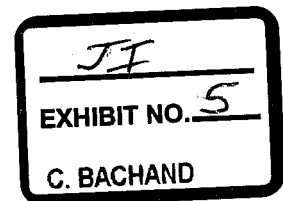


BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

In the Matter of the Application by Otter Tail Power)
Company on behalf of the Big Stone II Co-owners for)
an Energy Conversion Facility Siting Permit for the) Case No EL05-022
Construction of the Big Stone II Project)

Rebuttal Testimony of
David A. Schlissel and Anna Sommer
Synapse Energy Economics, Inc.

On Behalf of
Minnesotans for an Energy-Efficient Economy
Izaak Walton League of America – Midwest Office
Union of Concerned Scientists
Minnesota Center for Environmental Advocacy



June 9, 2006

1 **Q. Mr. Schlissel, please state your name, position and business address.**

2 A. My name is David A. Schlissel. I am a Senior Consultant at Synapse Energy
3 Economics, Inc, 22 Pearl Street, Cambridge, MA 02139.

4 **Q. Ms. Sommer, please state your name position and business address.**

5 A. My name is Anna Sommer. I am a Research Associate at Synapse Energy
6 Economics, Inc., 22 Pearl Street, Cambridge, MA 02139.

7 **Q. On whose behalf are you testifying in this case?**

8 A. We are testifying on behalf of Minnesotans for an Energy-Efficient Economy,
9 Izaak Walton League of America – Midwest Office, Union of Concerned
10 Scientists, and Minnesota Center for Environmental Advocacy (“Joint
11 Intervenors”).

12 **Q. Have you previously filed testimony in this proceeding?**

13 A. Yes. We filed direct testimony on May 19 and May 26, 2006.

14 **Q. What is the purpose of this rebuttal testimony?**

15 A. This testimony responds to the Direct Testimony of Dr. Olesya Denney submitted
16 on behalf of the Staff of the Public Utilities Commission of South Dakota.

17 **Q. Please summarize your opinions regarding Dr. Denney’s Direct Testimony.**

18 A. Our conclusions concerning Dr. Denney’s testimony are as follows:

- 19 • We concur with Dr. Denney that “neither the Application, nor the
20 Applicants’ direct testimonies provide a discussion of the current rail coal
21 delivery problems;”¹ an issue which may very well affect the viability and
22 feasibility of Big Stone Unit II.

¹ Direct Testimony of Olesya Denney, page 8, lines 12-13.

- 1 • We also agree with Dr. Denney that “the Applicants’ statement that
2 mercury emissions are targeted to be less than current mercury emissions
3 is misleading because it is not supported by the record.”²
- 4 • And like Dr. Denney, we are very concerned that the financial risks to
5 consumers from a potential lack of a reliable fuel source and in particular,
6 the future regulation of air emissions such as carbon dioxide from coal-
7 fired power plants are critical to the operation and viability of Big Stone
8 II. Like Dr. Denney we believe the Commission should address these
9 issues in this proceeding.

10 We do, however, disagree with certain points of Dr. Denney’s comparison of Big
11 Stone Unit II’s economic benefits to its environmental impacts:

- 12 • The comparison assumes the greater the cost of Big Stone Unit II, the
13 greater the economic benefits. Greater capital expenditures must be
14 balanced against the negative economic impacts of having to raise or pay
15 for those funds through rate increases to customers.
- 16 • The logic of concluding that Big Stone Unit II should be built so long as
17 its economic benefits are positive would suggest that economic benefits of
18 \$1 would justify building the unit. The economic benefits of Big Stone
19 Unit II must be compared to alternatives.
- 20 • Similarly, Dr. Denney claims her analysis is pessimistic³ because it does
21 not account for the “primary consumer benefits” of electricity produced by
22 Big Stone II. To our knowledge, no party in this case is proposing a “do
23 nothing” alternative and as such, those benefits would also apply to the
24 alternatives.
- 25 • This Commission should be concerned with the ethical implications of
26 accepting Dr. Denney’s conclusion that “if we narrow down the

² Ibid, page 15, lines 10-11.

³ Ibid, page 35, lines 1-3.

1 environmental impacts to the state of South Dakota, the net impact of Big
2 Stone II is likely to be positive.”⁴

3 • Finally, Dr. Denney has concluded that the net impact of Big Stone II
4 ranges from a negative \$1.36 billion to a positive \$589 million, with an
5 average negative \$384 million value.⁵ We see no evidence in the record to
6 support reliance on the upper (positive) end of this range over the lower
7 end.

8 **Q. Do you agree with Dr. Denney that Big Stone Unit II faces the risk of not**
9 **having a reliable source of fuel?**

10 A. Yes, as we discuss on page 21 of our May 26th testimony, the Big Stone II Co-
11 owners fail to even acknowledge that this may increase the risk of building Big
12 Stone Unit II.

