

Volume 2A

Direct Testimony and Supporting Schedules

Bruce G. Gerhardson

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 ___

POLICY

Direct Testimony and Schedules of

BRUCE GERHARDSON

April 20, 2018

TABLE OF CONTENTS

I. INTRODUCTION AND QUALIFICATIONS..... 1

II. PURPOSE AND OVERVIEW OF DIRECT TESTIMONY 1

III. DESCRIPTION OF OTP 10

 A. Summary..... 10

 B. Facilities 11

 C. Capital Expenditures 12

 D. Service Area 13

 E. Rates and Customer Satisfaction 14

 F. Customer Information System Upgrade 19

IV. CAPITAL INVESTMENTS AND MITIGATION OF CAPITAL COSTS..... 20

V. COST INCREASES AND MITIGATION OF COSTS 24

VI. OTHER PROPOSALS..... 27

VII. INTRODUCTION OF WITNESSES 28

VIII. CONCLUSION 29

ATTACHED SCHEDULES

Schedule 1 – Qualifications and Experience of Bruce Gerhardson

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 Q. PLEASE STATE YOUR NAME AND OCCUPATION.

3 A. My name is Bruce Gerhardson. I am employed by Otter Tail Power Company (OTP) as
4 Vice President of Regulatory Affairs.

5
6 Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.

7 A. I have worked for OTP for over 17 years. During my first 16 years, I worked as Associate
8 General Counsel, representing OTP in numerous regulatory proceedings. In 2012, OTP
9 added management of regulatory services and compliance to my duties. In 2017, I was
10 appointed Vice President, Regulatory Affairs. My current duties include providing
11 direction and supervision for OTP's Regulatory Services, Regulatory Compliance,
12 Market Planning and Strategic Planning areas. My qualifications and experience are more
13 fully described on Exhibit ___(BGG-1), Schedule 1.

14 **II. PURPOSE AND OVERVIEW OF DIRECT TESTIMONY**

15 Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

16 A. My Direct Testimony gives an overview of OTP's requests in this case.
17

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

19 A. I provide background on OTP and why OTP is requesting a rate increase. I provide a
20 summary of information showing the high levels of customer satisfaction OTP has
21 achieved, and I describe some of our recent capital expenditures, including the very large
22 recent projects that OTP successfully completed under budget. I also discuss some of the
23 significant sources of OTP's revenue deficiency and introduce OTP's other witnesses.
24

25 Q. HOW IS YOUR DIRECT TESTIMONY ORGANIZED?

26 A. In Section III, I provide a description of OTP, including: facilities, capital expenditures,
27 OTP's service area, OTP's small size, OTP's rates and customer satisfaction and OTP's
28 customer information system upgrade. In Section IV, I discuss OTP's capital investments

1 and what we've done to manage our capital costs. In Section V, I discuss cost increases
2 and mitigation of costs. In Section VI, I discuss other proposals including rate designs. In
3 Section VII, I introduce the other OTP witnesses and Section VIII presents my
4 conclusions.

5
6 Q. PLEASE SUMMARIZE OTP'S REQUEST IN THIS CASE.

7 A. OTP is requesting an increase to non-fuel base revenue. As part of the request, OTP
8 proposes to transition costs currently recovered through OTP's Environmental Cost
9 Recovery Rider (ECRR) and completed project costs recovered through OTP's
10 Transmission Cost Recovery Rider (TCRR) into base rates at the commencement of
11 Interim Rates in this case. To facilitate this transition from rider to base rate recovery,
12 OTP proposes to discontinue the associated recoveries through its ECRR and TCRR
13 contemporaneous with Interim Rates going into effect.

14 Excluding the effect of the rider-to-base-rate transition, the increase in non-fuel
15 base revenue is \$3,358,574, or 10.10 percent. The effect of the proposed increase to base
16 rates and the transition of rider recoveries to base rates — if considered in isolation,
17 without also taking into consideration the corresponding reduction to rider revenues -- is
18 \$5,978,109, or 19.50 percent. The transition of costs from riders to base rates does not
19 increase customer bills, however, as it merely moves recovery from the rider mechanisms
20 to the base rate mechanism. Therefore, the net effect of the requested increase is 10.10
21 percent, as indicated above.

22
23 Q. WHAT IS DRIVING OTP'S NEED FOR A REVENUE INCREASE?

24 A. Our current South Dakota base rates were set in 2011 based on a 2009 Test Year (Docket
25 No. EL10-011). We have made significant system investments since that case, with net
26 plant in service increasing 17 percent. The current income deficiency relating to
27 increased rate base investment since that case is \$1.6 million, while net operating income
28 grossed up for taxes and before the effect of rider roll-in has decreased \$1.7 million,
29 resulting in a net deficiency of \$3.3 million. The deficiency is net of the impacts of the
30 Tax Cuts and Jobs Act which reduced the request by approximately \$1.2 million.

1 Operations and maintenance (O&M) costs have increased since the 2009 Test
2 Year. Despite working to control both capital and O&M costs, including placing the Big
3 Stone Air Quality Control System (AQCS) project in service on-time and over \$125
4 million under budget, a rate increase is necessary for OTP to continue providing
5 electricity in a reliable, economic and environmentally responsible manner.

6 OTP's revenue deficiency reflects a return on equity (ROE) of 10.30 percent, an
7 equity ratio of 53.10 percent, and an overall rate of return on investment (ROR) of 7.96
8 percent. This is a reduction from the currently authorized 8.50 percent ROR.

9 OTP has maintained its base rates without increase (based on the historic Test
10 Year) for 8 years despite the fact OTP's sales have increased by an annual average of
11 only 0.69 percent over the sales used for setting OTP's rates in the 2009 Test Year (5.5
12 percent in aggregate over that period). OTP's overall rates for electric service in South
13 Dakota are the second lowest among South Dakota investor-owned utilities and have
14 been so for several years—MidAmerican Energy is the only such utility with lower rates.
15 OTP has been able to keep rates low by making cost containment a priority for capital
16 projects and O&M costs. Given the passage of time, however, OTP now requires
17 increased base rates to address cost increases that have occurred since our last general
18 rate case, despite our best efforts.

19
20 Q. HAS OTP LOCATED ANY OF ITS SIGNIFICANT RECENT SYSTEM
21 INVESTMENTS IN SOUTH DAKOTA?

22 A. Yes. OTP has been a leader in making beneficial infrastructure investments in South
23 Dakota. For example, OTP is the operator and majority owner of the Big Stone Power
24 Plant, located near Big Stone, South Dakota. Late in 2015, OTP completed a \$365.5
25 million AQCS upgrade to the Big Stone Plant. This was the largest single infrastructure
26 investment in OTP's history, and it was one of the largest single business investments
27 ever made by anyone in the state of South Dakota. OTP served as the construction
28 manager for the project and was very successful in managing costs. The project was
29 completed more than \$125 million under budget. The project and cost savings are

1 described in greater detail later in this testimony and in the Direct Testimony of OTP
2 witnesses Mr. Kirk A. Phinney and Mr. Stuart D. Tommerdahl.

3 OTP has also made some of the largest investments in transmission in South
4 Dakota's history. OTP is approximately a 50 percent owner in the Big Stone South to
5 Brookings and the Big Stone South to Ellendale 345 kV transmission projects. The Big
6 Stone South to Brookings project was completed and placed into service in 2017. The
7 Big Stone South to Ellendale is currently under construction and scheduled for
8 completion by the end of 2019. These are very large and expensive transmission projects.
9 The total capital costs of these projects are projected at \$140 million and \$250 million,
10 respectively (Total Project). They are classified as multi-value projects (MVPs) under the
11 MISO tariff, which qualifies them for MISO-wide regional allocation of costs. OTP
12 completed the Big Stone South to Brookings line more than \$61.3 million under budget
13 (Total Project), and the Big Stone South to Ellendale line is also currently expected to
14 come in under budget.

