

Exhibit No.:
Issues: Commitment to Complete Wind Energy
Assessments by Empire District Electric
Company in Missouri
Witness: Rick Anderson
Sponsoring Party: Missouri Department of Natural
Resources' Outreach and Assistance
Center, Missouri Energy Center
Type of Exhibit: Surrebuttal Testimony
Case No.: ER-2004-0570

EMPIRE DISTRICT ELECTRIC COMPANY ELECTRIC RATE CASE

SURREBUTTAL TESTIMONY

OF

RICK ANDERSON

MISSOURI DEPARTMENT OF NATURAL RESOURCES

ENERGY CENTER

November 24, 2004

FILED

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Missouri Public
Service Commission

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DEC 28 2004

Missouri Public
Service Commission

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

SURREBUTTAL TESTIMONY OF
RICK ANDERSON

MISSOURI DEPARTMENT OF NATURAL RESOURCES
ENERGY CENTER

CASE NO. ER-2004-0570

Exhibit No. 103
Case No(s) ER-2004-0570
Date 12-06-04 Rptr KF

1 **Q. Please state your name and business address.**

2 A. My name is Rick Anderson. My business address is Missouri Department of Natural
3 Resources, Energy Center, 1659 East Elm Street, P.O. Box 176, Jefferson City, Missouri
4 65102-0176.

5 **Q. Are you the same Rick Anderson who has filed prepared Direct Testimony in this case?**

6 A. Yes, I am.

7 **Q. What is the purpose of your Surrebuttal Testimony?**

8 A. The purpose of my Surrebuttal Testimony is to respond to certain issues presented by
9 Rebuttal Testimony filed before the Public Service Commission by Ms. Lena M. Mantle on
10 behalf of the Staff of the Missouri Public Service Commission (hereafter "Staff"). Ms.
11 Mantle addresses, among others, the MDNR recommendation regarding the Empire District
12 Electric Company (hereafter "Empire") funding for wind resource assessments to determine
13 the feasibility of building and operating wind powered electric generation systems within
14 Empire's Missouri service territory.

15 **Q. Please briefly describe MDNR's recommendation regarding Empire funding for wind**
16 **energy resource development.**

17 A. As reflected in my prepared Direct Testimony, the MDNR requests that Empire provide a
18 one-time funding amount of \$80,000 to conduct a wind energy assessment at two sites
19 within Empire's service territory within Missouri. The purpose of such an assessment would
20 allow Empire to examine other forms of energy resource development to help diversify
21 Empire's current electric generation mix. A substantial portion of Empire's proposed rate

1 increase addresses the rising cost related to the increased use of natural gas to produce
2 electricity.

3 **Q. Please summarize Staff's position regarding Empire funding for wind energy resource**
4 **development.**

5 A. Ms. Mantle notes in her testimony that "The question before the Commission is whether or
6 not EDE ratepayers should pay for the research. Because of the tenuous connection between
7 ratepayer benefits and costs, the Staff does not believe the ratepayers should pay for the wind
8 research project." (Mantle Rebuttal, page 3, line 5-8)

9 **Q. Please summarize the basis of Staff's position.**

10 A. Staff's position that Empire ratepayers should not pay for the recommended wind assessment
11 project is based on the following issues presented by Ms. Mantle's testimony:

12 1) Limitations of wind power. Ms. Mantle notes that the ability to generate wind would be
13 limited -- "wind turbine can only produce energy when the wind blows." (Mantle

14 Rebuttal, page 2, line 2-3);

15 2) Short run benefits. Ms. Mantle notes that the benefits to the ratepayers would be limited
16 to the funds spent in the area(s) installing and monitoring the (wind monitoring)
17 equipment (Mantle Rebuttal, page 2, line 5-6);

18 3) Long run benefits are tenuous. According to Ms. Mantle, "If the research shows that
19 there is wind potential at either or both of these sites, it does not necessarily mean that
20 wind resources will be developed at either or both sites. This is just the first step in
21 developing wind resources." (Mantle Rebuttal, page 2, line 7-10). Ms. Mantle suggests
22 that if a party or parties other than Empire develops the wind potential identified, Empire
23 ratepayers may not see any energy generated as a result of the assessment.

