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

In the Matter of Otter Tail Power Company's Petition for Approval of the Annual Update to Environmental Cost Recovery Rider Charge, Rate Schedule 13.08 Docket No. EL16-

PETITION OF OTTER TAIL POWER COMPANY

#### I. INTRODUCTION

Otter Tail Power Company (Otter Tail or the Company) submits this Petition to the South Dakota Public Utilities Commission (Commission) for approval of its annual update (Update) to the Environmental Cost Recovery Rate under Otter Tail's Environmental Cost Recovery Rider (ECR or Rider), Rate Schedule 13.08.

On December 10, 2014, the Commission approved Otter Tail's ECR tariff and charge for the Big Stone Plant's Air Quality Control System (AQCS) and Hoot Lake Plant's Mercury and Air Toxics Standards (MATS) projects in Docket No. EL14-082. On October 15, 2015, the Commission approved Otter Tail's first update to the ECR charge in Docket No. EL15-029. Otter Tail is now filing its second update to the ECR charge for actual and forecasted Big Stone AQCS and Hoot Lake Plant MATS project cost and revenue information through the recovery period of November 2016 through October 2017.

The AQCS project was placed in-service in December 2015. The project budget has been reduced to \$368 million compared to \$384 million as reported in the 2015 annual ECR update. The initial budget for the AQCS project was \$489 million. The updated forecast cost and revenue information in this filing includes incremental operation and maintenance expenses which commenced with the commissioning of the AQCS in December of 2015.

This update includes two tax-related items not included in previous annual updates. The first item relates to the proration of Accumulated Deferred Income Taxes (ADIT) in compliance with Internal Revenue Service (IRS) normalization rules. Otter Tail became aware of the issue

in late 2015 following the issuance of several Private Letter Rulings (PLRs) issued by the IRS. These PLRs gave insight into a tax issue Otter Tail and many utilities were not in compliance with. The proration of the incremental monthly changes in the ADIT balance uses the same methodology that was incorporated into and approved in Otter Tail's Transmission Cost Recovery Rider update in Docket No. EL15-045. The second item relates to Federal bonus tax depreciation and resulting deferred tax asset that was passed by Congress on December 18, 2015 and applies to equipment placed into service starting in 2015, including the AQCS project. The benefit of that additional bonus tax depreciation is the primary contributor to the reduced revenue requirement and rate in this update compared to the 2015 filing. Both of these tax related items are discussed in greater detail in the Revenue Requirement Components and Tracker section of this update.

The rate impact of this request **decreases** the ECR charge from \$.00643 per kWh to \$.00550 per kWh. For a residential customer using 1,000 kWh per month, the ECR charge will make up approximately 6 percent of the customer's bill.

# II. GENERAL FILING INFORMATION

# A. Name, Address, and Telephone Number of the Utility.

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# B. Name, Address, and Telephone Number of Utility Attorney.

Cary Stephenson Associate General Counsel Otter Tail Power Company 215 South Cascade Street P.O. Box 496 Fergus Falls, MN 56538-0496 Phone (218) 739-8956

# C. Title of Utility Employee Responsible for Filing.

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# D. Date of Filing and the Date Changes will Take Effect.

The date of this filing is August 31, 2016. Otter Tail proposes that the tariff mechanism for the recovery of jurisdictional costs of these environmental projects be effective on bills rendered on and after November 1, 2016.

# E. Statutes and Rules Controlling Schedule for Processing the Filing.

ARSD Part 20:10:13:15 requires a 30-day notice to the Commission of a proposed change in a utility's tariff schedule, after which time the proposed changes take effect unless suspended. Because no determination of Otter Tail's general revenue requirement is necessary, Otter Tail requests an expedited and informal proceeding, including any variances that may be necessary.

Attached to this filing is the Report of Tariff Schedule Change required by ARSD 20:10:13:26 (Attachment 1 – Report of Tariff Schedule Change).

In accordance with ARSD 20:10:13:18, Otter Tail will notify customers of the proposed changes to the ECR by posting notice thereof in each Otter Tail business office in South Dakota for at least 30 days before the change becomes effective. Otter Tail will also provide individual written notice to customers of the proposed changes in accordance with SDCL 49-34A-12. If the changes are approved by the Commission, Otter Tail will provide its South Dakota customers with individual written notice with the first bill for service under the new rate as outlined by ARSD 20:10:13:19. The proposed notice to be provided at implementation is included as Attachment 2.

