

**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. EL15-___

**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 Rider Tariff and adjustment rate for the Big Stone Plant's Air Quality Control System ("AQCS") and Hoot Lake Plant Mercury and Air Toxics Standards ("MATS") in Docket No. EL14-082. This filing is Otter Tail's first update to the ECR Rate for actual and forecasted AQCS and MATS project cost and revenue information through the recovery period of November 2015 through October 2016.

The Big Stone Plant AQCS project is over 90 percent complete as of the date of this filing. The project budget is \$384 million. The initial budget for the AQCS project was \$489 million. The updated forecast cost and revenue information includes incremental operation and maintenance expenses commencing with the anticipated commissioning of the AQCS in December 2015.

Since the last ECR update filing, Otter Tail has completed the required environmental retrofit project at the Hoot Lake Plant, located near Fergus Falls, Minnesota. The initial MATS project budget was \$10 million. The final actual project costs are approximately \$6.8 million.

The Big Stone Plant AQCS and Hoot Lake Plant MATS projects are necessary for continued operation of both facilities.

Otter Tail anticipates the rate impact of this request (for both projects) will increase the ECR Rider Rate from \$.00487 per kWh to \$.00643 per kWh.

Otter Tail anticipates the rate impact of this update will be just over 9 percent of a customer's bill on average. Otter Tail estimates the rate impact will decline each year in subsequent filings.

II. GENERAL FILING INFORMATION

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

Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
Phone (218) 739-8200

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.

Pete Beithon
Manager, Regulatory Recovery
Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
(218) 739-8607

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

The date of this filing is August 31, 2015. Otter Tail proposes that the tariff mechanism for the recovery of jurisdictional costs of new environmental projects go into effect as of November 1, 2015.

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. Attachment 2 is the proposed notice to be provided at implementation.

By way of general statutory authority, Otter Tail's ECR 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 first application for an annual rate adjustment to its ECR.

III. BACKGROUND

On December 10, 2014, the Commission approved Otter Tail's ECR tariff and rate in Docket No. EL14-082. The December 10, 2014 Order, authorized implementation of in ECR rate of \$0.00487 effective with bills rendered on and after December 1, 2014 and which was calculated on a recovery period through October 2015.

Otter Tail now requests to update its ECR Charge to reflect actual costs incurred through June 2015 and projected costs through October 2016 pursuant to its Electric Rate Schedule 13.08. As stated earlier, the updated forecast includes a total project budgeted amount of \$384 million (\$21.5 million Otter Tail South Dakota share) for the AQCS at Big Stone, and 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 (O&M starts in December 2015) plus actual capital costs of approximately \$6.8 million (\$630,000 Otter Tail South Dakota share) for the Hoot Lake Plant MATS project. As shown in the Tracker (Attachment 5), the projected revenue requirement for the AQCS and MATS projects allocated to South Dakota is \$2,752,150 less a projected over recovery of the current period's costs of \$15,043 plus a carrying **credit** to the customers benefit of \$9,492 for a total cost of \$2,727,616 to be recovered through the ECR Charge over the period November 1, 2015 through October 31, 2016.

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. The Big Stone boiler was originally designed to burn lignite fuel and began operation in 1975. Designed by Babcock & Wilcox ("B&W"), the boiler is a Caroline-type balanced-draft pump-assisted radiant machine. In 1995, the boiler was converted to burn Powder River Basin ("PRB") fuel. With the conversion to PRB fuel, a simplified Separated Overfire Air ("SOFA") system was installed to reduce nitrogen oxide ("NOX") emissions. The boiler also has a flue gas

recirculation (“FGR”) system to control main steam and reheat temperatures. From the boiler, flue gas travels to two air heaters. The unit currently has a conventional pulse-jet fabric filter for control of particulate emissions that will be replaced as part of this project. Ash is currently sent to a fly ash storage silo located directly south of the plant, where it is then trucked to a landfill. Flue gas from the fabric filter flows to four centrifugal-induced draft (“ID”) fans. The ID fans discharge the flue gas to the chimney, which has two breech openings.

Pursuant to the South Dakota Department of Environmental and Natural Resources (“DENR”) South Dakota Haze State Implementation Plan (“SD Haze SIP”) Otter Tail is required to install Air Quality Control System (“AQCS”) equipment at its Big Stone Plant to reduce emissions of sulfur dioxide (“SO₂”) and NO_x. The AQCS equipment is required based on a Best Available Retrofit Technology (“BART”) determination adopted by the South Dakota DENR. The BART determination requires that the AQCS include flue gas desulfurization (“FGD”) for SO₂ reduction, and selective catalytic reduction (“SCR”) with SOFA for NO_x 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 require 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 described in Otter Tail’s North Dakota Application for Advance Determination of Prudence (“ND ADP”) which was included as Attachment 3 to Otter Tail’s previous petition in Docket No. EL12-027. Otter Tail projects that the Big Stone Plant AQCS will be in service prior to January 2016.

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.”

The total cost estimate for the AQCS project is \$384 million (2015 dollars). Otter Tail's ownership share in the Big Stone Plant is 53.9 percent, and therefore the Company is responsible for 53.9 percent of the costs or \$207 million. Otter Tail's South Dakota jurisdictional share of this cost responsibility is approximately 10 percent or \$20.7 million.

Project costs of over \$342 million (\$184 million Otter Tail share) have been incurred as of June 31, 2015. The projection for total project expenditures is an additional \$42 million (\$23 million Otter Tail share) for a total of \$384 million (\$207 million Otter Tail share).

