### **Summary**

Slater Consulting is pleased to present this proposal to provide expert assistance and testimony for the South Dakota PUC Staff by analyzing the assumptions and inputs utilized by Black Hills Corporation in its 2007 Integrated Resource Plan (IRP). The IRP was filed in the current Black Hills rate case (Docket EL09-018) in support of the inclusion of the new coal-fired power plant Wygen III. Should the Company's rate increase be accepted, rates will increase by approximately 26.6% as early as April 1, 2010.

Wygen III is a 100 mega-watt coal-filed power plant located near Gillette, Wyoming, and would utilize coal from the adjacent Wyodak coal mine. At least initially, because of sales to other utilities, only 52 percent of the plant would be included in Black Hills' rate base.

The primary consultant on this project will be Mr. George Evans, whose resume and list of appearances is attached. Mr. Evans will analyze the assumptions and inputs in the Black Hills IRP, and present expert testimony on behalf of the South Dakota PUC.

### **Relevant Experience**

In June of 1995, Mr. Evans presented expert testimony concerning the modeling and assumptions used in the Black Hills IRP. In addition, he presented expert testimony in seven IRP dockets before the Georgia Public Service Commission, and in one IRP docket before the South Carolina Public Service Commission. He also developed the initial IRP for the Grand Island, Nebraska Electric Department and was a co-author of the "Analysis and Evaluation of the Integrated Resource Plans of the Investor-Owned and State-Owned Electric Utilities in South Carolina" for the South Carolina State Energy Office. In short, Mr. Evans is a well-known expert in the area of Integrated Resource Planning.

Mr. Evans' most recent engagement was a Rocky Mountain Power rate case, in which he testified for the Utah Division of Public Utilities, providing him with relevant regional experience.

A complete list of the expert testimonies filed by Mr. Evans is attached. He has made 35 expert appearances before state utility commissions, the FERC, and both state and federal court.

#### **Basic Approach**

The basic approach taken will be to examine each assumption and input used in the IRP, and compare each to typical assumptions used by other utilities at the time of the development of the Black Hills IRP. For example, what level of load growth was expected by other regional utilities at the time? Outliers will be identified and subjected to further analysis.

### Scope of Work

The following tasks are included in this proposal:

- 1) Discovery Mr. Evans will develop discovery questions to Black Hills on the IRP assumptions and data and analyze discovery responses received to date.
- 2) Base Analysis Mr. Evans will evaluate and analyze all assumptions and inputs used by the Company in the IRP. The assumptions and inputs evaluated will include at least the following:
  - a. Fuel cost projections for coal, natural gas, oil, and nuclear fuel
  - b. Load growth projections
  - c. Capital costs for each type of new resource evaluated coal-fired, gas-fired, nuclear, renewable, additional DSM, etc.
  - d. Operating assumptions for each type of new resource evaluated
  - e. Impacts of existing DSM programs
  - f. Escalation and inflation rates
  - g. Modeling of existing power plants heat rates, fuel costs, O&M costs
  - h. Modeling of regional power markets
  - i. Modeling of firm off-system purchases and sales
  - j. Potential CO2 limitations and/or taxes studied, along with other externalities
- 3) Historical Comparison Mr. Evans will compare recent actual performance of existing generating facilities to the results of Black Hills IRP modeling.
- 4) Modeling Projections Mr. Evans will evaluate the modeling results for new resources for reasonableness.
- 5) Initial Report Mr. Evans will present his initial findings in report form to the PUC Staff, and participate in a conference call discussion concerning the findings.
- 6) Pre-Filed Direct Testimony Mr. Evans will present formal, pre-filed testimony to be filed with the Commission on February  $9^{th}$ . The first draft will be provided to Staff by February  $4^{th}$ .
- 7) Responses to Discovery Mr. Evans will provide responses to discovery on his testimony from all parties.
- 8) Analysis of Other Testimony Mr. Evans will evaluate the pre-filed testimony of all other parties in the case.
- 9) Development of Rebuttal Mr. Evans will develop live rebuttal for presentation at the hearings, if required.

10) Hearings – M	r. Evans	will	appear	before	the	PUC	for	cross-	exami	nation	and	live
rebuttal.												

### **Cost Proposal**

Slater Consulting proposes to perform the tasks described in this proposal for a not-to-exceed cost of \$46,000.00. This cost includes all labor, travel (billed at actual cost), communication from Slater Consulting via FedEx, and any other out-of-pocket expenses. Labor will be billed at \$250 per hour as incurred. This proposal remains valid for thirty days from the date of this proposal.

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Evans	178 hours @ \$250	\$44,500.00
Out-of-pocket l	Expenses:	
Air fare	<b>,</b>	\$800.00
Hotel		\$300.00
Meals		\$180.00
Rental car or taxi		\$120.00
Parking		\$100.00
Total Out-of-pocket		\$1,500.00
Total Cost		\$46,000.00

Shown out-of-pocket expenses are approximated, and will be billed at actual cost, within the not-to-exceed total cost of \$46,000.00. Slater Consulting will follow any PUC limitations on out-of-pocket expenses.

Costs for FedEx communications from Slater Consulting, computer usage and software usage are included in the hourly rates.