

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Nancy Lange  
Dan Lipschultz  
Matthew Schuerger  
Katie J. Sieben  
John A. Tuma

Chair  
Commissioner  
Commissioner  
Commissioner  
Commissioner

In the Matter of the Application of Otter Tail  
Power Company for Authority to Increase  
Rates for Electric Service in Minnesota

ISSUE DATE: May 1, 2017

DOCKET NO. E-017/GR-15-1033

FINDINGS OF FACT, CONCLUSIONS,  
AND ORDER

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**PROCEDURAL HISTORY**

**I. Initial Filings and Orders**

On February 16, 2016, Otter Tail Power Company (Otter Tail, or the Company) filed this general rate case seeking an annual rate increase of \$19,295,627, or approximately 9.8%. The filing included a proposed interim-rate schedule.

On the same date, the Company filed a petition to establish a new base cost of energy for the period during which interim rates would be in effect; that petition was granted by order dated April 14, 2016.<sup>1</sup>

Also on April 14, 2016, the Commission issued three orders in this case:

- an order finding the rate-case filing substantially complete and suspending the proposed final rates;
- a notice and order for hearing referring the case to the Office of Administrative Hearings for contested-case proceedings; and
- an order setting interim rates for the period during which the rate case was being resolved.

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<sup>1</sup> *In the Matter of the Application of Otter Tail Power Company for Approval of a New Base Cost of Energy*, Docket No. E-017/MR-15-1034, Order Setting New Base Cost of Energy (April 14, 2016).

## **II. The Parties and Their Representatives**

The following parties appeared in this case:

- Otter Tail Power Company, represented by Bruce Gerhardson, Associate General Counsel; Cary Stephenson, Associate General Counsel; Richard J. Johnson, Moss & Barnett, P.A.; and Patrick T. Zomer, Moss & Barnett, P.A.
- Minnesota Department of Commerce (the Department), represented by Linda S. Jensen and Peter E. Madsen, Assistant Attorneys General.
- Office of the Minnesota Attorney General–Residential Utilities and Antitrust Division (OAG), represented by Joseph C. Meyer and Joseph A. Dammel, Assistant Attorneys General.
- Minnesota Chamber of Commerce (the Chamber), represented by Richard J. Savelkoul, Martin & Squires, P.A.
- Forest Products Group, represented by Andrew P. Moratzka and Emma J. Fazio, Stoel Rives LLP.
- Fresh Energy, represented by Attorney Benjamin L. Passer.

## **III. Proceedings Before the Administrative Law Judge**

The Office of Administrative Hearings assigned Administrative Law Judge (ALJ) Eric L. Lipman to hear the case.

The parties filed direct, rebuttal, and surrebuttal testimony prior to the opening of evidentiary hearings. The ALJ held evidentiary hearings in Saint Paul on October 13, 14, and 17, 2016. After the hearings the parties filed initial briefs, reply briefs, and proposed findings of fact and conclusions of law.

The ALJ also held four public hearings in the case, on the dates and at the locations set forth below:

- City Hall, Bemidji—August 24, 2016
- Cobblestone Inn, Crookston—August 24, 2016
- City Hall, Fergus Falls—August 25, 2016
- City Council Chambers, Morris—August 25, 2016

## **IV. Public Comments**

The Administrative Law Judge held four public hearings, where the Company, the Department, the OAG, and the Commission’s staff were available to make presentations and field questions from members of the public.



All public comments are filed in the case record. Written comments are labeled “Public Comment,” of which the Commission received one. The commenting member of the public opposed a rate increase.

## **V. Proceedings Before the Commission**

On January 5, 2017, the Administrative Law Judge filed his Findings of Fact, Summary of Public Testimony, Conclusions of Law, and Recommendation (the ALJ’s Report). The following parties filed exceptions to the ALJ’s Report under Minn. Stat. § 14.61 and Minn. R. 7829.2700: the Company, the Department, the OAG, Fresh Energy, and the Minnesota Chamber of Commerce.

On February 23 and March 2, 2017, the Commission heard oral argument from and asked questions of the parties. On March 2, 2017, the record closed under Minn. Stat. § 14.61, subd. 2.

Having examined the entire record in this case, and having heard the arguments of the parties, the Commission makes the following findings, conclusions, and order.

## **FINDINGS AND CONCLUSIONS**

### **I. The Ratemaking Process**

#### **A. The Substantive Legal Standard**

The legal standard for utility rate changes is that the new rates must be just and reasonable.<sup>2</sup> The Minnesota Supreme Court has described the Commission’s statutory mandate for determining whether proposed rates are just and reasonable as “broadly defined in terms of balancing the interests of the utility companies, their shareholders, and their customers,” citing Minn. Stat. § 216B.16, subd. 6.<sup>3</sup> That statute is set forth in pertinent part below:

The commission, in the exercise of its powers under this chapter to determine just and reasonable rates for public utilities, shall give due consideration to the public need for adequate, efficient, and reasonable service and to the need of the public utility for revenue sufficient to enable it to meet the cost of furnishing the service, including adequate provision for depreciation of its utility property used and useful in rendering service to the public, and to earn a fair and reasonable return upon the investment in such property.

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<sup>2</sup> Minn. Stat. § 216B.16, subsd. 4, 5, and 6.

<sup>3</sup> *In re Interstate Power Co.*, 574 N.W.2d 408, 411 (Minn. 1998).

## **B. The Commission's Role**

While the Public Utilities Act provides baseline guidance on the ratemaking treatment of different kinds of utility costs, it generally makes only threshold determinations on rate recoverability, leaving to the Commission the tasks of determining (a) the accuracy and validity of claimed costs; (b) the prudence and reasonableness of claimed costs; and (c) the compatibility of claimed costs with the public interest.

In ratemaking, therefore, the Commission must decide a wide range of issues, ranging from the accuracy of the financial information provided by the utility, to the prudence and reasonableness of the underlying transactions and business judgments, to the proper distribution of the final revenue requirement among different customer classes.

These diverse issues require different analytical approaches, involve different burdens of proof, and require the Commission to exercise different functions and powers. In ratemaking the Commission acts in both quasi-judicial and quasi-legislative capacities: As a quasi-judicial body it engages in traditional fact-finding, and as a quasi-legislative body it applies its institutional expertise and judgment to resolve issues that turn on both factual findings and policy judgments. As the Supreme Court has explained,

[I]n the exercise of the statutorily imposed duty to determine whether the inclusion of the item generating the claimed cost is appropriate, or whether the ratepayers or the shareholders should sustain the burden generated by the claimed cost, the MPUC acts in both a quasi-judicial and a partially legislative capacity. To state it differently, in evaluating the case, the accent is more on the inferences and conclusions to be drawn from the basic facts (i.e., the amount of the claimed costs) rather than on the reliability of the facts themselves. Thus, by merely showing that it has incurred, or may hypothetically incur, expenses, the utility does not necessarily meet its burden of demonstrating it is just and reasonable that the ratepayers bear the costs of those expenses.<sup>4</sup>

## **C. The Burden of Proof**

Under the Public Utilities Act, utilities seeking a rate increase have the burden of proof to show that the proposed rate change is just and reasonable.<sup>5</sup> Any doubt as to reasonableness is to be resolved in favor of the consumer.<sup>6</sup>

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<sup>4</sup> *In re N. States Power Co.*, 416 N.W.2d 719, 722–23 (Minn. 1987) (citation omitted).

<sup>5</sup> Minn. Stat. § 216B.16, subd. 4.

<sup>6</sup> Minn. Stat. § 216B.03.

On purely factual issues, the Commission acts in its quasi-judicial capacity and weighs evidence in the same manner as a district court, requiring that facts be proved by a preponderance of the evidence. On issues involving policy judgments, the Commission acts in its quasi-legislative capacity, balancing competing interests and policy goals to arrive at the resolution most consistent with the broad public interest.

Utilities seeking rate changes must therefore prove not only that the facts they present are accurate, but that the costs they seek to recover are rate-recoverable, that the rate recovery mechanisms they propose are permissible, and that the rate design they advocate is equitable, under the “just and reasonable” standard set by statute. As the Court of Appeals explained, quoting the Supreme Court,

A utility seeking to change its rates has the burden of proving by a preponderance of the evidence that its proposed rate change is just and reasonable. Minn. Stat. § 216B.16, subd. 4 (1986). “Preponderance of the evidence” is defined for ratemaking proceedings as “whether the evidence submitted, even if true, justifies the conclusion sought by the petitioning utility when considered together with the Commission’s statutory responsibility to enforce the state’s public policy that retail consumers of utility services shall be furnished such services at reasonable rates.”<sup>7</sup>

## **II. Rate Case Overview**

Otter Tail seeks an annual rate increase of \$19,295,627, or 9.80%, to cover a revenue deficiency arising in part from what it described as its “largest capital expenditure program in its history.” The Company projects that it will invest \$858 million between 2016 and 2020 in capital projects.

According to the Company, it has invested approximately \$536 million in capital projects between 2012 and 2015, and expects to invest an additional \$858 million between 2016 and 2020. Investments in environmental improvements and transmission largely drove these costs, along with “routine replacements, upgrades, and extensions.”

The average monthly impact of the proposed rate increase for a residential customer would be \$9.53 per month or \$114.36 per year. The impact on individual customers would be higher or lower depending on each individual customer’s actual electric consumption. The Company proposed to increase fixed monthly charges and to shift more revenue responsibility to its residential classes.

The Company used a projected 2016 test year, based on actual data from fiscal year 2015.

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<sup>7</sup> *In re Minn. Power & Light Co.*, 435 N.W.2d 550, 554 (Minn. App. 1989) (citation omitted).

### III. Summary of the Issues

Many initially contested issues were resolved in the course of evidentiary proceedings. The Administrative Law Judge found that the resolutions reached by the parties were reasonable and supported by record evidence; he recommended accepting them.<sup>8</sup> The Commission concurs.

Other issues remained contested. The following issues either were contested or otherwise require discussion.

#### Financial Issues

- **Prorated Accumulated Deferred Income Tax Assets**—Should the Commission defer a determination on accounting for Accumulated Deferred Income Tax Assets in this case in anticipation that the Company will receive guidance from the IRS?
- **Multi-Value Transmission Projects (MVPs)**—How should the Commission regard recovery for projects that are approved through the Midcontinent Independent System Operator (MISO) transmission-planning process, and classified as MVPs?
- **Aircraft Expenses**—Are the Company’s aircraft expenses recoverable through rates?
- **Pension Asset and Other Post-Employment Benefit (OPEB) Liability**—Should these amounts and associated accumulated deferred income taxes be excluded from the test-year rate base?
- **Discount Rates for Pension and OPEB Expenses**—What are the appropriate discount rates for these expenses?
- **TailWinds Program**—Should the Company be permitted to recover costs for unsubscribed energy from non-enrolling customers?
- **Reagents and Emissions Allowances—Fuel Clause Adjustment**—Should the Company be permitted to include test-year reagent cost and emissions-allowance amounts in the Base Fuel Cost, or to adjust them through the fuel clause adjustment?
- **Cash Working Capital (CWC)**—Should the Commission adopt the ALJ’s recommendation to adjust the amount of cash working capital by \$244,109 in light of a settlement reached between the Company and the Department?
- **Southwest Power Pool (SPP) Transmission Costs**—What amount of these transmission costs should be included in the test year and should differences be tracked?
- **Management Incentive Compensation**—Are the Company’s management incentive costs appropriate to include in the Company’s test year?
- **Charitable Contributions**—What amount of charitable contribution expenses should be included in the test year?
- **Interim Rates Recoveries**—Did the Company appropriately adjust interim rate recovery of its Environmental Cost Recovery Rider, Transmission Cost Recovery Rider, and Renewable Resource Adjustment Rider?

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<sup>8</sup> ALJ’s Report ¶¶ 172–265.

- **Missouri River Energy Services Integrated Transmission Service Agreement**—What amount of the expenses associated with this agreement should be included in the test year?
- **Operations & Maintenance (O&M) Expenses**—Is the increase in the Company’s O&M budget reasonable?
- **Investor Relations Expense**—What amount of these expenses should be included in the test year?
- **Allowance for Funds Used During Construction (AFUDC) and Construction Work in Progress (CWIP)**— Should the Company be permitted to continue placing CWIP in rate base and offsetting AFUDC from its income statement?
- **Employee Expenses**—What amount of these expenses should be included in the test year?
- **Lobbying & Organizational Dues**—What amount of these expenses should be included in the test year?

#### **Cost-of-Capital Issues**

- **Return on Equity**—What is a fair and reasonable rate of return on equity for this Company, on this record, at this time?

#### **Class-Cost-of-Service-Study (CCOSS) Issues**

- **CCOSS**—What action should the Commission take, if any, with respect to the Class Cost of Service Studies proposed in this case? What requirements, if any, should be established for future Otter Tail rate cases?

#### **Sales Forecast**

- **Sales and Revenues**—What figures should be adopted for this case?
- **Process Improvements**—How should Otter Tail improve its forecasting methods?

#### **Rate-Design Issues**

- **Interclass Revenue Apportionment**—What percentage of the revenue requirement should be allocated to each customer class?
- **Decoupling**—Should the Commission require the Company to propose or implement a revenue-decoupling rate design?
- **Fixed Customer Charges**—At what level should the Commission set the fixed monthly charges?

These issues are examined individually below, with issues on which the Commission declines to accept the ALJ's recommendation discussed in greater detail.

#### **IV. The Administrative Law Judge's Report**

The Administrative Law Judge's Report is well reasoned, comprehensive, and thorough. The ALJ held three days of formal evidentiary hearings and four public hearings. He reviewed the testimony of 27 expert witnesses and related hearing exhibits. He reviewed the written comment submitted by a member of the public.

The ALJ received and reviewed initial and reply post-hearing briefs from the parties, as well as their proposed findings of fact and conclusions of law. He made some 667 findings of fact and conclusions of law and made recommendations on stipulated, settled, and contested issues based on those findings and conclusions.

The Commission has itself examined the record, considered the report of the Administrative Law Judge, considered the exceptions to that report, and heard oral argument from the parties. Based on the entire record, the Commission concurs in most of the Administrative Law Judge's findings and conclusions. On some issues, however, the Commission reaches different conclusions, as delineated and explained below. And on a few issues it provides technical corrections and clarifications.

On all other issues, the Commission accepts, adopts, and incorporates the ALJ's findings, conclusions, and recommendations.

### **FINANCIAL ISSUES**

#### **V. Accumulated Deferred Income Taxes**

##### **A. Introduction**

##### **1. Depreciation**

Depreciation refers to the method of accounting for the presumed reduction in the value of an asset over time due to wear and tear, deterioration, or obsolescence. For regulatory and tax purposes, depreciation is designed to let a firm recover an investment in an asset over the asset's useful life by accounting for that investment as a stream of annual costs that can be offset against the firm's annual income.

When setting rates, the Commission seeks to permit a utility to recover its prudently incurred costs of service, including depreciation. The Commission generally prescribes *straight-line depreciation*.<sup>9</sup> For example, if a utility put into service an asset with an expected useful life of ten years, the Commission would design rates with the goal of letting the utility recoup its investment—including one-tenth of the asset's original book value—each year.

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<sup>9</sup> Minn. R. 7825.0800.

But to encourage capital investments, Congress authorizes many firms, for tax purposes, to depreciate assets faster than straight-line depreciation would allow. *Accelerated depreciation* permits a firm to record larger depreciation costs during an asset's early years, and smaller costs in later years, again with the goal of reaching zero by the end of the asset's useful life. And in 2015 Congress authorized *bonus depreciation* which further accelerates depreciation for tax purposes.<sup>10</sup>

## **2. Accumulated Deferred Income Taxes, Normalization, and Proration**

Accelerated depreciation has the effect of deferring the payment of a portion of income taxes. The difference between the income taxes based on straight-line book depreciation and accelerated tax depreciation creates a deferred tax liability. A utility records each year's liability to an account known as *Accumulated Deferred Income Tax*.

If a utility seeks to gain the advantages of accelerated and bonus depreciation for tax purposes, federal law requires the utility to meet the requirements of *normalization*. This means that the utility's rates must reflect both the current income tax expense and the deferred income tax expense. In addition, the utility must apply the Accumulated Deferred Income Tax balance to reduce the amount of the utility's rate base, thereby reducing customer rates (all else being equal).<sup>11</sup> In effect, this process lets customers derive the benefit of the tax advantages of accelerated depreciation for an asset.

Rules adopted by the federal Internal Revenue Service (IRS) prescribe how to calculate the amount of the ADIT rate-base offset. In particular, when a utility calculates the amount of federal income tax to include in rates based on a future period, the IRS requires that the utility prorate projected accruals to ADIT to adjust for the period that these amounts are expected to be in the ADIT account.<sup>12</sup> In private letter rulings<sup>13</sup> the IRS has expressed its view that, to the extent that a rate is based on forecasted costs, it reflects a future period and thus the associated ADIT accruals must be prorated.

In this case, the size of the Otter Tail's accelerated and bonus depreciation, combined with its other operating costs, is greater than its current revenues. Consequently Otter Tail is reporting a net operating loss for federal tax purposes.

## **B. Positions of the Parties**

### **1. The Department**

The Department opposed Otter Tail's proposal to prorate its Accumulated Deferred Income Tax credit, which would increase the revenues to be recovered from Minnesota ratepayers by

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<sup>10</sup> See Protecting Americans from Tax Hikes (PATH) Act of 2015, Pub. L. No. 114-113, Division Q.

<sup>11</sup> See 26 U.S.C. § 168(f)(2), (i)(9); 26 C.F.R. § 1.167(L)-1(h)(6).

<sup>12</sup> 26 C.F.R. § 1.167(l)-1(h)(6)(ii).

<sup>13</sup> The IRS may issue a private letter ruling (PLR) when a ratepayer asks how the IRS would apply the tax code to the ratepayer's specific circumstances. A PLR generally creates no legal precedent. See 26 U.S.C. § 6110(k)(3).

\$763,973. The Department argued that historically utilities have not requested, and the Commission has not authorized, proration of these credits. The Department objected to the nature of the proration formula, which would result in deferred tax expenses not matching the change in the balance of Accumulated Deferred Income Tax.

While Otter Tail cited private letter rulings in which the IRS directed utilities to prorate their Accumulated Deferred Income Tax credits, the Department argued that those rulings pertained to other utilities' unique circumstances, not Otter Tail's circumstances. And while Otter Tail stated an intent to seek its own private letter ruling, the Department objected that Otter Tail's proposal provided no mechanism to refund over-collected sums if the Commission later learns that Otter Tail's legal analysis was in error.

## **2. The OAG**

Noting the dispute between Otter Tail and the Department, the OAG proposed that the Commission reduce Otter Tail's depreciation expense to match the prorated level of the Accumulated Deferred Income Tax credit used for setting rates.

The OAG did not oppose Otter Tail's proposal to seek its own private letter ruling on this question, but expressed concern about prolonging the period of interim rates. Because interim rates tend to be higher than final rates, prolonging this period would prolong the time that ratepayers are paying excessive rates.

## **3. Otter Tail**

Otter Tail argued in favor of prorating the Accumulated Deferred Income Tax adjustment credit. In support of its position, Otter Tail cited private letter rulings in which the IRS has directed other utilities that used forecasted test years to prorate their ADIT credits. Otter Tail acknowledged that its proposal would have the effect of increasing its revenue requirement by more than \$763,000. But Otter Tail argued that the harm of failing to do so, if the IRS found the Company to be in violation of the tax code and the Company was no longer allowed to benefit from accelerated and bonus depreciation, would be substantially greater. If Otter Tail were required to use straight-line depreciation for tax purposes in this case, its Minnesota revenue requirement would have increased by \$15.6 million.

But to further address the concerns raised by the parties, Otter Tail proposed to seek its own private letter ruling from the IRS. Ultimately the Department and the OAG supported this proposal.

## **C. The Recommendation of the Administrative Law Judge**

The Administrative Law Judge recommended that the Commission adopt a proposal set forth by Otter Tail and summarized below:<sup>14</sup>

- Parties would address Otter Tail's Accumulated Deferred Income Tax issue in the same manner as they address any other issue, and brief it based on the information that the

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<sup>14</sup> ALJ's Report ¶ 321.



parties entered into the record. And the Commission would resolve the issues in this case according to the existing schedule—except for the Accumulated Deferred Income Tax issue. With respect to that issue, the Commission would defer judgment.

- Otter Tail convened a discussion among interested parties, as well as the Commission’s staff, to draft a request for a private letter ruling from the IRS clarifying how the normalization rules would apply to Otter Tail’s circumstances. Otter Tail sent the resulting request on December 28, 2016, and expects a reply within six months.
- The Commission would rule on this issue after the receipt of the IRS’s private letter ruling, or after the expiration of some deadline such as August 31, 2017. The Commission’s ruling, based on the then-available record, would provide the basis for establishing final rates and triggering any interim rate refunds.
- In the meantime, Otter Tail would agree to extend the duration of its case to provide time to resolve this Accumulated Deferred Income Tax issue, and would continue to charge interim rates.

No parties filed exceptions to the ALJ’s Report on this issue—but at hearing, Otter Tail and the Department offered a refined version of this proposal. In particular, the parties proposed that if the IRS were to issue a ruling finding no need for proration—but issue it too late to be addressed in this docket—then Otter Tail would record its excess earnings due to proration into a separate account for potential refund in a later rate case or other proceeding. Also, the parties proposed setting July 31, 2017, as the final date for incorporating a private letter ruling into the record of this case, rather than August 31.

#### **D. Commission Action**

As the Administrative Law Judge observed, there is considerable uncertainty about whether federal law requires the proration of the Accumulated Deferred Income Tax credit for utilities setting rates on the basis of a forecasted test year.<sup>15</sup> Minnesota Statutes section 216B.03 directs the Commission to resolve doubts as to reasonableness in favor of the consumer. Arguably this would justify excluding Otter Tail’s proration. But as Otter Tail noted, the interests of ratepayers are at risk whether the Commission authorizes the proration or not.

Given these risks, the Administrative Law Judge recommended that the Commission accept Otter Tail’s proposal to await the IRS’s private letter ruling on Otter Tail’s query before resolving the rate case—and to extend the time for resolving the rate case to accommodate this delay. At hearing, while the parties recommended refinements to the Administrative Law Judge’s proposal, no party objected to the idea in principle.

The Commission is concerned with delaying any appropriate relief for ratepayers bearing the cost of interim rates. But given the stakes involved, and the opportunity for reconciling any over-collection via the interim-rate refund or a future amortization of a regulatory liability, the Commission finds the parties’ recommendation to be reasonable and appropriate to the

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<sup>15</sup> ALJ’s Report ¶ 319.

circumstances. For these reasons, and based on discussions at the hearing, the Commission will approve Other Tail's proposal modified as follows:

For the present, the Commission will refrain from establishing final rates, and interim rates will remain in effect subject to refund. The Commission reserves the right to reopen the record of this proceeding to receive the parties' comments on the IRS's private letter ruling, and to set final rates and authorize a refund on the basis of the newly expanded record.

If at any time before August 1, 2017, the IRS issues a private letter ruling in response to Otter Tail's request, then the following will occur:

- Otter Tail must make a filing within 15 days of the ruling that would set forth the details of the ruling and estimate how implementing the ruling would affect rates.
- The Commission will establish a deadline for parties to file comments and replies on Otter Tail's analysis and proposal.

But if Otter Tail does not receive a private letter ruling from the IRS by July 31, 2017, then Otter Tail must do the following:

- By August 15, 2017, Otter Tail must file its detailed proposal for implementing final rates calculated on the basis of prorated Accumulated Deferred Income Tax.
- Otter Tail must record in its financial accounts a regulatory liability reflecting the difference between a revenue requirement including proration and a revenue requirement excluding proration.
- If the IRS ultimately issues a private letter ruling to Otter Tail that establishes that ratepayers paid excessive interim or final rates based on a misapplication of normalization requirements, then Otter Tail must submit a detailed proposal for addressing the regulatory liability. This proposal would be due as part of Otter Tail's initial filing in its next rate case, or at some earlier time designated by the Commission.

Finally, to minimize the chances of any last-minute disputes about this arrangement, the Commission will direct Otter Tail to file a preliminary report by July 1, 2017. This report would apprise the Commission of the status of Otter Tail's request for a private letter ruling, and summarize Otter Tail's understanding of how the parties will implement the process established above.

These procedures address potential contingencies associated with Otter Tail's request for an IRS private letter ruling, and provide an approach to each contingency that best promotes the public interest.

## **VI. MISO MVP Transmission Line Costs and Revenues**

A regulated utility generally recovers its cost of providing regulated utility service through base rates, set in a rate case after consideration of all of the utility's costs and revenues. But the utility may also recover some costs via a separate mechanism called a *rider* or *automatic adjustment*

*mechanism*. Specifically, the Legislature authorizes a utility to recover the cost of transmission facilities via base rates or a Transmission Cost Recovery Rider (TCRR).<sup>16</sup>

As with all other capital assets, if the transmission facilities generate additional revenues for the utility, those revenues would be used to offset other utility costs. This is called the “All-In” allocation. Where a utility’s transmission facilities would serve multiple state jurisdictions, the costs of and revenues from the assets would be allocated among the jurisdictions according to some formula—for example, in proportion to each jurisdiction’s energy consumption.

In this case, Otter Tail is building two transmission lines that will generate wholesale revenues that are expected to exceed their costs. Otter Tail proposed not to subject these capital costs to Minnesota retail ratemaking. As a result, Otter Tail would not recover the capital costs of these projects directly from Minnesota ratepayers via base rates or a rider, nor would Otter Tail share any of the revenues generated by these utility assets with Minnesota ratepayers. The Department and the Chamber opposed this proposal.

## **A. Introduction**

### **1. MISO Multi-Value Projects (MVPs)**

The Federal Power Act (FPA)<sup>17</sup> established the Federal Energy Regulatory Commission (FERC), and authorizes FERC to regulate “the sale of electric energy at wholesale in interstate commerce,” including both wholesale electricity rates and any rule or practice “affecting” such rates.<sup>18</sup>

Under authority of the FPA and related rules, FERC has authorized the formation of regional transmission organizations.<sup>19</sup> One such organization is Midcontinent Independent System Operator, Inc. (MISO), which administers the high-voltage wholesale electric transmission grid in Minnesota and 14 other states, as well as the Canadian province of Manitoba. MISO evaluates the adequacy of the grid relative to the demand for transmission capacity, determines which generators may connect to the grid and when they may operate, and adopts tariffs establishing how the owners of transmission lines receive compensation from the parties who use them. The Commission authorized Otter Tail to join MISO in 2002, subject to conditions.<sup>20</sup>

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<sup>16</sup> Minn. Stat. § 216B.16, subd. 7b.

<sup>17</sup> 16 U.S.C. §§ 791 *et seq.*

<sup>18</sup> 16 U.S.C. §§ 824(b), 824e(a).

<sup>19</sup> 18 C.F.R. Pt. 35.

<sup>20</sup> *In the Matter of Otter Tail Power Company’s Petition for Approval of Transfer of Operational Control of Transmission Facilities to the Midwest Independent System Operator*, Docket No. E-017/PA-01-1391, Order Authorizing Transfer with Conditions (May 9, 2002); *Otter Tail Power Co.*, 97 FERC ¶ 61,226 (2001); *Otter Tail Power Co.*, 98 FERC ¶ 62,218 (2002).

When a utility's transmission facility comes within the scope of MISO's tariffs, the utility must pay MISO's tariffed rate to use its own transmission line (or any other transmission line operated by MISO). But the utility also receives payments that MISO collects from the other users of the utility's transmission line. MISO designs its tariffs to permit transmission owners to recover the costs of their projects through usage payments, including MISO's return on equity as authorized by FERC.

Generally MISO tariffs provide that the parties who benefit from a line pay the owners of the lines they use. But certain projects have such significant costs, and system-wide benefits, that MISO provides for their costs to be recovered from all of MISO's load-serving entities—and by extension, from their nearly 30 million retail customers—based on each entity's share of energy consumed within the MISO footprint. MISO calls these projects Multi-Value Projects (MVPs).