By way of general statutory authority, Otter Tail's ECR rider was approved by the Commission under SDCL 49-34A-97, which grants the Commission authority to approve "a tariff mechanism for the automatic annual adjustment of charges for the jurisdictional capital cost and operating expenses incurred by a public utility for environmental improvements to its existing generation facilities." Eligible "environmental improvements" under SDCL 49-34A-97 include any "environmental improvements required under the Clean Air Act, the Clean Water Act, or any other federal law or rule, or any state law or rule implementing a federal law or rule, or voluntary environmental measures designed to protect the environment." SDCL § 49-34A-99 authorizes the Commission to approve annual rate adjustments to a tariff mechanism for environmental improvements. This filing is Otter Tail's second application for an annual rate adjustment to its ECR charge.

#### III. BACKGROUND

On December 10, 2014, the Commission approved Otter Tail's ECR tariff and charge in Docket No. EL14-082. On October 15, 2015, the Commission approved Otter Tail's first update to the ECR charge in Docket No. EL15-029 effective November 1, 2015.

Otter Tail requests to update its ECR charge to reflect actual costs incurred through July 2016 and projected costs through October 2017 pursuant to its Electric Rate Schedule 13.08. As stated earlier, the updated forecast, as of June 2016, now includes a total project budgeted amount of \$368 million (\$21.5 million Otter Tail South Dakota share) for the AQCS at Big Stone Plant. The forecast also contains AQCS operation and maintenance (O&M) expenses including depreciation and income taxes of approximately \$110,000 (Otter Tail South Dakota share) for the recovery period. Previously approved capital costs of approximately \$6.8 million (\$630,000 Otter Tail South Dakota share) for the Hoot Lake Plant MATS project are also included. As shown in the Tracker (Attachment 6), the projected revenue requirement for the AQCS and MATS projects allocated to South Dakota is \$2,546,204 less a projected over recovery for the current period of (\$239,073) and a carrying **credit of** (\$13,213) to the benefit of customers for a total revenue requirement of \$2,293,918 to be recovered through the ECR charge over the period November 1, 2016 through October 31, 2017. The current period over-collection is primarily a result of the effects of incorporating the impact of the bonus depreciation which is

described in more detail in Section V. B. of this Petition.

#### IV. PROJECT DESCRIPTIONS

# A. Big Stone Air Quality Control System

Otter Tail operates the Big Stone Plant (Big Stone) near Big Stone City, South Dakota. The Big Stone Plant is co-owned by NorthWestern Corporation d/b/a NorthWestern Energy, Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc., and Otter Tail.

Pursuant to the South Dakota Department of Environmental and Natural Resources (DENR) South Dakota Haze State Implementation Plan (SD Haze SIP), Otter Tail was required to install AQCS equipment at its Big Stone Plant to reduce emissions of sulfur dioxide (SO2) and NOX. The AQCS equipment was selected based on a Best Available Retrofit Technology (BART) determination adopted by the South Dakota DENR. The BART determination required that the AQCS include flue gas desulfurization (FGD) for SO2 reduction, and selective catalytic reduction (SCR) with SOFA for NOX reduction. The BART determination did not include mercury reduction requirements; however, at the time the AQCS was planned, it was expected that the U.S. EPA's utility boiler Maximum Achievable Control Technology (MACT) rule would require mercury reduction. Therefore activated carbon injection (ACI) was also evaluated as part of the AQCS project. As anticipated, the final MACT rule required mercury reduction. The rule is described in greater detail in the Hoot Lake Plant MATS section below. The implementing rules and the SD Haze SIP required that the Big Stone Plant AQCS be installed as expeditiously as practicable, but no later than five years from the EPA's approval of the SD Haze SIP. A copy of the relevant components of the SD Haze SIP is included in Otter Tail's North Dakota Application for Advance Determination of Prudence (ND ADP) which was included as Attachment 3 to Otter Tail's initial petition in Docket No. EL12-027. Otter Tail placed the Big Stone AQCS in service in December 2015.

In Docket No. EL12-027 the January 25, 2013 report prepared for the Commission entitled "Evaluation of Otter Tail's Air Quality Control System Project as the Least Cost Option Compared to Other Alternatives" concluded on that "[b]ased on the evaluation of Otter Tail's

IRP and the analysis conducted in the ADP proceedings in North Dakota and Minnesota, the AQCS project is found to be the least cost option compared to other alternatives."

