

STATE OF SOUTH DAKOTA

PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

In the Matter of the Application of Otter Tail Power Company for
Authority to increase its Electric Rates

Docket No. EL18-021

Proposed Findings of Fact and Conclusions of Law of Otter Tail Power Company

April 30, 2019

Otter Tail Power Company

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**Findings in this section are optional and are only needed if Commission gives any weight to Mr. Copeland’s recommendations. If the Commission adopts the in Sections A-D, these additional findings are not required.*

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

IN THE MATTER OF THE APPLICATION)	OTTER TAIL POWER
OF OTTER TAIL POWER COMPANY FOR)	COMPANY PROPOSED
AUTHORITY TO INCREASE ITS)	FINDINGS OF FACT
ELECTRIC RATES)	& CONCLUSIONS
)	EL18-021

**OTTER TAIL POWER COMPANY PROPOSED
FINDINGS OF FACT & CONCLUSIONS OF LAW**

APPEARANCES

Commissioners Kristie Fiegen, Gary Hanson, and Chris Nelson.

Cary Stephenson, Otter Tail Power Company, 215 South Cascade Street, Fergus Falls, MN 56537 and Richard Johnson (Pro Hac Vice) Moss & Barnett, P.A., 150 South Fifth Street, Suite 1200 Minneapolis, Minnesota 55402, appeared on behalf of the Applicant Otter Tail Power Company (Otter Tail or Company)

Kristen Edwards and Amanda Reis, 500 E. Capitol Ave., Pierre, South Dakota 57501, appeared on behalf of the South Dakota Public Utilities Commission Staff (Staff).

I. PROCEDURAL FINDINGS OF FACT

1. On April 20, 2018, Otter Tail filed with the Public Utilities Commission (Commission) an application for approval to increase rates for electric service to customers in its South Dakota service territory by approximately \$3,358,547 million annually or approximately 10.10 percent based on the Company's 2017 test year. Under the requested increase, a typical residential electric customer would have seen an increase of \$11.29 per month. Otter Tail proposed to implement \$2,386,538, or 7.17 percent, of this increase on an interim basis on May 21, 2018,

once the 30 days had passed from the date of the filing, pursuant to SDCL 49-34A-17. Otter Tail also proposed a later step increase for an additional \$629,107, or 1.72 percent increase to revenues, effective January 1, 2020. Under the requested step increase, a typical residential customer would have seen an additional increase of \$1.75 per month. The proposed rates would potentially affect approximately 11,700 customers in Otter Tail's South Dakota service territory.

2. On April 26, 2018, the Commission officially took notice of the filing and set an intervention deadline of June 1, 2018, for interested individuals and entities.

3. On May 16, 2018, the Commission issued an Order Suspending Operation of Proposed Rates; Order Assessing Filing Fee; Order Authorizing Consulting Contracts. The Commission's Order Suspending Operation of Proposed Rates suspended the proposed rates for 180 days after the Application filing date of April 20, 2018.

4. On June 28, 2018, Valley Queen Cheese Factory, Inc. filed a Petition to Intervene, which was granted by the Commission on July 16, 2018. Valley Queen Cheese Factory, Inc. later communicated to the Staff that it would no longer participate in this matter.

5. On September 17, 2018, the Company filed its Notice of Intent to Implement Interim Rates based on current rate design for service provided on and after October 18, 2018, pursuant to SDCL 49-34A-17.

6. On October 18, 2018, Otter Tail implemented an interim rate increase for net annual, non-fuel electric revenues of approximately \$3,358,575 million, or 10.10 percent, subject to refund.

7. On November 1, 2018 Otter Tail filed Supplemental Direct Testimony and Errata.

8. The Commission issued its first Scheduling Order on February 7, 2019. The Commission issued an Amended Scheduling Order on March 18, 2019, and a Second Amended Scheduling Order on April 2, 2019.

9. On February 15, 2019, Staff and Otter Tail entered into a Settlement Stipulation, which resolved all issues except for Otter Tail's authorized return on equity (ROE). On February 15, 2019 Staff filed a Joint Motion for Approval of Settlement Stipulation and Settlement Stipulation.

10. On February 19, 2019, Staff filed its Direct Testimony on the unresolved issue of ROE.

11. On February 20, 2019, Staff filed its Memorandum Supporting Settlement Stipulation.

12. The Commission considered and approved the Joint Motion for Approval of Settlement Stipulation at its regularly scheduled meeting on March 1, 2019.

13. On March 6, 2019 the Commission issued its Order Granting Joint Motion for Approval of Settlement Stipulation and an Order Approving Settlement Stipulation.

14. On March 7, 2019 the Commission issued an Order for and Notice of Evidentiary Hearing, which stated that a hearing will be held beginning at 9:30 a.m., CDT, Tuesday, March 26, 2019, through Thursday, March 28, 2019, in Room 413, State Capitol Building, 500 E. Capitol Ave., Pierre, South Dakota, with the Commission to determine the issue of "[w]hat is the appropriate return on equity to produce just and reasonable rates."

15. On March 15, 2018 Otter Tail filed its Rebuttal Testimony on the remaining contested issue of ROE.

16. On March 26, 2018 an evidentiary hearing was held on the remaining contested issue of ROE. Otter Tail presented the following witnesses at hearing, all of whom pre-filed testimony: Robert B. Hevert, Bruce G. Gerhardson, Kevin G. Moug, Stuart D. Tommerdahl and Kirk A. Phinney. Mr. Hevert testified as Otter Tail's ROE expert witness. Staff presented at hearing Mr. Basil C. Copeland, Jr., who also pre-filed testimony. Mr. Copeland testified as Staff's ROE expert witness.

17. On April 23, 2018 Staff and Otter Tail each filed post-hearing briefs.

18. On April 30, 2018, Otter Tail and Staff each filed proposed Findings of Fact and Conclusions of Law.

II. RETURN ON EQUITY FINDINGS OF FACT

A. Standards for the ROE Decision

19. The cost of equity is the return investors require in compensation for the risk of investing in common stock.¹

20. The cost of equity is a component of the cost of service.²

1. Constitutional and Statutory Requirements

21. To satisfy constitutional requirements recognized by South Dakota law, an ROE must: (1) maintain confidence in the financial soundness of the utility; (2) maintain the utility's credit profile and allow it to attract capital; and (3) be commensurate with returns of other companies of comparable risk.³

22. Meeting these requirements provides direct benefits to customers. Financial strength affects a utility's ability to provide safe and reliable service.⁴ Financially strong utilities

¹ Ex. OTP-1 at 7 (Hevert Direct).

² SDCL 49-34A-8.

³ Northwestern Pub. Serv. Co. v. Cities of Chamberlain, etc., 265 N.W.2d 867, 873-74 (S.D. 1978).