15 These completed and planned infrastructure investments demonstrate OTP's
16 significant commitment to beneficial investment in infrastructure in the state of South
17 Dakota. While South Dakota is home to just 8.8 percent of OTP's customers, these recent
18 and additional near-term investments in South Dakota (including the Astoria Station
19 Project, discussed below) will count for 36.0 percent of OTP's total plant in service by
20 2021. The investments have and will continue to provide very significant economic
21 benefits to the State of South Dakota.

22 These projects are not just beneficial from the perspective of economic
23 development in South Dakota. They will contribute to economical electric service to
24 numerous electric customers, for OTP and other utilities. The Big Stone AQCS project
25 will benefit the customers of Montana Dakota Utilities and NorthWestern Energy, in
26 addition to OTP's customers, as those utilities are co-owners of the Big Stone Plant and
27 their allocated capital costs are lower because of OTP's exceptional performance on the
28 project. And, the Big Stone Area Transmission projects were designed and constructed to
29 serve 30 million customers in a region that includes fifteen U.S. states and Manitoba,
30 Canada. The substantial cost savings OTP has achieved by bringing the projects to

1 completion under budget will benefit these millions of customers through lower
2 transmission rates.

3 These beneficial infrastructure investments are very large commitments for a
4 small utility like OTP, and as the Commission considers OTP's requests in this case, we
5 ask that the Commission also consider the significant investments we have made in South
6 Dakota and our exceptional performance in bringing them to completion.

7
8 Q. IS OTP PLANNING OTHER INFRASTRUCTURE INVESTMENT FOR
9 CONSTRUCTION IN SOUTH DAKOTA?

10 A. Yes. OTP is planning to construct a 250 MW natural gas generation project near Astoria,
11 South Dakota (the Astoria Station Project). The Astoria Station Project is expected to be
12 in service in early 2021 at a cost of approximately \$160 million (OTP Total). The
13 Commission is currently evaluating the siting permit application for the Astoria Station
14 Project in Docket No. EL17-042. It is planned to go into service in the spring of 2021.
15 Costs for this project are not included in this rate case.

16
17 Q. DOES OTP HAVE OTHER SYSTEM INFRASTRUCTURE INVESTMENTS
18 PLANNED THAT ARE NOT LOCATED IN SOUTH DAKOTA?

19 A. Yes. OTP is planning to construct a 150 MW wind project near Merricourt, North Dakota
20 (the Merricourt Wind Project). OTP anticipates the Merricourt Wind Project will go into
21 service in 2019.

22
23 Q. WHAT ARE SOME OF THE OTHER FEATURES OF OTP'S RATE PROPOSAL IN
24 THIS CASE?

25 A. OTP's overall revenue deficiency has been calculated using a 2017 historical Test Year
26 with known and measurable changes. OTP also proposes to transfer certain costs
27 currently being recovered through OTP's TCRR and ECRR to base rates as indicated
28 above.

29 Rolling the rider costs into base rates will not materially impact customers' bills,
30 as the base rate revenue requirement increase caused by the transfer of costs will be offset

1 by a corresponding decrease to the revenue requirements of the TCRR, and ECRR. Other
2 OTP witnesses, including Mr. Tommerdahl, Mr. Tyler A. Akerman and Mr. Bryce C.
3 Haugen, provide more information on OTP's proposal to transfer TCRR and ECRR costs
4 to base rates.

5
6 Q. HAVE YOU MADE A REQUEST IN THIS CASE TO ADDRESS THE COSTS YOU
7 WILL SPEND ON THE MERRICOURT WIND PROJECT?

8 A. Yes. We are requesting that the Commission authorize a step increase to facilitate
9 recovery for the Merricourt Wind Project when it is placed into service. This step
10 increase in rates is described in the Direct Testimony of Mr. Akerman. The step increase
11 will permit OTP to commence recovery when the project is placed in service and without
12 the cost and regulatory burden of an additional general rate case.

13 As the Commission is aware, the cost of administering a rate case can be
14 significant—both to the utility and the Commission--and when one considers that the
15 costs are generally recoverable from customers, reducing the regulatory costs and
16 burdens is very much in customers' and the public's interest. To be specific, if a rate case
17 might cost \$550,000, those costs must ultimately be spread across OTP's 11,700 South
18 Dakota customers, which means a single rate case can cost each South Dakota customer,
19 on average, over \$43, just for the costs of administering the case. OTP estimates that the
20 increases expected with the addition of the Merricourt Wind Project will largely be off-
21 set by reductions to fuel and purchased power costs, and those reductions will
22 automatically get reflected in reduced FCA charges. The total changes to bills anticipated
23 by the step increase of the Merricourt Wind Project are just 2 percent, and therefore, it
24 would appear imprudent and impractical to trigger a general rate proceeding that might
25 cost \$43 per customer when the effective annual bill increase related to the project is
26 expected to be approximately \$20 for Residential customers, on average.

27

1 Q. ARE THERE OTHER REASONS WHY IT IS REASONABLE TO ADDRESS THE
2 MERRICOURT WIND PROJECT THROUGH A STEP INCREASE?

3 A. Yes. As indicated above, OTP is planning to construct the Astoria Station Project by
4 2021, and it is expected this will necessitate a rate case. OTP believes it is
5 administratively efficient, and consistent with customers' and the public's interest to use
6 a step-in mechanism for the Merricourt Wind Project as proposed in this case and to
7 review all costs related to the project in OTP's next rate case, which is expected by 2021,
8 to accommodate recovery of the Astoria Station Project.

9 The step increase proposed in this case to accommodate recovery for the
10 Merricourt Wind Project is administratively effective and economic for our customers
11 and therefore should be approved.

12

13 Q. ARE YOU MAKING A REQUEST FOR INTERIM RATES IN THIS CASE?

14 A. Yes. We have requested authorization to implement Interim Rates 30 days following
15 submission of this case. The interim rate collections will be refundable to customers to
16 the extent they are more than the Commission's final determinations in the case.

17

18 Q. PLEASE SUMMARIZE OTP'S INTERIM RATE REQUEST.

19 A. OTP requests authority to implement Interim Rates 30 days following its filing of this
20 request. The Interim Rates have been adjusted to remove any known and measurable
21 changes that will not yet have occurred within the interim rate period. The Interim Rates
22 also provide a vehicle through which OTP will recognize tax rate changes that have
23 occurred under the Tax Cuts and Jobs Act. The Interim Rates will be refundable to ensure
24 that they will be consistent with the ultimate decision of the Commission in this case. For
25 these reasons, OTP's interim rate request is consistent with and necessary for the
26 establishment of just and reasonable rates and consistent with the public interest.

27

28 Q. PLEASE EXPLAIN THE BASIS FOR YOUR INTERIM RATE REQUEST.

29 A. As indicated above, OTP's request is based on a 2017 historic Test Year, and therefore
30 the 2017 Test Year demonstrates that OTP has a current revenue deficiency at the time of

1 the rate case filing. OTP's Interim Rate Request has also been adjusted to remove any
2 known and measurable changes that are included in the final rate 2017 Test Year but for
3 which the changes will not have yet occurred during the interim rate period. This ensures
4 that known and measurable adjustments for changes occurring beyond the interim period
5 are not the cause of any identified deficiency in the interim period. Also, the Interim
6 Rates will be refundable to the extent they exceed the Commission's final determinations
7 in this case. These protections ensure that the Interim Rates will apply only to the extent
8 that OTP ultimately demonstrates a deficiency existed during the interim rate period. As a
9 matter of regulatory principle, the rates charged by a utility should be just and reasonable,
10 which means that a utility should be permitted to recover its costs and a fair rate of return
11 on its investments. Regulatory lag caused by limiting a utility to the use of an historical
12 Test Year and without Interim Rates leaves a utility without any reasonable opportunity
13 to recover its prudently incurred costs of providing service.

14
15 Q. IS OTP'S INTERIM RATE REQUEST CONSISTENT WITH SOUTH DAKOTA
16 LAW?

17 A. Yes. OTP's Transmittal Letter and Application provide an explanation of why the request
18 is consistent with South Dakota Law.

