSING THE USE OF A 2018 FORECAST CAPITAL STRUCTURE FOR A 2017 HISTORICAL TEST YEAR?

A. OTP is proposing the use of its 13-month average 2018 forecast capital structure because of a significant change that occurred in February 2018. In February, OTP issued $100 million of LTD at a rate of 4.07 percent. This LTD was issued to provide long term financing for major capital expenditures that have been and are being placed in service.

Q. HOW DOES THE USE OF THE 2018 FORECAST CAPITAL STRUCTURE AFFECT RATES?

A. The use of the 2018 forecast capital structure added $100 million to OTP's long term debt, which reduced its equity ratio by approximately 3.4 percent from the 2017 historic 13-month average (on a test year basis), and reduced the average cost of LTD by approximately 28 basis points from the 2017 historic 13-month average. Thus, the use of the 2018 forecast capital structure and cost of LTD provides substantial benefits to South Dakota customers, reducing the 2017 Test Year revenue requirement by approximately $317,000.

Q. HOW DOES OTP'S PROPOSED 53.1 PERCENT EQUITY RATIO COMPARE TO EQUITY RATIOS OF MR. HEVERT'S COMPARABLE GROUP COMPANIES?

A. As Mr. Hevert explains, OTP's equity ratio is well within the range of the equity ratios of companies in his comparable group. Mr. Hevert notes the mean equity ratio from the operating utilities in his comparable group is 51.61 percent, the median equity ratio is 52.80 percent, and the range is from 44.86 percent to 57.42 percent. OTP's proposed 53.1 percent equity ratio is well within that range.

Q. DO OTP'S CAPITAL STRUCTURE AND EQUITY RATIO PROVIDE OTHER CUSTOMER BENEFITS?

A. Yes. OTP's capital structure and equity ratio have also contributed to OTP's ability to simultaneously finance its significant capital expenditures at reasonable costs, [10] and reduce its cost of LTD. We also expect that OTP's capital structure and equity ratio will facilitate OTP's completion of its capital expenditures over the next 5 years. All of these result in benefits to OTP customers.

Q. IS A REDUCTION IN OTP'S EXPENSES AND RATES (RESULTING FROM FEDERAL INCOME TAX REFORM) A FACTOR THAT AFFECTS THE REASONABLENESS OF OTP'S CAPITAL STRUCTURE AND EQUITY RATIO?

A. As explained in Mr. Hevert's Direct Testimony, a reduction in OTP's expenses and rates to reflect OTP's reduced federal income tax is the type of result that the rating agencies have characterized as a credit negative event which has an effect on both the cost of equity and reasonableness of the capital structure.

Q. IS OTP PROPOSING AN INCREASE IN ITS EQUITY RATIO AS A RESULT OF FEDERAL INCOME TAX REFORM?

A. No. OTP does believe, however, that federal income tax reform provides further substantial support for the reasonableness of OTP's proposed 53.1 percent equity ratio

[10] Otter Tail Corporation 2016 Form 10(K), p. 50.

V. OTP RECENT CAPITAL EXPENDITURES AND ONGOING CAPITAL EXPENDITURES PLANS

Q. PLEASE SUMMARIZE OTP'S RECENT CAPITAL EXPENDITURES.

A. OTP's capital expenditures increased significantly in 2012 and have remained very substantial since then as shown on Table 2 below:

Table 2

OTP Capital Expenditures 2012 – 2017 [11]

Year	**Capital Expenditure** ($ millions)
2012	$102
2013	$150
2014	$149
2015	$136
2016	$150
2017	$119
Total	$806
Average	$134

OTP witness Mr. Bruce Gerhardson provides further information regarding the various projects that were included in these capital expenditures.

Q. HOW DO THESE PRIOR EXPENDITURES COMPARE TO OTP'S NET PLANT IN SERVICE WHEN THEY BEGAN?

A. OTP's net electric plant in service as of December 31, 2011 was approximately $922 million.[12] OTP's $806 million investment during 2012-2017 represented approximately 99 percent of its net electric plant as of December 31, 2011.

Q. HOW HAS OTP PROVIDED LONG-TERM FUNDING FOR ITS 2012-2017 CAPITAL EXPENDITURES?

[11] Otter Tail Corporation Form 10-K for year ended December 31, 2014, p 50 and Otter Tail Corporation Form 10-K for year ended December 31, 2016, p 49.

[12] Otter Tail Corporation, 2011 Form 10-K, p. 115.

A. OTP provided long-term funding for its $806 million of capital expenditures in 2012-2017 with a combination of approximately $250 million of LTD issued by OTP (including the February 2018 issuance), earnings retained by OTP, and equity infusions from Otter Tail Corporation. Earnings retained by OTP and equity infusions from Otter Tail Corporation increased OTP's equity balance from $330 million at year end 2011 to $558 million at year end 2017. From 2012-2017, almost 80 percent of OTP's net income has been reinvested, either as retained earnings or added infusions of equity from Otter Tail Corporation. These equity reinvestments provided needed funding for OTP's capital expenditures and were also needed essential to maintain a balance of debt and equity and a balanced capital structure for OTP.