Because Otter Tail customers consume 0.98 % of the energy sold within MISO, MISO bills Otter Tail 0.98 % of the cost of all MVP projects. Otter Tail bears these costs in addition to the capital costs it bears to build its own transmission facilities. Otter Tail generally recovers all these costs via its Transmission Cost Recovery Rider or its base rates.

In addition, Otter Tail receives revenues for the use of MVP transmission facilities that it owns according to the MISO tariff's terms. Historically, Otter Tail also reflects these revenues in its Transmission Cost Recovery Rider or its base rates.

## **2. Otter Tail's MVPs at Issue**

The parties disagree about the appropriate allocation of the cost and revenues of two MVPs that Otter Tail is building near Big Stone, South Dakota, collectively called the Big Stone Access Transmission Lines (BSAT Lines). Otter Tail owns a half interest in the Big Stone–Brookings Line, and a half interest in the Big Stone–Ellendale Line.

### **B. Positions of the Parties**

#### **1. Otter Tail and the OAG**

For purposes of this rate case, Otter Tail proposed to remove the costs and revenues of its BSAT Lines from consideration in this ratemaking docket.

This proposal would have a number of financial consequences for Otter Tail's ratepayers and shareholders. Otter Tail would not seek to recover the lines' capital costs directly via base rates or rider—but would continue recovering the costs for the use of the new lines under the MISO tariff, just as before. And Otter Tail would not share any revenues it would recover under the MISO tariff for the use of its new transmission lines. This would benefit Otter Tail's shareholders by permitting them to retain earnings calculated on the basis of MISO's higher return on equity, rather than having those revenues assigned to the state jurisdictions in which Otter Tail operates to offset the utility's other costs.

Otter Tail acknowledged that it is seeking different ratemaking treatment for the BSAT Lines than for Otter Tail's other facilities, but argued that these lines were distinct from Otter Tail's other lines by virtue of their cost. This cost disparity, Otter Tail argued, reflects the idea that the BSAT Lines were not built to serve Otter Tail's customers specifically, but were built as MVPs to serve the MISO grid as a whole—and therefore warrant different regulatory treatment.

In addition, Otter Tail argued that it was justified in not seeking to recover the cost of its BSAT Lines via the TCRR because it had already made such a request and was denied. Otter Tail added that neither the Department nor the Chamber recommended recovering the cost of the BSAT Lines via the TCRR in any of Otter Tail's last three TCRR cases.

Otter Tail opposed the idea of accounting for the costs and revenues of the BSAT Lines in this rate case using All-In allocation. According to Otter Tail, FERC authorized a higher return on equity to provide incentives for investors to finance more transmission lines, but All-In allocation would frustrate this purpose by using this incentive to compensate ratepayers rather than investors. Otter Tail argued that the Department and the Chamber were merely seeking to arbitrage the differences between the federal and state jurisdictions to permit ratepayers to gain an unmerited advantage at the expense of shareholders. Otter Tail argued that FERC jurisdiction bars a state regulator from setting rates in a manner that would preclude a utility from receiving and retaining FERC-approved costs and revenues.

Otter Tail rejected the idea that it should have established a separate affiliate in order to justify according different treatment to the BSAT Lines than to its other assets. Otter Tail noted that jurisdictional allocations are a common feature of ratemaking and Otter Tail has never needed separate legal entities to make such allocations in the past.

In any event, Otter Tail argued that the circumstances of the BSAT Lines are sufficiently different from the circumstances under which the Commission has approved the use of All-In allocation as to justify a different result in this case.

The OAG agreed with Otter Tail that the BSAT Lines should not be subject to All-In allocation. The OAG argued that such treatment would be most consistent with traditional principles of cost allocation and separation.

## **2. The Department and the Chamber**

The Department and the Chamber opposed Otter Tail's proposal to exclude consideration of the BSAT Lines from this rate case. Instead, they recommended that the Commission continue its practice of approving an All-In allocation, whereby Minnesota's share of a project's costs and revenues are considered with all other costs and revenues when setting rates.

The Department's recommendation differed somewhat from the Chamber's. The Department recommended that the Commission direct Otter Tail to incorporate the costs and revenues of its BSAT Lines into its currently pending TCRR docket.<sup>21</sup> In contrast, the Chamber recommended

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<sup>21</sup> *In the Matter of the Petition of Otter Tail Power Company for Approval of its Transmission Cost Recovery Rider Annual Adjustment*, Docket No. E-017/M-16-374.

that the Commission direct Otter Tail to incorporate the BSAT Lines into the TCRR retroactive to 2014, the first year that a revised TCRR statute provided for recovering the cost of out-of-state facilities.

The Chamber argued that, in effect, Otter Tail is seeking to treat its investment in the BSAT Lines as if it were an unregulated affiliate, unaffected with a duty to serve in the public interest. The Chamber noted that if Otter Tail had intended to achieve that outcome, it could have made the appropriate filings before it began to pursue the BSAT Lines project. This would have provided an opportunity for all parties to ensure that the costs of the regulated and unregulated operations were kept separate, so that ratepayers would not inappropriately subsidize shareholders. But Otter Tail never did that. To the contrary, in 2012 Otter Tail petitioned to recover the cost of these same transmission facilities via the TCRR. According to the Chamber, this fact undermines any argument that Otter Tail acted in reliance on the idea that it would be allowed to account for its costs and revenues as if they were separate from the rest of Otter Tail's regulated operations.

The Department and the Chamber noted that Otter Tail had a history of seeking to assign assets to FERC's jurisdiction that would generate substantial wholesale revenues (MISO Schedule 26A revenues). They noted that the Commission had precluded this practice in the past, requiring use of All-In allocation instead.

The Department and the Chamber argued that Otter Tail overstated the distinctions between Otter Tail's investment in the BSAT Lines and its investment in other assets recovered via All-In allocation. Both parties noted that the BSAT Lines, like Otter Tail's other transmission lines, would serve Otter Tail's retail customers. And the Department denied that the size of an investment should alter the ratemaking treatment for the investment.

Otter Tail argued that it was the Department and the Chamber who were advocating an inconsistent position, in that they refrained from advocating All-In allocation for the BSAT Lines during any of the three prior dockets to adjust Otter Tail's TCRR. But the Department rejected this assertion. The Department noted that it files comments in response to utility petitions for Commission approval. When a utility declines to seek Commission approval—for example, declining to seek cost recovery for the BSAT Lines via the TCRR—then it is not surprising that the Department would not file comments on that matter.

While it might appear that Otter Tail's retail customers would benefit from having to bear only 0.98% of the BSAT Lines' cost, the Chamber emphasized that the loss of the associated revenue the lines generate would offset this benefit. Moreover, the Chamber noted that Otter Tail's ratepayers would bear 0.98% of the cost not only of the BSAT Lines, but of all 17 of MISO's MVPs. Otter Tail's customers must bear the cost of these facilities—even remote facilities that might seem to provide little benefit for Otter Tail's customers—as well as bear various administrative charges. Consequently, those same ratepayers should derive the full benefit of the few MVPs that their utility actually owns, to help offset those other MISO costs, the Department and the Chamber argued.

If the Commission were to decline to order Otter Tail to recover the cost of the BSAT Lines via the TCRR, the Department would recommend that the Commission rescind its authorization for Otter Tail to use this rider, and instead have all transmission costs recovered through base rates following a full rate case. This remedy would eliminate disputes about which projects should be recovered via the TCRR and which should not.

### **C. The Recommendation of the Administrative Law Judge**

The ALJ largely concurred with Otter Tail and the OAG.

The ALJ concluded that FERC has exclusive jurisdiction over the transmission of electricity in interstate commerce, and that MISO acted within that jurisdiction when it established a relatively high return on equity as a means to encourage investment in certain transmission facilities. According to the ALJ, state policies that would undermine the operation of these federal policies are preempted. Because the proposals of the Chamber and the Department would reduce Otter Tail's financial incentive to invest in the BSAT Lines, and similar lines in the future, the ALJ concluded that the Commission should reject them.

Furthermore, the ALJ concluded that the TCRR statute does not authorize the Commission to compel a utility to recover the cost of any given transmission project via the rider.

Finally, the ALJ concluded that the Department's alternative proposal to eliminate Otter Tail's TCRR would encounter the same problems as its initial proposal, because it would undermine the financial incentives created by MISO. Consequently the ALJ recommended that the Commission reject that proposal as well.

Instead, the ALJ recommended that the Commission authorize Otter Tail to treat its BSAT Lines as subject to federal jurisdiction.<sup>22</sup>

### **D. Commission Action**

The Commission respectfully disagrees with the ALJ's recommendation regarding the jurisdictional allocation of the BSAT lines. The Commission concurs with the Department for the reasons set forth below, and will require Otter Tail to include the BSAT Lines in the Company's existing TCRR.

#### **1. Filed Rate Doctrine Claim**

There is no disagreement that Otter Tail is a public utility that is adding the BSAT Lines to its system as utility plant that will be used and useful in the provision of electric service to its retail customers in Minnesota. Parties disagree, however, about the boundaries between federal and state ratemaking jurisdiction with respect to those lines. But in 2016 the U.S. Supreme Court provided a modicum of clarity when it found that the Federal Power Act authorizes FERC—

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<sup>22</sup> ALJ's Report ¶¶ 266-94.

to regulate “the sale of electric energy at wholesale in interstate commerce,” including both wholesale electricity rates and any rule or practice “affecting” such rates. [16 U.S.C.] §§ 824(b), 824e(a). But the law places beyond FERC’s power, and leaves to the States alone, the regulation of “any other sale”—most notably, any retail sale—of electricity. § 824(b).<sup>23</sup>

Otter Tail argued that the Commission’s All-In allocation of the BSAT Lines would violate the filed-rate doctrine, which requires state commissions to pass through FERC mandated wholesale rates. But as the Department and the Chamber noted, All-In allocation does not decline to pass through MISO’s MVP rates. To the contrary, it includes those rates, as well as the associated revenues, when setting Otter Tail’s retail rates. And, as noted above, rates for the retail sale of electricity remain within the jurisdiction of the states—and the states alone.

Accepting Otter Tail filed rate doctrine claims would also result in “unbundling” Minnesota’s electric retail service rates. In Minnesota, retail rates bundle together all the costs of a utility providing retail and wholesale electric services—generation, transmission, and distribution—in a single price set by the Commission. In effect, Otter Tail is arguing that the federal filed rate requires unbundling a portion of Otter Tail’s transmission cost—from the rest of its bundled generation, transmission, and distribution retail service costs. Such an application of the filed-rate doctrine would be inconsistent with FERC’s own decision not to exercise its authority to unbundle state retail rates and assert jurisdiction over the retail transmission costs contained in those rates.<sup>24</sup>

Consequently the Commission rejects the conclusion that the filed-rate doctrine precludes the Commission from setting retail rates for bundled retail electric service using All-In allocation.

## **2. Continuity Between the BSAT Lines and Other Otter Tail Facilities**

Otter Tail argues that the unique role of its BSAT Lines as MVPs justifies atypical regulatory treatment. And indeed, these lines are subject to MISO’s MVP tariffs. But they are not Otter Tail’s only lines subject to MISO tariffs.

Some of Otter Tail’s larger transmission lines come within FERC’s jurisdiction, even if they are not MVPs—for example, the CapX 2020 Fargo and Bemidji transmission lines. Otter Tail pays the MISO-tariffed rate to use these lines, and receives the MISO-prescribed revenues that MISO collects from transmission users on Otter Tail’s behalf. Notwithstanding the role of federal entities in this arrangement, no party has objected to the Commission taking both these costs and these revenues into account as part of this rate case.

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<sup>23</sup> *FERC v. Elec. Power Supply Ass’n*, 136 S.Ct. 760, 766 (2016).

<sup>24</sup> *See New York v. FERC*, 122 S.Ct. 1012, 1020, 1026 (2002) (noting that FERC specifically declined in Order No. 888 to use its authority under the FPA to require unbundling of state retail rates due to the “difficult jurisdictional issues” it would raise).



Moreover, Otter Tail already has an operating MVP: the CapX 2020 Brookings–Hampton 345 kV transmission line. This line is explicitly subject to MISO’s MVP tariffs, yet no party has objected to the Commission incorporating both its costs and revenues into rates. Specifically, Otter Tail incorporates these costs and revenues into its Minnesota retail rates through the operation of its TCRR. This fact undermines the claim that the BSAT Lines occupy a unique regulatory position.

The argument is further eroded by the fact that Otter Tail owns only half of its Big Stone–Brookings MVP line, and the party who owns the other half—Northern States Power Company d/b/a Xcel Energy (Xcel)—employs All-In allocation to recover its share of the line’s costs via Xcel’s own TCRR. Thus, to approve Otter Tail’s proposal, the Commission would have to conclude that Otter Tail’s ratepayers are not entitled to a portion of a transmission line’s revenues to help offset the jurisdictional portion of the line’s costs—when Xcel has reached the opposite conclusion about its own ratepayers.

In sum, the Commission is not persuaded that Otter Tail’s interest in the BSAT Lines warrants regulatory treatment that differs from the treatment accorded to other projects in FERC’s jurisdiction.

### **3. Arbitrage**

Otter Tail argues that to subject its BSAT Lines to All-In allocation would reflect a wrongful arbitrage by taking the higher return on equity offered by MISO and allocating it to the benefit of Otter Tail’s retail customers in Minnesota. The Commission shares Otter Tail’s concern for arbitrage, but does not agree with Otter Tail’s analysis or conclusion.

Regulatory arbitrage arises when a party seeks to take strategic advantage of price differences that arise within different regulatory environments. This Commission has addressed the problem in the context of telecommunications.<sup>25</sup> The remedy for arbitrage is to ensure, as far as possible, that a consistent regulatory policy prevails.<sup>26</sup>

In this case, Otter Tail has sought to assign the BSAT lines to the FERC’s jurisdiction, contrary to the assignment of all of its other transmission lines, to maximize advantage for its shareholders at the expense of its ratepayers. In contrast, the Department and the Chamber have proposed that, for purposes of state ratemaking, Otter Tail’s projects be subject to a uniform regulatory regime—All-In allocation. The Department’s approach, which the Commission adopts, precludes arbitrage inherent in Otter Tail’s proposal.

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<sup>25</sup> See, e.g., *In the Matter of Intercarrier Compensation Reform Required by [Federal Communications Commission] Order*, Docket No. P-999/M-12-356, Order Establishing Procedures for Revising Intrastate Access Rates (May 24, 2012) (addressing a disparity in the regulatory treatment of landline and wireless telecommunications, and between long-distance and local calls).

<sup>26</sup> *Id.* (adopting policies to reduce the disparities in the regulation of land-line and wireless telecommunications).

#### 4. Transmission Cost Recovery Rider

In addition, Otter Tail argued that the Commission cannot compel the Company to recover any specific costs via the TCRR.

Otter Tail argued that the Commission already had the opportunity to authorize recovery of the BSAT Lines via the TCRR, but the Commission denied Otter Tail's petition for authorization to use the rider. But this argument is unpersuasive for two reasons. First, Otter Tail withdrew its request to recover the cost of the BSAT Lines before the Commission ever had the opportunity to rule on it.<sup>27</sup>

Second, Otter Tail initially sought to use the TCRR to recover the costs of its BSAT Lines in 2012, the authorizing statute did not provide for recovering the cost of out-of-state projects. That is why Otter Tail withdrew its initial petition. But in 2013 the Minnesota Legislature changed the statute to authorize such recovery.<sup>28</sup> The revised statute now authorizes the Commission to approve, reject, or modify a tariff that:

allows the utility to recover charges incurred under a federally approved tariff that accrue from other transmission owners' regionally planned transmission projects that have been determined by the Midcontinent Independent System Operator to benefit the utility or integrated transmission system. These charges must be reduced or offset by revenues received by the utility and by amounts the utility charges to other regional transmission owners, to the extent those revenues and charges have not been otherwise offset; [and]

allows the utility to recover on a timely basis the costs net of revenues of facilities approved by the regulatory commission of the state in which the new transmission facilities are to be constructed and determined by the Midcontinent Independent System Operator to benefit the utility or integrated transmission system....<sup>29</sup>

This revised statute clearly provides for recovery of MISO-approved MVPs—and clearly provides for considering a project's revenues as well as costs.

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<sup>27</sup> *In the Matter of Otter Tail Power Company's Request for Determination that Transmission Investments are Eligible for Recovery through the Company's Transmission Cost Recovery Rider*, Docket No. E-017/M-12-514, Order Approving Transmission Cost Recovery Rider Eligibility for Three Projects, at 1 (March 15, 2013).

<sup>28</sup> See 2013 Minn. Laws, ch. 85, art. 7, § 1.

<sup>29</sup> Minn. Stat. § 216B.16, subd. 7b(b)(2) and (3).

Otter Tail correctly observes that the TCRR statute states that a utility must request establishment of a TCRR mechanism before the Commission may implement one. But Otter Tail has already asked, and received, permission to establish a TCRR.<sup>30</sup>

Ultimately, when a utility files a general rate case under Minnesota Statutes Section 216B.16, it invites the Commission to evaluate the utility's costs and revenues related to regulated utility services. Thereafter, the Commission exercises its authority to rule on a utility's revenues and costs, and the means by which the utility will match the one with the other. Under the statute, the Commission may authorize a utility to recover its prudently incurred costs via base rates and/or a variety of riders, including the TCRR—assuming the utility has requested to add such a rider to its tariffs.

Because the Federal Power Act preserves the Commission's jurisdiction over retail electric service, and the record provides no sufficient basis to discriminate between the ratemaking treatment accorded to the BSAT Lines and Otter Tail's other transmission lines, the Commission will continue to apply All-In allocation uniformly. Because the BSAT Lines had not yet become used and useful during the test year of the current rate case, the Commission will not incorporate the costs and revenues of those facilities into Otter Tail's base rates in this proceeding. But riders permit rate adjustments to reflect certain changes in a utility's costs and revenues accruing between rate cases.

The Commission will therefore direct Otter Tail to amend its petition in the currently pending TCRR docket to incorporate into its filing the costs and revenues related to its BSAT Lines. In the interest of simplicity, however, the Commission will decline the Chamber's proposal to direct Otter Tail to file a TCRR rate retroactive to the earliest point it might have taken effect. The Commission's policy will provide both ratepayers and shareholders with the consistent regulatory treatment that has guided the Commission's past decisions—All-In allocation, matching all of a utility's costs within the state with all of the related revenues.

## **VII. Corporate Aircraft Expense**

### **A. Introduction**

Otter Tail's service territory (70,000 square miles) is rural with limited commercial air service. The Company owns a 1987 turboprop aircraft, which it used some 48 times during 2015, mainly for trips between the Fergus Falls headquarters and the three state capitals where it is subject to state regulatory proceedings. The Company seeks 100% of the jurisdictional share of costs for owning and operating the aircraft (\$117,453).

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<sup>30</sup> *In the Matter of Otter Tail Power Company's Request for Approval of a Transmission Cost Recovery Rider Including the Proposed 2010 Transmission Factor*, Docket No. E-017/M-09-881, Order Establishing Transmission Cost Recovery Rider and Approving Costs for Recovery (January 28, 2010).

## **B. Positions of the Parties**

### **1. Otter Tail**

Otter Tail argued that, in compliance with the Commission directive in its last rate case, it had provided a cost/benefit analysis that would justify aircraft expense recovery of over 75%. Otter Tail explained that it used a “fly versus drive” tool (similar to one used by the Minnesota Department of Transportation) to justify each of the aircraft-expense transactions. The Company based its 2016 test-year amount for aircraft expense on a three-year average of costs during 2012, 2013, and 2014. The Company calculated that if the aircraft had not been used, the driving costs for the 48 flights would have been \$311,621 (total)<sup>31</sup> compared with the total flying costs of \$302,577.

### **2. The OAG**

The OAG argued that \$78,693 in requested expenses should be disallowed. The OAG asserted that the Company’s proposal for recovery of the fixed costs lacked sufficient support in the record. The OAG calculated that the Company’s invoiced flight amounts for 2015, adjusted to reflect known changes for 2016, were \$82,878 (\$38,760 for the Minnesota jurisdiction)—far less than the requested amount. The OAG calculated that the \$117,453 requested is over 200% higher than the Minnesota-jurisdictional amount.

Finally, the OAG requested that, in Otter Tail’s next rate case, the Commission require the Company to provide more support to justify its recovery of fixed costs.

## **C. Report of the Administrative Law Judge**

The Administrative Law Judge found that Otter Tail’s ownership and use of its aircraft is reasonable and necessary to the provision of utility service. He also found that the Company’s cost-benefit analysis supported 100% of the jurisdictional share of the ownership and operational costs of the aircraft for the 2016 test year. Finally, he found that use of the corporate aircraft cost ratepayers less than if Company employees were to travel by car.

## **D. Commission Action**

The Commission concurs with the Administrative Law Judge and adopts his findings, conclusions, and recommendations on this issue. The Commission agrees that the Company complied with the Commission’s directive in its last rate case and has justified 100% of the airplane expenses in this matter. The Company has shown a clear business purpose for each of the trips for which it seeks expense recovery and that the efficiencies the Company gains (less travel time, lower travel costs, and not needing to hire additional staff) continue to be substantial.

In recognition of the OAG’s concerns, and pursuant to their request, the Commission will order Otter Tail to provide more detailed, granular information of aircraft-related fixed costs and avoided costs of driving in future rate cases.

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<sup>31</sup> The Company’s analysis did not include the avoided costs of additional vehicles, incidental costs such as meals, and having to hire additional employees.

## **VIII. Pension Asset and Other Post-Employment Benefit Liabilities**

### **A. Introduction**

Otter Tail proposed to include pension and other post-employment benefit amounts in rate base. The Department recommended that both Otter Tail's prepaid pension asset and its other post-employment benefit (OPEB) liabilities be excluded from the 2016 test-year rate base, which would increase the test-year rate base by \$3,777,217. The OAG recommended that the only prepaid pension asset be excluded from test-year rate base.

### **B. Positions of the Parties**

#### **1. The Company**

Otter Tail argued that prepaid pension asset should be included in rate base for three reasons:

- The prepaid pension asset provides substantial benefits to customers, including a reduction in pension expenses;
- Including the prepaid asset in rate base is consistent with standard regulatory treatment of investor funded prepaid expenses; and
- Including the prepaid pension asset in rate base is consistent and symmetrical with the treatment that the Company has applied to Financial Accounting Standards 106 and Financial Accounting Standard 112 liabilities.<sup>32</sup>

The Company explained that its prepaid pension asset was calculated as the excess of cumulative contributions over cumulative actuarially calculated pension expenses. The Company stated that it has contributed some \$80 million (total company), \$40.4 million (Minnesota), to its pension trust since 2009. The Company further argued that approximately \$55 million of its contributions were not required under the Employee Retirement Income Security Act (ERISA).<sup>33</sup>

The Company disagreed with the Department's recommendation to exclude both the prepaid pension asset and the OPEB liabilities from rate base, arguing that the Company's approach is consistent with ratemaking standards and the Commission's approach in two Xcel Energy rate cases. Further, Otter Tail asserted that quantified and direct customer benefits of approximately \$241,000 were shown in the 2016 test year from the prepaid pension asset, when considering both the reduced pension expense and the Company's recovery of a return on the prepaid pension asset.<sup>34</sup>

Finally, the Company argued that if it is not allowed to earn a return on its prepaid pension asset, then consistency and standard Commission practice require the asset to be excluded from the calculation of the pension expense.

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<sup>32</sup> Beithon Direct, at 28 – 29.

<sup>33</sup> Beithon Rebuttal, at 10.

<sup>34</sup> *Id.* at 9, 13.

## 2. The Department

The Department disagreed with rate-base treatment of these accounts for the following reasons:

- The concept of calculating the difference between plan contributions and actuarially calculated pension expense is an obsolete concept no longer used under Generally Accepted Accounting Principles (GAAP);
- It is unreasonable to allow Otter Tail to place a prepaid pension asset, as defined by outdated GAAP guidance, into rate base to earn a guaranteed return while the pension plan is actually underfunded; and
- The prepaid pension asset is different from typical prepaid assets because it does not necessarily represent cash outlay by the Company, nor does it depreciate or amortize over time like other assets.

Financial reporting guidance for defined-benefit plans has changed over the years and is now consolidated in Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 715, which the Department relied on. This is the current financial standard, and requires that companies with defined-benefit retirement plans report the overfunded or underfunded status of their plans as a net asset or net liability on the company's balance sheet. Treatment under ASC 715 contrasts with the prior treatment of these assets by the FASB, where the funded status of a company's pension assets and pension obligations was allowed to be reported as a footnote to the company's financial statements.

The Department emphasized that it would be unreasonable to place the pension asset balance into test-year rate base, and to pay shareholders a return on the amount, where the asset balance is not solely investor-supplied funds.<sup>35</sup> The Department explained that quantifying the reduction in pension expense due to increases in the expected return on the pension trust does not change the fact that investment earnings, which are *not* funds contributed by shareholders, are included in the prepaid pension asset.

The Department explained that it would also be unreasonable to guarantee the Company a return on its proposed prepaid pension, while providing no guarantees to ratepayers and leaving them obliged to pay any shortfalls that might occur in the future.

The Department argued that, although Xcel Energy may have used a similar approach to prepaid pension in recent rate cases, the Commission has not decided this issue based on a fully litigated record as to this aspect of pension costs, due to the voluminous numbers of issues in those cases. Further the Department argued that the 2015 Minnesota Energy Resources Corporation (MERC) rate case is instructive, as Otter Tail's proposed rate-base treatment of pension and Other Post-Employment benefits was not significantly different from MERC's. In that case, the Commission denied rate base treatment of MERC's prepaid pension asset.

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<sup>35</sup> Byrne Summary, at 2; Byrne Surrebuttal, at 37.

Finally, the Department recommended excluding the accrued OPEB liabilities from rate base, because those balances are temporary and may go up or down, depending on funding, market conditions, or amendments to the pension plan.

### **3. The OAG**

The OAG opposed including the prepaid pension asset in rate base. The OAG also recommended that the Commission not allow any contributions above the ERISA minimum funding levels to earn a return.

#### **C. Recommendations of the Administrative Law Judge**

The Administrative Law Judge found that the test year rate base should exclude the prepaid pension asset and OPEB liabilities, and that the net financial effect of these adjustments is an increase to Otter Tail (Minnesota) rate base by \$3,777,217.

The ALJ reasoned that the opportunity to generate an expected return on assets, which reduces corporate liabilities under ERISA, is itself a meaningful return to shareholders. Further, the ALJ stated that the pension asset is unlike other familiar items included in rate base. The ALJ stated that “teasing out which fraction of the asset is traceable to investor-supplied funds from that which follows from changes in actuarial experience, or marketplace returns, is very problematic,” as the size of the asset fluctuates from year-to-year—even in years when no pension contributions are made by the Company.<sup>36</sup>

#### **D. Commission Action**

The Commission concurs with the Administrative Law Judge and the Department that Otter Tail has not justified rate-base treatment of pension and other post-employment regulatory benefits in this case.

Otter Tail recovers its allowable pension expense from ratepayers, and is not denied recovery of this operating cost. Further, as the Department explained, pension-plan assets and benefit obligations go up and down, depending on funding or market conditions. The balances in the prepaid pension asset are temporary, and fundamentally different from typical rate-base assets on which the Company earns a return on investment. In fact, as the Department explained, Otter Tail’s pension is actually underfunded.<sup>37</sup>

Nor does the Commission find the treatment of pension assets in Xcel Energy’s recent rate cases to be persuasive or precedential. The parties did not specifically litigate the question of whether a company’s pension asset is properly included in rate base.<sup>38</sup>

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<sup>36</sup> ALJ’s Report ¶ 343.

<sup>37</sup> Byrne Surrebuttal, at 30.

<sup>38</sup> Byrne Summary, at 2.

The Commission finds, however, that the treatment of this question in MERC’s 2015 rate case is instructive.<sup>39</sup> In MERC’s 2015 rate case the Commission found that prepaid pension asset should not be included in rate base, due to the fundamental difference between pension assets and other assets. Accordingly, the Commission will exclude prepaid pension asset and OPEB liabilities and associated ADIT from test-year rate base.