# **Shared AQCS Costs**

As noted earlier, the total shared cost estimate for the AQCS project is now \$368 million. Otter Tail's ownership share in Big Stone is 53.9 percent, and therefore the Company is responsible for 53.9 percent of the costs or \$198 million. Approximately \$192.5 million of the shared costs, (actual and forecast) are <u>currently</u> included in the tracker. Final project settlements and retention payments are still in process. Once these settlements are complete, final estimated Salvage and Removal costs will be calculated. Otter Tail currently estimates its share of these costs to be approximately \$5 million. Otter Tail anticipates incorporating final Salvage and Removal costs into next year's update to the ECR rider, which will bring Otter Tail's total shared costs for the project to approximately \$198 million (Total Company)

# **Otter Tail Specific AQCS Costs**

In addition to Otter Tail's portion of the shared project costs, Otter Tail incurred approximately \$3 million of additional capital costs relating to its individual interest in the project, as well as \$11.9 million in AFUDC charges incurred through October 2014, prior to the project being moved into the ECR. These costs have also been included in the tracker, as incurred, over the duration of the project. Total Otter Tail specific costs for the project are approximately \$15 million (Total Company).

Otter Tail estimates its total project costs will be approximately \$213 million (Total Company), which includes Otter Tail's portion of shared project costs (\$198 million) and the additional costs incurred directly by Otter Tail relating to its individual interest in the project (\$15 million). Otter Tail's South Dakota jurisdictional share of this cost responsibility is approximately \$21.3 million (10 percent of Otter Tail's total cost responsibility).

## B. Hoot Lake Plant MATS Project

Otter Tail has upgraded the existing Hoot Lake Plant Units #2 and #3 electrostatic precipitators (ESP) to comply with the MATS. Compliance with MATS was required by April 16, 2015. Otter Tail reviewed various compliance options including retiring the Hoot Lake Plant in 2015 and replacing the generation (most likely with natural gas generation), refurbishing the Hoot Lake Plant to operate as a Coal Unit for long-term operation, or installing near-term required upgrades and planning for retirement in the 2020 timeframe. The Hoot Lake Plant MATS actual project cost was \$6.8 million, including AFUDC. The in-service date of the MATS equipment was October 2014.

# V. REVENUE REQUIREMENT COMPONENTS AND TRACKER

# A. Components of the Revenue Requirements Calculation

Attachment 3 shows the revenue requirement calculation for the Big Stone AQCS and Attachment 4 shows the revenue requirement calculation for the Hoot Lake MATS project included in the ECR. The revenue requirement for these projects includes several components as described below.

- *Rate base section*. This section provides details on the amount of plant in service, accumulated depreciation, construction work in progress (CWIP), accumulated deferred taxes, and includes a 13-month average rate base calculation.
- CWIP. SDCL § 49-34A-25.2 allows a current return on CWIP.
- *Expense section*. The expenses applicable to a project are listed here and include operating costs, property taxes, and income taxes.
- Revenue requirements section. This section shows the components of the revenue requirements. Included are the items computed from the sections previously mentioned, including expenses and return on rate base.
- Return on investment (cost of capital). The return on investment applies the cost of capital calculation approved in ECR Docket No. EL15-029. While projects are under

construction they use the year end short-term and long-term debt balance and rate as well as the year-end total company equity balance and rate. Once a project is in service the year end long-term debt balance and rate and the year-end total company equity and rate are used.

- *Depreciation expense*. Depreciation expense is calculated using Otter Tail's current composite depreciation rate.
- *Property taxes*. The property tax calculation is based on Otter Tail's composite tax rate for the jurisdiction in which the environmental retrofit facilities are located, and are calculated in accordance with the procedures specified by that state.
- O&M Expense. The Company includes O&M costs specifically associated with the
  AQCS project in this rider. Reagent costs are not included in either project. Otter Tail
  received Commission approval to collect those costs through the Fuel Adjustment Clause
  Rider on September 18, 2014 in Docket No. EL14-070.

# **B.** Details of Tax Updates

As noted earlier, in late 2015, Congress passed new Federal bonus tax depreciation legislation. The following table summarizes the time frames and bonus tax depreciation percentages approved by Congress on December 18, 2015. Equipment placed into service in these years is eligible for bonus tax depreciation.