Q. HAVE OTP'S CAPITAL EXPENDITURES AND RELATED FUNDING BEEN A SIGNIFICANT PART OF OTTER TAIL CORPORATION'S STRATEGY?

A. Yes. OTP is Otter Tail Corporation's largest business, and Otter Tail Corporation has focused on OTP within Otter Tail Corporation's two platforms, electric and manufacturing. That focus on OTP has been successful, but $901 million of planned capital expenditures for OTP remains for the four-year period of 2018-2022, as shown in Table 3 below:[13]

Table 3

Projected OTP Capital Expenditures 2018 – 2021[14]

Year	**Capital Expenditure** ($ millions)
2018	$95
2019	$382
2020	$185
2021	$145
2022	$94
Total	$901
Average	$180

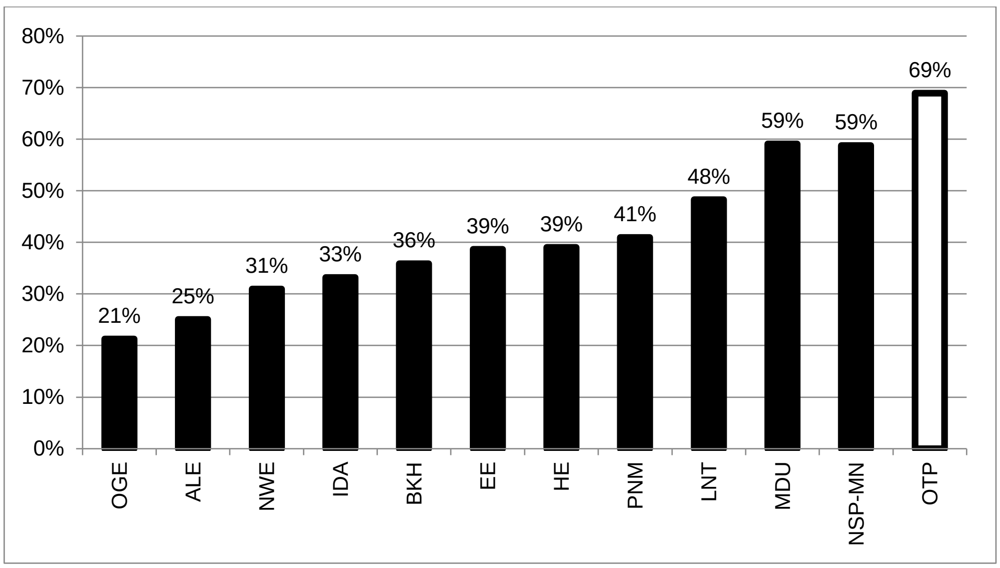
[13] Otter Tail Corporation Form 10-K for year ended December 31, 2016, p 49.

[14] Otter Tail Corporation Form 10-K for year ended December 31, 2014, p 50 and Otter Tail Corporation Form 10-K for year ended December 31, 2016, p 49.

Q. HOW DO THESE CAPITAL EXPENDITURES COMPARE TO OTHER UTILITIES?

A. As Mr. Hevert notes in his Direct Testimony, OTP's planned capital expenditure level is far higher than any other company in his proxy group, as shown in Chart 1:

Chart 1:
Comparison of OTP and Hevert Comparable Group
Planned Capital Expenditures
(As a percentage of net plant)



As Mr. Hevert also notes, OTP's projected 69 percent capital expenditures level as a percentage of its net plant is also significantly higher than all publicly traded investor owned utilities in South Dakota, including XEL (at 59 percent), MDU (at 59 percent), NWE (at 31 percent), and BKH (at 36 percent).[15]

Q. WILL THE ROE AND CAPITAL STRUCTURE AUTHORIZED IN THIS PROCEEDING HAVE AN EFFECT ON FINANCING OF OTP'S CAPITAL EXPENDITURE PLANS?

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[15] Hevert Direct Testimony, Section VI, *Capital Expenditures*.

A. Yes. The ROE and capital structure authorized in this proceeding will have a substantial impact on OTP's financing of its capital expenditures plan in two important ways. First, the ROE and capital structure will have a direct impact on the level of OTP's authorized earnings. The level of authorized earnings will, in turn, directly impact OTP's ability to fund capital expenditures with internally generated retained earnings.

As I explained, OTP has reinvested almost 80 percent of its earnings in the 2012-2017 period of its previous substantial capital expenditures. Previously authorized ROEs have had a significant effect on the availability of these internally generated retained earnings, which have been a significant source of funding for OTP's capital expenditures and are expected to remain a significant source of funding for the remainder of OTP's capital expenditures plan.