19
20 Q. HAS THE COMMISSION TAKEN STEPS THAT SUPPORT THE
21 IMPLEMENTATION OF INTERIM RATES ON OTP'S PROPOSED TIMELINE?

22 A. Yes. The Commission's actions relating to recent changes under the Tax Cuts and Jobs
23 Act are an example that it is not reasonable to delay a rate change when it can be
24 demonstrated that the cost of utility service has changed. As the Commission recognized
25 in its December 29, 2017 ORDER REQUIRING COMMENTS; ORDER REQUIRING RATES IN
26 EFFECT JANUARY 1, 2018, ARE SUBJECT TO REFUND; ORDER GRANTING INTERVENTION, in
27 Docket No. GE17-003 (Order), the change to tax rates under the Tax Cuts and Jobs Act
28 (TCJA) would result in a change to utilities' cost of service, and therefore the Order
29 commenced an examination into the possible cost of service impacts of the change. The
30 Commission ruled that rates charged by utilities on and after January 1, 2018, will be

1 subject to refund or any other ratemaking treatment which ensures ratepayers receive the
2 benefits of the tax change as of January 1, 2018. The Commission's Order was issued on
3 December 29, 2017, with an effective date of January 1, 2018, which serves as support
4 that the Commission has previously authorized reasonable measures to prevent
5 procedural lag in the setting of just and reasonable rates. In this case, the Order serves as
6 more than a regulatory precedent, too, given that it is intended to cover the same cost of
7 service period as the period covered by OTP's interim rate request (the 2018 calendar
8 year).

9
10 Q. HAS OTP REFLECTED THE CHANGE TO TAX RATES IN THE TEST YEAR AND
11 IN THE INTERIM RATE REQUEST?

12 A. Yes. Even though OTP has filed this case using a historic 2017 Test Year, which was
13 prior to the effective date for the TCJA tax changes, OTP has included known and
14 measurable changes in its 2017 Test Year cost of service to reflect the changes to the tax
15 code which took effect on January 1, 2018. In its interim rate request, OTP has retained
16 the known and measurable changes related to the TCJA, as they will be in effect during
17 the proposed interim rate period. This treatment allows a matching up of the tax-related
18 changes to the cost of service with other changes to OTP's cost of service.

19
20 Q. CAN YOU SUMMARIZE THE PROPOSED EFFECTIVE DATES OF THE
21 COMPONENTS OF THE COMPANY'S RATE PROPOSAL?

22 A. As I noted earlier, OTP proposes that Interim Rates go into effect 30 days after filing the
23 Application. OTP's proposed rates, sometimes referred to as Final Rates, would then be
24 effective upon the Commission's final disposition of the Company's Application, which
25 we would expect to occur approximately January 1, 2019. Under OTP's proposal, if the
26 Commission suspends or does not authorize Interim Rates, the proposed Final Rates
27 would be effective 180 days from the Application's filing date and remain in effect
28 pending the Commission's final disposition of OTP's Application. Finally, OTP has
29 proposed a Step Increase for the Merricourt Wind Project that would be effective January
30 1, 2020.

1 **III. DESCRIPTION OF OTP**

2 **A. Summary**

3 Q. PLEASE BRIEFLY DESCRIBE OTP.

4 A. OTP provides retail electric service to approximately 132,100 customers, including
5 approximately 11,700 in South Dakota, 61,700 in Minnesota, and 58,800 in North
6 Dakota. OTP serves 454 communities and rural areas in northeastern South Dakota,
7 western Minnesota and the eastern two-thirds of North Dakota. In South Dakota, OTP
8 serves 54 communities. Our 70,000 square-mile service territory is roughly the size of
9 Wisconsin. OTP is headquartered in Fergus Falls, Minnesota and is a subsidiary of Otter
10 Tail Corporation, which has its headquarters in Fargo, North Dakota.

11
12 Q. HAVE THERE BEEN CHANGES IN OTP’S RELATIONSHIP TO OTTER TAIL
13 CORPORATION SINCE OTP’S LAST SOUTH DAKOTA RATE CASE?

14 A. Yes. Since OTP’s last rate case, Otter Tail Corporation has substantially reduced the
15 number and scope of its non-utility operations and increased its focus on OTP. In 2009,
16 Otter Tail Corporation had 12 non-utility operating companies; it now has just 4.

17
18 Q. HOW MANY PEOPLE DOES OTP EMPLOY?

19 A. In 2017, OTP had an average of 776 full-time equivalent employees, including
20 approximately 390 union employees and 386 non-union employees (not adjusted for
21 employees of jointly owned plants).

22
23 Q. WHAT IS OTP’S MISSION?

24 A. OTP’s mission is: “To produce and deliver electricity as reliably, economically, and
25 environmentally responsibly as possible to the balanced benefit of customers,
26 shareholders, and employees and to improve the quality of life in the areas in which we
27 do business.”

1 **B. Facilities**

2 Q. PLEASE BRIEFLY DESCRIBE OTP'S GENERATION AND TRANSMISSION
3 FACILITIES.

4 A. OTP operates three coal-fired base load generating plants: Coyote at 427 megawatts
5 (MW), located near Beulah, North Dakota, Big Stone at 475 MW, located near Big
6 Stone, South Dakota, and Hoot Lake at 138 MW, located near Fergus Falls, Minnesota,
7 and three peaking plants: Jamestown 1 and 2 at 42.5 MW, located in North Dakota, Lake
8 Preston at 20 MW, located in South Dakota, and Solway at 43.7 MW, located in
9 Minnesota. We also own five hydroelectric stations on the Otter Tail River near Fergus
10 Falls, Minnesota, and one on the Mississippi River near Bemidji, Minnesota.

11 OTP owns three major wind farms, all located in North Dakota: Langdon at 40.5
12 MW, Ashtabula at 48 MW, and Luverne at 49.5 MW. OTP also owns several smaller
13 wind facilities and procures wind energy from other facilities through purchase power
14 agreements.

15 OTP owns a total of 5,863 miles of transmission line. Our electric system is
16 interconnected with the facilities of several neighboring suppliers.

17
18 Q. IS OTP A MEMBER OF A REGIONAL RELIABILITY ORGANIZATION AND
19 REGIONAL INDEPENDENT SYSTEM OPERATOR?

20 A. Yes. OTP is a member of the Midwest Reliability Organization (MRO), the regional
21 reliability council of the North American Electric Reliability Corporation (NERC) that
22 develops and establishes planning and operating reliability standards in the Midwest
23 region with which utilities must comply. OTP is also a member of the Midcontinent
24 Independent System Operator (MISO). MISO serves as the operator of the regional
25 transmission system, performs Balancing Authority functions of the NERC standards,
26 and implements a regional resource adequacy mechanism for the sharing of generation
27 reserves, all with the goal of lowering costs.

1 **C. Capital Expenditures**

2 Q. IS OTP ENGAGED IN AN EXTENSIVE CAPITAL EXPENDITURE PROGRAM?

3 A. Yes. OTP has been engaged in an extensive capital expenditure program since 2012 that
4 is expected to continue through 2021. OTP invested approximately \$806 million (OTP
5 Total) between 2012 and 2017 and is expected to invest an additional \$901 million (OTP
6 Total) between 2018 and 2021.¹ OTP's investments between 2012 and 2017 have focused
7 on upgrading our facilities and environmental compliance at our generating plants
8 (including the AQCS project at our Big Stone plant) and strengthening our transmission
9 system, along with routine replacements, upgrades and extensions.

10
11 Q. PLEASE BRIEFLY DESCRIBE THE AQCS PROJECT.

12 A. The AQCS project is OTP's largest ever single capital expenditure. The AQCS project
13 reduces nitrogen oxides and sulfur dioxide emissions at our Big Stone plant by
14 approximately 90 percent and reduces mercury emissions by approximately 80 percent.
15 The AQCS project came on line on December 29, 2015, more than \$125 million (Total
16 Project) below budget.