13 **Q. Do you agree with Dr. Denney that the Co-owners have not adequately**
14 **explained how they plan to meet future mercury regulations?**

15 A. Yes, as discussed on pages 42-43 of our May 26th testimony, the Co-owners have
16 not discussed their strategy to meet future mercury regulations.

17 **Q. Do you agree with the statement by Dr. Denney that there are a number of**
18 **risks that should be thoroughly considered by the Commission as part of its**
19 **decision making process in this proceeding?**⁶

20 A. Yes. We agree with Dr. Denney’s conclusion that the following risks should be
21 thoroughly examined in this proceeding:

22 (1) The potential that Big Stone II will not have a reliable source of fuel

23 (2) The potential that Big Stone II will be subject to taxes and emissions
24 restrictions that will dramatically increase the cost of production.

⁴ Ibid, page 39, lines 11-12.

⁵ Ibid, page 38, lines 4-8.

1 We especially agree with Dr. Denney’s observation that “poor decision making at
2 this point in time may haunt this Commission in the future.”⁷ Therefore, we
3 recommend that the Commission thoroughly consider these risks to South Dakota
4 ratepayers in this proceeding as, for example, we have done with regard to
5 potential CO₂ costs in our May 26, 2006 testimony.

6 **Q. Is it reasonable for the South Dakota Commission to approve a permit for**
7 **the Big Stone II project and hope to address these financial issues in**
8 **subsequent rate cases for the plant’s Co-owners?**

9 A. No. Given the financial imprudence of the project, we agree with Dr. Denney that
10 the Co-owners subject to rate regulation may run a risk of not being able to
11 recover their costs from ratepayers. However, as we understand, only two of the
12 Big Stone II Co-owners, Otter Tail Power and Montana-Dakota Utilities, are
13 subject to the ratemaking jurisdiction of this Commission. Consequently, the
14 Commission will not have any power in the future to protect the ratepayers of the
15 other Big Stone II Co-owners when the negative consequences of these risks
16 arise.

17 Moreover, the risks outlined by Dr. Denney really go to the heart of the question
18 of whether the Big Stone II project should be built at all. Therefore, they must be
19 considered now, not at some undefined time in the future after Big Stone II has
20 been built.

21 **Q. Do you believe that Dr. Denney’s testimony presents a reasonable**
22 **comparison of the economic and environmental costs and benefits of the**
23 **proposed Big Stone II project?**

24 A. No. Dr. Denney’s analysis is critically flawed because she fails to compare Big
25 Stone II to any alternatives.

⁶ Ibid, page 54, lines 5-14.

⁷ Ibid, at page 53, lines 15-23.

1 **Q. Please explain how the failure to compare Big Stone II to any alternatives**
2 **represents a flaw in Dr. Denney’s analysis.**

3 A. In the methodology used by Dr. Denney, the more that the Big Stone II Co-
4 owners spend on building the proposed plant, the larger the economic benefits for
5 South Dakota. This is unrealistic and contrary to the common ratemaking goal of
6 “least cost” service. Customary practice is that the estimated cost of building a
7 power plant is compared to the estimated costs of technically feasible alternatives.
8 If the estimated cost of building the proposed power plant increases, then, in the
9 real world, the relative economics of choosing an alternative are improved.

10 In addition, Dr. Denney’s analysis fails to examine whether there are alternatives
11 to Big Stone II that would provide the same or greater levels of purported
12 economic benefits but at a lower overall lifetime cost.

13 Dr. Denney’s analysis also fails to consider the negative consequences of the rate
14 increases that would be needed to pay for the construction and operating costs of
15 Big Stone II. For example, Montana-Dakota Utilities has estimated that its share
16 of Big Stone II will lead to a 20 percent rate increase.⁸ In essence, Dr. Denney’s
17 analysis reflects the positive benefits of spending the money to build the plant but
18 not the negative costs of having to raise those funds from ratepayers.

19 **Q. Can’t the same criticism be made of the testimony that Mr. Goldberg filed on**
20 **behalf of the Joint Intervenors?**

21 A. No. Mr. Goldberg compares the economic benefits of Big Stone II with a wind
22 alternative under which the expected rate increases would be lower than would
23 result from the construction of Big Stone II. Thus, his analysis understates the
24 additional economic benefits that the development of the wind alternative would
25 provide.

⁸ Response to Information Request 44 in Minnesota PUC Docket No. CN-05-619, incorporated by reference in Co-owners’ response to Intervenors’ Fourth Set of Requests for Production of Documents in this docket.

1 **Q. Is it your conclusion or the position of your clients in this proceeding that the**
2 **Big Stone II Co-owners should not take any actions to address projected**
3 **capacity deficits if they do not obtain a permit to build Big Stone II?**

4 A. No. It is our understanding that no party in this proceeding has advocated a “do
5 nothing” alternative to Big Stone II. For example, our clients believe that a
6 portfolio of wind generation and demand-side alternatives should be examined
7 and undertaken in place of Big Stone II.

8 **Q. Does this conclude your testimony?**

9 A. Yes.

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