The authorized ROE and capital structure will have a significant effect on the perceptions of rating agencies and investors, which is likely to be heightened by the scale of the OTP capital expenditures plan and the general recognition that federal income tax reform will have negative effects on utilities and the resulting uncertainty for utilities. These perceptions could have a substantial impact on credit ratings and the availability and external debt and equity capital that will be needed to complete OTP's capital expenditures plans. Later in my Direct Testimony, I will also discuss plans for issuance of new LTD and external sources of equity in the 2018-2022 time period during which OTP will be completing its capital expenditures plan.

Q. DO RATE CASE AND ROE DECISIONS AFFECT CREDIT RATING AGENCY EVALUATION OF UTILITIES?

A. Yes. The effect of rate case and ROE decisions is demonstrated in the February 20, 2018 action by Moody's Investor Services (Moody's) which changed its ratings outlook on ALLETE from Stable to Negative. Moody's noted the combined effects of the recent Minnesota Power rate case decision of the Minnesota Public Utilities Commission (MPUC) and the reduced cash flow anticipated from the recent federal tax reform. Moody's noted the rate case decision was likely to negatively affect financial metrics and also was seen as an indication of a deterioration of Minnesota Power's regulatory environment, noting that the "rate case outcome also points to a less constructive regulatory relationship between MP and the MPUC."

In a February 8, 2018 Issuer Comment, Moody's also discussed the negative effects of the MPUC rate case decision, noting that; "The MPUC reduced MP's allowed ROE to 9.25% from the requested 10.25%, below the national average of about 9.6%."

VI. OTP'S CREDIT RATINGS AND COST OF BORROWING

Q. ARE CREDIT RATINGS IMPORTANT TO OTP?

A. Credit ratings are particularly important to OTP now while OTP is completing its capital expenditures program. As I will explain, completion of that plan will require OTP to issue additional LTD in order to complete the plan, and the interest rates at which OTP issues its LTD will continue to affect costs for many years into the future. OTP's credit ratings have a direct effect on the interest rates for OTP's LTD.

Q. HOW DOES OTP ARRANGE ITS LTD FINANCING?

A. OTP raises the LTD needed for financing its operations, including its capital expenditures, through private placements with institutional investors rather than through public issuances of LTD. OTP uses private placements because the size of its debt offerings attracts better interest in the private placement market from fixed income investors as well as not incurring the added costs of issuing public debt and having to incur an additional borrowing cost for a small size premium that would exist in the public debt market. OTP's private placements of LTD are for terms of 10 to 30 years.

Q. DOES OTP'S USE OF PRIVATE PLACEMENTS FOR LTD MAKE CREDIT RATINGS UNIMPORTANT TO OTP AND OTP'S CUSTOMERS?

A. No. Credit ratings remain very important to OTP and OTP customers because institutional investors use these ratings, along with their own analysis, in making decisions regarding whether to invest in OTP's LTD debt and the interest rate to require in order to make an investment in OTP's LTD.

Q. WHAT ARE OTP'S CURRENT CREDIT RATINGS?

A. OTP's current credit ratings are set out in Table 4 below:

Table 4

OTP Credit Ratings[16]

	Moody's	Fitch	S&P
Corporate Credit/Long term issuer Default Rating	A3	BBB	BBB
Senior Unsecured Rating	N.A.	BBB+	BBB
Outlook	Stable	Stable	Positive

The "Positive" outlook from S&P reflects a change in outlook from Stable on August 21, 2017.[17]

Q. HAVE YOU ESTIMATED THE EFFECTS ON LTD INTEREST RATES OF A ONE-NOTCH CHANGE IN OTP'S CREDIT RATING?

A. Yes. Based on recent history, a one-notch change by Moody's (from OTP's current A3 rating to Baa1) would lead to a 25 to 40 basis point change in interest rates, with an increase in the Credit Rating reducing interest rates and a decrease in the Credit Rating increasing interest rates. This change in interest rates would not apply to LTD that is now outstanding but would apply to LTD that would be placed when the change in the Credit Rating became effective.

Q. WOULD A CREDIT RATING CHANGE ALSO HAVE AN EFFECT ON THE COSTS OF OTP'S SHORT TERM DEBT?

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[16] Moody's August 9, 2017 Credit Opinion for OTP (Moody's 2017); Fitch, August 17, 2017 (Fitch 2017); S&P August 21, 2017 Ratings for OTP and Otter Tail Corporation (S&P 2017).

[17] S&P 2017, p. 1.

A. Yes. OTP's STD credit agreement contains a defined pricing grid. A one notch downgrade in OTP's credit ratings would result in higher short-term borrowing costs of 25 basis points under the current credit agreement.