17 The AQCS project also demonstrates the importance safety plays in our mission.
18 Constructing the project took over 2.3 million worker hours and the project had only one
19 lost time accident and an OSHA rate of approximately 0.88. The AQCS project is
20 described in detail in the Direct Testimony of Mr. Phinney.

21
22 Q. HAS OTP ALSO COMPLETED OTHER RECENT CAPITAL EXPENDITURES
23 UNDER BUDGET?

24 A. Yes. For example, OTP was also able to complete its Hoot Lake Plant Mercury and Air
25 Toxics Standards (MATS) project under budget. This project is also described in greater
26 detail in the Direct Testimony of Mr. Phinney.

¹ Excluding AFUDC.

1 D. **Service Area**

2 Q. PLEASE DESCRIBE THE COMMUNITIES OTP SERVES.

3 A. OTP serves very small communities. The average population of our communities in our
4 service area is approximately 400 people, and over sixty percent of OTP's communities,
5 system wide, have populations of fewer than 200 people. Milbank is the largest
6 community OTP serves in South Dakota. It has a population of 3,353.

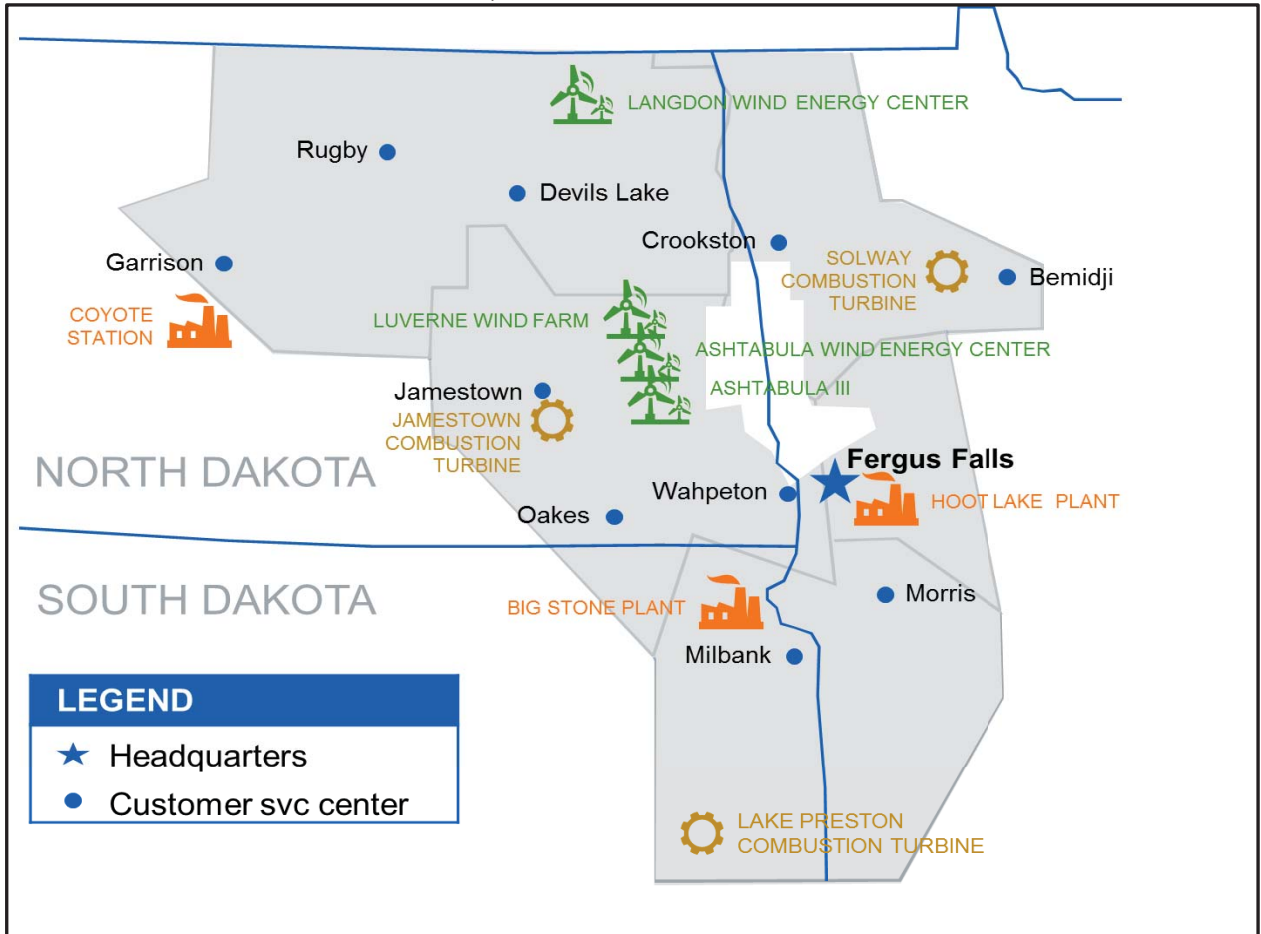
7
8 Q. DO YOU HAVE AN ILLUSTRATION THAT INCLUDES OTP'S SERVICE AREA
9 AND FACILITY LOCATIONS?

10 A. Yes. Figure 1 provides an overview of OTP's service area, generating facilities and
11 customer service centers.

12

1
2

Figure 1
Overview of OTP Service Area, Generation Facilities and Customer Service Centers



3

4

5 Q. HOW DOES OTP COMPARE IN SIZE TO OTHER UTILITIES?

6 A. OTP is very small in terms of number of total retail customers and retail revenues
7 generated. OTP is the second smallest investor-owned utility in the United States.

8

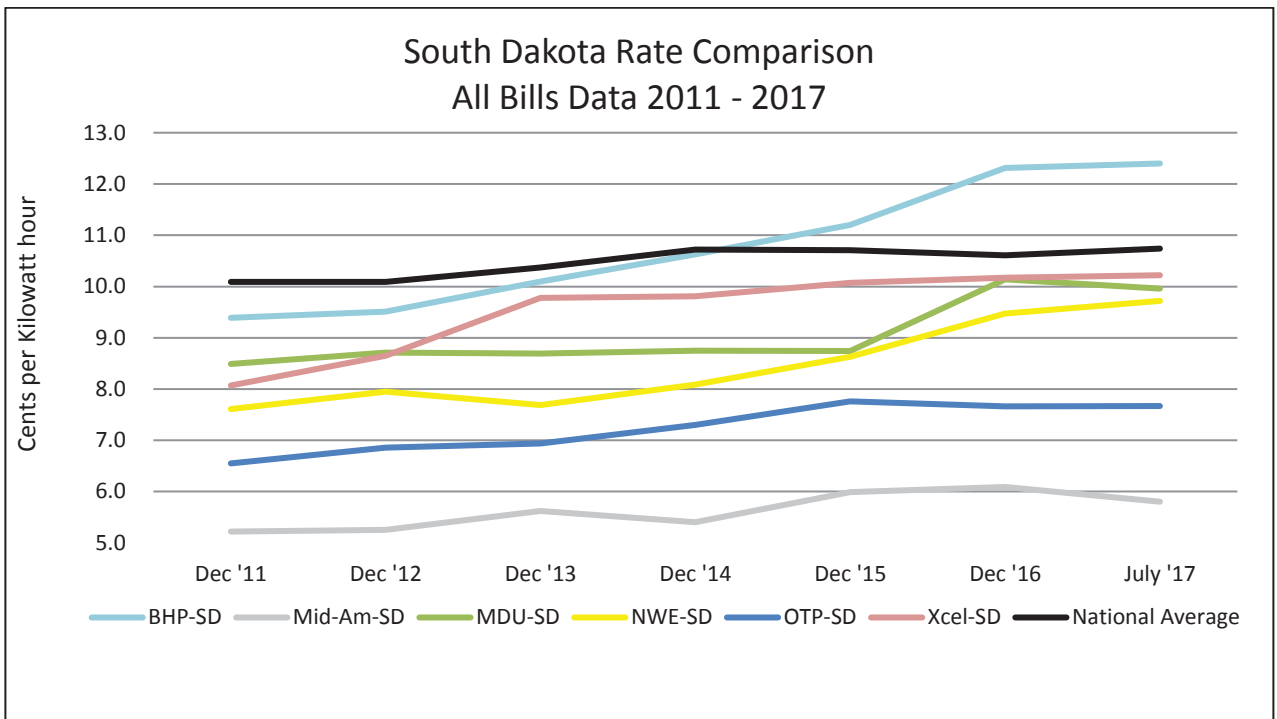
9 E. **Rates and Customer Satisfaction**

10 Q. HAS OTP'S SMALL SIZE AND SPARSELY POPULATED SERVICE AREA
11 PREVENTED OTP FROM DELIVERING ELECTRICITY ECONOMICALLY?

