BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION OF BLACK HILLS POWER, INC. FOR THE PHASE IN OF RATES REGARDING CONSTRUCTION FINANCING COSTS OF CHEYENNE PRAIRIE GENERATING STATION

STAFF MEMORANDUM SUPPORTING
SETTLEMENT STIPULATION

DOCKET EL12-062

Commission Staff (Staff) submits this Memorandum in support of the Settlement Stipulation (Settlement) of September 6, 2013, between Staff and Black Hills Power Company (BHP or Company) in the above-captioned matter.

BACKGROUND

On December 17, 2012, the Company filed an application with the South Dakota Public Utilities Commission (Commission) requesting approval to implement a phase in rate increase for its South Dakota customers relating to the construction financing costs of Cheyenne Prairie Generating Station (CPGS) pursuant to SDCL 49-34A-73.

CPGS is a natural gas-fired combustion turbine generator being constructed in Cheyenne, Wyoming, that will provide 55 MW of generation to BHP. CPGS will be owned by Black Hills Power and Cheyenne Light, Fuel and Power Company. The estimated cost of BHP's ownership of CPGS is $95 million. CPGS is expected to be placed in-service in October 2014. The phase in plan only seeks to recover the costs of the construction financing costs of CPGS.

The Company's witnesses filed testimony stating CPGS was necessary due to the retirement of three coal-fired units in 2014 due to EPA requirements. BHP witnesses also testified that the request to phase in rates regarding construction financing costs in lieu of traditional AFUDC resulted in a savings to customers.

BHP's application stated that a typical residential electric customer using an average of 650 kWh per month would see an increase of $0.88 per month for the first quarterly filing. Over the term of the phase in plan, the typical residential customer's bill would increase starting at around 1% and ending up at the completion of the phase in plan at approximately 4.5%.

The Commission officially noticed BHP's filing on December 20, 2012, and set an intervention deadline of February 28, 2013. On January 8, 2013, GCC Dacotah, Inc., Rushmore Forest Products, Inc., Spearfish Forest Products, Inc., and Rapid City Regional Hospital (collectively, Black Hills Industrial Intervenors or BHI) filed a petition to intervene. On January 11, 2013, a Petition to Intervene of Pete Lien & Sons, Inc. (Pete Lien) was filed. The petition stated that it will join BHI as an intervenor. On January 11, 2013, BHP and Commission Staff (Staff) filed a Joint Motion for Approval of Stipulation Regarding Effective Date of Interim Phase In Rates and a Stipulation Regarding Effective Date of Interim Phase In Rates. On January 17, 2013, the Commission issued an Order Granting Intervention to BHI, including Pete Lien; Assessing Filing Fee; Suspending Operation of Proposed Rates; and Granting Joint Motion for Approval of Stipulation Regarding Effective Date of Interim Phase In Rates. Phase in rates were effective commencing April 1, 2013, subject to true-up and refund until such rates are approved by the Commission.

On February 8, 2013, BHP filed Supplemental Testimony and Exhibits of Kyle D. White, including the Company's 2011 Integrated Resource Plan (IRP).

On April 29, 2013, the Commission issued an Order for and Notice of Procedural Schedule and Hearing ordering a hearing be held on September 16-20, 2013.

On May 23, 2013, BHP filed a Joint Motion for Approval of Settlement Agreement Between Black Hills Power and South Dakota Science and Technology Authority (SDSTA), Settlement Agreement Between BHP and SDSTA, Supplemental Motion for Approval of Settlement Agreement, Joint Motion for Approval of Settlement Agreement Between Black Hills Power and Menard, Inc. dba Midwest Manufacturing dba Dakota Panel (Dakota Panel), Settlement Agreement Between BHP and Dakota Panel, and Supplemental Motion for Approval of Settlement Agreement. On June 13, 2013, Staff filed its memorandum regarding contracts with deviations. On June 24, 2013, the Commission issued an Order Conditionally Authorizing and Approving Implementation of Contracts with Deviations Rates on an Interim Basis.

Settlement discussions between Staff, BHP, and BHI commenced on July 29, 2013. Thereafter, Staff and BHP (jointly, the Parties) held several settlement discussions in an effort to arrive at a mutually acceptable resolution of the issues presented in BHP's filing. Ultimately, the Parties reached a comprehensive agreement on the issues presented in this case. On August 12, 2013, BHP filed a letter stating BHP, Staff, and BHI agreed to suspend the procedural schedule to the extent that the testimony of Staff and BHI that was to be filed and served on or before August 12, 2013, must now be filed and served on or before Friday, August 16, 2013. On August 16, 2013, BHP filed a letter stating BHP, Staff, and BHI agreed to suspend the procedural schedule to the extent that the testimony of Staff and BHI that was to be filed and served on or before August 16, 2013, must now be filed and served on or before Friday, August 23, 2013. On August 23, 2013, BHP filed a letter stating BHP, Staff, and BHI agreed to suspend the procedural schedule to the extent that the testimony of Staff and BHI that was to be filed and served on or before August 23, 2013, must now be filed and served on or before Monday, August 26, 2013. On August 26, 2013, BHP filed a letter requesting that the procedural schedule in this case be suspended while the parties finalize the settlement documents for submission.