Q. DOES OTP PLAN TO ISSUE LTD DURING THE 2018-2022 TIME PERIOD IN ORDER TO COMPLETE ITS CAPITAL EXPENDITURE PLAN?

A. Yes. OTP plans to finance its estimated $901 million of capital expenditures in the 2018-2022 timeframe with a balanced mix of equity and debt, including OTP retained earnings and equity infusions from Otter Tail Corporation, including the results of common stock issuances.

Q. HAVE YOU ESTIMATED THE POTENTIAL EFFECTS ON OTP'S INTEREST EXPENSES IF THERE IS A RATING CHANGE?

A. Yes. Table 5 below summarizes the effects on OTP total interest expenses per $200 million of LTD that may be issued if there is a one-notch downgrade and interest rates increase by 25 and 40 basis points, with that LTD outstanding from 10 years to 30 years. Those calculations are shown on Exhibit___(KGM-2), Schedule 3.

Table 5

Effect of 25 basis point interest rate increase on
$200 million issuance of LTD

	OTP Total @ 25 basis points	**OTP Total** @ 40 basis points
Annual increase	$500,000	$800,000
Cumulative increase over 10 years	$5,000,000	$8,000,000
Cumulative increase over 20 years	$10,000,000	$16,000,000
Cumulative increase over 30 years	$15,000,000	$24,000,000

Q. WILL THE CHANGE IN THE COST OF THIS ADDITIONAL LTD AFFECT LONG TERM COSTS OF SERVICE?

A. Yes. The terms of newly issued debt are expected to range from 10 to 30 years. As a result, these costs will remain part of the costs of service for a substantial period of time.

VII. EFFECTS OF OTP'S BUSINESS AND FINANCIAL RISKS ON ITS CREDIT RATINGS

Q. DO RATING AGENCIES CONSIDER BOTH BUSINESS RISKS AND FINANCIAL METRICS IN ESTABLISHING A UTILITY'S CREDIT RATINGS?

A. Yes. Credit rating agencies assess, and assign ratings to, both a utility's: (1) Business Risk; and (2) Financial Risk when making rating determinations. A utility's Financial Risk is based on credit metrics. Business Risk and Financial Risk are considered together when a credit rating agency determines a utility's credit rating and each category of risk affects the level of risk that the rating agency requires of the other category in order to maintain a given rating. For example, the required Financial Risk becomes more stringent (i.e. the credit metrics must be better) to maintain a given credit rating as the utility's Business Risk rating decreases (indicating higher level business risk).

Q. WHAT ARE THE COMPONENTS THAT ARE CONSIDERED IN DETERMINING A UTILITY'S BUSINESS RISK?

A. A utility's business risk considers a number of factors, including: (1) the regulatory environment in which the utility provides service, including the timing and ability to recover investment; (2) the risk of environmental and other changes that may affect the utility's costs and ability to provide service; (3) the size and diversity of a utility's customer base; and (4) the economic strength of the utility's service area. Because a utility's ability to set rates and recover its costs is so dependent on cost of service regulation, a utility's regulatory environment is a key element of its business risk rating. The scope of a utility's investments is also a very significant factor in assessing a utility's risk.

Q. HAVE THE RATING AGENCIES ADDRESSED THE LARGE SCOPE OF OTP'S CAPITAL EXPENDITURES?

A. Yes. Moody's, Fitch, and S&P have each explicitly recognized the large scope of OTP's capital expenditure program. Based on information for 2017-2021, Moody's has noted "OTP's current five-year capital investment program is approximately $862 million."[18] Fitch similarly noted the "Large capex program at OTP totaling $862 million through 2021."[19] S&P stated it could revise the outlook downward from positive to stable "if rising capital spending continues without adequate and timely recovery of costs."[20] Rating agencies (and the capital markets) are particularly aware of the need for regulatory decisions that support the recovery of capital expenditures during periods of substantial expenditures

Q. HAVE THE RATING AGENCIES ADDRESSED THE RELATIONSHIP OF REGULATORY DECISIONS TO OTP'S CAPEX PROGRAM?

A. Yes. The importance and connection of supportive regulatory decisions to OTP's capital expenditures plan has been explicitly discussed. Moody's recently said:

> OTP's rating outlook reflects Moody's expectation that the regulatory environments for OTP remain credit supportive and that OTP will continue to produce predictable and stable cash flows.
>
> ***
>
> For OTP, a rating downgrade is possible if its regulatory support wanes and becomes less credit supportive such that regulatory lag increases or cost recovery is negatively affected.[21]

Fitch has similarly said:

> Otter Tail Power's (OTP) Stable Outlook reflects that regulated nature of its electric utility operations and a balanced regulatory environment across its three state jurisdictions …..[22]

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[18] Moody's 2017, p. 4.
[19] Fitch 2017, p. 4.
[20] S&P 2017, p. 2.
[21] Moody's 2017, pp 1, 2.
[22] Fitch 2017, p 2.

