

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

**IN THE MATTER OF THE PETITION OF BLACK HILLS POWER, INC. TO
ESTABLISH AN ENVIRONMENTAL MEASURES COST RECOVERY TARIFF**

**STAFF MEMORANDUM SUPPORTING
SETTLEMENT STIPULATION**

DOCKET EL11-001

Commission Staff (Staff) submits this memorandum in support of the Settlement Stipulation of May 27, 2011, between Staff and Black Hills Power, Inc. (BHP or Company) in the above-captioned matter.

BACKGROUND

On January 25, 2011, the Commission received a petition from BHP requesting the Commission approve its new tariff establishing an Environmental Improvement Adjustment (EIA) pursuant to legislation enacted during the 2007 Legislative Session.

South Dakota Codified Laws Chapter 49-34A, Sections 97 through 100 authorize the Commission to approve a tariff mechanism for the automatic annual adjustment of an electric utility's charges to recover costs incurred for environmental improvements to its electric generation facilities. Eligible costs are those incurred for 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.

The Company requests cost recovery for its share of environmental improvements made to the Wyodak Power Plant (Wyodak), jointly owned with PacifiCorp, to comply with the Regional Haze Rule (40 CFR 51). The Wyoming Department of Air Quality required a Best Available Retrofit Technology (BART) review to analyze the effects on visibility in nearby Class I areas from plant emissions. Upon completion of this review, emission control technologies were selected that achieve the emission requirements for nitrogen oxides (NO_x), sulfur dioxide (SO₂), and particulate matter (PM).

BHP proposes to recover approximately \$3,100,000 for the April 1, 2011 through March 31, 2012 revenue requirements created by its share of the environmental improvements. The Company proposed to implement the following rates per kWh to the respective customer classes effective June 1, 2011 in its initial filing:

Residential	\$0.0020
Small General Service	\$0.0015
Large General Service and Industrial	\$0.0046
Lighting	\$0.0027

Subsequently, after discovering its misclassification of some Large General Service customer sales as Small General Service sales, the Company indicated that the requested unit charges should have been stated as:

Residential	\$0.0020
Small General Service	\$0.0026
Large General Service and Industrial	\$0.0018
Lighting	\$0.0027

STAFF'S ANALYSIS AND SETTLEMENT RESOLUTIONS

Staff conducted a comprehensive review of BHP's filing, assessed the filing's compliance with the statutes authorizing the environmental improvement tariff mechanism, obtained additional information through discovery, and ultimately came to a determination based on this analysis.

Staff and BHP (jointly the Parties) positions were discussed thoroughly at settlement conferences. As a result, some party positions were modified and others were accepted where consensus was found. Ultimately, the Parties agreed on a comprehensive resolution of all issues.

A revised cost of service exhibit was filed by BHP on May 27, 2011 in support of the Settlement Stipulation. The EIA rate rider is based on estimated costs of the environmental measures subject to later "true-up" to their actual costs and actual recoveries. Exhibit A attached to the Settlement Stipulation is designed to implement the EIA rate rider upon approval by the Commission.

2011 EIA Rider

The 2011 EIA rates are based on the estimated revenue requirements associated with environmental control technologies installed on Wyodak. These environmental improvements were selected to comply with the Regional Haze Rule. Under the 1990 Clean Air Act Amendments, the Environmental Protection Agency (EPA) published the Regional Haze Rule which provides the program requirements to achieve visibility improvements in Class I areas. Staff believes these environmental measures qualify as eligible environmental improvements under SDCL-49-34A-97 as the controls fulfill requirements under the Clean Air Act.

The EIA legislation also requires consideration of whether the environmental improvements will achieve compliance at the lowest reasonable cost to ratepayers. As part of the BART review conducted in compliance with the Regional Haze Rule, technology alternatives were investigated that achieve the presumptive emission limits. One of the criteria used to evaluate potential retrofit technologies is the cost of compliance. The Wyoming Department of Air Quality reviewed the BART analysis and determined that all control technologies selected were cost effective and reasonable except the new full-scale fabric filter installed to be BART for PM (see Exhibit D of the filing).

While installing a polishing fabric filter on the existing electrostatic precipitator (ESP) would have been a more cost effective option than a new full-scale fabric filter to comply with the PM limits of the Regional Haze Rule, an upgrade to the existing ESP would not have been able to achieve compliance with other environmental requirements. The Company's analysis indicated a new full-scale fabric filter is able to achieve the 90% SO₂ removal rate required by the Air Quality Permit issued by the Wyoming Department of Air Quality. The study also showed the existing ESP was not a viable alternative to achieve the permitted SO₂ removal requirements. Furthermore, on March 16, 2011, the EPA proposed the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Coal- and Oil-fired Electric Utility Steam Generating Units (EUSGUs), or EGU maximum achievable control technology (MACT). This proposed rule is developed under the Clean Air Act and establishes emission standards for mercury, acid gases (hydrochloric acid or HCl), and PM. The full-scale fabric filter will assist in meeting the requirements contemplated under EGU MACT.

Considering all known and proposed environmental requirements, the Wyoming Department of Air Quality determined in the Wyoming Regional Haze State Implementation Plan that the costs associated with the installation of a new full-scale fabric filter are reasonable.