	Bonus %	
Year	Approved	
2015	50%	
2016	50%	
2017	50%	
2018	40%	
2019	30%	

Otter Tail placed several large projects into service in 2015, including the Big Stone AQCS project, transmission projects, and other investments to its rate base. Due to the size of these investments, the use of bonus tax depreciation on these investments created a Tax Net Operating

Loss (NOL) position for Otter Tail's 2015 tax year. The impact of this NOL position is described later in this Application.

### **Accelerated Tax Depreciation increases ADIT and Reduces Rate Base**

Bonus and other accelerated tax depreciation provisions reduce the amount of actual taxes paid when tax returns are filed. Ratepayers benefit when the payment of taxes can be deferred until future periods, and the mechanics of traditional ratemaking processes take this benefit into account. Typically, when the amount of depreciation expense for tax purposes is greater than the depreciation amount computed for book purposes, the difference is accounted for as ADIT. In traditional ratemaking, including Otter Tail's riders, the ADIT balances are included as a credit in the determination of the overall rate base upon which a return is calculated. When the ADIT balances grow, as a result of accelerated depreciation, the net rate base amounts drop. As of December 2015, total ADIT for the AQCS project was approximately \$36.3 million (Total Company Share) – a credit to rate base, which results in a lower net rate base amount upon which a return is calculated.

# **NOL Carryforward Position Creates Tax Asset to Offset Future Taxable Income**

As noted above, because of the significant capital investment by Otter Tail in 2015, the impact of taking bonus depreciation created a Tax NOL for 2015. As a result, the portion of the unused tax depreciation which remains when taxable income is reduced to zero creates a Deferred Tax Asset (NOL carry forward) that can be used to offset future taxable income. Otter Tail allocates the NOL to each project by dividing the project tax depreciation by the total Company tax depreciation and applies that percent to the total 2015 forecasted NOL.

The 2015 allocated NOL applicable to the AQCS project is accounted for as a Deferred Tax Asset in the ECR, which increases rate base. The Deferred Tax Asset balance for the AQCS project at December 31, 2015 was approximately \$17.8 million (Total Company), as found in Attachment 3, line 5. In future periods, as the NOLs are applied against future taxable income, the Deferred Tax Asset balance will be reduced, lowering rate base and the associated revenue requirement. This same methodology was approved in Otter Tail's most recent TCR filing in Docket EL15-045. The incremental impact of including bonus depreciation results in a reduction

of approximately \$643,594, offset by the corresponding Deferred Tax Asset of \$176,256 for a net decrease of \$467,338 on the proposed revenue requirement.

#### **Proration of ADIT**

Since the last ECR rider update, Otter Tail became aware of an IRS rule interpretation related to the normalization of ADIT in a forward looking test year used for rate-making purposes. This matter was brought to light by a series of Private Letter Rulings issued by the IRS to a number of other utilities. IRS Regulation Section 1.167(l)(h)(6) provides that ratemaking procedures and adjustments must be consistent with normalization accounting. This section defines the procedures a company must use to normalize the impact on rate making if a company elects to use a forecast test year for rate making purposes. Specifically, this section stipulates that the monthly changes to the forecasted deferred federal tax balances, as calculated by the company, must be prorated prior to computing the average of beginning and ending balances for ADIT.

Otter Tail provides Attachment 5 to this filing detailing the impact of the Federal ADIT proration on the revenue requirement for the proposed recovery period. The methodology used for proration of ADIT in this filing is consistent with Otter Tail's last TCR Update Docket No. EL15-045. The impact of the proration of ADIT is an increase to the revenue requirement of \$10,051 during the proposed recovery period.

#### C. Tracker Balance

Otter Tail maintains a tracker account worksheet and accounting system to track and account for retail revenue requirements until all costs have been fully recovered or reflected in base rates as the result of a general rate case. The tracker account information compares Otter Tail's South Dakota jurisdictional costs, as described in section VA, and the amount recovered through South Dakota retail revenue. The tracker account balance (either positive or negative) accrues monthly carrying charges at a rate of 1/12 of Otter Tail's cost of capital times the tracker balance. Carrying charges on negative tracker balances, as is the case in this annual filing,

accrue to the benefit of retail customers in the amount of (\$13,213). The tracker balance detail is included in Attachment 6.