S&P has noted the Positive outlook may not lead to an upgrade of the credit rating:

> [I]f rising capital spending continues without adequate and timely recovery of costs."[23]

Q. HOW IMPORTANT ARE REGULATORY AND COST RECOVERY IN RELATION TO FINANCIAL METRICS IN DETERMINING OTP'S RATINGS?

A. Regulatory and cost recovery appear to be as important as financial metrics in determining OTP's credit ratings. Exhibit___(KGM-1), Schedule 4 is a copy of Moody's Rating Factors for OTP from the August 9, 2017 Credit Opinion for OTP. The August 9, 2017 Credit Opinion shows the four factors Moody's considered in its rating decisions for OTP along with the weightings given to each. Regulatory Framework was weighted 25 percent. Ability to Recover Costs and Earn Returns (which reflect regulation) was weighted 25 percent. Diversification was weighted 10 percent. Financial Strength was weighted 40 percent.[24] The impact of regulation and resulting ability to recover costs and earn returns accounted for 50 percent of the ratings.

Q. WILL THE ROE AUTHORIZED IN THIS PROCEEDING BE IMPORTANT TO OTP'S CREDIT RATINGS, INVESTORS, AND COST OF CAPITAL?

A. Yes. While ROE is certainly not the only factor considered in the evaluation of a rate case or a potential investment in a utility doing business in a particular state, it is easy for rating agencies and investors to identify and compare ROEs to expectations and to ROEs from other jurisdictions. The ROEs are also regarded as an indicator of regulatory support or the lack of support, as the Moody's action and Issuer Comment pertaining to Minnesota Power demonstrate. Moody's also recently noted "A rating upgrade could be considered if OTP's regulatory environments improved materially, further shortening regulatory lag and improving rates and returns."[25]

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[23] S&P 2017, p. 2.
[24] Moody's 2017, p. 5.
[25] Moody's 2017, p. 2.

Q. IS OTP'S CAPITAL STRUCTURE IMPORTANT TO OTP'S RATING AGENCIES, INVESTORS, AND COST OF CAPITAL?

A. Yes. A utility's capital structure provides the long-term structural foundation for the financing required to support its operations and capital investment plans. It is particularly important when a utility is making significant capital expenditures, as reflected in Fitch's recent Rating Report noting that:

> Fitch expects … that future funding needs will be met by a balanced mix of debt and equity and that [Otter Tail Corporation] will downstream additional equity as needed to support the balanced capital structure.[26]

Q. WHAT IS YOUR CONCLUSION?

A. When a utility is engaged in an extensive capital expenditure program, a decision in a single rate case can have adverse effects that last long beyond the term of the rates set in that case. This is true in the case of OTP at this time, which continues to be engaged in an extensive capital expenditure program that will involve capital expenditures of approximately $901 million in the 2018-2022 timeframe. As a result, OTP requests the Commission take these facts into consideration when determining where to set the ROE for OTP within the range of reasonable ROEs.

VIII. COMPONENTS OF OTP's PROPOSED CAPITAL STRUCTURE

Q. WHAT ARE THE COMPONENTS OF OTP'S CAPITAL STRUCTURE?

A. OTP's capital structure consists of LTD, STD and common equity.

A. LONG-TERM DEBT

Q. WHAT IS THE AMOUNT AND COST OF OTP'S LTD IN THE PROPOSED CAPITAL STRUCTURE FOR THE 2017 TEST YEAR?

A. The 13-month average of OTP's LTD for the 2018 forecast year that is proposed for use in the 2017 Test Year is $492.7 million and the cost of LTD is 5.30 percent, as shown on Exhibit___(KGM-1), Schedule 5.

[26] Fitch 2017, p.3.

Q. HOW DO THE AMOUNT AND THE COST OF OTP'S LTD IN THE CURRENT RATE CASE COMPARE TO OTP'S LAST RATE CASE?

A. Since OTP's last rate case, LTD has increased by approximately $196.5 million and the cost has decreased by approximately 151 basis points as shown in Table 6 below:

Table 6
OTP LTD 2008 Rate Case and Current Case
($ millions)

	2008 Rate Case	Current Rate Case	Difference
Amount	$296.2	$492.7	$196.5
Cost	6.81%	5.30%	(1.51)%

B. COMMON EQUITY

Q. WHAT IS THE AMOUNT OF OTP'S 2018 FORECAST COMMON EQUITY AND HOW WAS IT DETERMINED?

A. OTP's common equity of $562.3 million reflects the average of 13 month-end expected equity balances from December 2017 through December 2018 as shown on Exhibit___ (KGM-1), Schedule 6. Since that schedule was prepared, Otter Tail Corporation has made a $10 million equity infusion into OTP. OTP does not anticipate increasing the proposed 53.1 percent equity ratio as a result of that equity infusion or other possible equity infusions by Otter Tail Corporation.

