STATE OF SOUTH DAKOTA BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

In the Matter of Otter Tail Power Company's Request for Approval to Revise Its Fuel Adjustment Clause Rider to Include Emission Costs

Docket No.

PETITION

I. INTRODUCTION

Pursuant to South Dakota Codified Laws Section 49-34A-10 and Administrative Rules of South Dakota ("ASRD") Part 20:10:13:12, Otter Tail Power Company ("Otter Tail") hereby petitions the South Dakota Public Utilities Commission ("Commission") for approval to include in its Fuel Adjustment Clause Rider ("FAC") certain specified costs for purchased emission allowances that may be necessary to comply with the Cross-State Air Pollution Rule ("CSAPR") promulgated by the Federal Environmental Protection Agency ("EPA").¹ The CSAPR creates a regime in which allowances are required for certain emissions and existing facilities are allocated allowances based on historic heat input. It applies to Otter Tail's two fossil fuel generating plants located in Minnesota: the Solway gas peaking plant and the Hoot Lake Plant ("HLP") units 2 and 3. Given the emission allowances allocated to Otter Tail's generating plants under CSAPR, it is expected that no additional allowances will be needed to operate the Solway plant at historical levels. However, it is expected that additional CSAPR emission allowances will likely be required in order to have HLP units 2 and 3 available to serve Otter Tail's customers at the same levels as these units have operated in the recent past. FAC recovery of these emissions allowance costs will provide Otter Tail an opportunity to purchase CSAPR emission allowances to operate HLP when doing so will result in lower

¹ The rule was initially promulgated to take effect January 1, 2012, but in the course of litigation challenging the rule, it was stayed by the District of Columbia Circuit Court of Appeals. Oral Arguments relating to that litigation are scheduled for April 13th in Washington DC. Otter Tail is not a party to that litigation.

costs for customers than the cost of reducing HLP operations and purchasing replacement power.

II. GENERAL FILING INFORMATION

Pursuant to ARSD Part 20:10:01:02.03, Otter Tail provides the following general information.

A. <u>Name, address, and telephone number of utility</u>

Otter Tail Power Company 215 South Cascade Street Fergus Falls, Minnesota 56538-0496 (218) 739-8200

B. <u>Name, address, and telephone number of utility attorney</u>

Bruce Gerhardson Associate General Counsel Otter Tail Power Company 215 South Cascade Street PO Box 496 Fergus Falls, Minnesota 56538-0496 (218) 739-8475 bgerhardson@otpco.com

C. <u>Title of utility employee responsible for filing</u>

Peter J. Beithon Manager, Regulatory Recovery Otter Tail Power Company 215 South Cascade Street PO Box 496 Fergus Falls, Minnesota 56538-0496 (218) 739-8607 pbeithon@otpco.com

D. Date of filing and proposed effective date of rates

The date of this filing is March 1, 2012. Otter Tail proposes the requested revision to its FAC be effective for costs incurred beginning in 2012.

F. <u>Rule Controlling Schedule for Processing the Filing</u>

ARSD Part 20:10:13:15 requires a 30 day notice to the Commission of a proposed change in a utilities tariff schedule, after which time the proposed changes take effect unless suspended.

G. <u>Rule Controlling the Notice of the Proposed Tariff Change</u>

ARSD Part 20:10:13:18 requires utilities to post notice of proposed changes in rates and charges or rules and regulation in the business offices of the utility in the territory affected for at least 30 days before the change becomes effective. The notice shall state that proposed rates and rules and regulations are available in that office for inspection. Otter Tail will comply with this rule by posting the Notice shown in Attachment 3 in its Milbank, South Dakota, Customer Service Center.

H. <u>Rule controlling the Report of Tariff Changes</u>

ARSD Part 20:10:13:26 requires utilities to submit a report to the Commission of tariff schedule changes on notice. Included in Attachment 4, is Otter Tail's South Dakota "Report of Tariff Schedule Changes" form.

III. DESCRIPTION AND PURPOSE OF FILING

In this Petition Otter Tail requests approval to include in its FAC certain specified costs for purchased emission allowances that may be necessary to comply with the CSAPR issued by the Federal EPA on and after January 1, 2012. FAC recovery of these emissions allowance costs will provide Otter Tail with an opportunity to purchase CSAPR emission allowances to operate HLP when doing so will result in lower costs for customers than the cost of reducing HLP operations and purchasing replacement power.

The number of emission allowances that Otter Tail may need to purchase is directly related to the number of tons of coal burned by the generating plant. Therefore, the cost of these emission allowances becomes part of the cost of fuel burned.