12 A. No. Despite the challenges posed by being a very small utility and serving customers in a
13 very large, sparsely populated service territory with very substantial capital expenditures,
14 OTP has been successful in maintaining low electric rates.

1 Figure 2 compares OTP's rates to the rates of other South Dakota investor-owned
2 utilities and to the national average since 2011 (the rates reflect an average of all
3 customer classes and include all bill components—i.e. all fuel and purchased power and
4 all riders).

5 **Figure 2**
6 Rates 2011-2017



7
8
9 Q. HOW HAS OTP BEEN ABLE TO MAINTAIN THESE LOW RATES?

10 A. These low rates are a direct result of successful execution on our capital project
11 investments and our efficient operations. We have recently completed our extensive
12 AQCS project at the Big Stone Plant on time and we were able to do so more than \$125
13 million below budget (Total Project). OTP has also been successful in managing the costs
14 of other capital expenditures.

1 Q. HAS OTP BEEN RECOGNIZED FOR ITS LOW RATES?

2 A. Yes. In May 2017, Regulatory Research Associates recognized Otter Tail Corporation as
3 the 4th lowest price provider among all utility parent companies in the United States with
4 a blended rate for all customers of 8.16 cents/kWh.
5

6 Q. PLEASE SUMMARIZE OTP'S CUSTOMER SATISFACTION LEVELS.

7 A. OTP continues to be recognized in the industry as having the highest levels of customer
8 satisfaction. OTP's customers' satisfaction is demonstrated in several ways, including the
9 American Customer Satisfaction Index, transaction surveys and, for the first time in
10 2015, OTP was included in J. D. Power's study of electric utility residential customer
11 satisfaction.
12

13 Q. HOW WAS OTP RANKED IN THE J.D. POWER STUDY?

14 A. In each of the last three years, OTP has been recognized as one of the top three utilities in
15 customer satisfaction among midsize utilities in the Midwest in the JD Power Electric
16 Utility Residential Customer Satisfaction Study.SM Also, OTP's scores have increased
17 each year over those three years.
18

19 Q. PLEASE DESCRIBE THE J.D. POWER STUDY.

20 A. The J.D. Power study analyzes the relative performance of major electric utility
21 companies in the United States in terms of how well they satisfy their residential
22 customers. In 2015, J.D. Power changed the criteria of its study to include utilities with as
23 few as 100,000 residential customers, allowing OTP to participate in this study for the
24 first time.

25 The J.D. Power proprietary study results are based on experiences and perceptions
26 of consumers surveyed annually over the period from July through May. The study
27 measures customers' satisfaction with their electric utility companies by looking at six
28 factors: power quality and reliability, price, billing and payment, corporate citizenship,
29 communications, and customer service.
30

1 Q. HAS OTP'S HIGH QUALITY OF SERVICE BEEN RECOGNIZED BY ANY OTHER
2 STUDIES?

3 A. Yes. The American Customer Satisfaction Index (ACSI) also reflects OTP's high
4 achievement in customer service. The ACSI measures the satisfaction of consumers
5 across the U.S. economy. Key metrics include customer satisfaction, customer
6 expectations, and customer perceptions about the value and quality of their actual
7 experiences, customer complaints, and customer retention. ACSI captures customer
8 opinions about critical elements of the residential customer experience including ability
9 to provide reliable electric service as well as ability to restore electric service following a
10 power outage. For investor-owned utilities, the ACSI conducts additional surveys,
11 gathering customer perceptions each quarter and analyzing customer satisfaction on a
12 rolling basis across the entire year.

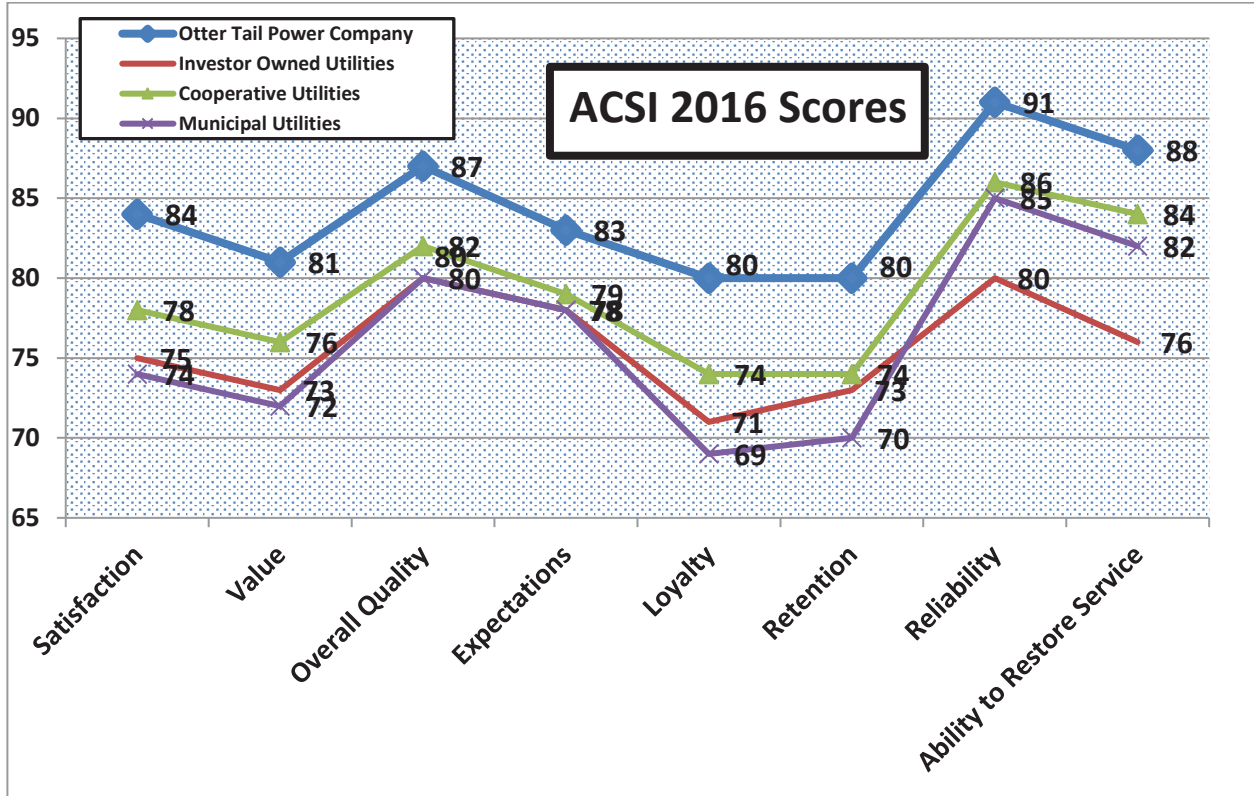
13 ACSI compares OTP's customer satisfaction ratings with those of the top electric
14 and gas investor-owned utilities in the country, which together serve more than
15 75 percent of all residential customers in the United States.

16
17 Q. HOW HAS OTP SERVICE BEEN RATED BY ACSI?

18 A. OTP's 2016 score for customer satisfaction was 84 out of 100, which was well above all
19 classes of utilities, when each is considered as a group. OTP scored high in every key
20 driver that ACSI measures, including satisfaction, meeting customer expectations,
21 quality, perceived value, customer loyalty, reliability, and service restoration. OTP also
22 had top scores in every category of customer satisfaction that was measured. Figure 3
23 shows that OTP's 2016 ACSI scores are significantly above the average scores of other
24 investor-owned, cooperative and municipal utilities in every rating category.