Q. HAS OTTER TAIL CORPORATION RECENTLY ISSUED COMMON STOCK?

A. Yes. Otter Tail Corporation has had follow on offerings of its common stock since 2004 and 2008. Otter Tail Corporation also issued common stock during the 2014-2017 timeframe using its "At the Market Program," its Dividend Reinvestment Plan (DRIP), and its Employee Stock Purchase Plan (ESPP). All of these common stock issuances are included on Exhibit___KGM-1), Schedule 7.

Q. ARE THERE COSTS OF ISSUING COMMON STOCK?

A. Yes. When common stock is issued, the corporation issuing the stock incurs costs in the process of issuance, including underwriter discounts, audit, legal, printing and listing fees, and other expenses of issuance. When these issuance costs (also known as "flotation costs") are incurred, they reduce the net proceeds received by the corporation issuing the stock (under generally accepted accounting principles). Flotation costs are comparable to the issuance costs for LTD. The flotation costs associated with Otter Tail Corporation's common stock issuances are identified in Exhibit___KGM-1), Schedule 7, which Mr. Hevert used to determine the flotation cost adjustment. All of these flotation costs were treated as a reduction in proceeds and reflected on the balance sheet and not expensed, which is the standard practice with all flotation costs.

Q. WERE THESE 2014-2017 COMMON STOCK ISSUANCES BY OTTER TAIL CORPORATION RELATED TO OTP'S CAPITAL EXPENDITURES?

A. Yes. These Otter Tail Corporation common stock issuances were directly related to OTP's prior capital expenditures, its current capital expenditures and its planned future capital expenditures.

Q. PLEASE SUMMARIZE OTTER TAIL CORPORATION'S PLANNED COMMON STOCK ISSUANCES.

A. As I noted earlier, OTP plans to finance its estimated $901 million of capital expenditures in the 2018-2022 timeframe with a balanced mix of equity and debt, including OTP retained earnings and equity infusions from Otter Tail Corporation, including the results of common stock issuances. These common stock issuances by Otter Tail Corporation are expected to include issuances under its At-the-Market (ATM) program, its Dividend Reinvestment Plan (DRIP) and its Employee Stock Purchase Plan (ESPP) during the 2018 - 2022 timeframe.

Q. ARE THE 2014-2017 AND PLANNED COMMON STOCK ISSUANCES DIRECTLY RELATED TO OTP'S INVESTMENT PLANS?

A. Yes. The 2014-2017 common stock issuances and planned issuances of common stock by Otter Tail Corporation during the 2018 – 2022 timeframe are directly related to the current and planned capital expenditures for OTP.

XI. CONCLUSION

Q. CAN YOU PLEASE SUMMARIZE YOUR CONCLUSIONS?

A. Yes. I recommend the Commission approve a capital structure for the 2017 Test Year including 53.10 percent equity, a 10.30 percent ROE, and an ROR of 7.96 percent.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

KEVIN G. MOUG

EMPLOYMENT

2001-PRESENT Otter Tail Corporation Fargo, ND
Sr. Vice President & Chief Financial Officer

1996-PRESENT Varistar Corporation Fargo, ND
Chief Financial Officer & Treasurer

1993-1996 Advance Dental Management Mondovi, WI
Chief Financial Officer

1981-1993 Deloitte & Touche Minneapolis, MN
Senior Manager – Middle Market Practice

EDUCATION

- Bachelor of Science in Business Administration — University of North Dakota

INDUSTRY CERTIFICATIONS

- Certified Public Accountant (Inactive)

PROFESSIONAL AFFILIATIONS

• American Institute of Certified Public Accountants	Member
• Financial Executive International	Member
• US Bank Advisory Board	Board Member
• Essentia Health West Region	Board of Directors
• Essentia Health System	Board of Directors Audit Committee Chair

PROPOSED COST OF CAPITAL FOR 2017 TEST YEAR

	(A)	(B)	(C)	(D)	(E)
Line No.	Capitalization	Amount	Percent of Total	Cost of Capital	Weighted Cost of Capital
1	Long term debt	496,615,385	46.90%	5.30%	2.49%
2	Common equity	$562,251,845	53.10%	10.30%	5.47%
3	Total Capitalization	1,058,867,229	100.00%		7.96%

Impact of 25 Basis Point Debt Cost Increase on $200 Million

Line No.	Description	Amount
1	Hypothetical amout of debt issuance	$200,000,000
2	25 basis points increase in Interest Rate	0.0025
3	Total Interest Cost	$500,000

Impact of 40 Basis Point Debt Cost Increase on $200 Million

Line No.	Description	Amount
4	Hypothetical amout of debt issuance	$200,000,000
5	40 basis points increase in Interest Rate	0.0040
6	Total Interest Cost	$800,000