## **IX. Discount Rates for Pension and Other Post-Employment Benefit Options**

### **A. Introduction**

Otter Tail and the Department agreed to update the expected return on assets for qualified pension to 7.75% and update the census data for qualified pension, retiree medical, and Long Term Disability (LTD) medical expense to January 1, 2016.<sup>40</sup> Otter Tail and the Department also agreed to use a five-year average to determine the discount rates to calculate pension and OPEB. The parties disagreed, however, on which years to average. Otter Tail recommended use of a five-year average, spanning 2012 – 2016; the Department recommended calculating the average based upon the years 2011 – 2015.

### **B. Positions of the Parties**

#### **1. The Department**

The Department recommended that Otter Tail’s test-year pension and OPEB expenses be calculated using the five-year fully historical 2011 – 2015 average discount rate—5.06% for pension, and 4.87% for retiree medical expenses and long-term disability medical expenses. The effect of the Department’s recommendation reduces qualified Minnesota jurisdictional pension expense for Otter Tail by \$936,931 and increases OPEB expenses by \$517,702

The Department argued that 2016 is an unaudited financial year, and based on forecasted test year costs, not on known, historical data. Further, the Department asserted that the Company’s proposed discount rate, based on the years 2012 – 2016, does not follow recent Commission decisions on this issue. The Department disputed Otter Tail’s reasoning that, because the pension and OPEB discount rates were based on the same financial standards (FAS 87, 106, and 112) as the discount rates for all prior years, that there is no basis to conclude that the 2016 discount rates are any less reliable than in previous years.

Finally, the Department argued that in several recent rate cases, the Commission has used the same methodology it has recommended, based exclusively on historical five-year rates.

#### **2. Otter Tail**

In rebuttal testimony, Otter Tail accepted the use of a five-year average to determine the discount rates to calculate pension and OPEB expense. Otter Tail, however, proposed to use the average of 2012 – 2016 discount rates, arguing that the five-year average should include the most current

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<sup>39</sup> *In the Matter of the Application of Minnesota Energy Resources Corporation for Authority to Increase Rates for Natural Gas Service in Minnesota*, Docket No. G-011/GR-15-736, Findings, Conclusions, and Order, at 11 (October 31, 2015).

<sup>40</sup> ALJ’s Report ¶ 265; Byrne Surrebuttal, at 7–8.



information available, which includes the 2016 test year. The Company asserted that the 2016 data is more appropriate than six-year old data that reflects economic conditions in 2011, which were quite different from 2016.<sup>41</sup>

Otter Tail recommended adjustment of the 2016 test-year expense to reflect:

- The updated earned return on assets from 7.50 to 7.75% and updated January 1, 2016 census information; and
- The 2012 – 2016 average discount rates of 4.81% for pension and 4.63% for OPEB.

Otter Tail argued that the 2012 – 2016 five-year averages should be used to set rates for the test year because they are more representative and forward-looking as to costs and economic conditions than the Department's 2011 – 2015 five-year average. The Company argued that the Department's average uses old and unrepresentative data, considering that the 2011 OPEB discount rate of 5.75% ranges from 65 to 155 basis points higher than any other OPEB discount rate since that time. Otter Tail also argued that its five-year average buffers short-term variation in current economic conditions.

Finally, Otter Tail argued that in the 2013 Xcel rate case, the test year was included in the five-year average adopted by the Commission. The Company argued that none of the other 2013 or 2015 rate cases relied on by the Department raised the issue of whether to include the test year in the five-year period used to calculate the discount rate.

### **C. The Administrative Law Judge's Report**

The ALJ acknowledged that the issue is not free from doubt, but concluded that the term "historical average" should refer to actual data from prior years and not test-year projections. The ALJ therefore adopted the Department's recommendation to use a historical 2011 – 2015 discount rate, resulting in a 5.06% discount rate for pension, and a 4.87% discount rate for post-retirement medical expenses (FAS 106) and long-term disability expenses (FAS 112).

### **D. Commission Action**

The Commission accepts Otter Tail and the Department's agreement to update the expected return on plan assets for qualified pension to 7.75% and update the census data for qualified pension, retiree medical, and LTD medical expense to January 1, 2016.

The Commission respectfully disagrees, however, with the ALJ's discount-rate recommendations for pensions and OPEB. The Commission will instead adopt certain revised findings and conclusions as set forth below and in the ordering paragraphs.

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<sup>41</sup> Beithon Rebuttal, at 6.

The ALJ recommended adopting the Department’s position to use the 2011 – 2015 period to establish average discount rates used to calculate pension and OPEB expense because it uses only actual data from prior years and not test-year projections. The Commission finds, however, that the Company’s proposal to use the average for 2012 – 2016 also uses only actual data, because the 2016 discount rates are not projections, but the actual rates established as of December 2015, used by Otter Tail to calculate the 2016 pension and OPEB expense.<sup>42</sup>

The Commission finds that it is more appropriate to use the most representative average data to determine rate-case costs. The Commission finds that the 2016 actual data better reflects current conditions than the 2011 actual data, which are outliers—2011 economic conditions and discount rates were considerably different from more current economic conditions and discount rates.

The Commission therefore will allow Otter Tail to use the 2012 – 2016 five-year average discount rates of 4.81% to calculate test-year pension expense, and 4.63% to calculate test-year OPEB expenses. The Commission will also require Otter Tail to make the correct adjustment to total test-year pension and OPEB expenses, including those in O&M expenses and those that are capitalized.

## **X. Energy Rider and TailWinds Program**

### **A. Introduction**

The Tailwinds Program is Otter Tail’s wind-generated energy program that allows customers to purchase 100-kilowatt-hour blocks of renewable energy at a fixed rate per block each month. Otter Tail has purchase power agreements (PPAs) with two small wind providers designated to serve the Tailwinds program. Under the PPA terms, Otter Tail purchases 100% of the energy generated by the specific wind turbines.

Otter Tail excludes the amount of energy purchased from the program from incurring monthly energy adjustment rider (or fuel clause adjustment rider) charges. The program is currently undersubscribed.<sup>43</sup>

### **B. Positions of the Parties**

#### **1. Otter Tail**

Subscription to the program was approximately half the designated output from the facilities in 2015. Because the Company excludes the entire amount of the two PPAs from the fuel clause calculations, it is not recovering the unsubscribed portion of the PPAs.

The wind energy (kWh) produced by the two generators in excess of the subscriptions serves as a contribution to the energy requirements of all Otter Tail customers, but is reflected in the Company’s energy-cost calculations at zero cost. The Company proposed to revise Section 13.01 of its Electric Rate Schedule so that non-TailWinds customers pay for wind energy credited to them through the fuel clause.

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<sup>42</sup> Beithon Rebuttal, at 4–7.

<sup>43</sup> Tommerdahl Rebuttal, at 49.

Otter Tail argued that its request is reasonable. The Company argued that the Commission's approval of Xcel Energy's Windsource program provides support for its request.<sup>44</sup>

## **2. The Department**

The Department opposed the Company's request for recovery of the unsubscribed costs of the TailWinds program PPAs. The Department argued that the Commission's approval of recovery for Xcel's Windsource program is not relevant, because Xcel had established that the PPA for that program was cost-effective and reasonable. The Department recommended denying the Company's request, because Otter Tail provided no information demonstrating that the TailWinds PPAs are cost-effective or reasonable.

## **3. The Chamber of Commerce**

The Chamber of Commerce also objected to the Company's proposal to recover the unsubscribed portion of the PPAs from other customers, and recommended that the Commission deny recovery through the fuel clause. The Chamber argued that the purpose of the PPAs was to sell renewable energy to customers willing to pay a premium for renewable energy.

### **C. Recommendations of the Administrative Law Judge**

The ALJ noted the significant differences in the record for Xcel's Windsource PPA and the record in this matter. In the Xcel docket, there was a thorough assessment of program costs, operational risks, and curtailment provisions. The ALJ found that in this record, there was not the same detail or assurance that the PPAs are cost effective and in the best interest of ratepayers. The ALJ recommended denial of Otter Tail's proposal to charge unsubscribed energy costs to non-enrolling customers through the fuel clause.

### **D. Commission Action**

The Commission concurs with the Administrative Law Judge's findings, conclusions, and recommendations, and will deny Otter Tail's proposal to recover the unsubscribed energy costs associated with the TailWinds program from non-enrolling customers through the Fuel Clause. Otter Tail did not provide sufficient evidence to establish that the PPAs for the TailWinds program were cost effective and in the best interests of customers.

## **XI. Reagents and Emissions Allowances – Fuel Clause Adjustment**

### **A. Introduction**

Reagents are substances used to process emissions and are necessary for a utility to comply with federal regulations enforced by the Environmental Protection Agency (EPA). Emission allowances are necessary to comply with the federal Cross-State Air Pollution Rule (CSAPR).

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<sup>44</sup> Thirty percent of the Windsource PPA is recovered from the Windsource Rider. The remaining 70% was included in the fuel clause and recovered from all customers.

Otter Tail proposed to include test-year reagent cost and emission-allowance amounts in its fuel clause adjustment. After the Department objected to the amount of reagent expenses related to the Company's Coyote generating plant to be included in the fuel clause, the parties agreed to reduce the \$1,726,412 amount Otter Tail initially proposed by \$170,827.

The Company also proposed to include test year reagent cost and emission allowance amounts in the base fuel cost amount, against which actuals would be measured in the energy adjustment rider (also referred to as fuel clause adjustment). The Commission has previously denied a request by Otter Tail to include reagent costs in the rider.<sup>45</sup>

Otter Tail explained that any over- or under-recovery would be addressed through the annual fuel clause true-up process. The Department recommended that the Commission deny the Company's proposed recovery of reagent costs and emission allowances through the fuel clause adjustment.

## **B. Positions of the Parties**

### **1. Otter Tail**

The Company explained that the consumption of reagents and the quantity of reagents used depends on the dispatch of the generating unit—*i.e.*, when the plant is operating, it is consuming reagents. The variability of amount consumed is beyond the Company's control, and makes reagents appropriate for rider recovery.<sup>46</sup> The Company also stated that similarly, plant emission levels depend on the hours of operation and dispatch levels of each plant, and are also appropriate for recovery through the base fuel amount with over- or under-recovery adjusted for through the fuel clause adjustment rider.

The Company proposed certain modifications to Section 13.01 of its Minnesota Electric Rate Schedule to address recovery of reagents and emissions-allowance expenses through the fuel clause adjustment rider, as well as the proceeds of any emission-allowance sales as a credit.

Otter Tail argued that recovery in the fuel clause rider is appropriate, because the rate case has allowed comprehensive review of Company costs and revenues for prudence and reasonableness that the Commission found not available in Docket No. E-017/M-14-649.<sup>47</sup>

### **2. The Department**

The Department objected to the Company's proposal to true up the costs of reagents and emission allowances through the fuel clause adjustment rider.

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<sup>45</sup> *In the Matter of Otter Tail Power's Request for Approval to Review Its Energy Adjustment Rider to Include Emission Control Costs*, Docket No. E-017/M-14-649, Order Denying Petition to Revise Energy Adjustment Rider and Denying Variance Request (May 27, 2015).

<sup>46</sup> Tommerdahl Direct, at 24.

<sup>47</sup> *See* Order Denying Petition to Revise Energy Adjustment Rider and Denying Variance Request (May 27, 2015).

The Department argued that Minn. Stat. § 216B.16, subd. 7, authorizes, but does not require, the Commission to permit automatic adjustment of charges for specified costs, including the cost of reagents. The Department argued that the Commission has previously considered this exact issue, and denied the Company's request to recover reagent costs and emission allowances through the fuel clause.<sup>48</sup> The Department argued that there has been no material change in circumstances since the Commission issued its decision in that matter.

Further, the Department argued that it would be unreasonable to allow fuel clause recovery in this rate case. The Department asserted that while the Company demonstrated the reasonableness of reagent costs in this rate case, the Company's proposed cost recovery in the fuel clause would not be subject to such a comprehensive review, because the costs will automatically flow through the fuel clause rider and on to ratepayers.

Finally, the Department explained that the Commission has asked the Department and other parties to examine the fuel clause adjustment mechanism and to file a proposal for a more appropriate ratemaking mechanism than the automatic flow-through of cost changes in the fuel clause.<sup>49</sup>

### **C. Recommendations of the Administrative Law Judge**

The ALJ recognized that reagent costs, once placed in the fuel clause adjustment rider, could change between rate cases to the detriment of ratepayers. The ALJ also recognized that if the variable expense experienced—whether due to the dispatch of the generation units or fluctuations in commodity price—is lower than the amount of costs placed in the test year as fixed costs, an over payment could occur.

The ALJ found the Company's proposal to be the lower risk alternative, and recommended that the Commission include test year reagent cost and emission allowance amounts as part of the base fuel cost of the fuel clause adjustment, with any over-or under-recovery addressed through the annual true-up process.

### **D. Commission Action**

The Commission respectfully disagrees with the ALJ's recommendations on this issue. The Commission concurs with the Department, and will deny the Company's request. Accordingly, the Commission will adopt certain revised findings and conclusions as set forth below and in the ordering paragraphs.

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<sup>48</sup> *Id.*

<sup>49</sup> See *In the Matter of the Review of the 2011 – 2012 Annual Automatic Adjustment Reports for All Electric Utilities*, Docket No. E-999/AA-12-757, Order Acting on Electric Utilities' Annual Reports and Requiring Additional Filings (June 2, 2016).

Minn. Stat. § 216B.16, subd. 7, authorizes, but does not require, the Commission to permit the automatic adjustment of charges for specified costs. Importantly, Minn. Stat. § 216B.03 continues to require that all rates, including the fuel clause adjustment, be just and reasonable and that “[a]ny doubt as to reasonableness should be resolved in favor of the consumer.”

The Commission has previously considered this issue. In Docket No. E-017/M-14-649, the Commission determined that allowing recovery of all reagent costs through the fuel clause, without the careful review of costs as would occur in a rate case, would not be reasonable, and would likely reduce Otter Tail’s incentive for efficiency and cost minimization. Otter Tail has not proved in this rate case that its request to recover all costs of reagents through its fuel clause adjustment rider would be reasonable.

Accordingly, the Commission will not authorize Otter Tail to include test-year reagent cost and emission-allowance amounts in the base fuel cost, or to adjust test-year reagent costs and emission-allowance amounts through the fuel clause.

## **XII. Resolved Financial Issues and Update Requirements**

### **A. Fuel Clause Rider**

Based on the Department’s recommendation, the Commission will amend ALJ Finding of Fact 229, as follows:

OTter Tail’s proposal to use the E8760 allocator to allocate both base fuel costs and amounts recovered through the Energy Adjustment Rider is reasonable and shall ~~should~~ be adopted. Further, OTP shall ~~should~~ only begin using the ~~40-class~~ E8760 allocation for the energy adjustment upon implementation of the new CIS in 2018. When the new system is operational, it would make allocations across the ten customer classes as recommended by the Department. Finally, OTP shall ~~should~~ submit a compliance filing at least 120 days ahead of the proposed implementation date of the new rates, consistent with the recommendation of the Department.

Otter Tail did not object to this proposed amendment.

### **B. Cash Working Capital**

Otter Tail and the Department agreed that the Cash Working Capital lag days for Property Taxes should be 296.3; the expense lag days for Labor and Associated Payroll Expense should be changed from 16.0 to 15.11; and expense lag days for Tax Collections Available-Franchise Taxes should be adjusted from 27.6 to 23.8. The Commission will require Otter Tail to update the Cash Working Capital to reflect the Commission-approved expense levels in this rate case. Accordingly, the Commission rejects ALJ Finding of Fact 219.

### **C. Southwest Power Pool Transmission**

In its exceptions, Otter Tail requested that the Commission clarify the ALJ's findings related to this matter. The Commission agrees with this request, and will clarify the ALJ's findings to reflect that:

- The Chamber recognized that SPP transmission-related expense remains fluid;
- Otter Tail and the Chamber agreed that the appropriate base-rate amount of net SPP transmission-related expense in the test year should be \$530,000, with the differences accounted for in a tracker to track the amounts over and under on an annual basis.

### **D. Management Incentive Compensation**

The Department and the Company agreed to reduce test-year management incentive compensation costs by \$170,079, based on Otter Tail's corrected response to Department Information Request No. 132. The adjustment includes removal of management incentive costs of \$30,975 and Board of Directors long-term incentive costs of \$139,104. The ALJ did not address this issue in his report.

The Commission agrees with the proposed reduction. The Commission will allow Otter Tail to recover management incentive costs in test-year expenses after removal of the agreed amounts of management incentive costs and Board of Directors long-term incentive costs. This adjustment is embedded in the agreed-upon corporate cost allocation adjustment.

### **E. Production Tax Credits**

The ALJ recommended that the Commission approve the Company's proposal to recover Production Tax Credit (PTC)-related expenses through the Renewable Rider after the PTCs expire. And the ALJ agreed with the Department that there should be a true-up of the PTCs included in base rates and the amounts for the renewable rider when the PTCs begin to expire in late 2017.

The Company, the Department, and the Chamber all also agreed that the Company should increase the PTCs in the 2016 test year and reduce the Company's tax expense by \$76,828, and that the Company should true-up and recover the difference between projected PTCs in base rates and actual PTCs in its Renewable Rider prior to the PTCs expiration. The Commission concludes these additional agreements are consistent with the ALJ's findings and recommendation and will so approve them.

## **F. Charitable Donations**

Utilities are allowed to recover 50% of charitable contributions as operating expenses if they qualify under Minn. Stat. § 300.66, subd. 3,<sup>50</sup> and the Commission deems the contributions prudent.

Otter Tail initially proposed to include the following costs in test-year contributions:

- \$12,221 paid to Minnesota Utility Investors, Inc. and Minnesota Business Partnership;
- \$9,741 for the purchase of circus tickets and grills; and
- \$221 for a Chamber Customer Appreciation Day, University of Minnesota picnic, and Faith Haven Camps.

Following an objection by the OAG, the Company agreed to exclude the \$12,221 paid to Minnesota Utility Investors, Inc. and Minnesota Business Partnership. The ALJ did not make a finding of fact on the recommended disallowance.

The Commission will allow Otter Tail to recover the costs of the following donations in its test-year expenses:

- \$9,741 for the purchase of circus tickets and grills; and
- \$221 for a Chamber Customer Appreciation Day, University of Minnesota picnic, and Faith Haven Camps.

## **G. Employee Expenses – One-Page Summary**

Minn. Stat. § 216B.16, subd. 17(b), requires utilities to provide a summary of the total amounts for each expense category included in the utility's proposed test year.

Otter Tail stated that its budgeting system does not provide budgeting information at a level of detail that allows the Company to prepare a one-page summary of total amounts in each expense category for the test year. Instead, Otter Tail provided a one-page summary of 2015 employee expenses.

The OAG argued that Otter Tail's submission did not comply with Minn. Stat. § 216B.16, subd.17(b), but did not request a particular remedy to address the issue.

The Administrative Law Judge agreed with the OAG, and recommended that in Otter Tail's next rate case, the Company should produce a one-page summary of total amounts in each expense category for the 2016 test year.

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<sup>50</sup> Minn. Stat. § 300.66, subd. 3, allows a corporation to contribute to various groups organized and operating for religious, charitable, philanthropic, benevolent, literary, artistic, educational, civic, or patriotic purposes.



In its exceptions, Otter Tail requested that the Commission clarify the ALJ's Finding 658 to indicate that the one-page summary of employee expenses should correspond to the test year proposed for the Company's next rate case, and not the 2016 test year.

The Commission agrees that Otter Tail's filing in this rate case does not comply with the statute, and will require the Company to produce a one-page summary in each expense category, and will amend the Administrative Law Judge's Finding of Fact 658 to read as follows:

The Administrative Law Judge agrees and finds that OTP did not meet the presentation requirement. In its next rate case, it should produce a one-page summary of total amounts in each expense category for the 2016 Test Year.

### **XIII. Interim-Rate Recovery**

#### **A. Introduction**

In the Order Setting Interim Rates, the Commission approved the recovery of certain costs, including some previously approved for rider recovery. These costs included remaining unamortized portions of its generation-related Big Stone II development costs, Environmental Cost Recovery Rider costs, Transmission Cost Recovery Rider costs, and Renewable Resource Adjustment Rider costs. The Commission approved the Company's interim-rate request with modifications on April 14, 2016.

#### **B. Recovery of Big Stone II Generation-Related Development Costs**

In Otter Tail's last rate case,<sup>51</sup> the Commission authorized the Company to recover Big Stone II generation-related development costs beginning October 1, 2011. In its initial filing in this rate case, Otter Tail proposed to recover the remaining unamortized portion of Big Stone II generation-related development costs in interim rates. Due to over-collection of the unamortized amount of Big Stone II generation-related costs (caused by errors in Otter Tail's calculations based on the assumed implementation date of interim rates), Otter Tail collected more in interim rates from Big Stone II generation-related development costs than appropriate.

Otter Tail agreed to refund any over-collection of Big Stone II generation-related development costs in its interim-rate refund.

#### **C. Positions of the Parties**

##### **1. Otter Tail**

The Company asserted that the Environmental Cost Recovery Rider, Transmission Cost Recovery Rider, and Renewable Resource Adjustment Rider costs are appropriately being recovered in interim rates, but adjusted their amount for timing and to reflect an appropriate rate

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<sup>51</sup> Docket No. E-017/GR-10-239.

of return. In its direct testimony, Otter Tail explained the following annualized adjustments it had made to interim rates:

- Environmental Cost Recovery Rider - \$172,967
- Transmission Cost Recovery Rider - \$142,004
- Renewable Resource Adjustment Rider - \$45,574<sup>52</sup>

## **2. The OAG**

The OAG disagreed with the proposed adjustments, arguing that allowing recovery of costs before parties can address and contest them creates a presumption that the costs are appropriately recoverable. The OAG also disagreed that the Company was following normal cost-recovery treatment in interim rates. The OAG argued that interim rates were \$500,000 too high.

### **D. The Recommendation of the Administrative Law Judge**

The Administrative Law Judge found that the Commission had approved each of the interim-only costs in other dockets, and found them appropriate for inclusion in rates. The ALJ also found that at the conclusion of the rate case, the Commission could order interim-rate refunds to address any concerns. Finally, the ALJ recommended that the Commission decline to disallow the costs requested by the OAG.

### **E. Commission Action**

The Commission finds that Otter Tail's costs under its Environmental Cost Recovery Rider, Transmission Cost Recovery Rider, and Renewable Resource Adjustment Rider adjustments were appropriate to recover in interim rates. These amounts have been subjected to Commission review in other dockets and do not need to be revisited.

But the Commission will order Otter Tail to provide a detailed reconciliation of Big Stone II generation-related development costs that reflects the Commission's final order, including any over-recoveries as part of the interim-rate refund.

## **XIV. Integrated Transmission Service Agreement – Missouri River Energy Services**

### **A. Introduction**

The Western Minnesota Municipal Power Agency (WMMPA) has transmission facilities in a 6,400 square-mile area entirely within Otter Tail's service area. Missouri River Energy Services (MRES),<sup>53</sup> a not-for-profit joint-action agency, uses WMMPA's transmission facilities. MRES's mission is to help municipalities that operate their own electric systems to work together in planning for future power-supply needs.

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<sup>52</sup> In Docket No. E-017/M-12-708, the Commission instructed Otter Tail to address the uncollected balance in its next rate case. The Company collected the balance of \$67,361 over 18 months, which resulted in a \$45,574 annualized adjustment.

<sup>53</sup> MRES serves members in Iowa, Minnesota, North Dakota, and South Dakota.

Otter Tail, MRES, and WMMPA entered into an integrated transmission agreement (ITA) in 1986, under which Otter Tail operated all transmission facilities within the system. Otter Tail also maintained WMMPA’s transmission facilities within the system, and performed certain operation and management services.<sup>54</sup> This agreement expired at the end of 2015.

In 2016 Otter Tail and WMMPA entered into a new Operational and Supplemental Services Agreement, with MRES serving as the agent for WMMPA. Under the new agreement, Otter Tail performed a different, and reduced, range of services for WMMPA/MRES.

The issue in this rate case is what level of test-year Operations and Maintenance (O&M) expense Otter Tail should recover for the 2016 Operational and Supplemental Services Agreement.

**B. Positions of the Parties**

**1. Otter Tail**

In contrast to Otter Tail’s revenues under the 1986 ITA, which were based on a percentage of total transmission O&M expenses, Otter Tail’s revenues under the new Operational and Supplemental Services agreement (Supplemental Services Agreement or 2016 Agreement) are based on a flat annual fee.<sup>55</sup>

Once the 2016 Agreement was implemented, Otter Tail recommended revising the 2016 test-year revenues to use the actual 2016 Supplemental Services Agreement’s revenues of \$220,000 (Minnesota) in the rate-case revenues. The Department and the OAG supported this proposal.

Otter Tail stated that the 2016 test year also includes all transmission-related revenues from WMMPA/MRES. With the update of the test-year revenues from the 2016 Agreement, Otter Tail proposed to reduce the test-year revenues included in the 2010 rate case by approximately \$730,000 on a Minnesota basis.

Level included in 2010 rate case (under 1986 Integrated transmission agreement)	\$950,000
Actual revenues	(220,000)
Proposed adjustment to revenues	\$730,000

Otter Tail made no adjustment for reduced transmission costs under the 2016 Agreement, stating that because of the type of services provided to MRES/WMMPA, and the manner in which the Company provided such services, it did not anticipate a reduction in transmission costs in the test year.

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<sup>54</sup> Weirs Rebuttal, at 12. Otter Tail based its revenues under the 1986 ITA on a percentage of total transmission O&M expenses.

<sup>55</sup> Weirs Rebuttal, at 12; Weirs Surrebuttal, at 4.

## **2. The Department and the OAG**

The Department and the OAG argued that it is not reasonable for the Company to reduce only revenues in the 2016 test year, and not the related Operations and Management (O&M) transmission costs associated with the reduced revenues. The agencies argued that the Commission should also reduce O&M expenses by approximately \$730,000 to account for the smaller scope of the 2016 Agreement, and the fact that Otter Tail will be performing less transmission work (with two fewer employees) on behalf of MRES in the test year.<sup>56</sup>

The agencies disputed the Company's argument that, because of the type of services it provides under the 2016 Agreement, and the manner of billing for those services, there will be no reduction in net expenses. The Department argued that a test-year adjustment is necessary to reflect the fact that Otter Tail will be performing less transmission work on behalf of MRES in the test year due to the expiration of the 1986 ITA and its reduced responsibilities under the 2016 Agreement.<sup>57</sup>

Due to the paucity of actual numbers established in Otter Tail's testimony on this topic, the Department recommended a dollar-for-dollar reduction in the Company's level of O&M expense. Both the Department and the OAG recommended that the Commission require Otter Tail to reduce test year O&M expenses by \$730,000.

### **C. Recommendation of the Administrative Law Judge**

The ALJ found that the Company's revenues under both the 1986 ITA and the 2016 Supplemental Services Agreement do not follow directly from the expenses incurred to provide services to MRES and WMMPA.

The ALJ concluded that the 2016 test year appropriately reflects all revenues associated with Otter Tail's O&M service to WMMPA/MRES. The ALJ recommended that the Commission adopt the revenue adjustment included in the Company's rebuttal testimony of \$730,000.

### **D. Commission Action**

The Commission respectfully disagrees with certain of the Administrative Law Judge's findings and his recommendation on this issue, as well as with the recommendations of the Department and the OAG.

The Commission finds that Otter Tail has not fully met its burden of proof to establish its requested level of recovery. The record establishes that the Company will have reduced responsibilities on behalf of MRES under the Supplemental Services Agreement. Further, the Company acknowledged that there are now two fewer employees doing that work.<sup>58</sup> Thus, the Commission finds unpersuasive the Company's claim for full recovery.

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<sup>56</sup> Weirs Rebuttal, at 13.

<sup>57</sup> Johnson Direct, at 42–43.