1
2

Figure 3
2016 ACSI Scores



3

4

5 Q DOES OTP ALSO USE TRANSACTION SURVEYS TO ASSESS ITS CUSTOMER
6 SATISFACTION ACHIEVEMENT?

7 A. Yes. Bellomy Research, Inc. conducts research to measure customer satisfaction among
8 OTP's Residential and Commercial customers that make transaction contacts with OTP.
9 Specifically, the research measures:

- 10 • Satisfaction with overall contact experience and contact handling
- 11 • Satisfaction with service provided by the Customer Service Representative
- 12 • Satisfaction with service provided by the Field Service Technician (where relevant)
- 13 • Resolution and number of times called about the same issue
- 14 • Overall value for the money

15 Since 2012, over 90 percent of both OTP Residential and OTP Commercial
16 customers have rated Overall Quality of Service as "Very Good" or "Excellent."

1 Customers also remain very satisfied with how agents and field service technicians are
2 handling their requests.

3
4 Q. ARE THERE OTHER RECENT INDICATORS OF OTP'S QUALITY SERVICE?

5 A. Yes. In June 2017, the Edison Electric Institute presented OTP with the association's
6 Emergency Recovery Award for its outstanding restoration efforts after a snow and ice
7 storm hit OTP's territory on Christmas Day, 2016. EEI's Emergency Recovery Award
8 recognizes member companies that faced difficult circumstances as a result of
9 extraordinary events and put forth an outstanding effort to promptly restore service to the
10 public. The Christmas Day storm produced freezing rain that caused one to two inches of
11 ice accumulation on roads and power lines, and loss of power to more than 4,000
12 residences in South Dakota and 2,200 residences in North Dakota. The award recognized
13 the exceptional performance and achievement of OTP's crews in restoring power to
14 customers despite these challenging conditions.

15 **F. Customer Information System Upgrade**

16 Q. IS OTP MAKING ANY CHANGES TO ITS OPERATIONS THAT WILL FURTHER
17 ENHANCE ITS CUSTOMER SERVICE?

18 A. Yes. We are in the process of replacing our Customer Information System (CIS). OTP's
19 current CIS is an older, internally-built system, which has been in service for over 30
20 years. The capabilities of this legacy system limit OTP's ability to implement complex
21 rates and provide services our customers are growing to expect. After an extensive
22 analysis of replacement options and a request for proposal process, OTP selected Cayenta
23 Utilities as the vendor for a new CIS.

24
25 Q. PLEASE DESCRIBE THE STATUS AND FEATURES OF THE NEW CIS.

26 A. OTP is 25 months into implementation of its new CIS, which is sometimes referred to as
27 "CISone." CISone is scheduled to "go-live" in the 4th quarter of 2018.

28 CISone is a foundational system and building block for other technology that OTP
29 has in its future plans, such as automated metering infrastructure (AMI), mobile work

1 management (MWM) technologies, and outage management system (OMS) technologies.
2 The CISone will allow OTP to better align business processes with industry best
3 practices, allowing quicker and more thorough access to information for both employees
4 and customers. While the current CIS relies on overnight batch/file runs to complete the
5 desired processes, the CISone will use application programming interfaces (API) to
6 process tasks in real-time. Customers will have better access to information through
7 online and self-service options. Mr. Tommerdahl further describes CISone and OTP's
8 proposal pertaining to CISone in his Direct Testimony.

9
10 Q. WHAT IS YOUR CONCLUSION REGARDING CISONE?

11 A. It is reasonable and necessary for OTP to replace the current CIS, and CISone will
12 provide substantial customer benefits.

13 **IV. CAPITAL INVESTMENTS AND MITIGATION OF CAPITAL**
14 **COSTS.**

15 Q. PLEASE SUMMARIZE THE CHANGES IN NET PLANT IN SERVICE BETWEEN
16 OTP'S LAST SOUTH DAKOTA RATE CASE AND THIS CASE.

17 A. In 2009, OTP had net plant in service of approximately \$813.6 million (OTP Total).
18 Through 2017 Test Year, OTP's net plant in service will grow to approximately \$1.19
19 billion (OTP Total), an increase since 2009 of approximately \$376 million (OTP Total).

20
21 Q. PLEASE BRIEFLY DESCRIBE OTP'S RECENT INFRASTRUCTURE ADDITIONS.

22 A. In addition to substantial routine capital expenditures, OTP has made significant capital
23 expenditures in its existing generation facilities and in transmission facilities. As I
24 explained earlier, the AQCS project at the Big Stone Plant is the single largest investment
25 ever made by OTP. The AQCS project includes the following equipment: (i) a dry Flue
26 Gas Desulfurization (FGD) system with a new baghouse; (ii) an ammonia-based
27 Selective Catalytic Reduction (SCR) system; (iii) a Separated Overfire Air (SOFA)
28 system; and (iv) an Activated Carbon Injection (ACI) system. The FGD system and
29 baghouse control sulfur dioxide and particulate matter emissions. The SCR and SOFA

1 systems control nitrogen oxide compounds emissions. The ACI system controls mercury
2 emissions.

3 OTP also added the MATS project at the Hoot Lake Plant, which involved the
4 upgrade of Electrostatic Precipitators and the installation of an ACI. The Hoot Lake
5 MATS project controls mercury and particulate matter emissions at the plant. Mr.
6 Phinney describes these projects in his Direct Testimony.

7 OTP has also made substantial investments in new transmission facilities and
8 upgrades, including investments in the following transmission projects: (a) the Brookings
9 County-Hampton 345 kV line. OTP is also making investments in two 345 kV lines that
10 connect to the Big Stone generating facility. (b) the Fargo-St. Cloud-Monticello 345 kV
11 line; and (c) the Bemidji-Grand Rapids 230 kV line.

12
13 Q. PLEASE SUMMARIZE OTP'S EXPECTED CAPITAL EXPENDITURES.

14 A. OTP is expecting to make significant capital expenditures in generation and transmission
15 facilities and in routine projects. Specifically, OTP expects to invest an additional \$901
16 (Total Company) million between 2018 and 2021.

17
18 Q. WHAT GENERATION INVESTMENTS IS OTP EXPECTING TO MAKE?

19 A. OTP expects to make significant capital expenditures for the Astoria Station Project and
20 Merricourt Wind Projects, as I described earlier in my testimony.

21
22 Q. WHAT TRANSMISSION INVESTMENTS IS OTP EXPECTING TO MAKE?

23 A. In addition to several smaller transmission projects, OTP has completed the Big Stone
24 South to Brookings 345-kV line in 2017 and will complete the Big Stone South to
25 Ellendale 345-kV line by the end of 2019.

26
27 Q. PLEASE DESCRIBE THE BROOKINGS AND ELLENDALE PROJECTS.

28 A. The Big Stone South to Brookings 345-kV line extends approximately 70 miles, was put
29 in service in September 2017, and is estimated to cost approximately \$140 million (Total
30 Project)/ \$73.2 million (OTP Total). Xcel Energy and OTP are joint owners. The Big

1 Stone South to Ellendale 345-kV line will extend approximately 160 to 170 miles and is
2 estimated to cost approximately \$250 million (Total Project)/\$124.5 million (OTP Total)
3 and be in service in 2019. OTP and Montana-Dakota Utilities Co. will jointly own the
4 Big Stone South to Ellendale project.

5
6 Q. ARE EITHER OF THESE PROJECTS INCLUDED IN THE 2018 TEST YEAR OR
7 PROPOSED RATES IN THIS CASE?

8 A. Yes. The South Dakota retail share of the Big Stone South to Brookings 345 kV line is
9 included in the 2017 Test Year, consistent with the ratemaking approach approved by the
10 Commission in Docket Nos. EL16-035 and EL12-054 for FERC-approved MVP projects.