OVERVIEW OF SETTLEMENT

Staff based its determination regarding BHP's decision to construct CPGS and other items concerning the phase in of rates on its comprehensive analysis of BHP's filing and information obtained during discovery.

Company and Staff positions were discussed thoroughly at the 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. Staff believes the settlement is based on sound regulatory principles and avoids costly and unnecessary litigation.

Staff and BHP agree to the phase in of rates regarding the construction financing costs of CPGS. Staff also agrees to not oppose the inclusion of CPGS in rate base when the Company files for an increase of rates to be effective once the plant is placed in-service. The Parties also agree to certain conditions regarding the credit of wholesale contract revenues in the Energy Cost Adjustment and future resource planning.

STAFF OVERVIEW OF SETTLEMENT

SDCL 49-34A-73 through 74 set forth the requirements for a phase in of rates prior to the commercial operations of a plant addition. Staff believes the requirements of the statutes have been met and the Settlement should thus be approved.

Staff's analysis centered on its examination of BHP's 2011 IRP and the Company's decision to construct CPGS. While Staff's analysis identified concerns regarding the decision to construct CPGS and the Company's IRP methods, Staff believes these risks are adequately addressed by this Settlement. Staff also reviewed the Company's customer benefit analysis and proposed revenue requirement and rate calculations. These items are further discussed below.

CPGS/2011 IRP ANALYSIS

1. Introduction

BHP's 2011 Resource Plan and related testimony indicated that three of its older and smaller coal fired units, namely Osage, Ben French, and Neil Simpson, with a net summer capacity of 71MW, needed to be retired due to the high cost of refurbishing and retrofitting to comply with EPA Area Source Rules by March 2014. As a result of retiring these units, BHP indicated that an additional generation resource was needed in 2014. The Company stated that its preferred plan was the least cost plan over a 20-year and 30-year planning horizon. In the short term (i.e., the next five years), the preferred plan consisted of implementing energy efficiency and demand-side management goals, installation of 55 MW of gas-fired combined-cycle combustion turbine technology, and firm market purchases to fulfill expected load requirements.

Cheyenne Light's resource planning analysis (conducted also in 2011 but prior to the Company's analysis) identified a preferred plan that included three combustion turbine generators in 2014. The two utilities conducted additional analysis in order to evaluate the economics of jointly owning a unit and concluded in favor of building the CPGS. BHP stated that the CPGS would offer diversity in its generation mix from a geographic (located in Cheyenne instead of Gillette) and technology perspective and allow for greater flexibility since it can operate as a baseload, intermediate, or peaking unit.

2. Staff's Concerns

Staff's primary concerns were related to **[Begin Confidential]** [redacted] **[End Confidential]** and load forecast methodology.

a. **[Begin Confidential]** [redacted]

[redacted]

[redacted] **[End Confidential]**

b. **Load forecasting methodology:** The most crucial element in resource planning is to conduct a thorough analysis of the retail load profile to ascertain capacity and energy need deficiency. The industry norm is to conduct econometric or other similar analysis to better understand factors driving growth in various customer classes and to appropriately account for weather influences. BHP did not conduct any such analysis and instead relied on a seven year trend to justify its base load forecast assumptions. Consequently, Staff did not have a high level of confidence in the basis of the need deficiency resulting from these forecasts.

[Begin Confidential] [redacted] **[End Confidential]**

c. **Natural Gas Price Volatility:** Since the inclusion of CPGS would increase the natural gas share in the Company's generation mix, Staff was concerned of the natural gas price risk.

Notwithstanding currently lower natural gas prices, history has demonstrated high volatility in natural gas prices relative to other fuels.

3. Settlement

The Parties held several settlement discussions in an effort to arrive at a mutually acceptable resolution of the primary concerns. Specifically, the concerns were addressed as follows:

a. **[Begin Confidential]** [redacted] **[End Confidential]**

b. **[Begin Confidential]** [redacted] **[End Confidential]**

c. **Analysis regarding retail load and proper load forecasting**. In order to address the concerns regarding load forecasting and planning for retail load in future Resource Plans, the Parties also agreed that in future Resource Plans, BHP would incorporate the following in its analysis:
   a. Weather normalized load projections – energy and capacity;

b. Basis for low, mid and high case for load growth based on econometric or other similar analysis; and
c. Separate out retail load from wholesale load.

d. Natural gas procurement plan: In light of the future expected increase in the use of natural gas due to the CPGS and to manage price risk, BHP agreed to provide a natural gas procurement plan to Staff on or before May 1, 2015. By this time, CPGS would be in operation for a few months and the Company would gain insight into the natural gas quantity needed for generation and plan accordingly.