<sup>58</sup> Weirs Rebuttal, at 13–14.

Nor, however, does the Commission find the Department's proposal for a dollar-for-dollar reduction in the recoverable level of expense to be reasonable. Although the record indicates that reduced costs should flow from the Company's reduced responsibilities under the Supplemental Service Agreement, it is unreasonable to assume a dollar-for-dollar reduction since the initial price paid by the Company was not based on a dollar-for-dollar cost calculation. The record reasonably establishes that some significant portion of the initial costs remain.

Accordingly, the Commission finds that a test-year adjustment is necessary to reflect the Company's costs, while recognizing Otter Tail's reduced responsibilities for Missouri River Energy Services under the Supplemental Services Agreement, and with fewer employees, in the test year and beyond. The Commission will therefore disallow \$547,000 of the Company's requested recovery. To adjust for the changes, the Commission will allow \$182,500, or approximately 25% of the Company's requested expense recovery in this rate case.

Finally, if Otter Tail seeks recovery of MRES expenses in its next rate case, the Commission will require the Company to provide additional detail to clearly delineate and justify such amounts. If Otter Tail does not better establish its requested recovery in the next rate case, the Commission will deny further recovery of these expenses.

## **XV. Operations and Maintenance Expenses**

### **A. Introduction**

Generally, the Commission has examined a utility's Operations and Maintenance expenses in a rate case on an issue-by-issue basis for individual items, and not on a macro level. In this rate case, however, Otter Tail proposed an overall level of O&M expenses in its budget for the 2016 test year. Otter Tail stated that the test-year O&M amounts were based on 2015 O&M amounts, adjusted to reflect known changes for 2016. The OAG disputed the Company's calculation, and recommended that the Commission use historical actuals based on a 2013 – 2015 average, and not a projected budget.

### **B. Positions of the Parties**

#### **1. Otter Tail**

To arrive at its 2016 O&M budget, Otter Tail started with its 2015 budget and made adjustments to reflect known changes for 2016.

The Company stated that it had submitted the 2016 O&M budget for review by various business areas within the Company. The Company stated that Otter Tail Power's and Otter Tail Corporation's Boards of Directors have approved the budget. Otter Tail then made a number of adjustments to its 2016 budget to calculate its 2016 test-year O&M expense. Otter Tail explained that it conducted several tests of reasonableness for the 2016 test-year O&M budget.<sup>59</sup>

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<sup>59</sup> The tests compared (1) budgeted O&M expense to actual O&M expense; (2) actual 2014 O&M expense to actual 2015 O&M expense; and (3) budgeted 2016 O&M expense to 2014 and 2015 actual O&M expense.

Otter Tail argued that its actual expenses, by FERC account, have averaged only 0.12% above budget for 2013 – 2015, and 1.68% below budget for the period 2011 – 2015. The Company explained that its 2015 O&M expense was approximately 3.62% below the budgeted expense, due to the commencement of significant projects at the Big Stone and Coyote plants and the reclassification of those O&M expenses as capital costs.<sup>60</sup>

Otter Tail argued that its 2016 O&M budget represents a 3.2% increase over its 2014 actuals, or approximately 1.6% per year. The Company's net rate base grew by approximately 14% over that period, and sales grew almost 17.2%. Based on those calculations, Otter Tail argued that its 2016 O&M budget is a reasonable representation of what will occur in 2016.

Further, Otter Tail argued its 2016 budget is reasonable, given the planned growth in the business going forward, including a projected growth in rate base of some \$858 million (Otter Tail total) of capital expenditures over the 2016 – 2020 time frame.

Finally, the Company argued that both Minnesota Power and Xcel Energy use budgets to develop forward-looking test-year O&M expenses, and not historical averages.

## **2. OAG**

The OAG recommended that the Commission set 2016 test-year O&M expense equal to the average historical actual O&M expense during the 2013 – 2015 period. The OAG acknowledged that a reasonable level of test-year O&M expense could be calculated based on budgets, but recommended as a better approach the use of a normalized level of historical, actual O&M expense.

The OAG argued that using a historical average better protects ratepayers than using a projected budget. The OAG disagreed, however, with Otter Tail that the Company's reclassification of the Big Stone and Coyote plants caused the \$4.3 million dip in 2015 O&M expenses. The OAG argued that its analysis showed that, as the 2015 expenses were \$4.3 million lower than budget, and the Company's 2014 expenses were \$4.6 higher than budget, the differences offset each other and support the proposed use of a three-year average.

Based on its analysis, the OAG recommended using the three-year (2013 – 2015) historical average to determine the appropriate 2016 test-year amount, or approximately \$1 million over 2015 actual O&M expenses.<sup>61</sup>

### **C. Recommendation of the Administrative Law Judge**

The Administrative Law Judge found that the Company's 2016 O&M budget represents a reasonable 3.2% increase over 2014 actuals, or approximately 1.6% per year.

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<sup>60</sup> The Company originally considered the O&M expenses for the Big Stone and Coyote plants to be routine O&M projects; it later re-categorized the expenses as capital projects based on the scope and type of work performed. Otter Tail switched both labor and non-labor costs for these projects from O&M to capital costs.

<sup>61</sup> Lindell Surrebuttal, at 25.

In reaching this result, the ALJ noted that the Company's 2015 O&M expenses were abnormally low due to its re-categorization of Big Stone expenses as capital expenses, and the limited operation of the Coyote plant. The ALJ also found that there have been significant changes to the Company's financials, rate base, and operations since 2013, with both sales and rate base growing over 14%. Importantly, the ALJ found that Otter Tail has projected its rate base to continue to grow after the test year, with some \$858 million (Otter Tail total) of capital expenditures planned by 2020.

#### **D. Commission Action**

The Commission concurs with the Administrative Law Judge on this issue; it accepts and adopts the ALJ's Findings and Recommendations (Findings 384 – 394).

The Commission appreciates the input of the OAG to highlight and clarify this issue. However, the Commission believes that with a forward-looking test year, the better approach is to use the forward-looking, but substantiated, projected budgets, and not rely on historical averages.

The Commission encourages the Company to continue to plan and make O&M investments to build for the future for the benefit of its ratepayers.

### **XVI. Investor-Relations Expense**

#### **A. Introduction**

As a regulated utility, Otter Tail uses capital funding from its investors to accomplish multiple tasks. Otter Tail included \$188,314 in the test year for investor-relations expenses, which is 100% of the Minnesota share of investor-relations expenses allocated to Otter Tail by its parent company. The Department seeks to disallow 50% of the expense, or \$94,157, from the test year.

The issue is whether to include 100% or 50% of investor-relations expense in the test year.

#### **B. Positions of the Parties**

##### **1. Otter Tail**

Otter Tail asks the Commission to allow it to recover 100% of the investor-relations expense in the test year. The Company asserted that there is no basis for the Department's proposal to impose a 50% limit on recovery of these expenses, other than that the Commission disallowed that amount in Xcel's last rate case.

Otter Tail challenged the requested 50% disallowance as arbitrary and unreasonable as, in its previous rate cases, the Commission has found investor-relations costs to be a prudent and necessary cost of business to serve Minnesota customers. Further, Otter Tail asserted that the Commission has never specifically articulated a rationale for the 50% disallowance, other than that the parties had agreed that it was appropriate.

Otter Tail also emphasized that the Department's recommendation does not account for the fact that the benefits of the corporate investor-relations expenses are heavily weighted to Otter Tail and its ratepayers.<sup>62</sup> The Company explained that it is in the process of significant capital spending that will largely accrue to the benefit of its ratepayers and argued that it depends on strong relationships with both the debt and equity capital markets to raise the necessary funds.

Otter Tail argued that for 2014 and 2015, as well as 2016 – 2019, virtually all of the equity raised by Otter Tail Corporation is to be invested in the utility to fund capital expenditures made on behalf of ratepayers.<sup>63</sup> Finally, Otter Tail stated that during a period of such substantial infrastructure spending, its investor relations efforts are critical.

## **2. The Department**

The Department argued that 50% (\$94,157) of Otter Tail's investor relations expense should be excluded from the test year to provide a reasonable sharing of these expenses between ratepayers and shareholders. The Department stated that many of the functions performed within the Company's investor-relations department are more appropriately shareholder costs.

The Department argued that some of these costs appear principally to benefit shareholders, such as the cost of the annual shareholders' meeting. The Department acknowledged that it is necessary to ensure that Otter Tail shareholders receive reasonable information about the Company, but argued that these costs should be the responsibility of shareholders, and not ratepayers. The Department argued that clearly it is not reasonable to allocate 100% of the costs to ratepayers.

The Department recommended that the Commission disallow 50% of the Company's claimed investor-relations expense. The Department asserted that excluding 50% of investor relations expenses from the test year is reasonable, and is consistent with other recent Commission rate-case decisions on this issue.

### **C. Recommendations of the Administrative Law Judge**

The ALJ focused primarily on the costs to the Company of obtaining the equity capital necessary to achieve the capital structure set by the Commission. Further, the ALJ noted that Otter Tail Corporation has projected that virtually all of the equity raised by it in the near term will be invested in Otter Tail to fund capital expenditures.

The Administrative Law Judge recommended that the Commission permit Otter Tail to recover 100% (\$188,314) of the Minnesota share of investor-relations expenses allocated to the Company in the test year. In reaching his recommendation, the ALJ noted recent Commission decisions in which the Commission adopted ALJ recommendations to disallow 50% of investor-relations expenses. The ALJ observed, however, that the Commission did not specifically address the issue in the prior cases.

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<sup>62</sup> Tommerdahl Rebuttal, at 56.

<sup>63</sup> *Id.* at 57–58.



#### **D. Commission Action**

The Commission does not accept the ALJ's recommendation to assign 100% of investor-relations expenses in the test year to ratepayers. Instead, it will allow Otter Tail to recover 50% of its investor-relations expense from ratepayers.

The Commission agrees that it is necessary for the Otter Tail Corporation to provide reasonable information to its shareholders, and that in the next few years Otter Tail Corporation will be investing significant amounts in capital projects that will provide economic benefit to the utility as well as its other subsidiaries. The Commission does not find, however, that it is reasonable to allocate 100% of the costs of investor relations to ratepayers on the record developed in this matter.

The Commission agrees with the Department that a significant portion of the investor-relations costs identified by the Company appear principally to benefit shareholders. The Company has not met its burden to show that 100% of these costs benefit ratepayers. Accordingly, to resolve doubt in favor of ratepayers and reasonably and equitably share such expenses between shareholders and ratepayers, the Commission will disallow half of the proposed test-year investor relations expenses.

### **XVII. Allowance for Funds Used During Construction and Construction Work in Progress**

#### **A. Introduction**

Construction Work in Progress (CWIP) and Allowance for Funds Used During Construction (AFUDC) are accounting devices used to permit utilities to recover the cost of capital used during construction. Capital costs incurred during construction are placed in rate base as CWIP. Utilities add the associated financing costs to net operating income as AFUDC, which normally offsets any return on CWIP until the plant under construction goes into service. A utility recovers CWIP and AFUDC over the life of the asset through the recording of book depreciation expense.

The Commission is authorized to consider CWIP and AFUDC in ratemaking under Minn. Stat. § 216B.16, subds. 6 and 6a.

The issue is whether the Company should be permitted to continue placing CWIP in rate base and offsetting AFUDC from the income statement.

#### **B. Positions of the Parties**

##### **1. The OAG**

The OAG recommended that:

- AFUDC should not apply to any projects where construction is suspended for a period of three months;
- A minimum project-cost threshold of \$100,000 should be imposed for AFUDC to accrue;

- The AFUDC rate should be based solely on long-term and short-term interest rates; and
- Otter Tail should remove CWIP from rate base and AFUDC from income because projects under construction are not used and useful for the benefit of ratepayers.

## 2. Otter Tail

The Company explained that it uses a combination of debt and equity and earnings to finance CWIP. Otter Tail argued that it follows Commission standards in its treatment of CWIP and AFUDC.<sup>64</sup>

Otter Tail argued that prohibiting AFUDC on a project that is inactive for three or more months would represent a new limitation of AFUDC. The Company noted that stopping construction during the winter months in Minnesota (approximately November through March) would lead to suspension of AFUDC.

Otter Tail argued that the OAG made essentially the same arguments about CWIP and AFUDC in each of the last two Xcel electric rate cases, and that in each case the Commission rejected OAG's arguments.<sup>65</sup> In Xcel's 2013 rate case, the Commission found no reason to change Xcel's practice of accruing AFUDC on projects larger than \$25,000. According to Otter Tail, the OAG has presented no additional rationale that should persuade the Commission to limit the accrual of AFUDC to projects over \$100,000 in this rate case.

In Xcel's 2013 rate case, the Commission also rejected the OAG's claim that excess revenues should be used to finance capital projects and that the AFUDC rate should be based solely on long-term and short-term interest rates. Again, the Company argued that the OAG presented no reason why the Commission should, in this rate case, impose such limitations. Otter Tail argued that, like Xcel, its rates are based on cost and do not include an extra component for financing of construction activities.

Otter Tail argued that its cash from operations represents a combination of the "return of" investment to investors and "return on" investments (earnings on common stock previously invested).<sup>66</sup> Both of these sources of cash are owned by investors and cannot be used to finance CWIP without compensation to investors.

## C. Recommendation of the Administrative Law Judge

The Administrative Law Judge found that it is not appropriate to conscript the resources of Otter Tail's shareholders for financing utility projects without compensating the owners of those resources.<sup>67</sup> The ALJ also found that prohibiting the accrual of AFUDC on a project that is inactive for three months would represent a new limitation on AFUDC, and could end accruals

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<sup>64</sup> See Minn. Stat. § 216B.16, subs. 6 and 6a; Beithon Direct, at 36–39.

<sup>65</sup> See Docket Nos. E-002/GR-12-961, E-002/GR-13-868.

<sup>66</sup> Beithon Rebuttal, at 38–39.

<sup>67</sup> ALJ's Report ¶ 399.

on active projects that are interrupted during cold winter conditions between November and March.

The ALJ recommended that the Commission decline to adopt the OAG's rationale on CWIP and AFUDC.

#### **D. Commission Action**

The Commission concurs with the Administrative Law Judge's findings (398 – 401), and will decline to adopt the OAG's proposed limitations on CWIP and AFUDC. The Commission previously has considered virtually the same objections raised by the OAG in the last two Xcel rate cases. The OAG has not introduced any new or additional facts or law that would lead the Commission to a different conclusion in this rate case.

### **XVIII. Employee Expense – Flex Field**

#### **A. Introduction**

Minn. Stat. § 216B.16, subd. 17, requires utilities to include in a general rate case petition schedules that separately itemize travel, entertainment, and related employee expenses as specified by the Commission. In addition, in Otter Tail's last rate case, the Commission required that the Company, in its next rate case, to:

. . . file the information required by Minn. Stat. § 216B.16, subd. 17, in a searchable, sortable format. The Company shall modify the information describing the business purpose for each expense to more clearly describe the purpose. The filing shall include the name of the employee incurring the expense and the jurisdictional share of the expense. The filing shall also include a reference document that clearly describes what type of costs and activities are included in each business purpose category used by the Company.<sup>68</sup>

The Company worked with the Department, the OAG, and Commission staff concerning the types of employee-expense data that the Company would file in its next rate case. On July 24, 2013, Otter Tail made an informational filing explaining how it would report employee-expense data in its next rate case, including its rationale and use of monetary thresholds.

#### **B. Positions of the Parties**

##### **1. Otter Tail**

In its filing, Otter Tail included itemized employee-expense schedules as required by Minn. Stat. § 216B.16, subd. 17, including an itemization of 2015 employee expenses for travel, meals, and lodging of \$542,741 (Otter Tail MN).

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<sup>68</sup> *In re Otter Tail Power Company's Petition for Authority to Increase Rates for Electric Utility Service in Minnesota*, Docket No. E-017/GR-10-239, Findings of Fact, Conclusions, and Order, at Ordering Paragraph 12 (April 25, 2011).

Otter Tail stated that its employee-expense reporting system conforms to the procedures set out in its July 2013 filing. The Company explained that its reporting system does not require narrative descriptions in the flex field for transactions under certain monetary thresholds: \$175 for lodging, \$35 for meals, and \$475 for travel.<sup>69</sup> Otter Tail argued that a narrative description in the flex field itself is unnecessary to a determination of reasonableness, because the Company provided other information that, taken together, demonstrated the reasonableness and purpose of the expense.<sup>70</sup>

Otter Tail explained that to provide additional narratives in the flex field for every transaction, the Company would need to hire at least one additional full-time employee for data entry. The Company would also incur additional costs associated with the time and effort of employees providing the narrative description to Company data-entry personnel.<sup>71</sup>

The Company argued that the Commission should reject the OAG recommendations, as the agency requested a level of business purpose detail that is not required by statute or order and such information is not necessary to determine the business purpose of the transaction. The Company asserted that its proposed approach, set out in its July 2013 filing, balances the OAG's desire for additional business purpose information and the cost to the Company and its ratepayers of collecting and maintaining that information.

## **2. The OAG**

The OAG recommended that the Commission disallow \$97,982 in employee travel, meal, and lodging expenses because the information submitted by the Company was inadequate to determine whether the expenses were reasonable or necessary for the provision of utility service. OAG argued that 3,568 transactions relating to these expenses lacked sufficient information to determine whether they were reasonable or necessary.

Specifically, the OAG argued that the challenged expenses lack a narrative explanation with data on the meeting topics, description of fieldwork or business purpose, name of the employee for whom the expense incurred, and detail of the expense on the expense schedule form, as required in the Company's last rate case.

The OAG asserted that the expense filing failed to comply with Minn. Stat. § 216B.16, subd. 17, in that it did not provide sufficient business-purpose detail for the bulk of the transactions listed. The OAG also argued that the Company did not uniformly follow its internal threshold amounts (limiting when a business purpose is required).

Finally, the OAG asked the Commission to order the Company to use the available flex fields in its accounting system to record the business purpose and other transaction information for all transactions, regardless of amount involved.

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<sup>69</sup> Tommerdahl Direct, at 69–71.

<sup>70</sup> Tommerdahl Rebuttal, at 39–40.

<sup>71</sup> Tommerdahl Rebuttal, at 41.

### **C. Recommendation of the Administrative Law Judge**

The ALJ found that the Company's use of thresholds to provide additional business-purpose data was reasonable. The ALJ also found that Otter Tail had provided sufficient business-purpose information for transactions under the thresholds to determine whether the expenses were reasonable and necessary for the provision of utility services.

The Administrative Law Judge recommended that the Commission approve the Company's \$97,982 in employee travel, meal, and lodging expenses for the 2016 test year.

### **D. Commission Action**

The Commission concurs with the Administrative Law Judge's findings, conclusions, and recommendation on rate recovery of these expenses. The Company has provided adequate detail in the course of this proceeding to demonstrate that the expenses claimed are reasonable and necessary for the provision of utility service.

Further, the Commission finds that Otter Tail's use of thresholds to provide additional business-purpose information is reasonable. Otter Tail has demonstrated that it has met the statutory criteria in Minn. Stat. § 216B.16, subd. 17.

Finally, Otter Tail has provided sufficient business-purpose information for transactions under the thresholds to determine whether the expenses are reasonable and necessary for the provision of utility service. The Commission will approve Otter Tail's \$97,982 in employee travel, meal, and lodging expenses for the 2016 test year.

## **XIX. Employee Expense – Gifts**

### **A. Positions of the Parties**

#### **1. Otter Tail**

Otter Tail included in its test-year expenses a total of \$18,310 (Otter Tail MN) for gift expenses<sup>72</sup> and \$7,380 for employee recognition and employee entertainment expenses.<sup>73</sup> Otter Tail asserted that the expenses recognize employee achievement, acknowledge life events such as retirements and deaths, and mark holidays and other special events.

The Company argued that it categorized nearly all the items listed in its gift schedule under activity code 1080 – Employee Recognition Programs. The Company argued that the description of these activities along with the information provided in the Company's gift schedules demonstrates that the gifts are extremely modest, reasonable and prudent, and should be eligible for rate recovery as they help to build employee morale and promote retention.

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<sup>72</sup> These expenses include \$7,742 for employee recognition, \$4,563 for holiday gifts, \$3,310 for employee life events (such as retirements and funerals), and \$298 for prizes at safety meetings. Otter Tail Initial Filing, Schedule 06-2015 Gift Expenses.

<sup>73</sup> Tommerdahl Rebuttal, at 44.

## **2. The OAG**

The OAG objected to asking ratepayers to pay for these expenses, arguing that ratepayers already pay all employee compensation costs necessary for the provision of utility service. The OAG urged the Commission to disallow the requested \$18,310 as well as the \$7,380 in employee recognition and entertainment expenses.

The OAG argued that the Commission has not allowed such expenses in the Company's prior rate cases, and in Otter Tail's 2010 rate case specifically disallowed employee gifts as unreasonable and unnecessary for the provision of utility service. The OAG requested that the Commission again disallow all such costs.

### **B. Recommendations of the Administrative Law Judge**

The Administrative Law Judge recommended disallowing the Company's request for rate recovery of \$18,310 for gifts, life events, and other employee gift expenses and \$7,380 in employee recognition and entertainment expenses. The ALJ reasoned that, in the Company's last rate case, the Commission had disallowed inclusion of these types of expenses in the test year. Therefore, absent a willingness by the Commission to revisit its earlier holding, the \$18,310 for gifts, life events, and other employee gift expenses, and the \$7,380 in employee recognition and entertainment expenses should be excluded from test-year expenses.

### **C. Commission Action**

The Commission concurs with the Administrative Law Judge and will disallow rate recovery of the Company's proposed employee gift and recognition expenses.

The Administrative Law Judge recommended disallowing the \$18,310 for gifts, life events, and other employee gift expenses, and \$7,380 in employee recognition and entertainment expenses. The ALJ reasoned that the hearing record in this matter, and the legal arguments for approving the proposed expenses, are akin to those in the Company's last rate case, in which the Commission denied recovery. Therefore, absent a willingness by the Commission to revisit its decision in the 2010 rate case, Otter Tail's proposed employee recognition and employee gift expenses should be denied.

The Commission finds that the evidence adduced and the arguments presented in this rate case are similar to those of the last rate case. The Commission finds that the proposed employee gift and recognition expenses are not reasonable and necessary for the provision of utility services. The Commission will deny recovery for these items.

## **XX. Lobbying and Organizational Dues**

### **A. Introduction**

OTP seeks full recovery of organizational dues expenses. The OAG disagreed with the Company's request. The OAG recommended that the Commission deny \$89,573 of Minnesota-jurisdictional dues paid to the Edison Electric Institute and the Lignite Energy Council because the organizations are primarily lobbying organizations that advocate on behalf of investor-owned utilities and do not benefit ratepayers.

## **B. Positions of the Parties**

### **1. The OAG**

The OAG challenged rate recovery of dues paid to the Edison Electric Institute and the Lignite Energy Council, arguing that they are primarily lobbying groups. The OAG argued that Otter Tail has not provided record support for the portion of the dues allocated to lobbying expenses, nor has it shown that membership in these organizations benefits ratepayers.

### **2. Otter Tail**

Otter Tail agreed that it should not recover lobbying expenses. The Company explained that it has reduced the dues payable to both organizations to exclude the portion of the charges for lobbying activities.

Otter Tail claimed that in addition to lobbying activities, these organizations provide valuable services, information, and expertise the Company cannot duplicate on its own. Otter Tail explained that the Edison Electric Institute provides public-policy leadership, critical industry data, market opportunities, strategic business intelligence, conferences, products, and services. Otter Tail also asserted that in the Company's 2010 rate case, the Commission allowed recovery of dues paid to these organizations.

At oral argument, Otter Tail agreed to withdraw its request for the organizational dues for the Lignite Energy Council.

## **C. Recommendation of the Administrative Law Judge**

The ALJ found that both organizations provide valuable services and information that benefit ratepayers, which the Company cannot duplicate cost-effectively on its own.

He also found that the Company had established that the 2016 test year dues for these organizations do not include non-recoverable lobbying expenses. The Company itemized its lobbying expenses for these organizations in FERC Account 426.4, a below-the-line account.

Finally, the ALJ noted that the OAG's arguments against recovery of membership dues in these organizations were the same as those it advanced in Otter Tail's last rate case, which the Commission rejected. Accordingly, the ALJ recommended that the Commission approve recovery of the organizational dues in its 2016 test year.

## **D. Commission Action**

The Commission concurs with the Administrative Law Judge's findings, conclusions, and recommendations on rate recovery of expenses for the Edison Electric Institute. The Company has provided adequate detail demonstrating that the expenses claimed are reasonable and necessary for the provision of utility service.

The Commission will modify the ALJ's Finding of Fact 444 to exclude the recovery of Lignite Energy Council dues from the test year, as the Company has withdrawn that portion of its request.

Further, in future rate cases the Commission will require that if the Company seeks recovery of organizational dues of this nature, it must support its claim by providing information that identifies on membership invoices the amount of dues paid and the portion of dues charged for lobbying activities.

## **COST OF CAPITAL ISSUES**

Utilities meet their capital needs by issuing stock, known as equity, and by incurring long-term and short-term debt; these three components make up the utility's capital structure. Generally, equity is the most expensive form of financing, followed by long-term debt and then short-term debt. The percentage of the capital structure made up of each of these components therefore has a substantial impact on costs and rates, as does the cost determined for each component during the ratemaking process.

In this case, the only contested cost-of-capital issue is the cost of equity. The Company and the Department took the same position on capital structure and the costs of long- and short-term debt—the OAG took none—and all three parties took different positions on the cost of equity.

The Commission will summarize the capital structure and address the cost of equity below.

### **XXI. Capital Structure**

To determine the Company's cost of capital, it is necessary to determine reasonable ratios of long- and short-term debt and common-stock equity, because the costs of each source of financing are different.

Otter Tail Power is a wholly owned subsidiary of Otter Tail Corporation. The Company has separately issued short term debt and long-term debt, and has a separate credit rating, from Otter Tail Corporation. The Company argued, and the Department agreed, that the Company's proposed capital structure is a predominantly market-based capital structure that is reflective of Otter Tail's actual capital structure.

The Company proposed a capital structure that did not differ significantly from the capital structures of comparable utilities or the Company's capital structure approved in its last rate case. The Department concluded that Otter Tail's proposed capital structure is reasonable because it is consistent with those found in comparable utilities. The ALJ also concluded that the Company's proposed capital structure is reasonable. The Commission agrees. The updated 2016 capital structure is set forth below:

Long-Term Debt	44.06%
Short-Term Debt	3.44%
Common Equity	52.50%



## **XXII. Cost of Equity**

### **A. Introduction**

In determining just and reasonable rates, the Commission is required to

give due consideration to the public need for adequate, efficient, and reasonable service and to the need of the public utility for revenue sufficient to enable it to meet the cost of furnishing service, including adequate provision for depreciation of its utility property used and useful in rendering service to the public, *and to earn a fair and reasonable return upon the investment in such property.*<sup>74</sup>

One of the critical components of that fair and reasonable return upon investment is the return on common equity, which—together with debt—finances utility infrastructure. The Commission must set rates at a level that permits stockholders an opportunity to earn a fair and reasonable return on their investment and permits the utility to continue to attract investment.

In short, the Commission must determine a reasonable cost of equity and factor that cost into rates. Otter Tail is a subsidiary of Otter Tail Corporation, Inc., and has no publicly traded common stock. Its cost of common equity—essential to determining overall rate of return and the final revenue requirement—must therefore be inferred from market data for companies that present similar investment risks. Using a proxy group also moderates the effects of one-time events on a given company's stock.

### **B. The Analytical Tools**

Otter Tail, the Department, and the OAG conducted cost-of-equity studies and based their analysis on comparison groups of utilities they considered similar enough to Otter Tail to serve as proxies in determining the Company's cost of equity. All three used the Discounted Cash Flow (DCF) analytical model, on which this Commission has historically placed its heaviest reliance.