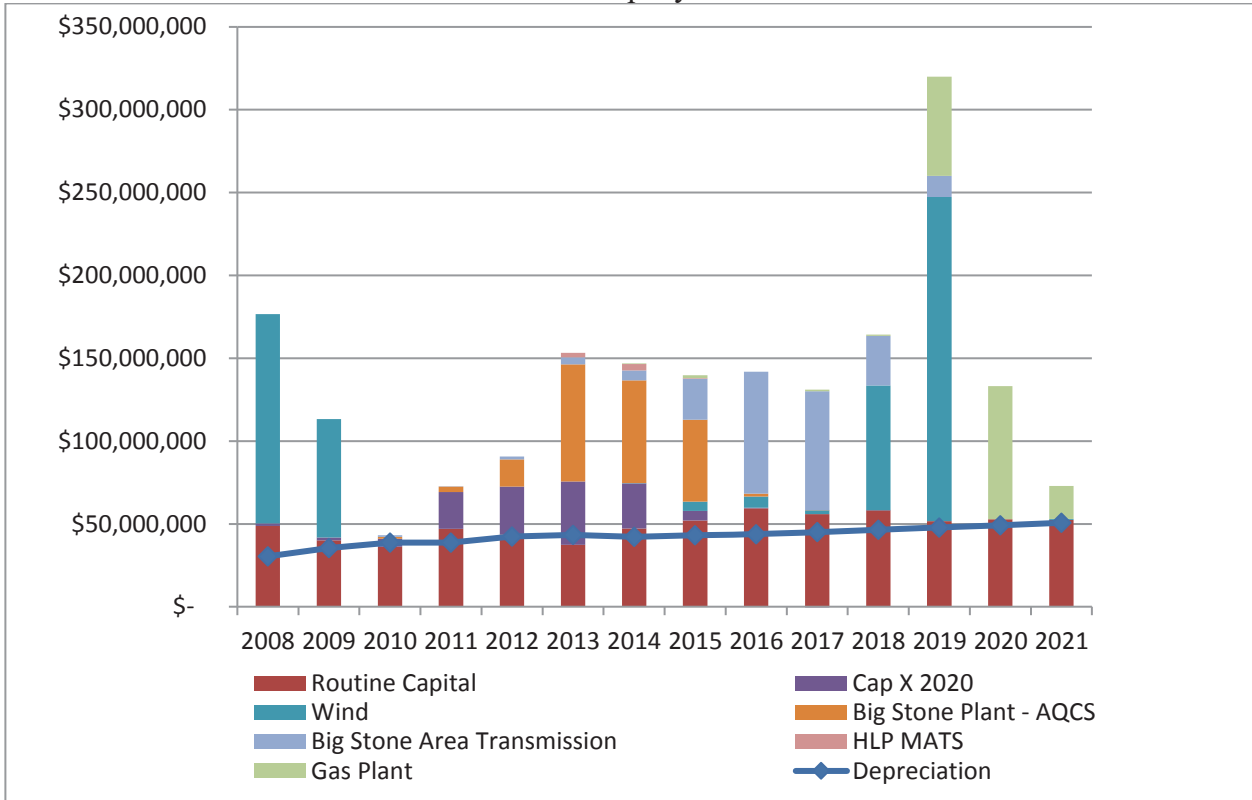
11
12 Q. DO YOU HAVE AN ILLUSTRATION THAT SHOWS OTP'S PRIOR AND
13 EXPECTED INVESTMENTS BY SEGMENT?

14 A. Yes. Figure 4 shows OTP's prior investments from 2010 through 2017 and OTP
15 projected investments from 2018 through 2021, by segment. We currently expect this
16 period of significant investment to taper off after 2021, but given the changing
17 technology in the electric industry, it is possible that this period of investment could
18 continue.

19

1
2
3

Figure 4
OTP Prior and Projected Investments by Segment (2008 – 2021)
Total Company Costs



4
5

6 Q. WILL THE COMMISSION'S DECISION IN THIS CASE HAVE SIGNIFICANT
7 IMPACTS ON OTP'S COST OF CAPITAL NEEDED FOR THESE INVESTMENTS?

8 A. Yes. As OTP witness Mr. Kevin G. Moug explains in his Direct Testimony, OTP will
9 need access to significant levels of external debt and equity financing, as well as
10 internally generated equity, to complete these significant infrastructure investments. The
11 costs of these external sources of debt and equity financing will be directly affected by
12 investors' confidence in OTP and in OTP's regulatory environment. Mr. Moug further
13 explains OTP's capital needs and the importance of this case to meeting those needs in
14 his Direct Testimony.

1 **V. COST INCREASES AND MITIGATION OF COSTS**

2 Q. HAS OTP TAKEN STEPS TO MANAGE AND CONTAIN COST INCREASES
3 RELATED TO INCREASED CAPITAL EXPENDITURES?

4 A. Yes. In this period of significant capital investment, OTP has paid close attention to the
5 completion of its large infrastructure projects. By managing these projects well, OTP has
6 helped to keep its costs low, with customer benefits extending for the full life of the
7 projects. A good example of this focus is the AQCS project, which was completed over
8 \$125 million (Total Project) under budget. It has a 30-year life. The under-budget
9 completion of the AQCS Project reduced the 2017 Test Year revenue requirement for
10 South Dakota customers by approximately \$17.2 million over the life of the project, as
11 Mr. Tommerdahl discusses in his Direct Testimony, and it will similarly reduce OTP's
12 revenue requirement each year for the entire life of the project. Mr. Phinney provides
13 more information on how the AQCS project was managed in his Direct Testimony. He
14 also discusses the Hoot Lake Plant MATS project, which was also completed under
15 budget.

16
17 Q. HAVE OTP'S O&M COSTS ALSO INCREASED SINCE OTP'S LAST RATE CASE?

18 A. Yes. OTP's Total O&M costs have increased by approximately \$6.4 million (OTP SD),
19 which amounts to a 26 percent increase since 2009, or about a 3.2 percent increase
20 annually. Non-fuel O&M costs have increased 46 percent over the same period, or about
21 5.8 percent annually. The main cost increases are due to reagents for the Big Stone Air
22 Quality Control system, transmission costs (SPP and MISO), EEP costs and depreciation
23 expense for the plant additions. More than half of the cost drivers have been covered
24 through rider revenue in the Environmental Cost Recovery Rider, the EEP rider and the
25 Transmission Cost Recovery rider. Without rider revenues OTP's retail revenues have
26 actually been relatively flat since 2009. OTP's sales have decreased in every class except
27 Large General Service, Farms, Controlled Service Interruptible and Deferred since 2009.
28 The sales increases have been in classes that have much lower average rates than the
29 classes that have grown. While sales have increased 0.6 percent annually, the base

1 revenues have only increased at 0.2 percent annually or just over \$500,000 since OTP's
2 last case. The other, non-rider cost increases since the last case have grown at just one
3 and a half percent per year but the one percent equates to approximately \$2.5 million over
4 the period. Adding the return on the growth in rate base of \$800,000 and other Test Year
5 adjustments, which offset the small base revenue growth, results in a net deficiency of
6 \$3.3 million. The expiration of the Production Tax Credits from OTP's Langdon and
7 Ashtabula Wind projects and other tax changes since the 2009 Test Year increases the
8 revenue requirement, but, the change in income taxes due to the Tax Cuts and Jobs Act
9 reduces the revenue requirement reduced taxes by a comparable amount. In sum, there
10 are several O&M cost increases that have occurred incrementally over the eight years that
11 has passed between the Test Year in the last rate case and the Test Year in this one. In
12 combination with flat revenue growth, they are driving the OTP's current need for a rate
13 increase.

14
15 Q. HAS OTP TAKEN STEPS TO ADDRESS RISING EMPLOYEE BENEFIT COSTS?