Moody's Rating Factors
Otter Tail Power Company

Line No.					
1	Regulated Electric and Gas Utilities Industry	Current LTM		[3]Moody's 12-18 Month Forward View As of March 2017	
2	Grid [1][2]	3/31/2017			
3	**Factor 1 : Regulatory Framework (25%)**	**Measure**	**Score**	**Measure**	**Score**
4	a) Legislative and Judicial Underpinnings of	A	A	A	A
5	the Regulatory Framework				
6	b) Consistency and Predictability of	A	A	A	A
7	Regulation				
8	**Factor 2 : Ability to Recover Costs and Earn**				
9	**Returns (25%)**				
10	a) Timeliness of Recovery of Operating and	A	A	Aa	Aa
11	Capital Costs				
12	b) Sufficiency of Rates and Returns	Baa	Baa	Baa	Baa
13	**Factor 3 : Diversification (10%)**				
14	a) Market Position	Baa	Baa	Baa	Baa
15	b) Generation and Fuel Diversity	Ba	Ba	Baa	Baa
16	**Factor 4 : Financial Strength (40%)**				
17	a) CFO pre-WC + Interest / Interest (3 Year	5.5x	A	6x-6.4x	Aa
18	Avg)				
19	b) CFO pre-WC / Debt (3 Year Avg)	22.5%	A	23%-27%	A
20	c) CFO pre-WC - Dividends / Debt (3 Year	15.7%	Baa	16%-20%	A
21	Avg)				
22	d) Debt / Capitalization (3 Year Avg)	42.7%	A	36%-40%	A
23	**Rating:**				
24	Grid-Indicated Rating Before Notching		A3		A2
25	Adjustment				
26	HoldCo Structural Subordination Notching	0	0	0	0
27	a) Indicated Rating from Grid		A3		A2
28	b) Actual Rating Assigned		A3		A3

29 [1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 3/31/2017(L) [3] This represents Moody's
forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures. Source: Moody's Financial Metrics™

OTTER TAIL POWER COMPANY
Electric Utility - State of South Dakota

Docket No. EL18-___
Exhibit ___(KGM-1), Schedule 5
Page 1 of 1

COMPOSITE COST OF PROPOSED LONG-TERM DEBT FOR 2017 TEST YEAR

Line	DESCRIPTION		Interest	PRINCIPAL AMOUNTS OUTSTANDING															
No.	Debentures		Rate	Dec-17[1]	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total	Interest Cost	
1	4.630%	Series for 2021	4.630%	$140,000,000	$140,000,000	$140,000,000	$140,000,000	$140,000,000	$140,000,000	$140,000,000	$140,000,000	$140,000,000	$140,000,000	$140,000,000	$140,000,000	$140,000,000	$140,000,000	$6,482,000	
2	6.150%	Unsecured Series B 2022 Senior Notes	6.150%	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	1,845,000	
3	6.370%	Unsecured Series C 2027 Senior Notes	6.370%	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	2,675,400	
4	6.470%	Unsecured Series D 2037 Senior Notes	6.470%	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	3,235,000	
5	4.070%	Unsecured Series A 2048 Senior Notes	4.070%	0	0	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000	84,615,385	3,443,846	
6	Total Debentures		0	$262,000,000	$262,000,000	$362,000,000	$362,000,000	$362,000,000	$362,000,000	$362,000,000	$362,000,000	$362,000,000	$362,000,000	$362,000,000	$362,000,000	$362,000,000	$346,615,385	$17,681,246	
7	Series Bonds																		
8	4.680%	2029 Series	4.680%	$60,000,000	$60,000,000	$60,000,000	$60,000,000	$60,000,000	$60,000,000	60,000,000	$60,000,000	60000000	60,000,000	60,000,000	60,000,000	60,000,000	60,000,000	2,808,000	
9	5.470%	2044 Series	5.470%	90,000,000	90,000,000	90,000,000	90,000,000	90,000,000	90,000,000	90,000,000	90,000,000	90000000	90,000,000	90,000,000	90,000,000	90,000,000	90,000,000	4,923,000	
10	Total Series Bonds			$150,000,000	$150,000,000	$150,000,000	$150,000,000	$150,000,000	$150,000,000	$150,000,000	$150,000,000	$150,000,000	$150,000,000	$150,000,000	$150,000,000	$150,000,000	$150,000,000	$7,731,000	
11																			
12	Subtotal Bond Balances			$412,000,000	$412,000,000	$512,000,000	$512,000,000	$512,000,000	$512,000,000	$512,000,000	$512,000,000	$512,000,000	$512,000,000	$512,000,000	$512,000,000	$512,000,000	$496,615,385	$25,412,246	5.12%
13																			
14	Loss/Gain on Reacquired Debt			(3,434,337)	(3,380,088)	(4,325,839)	(4,268,817)	(4,211,795)	(4,154,773)	(4,097,751)	(4,040,729)	(3,983,707)	(3,926,685)	(3,869,663)	(3,812,641)	(3,755,619)	(3,943,265)	678,719	
15	Total Long-Term Debt Capital			$408,565,663	$408,619,912	$507,674,161	$507,731,183	$507,788,205	$507,845,227	$507,902,249	$507,959,271	$508,016,293	$508,073,315	$508,130,337	$508,187,359	$508,244,381	$492,672,120	$26,090,965	
															WEIGHTED COST OF LONG-TERM DEBT			5.30%	