⁴ Ex. S1 at 6 (Copeland Direct) ("If the allowed rate of return on equity is significantly below the market cost of equity the impairment of the firm's financial integrity undermines its ability to render safe and reliable service."); Tr. at 178

can attract capital at more favorable rates, thereby saving money for customers,⁵ and are able to generate internal earnings, which Otter Tail has used, and will continue to use, to fund capital expenditures for infrastructure that is used to provide service to customers.⁶

23. In addition to meeting constitutional minimums, South Dakota statutes require that Otter Tail be allowed to “earn a fair and reasonable return upon the value of its property”⁷ which requires a balancing of interests.⁸

24. Due to the allocation of costs to other states where Otter Tail also provides electric service, this proceeding will set the ROE for about a 10 percent share of Otter Tail’s retail electric investments, but the limited size of Otter Tail’s South Dakota operations does not limit the application of the constitutional minimum standards and the fair and reasonable standard of South Dakota law.⁹

2. *Analytical Framework*

25. In setting the ROE, the Commission must exercise sound judgment based on the overall results of the analysis.¹⁰

26. Establishing a fair and reasonable return also requires that the Commission balance the interest of the utility and customers, with neither interest predominant over the other:

The statutes place the responsibility on the PUC to balance the need of the utility for adequate revenue with the protection of the public from unjust or unreasonable rates. To this end, it is neither a consumer advocate nor a utility advocate.¹¹

(Gerhardson) (“[I]f our market cap dropped by a billion dollars, we would have a desperate financial situation. We’d have to manage, and it would most certainly affect our ability to perform as we have.”).

⁵ Ex. OTP-3 at 12-14, 17 (Moug Direct); Tr. at 142 (Moug).

⁶ Ex. OTP-3 at 11 (Moug Direct).

⁷ SDCL 49-34A-8.

⁸ In re Northwestern Pub. Serv. Co., 297 N.W.2d 462, 464 (S.D. 1980).

⁹ Tr. at 188-189 (Gerhardson); Minnesota Rate Cases, 230 U.S. 352 (1913).

¹⁰ In re Northern States Power Company, Docket No. EL11-019, Final Decision and Order; Notice of Entry at ¶ 8 (July 2, 2012).

¹¹ In re Northwestern Pub. Serv. Co., 297 N.W.2d 462, 464 (S.D. 1980).

27. Under this standard, it is important for the Commission to consider the benefit of low rates *and* the benefit of maintaining a financially strong utility, from which a high quality of service can be maintained.

28. The use of a single formula is not required, and whether legal standards have been met in setting the ROE is determined based on whether the method followed, and the order entered, when applied to the facts and viewed as a whole, produce an unjust or arbitrary result.¹²

29. The Commission is required to consider and give appropriate weight to all testimony that has a reasonable basis. The Commission is not required to adopt the specific recommendations of any of the witnesses.¹³

30. In Docket No. EL11-019, the Commission relied on the Discounted Cash Flow (DCF) model in establishing an authorized ROE.¹⁴ That Docket does not support the Commission limiting its consideration to DCF model results in place of the Commission exercising its judgement based on consideration of all evidence when setting the ROE. The evidence in the current case confirms that the Commission cannot solely rely on the DCF model to select a just and reasonable ROE in this matter.

31. The DCF model is not producing reasonable ROE estimates under current market conditions and has not done so since 2014. By 2018, the differences between the DCF and authorized ROEs were consistently over 100 basis points and exceeded 150 basis points by the 4th quarter of 2018.¹⁵

¹² Northwestern Pub. Serv. Co. v. Cities of Chamberlain, etc., 265 N.W.2d 867, 872 (S.D. 1978).

¹³ Northwestern Pub. Serv. Co. v. Cities of Chamberlain, etc., 265 N.W.2d 867, 872 (S.D. 1978).

¹⁴ *In re Northern States Power Company*, Docket No. EL11-019, FINAL DECISION AND ORDER; NOTICE OF ENTRY at ¶¶ 19-21 (July 2, 2012).

¹⁵ Ex. OTP-2 at 8 (Hevert Rebuttal).

32. FERC and a number of state regulatory commissions have explicitly recognized that DCF model is not producing reasonable ROE estimates in current market conditions.¹⁶

33. Other state regulatory agencies have determined that reliance on a single mathematical model is not adequate for a subject as complex as determining the ROE.¹⁷

34. Considering a broad range of information is consistent with how investors make decisions. FERC has noted that investors do not rely solely on the DCF model:

While some investors may give some weight to a DCF analysis, it is clear that other investors place greater weight on one or more of the other methods ... as well as taking other factors into account.¹⁸

35. Investors consider “as much relevant data” as possible, including use of “multiple analytical approaches.”¹⁹ Applying the same approach used by investors essential because the ROE must approach the cost of equity, which is determined by investors,²⁰ and satisfy constitutional minimums regarding capital attraction and financial confidence, also both determined by investors.

B. Otter Tail Risks and Performance

36. The cost of equity is the return investors require in compensation for the risk of investing in common stock.²¹ Investors require higher returns for investing in utilities with higher risks.²²

¹⁶ *Coakley v. Bangor Hydro-Elec. Co.*, 165 FERC ¶ 61,030 at ¶ 32 (2018); *Duke Energy Carolinas, LLC*, North Carolina Utils. Comm’n Docket No. E-7, Sub 1146, ORDER ACCEPTING STIPULATION, DECIDING CONTESTED ISSUES, AND REQUIRING REVENUE REDUCTION at 62 (2018).

¹⁷ *Baltimore Gas and Electric*, Maryland Pub. Serv. Comm’n, ORDER NO. 87591 at 153. (2016); *South Carolina Electric & Gas*, South Carolina Pub. Serv. Comm’n, ORDER NO. 2018-804 at 89 (2018).

¹⁸ *Coakley v. Bangor Hydro-Elec. Co.*, 165 FERC ¶ 61,030 at ¶ 35 (2018).

¹⁹ Ex. OTP-1 at 16 (Hevert Direct).

²⁰ Ex. OTP-1 at 7 (Hevert Direct).

²¹ Ex. OTP-1 at 7 (Hevert Direct).

²² Ex. OTP-1 at 3 (Hevert Direct) (“The combination of [OTP’s risk] factors indicates a heightened degree of business risk relative to the proxy companies, suggesting an ROE toward the upper end of the range to account for that greater risk.”).

37. Recognizing performance through a higher authorized ROE is consistent with sound regulatory practice and the concept of a “fair and reasonable” return.²³

38. Otter Tail is not a utility of average risk or average performance as compared to utilities in the proxy group examined by Mr. Hevert and Mr. Copeland and other investor-owned utilities providing service in South Dakota.

