#### BEFORE THE PUBLIC SERVICE COMMISSION OF WISCONSIN

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Application of Wisconsin Public Service Corporation for a Certificate of Public Convenience and Necessity for Construction of a Large Electric Generating Plant with Associated Facilities, Known as Weston 4, at its Existing Weston Generating Station Located in Marathon County

Docket No. 6690-CE-187

### **Testimony of**

# David A. Schlissel and Geoffrey L. Keith

## on Environmental Impact Statement Issues

### Synapse Energy Economics, Inc.

# On Behalf of the Citizens Utility Board of Wisconsin

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.	Mr. Keith, please state your name, position and business address.
5	A.	My name is Geoffrey L. Keith. I am an Associate at Synapse Energy Economics,
6		Inc., 22 Pearl Street, Cambridge, MA 02139.
7	Q.	Have you previously submitted testimony in this proceeding?
8	A.	Yes. We filed direct testimony in this proceeding on June 25, 2004.
9	Q.	Did you assist the Citizens Utility Board ("CUB") in the preparation of
10		comments on the Draft Environmental Impact Statement ("Draft EIS") for
11		the proposed Weston 4 power plant?
12	A.	Yes. We assisted the CUB in preparing comments on the Draft EIS.
13	Q.	Were the points you raised in these comments adequately addressed in the
14		Final EIS?
15	A.	No. A number of the key points that CUB raised in its comments on the Draft
16		EIS were not adequately addressed in the Final EIS. In particular, WPS has not
17		proposed a legitimate alternative site for the Weston 4 project. The proposed
18		alternative site - on the same parcel of land as the proposed project - does not
19		achieve the key goal of the EIS alternative site requirement: it does not avoid
20		environmental impacts at the original site proposed. WPS's "alternative site"
21		would still result in a major new facility at the Weston site and much of the same
22		new transmission infrastructure proposed for the primary site. Tables 2-6 and 2-7
23		of the Final EIS list five transmission projects, including a 50-mile, 345-kW line
24		(Weston - Central Wisconsin), that would be needed for Weston 4 to operate
25		without restrictions. It is possible that a new unit added at a different site would
26		necessitate less new transmission infrastructure than the proposed unit at Weston
27		- and thus would result in lower costs and reduced environmental impacts.

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1 The obvious alternative site to consider is the site of the Pulliam generating 2 station. At page 14 of the DEIS, the Commission notes that WPS's 2003 study of 3 sites for new generating units found the Pulliam site to be the best for pulverized coal technology if an additional parcel of land there could be acquired. WPS has 4 5 now acquired that land. Given this land acquisition, and WPS's failure to propose 6 a legitimate alternative site, a reanalysis of the Pulliam site is critical. 7 As part of the EIS process, the Commission should at least require WPS to 8 propose an alternative site that avoids environmental impacts at the Weston site. 9 Requiring WPS to reassess the Pulliam site in light of the land purchase should be 10 a key part of the Company's assessment of alternative sites. 11 At the same time, in its comments on the Draft EIS, the CUB expressed concern 12 that the Commission's EGEAS modeling was based largely on WPS's modeling, 13 and thus would suffer from any flaws in the WPS inputs or assumptions. The 14 CUB encouraged the Commission to examine the assumptions on which WPS's 15 modeling was based and change any assumptions that did not seem appropriate. 16 As we noted in our June 25, 2004 testimony, WPS's modeling contains one input 17 assumption that may bias the model significantly toward a single, large power 18 plant rather than a number of smaller capacity additions spread over several years. 19 In WPS's EGEGAS modeling, the Company has assumed that virtually all of its 20 purchased power contracts (250 MW of capacity) will expire at the end of 2007. 21 In reality, this would be an imprudent way to manage those contracts, as it would 22 create a sudden need for substantial capacity in 2008. This sudden capacity need 23 in 2008 appears to be the main reason that the model selects the large Weston 4 24 project consistently in 2008. While both the Company and the Commission 25 explore different scenarios by altering other assumptions, the assumed expiration 26 of 250 MW of purchased power in 2007 remains consistent across all scenarios. 27 We strongly urge the Commission to examine a scenario in which WPS manages 28 its purchased power contracts in a more rational way, which does not create a 29 "capacity need" shock in 2008.

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1		In addition, in the Final EIS, the Commission Staff provides additional
2		information on the wind costs it has used in its EGEAS modeling. Table 5-8 of
3		the Final EIS shows a levelized wind cost of \$74.38 per MWh. This is roughly
4		double the levelized wind cost WPS used in its modeling, as shown in Exhibit 8-4
5		of the Need and Wholesale Planning Analysis Document. It is important for the
6		Commission Staff to explain why it has used wind costs that appear to be so much
7		higher than those used by the Company.
8	Q.	Does the Final EIS remedy the weaknesses that led you to conclude in your
9		June 25, 2004 testimony that the Commission should not issue a CPCN for
10		Weston 4 based on the EGEAS analyses presented by WPS and the
11		information in the Draft EIS?
12	A.	No. Other than reflecting the potential that new wind units will be able to
13		operate at more than a 25 percent capacity factor, each of the weaknesses we
14		identified in the Draft EIS have not been remedied in the Final EIS.
15		In particular, we recommended that the PSCW Staff should perform new EGEAS
16		analyses reflecting the following assumptions:
17 18		<ul> <li>The possible extension or renewal of some or all of WPS's existing power purchase agreements.</li> </ul>
19 20		<ul> <li>Limitations on Weston 4's capability to operate at full power through the end of December 2009, if not later.</li> </ul>
21 22		<ul> <li>Thirty percent wind unit capacity factors and the wind capital costs assumed in Staff's better biomass and wind scenarios.</li> </ul>
23		• With and without Weston 4.
24		• With and without CO <sub>2</sub> and mercury monetization.
25		<ul> <li>With Staff's aggressive DSM projections.</li> </ul>
26 27		• With and without a Weston 4 capital cost six to ten percent higher than currently forecast. <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Direct Testimony of David A. Schlissel and Geoffrey L. Keith, dated June 25, 2004, at page 20, lines 10-22.

1		In addition, we recommended that the PSCW Staff should perform these analyses
2		in EGEAS runs which examine at the same time the combined effect of more than
3		one of these changes from the base case assumptions. <sup>2</sup>
4		Except for adding a new scenario which reflects what the PSCW Staff termed
5		"Better Biomass and Wind" and Staff's Aggressive DSM figures, the Final EIS
6		does not present any new EGEAS runs reflecting the revised assumptions we
7		identified in our June 25, 2004 testimony. For this reason, it is still our
8		conclusion that the Commission should not issue a CPCN for Weston 4 based on
9		the information in the Final EIS.
10	Q.	Does this complete your testimony on Environmental Impact Statement
11		Issues?
12	A.	Yes.
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<sup>&</sup>lt;sup>2</sup> Direct Testimony of David A. Schlissel and Geoffrey L. Keith, dated June 25, 2004, at page 20, lines 23-25.