## BEFORE THE PUBLIC UTILITIES COMMISSION STATE OF SOUTH DAKOTA

Black Hills Power, Inc.
Application to Increase Electric Rates in South Dakota
Docket No. EL09-018

Rebuttal Testimony of George W. Evans on Behalf of the Commission Staff

June 4, 2010

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3	Q.	Please state your name, business address and occupation.
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5	A.	George W. Evans. I am currently a Vice President with Slater Consulting.
6		My address is P.O. Box 2449, Robbinsville, North Carolina.
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8	Q.	Does the Appendix to this testimony describe your education and
9		summarize your experience in public utility regulation?
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11	A.	Yes, it does.
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13	Q.	Have you testified previously before the South Dakota Public Utilities
14		Commission?
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16	A.	Yes. I presented expert testimony on behalf of the South Dakota Public Utilities
17		Commission Staff in Docket No. EL95-003, which was filed in June 1995. In that
18		testimony, I discussed the modeling and assumptions utilized in the development
19		of the Black Hills Power, Inc. ("Company" or "BHP") Integrated Resource Plan.
20		
21	Q.	Have you presented expert testimony in other jurisdictions concerning
22		integrated resource planning?
23		
24	A.	Yes, I have. I presented expert testimony concerning integrated resource
25		planning on eleven previous occasions, before the Georgia Public Service
26		Commission, the Alabama Public Service Commission, the Mississippi Public

Qualifications

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1		Service Commission, the Public Service Commission of Oklahoma, and the
2		South Carolina Public Service Commission.
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4		II. Purpose of Testimony and Summary of Conclusions
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6	Q.	What is the purpose of your rebuttal testimony in this case?
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8	A.	My testimony responds to certain aspects of the direct testimony of Mr.
9		Christopher A. James, witness for the Residential Consumers Coalition
10		("RCC").
11		
12	Q.	Please summarize your conclusions.
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14	A.	Mr. James' claim that BHP could meet current and future customer
15		demand through energy efficiency programs, demand side measures and
16		demand response programs, in place of Wygen III, is simply incorrect. Mr.
17		James fails to show that the capacity need that led to the construction of
18		Wygen III could be filled using demand-side management (or DSM)
19		programs.
20		
21		III. <u>Direct Testimony of Christopher James</u>
22		
23	Q.	What has Mr. James claimed concerning the impact of DSM programs on
24		the Company's customer needs?
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26	A.	Mr. James makes the following claims in his direct testimony <sup>1</sup> :
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<sup>&</sup>lt;sup>1</sup> The direct testimony of Mr. James was not page numbered or line numbered, so the references to his direct testimony are based on assumed page and line numbering.

- "Black Hills Power (BHP) can provide reliable and affordable electricity to its customers without the generating output from Wygen 3;"<sup>2</sup>
- "BHP can meet current and future customer demand more cost-effectively through energy efficiency, demand side measures and demand response."
  - "BHP's IRP should have included the energy and capacity resources that would be realized from even a modest DSM program that achieves energy savings equal to 1% of annual electricity sales; a level that is considered to be a good program goal per ACEEE. Inclusion of this factor alone would have shown that Wygen 3 was unnecessary."

## Q. What issue do you have with these claims?

A. These claims have no basis in fact. Had BHP instituted DSM programs that achieved energy savings of one percent (1%) of annual electricity sales, the capacity savings would be approximately one percent (1%) of peak demand, which is a capacity savings of only 6.15 mega-watts (forecasted peak demand for 2010 is 615 mega-watts<sup>5</sup>). Mr. James has not disputed the Company's claimed need for an additional 77 mega-watts in 2010, but is claiming that this 77 mega-watt need can be met with only 6 mega-watts of capacity savings from DSM programs.

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<sup>&</sup>lt;sup>2</sup> Page 5, lines 3-4 of Mr. James' direct testimony

<sup>&</sup>lt;sup>3</sup> Page 5, lines 15-16 of Mr. James' direct testimony

<sup>&</sup>lt;sup>4</sup> Page 15, lines 8-12 of Mr. James' direct testimony.

<sup>&</sup>lt;sup>5</sup> Page 61 of Exhibit JST-2

1	Q.	Is it reasonable to assume that new DSM programs could provide 77 mega-
2		watts of capacity savings for BHP?
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4 A

A. No, it is not reasonable. Mr. James makes this very clear when he describes the capacity savings that other utilities in the region are projecting from new DSM programs<sup>6</sup>:

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- Otter Tail Power 0.4 mega-watts
- MidAmerican Energy 0.6 mega-watts
  - Xcel Energy 2.9 mega-watts

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If a utility as large as Xcel Energy forecasts less than 3 mega-watts of capacity savings from new DSM programs, it is highly unlikely that BHP could find 77 mega-watts of capacity savings from new DSM programs.

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Q. Near the bottom of page 25 of his direct testimony, Mr. James claims that BHP could achieve 128 mega-watts of capacity savings from new DSM programs. Do you agree?

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20 Α. No, I do not agree. It appears that Mr. James is claiming this capacity savings by 21 the year 2020, which would mean that he is claiming that new DSM programs 22 could reduce BHP's peak demand by 17 percent (17%) in the year 2020. According to the U.S. Energy Information Administration ("EIA"), realized peak 23 24 demand reductions through the year 2008 have achieved total reductions of only 25 four percent (4%) of peak demand throughout the country (see Exhibit GWE-26 1). If BHP were to meet this average peak demand reduction of four percent 27 (4%), it would reduce peak demand by only 30 mega-watts in the year 2010.

<sup>&</sup>lt;sup>6</sup> Page 28 of Mr. James' direct testimony

1		Under this hypothetical (and highly unlikely) scenario, BHP would still need
2		Wygen III.
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4	Q.	Does this mean that you do not recommend that BHP investigate additional
5		DSM programs?
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7	A.	No, it does not. DSM programs can provide substantial benefits to both BHP and
8		the ratepayers of BHP, and should be considered in all long range planning
9		performed by the Company. However, Mr. James has greatly exaggerated the
10		potential impacts of new DSM programs.
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12	Q.	Does this conclude your rebuttal testimony?
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14	A.	Yes it does.