1. Capital Expenditures

39. Higher levels of capital expenditures increase utility risk because “the additional pressure on cash flows associated with high levels of capital expenditures exerts corresponding pressure on credit metrics and, therefore, credit ratings.”²⁴ Earning a return adequate to attract capital is of particular importance to a utility with high capital expenditures.²⁵

40. Otter Tail has a significantly higher rate of capital investment in infrastructure than other utilities. From 2012 to 2017, Otter Tail invested approximately \$806 million (OTP Total) in its infrastructure²⁶ and expects to invest an additional \$901 million (OTP Total) between 2018 and 2022.²⁷

41. Otter Tail’s projected capital expenditures on its infrastructure are 68.92 percent of its net plant for 2018-2022, which is significantly higher than the ratio of the utilities in the proxy group examined by Mr. Hevert and Mr. Copeland and other investor owned utilities providing service in South Dakota.²⁸ The 2018-2022 infrastructure investment ratios of Otter Tail and the utilities in the proxy group examined by Mr. Hevert and Mr. Copeland, as shown below:

²³ Ex. OTP-1 at 50-51 (Hevert Direct); SDCL 49-34A-8.

²⁴ Ex. OTP-1 at 37-38 (Hevert Direct).

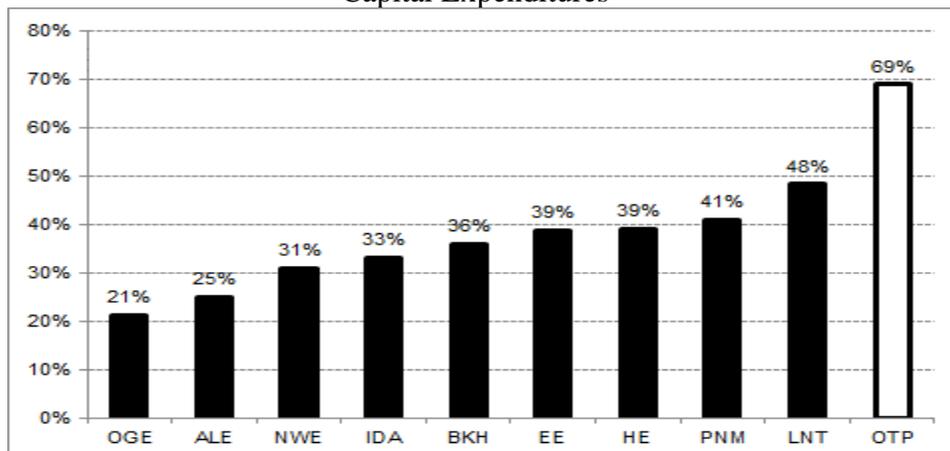
²⁵ Ex. OTP-1 at 38 (Hevert Direct).

²⁶ Ex. OTP-3 at 8 (Moug Direct); Ex. OTP-5 at 12 (Gerhardson Direct).

²⁷ Ex. OTP-3 at 9 (Moug Direct); Ex. OTP-1 at 36 (Hevert Direct).

²⁸ Ex. OTP-1 at 33, 37 (Hevert Direct).

Figure 1
Capital Expenditures²⁹



2. *Small Size*

42. Smaller size leads to two types of increased risk: (1) liquidity risk (*i.e.*, the risk of not being able to sell one’s shares in a timely manner due to the relatively thin market for the securities); and (2) fundamental business risks.³⁰ Investors require a “size premium” to account for these increased risks.³¹

43. Otter Tail is significantly smaller than other investor owned utilities, serving only 132,000 total customers across a service area the size of Wisconsin.³²

44. Otter Tail’s implied market capitalization in South Dakota is approximately 2.00 percent of the median level of the utilities analyzed by Mr. Hevert and Mr. Copeland, and approximately 4.00 percent of the smallest of those companies.³³ Otter Tail Corporation (Otter Tail’s parent) is the second smallest publicly traded investor owned utility in the United States,³⁴

²⁹ Ex. OTP-1 at 3 (Hevert Direct).

³⁰ Ex. OTP-1 at 40 (Hevert Direct).

³¹ Ex. OTP-1 at 42 (Hevert Direct).

³² Ex. OTP-5 at 10 (Gerhardson Direct).

³³ Ex. OTP-1 at 40 (Hevert Direct).

³⁴ Ex. OTP-3 at 4 (Moug Direct)

and its total market capitalization is 1/10th the size of the average publicly traded investor owned utility.³⁵

3. *Institutional Ownership*

45. Equity investors perceive low levels of institutional ownership as a risk. Institutional investors provide capital-intensive utilities an efficient source of capital and a source of liquidity. Companies with lower levels of institutional ownership are at a competitive disadvantage because of diminished access to efficient sources of equity capital and diminished market liquidity. Investors require higher returns from utilities with low levels of institutional ownership in view of this competitive disadvantage and liquidity risk.³⁶

46. Otter Tail Corporation has a low level of institutional ownership compared to other utilities. Otter Tail Corporation's 43.10 percent level of institutional ownership is far below the 81.22 percent average institutional ownership level of utilities analyzed by Mr. Hevert and Mr. Copeland, and well below the level of institutional ownership levels of other investor owned utilities providing service in South Dakota.³⁷

4. *Trading Volume*

47. Low trading volume increases the risk that investors (especially institutional investors) may have difficulty selling positions without adversely affecting the market price of shares. Investors require a higher return – a liquidity premium – to account for this risk.³⁸

48. Otter Tail Corporation has low trading volumes compared to other utilities. From 2013 to 2018, Otter Tail Corporation's average daily trading volume was approximately 18 percent of the average daily trading volume of the utilities analyzed by Mr. Hevert and Mr. Copeland³⁹

³⁵ Ex. OTP-3 at 4 (Moug Direct).

³⁶ Ex. OTP-1 at 45-46 (Hevert Direct).

³⁷ Ex. OTP-1 at 45-46 (Hevert Direct).

³⁸ Ex. OTP-1 at 46 (Hevert Direct).