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There are a number of uncertainties surrounding this new regulation. Several states and entities have begun legal challenges, which have resulted in a stay of the rule. Oral arguments on the rule are scheduled for April 13, 2012. In addition to the uncertainties associated with this litigation, as discussed below, because the market for allowances is not yet operating, the availability and cost of emission allowances cannot yet be predicted with any precision. If allowances are not or cannot be obtained, it is estimated the output of HLP units 2 and 3 may be reduced by as much as 60 percent.

Once the rule is in place and throughout the compliance process, Otter Tail will evaluate the lowest cost options for its customers. These options will include purchasing additional allowances and operating the plant at times and, at other times, reducing plant output and purchasing replacement energy in the market. Otter Tail is making this request for cost recovery to allow it sufficient flexibility to meet compliance requirements in a way that is the lowest cost for its customers and in the public interest.

A. <u>Background</u>

1. Otter Tail's Minnesota generating plants

Otter Tail operates two fossil fuel generating plants in Minnesota: a 47 MW gas peaking plant ("Solway plant") built in 2003 and located at Solway, Minnesota, near Bemidji, and the Hoot Lake ("HLP") coal plant at Fergus Falls, Minnesota. HLP consists of two operating units: 59 MW unit 2 built in 1959 and 85 MW unit 3 built in 1964. HLP unit 1 was retired and removed from commercial operation in 2005.

2. New Federal emission regulations

Early in 2011 the Federal EPA finalized the new CSAPR. CSAPR further regulates sulfur dioxide ("SO2") and nitrogen dioxide ("NOx") emissions from fossil fuel fired power plants located in the eastern portion of the United States. The Rule establishes two new types of SO2 allowances ("Group 1" and "Group 2") and two new types of NOx allowances ("annual" and "ozone"). Minnesota is classified as a "Group 2" SO2 state (along with 6 other states) and an "annual" NOx states (along with 22 other states). South Dakota and North Dakota are not included in CSAPR. Therefore, Otter Tail's Big Stone Plant in South Dakota and the Coyote Generating Station in North Dakota are not impacted by this new rule.

The final CSAPR was published on August 8, 2011, and was to be effective October 7, 2011, for generating plant operations on and after January 1, 2012. Generating units were allocated allowances in late October 2011. In the course of litigation challenging the rule, it was stayed by the District of Columbia Circuit Court of Appeals. Had the rule not been stayed, compliance would have been determined in early 2013 based on 2012 emissions. Because of the stay, implementation and compliance dates are unknown at the time of the filing.

Other important information regarding the CSAPR rule includes the following:

- The new rules do not rely on Title IV allowances used for the Acid Rain Program ("ARP"); however, sources will still be required to hold the ARP allowances and comply with all requirements of that program.
- The rule sets an allowance budget for each state, and then allocations are made from the state budget to each affected unit within the state. Allocations are made based on the ratio of the unit's historical heat input to the state's historical heat input. Adjustments are then made to ensure that sources do not receive more allowances than their historical maximum emissions. This allocation methodology is in contrast to the originally proposed Transport Rule for Group 2 that allocated allowances based on a unit's projected future actual emissions. The significance to HLP of this change in allocation methodology is explained below.
- If an affected unit does not have enough allowances, the unit can obtain allowances on the open market. However, a Group 2 SO2 unit can only use Group 2 SO2 allowances. Any extra allowances remaining at the end of the year can be banked for use in future years.

It should be noted that initially, prior to publication, the EPA draft CSAPR did not appear to impact Otter Tail—based on Otter Tail's evaluation of the earlier CSAPR drafts, all of Otter Tail's generating plants would be able to meet the new requirements under normal operating conditions and by using the allowances allocated pursuant to the rule as originally proposed. Therefore, operations would have been able to continue as before without purchasing additional emission allowances. However, when the final CSAPR rule was ultimately published in the Federal Register, it had been revised such that Otter Tail's HLP units 2 and 3 were unlikely to be able to meet the new requirements at normal operating levels without the purchase of SO2 emission allowances beyond those allocated to the company.

The chart below illustrates the magnitude of the difference between the proposed and final emission allowances under the rule.



3. Potential impact of CSAPR

SO2

Under the CSAPR, generating units that do not have enough allowances can obtain allowances on the open market. The CSAPR designates Minnesota as one of seven states classified as Group 2 for SO2. The CSAPR allows a utility located in a Group 2 state only to purchase allowances from other Group 2 states. A liquid market has not yet been established for these allowances. In the case of SO2 allowances, there is some indication that the Group 2 states in total will not have enough allowances available; therefore, the market price is difficult to predict. The EPA modeling suggests a market price of \$600/ton. Applying this price to the average shortfall for HLP would

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result in the cost of annual purchases of over \$1 million, about 10 percent of which would be allocated to South Dakota.