#### VI. RATE DESIGN

Otter Tail continues to use the rate design approved in prior ECR dockets by calculating the revenue requirement from November 2016 through October 2017 by dividing the total forecast kWh for South Dakota electric retail customers for the same period. The rate design calculation is shown on Attachment 7.

#### VII. RATE APPLICATION AND IMPACT

Otter Tail proposes that the ECR continue to be applicable to electric service under all of Otter Tail's retail rate schedules. The charge is shown on the "Environmental Cost Recovery" line on customers' bills. The proposed rate for the recovery period is as follows:

	<u>\$ / kWh</u>
All Customers	\$ 0.00550

The following table shows the estimated rate impact by retail customer class comparing the monthly bill impact of current rate that is in effect, to the proposed (reduced) rate in this filing.

Rate Class	*Average D	*Average Data			Monthly Impact		
	955	kWh/bill	avg. \$ current ECR	\$6.14			
Residential	\$82.79	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$5.25			
			<b>Proposed Change</b>	-\$0.89	-1.00%		
	1,640	avg. kWh/bills	avg. \$ current ECR	\$10.55			
Farm	\$132.43	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$9.02			
			<b>Proposed Change</b>	-\$1.53	-1.07%		
General	2,854	avg. kWh/bills	avg. \$ current ECR	\$18.35			
Service	\$228.23	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$16.47			
			<b>Proposed Change</b>	-\$2.65	-1.08%		
Large	311,119	avg. kWh/bills	avg. \$ current ECR	\$2,000.50			
General Srvc	\$17,372.08	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$1,795.16			
			<b>Proposed Change</b>	-\$289.34	-1.49%		

	1,843	avg. kWh/bills	avg. \$ current ECR	\$11.85	
Irrigation	\$128.28	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$10.63	
			<b>Proposed Change</b>	-\$1.71	-1.22%
Outdoor	83	avg. kWh/bills	avg. \$ current ECR	\$0.53	
Lighting	\$11.10	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$0.46	
			<b>Proposed Change</b>	-\$0.08	-0.66%
Municipal	2,647	avg. kWh/bills	avg. \$ current ECR	\$17.02	
Pumping	\$162.14	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$15.27	
			<b>Proposed Change</b>	-\$2.46	-1.37%
Water Heating	220	avg. kWh/bills	avg. \$ current ECR	\$1.41	
Controlled	\$14.77	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$1.21	
			<b>Proposed Change</b>	-\$0.20	-1.26%
Interruptible	2,166	avg. kWh/bills	avg. \$ current ECR	\$13.93	
Load	\$88.60	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$11.91	
			<b>Proposed Change</b>	-\$2.01	-1.96%
Deferred	2,775	avg. kWh/bills	avg. \$ current ECR	\$17.84	
Load	\$123.74	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$15.26	
	<u> </u>		Proposed Change	-\$2.58	-1.82%

<sup>\*</sup>All average data comes from Otter Tail's proposed rates in Statement I that was filed in compliance to the SD PUC's Order (Docket No. EL10-011) on April 21, 2011

The above charge has been calculated based on an expected implementation date of November 1, 2016. Revenue Requirement calculations are based on the November 2016 through October 2017 costs and forecasted prior recovery period true-up. If the effective date is significantly later than November 1, 2016, Otter Tail requests the option to recalculate the ECR charge in order to recover all approved costs in the remainder of the collection period.

# VIII. ENVIRONMENTAL COST RECOVERY RIDER RATE SCHEDULE

Otter Tail's revised Rate Schedule 13.08 is provided as Attachment 8 to this Petition, in both redline and clean.

# IX. FILING FEE

Under SDCL 49-1A-8, the Commission may require a deposit of up to fifty thousand dollars for the filing of a tariff for approval under the provisions of § 49-34A-4 and §§ 49-34A-25.1 to 49-34A-25.4, inclusive, or makes a filing pursuant to §§ 49-34A-97 to 49-34A-100. Otter Tail will pay such deposit amount as the Commission determines appropriate upon the Commission's Order assessing such fee.

# X. CONCLUSION

Otter Tail respectfully requests the Commission approve the updated ECR charge to become effective November 1, 2016, based on the tracker activity.

Date: August 31, 2016 Respectfully submitted,

OTTER TAIL POWER COMPANY

# /s/ ANTHONY HARRIS

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