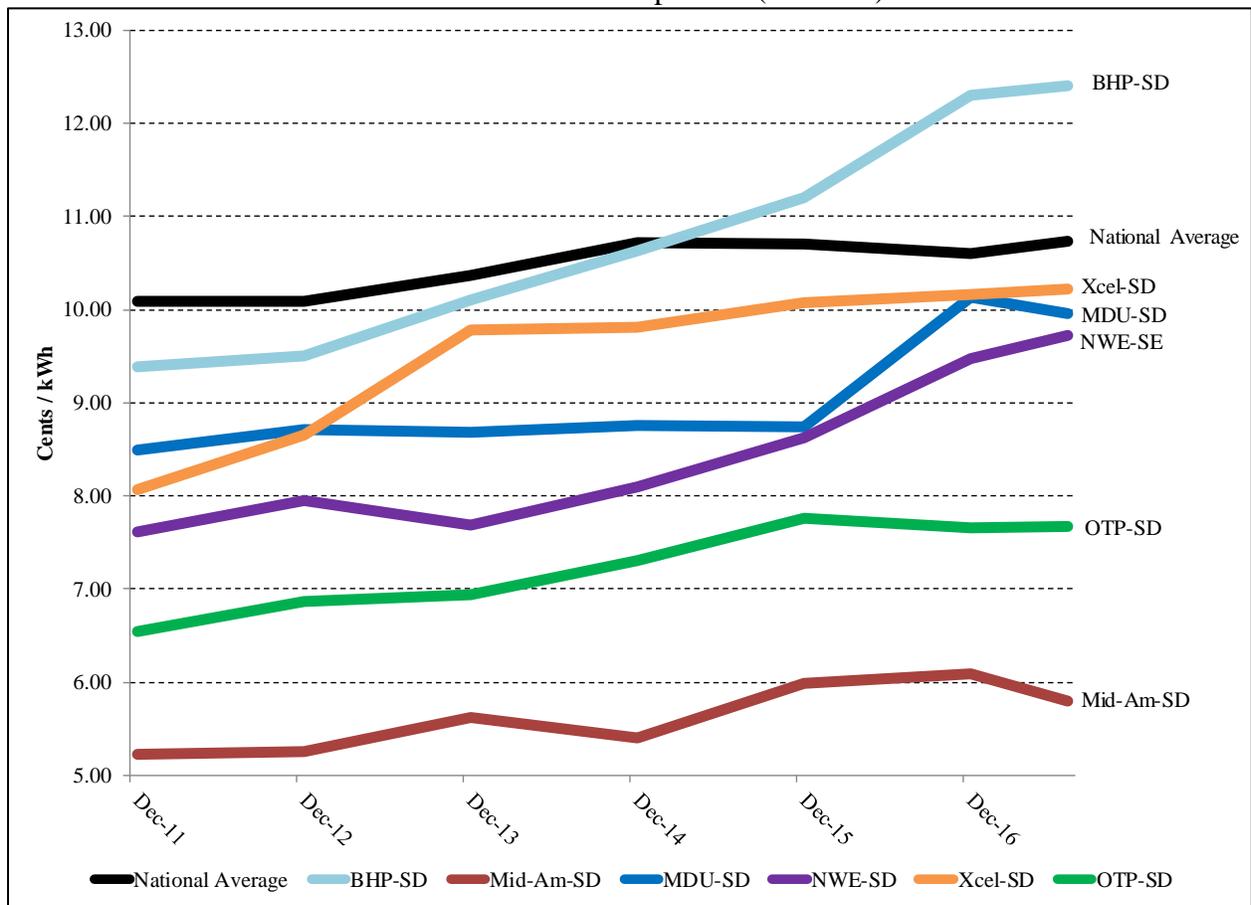
³⁹ Ex. OTP-1 at 46 (Hevert Direct).

and is well below the trading volumes of other investor owned utilities providing service in South Dakota.

5. *Otter Tail Rates*

49. Otter Tail has maintained low rates. Since 2011, Otter Tail’s rates have been the second lowest among South Dakota utilities and well below the national average, as shown below.⁴⁰

Figure 2
South Dakota Rate Comparison (All Bills)⁴¹



⁴⁰ Ex. OTP-5 at 14-15 (Gerhardson Direct).

⁴¹ Ex. OTP-5 at 15 (Gerhardson Direct).

50. In 2017, Otter Tail Corporation was the fourth lowest price provider among all utility parent companies nationwide.⁴²

6. *Under-Budget Completion of Large Projects*

51. Otter Tail has executed large projects well, which helps Otter Tail to maintain low rates to the benefit of its South Dakota customers.

52. The Big Stone Plant Air Quality Control Standards (AQCS) Project was the single largest investment ever made by Otter Tail and was put into commercial operation more than \$125 million under budget.⁴³

53. The cost savings were driven in large measure by Otter Tail taking on the duties of construction management for the project.⁴⁴

54. Otter Tail's under budget completion of the AQCS Project reduced the 2017 Test Year South Dakota revenue deficiency by approximately \$0.8 million, a dollar-for-dollar saving for South Dakota customers.⁴⁵

55. The approximately \$0.8 million of annual customers' savings is equivalent to approximately 143 basis points of ROE.⁴⁶

⁴² Ex. OTP-5 at 16 (Gerhardson Direct).

⁴³ Ex. OTP-7 at 10 (Phinney Direct); Ex. OTP-5 at 15 (Gerhardson Direct).

⁴⁴ Ex. OTP-7 at 8 (Phinney Direct); Tr. at 172-173 (Gerhardson).

⁴⁵ Ex. OTP-6 at 11 (Gerhardson Rebuttal).

⁴⁶ Attachment 1 to Staff's February 21, 2019 Memorandum Supporting Settlement Stipulation identified the revenue requirement associated with Mr. Copeland's recommended 8.25% ROE to be \$35,206,758. Attachment 20 to Staff's February 21, 2019 Memorandum Supporting Settlement Stipulation identified the revenue requirement associated with Mr. Hevert's recommended 10.30% ROE to be \$36,349,601. The only difference between the two positions is the recommended ROE, which means that the entire revenue difference between the two positions is the result of the difference between the ROE positions. The revenue difference is \$1,142,843 (\$36,349,601 - \$35,206,758). The difference between the two ROE positions is 205 basis points (10.30% - 8.25%). The result is that every basis point is equivalent to approximately \$5,575 (\$1,142,843 / 205 basis points). The \$800,000 savings / \$5,575 per basis point = 143.5 basis points.

56. The under-budget completion of the AQCS Project produced cost savings for Otter Tail's South Dakota customers of approximately \$15.5 million over the life of the AQCS Project, with a net present value of \$7.0 million.⁴⁷

7. *Infrequent Rate Cases*

57. Otter Tail has filed infrequent rate cases. Otter Tail's last South Dakota rate case was filed on August 20, 2010. Since that time, most South Dakota utilities have filed two or three rate cases.⁴⁸

58. Rate cases are a significant costs borne by customers.⁴⁹ Avoiding rate cases saves significant costs for customers.⁵⁰

8. *Customer Satisfaction*

59. Otter Tail has achieved high customer satisfaction. Over the last three years, Otter Tail was recognized as one of the top three utilities in customer satisfaction among the Midwest midsize utilities by JD Power.⁵¹ Otter Tail has also achieved very high customer satisfaction scores measured by the American Customer Satisfaction Index and by Bellomy Research.⁵² Since 2012, over 90 percent of Otter Tail's residential and commercial customers have rated Overall Quality of Service as "Very Good" or "Excellent."⁵³

C. Mr. Hevert's Recommendation

60. Otter Tail ROE witness Mr. Robert B. Hevert estimated Otter Tail's cost of equity is currently is in the range of 10.00 percent to 10.60 percent.⁵⁴ Based on his quantitative and

⁴⁷ Ex. OTP-6 at 11 (Gerhardson Rebuttal).