(1) Actual balances are used for December 2017

COMMON EQUITY FOR 2017 TEST YEAR

Line No.		Month-end Balances CONTRIBUTED CAPITAL	RETAINED EARNINGS	TOTAL COMMON EQUITY
1	December 2017	376,989,466	181,478,804	558,468,270
2	January	376,989,466	187,131,648	564,121,114
3	February	376,989,466	190,877,392	567,866,858
4	March	376,989,466	184,304,662	561,294,128
5	April	376,989,466	186,499,101	563,488,566
6	May	376,989,466	188,178,472	565,167,937
7	June	376,989,466	180,477,234	557,466,700
8	July	376,989,466	185,197,716	562,187,182
9	August	376,989,466	189,674,530	566,663,996
10	September	376,989,466	182,377,990	559,367,456
11	October	376,989,466	183,091,677	560,081,143
12	November	376,989,466	187,384,550	564,374,015
13	December	376,989,466	181,737,136	558,726,602
14	Average Common Equity			$562,251,845

Floation Costs

Line No.	Issuing Entity	Mechanism	Date	Shares issued	Offering Price	Underwriting Discount	Offering Expense	Gross Proceeds	Total Flotation Costs	Net Proceeds	Flotation cost %
1	Otter Tail Corp.	ESSP	2004	66,958	NA	$ -	$ -	$ 1,292,959	$ -	$ 1,292,959	0.00%
2	Otter Tail Corp.	ESSP	2009	62,450	NA	$ -	$ -	$ 1,197,791	$ -	$ 1,197,791	0.00%
3	Otter Tail Corp.	ESPP	2014	39,222	NA	$ -	$ -	$ 1,049,188	$ -	$ 1,049,188	0.00%
4	Otter Tail Corp.	ESPP	2015	42,253	NA	$ -	$ -	$ 1,095,620	$ -	$ 1,095,620	0.00%
5	Otter Tail Corp.	ESPP	2016	53,875	NA	$ -	$ -	$ 1,491,266	$ 1,159	$ 1,490,107	0.08%
6	Otter Tail Corp.	ESPP	2017	5,284	NA	$ -	$ -	$ 210,585	$ 367	$ 210,218	0.17%
7	Otter Tail Corp.	DRIP	2004	223,165	NA	$ -	$ -	$ 4,308,033	$ -	$ 4,308,033	0.00%
8	Otter Tail Corp.	DRIP	2009	233,943	NA	$ -	$ -	$ 4,493,385	$ 5,877	$ 4,487,508	0.13%
9	Otter Tail Corp.	DRIP	2014	288,045	NA	$ -	$ -	$ 7,707,964	$ -	$ 7,707,964	0.00%
10	Otter Tail Corp.	DRIP	2015	330,379	NA	$ -	$ 56,545	$ 8,566,009	$ 56,545	$ 8,509,464	0.66%
11	Otter Tail Corp.	DRIP	2016	302,524	NA	$ -	$ -	$ 9,708,531	$ 32,973	$ 9,675,558	0.34%
12	Otter Tail Corp.	DRIP	2017	107,285	NA	$ -	$ -	$ 4,139,552	$ 17,554	$ 4,121,998	0.42%
13	Otter Tail Corp.	ATM	2014	519,636	$ 30	$ 306,727	$ 780,616	$ 15,336,352	$ 1,087,343	$ 14,249,009	7.09%
14	Otter Tail Corp.	ATM	2015	133,197	$ 28	$ 56,485	$ 339,160	$ 3,785,244	$ 395,645	$ 3,389,599	10.45%
15	Otter Tail Corp.	ATM	2016	1,014,115	$ 33		$ 561,548	$ 33,235,729	$ 561,548	$ 32,674,181	1.69%
16	Otter Tail Corp.	Secondary	2004-05	3,075,000	$ 25	$ 2,921,250	$ 391,452	$ 78,258,750	$ 3,312,702	$ 74,946,048	4.23%
17	Otter Tail Corp.	Secondary	2008	5,175,000	$ 30	$ 5,627,812	$ 807,185	$ 155,250,000	$ 6,434,997	$ 148,815,003	4.14%
18	Weighted Average										3.60%