B. Hoot Lake Plant MATS Project

Otter Tail Power 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 project original cost estimates were approximately \$10 million, however at the time of completion the actual project cost was \$6.8 million, including AFUDC (a 30 percent decrease from the estimate). 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 Environmental Cost Recovery Rider. The revenue requirement for the projects included in the Environmental Cost Recovery Rider 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") (if applicable), 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 will be listed here and include operating costs, property taxes, and, income taxes.
- *Revenue requirements section*. This section will show 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 will utilize the cost of capital similar to the approved Transmission Cost Recovery Rider (Docket No. EL13-029) for the Hoot Lake Plant MATS project. The Big Stone AQCS Project will utilize the same formula once it is in service in 2016 but include short-term debt amounts in the calculation while still under construction in 2015. The rates used for the calculations are based on the 2014 year end actual results. The rates used for the 2014 calculations were also trued up based on these figures.
- *Depreciation expense*. Depreciation expense will be calculated using Otter Tail's latest composite depreciation rate.
- *Property taxes*. The property tax calculation will be based on Otter Tail's composite tax rate for the jurisdiction in which the environmental retrofit facilities are located, and will be calculated in accordance with the procedures specified by that state.
- *O&M Expense*. The Company will set up environmental O&M accounting projects to track O&M costs specifically related to each project included in the 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. 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 and the amount recovered through South Dakota retail revenue. The tracker account balance (either positive or negative) will accrue monthly carrying

charges at a rate of 1/12 of Otter Tail’s cost of capital times the tracker balance. Carrying charges on a negative tracker balance will accrue to the benefit of retail customers and carrying charges on a positive tracker balance will accrue to Otter Tail.

Otter Tail anticipates making annual filings to revise the Environmental Cost Recovery rates to reflect updated revenue requirements and additional new environmental measure projects, if any. When submitting annual filings, the tracker account will be updated so that any over/under recovered amount at the end of the previous year will be reflected in the Environmental Cost Recovery Rider adjustment for the upcoming year. This approach ensures that no under/over recovery occurs. The tracker balance detail is included in Attachment 5.

VI. RATE DESIGN

Otter Tail’s proposes continuing the existing rate design by the calculating the revenue requirement from November 2015 through October 2016 by dividing the total forecast kWh to South Dakota electric retail customers from November 2015 to October 2016. The rate design calculation is shown on Attachment 6.

VII. RATE APPLICATION AND IMPACT

Otter Tail proposes that the Environmental Cost Recovery Rider should be applicable to electric service under all of Otter Tail’s retail rate schedules. The charge will be shown on the Environmental Cost Recovery line on customers’ bills. The proposed rate for this annual recovery period is as follows:

	<u>\$ / kWh</u>
All Customers	\$ 0.00643

The following table shows the estimated rate impact by retail customer class.

Rate Class	*Average Data	Monthly Impact		
Residential	955 kWh/bill	avg. \$ current ECR	\$4.64	
	\$82.79 avg. \$ / bill before ECR	avg. \$ proposed ECR	\$6.14	
		Proposed Change	\$1.50	1.71%

Farm	1,640	avg. kWh/bills	avg. \$ current ECR	\$7.97	
	\$132.43	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$10.55	
			Proposed Change	\$2.57	1.83%
General Service	2,854	avg. kWh/bills	avg. \$ current ECR	\$13.87	
	\$228.23	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$18.35	
			Proposed Change	\$4.48	1.85%
Large General Srvc	311,119	avg. kWh/bills	avg. \$ current ECR	\$1,512.04	
	\$17,372.08	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$2,000.50	
			Proposed Change	\$488.46	2.59%
Irrigation	1,843	avg. kWh/bills	avg. \$ current ECR	\$8.96	
	\$128.28	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$11.85	
			Proposed Change	\$2.89	2.11%
Outdoor Lighting	83	avg. kWh/bills	avg. \$ current ECR	\$0.40	
	\$11.10	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$0.53	
			Proposed Change	\$0.13	1.13%
Municipal Pumping	2,647	avg. kWh/bills	avg. \$ current ECR	\$12.86	
	\$162.14	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$17.02	
			Proposed Change	\$4.16	2.37%
Water Heating Controlled	220	avg. kWh/bills	avg. \$ current ECR	\$1.07	
	\$14.77	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$1.41	
			Proposed Change	\$0.35	2.18%
Interruptible Load	2,166	avg. kWh/bills	avg. \$ current ECR	\$10.53	
	\$88.60	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$13.93	
			Proposed Change	\$3.40	3.43%
Deferred Load	2,775	avg. kWh/bills	avg. \$ current ECR	\$13.49	
	\$123.74	avg. \$ / bill before ECR	avg. \$ proposed ECR	\$17.84	
			Proposed Change	\$4.36	3.17%

*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 rate has been calculated based on an expected implementation date of November 1, 2015. Revenue Requirement calculations are based on November 2015 through

October 2016 costs, assuming revenue collection occurs November 2015 through October 2016. If the effective date is significantly later than November 1, 2015, Otter Tail requests the option to recalculate the Environmental Cost Recovery rate 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 7 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. OTP 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 Environmental Cost Recovery Charge effective November 1, 2015, based on the tracker activity and cost recovery for the Big Stone Plant AQCS project and the Hoot Lake Plant MATS project.

Date: August 31, 2015

Respectfully submitted,
OTTER TAIL POWER COMPANY

/s/ PETE BEITHON
Pete Beithon
Manager, Regulatory Recovery
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
Phone (218) 739-8607