⁴⁸ Ex. OTP-6 at 12 (Gerhardson Rebuttal).

⁴⁹ Ex. OTP-5 at 6 (Gerhardson Direct); Tr. at 181-82 (Gerhardson) (identifying \$400,000 to \$750,000 as being a reasonable estimate of rate case expense).

⁵⁰ Tr. at 181-82 (Gerhardson).

⁵¹ Ex. OTP-5 at 17 (Gerhardson Direct).

⁵² Ex. OTP-5 at 17-18 (Gerhardson Direct).

⁵³ Ex. OTP-5 at 18-19 (Gerhardson Direct).

⁵⁴ Ex. OTP-1 at 2 (Hevert Direct).

qualitative analyses, including an assessment of Otter Tail’s relative risk and superior performance, Mr. Hevert concluded the appropriate ROE for Otter Tail is 10.30 percent.⁵⁵

61. Using multiple quantitative models is appropriate because it is consistent with what equity analysts and investors do.⁵⁶

62. Mr. Hevert used several quantitative models, including the DCF model, to quantify a range of investor expectations of Otter Tail’s cost of equity.⁵⁷

63. The 10.00 percent base of Mr. Hevert’s ROE range and his 10.30 percent ROE recommendation are well within the range of these models.

Table 1
Summary of Hevert Quantitative Analyses⁵⁸

30-Day Constant Growth DCF	10.26%*
90-Day Constant Growth DCF	10.31%*
180-Day Constant Growth DCF	10.44%*
30-Day Multi-Stage DCF	9.22%*
90-Day Multi-Stage DCF	9.22%*
180-Day Multi-Stage DCF	9.31%*
CAPM Current 30-Year Treasury (3.03%) (Bloomberg Beta)	8.40% and 10.9%
CAPM Current 30-Year Treasury (3.03%) (Value Line Beta)	10.07% and 12.29%
CAPM Near Term Projected 30-Year Treasury (3.33%) (Bloomberg Beta)	8.70% and 12.39%
CAPM Near Term Projected 30-Year Treasury (3.33%) (Value Line Beta)	10.37% and 12.59%
Bond Yield + Risk Premium Current 30-Year Treasury (3.03%)	9.93%
Bond Yield + Risk Premium Near Term Projected 30-Year Treasury (3.33%)	9.98%
Bond Yield + Risk Premium Long Term Projected 30-Year Treasury (4.05%)	10.17%

* Mean High result, which is appropriate given Otter Tail’s higher risk and superior performance.

⁵⁵ Ex. OTP-1 at 2 (Hevert Direct).

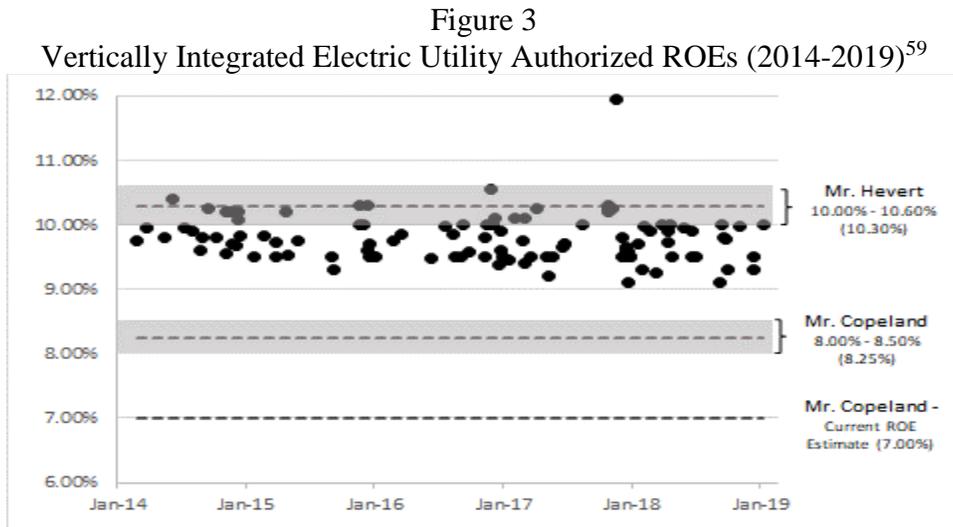
⁵⁶ Ex. OTP-1 at 2 (Hevert Direct).

⁵⁷ Ex. OTP-1 at 15 (Hevert Direct).

⁵⁸ Ex. OTP-2 at 77 (Hevert Rebuttal).

64. Mr. Hevert’s recommended ROE meets the constitutional minimum requirements and fair and reasonable standard of SDCL 49-34A-8.

65. Mr. Hevert’s ROE range and ROE recommendation are within the mainstream of ROE awards since 2014 and satisfy the comparable return standard, as shown below:



66. Mr. Hevert’s recommended ROE also satisfies the financial soundness, credit profile and ability to attract capital constitutional requirements.⁶⁰

67. Otter Tail’s higher risks and superior performance supports an ROE in the range recommended by Mr. Hevert. Investors require higher returns in exchange for accepting the kind of risks associated with Otter Tail,⁶¹ and constitutional standards require an accounting for Otter Tail’s higher risk.⁶² Recognizing Otter Tail’s higher performance through a higher authorized

⁵⁹ Ex. OTP-2 at 6 (Hevert Rebuttal).

⁶⁰ Ex. OTP-3 at 10-11, 17 (Moug Direct).