The Company, the OAG, and the Department also used the Capital Asset Pricing Model (CAPM) as a secondary, corroborating resource, consistent with the Commission's historical treatment of this model. The Company also conducted a third analysis using the Bond Yield Plus Risk Premium Model, which the Commission has historically relied on less heavily, considering the model prone to producing volatile and unreliable outcomes.

The DCF model uses the current dividend yield and the expected growth rate of dividends to determine what rate of return is sufficient to induce investment. The model is derived from a formula used by investors to assess the attractiveness of investment opportunities using three

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<sup>74</sup> Minn. Stat. § 216B.16, subd. 6 (emphasis added).

inputs—dividends, stock prices, and growth rates. DCF modeling can be performed using constant, “two-growth,”<sup>75</sup> and multistage dividend growth assumptions.

The CAPM model estimates the required return on an investment by determining the rate of return on a risk-free, interest-bearing investment; adding a risk premium determined by subtracting the risk-free rate of return from the total return on all market equities; and multiplying the remainder by beta, a measure of the investment’s volatility compared with the volatility of the market as a whole.

The Bond Yield Plus Risk Premium (or Risk Premium) Model determines the cost of equity by adding to the risk free rate a premium reflecting the greater returns required by equity holders.

## **C. The Positions of the Parties**

### **1. The Company**

The Company proposed a return on equity of 10.05%, based on constant growth, two-growth, and multistage DCF models of an eight-utility proxy group, along with CAPM and Bond Yield Plus Risk Premium analyses.

The Company’s chosen proxy group screened out companies using a cap on customers-per-square-mile, and a floor on the comparable companies’ return on equity.

The Company also conducted a multistage DCF study, developing inputs for multiple time periods and extrapolating future financial performance from the results. The Company conducted a CAPM study, using 30-year treasury notes as the risk-free asset the study requires. It conducted a risk premium study, also using 30-year treasury notes as the baseline asset.

The Company also advocated for factoring in and adjusting for business risks and other factors specific to the Company’s small size, equity-price volatility, and low institutional ownership, trading volume, and performance. According to the Company all of these factors taken together distinguish Otter Tail and justify a high ROE relative to the companies in the proxy group. Finally, the Company’s ultimate recommendation of a 10.05% return on equity included an adjustment for flotation costs—the costs of issuing securities—since those costs result in a utility receiving less than the full sales price for shares issued.

### **2. The Department**

The Department proposed a return on equity of 8.66%, the result of applying both a constant- and two-growth DCF model to a proxy group not screened using an ROE floor, using the most recent growth-rate projections for each company in that group, and adjusting the final number to include flotation costs.

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<sup>75</sup> A two-growth model assumes that dividends grow at one rate for a short time, and then grow at a second, sustainable rate in perpetuity.

The Department noted that it had also conducted two CAPM analyses on the companies as a reasonableness check—one using the classic CAPM model and the other the Empirical CAPM model. The agency stated that these studies confirmed the general accuracy of its DCF results, though the CAPM results were lower than those supported by DCF analysis.

The Department rejected the arguments that the cost of equity should be adjusted to reflect the individual factors proposed by the Company, arguing that the proposed adjustments would effectively be double-counting individual risk factors, which are already incorporated into the DCF analysis of the proxy group. And, the Department argued, the Company appeared only to have considered adjusting for individualized factors that appear to make the Company riskier. The Department also opposed granting an upward ROE shift to reward the company for good performance, arguing that the inclusion is not consistent with cost-of-service regulation.

### **3. The OAG**

The OAG proposed a return on equity of 7.14%, based on a multistage DCF study using a different proxy group that did not apply screens used by the Company that the OAG considered unreasonable. The Office also opposed adjusting the DCF results upward to include a flotation adjustment.

The OAG also urged the Commission to base its decision on the DCF analytical model. The OAG pointed to the Commission's heavy historical reliance on the DCF model and to the Department's characterization of the model as "a fair, market-oriented method that uses current, relevant information.

The OAG challenged the Company's execution of the DCF analytical models, arguing that the Company's proxy group unreasonably screened out relevant comparable companies, and that the Company's DCF modeling used outdated market information and imprecise growth rates.

The OAG opposed the Company's and Department's support of a flotation adjustment. The Office argued that the adjustment wasn't needed to access capital markets, and so would be a windfall to the Company.

The OAG also opposed the Company's proposed upward adjustments for factors such as company size, customer concentration, and customer satisfaction for the same reasons the Department opposed them—it argued that adjusting a DCF-based ROE for these factors would effectively account for them twice.

### **D. The Recommendation of the Administrative Law Judge**

The ALJ determined that, consistent with previous Commission decisions, DCF modeling provides the best resource for determining a reasonable cost of equity, and is superior to both CAPM and Bond Yield Plus Risk Premium models for the purpose.

The ALJ recommended that the Commission determine that “familiar, recognized discounted cash flow analyses will be used by the Commission as a starting point for ROE deliberations, and that within the appropriate range of DCF results, the Commission will address company-specific circumstances.” He concluded that the Department’s DCF modeling was superior to the models submitted by the OAG and the Company.

However, the ALJ supported adjusting DCF analysis results “to account for company-specific details.” He recommended that the Commission approve a return on equity on the high end of the Department’s two-growth DCF analysis: 9.54%, which incorporated an upward adjustment for flotation costs.

### **E. Commission Action**

Setting the cost of equity is a fact-intensive and record-specific judgment. The Commission must ultimately establish a reasonable rate of return that is supported by the evidence in the record considered in its entirety.<sup>76</sup> The Commission believes that the record evidence in this case, including the broad diversity of modeling and expert testimony, establishes a range of reasonable costs of equity, within which the Commission must identify one value.

The Commission agrees with the ALJ that DCF analysis provides the best evidence in the record for establishing the Company’s cost of equity in this case. DCF modeling continues to offer analytically rigorous substantial evidence to support a determination of the Company’s cost of equity, with the reasonableness of the results checked by CAPM and Risk Premium analyses. The Commission also agrees with both the Company and Department that the two-growth DCF method is the best approach for determining Otter Tail’s ROE in this instance

A properly constituted proxy group ensures that a DCF analysis is grounded in relevant comparable data. In this case the proxy group used by the Department, prior to eliminating the 7% screen, likely reflects the most appropriate range of reasonably comparable companies for the DCF modeling. The Commission agrees with the Department and the OAG that the proxy-group screens applied by the Company erroneously excluded comparable companies.

On a different record, it may be reasonable to eliminate the 7% screen, as proposed by the Department in surrebuttal testimony; however, in this case the proposal was raised late in the proceeding, with too little opportunity for parties to fully address the issue. And Otter Tail reasonably questioned the Department’s rationale to abandon the screen in this particular case, in light of the overall distribution of ROEs in the proxy group.

Accordingly, the Commission concludes that the most persuasive and well-supported analysis is the Department witness’s surrebuttal testimony and two-growth DCF analysis, with the results adjusted after re-applying the 7% screen. This results in the following ROE range:

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<sup>76</sup> *In Re: App. of Minn. Power for Auth. to Increase Rates for Elec. Serv. in Minn.*, 838 N.W.2d 747, 760 (2013) (describing the substantial evidence test, and citing *Reserve Min. Co. v. Herbst*, 171 N.W. 2d 712, 825 (1977)).

	Mean Low	Mean Average	Mean High
Two-Growth DCF	8.13%	8.98%	9.85%

Using the DCF and other analyses in the record as both a foundation and a guide, the Commission has considered and weighed all the relevant factors. In light of these factors, the Commission will approve, for the reasons stated below, a cost of equity of 9.41%. A 9.41% return on equity is equal to the average of the proxy group’s mean ROEs in the Department’s two-growth DCF average- and high-growth scenarios, identified as the Midpoint in the following table:

	Mean Low	Mean Average	<b>Midpoint</b>	Mean High
Two-Growth DCF	8.13%	8.98%	<b>9.41%</b>	9.85%

The record does not formulaically dictate a particular ROE to be approved. Instead, the record presents a range of reasonable returns on equity that the Commission has carefully evaluated based on the analyses and arguments in the record. As such, the Commission is setting the Company’s authorized ROE in light of the record as a whole.

The record in this case establishes a compelling basis for selecting an ROE above the mean average within the DCF range, given Otter Tail’s unique characteristics and circumstances relative to other utilities in the proxy group. These factors include the company’s relatively smaller size, geographically diffuse customer base, and the scope of the Company’s planned infrastructure investments. The Commission has also considered Otter Tail’s recognized the Company’s performance in completing major infrastructure projects substantially under budget,<sup>77</sup> its history of providing reliable service with stable rates, and its record of effectively serving the needs of its customers, as measured by multiple customer-satisfaction metrics.<sup>78</sup>

Although the Department included an Otter Tail ROE in its DCF analyses to adjust for the Company’s higher-than-average risk, the Commission concludes that, in this case, including Otter Tail in the proxy group does not adequately account for Otter Tail’s unique characteristics; Otter Tail’s ROE is only one of 15 ROE values in the calculation.

The Commission recognizes that the ALJ’s recommended ROE of 9.54% is also likely within the range of reasonableness established by the record; however, the Commission concludes that a slightly lower ROE is more appropriate. Otter Tail’s higher investment-risk profile relative to other utilities in the DCF proxy group—which the ALJ also concluded justified an ROE at the high end of the DCF analysis—is already partially reflected by inclusion of an Otter Tail ROE in the proxy group. To adjust for this, the Commission will approve an ROE below the ALJ’s recommendation, but still higher than the mean–average DCF analysis results.

The Commission has determined that the midpoint of the mean–average and the mean–high results appropriately reflects the company-specific adjustments that are appropriate in this case,

<sup>77</sup> For example, Otter Tail completed its Big Stone Air Quality Control System project approximately 25% below budget and completed its Hoot Lake Mercury Air Toxins Standard project below budget.

<sup>78</sup> For example, Otter Tail tied for the highest ranking in customer satisfaction among midsize utilities in the Midwest in J.D. Power’s 2015 Electric Utility Residential Customer Satisfaction Study.

and best balances the interests of ratepayers and the Company. The outcome is that Otter Tail’s approved ROE falls midway between the average and higher end of comparable company ROEs. As such, it adequately assures a fair and reasonable return in light of the Company’s unique risk profile, substantial capital investment activity, costs of obtaining equity investment, and performance.

To further develop the record on the costs of obtaining equity investment in the Company’s next rate case, the Commission will require the Company to provide detailed information on all the costs necessary to obtain equity in its proposed test year, and its plans for acquiring equity through the capital markets for the five years following the test year. With this information, the Commission and the parties can more fully analyze the need for and, if appropriate, amount of any adjustment for flotation costs.

**XXIII. Cost of Long-Term and Short-Term Debt**

The Company proposed a long-term debt cost of 5.62%. The Department concurred in the 5.62% figure, and the OAG did not address the issue.

The Company initially proposed a short-term debt cost of 3.28%, which it updated to 2.55% in the course of evidentiary proceedings. The Department concurred in the 2.55% figure, and the OAG did not address the issue.

No one challenged the reasonableness of either of these agreed-upon numbers, and the Administrative Law Judge recommended adopting both. The Commission concurs and will set the cost of long-term debt at 5.62% and the cost of short-term debt at 2.55%.

**XXIV. Final Capital Structure and Overall Cost of Capital**

The final capital structure and overall cost of capital resulting from the decisions made in this order are set forth below:

<b>Component</b>	<b>Ratio</b>	<b>Cost</b>	<b>Weighted Cost</b>
Long-Term Debt	44.0601%	5.6229%	2.4775%
Short-Term Debt	3.4399%	2.5549%	0.0879%
Common Equity	52.5000%	9.4100%	4.9403%
Total	100.000%		7.5056%

**CLASS COST OF SERVICE STUDY ISSUES**

**XXV. Rate Design and Cost of Service**

The preceding discussion has sought to quantify the costs that a prudently managed utility serving Otter Tail’s service area would bear. The following sections will address how Otter Tail may recover those costs from its ratepayers and earn a reasonable return on its investment. This process of *rate design* requires the Commission to exercise policy judgment because there are many ways to set rates to enable a utility to recover appropriate revenues.

In designing rates, the Commission considers a variety of factors, including:

- Equity, justice, and reasonableness, and avoidance of discrimination, unreasonable preference, and unreasonable prejudice;<sup>79</sup>
- Continuity with prior rates to avoid rate shock;
- Revenue stability;
- Economic efficiency;
- Encouragement of energy conservation;<sup>80</sup>
- Customers' ability to pay;<sup>81</sup>
- Ease of understanding and administration; and, in particular,
- Cost of service.

Estimating the cost to serve any given customer is challenging because a utility will incur different costs to serve different customers, and will incur many costs that benefit multiple customers. Because similar types of customers tend to impose similar types of costs on the system, utilities simplify their analysis by first dividing customers into classes—for example, distinguishing residential customers from commercial or industrial customers. Utilities then attempt to determine the amount of revenues they should recover from each customer class.

To aid this analysis, the Commission directs utilities to conduct a Class-Cost-of-Service Study (CCOSS). Minn. R. 7825.4300(C) directs a utility to file

A cost-of-service study by customer class of service, by geographic area, or other categorization as deemed appropriate for the change in rates requested, showing revenues, costs, and profitability for each class of service, geographic area, or other appropriate category, identifying the procedures and underlying rationale for cost and revenue allocations.

Otter Tail identified ten customer classes:

- Residential, subdivided into two categories: standard Residential, and Residential—Controlled Demand (RCD).
- Farm
- General Service
- Large General Service
- Irrigation
- Outdoor Lighting
- Other Public Authority Service

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<sup>79</sup> Minn. Stat. §§ 216B.01, .03.

<sup>80</sup> Minn. Stat. §§ 216B.03, .2401, 216C.05.

<sup>81</sup> Minn. Stat. § 216B.16, subd. 15.

- Water Heating.
- Controlled Service – Interruptible
- Deferred Load Service

## XXVI. Class Cost of Service Studies

### A. Introduction

#### 1. Functionalization, classification, and allocation of costs

According to the *Electric Utility Cost Allocation Manual* of the National Association of Regulatory Utility Commissioners (Electric Manual), performing a CCOSS involves three steps. First, costs are grouped according to their function (generation/production, transmission, distribution, customer service/facilities, administrative). Second, costs are classified based on how they are incurred. Third, costs are allocated to the various customer classes.<sup>82</sup>

*Functionalization:* In this case, the function that has generated the most dispute is distribution. The distribution system carries electricity from the transmission system to a customer's location. Utilities distinguish between the primary distribution system and the secondary distribution system. In the primary distribution system, electricity travels from the high-voltage transmission system to substations, which reduce the voltage and distribute it via lines and poles to the neighborhoods of retail customers. While some large industrial customers purchase power at primary distribution voltages, generally this electricity flows to the secondary distribution system, where distribution transformers again reduce the voltage, permitting it to be distributed via lines and poles to customer premises.

*Classification:* The cost of a function might be classified as related to *energy, demand, or customers*. Energy-related costs increase as a customer's consumption of energy increases. Demand-related costs increase as the rate at which the customer consumes energy increases, especially during periods of peak demand. Customer-related costs increase as the number of customer accounts increases. According to the Electric Manual, the cost of an electric utility's distribution system is related to energy, demand, and customers.

*Allocation:* The various costs then get allocated to each customer class. The manner in which these costs get allocated have important rate consequences. For example, because the great majority of Otter Tail's customers are residential customers, a choice to characterize a cost as a customer cost will result in residential customers bearing the great majority of those costs.

According to the Electric Manual, the cost of an electric utility's distribution system is related to energy, demand, and customers.<sup>83</sup> Yet the two methods that the Manual identifies for allocating such costs—the Zero Intercept method and the Minimum System method, discussed below—classify the cost of distribution plant as related to demand and customers, and do not classify any part of the distribution system as related to energy.

<sup>82</sup> Electric Utility Cost Allocation Manual, National Association of Regulatory Utility Commissioners, at 18–23 (January, 1992).

<sup>83</sup> *Id.* at 21–22.



## **B. Positions of the Parties**

### **1. The Company**

Otter Tail advocated use of the Minimum System method (also called the Minimum Size method). The Minimum System method reflects the premise that a utility builds out its distribution plant to serve each customer regardless of the amount of demand that each customer puts on the system, thus *some* portion of the plant should be regarded as customer-related. To use this method, an analyst estimates the minimum cost to build a system that would connect to all of Otter Tail’s customers. The extent to which Otter Tail built a system that was larger than necessary simply to connect to each customer, this excess is attributed to demand—that is, to Otter Tail’s need to provide the capacity to serve peak load.

In support of its CCOSS, Otter Tail noted that the Minimum System method is one of the allocation methods recommended in the Electric Manual, and has been previously adopted by various regulators—including this Commission.

Responding to concerns raised by other parties, however, Otter Tail agreed on the need to modify its CCOSS to treat the cost of Conservation Improvement Programs (CIP) as energy-related, rather than customer-related.

### **2. The OAG**

#### **a. The Basic System Method and the Peak and Average Method**

The OAG recommended that the Commission rely on Otter Tail’s CCOSS based on the Minimum System method—but also rely on CCOSSs based on the Basic System (sometimes called Basic Customer) method and the Peak and Average method. In support of its position, the OAG cited a prior Commission decision directing a utility to consider multiple CCOSS models prospectively.<sup>84</sup>

Similar to the Minimum System method, the Basic System method begins by attempting to identify the subpart of distribution costs that should be attributed to customer-related costs, and presumes that any excess cost should be attributed to demand. But while the Minimum System method relies on estimating the cost of a hypothetical minimum distribution system, the Basic System method identifies costs that can be attributed to individual customers—such as the costs of service lines, meters, billing, and collection—as the basis for estimating customer costs.

In support of the Basic System method, the OAG cited various academic studies and decisions from other jurisdictions.

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<sup>84</sup> *In the Matter of the Application of CenterPoint Energy Corp. for Authority to Increase Natural Gas Rates in Minnesota*, Docket No. G-008/GR-15-424, Findings of Fact, Conclusions, and Order, at 53 (June 3, 2016).

The *Peak and Average* method differs from both the Minimum System and the Basic System methods. These latter methods allocate capacity cost among customer classes based on each class's share of total energy consumption during the utility's peak demand (coincident peak demand). These methods reflect the idea that a utility designs and builds its system to have sufficient capacity to meet the needs of all its firm customers during periods of peak demand, no matter how brief that period is. In practice, this dynamic causes residential consumers to bear a larger share of these costs relative to the amount of energy consumed than do industrial customers.

In contrast, the Peak and Average method characterizes all distribution system costs as capacity costs, but rejects the premise that these costs should be allocated purely on the basis of coincident peak demand. Instead, the Peak and Average method allocates some costs based on each class's average level of usage, reflected by each class's energy consumption or average demand. And it allocates the rest based on peak demand—but the peak demand of *each customer class*, regardless of when that peak occurs (non-coincident peak demand). This has the effect of assigning less distribution-system cost to residential customers, and more to industrial customers.

### **b. Opposition to Minimum System Method**

The OAG criticized Otter Tail's choice to rely solely on the Minimum System method. Because this analytical method relies on comparing Otter Tail's actual distribution plant costs to the cost of a hypothetical minimalist distribution plant, the model depends on the subjective perspectives of the analyst modeling the hypothetical plant. The OAG alleged that this practice tends to over-allocate costs to the customer component. This method contrasts with the Basic System model, the OAG argued, which relies on actual data from the utilities' accounts.

The OAG also criticized Otter Tail's choice to apply the Minimum System model uniformly to the primary and secondary distribution system. The OAG argued that the rationale for allocating the cost of the primary distribution system based on the number of customer accounts is weaker than the choice to allocate the secondary distribution system on this basis.

### **c. Other Concerns**

The OAG raised additional issues regarding Otter Tail's CCOSS, including the following:

*Discovery:* Otter Tail's CCOSS relies on accounting data. The OAG alleged that Otter Tail did not always identify the relevant account in FERC's Uniform System of Accounts from which any given piece of data came, and the task of obtaining this data from Otter Tail was needlessly burdensome. As a remedy, the OAG asks the Commission to direct Otter Tail to include FERC account information within its CCOSS models in the next rate case.

*Modeling:* The OAG alleged that parts of Otter Tail's CCOSS contain numbers that would appear to be endogenous, arising from the model, but were in fact "hard-coded" into the model. As a result, when changes would be made to the model, the hard-coded data would not reflect these changes, causing needless frustration to the parties. The OAG asked the Commission to direct Otter Tail to correct these errors by the time it files its next rate case.

*Peak Demand Allocator:* Otter Tail calculates an allocator which identifies each class's share of usage on Otter Tail's system during periods of peak demand on Otter Tail's system. Generally, a utility's system's peak demand is a relevant design criteria, because it is the period when the demands of the utility's customers may threaten to exceed the utility's capacities. But Otter Tail is a member of MISO and its energy markets and, while the period of peak demand on Otter Tail's system is in the winter, MISO's peak demand occurs in the summer. As a consequence, MISO tends to have excess capacity at precisely the time that Otter Tail would be most likely to need it.

The actual period when capacity might be scarce is during MISO's peak demand, not Otter Tail's. MISO's rules for ensuring that the system will have adequate capacity during peak demand conditions are designed around MISO's peak demand, not Otter Tail's. As a result of these rules, Otter Tail incurs costs based on the amount of consumption on its system during MISO's peak demand, not Otter Tail's. For these reasons, the OAG argued, Otter Tail should calculate its peak demand allocator during MISO's peak, not Otter Tail's. The OAG asked the Commission to direct Otter Tail to calculate its allocator in accordance with MISO's resource adequacy rules by the time Otter Tail files its next rate case.

*Advanced Meters:* Otter Tail treats the cost of advanced meters capable of two-way communication—including Residential–Controlled Demand (RCD) meters and any other customers that have radio load-management receivers—as customer costs. But the OAG observed that utilities invest in advanced meters in order to facilitate conservation and load-shifting, matters that are related to energy and demand, respectively. Consequently the OAG asked the Commission to direct Otter Tail to allocate its cost of advanced meters equally to customer, energy, and demand.

### **3. The Department**

The Department recommended that the Commission either accept Otter Tail's proposed CCOSS, adjusted to reflect the OAG's classification of conservation-improvement-program expenses, or develop a study based on the Zero Intercept method set forth in the Electric Manual. The Department also recommended that Otter Tail adjust its CCOSS to reflect exclusion of CIP expenses.

According to the Department, the distribution system exists to serve two functions: delivering service to customers' premises (customer costs), and ensuring that the distribution system is large enough to maintain reliable service (demand costs). Based on this view of the role of the distribution system, the Department is skeptical of any theory that would allocate distribution costs based on energy consumption.

Finally, the Department did not recommend setting rates on the basis of multiple CCOSS models. The Department recommended that the Commission adopt the model that it thinks best reflects cost causation. That said, the Department stated that it could support consideration of either or both of the cost methods reflected in the Electric Manual—the Minimum System method and the Zero Intercept method.

#### 4. The Chamber

The Chamber also supported allocating costs guided by Otter Tail’s CCOSS.

The Chamber opposed relying on the Basic System and Peak-and-Average methods. The Chamber argued that these methods would fail to allocate costs to customer classes on the basis of cost causation, and would be inconsistent with prior Commission orders. The Chamber expressed concern that these methods would allocate excessive costs to Otter Tail’s commercial and industrial customers, would could make their operations uncompetitive with firms operating in an environment with cheaper electricity.

If the Commission were to adopt any or all of the OAG’s CCOSS methods, the Chamber would ask that Otter Tail apply those methods not merely for the purpose of allocating distribution plant, but for allocating generation/production plant, too. The Chamber anticipated that allocating the cost of production plant in this manner would shift costs away from commercial and industrial customers.

#### D. Commission Action

Each CCOSS in the record supports a different conclusion about the appropriate allocation of cost responsibility among Otter Tail’s customer classes, as follows:

Class	Current Apportionment	Minimum System CCOSS	Basic System CCOSS	Peak & Average CCOSS
Residential	24.67%	26.26%	24.58%	24.55%
Farms	1.59%	1.57%	1.59%	1.53%
General Service	15.95%	15.22%	15.25%	15.11%
Large General Service	50.04%	48.60%	49.63%	50.67%
Irrigation	0.20%	0.26%	0.28%	0.22%
Lighting	1.45%	1.50%	1.52%	1.50%
Other Public Authority	0.80%	0.83%	0.83%	0.83%
Water Heating Class	0.83%	1.07%	1.17%	1.04%
Controlled Service - Interruptible	3.64%	3.91%	4.31%	3.76%
Deferred Load Service	0.82%	0.78%	0.84%	0.78%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Based on the arguments of the parties, the Commission concurs with Otter Tail, the Department, the Chamber, and the ALJ that the Minimum System method is a sound basis for allocating costs among customer classes, recognizing that the number of customers as well as the amount of peak consumption influence the cost of Otter Tail’s distribution plant. The Commission also concurs with all parties on the need to re-classify CIP expenditures as energy-related costs rather than customer-related costs.

However, the Commission also concurs with the OAG on the merits of considering more than one cost study. The Electric Manual indicates that no single cost study method can be judged superior to all others in all contexts, and the choice among methods is fraught with disputes over assumptions, applications, and data.

Therefore the Commission concludes that Otter Tail's Minimum System method (modified to treat the costs of Conservation Improvement Programs as energy-related costs) provides a useful tool for apportioning Otter Tail's revenue requirement among customer classes in this proceeding. But so does the OAG's Basic System method, and its Peak and Average method. While evaluating data from a variety of models will not eliminate any model's weaknesses, it may provide a broader range of perspectives from which to evaluate the other models.

For this reason, the Commission will also direct Otter Tail, in its next rate case, to file CCOSSs using each of the methods described above—as well as the Zero Intercept method set forth in the Electric Manual.

The Zero Intercept method is similar to the Minimum System method, but through the use of statistical analysis it estimates the cost of a minimum system that is so small as to connect to all customers, yet have no actual capacity to transmit energy. In this manner the Zero Intercept method is intended to perfectly distinguish between the cost of connecting customers (a customer-related cost) from the cost of having capacity to provide electrical service to those customers (a demand-related cost).

During hearings, the parties acknowledged that conducting a Zero Intercept CCOSS would require Otter Tail to refine its data, but noted that the Company would be able to use this disaggregated data to improve its Minimum System study as well. At least for purposes of Otter Tail's next rate case, the Commission will direct the Company to refine its data and conduct additional analysis.

Finally, to address some of the challenges the OAG encountered in analyzing Otter Tail's CCOSS in this case, the Commission will also direct Otter Tail to take certain additional steps in its next rate case.

Specifically, Otter Tail must work with the OAG to update its CCOSS to address the discovery and modeling issues raised by the OAG in this proceeding. Similarly, Otter Tail must revise the method by which it calculates its peak demand allocator—whether based on a single summer peak, or a peak season—to reflect the peak demand as specified in MISO's policies governing resource adequacy. And Otter Tail must justify (and revise, if appropriate) its policies regarding the classification and allocation of advanced meters, Residential–Controlled Demand meters, or any other meters with radio load-management receivers.

## **XXVII. Sales Forecast**

### **A. Introduction**

When setting a utility's rates, the Commission must rely on an estimate of sales of utility service. These estimates influence the calculation of a utility's revenues and costs. They influence the Class Cost-of-Service Studies, discussed above. And they influence the calculation of the final rates to permit a utility to recover its costs.

### **B. Positions of the Parties**

The Department found Otter Tail's data analysis and forecast to be deficient for a variety of technical reasons.

In particular, the Department recommended that Otter Tail make two specific changes to how it conducts its next sales forecast. First, the Department recommended that Otter Tail provide spreadsheets that tie the Company's test-year customer counts to the test-year meter counts. These counts are not the same, as some customers have multiple meters. In the interest of full analysis, and given some of the challenges in the current docket, the Department proposed that Otter Tail provide this information in its pre-filed forecasting data.

Second, the Department recommended that Otter Tail not wait until the end of the calendar year to correct its data collection and billing system data when the Company is planning to file a rate case. The Department acknowledged that errors will occur in historical data, but asked Otter Tail to make an extra effort to find and correct those errors before filing a rate case. Specifically, the Department emphasized that when errors are found, the errors should be corrected in the data for the month where the error occurred—not in the month when the error was discovered.