Year	Total HLP SO2 Emissions (tons)	Final HLP SO2 Allocation (tons)	Theoretical SO2 Allowance Shortfall (based on final allocation)
2010	3610	1255	(2355)
2009	2187	1255	(932)
2008	2802	1255	(1547)
2007	3574	1255	(2319)
2006	3215	1255	(1960)

The following illustrates theoretical historical shortfalls based on the final HLP SO2 allocations.

NOx

Based on the CSAPR NOx allowance allocations provided for in the rule, HLP will be close to being able to operate within its allowance budget without making additional NOx allowance purchases. The EPA modeling suggests an estimated market price of \$500/ton. The highest level of NOx emissions at HLP in the last 5 years happened in 2007. Applying the EPA modeling costs and assuming HLP has a year similar to 2007, Otter Tail would have to purchase approximately 150 annual NOx allowances for an estimated total cost of around \$75,000. The table below shows total historical HLP NOx emissions that were recalculated based on anticipated achievable emissions.

Year	Total HLP NOx	Final HLP NOx	Theoretical NOx
	Emissions (tons)	Allocations (tons)	Allowance Shortfall
2010	891	847	(44)
2009	611	847	236
2008	815	847	32
2007	1031	847	(184)
2006	916	847	(69)

Estimated Customer Impacts – Financial Impacts

Based on the information above, it is anticipated there will be some impact of the rule for HLP SO2 emissions, while the impact for HLP NOx emissions will likely be immaterial. These emission costs will apply to all of Otter Tail's South Dakota customers subject to the FAC. Based on current estimates, the potential monthly impact for an average residential customer using 1,000 kWh per month may range from \$0 to \$0.34 per month and the impact on all other customers using an average of 9,000 kWh per month may range from \$0 to \$3.00 per month—these estimates, of course, depend on the amount of credits purchased, the price and market conditions for purchased power and allowances.

IV. OTTER TAIL'S REQUEST

As explained above, the number of emission allowances that Otter Tail may need to purchase for its HLP is directly related to the number of tons of coal burned at the plant, and therefore, the cost of these emissions becomes a cost of the fuel for that plant.

S.D.C.C. § 49-34A-25 authorizes the commission to "permit a public utility to file rate schedules containing provisions for automatic adjustment of charges for public utility service in direct relation to changes in wholesale rates for energy delivered, the delivered costs of fuel used in generation of electricity, the delivered cost of gas, ad valorem taxes paid, or commission approved fuel incentives."

As described above, these allowance costs are incurred for the very purpose of permitting the consumption of delivered fuel, and therefore they are appropriate for recovery through the FAC. Also, FAC recovery of these emissions allowance costs is supported by the Commission's prior approval of FAC recovery for other revenues and costs associated with delivered fuel and delivered energy. For example, Otter Tail's currently approved Fuel Adjustment Clause Rider provides for the inclusion of all or a portion of (i) revenue from any renewable energy credits sold, (ii) expense and revenue from the MISO Ancillary Services Market ("ASM") transactions, and (iii) revenue from any allocable emission allowances sold. Additionally, without these emission allowances, Otter Tail would incur replacement energy costs which would flow through

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the FAC. Therefore symmetrical FAC treatment of these allowance costs should be approved, to avoid any disincentives that might inhibit the purchase of allowances and the operation of HLP whenever that is the most economic generation available for Otter Tail's customers.

V. REVISION TO OTTER TAIL'S FUEL ADJUSTMENT CLAUSE RIDER

In order to expressly describe the inclusion of these costs in its FAC, Otter Tail recommends the following addition to paragraph 1 of its FAC Rider, Section 13.01 of its Rate Book:

The cost of fuel shall be determined as follows:

 The expense of fossil and other fuels, including but not limited to, biomass, wood, refuse-derived fuel ("RDF"), and tire-derived fuel ("TDF"), as recorded in Account 151 of the FERC's Uniform System of Accounts for Public Utilities and Licensees, used in the Company's generating plants, <u>and the cost of emission allowances purchased after January 1, 2012, necessary for the Company to operate its generating plants in compliance with the Cross-State <u>Air Pollution Rule</u>.
</u>

Attachments 1 and 2 are redline and clean versions of the Tariff Schedule 13.01, Energy Adjustment Rider. Otter Tail will separately show the cost of any allowances purchased in its monthly FAC reports.

VI. CONCLUSION

Otter Tail respectfully requests the Commission approve the requested revision to its FAC Rider as described herein effective for costs incurred beginning in 2012.

Dated: March 1, 2012

Respectfully Submitted,

OTTER TAIL POWER COMPANY

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