# STAFF MEMORANDUM

**TO:** COMMISSIONERS AND ADVISORS

**FROM:** BRITTANY MEHLHAFF, PATRICK STEFFENSEN, ERIC PAULSON, AND KAREN CREMER

**RE:** Docket EL15-008 - In the Matter of the Application of Black Hills Power, Inc. for Approval of its 2015 Environmental Improvement Adjustment

**DATE:** May 19, 2015

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Commission Staff (Staff) submits this Memorandum in support of the Settlement Stipulation of May 19, 2015, between Staff and Black Hills Power, Inc. (BHP or Company) in the above captioned matter.

## BACKGROUND

On February 13, 2015, the Commission received a petition from Black Hills Power, Inc. for approval of its 2015 Environmental Improvement Adjustment (EIA). The Company requests the recovery allowed under SDCL 49-34A-99 for the costs of the Wyodak Mercury Control Project and Wygen III CO and $O_2$ Grid Installation.

The EIA rider was implemented on June 1, 2011, as a result of Docket EL11-001. In Docket EL12-029, the Commission approved the Company's projected second year EIA revenue requirements associated with the previously approved Wyodak environmental improvements, including the true-up of the first year actual costs and revenues. In Docket EL13-009, the Commission approved the Company's projected third year EIA revenue requirements associated with the Wyodak environmental improvements, including the true-up of the second year actual costs and revenues. The revenue requirement in Docket EL13-009 was based on only two and a half months of cost recovery since the Company shifted cost recovery of the Wyodak environmental improvements from the EIA rider to base rates in Docket EL12-061. In Docket EL14-037, the Commission approved the true-up of the third year revenue requirements, an EIA rate of $0.0000 for all customer classes, and the Company's request to credit/charge the remaining EIA balancing account amounts through Transmission Facility Adjustment (TFA).

In this docket, the Company requests cost recovery for its share of the environmental improvements made to the Wyodak Power Plant (Wyodak), jointly owned with PacifiCorp, and the Wygen III Power Plant (Wygen III), jointly owned with Montana Dakota Utilities and the City of Gillette, to meet the requirements of the utility Maximum Achievable Control Technology (MACT) rule.

BHP proposes to recover $161,105 for the June 1, 2015 through May 31, 2016 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, 2015:

| | Current Rates | Proposed Rates |
|---|---|---|
| Residential | $ 0.00000 | $ 0.00012 |
| Small General Service | $ 0.00000 | $ 0.00012 |
| Large General Service and Industrial | $ 0.00000 | $ 0.00009 |
| Lighting | $ 0.00000 | $ 0.00007 |

## STAFF ANALYSIS AND SETTLEMENT RESOLUTIONS

The majority of the revenue requirement in this docket is associated with Wyodak's mercury control system to comply with the mercury removal component of the Environmental Protection Agency's (EPA's) MACT rule. This rule, developed under the Clean Air Act, establishes emission standards for mercury, acid gases, and particulate matter. Under this rule, mercury emissions would be limited for units burning sub-bituminous coal to less than or equal to 1.0 pounds per trillion BTUs.

The mercury control project was required to address the mercury content of the coal supplied to the units and the existing emission control infrastructure. PacifiCorp conducted pilot tests with other mercury removal chemicals, including an amended silicate project, but the activated carbon was ultimately chosen as the best option for removal of mercury at Wyodak. This solution is regarded as representative of industry standard practice for mercury content controls.

PacifiCorp took several measures to ensure the lowest reasonable costs for its customers, including competitive bid tenders for the additives supply, activated carbon injection, and pulverized activated carbon portions of the project. As a result of these evaluation efforts, the projects were awarded as fixed price, date certain contracts, at the lowest evaluated cost.

The Wygen III CO and $O_2$ grid installation project is also required to bring the power plant into compliance with the requirements of the MACT rule. This rule requires performance tune-ups to optimize combustion to minimize the generation of carbon monoxide and nitrogen oxides. This means BHP must perform inspections of the burner at least once every 36 months.

Previously, the Company contracted with a third party for burner tuning during outages. The Wygen III CO and $O_2$ grid Installation provides the Company the ability to tune its burners online at any time without the need for an outage, a tuning contractor, or expensive tuning equipment. BHP has calculated, with current costs, a payback period of less than six years when comparing the investment versus hiring a third party. Thus, investing in the CO and $O_2$ grid installation and using internal resources to perform burner tuning is more economical than using contract labor and equipment.

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

**Wyodak Mercury Control Project** – The Company provided estimated capital costs for the Wyodak Mercury Control Project based on budgets and an estimated in-service date of April 1, 2015. During discovery, BHP provided actual capital costs and updated to an actual in-service date of April 15, 2015. The Settlement Stipulation reflects these actual costs and the actual in-service date. These changes reduce the projected revenue requirement by $3,358.

**Leap Year Adjustment** – The 116.99% allocation calculation on line 2, column e of Schedule 4-3 accounted for the 2016 leap year in the numerator of the equation, but not the denominator. The Settlement Stipulation backs this extra day out of the numerator to accurately reflect the percentage of a year used in the Wyodak Mercury Control Project revenue requirement calculation. This change reduces the projected revenue requirement by $363.

The net effect of these changes is an estimated revenue requirement of $157,384. The revised EIA rates per kWh for the respective customer classes to be effective June 1, 2015 are:

| | |
|---|---|
| Residential | $0.00012 |
| Small General Service | $0.00011 |
| Large General Service and Industrial | $0.00009 |
| Lighting Service | $0.00006 |

**OTHER ISSUES**

**Annual Report of South Dakota Jurisdictional Earnings** – The Settlement Stipulation revises the annual filing date for the jurisdictional earnings report from April 15th to February 15th to correspond with the EIA and TFA filing dates. The Company and Staff believe this change makes sense and is more efficient, as it will allow Staff adequate time to review the information provided in the report during its review of annual EIA and TFA filings. As in the past, this earnings report requirement will exist only as long as the Company is receiving revenue from the EIA. The Company is not required to submit the report if BHP has (a) filed a general rate case within 12 months of the report due date or (b) adjusted rates as a result of a general rate case within 12 months of the report due date.

**Phase-In Plan Refund** – BHP is proposing a one-time bill credit for refund due to customers in EL12-062. Additionally, BHP is proposing that once the one-time bill credit is processed, the remaining dollars are credited/charged to the EIA. This mechanism seems appropriate, as the customer class allocation percentages for the EIA represent a fair allocation among the customer classes charged in the Phase-In Plan.

**Rate of Return** – The Settlement Stipulation provides for a rate of return based on the Company's capital structure approved in rate case docket EL14-026. The rate of return used for calculations of this year's revenue requirements also reflects the debt costs and return on equity approved in EL14-026. Staff reserves the right to review these components in future filings.

## RECOMMENDATION

Staff recommends the Commission approve the Settlement Stipulation for the reasons stated above.