Otter Tail disagreed with aspects of the Department's critique. But Otter Tail agreed, for purposes of the current case, not to dispute the reasonableness of the Department's sales and revenue figures set forth in surrebuttal testimony.

### **C. The Administrative Law Judge's Report**

The Administrative Law Judge's Report did not state specific findings on this issue.

### **D. Commission Action**

The Commission concurs with the Department that the shortcomings in Otter Tail's sales analysis and forecasting, set forth in the attached supplementary findings, rendered the Company's testimony unreliable. And, consistent with the positions of Otter Tail and the Department, the Commission will rely on the test-year sales and revenue analysis and figures set forth in the Department's corrected surrebuttal testimony instead.

So for purposes of this rate case, the Commission finds test-year sales of 2,640,367,131 kWh, resulting in base test-year revenues of \$173,461,633, and reducing the Company's test-year energy expense by \$31,372.

In addition, the Commission will direct Otter Tail to do the following for its next rate case:

- In its pre-filed forecasting data, Otter Tail should provide an analysis with fully linked spreadsheets that tie together the Company’s test-year customer counts and test-year meter counts.
- Prior to the initial filing and completion of future rate-case forecasts, Otter Tail should correct the data from its data collection and billing system in the same manner that it does at the end of each calendar year. If Otter Tail uses actual data in the base year as it did in this case (i.e., through August 2015), then Otter Tail should ensure that, to the fullest extent possible, all billing or other errors are corrected before the Company files its next general rate case. Moreover, Otter Tail should make such corrections to the month(s) in which the error occurred rather than the month when the error was discovered.

## RATE DESIGN ISSUES

### XXVIII. Interclass Revenue Apportionment

#### A. Introduction

The next step in rate design is to determine the share of the utility’s revenue requirement to recover from each customer class. Otter Tail, the Chamber, the Department, and the OAG all agree that the Commission should consider the cost Otter Tail incurs to provide service to each class, as reflected in a CCOSS, as a principal factor in apportioning revenue responsibility. And these parties also agree that cost should not be the Commission’s sole consideration. But the parties disagree about the method to calculate a CCOSS, and about the weight to be given to cost and non-cost factors.

#### B. Positions of the Parties

The parties’ positions on revenue apportionment are reflected in the following table:

Class	Current Apportionment	Proposed Apportionment			
		Otter Tail	Chamber	Dept.	OAG
Residential	24.67%	25.05%	25.86%	24.67%	24.66%
Farms	1.59%	1.58%	1.58%	1.57%	1.59%
General Service	15.95%	15.84%	15.41%	15.72%	15.87%
Large General Service	50.04%	49.67%	48.96%	50.04%	49.99%
Irrigation	0.20%	0.22%	0.24%	0.21%	0.22%
Lighting	1.45%	1.49%	1.48%	1.50%	1.50%
Other Public Authority	0.80%	0.82%	0.82%	0.83%	0.83%
Water Heating Class	0.83%	0.85%	1.01%	0.87%	0.85%
Controlled - Interruptible	3.64%	3.70%	3.84%	3.81%	3.71%
Deferred Load Service	0.82%	0.78%	0.79%	0.78%	0.79%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## **1. The Chamber**

The Chamber stated that it developed its proposal by relying on the Company's Minimum System CCOSS, to the exclusion of any other cost study, and generally by shifting each class's apportionment to be closer to the amount specified in the cost study. Of the four parties participating in this issue, the Chamber adhered most closely to the results of a CCOSS. The Chamber also proposed the greatest increase to the Residential class's share of costs, and the greatest decrease to the Large General Service class's share.

## **2. Otter Tail**

Similar to the Chamber, Otter Tail also relied on its Minimum System CCOSS to the exclusion of the other cost studies in the record. And while Otter Tail also proposed to shift the apportionments closer to the levels set forth in its CCOSS, it proposed smaller shifts than the Chamber. Otter Tail argued that its proposal strikes the appropriate balance between adopting a cost-based apportionment as reflected in the Minimum System CCOSS, and addressing non-cost factors such as maintaining continuity with the existing apportionment.

## **3. The Department**

Like Otter Tail and the Chamber, the Department stated that it developed its apportionment proposal guided by no other cost study than Otter Tail's. However, the Department also emphasized the need to balance respect for the cost study with respect for statutory duties to avoid unreasonable discrimination, to encourage energy conservation and the use of renewable sources of energy, to consider customers' ability to pay, and to resolve doubts as to reasonableness in favor of the customer.

The Department followed certain guidelines when developing its recommendation for revenue apportionment. The Department was willing to propose that certain classes begin bearing the full apportionment proposed by the CCOSS. In particular, two rate classes—Controlled Water Heat and Interruptible—contain customers who are willing to endure service interruptions if the price is right; the Department favored setting the apportionments for these classes at cost in order to provide the most authentic price signal. But out of concern for rate shock, the Department was unwilling to recommend increasing any class's apportionment by more than 15%. Finally, the Department proposed holding constant the apportionments to the Residential and Large General Service rate classes. The Department still proposed to increase the revenue requirements for these classes, but only at the rate that the utility's overall revenue requirement increased.

The Department acknowledged that, methodological differences notwithstanding, the Department's proposed apportionment closely matched the OAG's.

## **4. The OAG**

The OAG stated that it was the only party to develop its proposed apportionment based on all three CCOSSs in the record. The OAG stated that it developed its proposal by seeking out patterns among the studies, including customer classes that all the studies identified as bearing too much revenue responsibility, or bearing too little. The OAG also identified classes that a majority of the studies identified as bearing too much cost, or too little. (The Residential Class was among those classes.) The OAG then proposed apportionments to bring each of these classes closer to the apportionments indicated by all or most of the studies.



The OAG opposed the apportionments recommended by Otter Tail and the Chamber, each of which proposed to increase the Residential Class’s revenue apportioned above the current apportionment, and above the apportionments supported by two of the three CCOSSs in the record. But the OAG found the Department’s proposed apportionment to be reasonable in result, even if the OAG did not embrace the Department’s analytical methods.

### **C. The Administrative Law Judge’s Report**

The ALJ stated that, while the Commission has the authority to design rates on the basis of its quasi-legislative judgments, the ALJ was reluctant to exercise similar prerogatives. Instead, the ALJ sought to act on the basis of the preponderance of the evidence in the record, and declined to give weight to witness opinions—including, in particular, opinions about how ratepayers might react to large shifts in rates.

Based on this analysis, the ALJ recommended that the Commission adopt the revenue apportionment proposed by the Chamber. Because this allocation most closely conformed to Otter Tail’s CCOSS, the ALJ concluded that it was reasonable, transparent, well-grounded in the record, and made the most progress in reducing inter-class subsidies and contributing to near-term stability in electricity rates.<sup>85</sup>

### **D. Commission Action**

All parties have made credible and well-supported proposals for apportioning Otter Tail’s revenue requirement. Nevertheless, the Commission finds the OAG’s proposal has the greatest support. This proposal has the advantage of incorporating insights from three distinct cost studies. It generally brings customer classes closer to bearing their appropriate burdens, but does so in a gradual manner that is less likely to provoke ratepayers. And the fact that it closely tracks the apportionment advocated by the Department further bolsters its credibility.

Consequently the Commission will direct Otter Tail to design rates based on the OAG’s proposed apportionment, set forth above.

## **XXIX. Revenue Decoupling**

### **A. Introduction**

Under traditional rate design, when ratepayers buy more energy than forecast, they pay higher bills than expected and the utility receives higher revenues. Conversely, when ratepayers buy less energy than forecast, they pay lower bills than expected and the utility receives less revenue than expected. This dynamic produces two consequences. First, the utility and ratepayers both bear the risk that sales will differ from the forecast. Second, while the Legislature directs the Commission to encourage energy conservation and efficiency, this rate design creates a disincentive for utilities to pursue policies that would decrease energy sales.

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<sup>85</sup> ALJ’s Report at ¶ 516.

*Revenue decoupling* is a type of rate design intended to align the interest of the utility and the public by severing the connection between energy sales and net revenue. Consistent with statute, the Commission has established standards for decoupling mechanisms that would operate “without adversely affecting utility ratepayers,”<sup>86</sup> and has authorized some three-year pilot programs implementing decoupling.<sup>87</sup>

In general terms, revenue decoupling operates by having the Commission identify the revenues a utility should recover. If a utility’s revenues later exceed this revenue requirement, the difference is returned to ratepayers in the form of a discount on the price of future energy consumption. If the revenues fall short of the revenue requirement, the difference is made up via a surcharge on future energy consumption. In this manner, the utility receives—and ratepayers pay—the amounts justified in the rate case.

## **B. Positions of the Parties**

### **1. Fresh Energy**

Fresh Energy recommended that the Commission direct Otter Tail to implement revenue decoupling.

Otter Tail recovers its costs of service via a two- or three-part rate. One part may increase or decrease with the passage of time (the fixed monthly charge, or customer charge). Another part increases as the amount of energy (kWhs) consumed increases (the energy or volumetric charge). And for larger customers, Otter Tail also has another bill part that increases as a customer’s maximum demand increases (the demand charge).

Fresh Energy favors a rate design whereby Otter Tail would recover its costs based largely on volumetric charges, on the theory that such charges provide a customer with the maximum incentive to pursue conservation efforts—for example, by turning off lights or investing in more efficient electric appliances. In contrast, utilities often prefer a rate design that recovers a larger share of costs via fixed charges to help stabilize utility revenues even when energy sales are low. But a rate design with higher fixed charges will have lower volumetric charges, all else being equal, frustrating Fresh Energy’s objectives. So to remove any concern about stabilizing revenues, Fresh Energy advocates revenue decoupling.

Because this rate design helps assure a utility that it will recover the amount of revenues authorized by the Commission, this rate design reduces the need for other revenue-stabilizing strategies such as higher fixed monthly customer charges.

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<sup>86</sup> See Minn. Stat. § 216B.2412, subd. 2; *In the Matter of a Commission Investigation Into the Establishment of Criteria and Standards for the Decoupling of Energy Sales from Revenues*, Docket No. E,G-999/CI-08-132, Order Establishing Criteria and Standards to be Utilized in Pilot Proposals for Revenue Decoupling (June 19, 2009) (Decoupling Order).

<sup>87</sup> See Minn. Stat. § 216B.2412, subd. 3 (authorizing pilot programs).

Even if the Commission were not persuaded to adopt revenue decoupling in the current rate case, Fresh Energy asked the Commission to direct Otter Tail to implement decoupling in its next rate case—or earlier.

## **2. OAG**

The OAG supported Fresh Energy’s proposal—on the condition that the Commission add some conditions that it has included when approving other revenue-decoupling mechanisms. These included a prohibition on rate surcharges if Otter Tail fails to demonstrate that it has achieved specified levels of conservation, a presumption that revenue decoupling would apply to the Large General Service class, and a limit on increases in certain customer charges until after “a stakeholder process to research alternative rate designs.”<sup>88</sup>

Fresh Energy supported these conditions.

## **3. Otter Tail**

Otter Tail has agreed to work with the parties to research and propose alternative rate designs prospectively. But Otter Tail opposed Fresh Energy’s proposal—not out of opposition to revenue decoupling in general, but out of concerns of adopting the practice in the context of the current proceeding.

As previously discussed, Otter Tail and the Department arrived at different forecasts of Otter Tail’s future sales. While Otter Tail ultimately decided not to contest the Department’s forecast for purposes of setting rates in this proceeding, the Company expressed concern that a misguided sales forecast might cause a revenue-decoupling mechanism to trigger substantial surcharges.

### **C. The Recommendation of the Administrative Law Judge**

The Administrative Law Judge recommended that the Commission deny Fresh Energy’s recommendation to implement revenue decoupling. Based on the Commission’s order establishing standards for adopting revenue decoupling,<sup>89</sup> the ALJ found that the Commission had placed the burden of justifying a decoupling proposal on the party making the proposal—in this case, on Fresh Energy. And the ALJ concluded that the record in this docket left too many matters unresolved to find that Fresh Energy had borne its burden.<sup>90</sup>

### **D. Commission Action**

The Commission appreciates Fresh Energy’s arguments in support of revenue decoupling. The Commission is already persuaded of the merits of revenue decoupling generally, as demonstrated by its prior decisions approving this rate design, and no party to the current proceeding has opposed it. Thus, the issue before the Commission is not the merits of revenue decoupling generally, but as applied to Otter Tail in the current docket.

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<sup>88</sup> OAG’s Initial Brief, at 91.

<sup>89</sup> See Decoupling Order, *supra*.

<sup>90</sup> ALJ’s Report ¶¶ 609–614.

As Fresh Energy observes, revenue decoupling is designed to remove a utility's disincentive to pursue conservation. But in this case, the record reveals that Otter Tail has been diligent in pursuing conservation efforts and achieving conservation targets. It is unclear how much more conservation the Commission should expect from a change in rate design.

Moreover, as Otter Tail argued, the size of a decoupling mechanism's surcharges and refunds will depend on the accuracy of a utility's sales forecasts. All forecasts are inaccurate because the future is uncertain. But a recent surge in sales resulting from one specific customer has complicated the ability to anticipate future growth rates, as reflected in the disputes between Otter Tail and the Department.

In sum, Otter Tail is already demonstrating an admirable commitment to conservation, while the record poses an unusual challenge for forecasting Otter Tail's future sales. For these reasons the Commission will adopt the ALJ's recommendation and decline to compel Otter Tail to implement revenue decoupling at this time.

Instead, the Commission will accept Otter Tail's offer to research alternative rate design—and to work with stakeholder groups in this effort—culminating in an alternative rate design proposal.

Specifically, by April 1, 2018, Otter Tail must prepare a report analyzing the potential customer impacts of Fresh Energy's proposed revenue-decoupling mechanism for the Residential, Farm, and Small General Service rate classes. The report must include a comparison of actual 2016 and 2017 revenues to 2016 Test Year baseline revenues (with baseline revenue per customer calculated using the final rates, sales, and customer counts of this rate case). And it must include a comparison of actual 2014 and 2015 revenues to 2009 baseline revenues (baseline revenue per customer calculated using the final rates, sales, and customer counts from Otter Tail's 2010 rate case<sup>91</sup>).

Interested parties will be invited to file comments on the report to address how any proposed change would affect specific customers or classes, and potential strategies for implementing a decoupling mechanism for Otter Tail, among other matters.

### **XXX. Monthly Customer Charge**

#### **A. Introduction**

As previously discussed, Otter Tail assesses charges to members of each customer class based on a two- or three-part rate. One part consists of a fixed monthly customer charge, designed to recover the fixed costs of serving a customer. Another part consists of a distribution charge that varies with the amount of electricity a customer uses. And for certain classes of larger customers, Otter Tail also assesses a monthly demand charge reflecting the peak amount of electricity the customer uses.

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<sup>91</sup> *In the Matter of the Application of Otter Tail Power Co. for Authority to Increase Rates for Electric Service in Minnesota*, Docket No. E-017/GR-10-239.

The forecasted sum of the revenues from a class’s customer charge, distribution charge, and demand charge must equal the class revenue apportionment. Thus rate design poses a tradeoff: the choice to reduce any one component of these charges must result in an increase to another component. For customers that do not pay a separate demand charge—such as residential customers—an increase in the customer charge will have the effect of reducing the volumetric distribution charge, and vice versa.

In the absence of revenue decoupling, utilities generally favor increased customer charges to make total bills and revenue collections more stable by reducing the share of a class’s revenue requirement to be recovered on the basis of energy consumption, which varies month to month.

**B. Positions of the Parties**

**1. Otter Tail**

Otter Tail proposed increasing its schedule of fixed customer charges, including the following:

**Proposed Fixed Charge Increases (\$/month)**

<b>Class</b>	<b>Current</b>	<b>Proposed</b>	<b>Increase</b>
Residential	\$8.50	\$13.30	56%
Residential—Controlled Demand	\$11.00	\$17.00	55%
Small General	\$15.50	\$21.50	39%
General (secondary)	\$19.00	\$35.00	84%

Otter Tail noted that once the Commission establishes the amount of money each customer class must contribute toward covering the utility’s revenue requirement, rate design becomes a zero-sum exercise for a customer class: a change in any one rate component—say, an increase in the customer charge—must be offset by an opposite change in another component—say, a decrease in the volumetric rate.

But while changes in billing components cannot change the class’s revenue requirement, these changes can change how much individual members of the class contribute toward reaching the revenue requirement. A rate design with higher customer charges and lower volumetric charges will decrease the bills for households with higher consumption and increase the bills for households with lower consumption. A rate design with lower customer charges and higher volumetric charges would have the opposite result. Otter Tail characterized these differences as *intra-class subsidies*.

Generally Otter Tail sought to set fixed customer charges to recover fixed components of providing service, as established in Otter Tail’s incremental cost study. Otter Tail argued that this provided a cost-based method for determining the appropriate tradeoff between larger fixed charges and larger volumetric charges.

While other parties objected that Otter Tail's proposals would result in an excessively large increase in the monthly customer charge, especially for the Residential Class, Otter Tail argued that these concerns were misplaced. Otter Tail reasoned that the choice to moderate the increase in the customer charge necessarily entails a choice to enhance the increase in the volumetric rates. The customer class would bear the increased costs, regardless.

In support of its proposed rate design, Otter Tail documented how its service area differs from the service areas of other utilities. Otter Tail serves relatively small communities—many lacking access to natural gas. People who heat with electricity will consume more electricity than people who heat with gas, all else being equal, and thus would bear a greater burden if the Commission were to set the volumetric charge high and the customer charge low.

In the absence of rate decoupling, Otter Tail emphasized the role of fixed customer charges in helping utilities and ratepayers stabilize the size of bills, and thus stabilize the utility's revenues. Recovering fixed costs via volumetric rates can have the effect of discouraging energy consumption, which can have the effect of depriving a utility of the opportunity to recover its fixed costs. Thus Otter Tail concluded that raising customer charges, and lowering the volumetric rate, complies with the statutory directive to encourage conservation to the maximum reasonable extent—because other rate designs simply are not reasonable.

In any event, Otter Tail cited evidence questioning the degree to which customers, especially residential customers, change their consumption of electricity in response to changes in the volumetric charge—at least regarding the magnitude of changes under discussion here.

Otter Tail argued that the atypical nature of its service area means that its residential customers are at unusual risk from intra-class subsidies. First, Otter Tail serves a higher percentage of low-income residential consumers than do other Minnesota utilities and, according to the Company, low-income households tend to consume more electricity than others. Second, Otter Tail serves a higher percentage of people living in smaller towns, especially towns without natural gas service; people who heat with electricity tend to consume more electricity than others. In each of these cases, customers would benefit from lower volumetric rates, even at the expense of higher fixed customer charges.

According to Otter Tail, intra-class subsidies also arise between single-family and multifamily residences, between urban and rural areas, and between customers with distributed generation—rooftop solar panels, for example—and customers without such generators.

Finally, Otter Tail addressed the special circumstances of households receiving Residential–Controlled Demand service. Subscribers to this service agree, in exchange for lower rates, to permit the Company to place limits on electric usage during winter months when Otter Tail's system faces peak demand. Because customers who subscribe to this service must have a more sophisticated meter than customers who subscribe to standard Residential Service, and because Otter Tail classifies meters as a customer charge, this justifies assessing a higher customer charge on the Residential–Controlled Demand class than on the Residential Class.

## 2. The Department

The Department proposed the following changes to Otter Tail's fixed customer charges:

<b>Class</b>	<b>Current</b>	<b>Proposed</b>
Residential	\$8.50	\$9.75
Residential—Controlled Demand	\$11.00	\$12.75
Small General	\$15.50	\$18.50
General (secondary)	\$19.00	\$27.00

The Department supported increasing these four customer charges to bring them closer to the marginal cost of service, and to mitigate intra-class subsidies. But the Department could not support the magnitude of the Company's proposed increases in the customer charge, which the Department found to be inconsistent with past Commission practice. While rural electric cooperatives might assess comparable customer changes, the Department argued that these cooperatives did not provide an appropriate basis for comparison with a regulated public utility. And the Department argued that the magnitude of the increases would provoke rate shock among Otter Tail's ratepayers.

Moreover, the Department argued that Otter Tail's arguments about the adverse consequences of intra-class subsidies could be overstated. The Department's own analysis confirmed that residential consumers did not substantially alter their consumption of electricity in response to a price change, and that this pattern prevailed even among low-income consumers.

## 3. The OAG

The OAG proposed the following schedule of fixed customer charges:

<b>Class</b>	<b>Current</b>	<b>Proposed</b>
Residential	\$8.50	\$8.50
Residential—Controlled Demand	\$11.00	\$11.00
Small General	\$15.50	\$14.00

That is, the OAG proposed retaining the existing schedule for the Residential and Residential—Controlled Demand classes, and decreasing the fixed customer charge for the Small General Service class.

The OAG repeated its traditional arguments in favor of lower customer charges even at the expense of higher volumetric charges: Increasing fixed charges while reducing the charge for each additional kilowatt-hour sold has the effect of undermining conservation efforts. If Otter Tail eventually must add new facilities to meet demand because the Company failed to achieve all of the available potential for conservation, ratepayers will have to bear the additional cost.

But in this case, the OAG raised additional arguments for its preference for lower customer charges.

The OAG did not disagree with Otter Tail’s theory to adjust fixed customer charges to more closely match a customer’s marginal cost. But the OAG argued that Otter Tail should have calculated marginal cost to exclude costs related to Conservation Improvement Programs, which the parties agree should be characterized as energy costs, not customer costs. And it should have calculated marginal costs using the New Customer Only method. Had it done so, Otter Tail would have concluded that the Residential class was already paying customer charges that roughly match the class’s marginal cost—and Otter Tail would have realized that the Small General Service class was paying customer charges well in excess of its marginal cost. For these reasons, the OAG proposed keeping the Residential Class’s customer charge constant, and reducing the charge for the Small General Service Class.

Regarding the Residential–Controlled Demand class, the OAG argued that the marginal cost calculation was artificially inflated by Otter Tail’s choice to treat the class’s extra meter costs as customer-related costs. The OAG argued that this class exists in order to provide Otter Tail with a means to manage demand and energy consumption of these customers during periods of peak demand. In other words, the OAG argued, the added metering cost should have been treated as demand- and energy-related costs. Indeed, the OAG suggested that the needlessly inflated customer charge may be reducing the efficiency of Otter Tail’s system by needlessly deterring customers from subscribing for this beneficial kind of residential service.

According to the OAG, if Otter Tail were to remove these added metering costs from its customer charge calculation—and instead recover these costs via the volumetric charge—it would eliminate the rationale for increasing this class’s customer charge.

The OAG acknowledged Otter Tail’s arguments about how the demographics of its service area would affect the Company’s cost of service and marginal cost calculation. But the OAG argued that these factors were already accounted for in Otter Tail’s analysis and do not warrant additional consideration.

#### 4. Fresh Energy

Fresh Energy proposed maintaining the current fixed customer charge for the Residential class:

<b>Class</b>	<b>Current</b>	<b>Proposed</b>
Residential	\$8.50	\$8.50

Fresh Energy claimed that Otter Tail failed to show that its proposed increases to the Residential customer charge would be reasonable for all residential customers.

Fresh Energy concurred in many of the arguments of the Department and the OAG. For example, Fresh Energy agreed with the Department’s rejection of using rural electric cooperatives as an appropriate basis for comparison for Otter Tail’s rates. And Fresh Energy echoed the OAG’s criticism of Otter Tail’s marginal cost study. In addition, while Otter Tail argued that the existing rate design was creating intra-class subsidies, Fresh Energy argued that all rate designs have this result: It is an inevitable result of designing a set of rates that will apply uniformly to a heterogeneous population.



### **C. The Recommendation of the Administrative Law Judge**

The ALJ found that a marginal cost study provides relevant guidance for setting customer charges. And the ALJ concluded that the marginal cost study conducted by Otter Tail provided more relevant guidance for setting customer charges than the analysis conducted by the OAG using the New Customers Only method.

While the ALJ acknowledged in the abstract the Department's concern that large increases in customer charges might provoke rate shock among ratepayers, the ALJ concluded that the record contained insufficient evidence to credit this concern.

Consequently the ALJ recommended adoption of Otter Tail's proposed customer charges for the Residential, Residential–Controlled Demand, Small General Service, and General Service (Secondary) classes, on the theory that these changes would better permit the Company to recover its fixed costs from these customers.<sup>92</sup>

### **D. Commission Action**

The Commission appreciates the rigor with which the parties have analyzed the magnitude of the monthly customer charge. The parties largely agreed on the merits of setting a fixed customer charge to permit a utility to recover its marginal cost to serve customers. But the parties disagreed about the best method for calculating that amount, and about the wisdom of implementing large changes in customer charges.

As a general proposition, the Commission concurs with the ALJ that Otter Tail's marginal-cost analysis provides an appropriate benchmark for guiding the level of customer charges. Like the ALJ, the Commission is not persuaded that the New Customer Only method is appropriate for identifying the marginal cost of all the customers within any given customer class.

The Commission agrees that Conservation Improvement Program costs should not be included in a calculation of a customer's marginal cost to Otter Tail's system, but Otter Tail made some adjustments related to this already; it does not appear that any additional adjustments, if warranted, would substantially change Otter Tail's analysis.

That said, at this time the Commission will decline to adopt Otter Tail's schedule of customer charges for the Residential, Residential–Controlled Demand, Small General Service, and General Service (Secondary) classes, for reasons articulated by the OAG and the Department.

First, as the OAG noted, the added meter costs borne by subscribers to the Residential–Controlled Demand service are more appropriately understood as demand or energy costs. These costs are incurred to benefit Otter Tail's system as a whole, not just the customer receiving electricity through the meter. Consequently the Commission concludes that they should be excluded from any calculation of these customers' marginal cost. And when these sums are excluded, the record no longer demonstrates any need to increase the customer charge for this customer class. Consequently the Commission will not authorize any increase for this customer

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<sup>92</sup> ALJ's Report ¶¶ 531, 582, 593, 597, 598, 602, and 604.

charge. Rather, the Commission will direct Otter Tail to abolish its fixed facility charge for this class, and to recover the additional cost of the relevant facilities via volumetric rates instead.

Second, the Commission concurs with the Department that, no matter how thoroughly Otter Tail calculated the marginal costs of serving the Residential, Small General Service, and General Service (Secondary) classes, the magnitude of the proposed increases are likely to provoke adverse customer reaction. Unlike the ALJ, the Commission acknowledges the expert judgment of the Department witnesses on this topic and finds it credible. Consequently the Commission is persuaded to moderate the proposed increases in the customer charge for these three customer classes in the manner proposed by the Department. Again, Otter Tail will not be deprived of the opportunity to recover its costs; it will simply recover them via the volumetric charge.