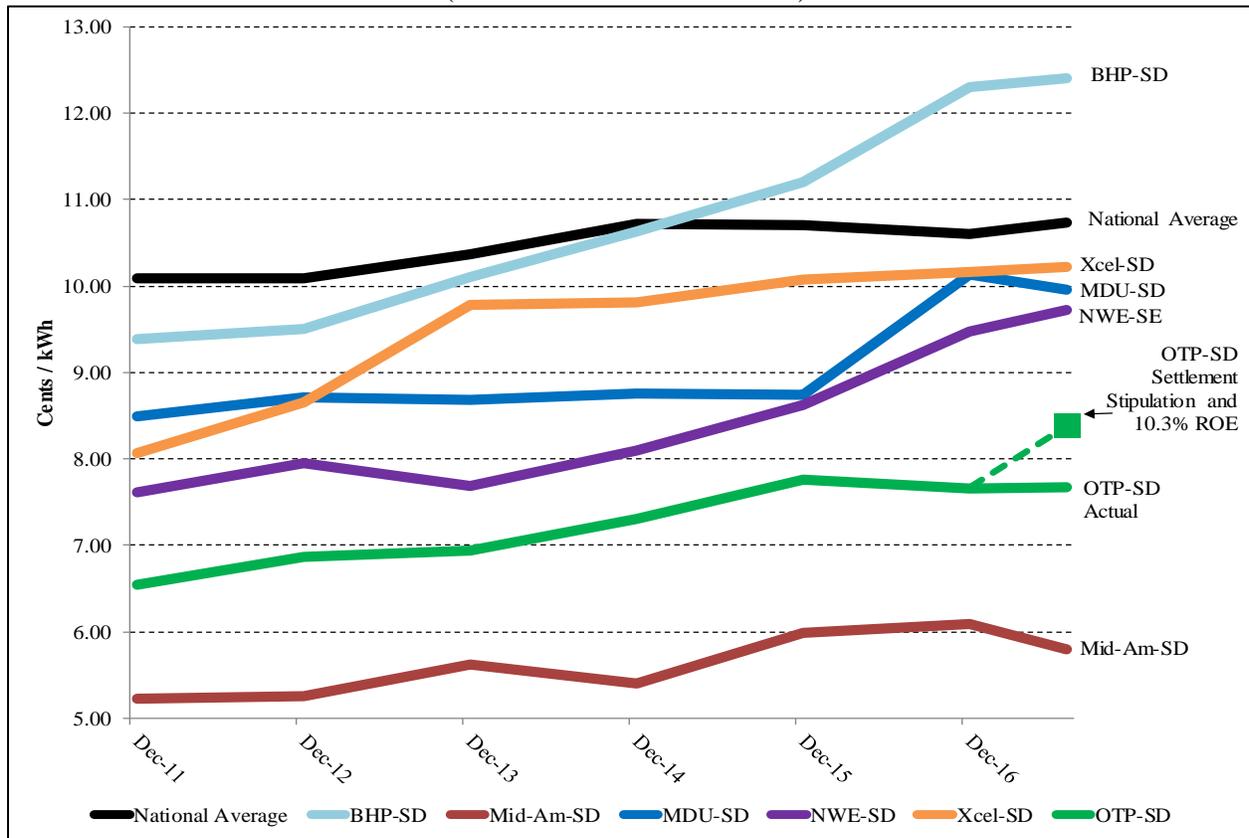
⁶¹ Ex. OTP-1 at 3 (Hevert Direct) (“The combination of [OTP’s risk] factors indicates a heightened degree of business risk relative to the proxy companies, suggesting an ROE toward the upper end of the range to account for that greater risk.”).

⁶² Northwestern Pub. Serv. Co. v. Cities of Chamberlain, etc., 265 N.W.2d 867, 873-74 (S.D. 1978) (quoting Hope, 320 U.S. at 603, for the requirement that ROE be “commensurate with returns” earned by comparable companies).

ROE is also consistent with the “fair and reasonable” standard of SDCL 49-34A-8 and sound regulatory practice.⁶³

68. Otter Tail customers will continue to have very low rates at Mr. Hevert’s recommended ROE of 10.30 percent, as shown below:

Figure 4
South Dakota Rate Comparison⁶⁴
(All Bills Data 2011 – 2017)



69. Mr. Hevert’s ROE analysis and recommendations fully support an ROE of 10.00 percent or more for Otter Tail.

⁶³ Ex. OTP-1 at 50-51 (Hevert Direct); SDCL 49-34A-8.

⁶⁴ Ex. OTP-5 at 15 (Gerhardson Direct); Staff Memorandum Supporting Settlement Stipulation, Attachment 20 (SD Electric Revenue Requirement – OTP ROE). Attachment 20 identifies present 2017 Test Year Retail Revenue of \$30,658,393 and Rider Roll-In Revenue of \$2,619,535, for total present revenues of \$33,277,928. At Otter Tail’s proposed 10.3% ROE and reflecting the Settlement Stipulation, the overall revenue increase would be \$3,071,673, or 9.23%. Otter Tail’s July 2017 All Bills rate was 7.67 cents / kWh: 7.67 cents / kWh multiplied by 1+9.23% equals 8.38 cents / kWh.

D. Mr. Copeland's Recommendation

70. Staff witness Mr. Basil Copeland's recommends an ROE of 8.25 percent, with an ROE range from 8.0 percent to 8.5 percent.⁶⁵

71. Mr. Copeland's ROE recommendation and ROE range are lower than any ROE awarded to any vertically integrated electric utility in the United States since at least 1980.⁶⁶

72. Mr. Copeland's ROE recommendation and ROE range are materially lower than any ROE authorized for a vertically integrated electric utility in the recent past.⁶⁷

73. Mr. Copeland's recommended ROE is 125 basis points below the most recent ROEs authorized by the Commission.⁶⁸

74. An ROE that was far below other authorized ROEs cannot meet either the comparable return requirement or fair and reasonable standard of SDCL 49-34A-8, especially given the unchallenged record evidence that Otter Tail has higher risk and better performance than other utilities.

75. Mr. Copeland's ROE recommendation rests on a theory that seeks to reduce the market-to-book ratio of Otter Tail (and other utilities). Specifically, Mr. Copeland recommended ROE of 8.25 percent corresponds to a market-to-book ratio for Otter Tail of 1.37 percent, which Mr. Copeland supports as a step toward the Commission ultimately reducing OTP's allowed rate of return on equity toward a market-to-book ratio of no more than 1.25.⁶⁹

⁶⁵ Ex. S1 at 3 (Copeland Direct).

⁶⁶ Ex. OTP-2 at 5 (Hevert Rebuttal).

⁶⁷ Ex. OTP-2 at 6 (Hevert Rebuttal).

⁶⁸ Ex. OTP-6 at 7-8 (Gerhardson Rebuttal).

⁶⁹ Ex. S1 at 4 (Copeland Direct).

76. No other utility commission in the United States has implemented a policy of targeting market-to-book ratios as demonstrated by utility market-to-book ratios persistently exceeding levels Mr. Copeland deems appropriate.⁷⁰

77. There is no quantitative or analytical basis for Mr. Copeland's market-to-book recommendation.⁷¹

78. Mr. Copeland's market-to-book recommendation would severely harm Otter Tail and its customers. Otter Tail and its investors would lose approximately \$1 billion of market capitalization if Mr. Copeland's recommended 1.25 market-to-book ratio was adopted by all of Otter Tail's jurisdictions.⁷² Mr. Copeland's immediate recommendation of an 8.25 percent ROE and market-to-book ratio of 1.37 for Otter Tail⁷³ would cause similar losses.⁷⁴

79. Adopting Mr. Copeland's recommendation would increase Otter Tail's cost of equity and harm its ability to raise capital:

[I]f we had to then raise equity at \$23 a share compared to \$49 a share, we would have to double the amount of shares that we would have to raise to cover the amount of dollars needed So ... the cost of that equity would go up as a result of the significant dilution that would occur⁷⁵

80. These are extremely serious concerns for Otter Tail investors and customers, given Otter Tail's plan to finance \$901 million of 2018-2022 capital expenditure through a balanced mix of equity and debt.⁷⁶

⁷⁰ Ex. S1 at 20-21 (Copeland Direct); Ex. OTP-2 at 41 (Hevert Rebuttal).