Based on the foregoing elements of the Settlement, Staff believes that the risks associated with (a) **[Begin Confidential]** [redacted] **[End Confidential],** (b) **[Begin Confidential]** [redacted] **[End Confidential]**, (c) load forecasting of retail load, and (d) natural gas price volatility have been reasonably addressed.

4. [Begin Confidential] [redacted] **[End Confidential]**

5. Review of Reasonableness of Construction Costs

As Staff has completed its analysis of BHP's 2011 IRP and the decision to construct CPGS in this docket, Staff agrees to support the Settlement and not to oppose the inclusion of CPGS in rate base for the determination of BHP's South Dakota revenue requirement in the Company's next rate case. However, Staff reserves the right to review the reasonableness of actual construction costs at that time.

CUSTOMER BENEFIT ANALYSIS

BHP's filing included a Customer Benefit Analysis in Exhibit CJK-101. Staff acknowledges that the Customer Benefit Analysis does show certain benefits to ratepayers. However, Staff advises the Commission recognize the unique circumstances underlying this case, and not consider this a precedent for a departure from the general practice of requiring the capitalization of the financing costs of construction work in progress.

First, considerations of inter-generational equity remain relevant. That is, costs should typically be borne by the ratepayers who benefit. Those who pay higher rates during construction do not necessarily experience the benefits of that construction, and this is one of the principal reasons for capitalizing the financing cost of construction, as it recovers the cost in the future as benefits are received by the ratepayer. Here, Staff believes this concern is mitigated by the short time frame during which the phase in rates will be effective. In future cases, especially where construction periods are longer, this mitigation might not exist or be a relevant consideration.

Second, the net positive benefit shown in BHP's Exhibit CJK-101 are the product of two unusual, but related, circumstances that might well not exist in future cases. First, BHP is proposing to use a financing cost rate that utilizes the cost of short-term debt for the debt cost portion of the overall rate of return, rather than its embedded debt cost or a more traditional AFUDC rate. Because short term debt costs are unusually low at the present time (the Customer Benefit Analysis in CJK-101 uses 2.0 percent for the debt component of the overall rate of return), the resulting financing costs are much lower than they otherwise be, contributing significantly to the net positive benefit of the phase in plan. Related, with other capital costs, such as the cost of equity, at historical lows, this also enhances the net present value of the Customer Benefit Analysis. In cost-benefit analysis, the net present value of benefits is inversely related to the discount rate. For any stream of benefits, net present value will be greater with a lower discount rate than with a higher discount rate. In the future, should capital costs rise, and especially with longer construction periods, it is less likely that a plan like this could be justified based on a Customer Benefit Analysis of the kind presented here by BHP. Because the circumstances here are historically unique, the Commission should make clear that if it approves the phase in plan, that it is doing so given these unique circumstances, and not because of a fundamental change in Commission policy regarding the capitalization of construction financing costs.

RATE OF RETURN

As proposed by the Company, the capital structure ratios and equity return used in the phase in plan should be updated to reflect the Commission's decision in Docket EL12-061. Staff also agrees with the short term debt costs as proposed in the Company's filing. The debt costs will be updated in each compliance filing. The rate of return will be trued-up to actuals through the balancing account in future compliance filings.

DETERMINATION OF RATES

Rates will be determined in each compliance filing as described in the tariff. The quarterly revenue requirements are determined using forecasted costs and allocated to each customer class using the demand allocator utilized in the Transmission Cost Adjustment. The Company proposed the revenue requirement by customer class be divided by the forecasted kWh per class to determine the quarterly phase in plan rates. Actual phase in revenues will be compared to actual costs and a carrying charge will be applied to the difference through the balancing account. This over or under recovery will be included in the net quarterly revenue requirement calculation.

Staff reviewed the Company's draft settlement agreement with BHI, wherein it states: **[Begin Confidential]** [redacted] **[End Confidential]**

EFFECTIVE DATE

The phase in plan was effective on April 1, 2013, subject to refund. BHP filed its first compliance filing on June 28, 2013, in compliance with the schedule determined in the Stipulation Regarding Effective Date of Interim Phase In Rates. Rates resulting from this compliance filing are effective August 1, 2013 through October 31, 2013. The Company will make its next compliance filing by October 1, 2013, for rates effective November 1, 2013 through January 31, 2014.

RECOMMENDATION

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