## FINANCIAL SCHEDULES

### XXXI. Gross Revenue Deficiency

The above Commission findings and conclusions result in a Minnesota-jurisdictional gross revenue deficiency for the test year of \$12,292,120, as shown below:

#### Revenue Deficiency - Minnesota Jurisdiction Test Year Ending December 31, 2016

Description	OTP - MN
Average Rate Base	\$ 487,191,827
Rate of Return	7.5056%
Required Operating Income	\$ 36,566,670
Operating Income	\$ 29,359,798
Income Deficiency	\$ 7,206,872
Gross Revenue Conversion Factor	1.705611
Gross Revenue Deficiency	\$ 12,292,120

## XXXII. Rate Base Summary

Based on the above findings, the Commission concludes that the average Minnesota-jurisdictional rate base for the test year ending December 31, 2016, is \$487,191,827, as shown below:

### Rate Base Summary - Minnesota Jurisdiction Test Year Ending December 31, 2016

Description	OTP-MN
PLANT IN SERVICE	
Production	\$ 469,760,408
Transmission	\$ 201,194,619
Distribution	\$ 206,480,733
General	\$ 43,721,118
Intangible	\$ 4,989,475
Total Plant In Service	\$ 926,146,353
RESERVE FOR DEPRECIATION	
Production	\$ (177,750,802)
Transmission	\$ (56,199,220)
Distribution	\$ (90,173,998)
General	\$ (19,350,265)
Intangible	\$ (2,461,530)
Total Reserve For Depreciation	\$ (345,935,815)
NET PLANT IN SERVICE	
Production	\$ 292,009,606
Transmission	\$ 144,995,399
Distribution	\$ 116,306,735
General	\$ 24,370,853
Intangible	\$ 2,527,945
Total Net Plant In Service	\$ 580,210,538
OTHER RATE BASE ITEMS	
Utility Plant Held for Future Use	\$ 13,813
CWIP	\$ 11,833,565
Materials & Supplies	\$ 9,408,253
Fuel Stocks	\$ 5,824,626
Prepayments	\$ 964,455

Customer Advances & Deposits	\$	(1,034,563)
Cash Working Capital	\$	4,756,352
Accumulated Deferred Income Taxes	\$	(124,785,212)
Total Other Rate Base Items	\$	<u>(93,018,711)</u>
 TOTAL AVERAGE RATE BASE	\$	<u><u>487,191,827</u></u>

**XXXIII. Operating Income Summary**

Based on the above findings, the Commission concludes that the Minnesota-jurisdictional net income for the test year under present rates is \$29,359,798, as shown below:

**Operating Income Summary - Minnesota Jurisdiction  
Test Year Ending December 31, 2016**

<u>Description</u>	<u>OTP-MN</u>
<b>UTILITY OPERATING REVENUES</b>	
Retail Revenue	\$ 196,132,378
Other Operating Revenue	\$ 7,109,372
Total Operating Revenues	<u>\$ 203,241,750</u>
<b>UTILITY EXPENSES</b>	
Production	\$ 86,806,274
Transmission	\$ 6,792,776
Distribution	\$ 7,562,530
Customer Accounting	\$ 6,541,536
Customer Service & Information	\$ 7,293,088
Sales	\$ 108,214
Administrative & General	\$ 18,694,465
Charitable Contributions	\$ 15,927
Depreciation	\$ 26,949,513
General Taxes	\$ 7,326,510
Total Operating Expenses	<u>\$ 168,090,833</u>
Net Operating Income Before Taxes & AFUDC	\$ 35,150,917
<b>TAXES</b>	
Investment Tax Credit	\$ (4,585,822)
Deferred Income Taxes	\$ 3,205,425
Federal & State Income Tax	\$ 7,762,686
Total Income Taxes	<u>\$ 6,382,289</u>
Net Operating Income Before AFUDC	\$ 28,768,628
AFUDC	<u>\$ 591,170</u>
Net Income	<u>\$ 29,359,798</u>

## ORDER

1. The following capital structure and overall cost of capital are approved:

<b>Component</b>	<b>Ratio</b>	<b>Cost</b>	<b>Weighted Cost</b>
Long-Term Debt	44.0601%	5.6229%	2.4775%
Short-Term Debt	3.4399%	2.5549%	0.0879%
Common Equity	52.5000%	9.4100%	4.9403%
Total	100.000%		7.5056%

2. Otter Tail's proposal to recover airplane costs totaling \$117,453 is approved.
3. Otter Tail shall provide more detailed, granular information on aircraft-related fixed costs and avoided costs of driving in future rate cases.
4. Otter Tail shall exclude the prepaid pension asset and OPEB liabilities and associated ADIT from test-year rate base.
5. The Commission accepts the parties' agreement to update the expected return on plan assets for qualified pension to 7.75% and update the census data for qualified pension, retiree medical, and LTD medical expense to January 1, 2016.
6. Otter Tail may use the 2012–2016 five-year average discount rates of
- a. 4.81% to calculate test-year pension expense, and
  - b. 4.63% to calculate test-year OPEB expenses.
7. Otter Tail shall make the correct adjustments to total test-year pension and OPEB expenses, those in Operations and Management expenses, and the capitalized pension and OPEB expenses.
8. The Commission denies Otter Tail's request to charge unsubscribed energy costs associated with the Company's TailWinds program to non-enrolling customers through the Energy Adjustment Rider.
9. Otter Tail shall not include test-year reagent costs and emission allowances in the base fuel costs, or adjust test-year reagent costs and emission-allowance amounts through the fuel clause adjustment.

10. The ALJ Finding of Fact 229 shall be modified as follows:

OTP's proposal to use the E8760 allocator to allocate both base fuel costs and amounts recovered through the Energy Adjustment Rider is reasonable and shall ~~should~~ be adopted. Further, OTP ~~should~~ shall only begin using the ~~40-class~~ E8760 allocation for the energy adjustment upon implementation of the new CIS in 2018. When the new system is operational, it would make allocations across the ten customer classes as recommended by the Department. Finally, OTP shall ~~should~~ submit a compliance filing at least 120 days ahead of the proposed implementation date of the new rates, consistent with the recommendation of the Department.
11. The Commission rejects ALJ Finding of Fact 219 and finds that the Cash Working Capital lag days for property taxes, Labor, and Associated Payroll Expense, and Tax Collections Available-Franchise Taxes should be adjusted as agreed upon between the Department and Otter Tail, and Cash Working Capital should be updated to reflect the Commission-approved expense levels.
12. The Commission will adopt the agreement between Otter Tail and the Chamber as follows:

The appropriate base rate amount of SPP transmission-related expense in the test year shall be \$530,000 with the differences accounted for in a tracker to track the amounts over and under on an annual basis. Otter Tail shall set up a tracker to track the amounts over and under the base amount of net costs on an annual basis.
13. Otter Tail may recover management-incentive costs in test-year expenses after removal of \$170,079.
14. Otter Tail may recover the cost of the following donations in test-year expenses:
  - a. \$9,741 for the purchase of circus tickets and grills
  - b. \$221 for other events and services
15. The Commission adopts ALJ Finding of Fact 658, amended as follows:

The Administrative Law Judge agrees and finds that OTP did not meet the presentation requirement. In its next rate case, it should produce a one-page summary of total amounts in each expense category ~~for the 2016 Test Year.~~
16. As agreed, Otter Tail shall refund any over-collection of Big Stone II generation-related development costs in its interim-rate refund.
17. The Commission adopts the Department's proposal to increase the PTCs in the 2016 test year and reduce OTP's tax expense by \$76,828.
18. The Company is authorized to true up and recover the difference between its projected PTCs in base rates and its actual PTCs in its Renewable Rider prior to the PTCs' expiration.

19. Recovery of costs of the Integrated Transmission Service Agreement with MRES is limited to \$182,500. If Otter Tail seeks recovery for such expenses in its future rate cases, Otter Tail shall provide additional detail justifying recovery.
20. The Commission does not adopt ALJ's Report ¶ 415. Otter Tail may recover 50% of its investor-relations expense.
21. ALJ's Report ¶ 444 is modified to exclude the recovery of Lignite Energy Council dues in the test year, as the Company has withdrawn that portion of its request. In future rate cases, if the Company seeks recovery of organizational dues of this nature, it must support its claim by providing information that identifies on membership invoices the amount of dues paid and the portion of dues charged for lobbying activities.
22. Regarding proration of Otter Tail's Accumulated Deferred Income Tax:
  - A. The Commission accepts Otter Tail's agreement to extend the duration of this case, leaving the record open to receive future filings from Otter Tail and the parties on this topic. Otter Tail shall continue to charge interim rates subject to refund pending subsequent Commission action.
  - B. By July 1, 2017, Otter Tail shall file a report apprising the Commission of the status of Otter Tail's request for a private letter ruling from the federal Internal Revenue Service (IRS), and summarizing Otter Tail's understanding of how the parties will implement the process set forth below.
  - C. If by August 1, 2017, the IRS issues a private letter ruling in response to Otter Tail's request, then the following shall occur:
    - 1) Otter Tail shall make a filing within 15 days of the ruling that sets forth the details of the ruling and estimates how implementing the ruling would affect rates.
    - 2) The Commission will establish a deadline for parties to file replies to Otter Tail's analysis and proposal.
    - 3) Parties may file replies.
  - D. If by July 31, 2017, the IRS has not issued its private letter ruling in response to Otter Tail's request, then Otter Tail shall do the following:
    - 1) By August 15, 2017, Otter Tail shall file its detailed proposal for implementing final rates calculated on the basis of prorated Accumulated Deferred Income Tax.
    - 2) Otter Tail shall record in its accounts a regulatory liability reflecting the difference between a revenue requirement including proration and a revenue requirement excluding proration.
    - 3) If the IRS ultimately issues a private letter ruling to Otter Tail that establishes that ratepayers paid excessive interim or final rates based on a misapplication of normalization requirements, then Otter Tail shall submit a detailed proposal for addressing the regulatory liability. Otter Tail shall file this proposal as part of Otter Tail's initial filing in its next rate case unless otherwise instructed by the Commission.



23. Regarding jurisdictional allocation of Multi-Value Projects, the Commission does not adopt ALJ’s Report ¶¶ 287-294. Otter Tail shall use All-In allocation and include the Big Stone Area Transmission Lines in the Company’s 2016 Transmission Cost Recovery Rider in Docket No. E-017/M-16-374, *In the Matter of the Petition of Otter Tail Power Company for Approval of Its Transmission Cost Recovery Rider Annual Adjustment*.
24. Regarding Class Cost of Service Studies, in its next rate case Otter Tail must take the following actions prior to and upon filing its embedded CCOSS:
- A. Work with the OAG to update its CCOSS to address the discovery and model issues raised by the OAG in this proceeding.
  - B. Calculate Otter Tail’s peak demand allocator to reflect MISO resource-adequacy rules, whether this be a single summer peak or a seasonal approach.
  - C. Address the classification and allocation of advanced meters, Residential–Controlled Demand meters and any other customers that have radio load management receivers.
  - D. File CCOSSs using the following methods:
    - The Basic System Method
    - The Peak and Average Method
    - The Zero Intercept Method
    - The Minimum System method, refined through the use of disaggregated data.
25. In designing rates, Otter Tail shall apportion revenue responsibility among its customer classes as follows:

<b>Class</b>	<b>Apportionment</b>
Residential	24.66%
Farms	1.59%
General Service	15.87%
Large General Service	49.99%
Irrigation	0.22%
Lighting	1.50%
Other Public Authority	0.83%
Water Heating Class	0.85%
Controlled - Interruptible	3.71%
Deferred Load Service	0.79%
<b>Total</b>	<b>100%</b>

26. Regarding decoupling,
- A. Otter Tail shall research, work with stakeholder groups, and propose alternative rate designs.
  - B. Otter Tail shall prepare a report analyzing the potential customer impacts of Fresh Energy’s proposed revenue-decoupling mechanism for the Residential, Farm, and Small General Service rate classes.
    - 1) The report shall include at least the following:
      - Comparison of actual 2016 and 2017 revenues to 2016 Test Year baseline revenues (with baseline revenue per customer calculated using the final rates, sales, and customer counts of this rate case); and
      - Comparison of actual 2014 and 2015 revenues to 2009 baseline revenues (baseline revenue per customer calculated using the final rates, sales, and customer counts from Otter Tail’s 2010 Rate Case (Docket No. E-017/GR-10-239)).
    - 2) Otter Tail shall file the report by April 1, 2018.
    - 3) Interested parties will be invited to file comments on the report addressing identified customer impacts, potential strategies for implementing a decoupling mechanism for Otter Tail, and other matters.

27. Regarding Otter Tail’s rate design,
- A. Otter Tail shall adopt the following schedule of fixed monthly customer charges:

<b>Class</b>	<b>Amount</b>
Residential	\$9.75
Residential–Controlled Demand	\$11.00
Small General Service	\$18.50
General (secondary)	\$27.00

- B. Regarding Residential–Controlled Demand Service, Otter Tail shall abolish the fixed facilities charge and recover the costs for fixed facilities through the volumetric rate.
28. The Commission adopts the sales analysis and forecasting set forth in the Department’s corrected surrebuttal testimony, and summarized in the attached supplementary findings on sales forecasts.
- A. For purposes of setting rates, the Commission finds test-year sales of 2,640,367,131 kWh, resulting in base test-year revenues of \$173,461,633, and reducing the Company’s test-year energy expense by \$31,372.
  - B. In its next rate case:

- 1) In pre-filed forecasting data, Otter Tail shall provide an analysis with fully linked spreadsheet that tie together the Company's test-year customer counts and test-year meter counts.
  - 2) Prior to the initial filing and completion of future rate case forecasts, Otter Tail shall correct the data from its data-collection and billing system in the same manner that it corrects its data at the end of each calendar year. If Otter Tail uses actual data in the base year as it did in this case (i.e., through August 2015), then Otter Tail shall ensure that, to the fullest extent possible, all billing or other errors are corrected before the Company files its general rate case. Moreover, when an error is discovered, Otter Tail shall make the correction to the data for the month(s) in which the error occurred rather than the month(s) in which the error was discovered.
29. Otter Tail shall, in its next rate case, provide detailed information of all the costs necessary to obtain equity in its proposed test year, and its plans for acquiring equity through the capital markets for the five years following the test year. If the Company proposes adjustments to ROE for flotation costs, it shall compare its proposal to the required information.
30. Within 30 days, Otter Tail shall make the following compliance filings:
- a. Revised schedules of rates and charges reflecting the revenue requirement and the rate design decisions herein, along with the proposed effective date, and including the following information:
    - i. Breakdown of Total Operating Revenues by type;
    - ii. Schedules showing all billing determinants for the retail sales (and sale for resale) of electricity. These schedules shall include but not be limited to:
      1. Total revenue by customer class;
      2. Total number of customers, the customer charge and total customer charge revenue by customer class; and
      3. For each customer class, the total number of energy and demand related billing units, the per unit energy and demand cost of energy, and the total energy and demand related sales revenues.
    - iii. Revised tariff sheets incorporating authorized rate design decisions;
    - iv. Proposed customer notices explaining the final rates, the monthly basic service charges, and any and all changes to rate design and customer billing.
  - b. A revised base cost of energy, supporting schedules, and revised fuel adjustment tariffs to be in effect on the date final rates are implemented.

c. A summary listing of all other rate riders and charges in effect, and continuing, after the date final rates are implemented.

31. Otter Tail shall file a computation of the CCRC based upon the decisions made herein.
32. Otter Tail shall file a schedule detailing the CIP tracker balance at the beginning of interim rates, the revenues (CCRC and CIP Adjustment Factor) and costs recorded during the period of interim rates, and the CIP tracker balance at the time final rates become effective.
33. If final authorized rates are lower than interim rates, Otter Tail shall file a proposal to make refunds of interim rates consistent with the Commission's decisions in this proceeding, including interest to affected customers.
34. Comments may be filed on all compliance filings within 30 days of the date they are filed. However, comments are not necessary on Otter Tail Power Company's proposed customer notice.
34. This order shall become effective immediately.

BY ORDER OF THE COMMISSION

Daniel P. Wolf  
Executive Secretary



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**SUPPLEMENTARY FINDINGS—SALES FORECAST**

**A. Overview of Test-Year Sales and Revenue Forecasts in Rate Cases**

1. The test year is a representative 12-month period selected by the utility, which must be based on reasonable costs and revenues, to determine appropriate rates to be charged to customers. The costs and revenues are for a 12-month period, based on current utility circumstances, but the rate case is not a projection for an actual year; instead, the rates based on this information remain in place until the Commission approves new rates in a subsequent rate case. The representative values reflect known and measurable changes that are anticipated to occur and are adjusted to remove the impacts of variable factors, such as weather. Heinen Direct, at 32.

2. Test-year sales volumes are important factors in calculating a utility's revenue requirement because sales levels directly impact both revenues and expenses, and hence, the overall revenue requirement. Because sales levels are an integral input in calculating a utility's revenue requirement, the method used to determine sales levels must be reasonable. *Id.* at 33.

3. Several rate case issues are affected by the sales forecast. For example, in designing rates, test-year sales volumes are used to allocate costs in the CCOSS, which is one of the factors used to apportion revenue responsibility. In addition, the sales forecast is used to determine any rate that is designed to recover costs per unit of sales, such as per-kilowatt hour (kWh) rider rates. Thus, the sales forecast is used to set the individual tariffed rates when final rates are set.

4. When sales are under-estimated, a utility's revenue requirement is spread over fewer units (kWh), which means that the utility would collect more revenues per unit sold than is warranted by costs. That is, customers would pay a higher rate for this energy than is reasonable. The opposite would be true (i.e., rates would be too low) if the sales forecast were too high. Therefore, reasonable sales estimates and the methodologies used to determine sales levels are a critical part of the rate-case process.

**B. Summary of Otter Tail's Test-Year Sales Methodology**

5. Otter Tail filed a future, or forecasted, test year in this proceeding. Heinen Direct, at 34. This approach was a change from Otter Tail's past practice, where Otter Tail has used historical test-years, adjusted for known and measurable changes, including in its two most recent general rate cases, the Otter Tail 2010 Rate Case,<sup>1</sup> and the Otter Tail 2007 Rate Case.<sup>2</sup> *Id.* Otter Tail also used a different sales forecast method than it employed in the Otter Tail 2010

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<sup>1</sup> *In the Matter of the Application by Otter Tail Power Co. for Auth. to Increase Rates for Electric Serv. in Minn.*, Docket No. E-017/GR-10-239 (the *OTP 2010 Rate Case*).

<sup>2</sup> *In the Matter of the Application by Otter Tail Power Co. for Auth. to Increase Rates for Electric Serv. in Minn.*, Docket No. E-017/GR-07-1178 (the *OTP 2007 Rate Case*).

Rate Case. While both analyses used ordinary least squares (OLS), the analyses are noticeably different.

6. Otter Tail used OLS regression analysis for each of its rate classes as the basis for forecasting test-year customer counts. Ex. 1 Attach. A2-A8 (Pre-Filed Forecasting Data). These models used historical data (e.g., monthly factors, yearly factors, demographic data) over the period from July 1995 to August 2015 to forecast test-year customer counts. Heinen Direct, at 35.

7. Otter Tail used an acceptable method of calculating normal weather. The Department examined the raw weather input data, and was able to replicate Otter Tail's normal weather calculations.

8. The Department examined the validity of the raw data that Otter Tail used in its sales analyses<sup>3</sup> and had concerns with the relationship between Otter Tail's raw billing cycle data and the billing month data used as an input into the regression models. Otter Tail used a novel approach that was unlike the approach taken by all other utilities in Minnesota, which use raw billing cycle data for their billing month data. To the extent that Otter Tail's adjustments to raw data are consistent, the Department did not conclude in its Direct Testimony that Otter Tail's approach was unreasonable; however, given time constraints in the proceeding, it was unable to fully reconcile these data. Otter Tail offered to further explain its collection of data prior to the next rate case, which Department Witness Mr. Heinen indicated was likely an acceptable approach going-forward. Heinen Direct, at 37-38.

9. In general, the Department did not take issue with the Company's general forecasting approach, but had concerns regarding Otter Tail's construction of certain input data and its regression model specification and results, and for that reason, conducted an alternative test-year sales analysis. Heinen Direct, at 38-39.

### **C. Concerns with Otter Tail's Input Data and Regression Analysis**

10. Otter Tail's data collection was similar to the approach in previous rate cases, but unlike the past two rate cases, Otter Tail forecasted sales instead of weather normalizing historical sales. *Id.* at 34-35. The Department observed several areas of concern in the Company's analysis and data construction. There were inaccuracies in the Company's raw weather data, unexpected changes in historical data when updated data were requested, and concerns regarding Otter Tail's construction of its weather data. There were also issues with the Company's model specifications; in particular, its use of yearly regression factors, a potential downward bias in its use per customer estimates, and a failure to account for serial correlation which resulted in inefficient regression estimates. The Department ultimately concluded that the Company's estimates are not reasonable for ratemaking purposes and conducted an alternative test-year sales forecast. *Id.* at 65-66. Two areas of concerns with the Company's data collection and forecasting analysis were: (1) certain input data into the models and (2) the specifications and testing of its models. *Id.* at 39; Heinen Surrebuttal, at 29.

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<sup>3</sup> The Department found no significant issues with Otter Tail's raw regression data. The regression data used in the analysis was CIS/A data, which matched what the Company filed in its most recent resource plan.

## **1. Concerns with Otter Tail's Input Data**

11. There were inaccuracies in historical weather data and unexpected changes to historical use per customer data. Also, Otter Tail constructed a "virtual weather station" and based its weather weights on total actual sales, not weather sensitive sales, and only for a single year. Heinen Direct, at 39-43; Heinen Surrebuttal, at 29.<sup>4</sup> There were three issues with the Company's input data, two related to the Company's specification of weather data and one related to the use-per-customer data included in its regression models. Heinen Direct, at 39.

### **a. Otter Tail Used Incorrect Hourly Data**

12. In Otter Tail's data, there were instances where zero degrees Fahrenheit was listed where there should have been temperatures logged (e.g., 75 degrees Fahrenheit). Ex. 1 Attach. A45 (Pre-Filed Forecasting Data). In its Response to DOC IR 516, the Company confirmed these issues with its input data and provided what it said was corrected weather data. Heinen Direct, at 39-40, AJH-11. Otter Tail, however, incorrectly calculated updated weather data for its Fergus Fall weather station.<sup>5</sup> The Department concluded that the Company's weather data was not reasonable. *Id.* at 40.

### **b. Otter Tail's Weather Weights**

13. A second issue was related to the weather weights Otter Tail used to create its representative weather station. Otter Tail has a large geographic area, so the use of a single weather station may result in weather inputs that are not appropriate for estimating sales. Otter Tail created its representative weather station based on weather data, weighted by sales related to a geographic area, from various weather stations in the Company's service territory.<sup>6</sup> The Department was concerned about the reasonableness of the choice of sales data Otter Tail used to allocate weights between the various weather stations. Heinen Direct, at 40-41.

14. There were two concerns regarding the sales data: the length of time used to create the sales data, and the type of weather data used to create the weather weights. *Id.* at 41. Otter Tail should have used only weather-sensitive sales data in its creation of weather weights; this approach would have ensured that the weather data was more closely aligned with the objectives of a test year. *Id.* at 41-43, AJH-12.

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<sup>4</sup> The Department made corrections to address these concerns and incorporated these updated data into its alternative test-year sales forecast. Heinen Surrebuttal, at 29.

<sup>5</sup> Because use of the Company's weather data was not reasonable, the Department corrected this error, and then calculated normal weather data that appeared to be more accurate for the Otter Tail system, and used these corrected data in its alternative analysis. Heinen Direct, at 40.

<sup>6</sup> This approach was also employed by Minnesota Energy Resources Corporation in its estimation of test-year sales in Docket No. G-011/GR-13-167, *In the Matter of a Petition of Minnesota Energy Resources Corp. for Authority to Increase Natural Gas Rates in Minnesota*.

**c. Otter Tail's Use-Per-Customer Input Data**

15. Otter Tail's use-per-customer information from January 2015 onwards was not the same as initially filed by the Company. Ex. 1 Attachs. A23-A29 (Pre-Filed Forecasting Data). That these historical data changed when Otter Tail provided updated data through June 2016, raised concerns regarding the potential stability of Otter Tail's input data. Heinen Direct, at 43; Heinen Surrebuttal, at 39 – 47.

**d. Otter Tail's Response to Concerns with Its Input Data**

16. In its Rebuttal, the Company recommended using its initially filed forecast to set rates in this proceeding.

17. The Department disagreed. Because Otter Tail decided to update certain costs in its Rebuttal Testimony, it was also necessary to fully update the sales forecast. Heinen Surrebuttal, at 32. Otter Tail's recommendation to update costs while maintaining the initially filed test-year sales forecast is not reasonable. Otter Tail's updated test-year sales were not reasonable because they were not based on updated data. Heinen Surrebuttal, at 32.

**2. Concerns Regarding Otter Tail's Model Specifications and Testing**

18. Several issues existed with Otter Tail's regression model specifications. Otter Tail used yearly factors in its regression models and which is a violation of Ordinary Least Square (OLS) regression theory. Heinen Direct, at 44-53; Heinen Surrebuttal, at 29.

**a. Yearly Factors and Joint Significance**

19. In some of its use-per-customer models, Otter Tail included various yearly factors (e.g., 1998 factor, 2003 factor), which are meant to account for the influences of various years on the model results. The Company's application of these factors was problematic. Otter Tail did not include each individual yearly factor in its models; it included only the factors that were individually significant, which was not reasonable. Heinen Direct, at 44. The Department observed that Otter Tail had incorrectly specified certain factors in regression analysis, by failing consider their related nature. In particular, Otter Tail did not test for joint significance of yearly factors.

20. Otter Tail's Rebuttal responded regarding the Company's specification of yearly binary factors. Otter Tail's explanation was not compelling in light of known changes in energy efficiency. Since the enactment of the Next Generation Energy Act, conservation savings have generally increased in Minnesota, including in Otter Tail service territory. In light of this effect and the Company's explanation, one would expect yearly factors in recent times (e.g., the last five years) to be significant; however, for the Residential rate class, the year 2005 was the last significant yearly factor. Ex. 1 at Attach. A23 (Pre-Filed Forecasting Data). Heinen Surrebuttal, at 35.

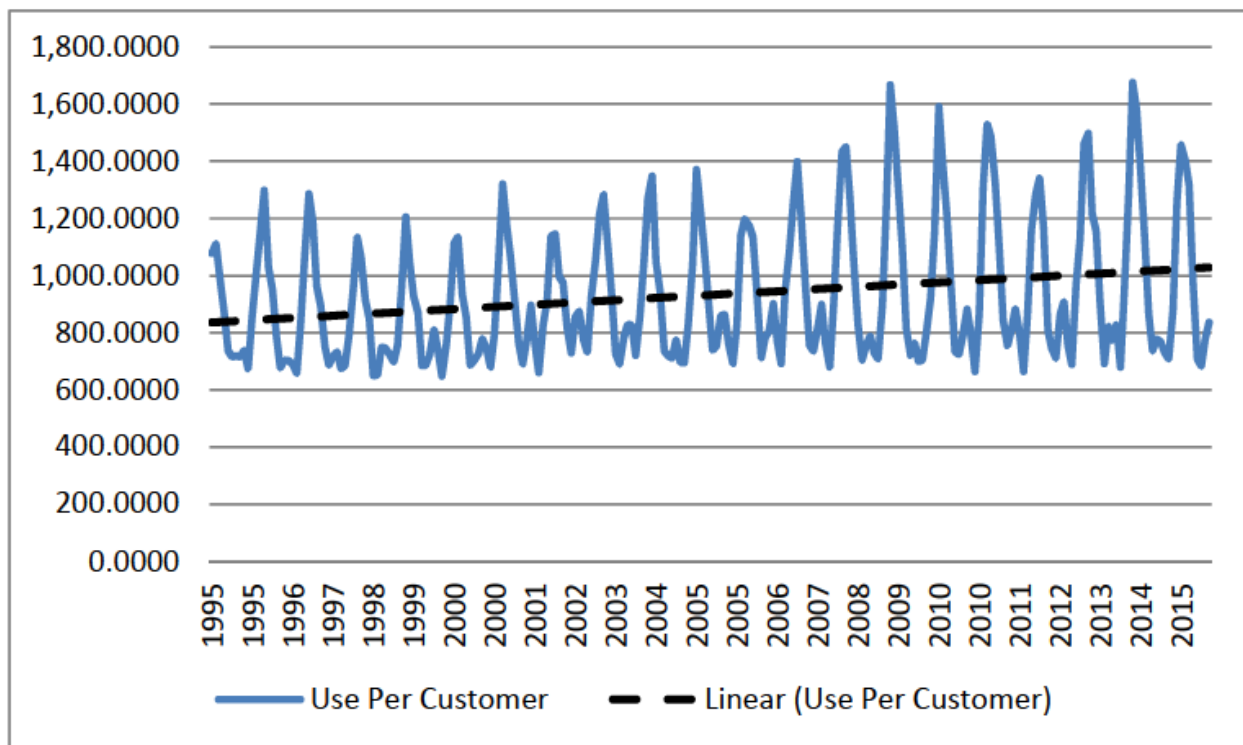


21. Otter Tail’s argument regarding downward trends in consumption in the past three years would imply that these recent yearly factors were significant, but, in fact, they were not. Heinen Surrebuttal, at 35 (citing Ex. 27 at 11 (Draxten Rebuttal)). Otter Tail’s response is not compelling; the inclusion of yearly binary factors remained a modeling concern that Otter Tail should have addressed. Because the Company failed to address the concern, the Company failed to demonstrate that its modelling is reasonable. Heinen Surrebuttal, at 35.