⁷¹ Tr. at 104-110 (Copeland).

⁷² Tr. at 134 (Moug).

⁷³ Ex. S1 at 4 (Copeland Direct) ("My recommended rate of return of 8.25 percent is adequate to support a market-to-book ratio of 1.37 at the present time.").

⁷⁴ A market-to-book ratio of 1.25 would result in a stock price of \$23.63. Based on that relationship (1.25 market-to-book / \$23.63 stock price), a market-to-book ratio of 1.37 would equal a stock price of \$25.90. The calculation is as follows: $1.25/23.63 = 1.37/x$, where $x = (23.63 * 1.37) / 1.25$. A market loss of \$23.60 per share $(\$49.50 - \$25.90) \times 40$ million shares = \$944 million.

⁷⁵ Tr. at 135 (Moug).

⁷⁶ Ex. OTP-3 at 20 (Moug Direct).

81. A \$1 billion loss of market capitalization could also impact Otter Tail's ability to continue performing as well as it has.⁷⁷

82. Adopting Mr. Copeland's recommendations would put Otter Tail and other South Dakota utilities at a disadvantage when seeking investment capital,⁷⁸ as investors can and will move their investment capital to jurisdictions with more favorable policies.⁷⁹

83. Mr. Copeland's ROE recommendation would result in an unreasonably low ROE for Otter Tail, and signal to equity investors and rating agencies a lack of support by the Commission in the context of Otter Tail's large investments and superior performance.⁸⁰

84. These kinds of adverse rate case results can signal a deterioration in regulatory support, which in turn can affect utility credit outlooks⁸¹ and debt ratings.⁸² Such actions have a direct impact on the cost of service.⁸³

85. Mr. Copeland's recommendations are not justified by the fact that South Dakota represents only a small part of Otter Tail's total utility business.⁸⁴ The market's adverse reaction to the Commission adopting Mr. Copeland's recommendation would not be eliminated by the

⁷⁷ Tr. at 178 (Gerhardson).

⁷⁸ Tr. at 19 (Hevert); Ex. OTP-1 at 18 (Moug Direct).

⁷⁹ Ex. OTP-1 at 5 (Hevert Direct); Tr. at 19 (Hevert).

⁸⁰ Ex. OTP-4 at 2 (Moug Rebuttal); Tr. at 144-145 (Moug).

⁸¹ Ex. OTP-3 at 11-12 (Moug Direct).

⁸² *In re Minnesota Power*, MN PUC Docket No. E015/GR-16-664, March 29, 2019 Letter of David. R. Moeller (Mar. 29, 2019), available at

<https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId={B007CB69-0000-CF17-AE16-08945BE13A97}&documentTitle=20193-151515-01>. The Commission may take notice of the one-notch downgrade of Minnesota Power on March 29, 2019 pursuant to S.D.C.L § 1-26-19, which applies to this contested case proceeding. S.D. Admin. R. § 20:10:01:15.

⁸³ Ex. OTP-3 at 14 (Moug Direct).

⁸⁴ Ex. S1 at 41 (Copeland).

limited scope of Otter Tail's business in South Dakota.⁸⁵ Further, Mr. Copeland's recommendations are not justified or supported by Otter Tail's earnings in other jurisdictions.⁸⁶

86. Mr. Copeland's recommendations are not justified by his intent to cause a refund of returns from prior periods, which Mr. Copeland considers "excess earnings."⁸⁷ Otter Tail has not earned its overall regulated rate of return in South Dakota.⁸⁸ This means that any increases in *market* prices for Otter Tail investors are not the result of South Dakota operations and provide no justification for any decision by the Commission. Further, Mr. Copeland's intent to recoup "excess earnings" from prior years also violates the fundamental test year concept of rate-setting, which excludes income and expense from outside of the test year.⁸⁹

E. Optional Findings Regarding Combination of Mr. Hevert's and Mr. Copeland's Recommendations*

[Findings 87-92 are optional and are only needed if Commission gives any weight to Mr. Copeland's recommendations. If the Commission adopts the findings above, these additional findings 87-92 are not required]

87. During the evidentiary hearing, Mr. Copeland acknowledged that the Commission could consider both his analysis and that of Mr. Hevert if the Commission found both "to be reasonable." One way to do so would be to use Mr. Hevert's and Mr. Copeland's ROE ranges to select a starting point within a "zone of reasonableness"⁹⁰ from which to evaluate the effect of Otter Tail's higher risk and superior performance.

⁸⁵ Tr. at 80-81 (Hevert).

⁸⁶ Minnesota Rate Cases, 230 U.S. 352 (1913) ("Where the business of the [utility] is both interstate and intrastate, the question whether a scheme of maximum rates ... for intrastate transportation affords a fair return, must be determined by considering separately the value of the property employed in the intrastate business").

⁸⁷ Ex. S1 at 41 (Copeland Direct).

⁸⁸ Ex. OTP-6 at 7 (Gerhardson Rebuttal). Table 1 in Mr. Gerhardson's Rebuttal Testimony shows overall rate of return, *i.e.* cost of debt and authorized ROE. Since: (1) debt is paid before equity and (2) the actual overall rate of return is below the authorized rate of return, one can conclude Otter Tail has not achieved its authorized South Dakota ROE for several years.

⁸⁹ OTP Brief, p. 23.

⁹⁰ See Tr. at 120 (Copeland) ("[I]f you were to conclude that you found my testimony, my estimate, to be reasonable, that a reasonable mind would conclude the 8.25, and you found that a reasonable mind would conclude that it was

88. Using the top of Mr. Copeland's range (8.50 percent) and the bottom of Mr. Hevert's range (10.00 percent) produces a narrow range based on a combination of their analyses, which has a midpoint of 9.25 percent.⁹¹ Using the top of Mr. Hevert's range (10.60 percent) and the bottom of Mr. Copeland's range (8.00 percent) produces a wider range based on a combination of their analyses, which has a midpoint of 9.30 percent.⁹²

89. These 9.25 percent to 9.30 percent midpoints would be representative of an ROE for a utility of average risk and average performance.⁹³

90. While no witness identified a specific value for each of Otter Tail's higher risk and superior performance factors, the cumulative effect of those factors cannot be less than 50 basis points since only one aspect of Otter Tail's superior performance – the under-budget completion of the Big Stone AQCS Project – has provided customer savings in the test year that are equivalent to 143 basis points of ROE.⁹⁴

91. The award of an ROE 50 basis points higher than the ROE for an average risk, average performing utility would represent a sharing with Otter Tail shareholders of approximately 35 percent of the 2017 Test Year Big Stone AQCS Project savings.⁹⁵ The other approximately 65 percent of savings would be provided to customers.

