

**BLACK HILLS POWER, INC.**  
SD PUC DOCKET: EL14-038

REQUEST DATE : August 8, 2014  
RESPONSE DATE : August 14, 2014  
REQUESTING PARTY: SDPUC Staff

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**SDPUC Request No. 1-1:**

Please provide additional detail on changes to the residential audit program. Specifically, what are budgeted expenses in both the residential audit and the whole house efficiency audit programs going towards?

**Response to SDPUC Request No. 1-1:**

Residential Audit Program

In the new Plan, the Residential Audit Program provides all customers the opportunity to complete an online energy audit free of charge. A report is generated based on inputs used in defining the energy items in the home. This report has a breakdown of the annual usages and costs at the home for the various energy using items. Further monthly details are included to show seasonal usage and costs for electric or other fuels such as natural gas. Recommended no-cost and low-cost changes are provided along with long-term investments to reduce the home's energy costs. The estimated savings for the recommendations is supplied at the end of each report. Please see Attachment 1-1a for a sample online report.

Please see Attachment 1-1b for Applied Energy Group's study that supports the new Plan. The study contains detailed calculations and assumptions for each program's budget, estimated savings, and cost effectiveness measures.

The total budget for the Residential Audit Program is \$13,860/year and the annual goal is to receive 400 participants. The budgeted expenses associated with the Residential Audit Program include \$12,000 to pay the annual software fees to Apogee Interactive. In addition, \$1,860 of administrative, marketing, and evaluation costs are included in the budget. This information can be found on Attachment 1-1b in the Portfolio Inputs worksheet on line 32.

Whole House Efficiency Audit Program

The new Plan offers on-site home energy audits performed by a certified energy auditor. Previously, BHP only offered this service to homes heated with electricity. An arrangement has been made with Montana-Dakota Utilities (MDU) to provide audits and share the costs equally with the homes with both electric and natural gas. The customers will receive a report showing the results of site inspections and tests completed such as blower door or infrared camera checks. BHP and MDU would also provide leave-behind kits for the customer to install basic items.

Please see page 7 of Attachment 3 to the Application for the Whole House Efficiency Audit Program budget for 2014, 2015, and 2016. The cost per audit is \$485 per home with 100 estimated participants in the first year and 125 estimated participants per year in

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the second and third years. The audit cost is proposed to be split evenly between BHP and MDU. The budget also includes costs for Administration, Marketing, and Evaluation. This information can be found on Attachment 1-1b in the Portfolio Inputs worksheet on line 23.

**Attachments:**

**Attachment 1-1a Sample Online Home Audit Report**  
**Attachment 1-1b – AEG Study**