16 A. Yes. OTP has taken several steps to manage employee benefit costs. For example, in
17 2012 OTP moved all employees to a consumer-driven High Deductible Health Plan
18 (HDHP). OTP also instituted a mechanism that triggers higher employee premiums when
19 OTP's healthcare spending increases more than six percent over the prior year. In 2017
20 OTP refined the HDHP with three options and introduced coinsurance. The employer
21 share/employee share for gross health costs for non-union employees, which includes
22 total spend for both OTP and employees, moved from approximately 80 percent
23 employer/20 percent employee to 70 percent employer/30 percent employee on all three
24 of the new HDHPs. OTP also eliminated health care eligibility for spouses who can
25 obtain health care insurance from their own employer. OTP also negotiated an increase to
26 the premiums paid for dental coverage by union employees. OTP witness Mr. Peter E.
27 Wasberg explains these actions and other actions OTP has taken to manage employee
28 benefit costs in his Direct Testimony.

29

1 Q. HAS OTP ALSO TAKEN STEPS TO CONTROL ITS PENSION AND POST-
2 RETIREMENT BENEFITS COSTS?

3 A. Yes. As further described by Mr. Wasberg in his Direct Testimony, in 2006 OTP closed
4 eligibility for defined benefit pension and post-retirement medical benefits to non-union
5 employees hired after fixed dates, which varied by categories of employees. The pension
6 plan was closed after 2010 for bargaining unit employees. These steps are often referred
7 to as “soft freezes” and have been used by many other employers as well.

8

9 Q. HAS OTP TAKEN OTHER STEPS TO CONTROL ITS PENSION COSTS?

10 A. Yes. As further described by Mr. Wasberg in his Direct Testimony, OTP has prefunded
11 its obligations under its defined pension plan. The prefunding reduces pension expenses
12 by providing additional pension plan earnings which reduce total pension expense. The
13 prefunding also protects OTP and its customers from the risks of facing a large and
14 unexpected pension funding obligation at some time in the future when conditions for
15 providing funding may be unfavorable.

16

17 Q. CAN YOU GIVE SOME OTHER EXAMPLES OF STEPS OTP HAS TAKEN TO
18 MANAGE ITS O&M COSTS?

19 A. Yes. We have taken many other actions to manage costs. Some examples of process
20 improvements we have made in the last several years are: the implementation of a new
21 workforce planning system to efficiently deploy employees; the implementation of a
22 financial data warehouse system to monitor labor and non-labor expenditures and
23 variances from budgets; the implementation of a monthly operating report system to
24 coordinate among operations managers and customers service center managers to review
25 reliability, infrastructure issues and labor plans; and the implementation of a new project
26 management initiative to increase focus on effective execution on capital projects.

27 Some examples of changes to facilities and facility operations we have made are
28 the installation of variable frequency drives on gas recirculation fan motors at Coyote
29 Station that have reduced the station service load by 2 to 2.5 MWs and negotiating with
30 the union to reduce the number of operators required at Hoot Lake Plant to match lower

1 anticipated generation levels. Finally, OTP was able to engineer the AQCS project to
2 operate without any derate due to load caused by the AQCS system. These initiatives are
3 not all of what OTP has done to manage costs, but they exemplify other steps that OTP
4 has taken over the past few years to manage costs.

5 **VI. OTHER PROPOSALS**

6 Q. PLEASE DESCRIBE OTP'S PROPOSAL TO TRANSFER RIDER RECOVERIES TO
7 BASE RATES IN THIS CASE.

8 A. OTP's proposal is to transfer in-service transmission and environmental project costs
9 from its TCRR and ECRR to base rates. OTP proposes that rider recoveries be
10 discontinued during the current proceeding and the interim rate adjustment includes the
11 revenue requirement associated with costs previously recovered through riders. OTP
12 proposes to continue the inclusion of the retail share of MISO Schedule 26 and 26A
13 revenues and expenses in the TCRR (due to the variability of Schedule 26 and 26A). Mr.
14 Haugen and Mr. Akerman discuss our proposal to move ECRR, and TCRR costs from the
15 riders to base rates in their Direct Testimonies.

16
17 Q. IS OTP PROPOSING TO CHANGE ITS CUSTOMER CHARGES IN THIS CASE?

18 A. Yes. OTP witness Mr. David G. Prazak explains in his Direct Testimony that OTP is
19 proposing increases to customer charges in order to better reflect marginal costs.
20 Aligning rates with marginal costs is especially important given the nature of OTP's
21 system and how our customers use electricity.

22
23 Q. IS OTP'S SYSTEM SOMEWHAT UNIQUE IN THIS REGARD?

24 A. Yes. As I described earlier in my Direct Testimony, OTP's service area is predominately
25 rural and lacks significant customer density. Mr. Prazak also explains that many of our
26 customers use electricity for heating, which impacts system design in a way that increases
27 the kinds of costs a customer charge is intended to recover. Finally, Mr. Prazak explains
28 that the proposed rate design promotes equity among customers within a class. Promoting

1 intra-class equity is of particular concern on OTP's system, where low-income customers
2 are more likely to use electricity for heating.

3
4 Q. IS OTP MAKING ANY NEW RATE DESIGN PROPOSALS?

5 A. Yes. Mr. Prazak discusses a Residential Time of Day pilot, an LED street lighting rate, an
6 Economic Development Rider rate, an Air Conditioning Rider rate and a Super Large
7 General Service rate.

8 **VII. INTRODUCTION OF WITNESSES**

9 Q. PLEASE IDENTIFY THE WITNESSES OTP IS SPONSORING IN THIS
10 PROCEEDING.

11 A. The following individuals will be presenting testimony in this proceeding:

- 12 • Kevin G. Moug addresses OTP's costs of debt and overall cost of capital and rate of
13 return, the financial requirements related to OTP's prior and planned capital
14 expenditures, OTP's recent levels of reinvestment in its operations, the significant
15 differences between OTP and most other investor-owned utilities, and OTP's credit
16 ratings.
- 17 • Stuart D. Tommerdahl addresses the ratemaking treatment of several capital and
18 expense items, jurisdictional and class allocation factors, corporate cost allocations,
19 OTP's proposal for a step-in rate change when the Merricourt Wind Project goes
20 into service in 2019, numerous miscellaneous items and compliance items.
- 21 • Bryce C. Haugen addresses rider roll into base rates, the class cost of service study,
22 and specific regulatory compliance items.
- 23 • Tyler A. Akerman addresses the selection and development of the 2017 Test Year,
24 the development of the Test Year rate base, the development of the Test Year
25 operating statement with regulatory adjustments, pension expense, prepaid pension
26 and other post-employment benefit expense. He also addresses the impact of Tax
27 Cuts and Jobs Act.

- 1 • Peter E. Wasberg addresses matters relating to employee compensation, benefits,
2 and costs.
- 3 • Bradley E. Tollerson addresses the need for the Merricourt Wind Project.
- 4 • Kirk A. Phinney describes the capital project costs and operating and maintenance
5 costs of the Big Stone and Hoot Lake environmental compliance projects.
- 6 • David G. Prazak sponsors proposed rate design changes and general tariff changes.
- 7 • Robert B. Hevert explains OTP's cost of equity and presents OTP's recommended
8 10.30 percent rate of return.

9 **VIII. CONCLUSION**

10 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

11 A. As reflected in our Mission Statement, we take seriously our responsibility to deliver
12 electricity as reliably, economically and environmentally responsibly as possible and to
13 improve the quality of life in the areas we serve. We take pride in fulfilling that mission.
14 Continuing to fulfill that mission requires adequate financial strength. To maintain that
15 strength, we require an increase to non-fuel base revenue of \$5,978,9109 or 19.50
16 percent. This increase is based in part on an ROE of 10.3 percent and an equity ratio of
17 53.09 percent. As I previously noted, excluding the effect of the rider-to-base-rate
18 transition, the increase in non-fuel base revenue is \$3,358,574, or 10.10 percent.

19 OTP is facing a growing need to invest in additional infrastructure over at least
20 the next five years and will need to go to the market to raise additional capital.
21 Consequently, we need to have reasonable earnings and a competitive ROE.

22

23 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

24 A. Yes.