10.3, and therefore, you're going to adopt the middle of that, that's going to get upheld. That's going to satisfy, you know, the zone of reasonableness idea. And that's kind of often the way it's done.”).

⁹¹ Ex. OTP-1 at 2 (Hevert Direct); Ex. S1 at 3 (Copeland Direct).

⁹² Ex. OTP-1 at 2 (Hevert Direct); Ex. S1 at 3 (Copeland Direct).

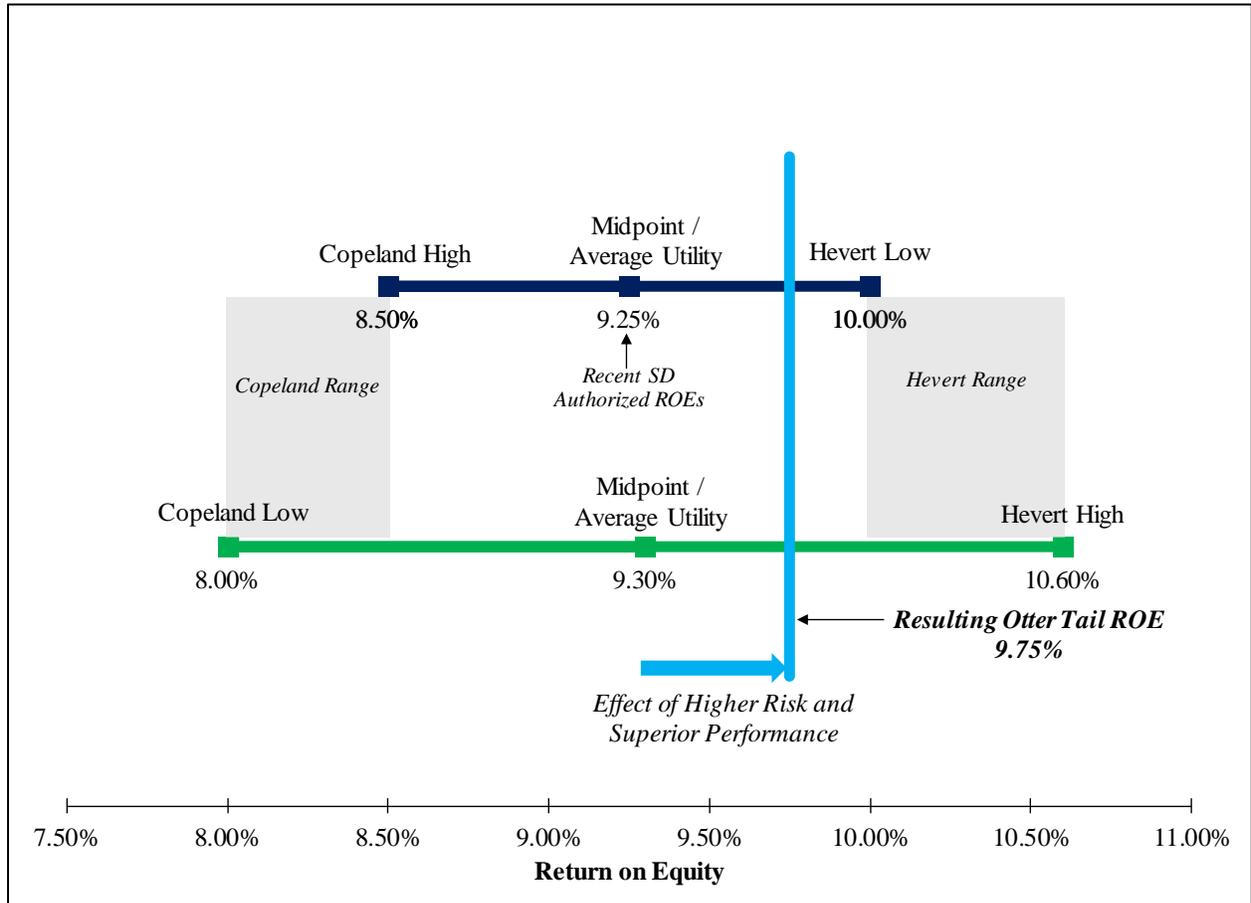
⁹³ Otter Tail Br., p. 29.

⁹⁴ Otter Tail Br., p. 29-30; Attachment 1 to Staff's February 21, 2019 Memorandum Supporting Settlement Stipulation identified the revenue requirement associated with Mr. Copeland's recommended 8.25% ROE to be \$35,206,758. Attachment 20 to Staff's February 21, 2019 Memorandum Supporting Settlement Stipulation identified the revenue requirement associated with Mr. Hevert's recommended 10.30% ROE to be \$36,349,601. The only difference between the two positions is the recommended ROE, which means that the entire revenue difference between the two positions is the result of the difference between the ROE positions. The revenue difference is \$1,142,843 (\$36,349,601 - \$35,206,758). The difference between the two ROE positions is 205 basis points (10.30% - 8.25%). The result is that every basis point is equivalent to approximately \$5,575 (\$1,142,843 / 205 basis points). The \$800,000 savings / \$5,575 per basis point = 143.5 basis points.

⁹⁵ 50 basis points / 143.5 basis points = 35%.

92. If the Commission were to give equal weight to Mr. Hevert's and Mr. Copeland's analyses and ranges Otter Tail's ROE should be at least 9.75 percent, as shown below.

Figure 5
Effect of ROE Data and Otter Tail Risk and Performance Factors⁹⁶



III. CONCLUSIONS OF LAW

From the foregoing Findings of Fact and the record in this proceeding, the Commission now makes the following Conclusions of Law:

1. Applicant is Otter Tail Power Company (Otter Tail or Company), a public utility as defined in SDCL 49-34A-1(12).

⁹⁶ Otter Tail Br., p. 31.

2. The Commission has jurisdiction in this matter pursuant to SDCL Chapters 1-26 and 49-34A, specifically 49-34A-4,49-34A-6,49-34A-8,49-34A-I 0,49- 34A-11,49-34A-12,49-34A-13,49-34A-13.1, 49-34A-17, 49-34A-19, and 49-34A-21.

3. Based on the evidence in this case and constitutional and statutory requirements, the fair and reasonable return on equity for Otter Tail is _____ percent.

Dated: April 30, 2019 Respectfully submitted,

Otter Tail Power Company

By: /s/ Cary Stephenson

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