Also, Staff requested additional information to determine the prudence of the environmental investments. When compared to the cost per MWh of a new gas generating power plant, the cost to make the environmental improvements on Wyodak is very cost effective over the useful life of the plant. In addition, the EPA has proposed emission standards that would require significant investments in coal generation plants to bring them into compliance. BHP indicated that its assessment of the proposed rules identified five plants that would require material capital expenditures, including three plants installed before 1969. Installing the environmental improvements on Wyodak preserves a cost effective base load generation resource with a scheduled retirement date of 2030.

Unless otherwise noted, all of the changes discussed below are changes from the Company's originally filed position.

Plant in Service – The Company estimated capital costs based on actual project expenses through December 2010 and projected expenses through 2011. The settlement reflects actual project costs through April 2011 and a revised projection for the remaining 2011 costs. Although the environmental measures were completed and in-service as of May 2, 2011, final costs are not known and will be updated at the next annual filing.

Filing Fee – During discovery, BHP requested to include the filing fee as an eligible expense. The settlement accepts this adjustment. The actual amount billed to the Company will be reflected in the next annual filing.

Depreciation Expense Adjustment – The Company adjusted depreciation expense to reflect a partial year with an in-service date of April 16, 2011. The settlement reflects a depreciation expense adjustment that incorporates an in-service date of May 2, 2011.

Rate Base Adjustment for Accumulated Deferred Income Taxes (ADIT) – In developing a rate base adjustment for ADIT, the Company deducted book depreciation on the environmental investments from tax depreciation on these investments twice – once in calculating ADIT for investments depreciated at normal tax depreciation rates and again in calculating ADIT for investments eligible for “bonus” depreciation tax treatment. This effectively “double counted” book depreciation in the tax calculation. The settlement eliminates the double-count.

Cost of Capital and Rate of Return – The Company’s filing proposed to develop ECR rates from a revenue requirement that reflected the 8.26% overall rate of return (ROR) that was agreed upon in the settlement of its most recent general rate case, EL09-018. (See Commission’s August 11, 2010 Final Decision and Order, Appendix A, Confidential Findings of Fact for the derivation of this rate of return and for Staff’s statement in support thereof.) The Company intended also to use this same rate of return in future “true-ups” of actual costs and revenues. Staff does not support these applications of the 8.26% ROR in the ECR filing for two reasons.

First, the passage of time since Black Hills’ rates were reviewed in EL09-018 called for a more current review of the Company’s capital structure, debt and equity costs. Both capital structure changes (unless such changes are significant and potentially uneconomic) and changes in debt costs can and should be addressed here through the ECR true-up mechanism by using the Company’s actual capital structure and actual debt costs applicable to the true-up periods and, for the initial rate determination, by updating these elements to current levels. For reasons of practicality, Staff supports the Settlement’s use of these elements as of dates certain -- March 31, 2011 for the initial rate determination (rates to be effective June 1, 2011) and as of March 31 preceding each annual true-up period. **Begin Confidential**

End Confidential

Second, unlike a general base rate determination that involves developing rates that are designed to provide the utility with a *reasonable opportunity* in the future to recover its costs, including a fair return on its plant investment, the ECR rate mechanism establishes an initial rate based on partly estimated costs and projected revenues and then provides for a true-up of these estimates to reflect actual costs and revenues collected. That is, the ECR mechanism is conceived to substitute a *guaranteed recovery* for the *opportunity to recover pro forma costs* in a base rate case. Using the overall rate of return from Black Hills’ earlier base rate case would be inconsistent with the actual cost recovery objective of an ECR rate mechanism. **Begin Confidential**

End Confidential

The effect of these elements of the Settlement Stipulation is to reduce the 8.26% ROR proposed in the Company's filing to 8.16% for the determination of the initial ECR rate to be effective June 1, 2011.

The net effect of these changes is an estimated revenue requirement of \$3,098,568 associated with the environmental controls. The revised EIA rates per kWh for the respective customer classes effective June 1, 2011 would be:

Residential	\$0.0021
Small General Service	\$0.0026
Large General Service and Industrial	\$0.0018
Lighting	\$0.0027

Other Issues

Annual Filings – The Company proposed to file the annual rate adjustment by April 30th of each year for rates effective June 1st. Staff believes additional time is necessary to adequately review the filing. The settlement changes the filing deadline to February 15th of each year for projected environmental capital costs, expenses, and recoveries. A supplemental filing to reflect actual financial information for the period of April 1st to March 31st will be filed no later than April 30th of each year.

Rate Design – The Company proposed allocating the revenue requirement to customer classes based on the production capacity allocator from its most recent rate case, Docket EL09-018. The actual rate per kWh would be determined by dividing (a) the allocated revenue requirements, by (b) the forecasted kWh sales for June 1, 2011 through May 31, 2012. Staff supports the Company's proposal with the condition that this method of revenue distribution be reviewed by Staff at the next general rate filing or preparation of an updated class cost of service study.

Reasonableness of Overall Earnings from Regulated Rates – The Company has agreed to file, by June 1 of each year beginning in 2012, an annual report with the Commission detailing its South Dakota jurisdictional earnings for the preceding calendar year. Staff believes the report is necessary to monitor the Company's earnings and the potential effect of adding the EIA to its South Dakota tariff. This requirement will exist only as long as the Company is receiving revenue from the EIA.