**b. Trend Factors**

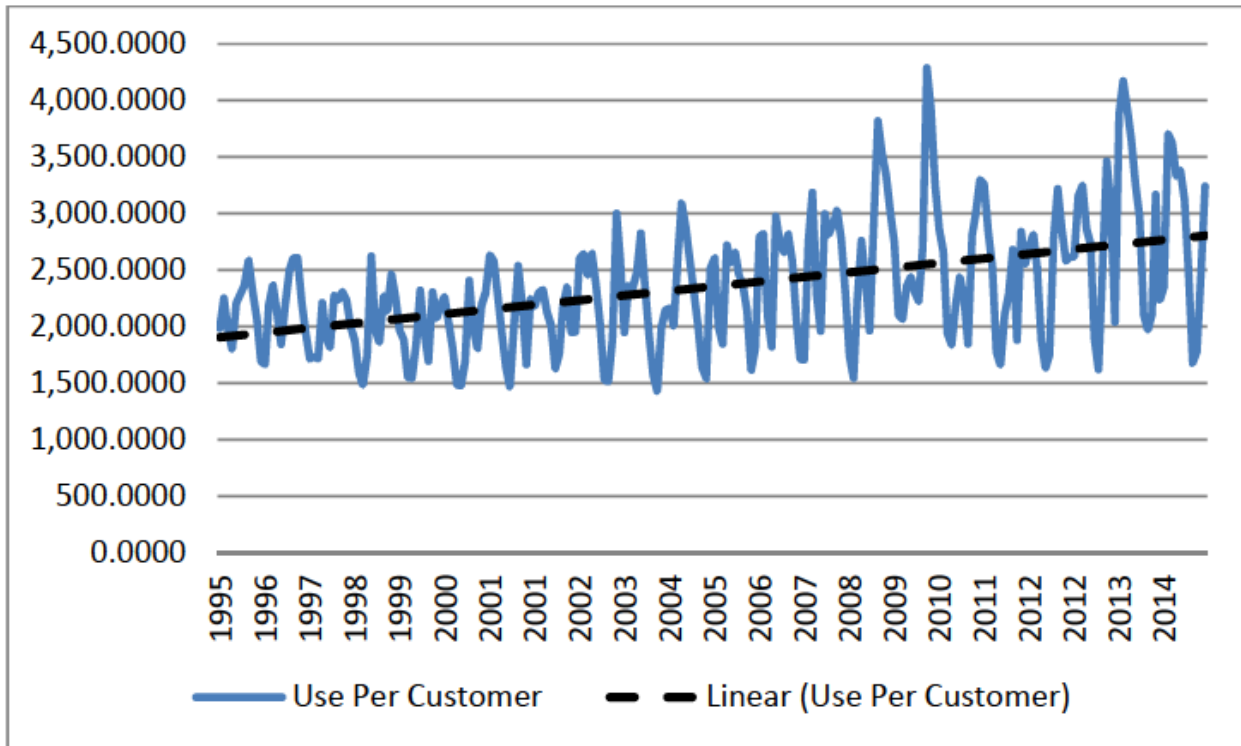
22. It was unclear from its Direct whether Otter Tail considered the inclusion of a trend factor in its analysis. The Company provided no discussion or support on this topic. Heinen Direct, at 46. The Company’s data, however, suggested the presence of a trend in Otter Tail’s historical use-per-customer data. The Department graphed the historical use-per-customer data for each of Otter Tail’s rate classes and overlaid a trend function from Microsoft Excel on the underlying data. These graphs are shown separately below:

**Heinen Direct Graph 1: Residential Use Per Customer**



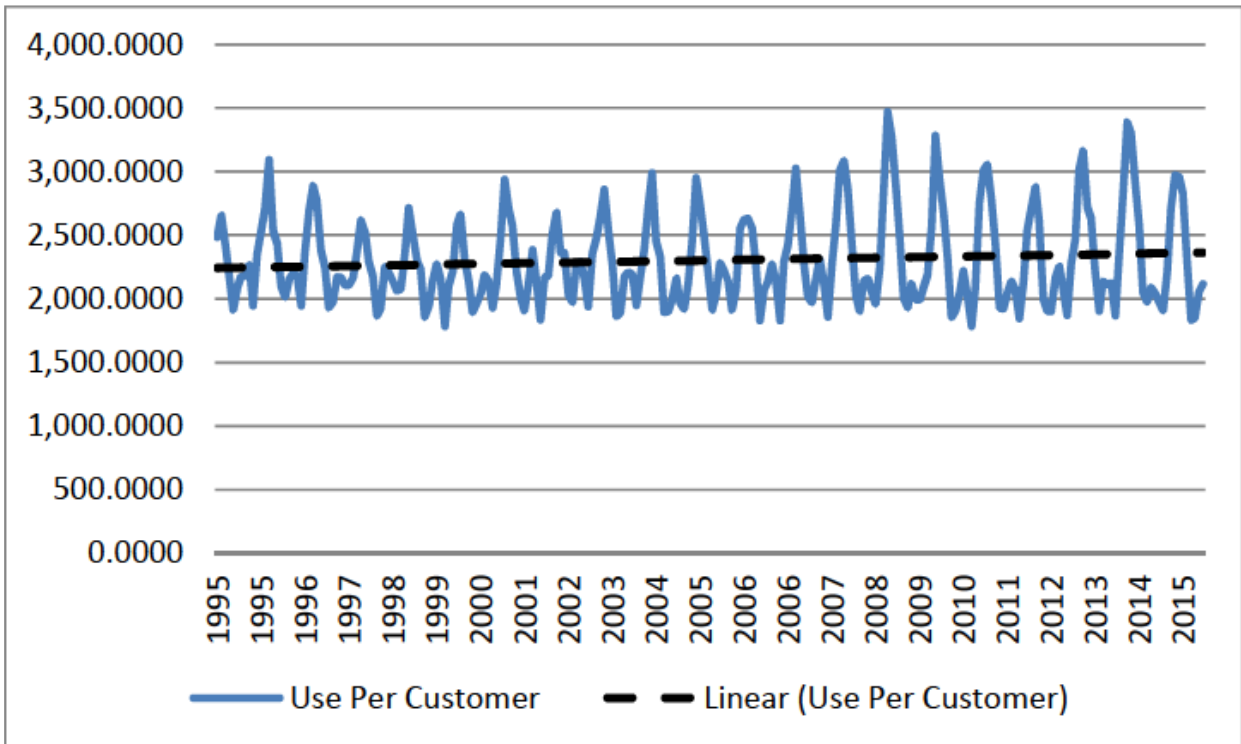
Heinen Direct, at 47.

**Heinen Direct Graph 2: Farm Use Per Customer**



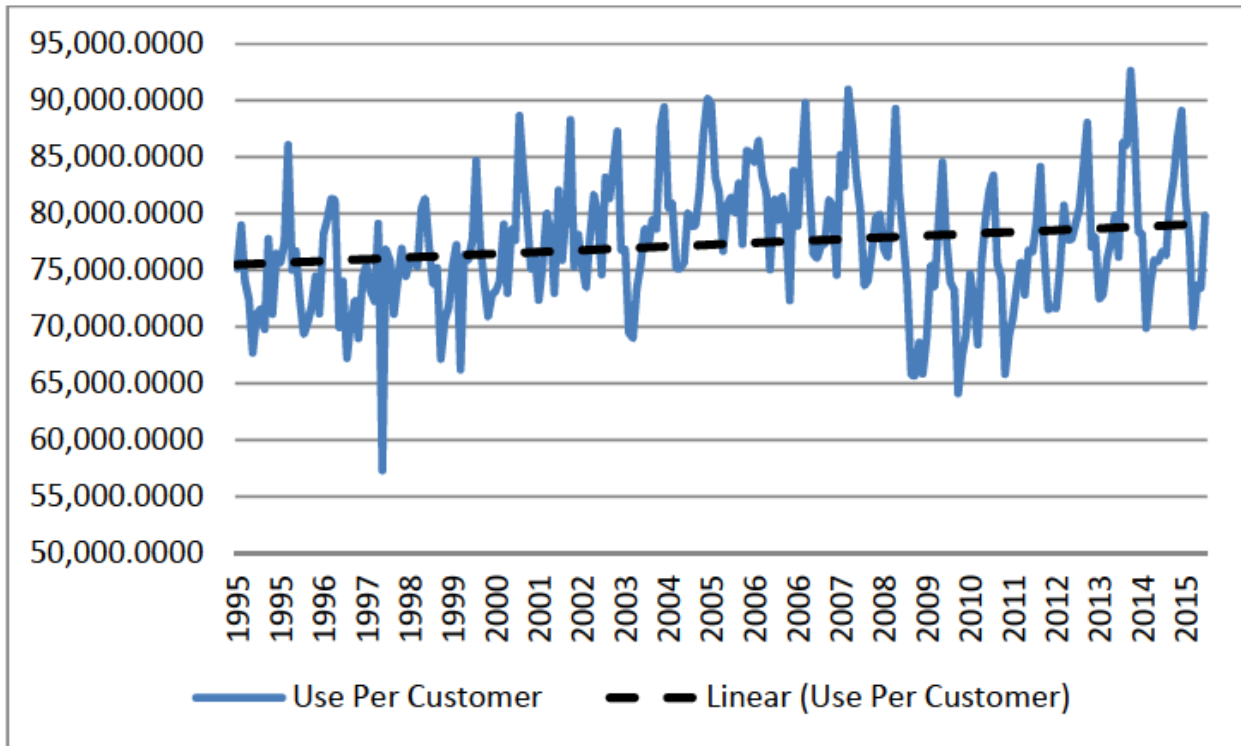
Heinen Direct, at 47.

**Heinen Direct Graph 3: Small Commercial Use Per Customer**



Heinen Direct, at 48.

**Heinen Direct Graph 4: Large General Service Use Per Customer**



Heinen Direct, at 48.

23. These graphs show a general trend upward in use per customer, for each of Otter Tail's rate classes, with some trends more marked than others. Even if the trend factor is not significant, it may still be appropriate to include a proxy, or related factor, in the regression model. The most straightforward way to test this would be to include a trend factor in each of the Company's originally-filed regression models. Heinen Direct, at 48-49. The Department did so, and included a simple trend factor in each of the Company's initial filed model specifications and the results show that a simple trend is statistically significant for all of the rate classes. The results are listed in Heinen Direct, at AJH-16. *Id.* at 49.

24. The Department was concerned that there were issues with the Company's model results. Otter Tail's originally filed forecast used data from the period of September 2015 to December 2016. As shown in Heinen Direct Table 11 below, the outcome of the regression models is the same in 2015 and 2016 for September through December; in other words, Otter Tail forecasts zero growth in its sales forecast, which contrast to the significant trends for some of its customer classes. *Id.*

Month	Residential	Farm	Small Commercial	Large Commercial
9/2015	791	2,428	2,053	77,999
10/2015	732	2,121	1,892	75,029
10/2015	903	2,846	2,223	80,004
10/2015	1,135	2,784	2,578	80,436
01/2016	1,467	3,009	3,032	84,623
02/2016	1,436	2,977	3,040	85,586
03/2016	1,258	2,675	2,704	78,247
04/2016	998	2,367	2,404	77,100
05/2015	799	1,877	1,937	71,726
06/2016	746	1,832	1,902	73,061
07/2016	813	2,368	2,079	74,968
08/2016	852	2,864	2,139	76,886
09/2016	791	2,435	2,053	77,999
10/2016	732	2,128	1,892	75,029
11/2016	903	2,852	2,223	80,004
12/2016	1,135	2,791	2,578	80,436

Heinen Direct, at 50.

25. Because the Company's forecasts showed the same level of use per customer (except for the Farm rate class), and there was evidence of increasing use per customer as shown in Graphs 1 through 4 above, the results in Heinen Direct Table 11 suggested that Otter Tail built a downward bias into its use per-customer-forecasts. Specifically, the Company failed fully to account for increasing use per customer for three of its four rate classes whose use if graphed above. Heinen Direct, at 50.

26. For the fourth rate class, the Farm Class, Otter Tail's model exhibited increasing use per customer because Otter Tail did include a Farm Earnings factor in the regression model for this rate class. The data for this factor in the forecast period grows at a steady linear pace and, in the historical period, farm earnings exhibited growth over the sample period. *Id.* Otter Tail should have specified various factors, similar to Farm Earnings, in its other rate class models. The historical data shows that, in general, use per customer increased over the past 20 years. OYP's forecast of flat growth in the last half of the test year for its Residential, General Service, and Large General Service rate class was unexpected and did not match historical use-per-customer patterns. The lack of growth in 2016 relative to 2015 suggested a downward bias in test-year sales. Because a lower forecast disadvantages Otter Tail's ratepayers by overstating the revenue deficiency, the presence of this downward bias in Otter Tail's test-year sales called into question the reasonableness of using the Company's sales forecast to set rates. *Id.* at 51.

27. In Rebuttal, Otter Tail responded to the Department's concern with the Company's decision not to include a trend factor in its regression models to account for historical growth. Otter Tail said the Department's concern was misplaced because "Structural changes" are occurring in how energy is used at the class level. The Company said that the 20 year-long historical upward trend in consumption (shown in Heinen Direct Graphs 1 through 4) should not be relied on because there had been negative growth in sales during the recent period of 2013-2015. Heinen Surrebuttal, at 36 (citing Ex. 27 at 11(Draxten Rebuttal)).

28. That customer usage has decreased during the recent three year period is not a compelling reason to find Otter Tail's sales forecast reasonable, for several reasons.

29. First, usage ordinarily may go up or down and may decrease on a (short) year-to-year basis. Heinen Surrebuttal, at 36. The selection of end points of a study may not reflect longer term trends that should be accounted for in a forecast.

30. Second, as noted above, the Next Generation Energy Act has helped reduce energy use, but it is premature to conclude based on only three years of data that consumption is now trending downward, when the previous 20 years of data suggests the presence of a noticeable upward consumption trend. *Id.*

31. Third, the last three years of data is, in fact, anomalous, given the characteristics of the Otter Tail system and recent unusual weather. That is, Otter Tail is a winter peaking electric utility and experiences higher usage in the winter, similar to a natural gas utility. Otter Tail selected consumption data over the period from 2013-2015, which included one of the coldest winters in recent memory (i.e., 2013-2014) and also one of the warmer winters in recent memory (i.e., the first part of the 2015-2016 heating season). By selecting these dates, one would expect a significant reduction in sales between calendar year 2014 and 2015, because 2014 would be set at an unusually high level of consumption and 2015 would be set at an unusually low level of consumption. See Ex. 27 at BHD-2 (Draxten Rebuttal). The Company's use of a two-year average is insufficient to determine an adequate or reasonable calculation of a trend. Heinen Surrebuttal, at 36-37.

### **c. Model Testing**

32. From the information in Otter Tail's initially-filed regression models, it was unclear whether the Company accounted for serial correlation in its regression results. Heinen Direct, at 51 (citing Ex. 1 Attachs. A23-A29 (Pre-Filed Forecasting Data)). The potential presence of serial correlation a significant issue in a regression model because it violates the OLS regression theory. If serial correlation exists, the model results are not efficient and may appear better, or more precise, than they really are. In addition, serial correlation may lead the analyst to include erroneous factors or remove relevant factors from the regression analysis, which will in turn impact the subsequent model results. If the results are inefficient, then the results of the model, and any subsequent forecast, may raise concerns about their reasonableness for ratemaking. Heinen Direct, at 51-52.

33. Otter Tail tested for serial correlation in its models and was unable to show that Otter Tail's models do not have serial correlation, which meant that the Company was unable to confirm whether its model results were efficient or correctly specified. *Id.* at 52.

34. Because of this problem, the Department conducted an alternative test to determine whether the Company's models are free of serial correlation and found the presence of serial correlation in each of the Company's originally filed use-per-customer models. *Id.* at AJH-17. These results demonstrate that Otter Tail's regression model results, and subsequent forecasts, are flawed, and likely not appropriate for ratemaking purposes. *Id.* at 52-53.

35. In Rebuttal, Otter Tail responded to these concerns regarding the presence of serial correlation in its regression models. Heinen Direct, at 51-53. Otter Tail attempted to minimize these concerns by arguing that it included the correct factors in its analysis. Otter Tail stated that it re-ran its models correcting for serial correlation which resulted in a lower estimate of use per customer. Ex. 27 at 12 (Draxten Rebuttal); Heinen Surrebuttal, at 37.

36. Because Otter Tail's filed models, which included the presence of serial correlation, resulted in a higher estimate of test-year use per customer, there is no risk to ratepayers at this time, but the Company's response in Rebuttal was not accurate and attempted to minimize serial correlation. If a model has serial correlation, the model violates the assumptions of OLS regression, which is a concern that should have been addressed. Heinen Direct, at 51-52. Even if the Company has specified, or used, the "best or most appropriate factors," serial correlation can still exist and should have been accounted for to ensure the most robust estimates and corresponding forecasts. Heinen Surrebuttal, at 37-38.

37. The Commission finds that the Company's regression models are not reasonable.

#### **D. The Department's Alternative Test-Year Sales Forecast Should Be Used**

38. Based on these concerns with the Company's data and regression models, the Department conducted an alternative test-year sales analysis in its Direct Testimony. This alternative analysis accounted for the issues observed with the Company's analysis and also used updated data through June, 2016, which required the Department to undertake a hybrid test-year analysis, using weather-normalized sales between January and June, 2016 and forecast sales between July, 2016 and December, 2016. The Department used similar models for each of the Company's rate classes, which incorporated weather, monthly factors, and autoregressive terms to estimate use per customer. Heinen Direct, at 53-61; Heinen Surrebuttal, at 30.

39. The alternative test-year sales forecast was based on OLS regression techniques and employed the same basic factors for each of the rate class regression models. These regression models estimate use per customer and arrived at test-year sales by multiplying the Company customer count figures by the Department's use per customer estimates. The alternative analysis resulted in an overall increase in test-year sales and revenues. Heinen Direct, at 66-67.

40. The Department's alternative analysis calculated weather and normal weather in the same manner that Otter Tail did, and the only difference was that the data were updated to the most recent 20-year period available and other minor adjustments such as weather station allocators. *Id.* at 54.

41. To estimate test-year use per customer with updated data through June, 2016, the Department used a hybrid estimation process. When forecasting the results for the six-month period at the end of the test year, the Department substituted normal calendar month weather data in place of billing month data in the forecasting period to arrive at normal calendar month data. *Id.* at 55. For the first six months of 2016 the Department used actual, historical data with a weather normalization adjustment, similar to the one Otter Tail used to normalize weather and calendarize data in its last rate case. Heinen Direct, at 56; Heinen Surrebuttal, at 38-39.

42. A detailed breakdown of the Department’s monthly regression and forecasting results, by rate class, were provided in Direct Testimony in *Id.* at AJH-21.

43. The total test-year sales forecast results, by rate class, and their comparison to Otter Tail’s originally filed estimates, were provided by Department witness Mr. Heinen. *See* Heinen Direct (Trade Secret), at 58 and AJH-21.

44. In its Direct Testimony, in its calculation of test-year revenue, the Department did not make adjustments to test-year customer counts, but reviewed the Company’s test-year customer counts and determined that even with updated data, Otter Tail’s originally filed customer counts were acceptable for ratemaking purposes. Heinen Direct, at 59.

**E. The Department’s Updated Alternative Test-Year Sales and Revenue Forecast**

45. Subsequent to Rebuttal Testimony, Otter Tail estimated the relationship between its updated customer counts and updates to meter counts associated with these new customer counts.

46. Using this information, the Department updated its analysis in its Surrebuttal, and modified its initial test-year sales forecast to include the updated customer counts provided by Otter Tail in its Rebuttal Testimony (Heinen Surrebuttal, at 41-42 (citing Draxten Rebuttal, Sch.1)) and provided updated individual rate class test-year sales results.

47. The Department summarized its updated total test-year sales forecast results, by rate class, and their comparison to Otter Tail’s originally filed estimates in Table S-5, and in Heinen Surrebuttal (Trade Secret), at AJH-S-6.

Heinen Table S-5: Updated DOC Rate Class Sales Figures and Adjustments

Rate Class	Dept Sales (kWh)	Otter Tail Sales (kWh)	Difference (kWh) Dept. – OTP*
Residential	572,171,258	578,103,106	(5,931,848)
Farm	43,471,612	40,915,533	2,556,079
General Service	278,247,560	271,629,716	6,617,844
Large Gen Service	Trade Secret Data	Trade Secret Data	
Pipelines	Trade Secret Data	Trade Secret Data	
Lighting	10,579,232	10,579,232	0
OPA	18,900,350	20,621,001	(1,720,651)
Total	2,640,367,131	2,641,640,337	(1,273,206)

\* A positive number indicates that the DOC's sales estimate is higher than Otter Tail's estimate, while a negative number indicates that Otter Tail's sales estimate is higher than the DOC's estimate.

Note: The Large General Service sales data are labeled trade secret to protect the sensitive nature of the Pipeline rate class.

Heinen Surrebuttal, at 43.

48. Because test-year revenue is based, in large part, on sales during the test year, it is necessary to adjust test-year revenues when there are changes in projected sales. In Surrebuttal, because the Department recommended the above changes in test-year sales, the Department also recommended an adjustment to Otter Tail's test-year revenue. *Id.* at 43.

49. The Department calculated test-year revenue using the same method it had used in Direct Testimony: *Id.*<sup>7</sup> The Department's final recommendation resulted in an increase in test-year revenue of \$293,272 and a decrease in test-year energy expenses of \$31,372, which yielded a net increase to test-year revenue of \$324,644. Heinen Surrebuttal, at 46; Ex. 518 at 1 (Heinen Summary). The updated revenue adjustments the Department recommended are in Table S-6:

Heinen Table S-6: Updated DOC Rate Class Revenue Figures and Adjustments

Rate Class	DOC Revenue	Otter Tail Revenue	Difference DOC – Otter Tail
Residential	\$42,632,292	\$42,735,029	(\$102,737)
Farm	\$2,921,507	\$2,741,585	\$179,922
General Service	\$28,163,826	\$27,521,622	\$642,204
Large Gen Service	\$86,526,003	\$86,466,549	\$59,454
Irrigation	\$391,278	\$367,579	\$23,699
Lighting	\$2,628,515	\$2,572,935	\$55,580
OPA	\$1,255,808	\$1,367,821	(\$112,013)
Water Heating	\$1,529,279	\$1,490,051	\$39,228
Control Service Interruptible	\$6,049,455	\$6,451,328	(\$401,873)
Control Service Def.	\$1,363,670	\$1,453,862	(\$90,192)
Total	\$173,461,633	\$173,168,361	\$293,272

<sup>7</sup> In addition, prior to the evidentiary hearing, Otter Tail contacted the Department and identified a calculation error in the Department's calculation of test-year revenue that resulted in an underestimation of test-year revenue. Heinen filed corrected versions in which the test-year revenues were adjusted to account for this error. *See* Heinen's corrected Surrebuttal, Ex. 512 and 513.



\* A positive number indicates that the DOC's revenue estimate is higher than Otter Tail's estimate, while a negative number indicates that Otter Tail's revenue estimate is higher than the DOC's estimate.

Note: The Large General Service sales data are labeled trade secret to protect the sensitive nature of the Pipeline rate class.

Heinen Surrebuttal, at 44

50. As detailed in Heinen Table S-6, the Department in its Surrebuttal Testimony recommended a total base test-year revenue figure of approximately \$173,461,633.<sup>8</sup> This amount represents an increase in base test-year revenue of approximately \$293,272 over Otter Tail's originally-filed proposed revenue figure of \$173,168,361. Heinen Surrebuttal, at 44-45; Heinen Surrebuttal (Trade Secret), at AJH-S-7.<sup>9</sup>

51. The base cost of energy, when applied to the Department's updated alternative test-year sales estimates decreased test-year energy expenses by approximately \$31,372. Heinen Surrebuttal, at 45, AJH-S-6. Because this amount was a decrease in test-year expenses, it increased the net effect of the Department's \$293,272 revenue adjustment.<sup>10</sup> When the decrease in energy expenses is considered alongside the increase in test-year revenue, the Department in Surrebuttal recommended a net increase to test-year revenue of approximately \$324,644.<sup>11</sup> *Id.* at 45.

## **F. Test-Year Sales and Revenue Findings, Summary and Conclusions**

52. The Commission finds that Otter Tail's test-year sales analysis and subsequent forecasting results were not reasonable.<sup>12</sup> There were issues regarding the Company's input data, and with Otter Tail's model specification and testing. There were issues with Otter Tail's input data, including historical hourly weather data, the Company's construction and specification of its weather weights, and a change in historical data when updated data were provided in discovery. Heinen Direct, at 61.

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<sup>8</sup> The Department's test-year revenue figure does not include other revenues such as those collected through riders.

<sup>9</sup> This updated result is closer to OTP's proposal than the amount in the Department's Direct Testimony, which represented an increase in test-year revenue of \$1,983,158. Heinen Direct, at 60.

<sup>10</sup> This is calculated in Heinen Surrebuttal, at AJH-S-7.

<sup>11</sup> For comparison, the amount in Direct Testimony was \$1,396,206. Heinen Direct, at 61.

<sup>12</sup> OTP proposed total system test-year sales of approximately 2,641,640,337 kWh. Ex. 1, Attach. A51 (Pre-Filed Forecasting Data). OTP proposed total test-year revenue of approximately \$222,092,895. Ex. 1 Attach. B11 (Pre-Filed Forecasting Data); Heinen Direct, at 62.

53. The Commission finds that regarding the model construction and specification, there are issues regarding Otter Tail's inclusion of yearly factors in various model specifications, the Company's failure to account for increasing use per customer in several of its regression models, and the presence of, and failure to correct for, serial correlation in its regression models. *Id.* at 61-62.

54. The Commission finds that adjustments to Otter Tail's test-year sales and revenues are needed because these problems in Otter Tail's forecasting analysis are significant and render Otter Tail's test year sales and revenues unreasonable for ratemaking purposes.

55. The Commission finds that the Department's Surrebuttal alternative test-year sales and revenue analysis and figures should be used in this rate case.

56. The Commission adopts the Department's alternative analysis in its corrected Surrebuttal, which results in test-year sales of 2,640,367,131 kWh, which is 1,273,206 kWh lower than the Company's originally filed estimate of 2,641,640,337 kWh. *Id.* at 47, AJH-S-6. When the applicable tariff rates are applied to the Department's test-year sales estimates, it results in base test-year revenues of \$173,461,633. This figure is \$293,272 greater than Otter Tail's filed base test-year revenue figure of \$173,168,361. *Id.* at 47. The recommended decrease in test-year sales results in a decrease of \$31,372 in test-year energy expense. *Id.* at 47, AJH-S-6. When the decrease in energy expenses is accounted for, along with the increase in test-year revenue, this results in a net increase to test-year revenue of approximately \$324,644 over Otter Tail's proposed test-year revenue. *Id.* at 47-48.

57. The Commission will direct Otter Tail to do the following for its next rate case:

- In its Pre-Filed forecasting data in its next rate case, Otter Tail should provide an analysis, and fully linked spreadsheets, which ties the Company's test-year customer counts and test-year meter counts together. Heinen Surrebuttal, at 46.
- Prior to the initial filing and completion of future rate case forecasts, Otter Tail should correct the data from its data collection and billing system in the same manner that it does at the end of each calendar year. If Otter Tail uses actual data in the base year as it did in this case (i.e., through August 2015), then Otter Tail should insure that, to the fullest extent possible, all billing or other errors are corrected before the Company's files its general rate case. Moreover, such corrections should be made to the month(s) in which the error occurred rather than the month when the error was discovered. Heinen Surrebuttal, at 40, 46-47.