1 **Q. Do you agree with Ms. Mantle's positions as presented by her filed Rebuttal**

2 **Testimony?**

3 A. No. As I noted in prepared Direct Testimony, the purpose of MDNR's recommendation is to
4 provide an opportunity for Empire to examine the potential for wind resource development
5 specifically within its Missouri service territory. Such an assessment may help guide Empire
6 and others with an interest in wind energy development within the Empire service territory,
7 including customers of Empire, to determine if wind based electric generation is technically
8 and economically feasible. Empire has noted the need to make "significant" investments
9 over the next several years to support its customers' demand for electricity (Gipson, Direct,
10 page 4, line 19-21). Empire ratepayers will be asked to pay for these investments. Such
11 investments should be based on a comprehensive analysis of multiple methods of providing
12 necessary energy supply. A comprehensive analysis should address as many sources as
13 possible, including wind energy.

14 **Q. Please summarize the benefits of a wind energy assessment for Empire customers.**

15 A. Empire continues to rely heavily on fossil fuels to generate electricity. Investor-owned
16 electric utilities in Missouri, including Empire, must import virtually all of their fossil fuels –
17 coal, natural gas and oil – to support the current electric generation infrastructure in the state.
18 This dependency subjects Empire's customers to the price and supply volatility associated
19 with such fuels, particularly natural gas. Empire should examine all methods of electric
20 generation, not just fossil based generation, to assure that the company is making prudent
21 investments in electric generation for its customers in the years to come.

22 A comprehensive analysis by Empire could lead to utility scale wind energy development in
23 southwest Missouri and could accomplish the following benefits to Empire ratepayers:

- 1 a) Support economic activity within Southwest Missouri that would otherwise leave the
2 area due to energy purchases;
- 3 b) Improve fuel price stability;
- 4 1) Long term energy price contract for wind energy, versus short term prices for
5 fossil based fuels.
- 6 2) Diminished demand for natural gas due to associated reduction in demand; and
- 7 c) Reduced emission of air pollutants and associated health impacts.

8 **Q. Could ratepayers benefit from the use of Empire's green power tariff?**

9 A. Yes. Empire ratepayers also could benefit through the use of Empire's existing green power
10 tariff. Ms. Mantle notes that the tariff has been in effect since September 28, 2003 yet has
11 been unused due to a lack of wind power. (Mantle Rebuttal, page 2, line 15-22) Wind
12 energy generation that may result from this assessment would make the existing green power
13 tariff viable.

14 The wind assessment could guide Empire ratepayers interested in generating wind to build
15 and operate their own wind energy generators. Empire's ratepayers benefit by being able to
16 use the energy generated for themselves, helping Empire to potentially reduce base load and
17 peak demand, or by selling the energy to Empire, helping to meet its generation needs and
18 diversifying its electric generation system.

19 **Q. Is wind energy a viable resource alternative for Empire?**

20 A. Yes. As noted by Ms. Mantle, improvements in wind technology, decreased production costs
21 and the current federal wind energy tax credit have helped wind based generation to become
22 a more economically viable resource alternative. (Mantle Rebuttal, page 1, line 24-26)

23 However, Ms. Mantle notes that wind energy resource may not be an option for Empire since

1 it did not include wind as a part of its future resource plans in its recent resource planning
2 updates held with Staff. (Mantle Rebuttal, page 1, line 26-28)

3 However, in three separate resource planning updates with Staff, Empire did address and
4 discuss wind energy. In fact, Empire confirmed their interest in wind energy development in
5 recent IRP meetings. "However, as has been stated in Empire's bi-annual IRP meetings with
6 MPSC Staff, MDNR Staff, and OPC, Empire is pursuing a purchased power agreement
7 (PPA) with a wind energy developer. We have had discussions with several of these
8 developers and all have indicated that wind energy projects in Missouri are not as economical
9 as the ones being evaluated through the state of Kansas, especially those in the eastern half of
10 the state of Kansas. This is purely because of the wind speeds/characteristics that are
11 consistently present in the state of Kansas compared to those found in Missouri." (Data
12 Request MDNR-26, Blake Mertens, Empire District Electric Company, August 10, 2004)
13 Empire publicly declared its intent to purchase 150 MW of wind energy in the on-the-record
14 presentation to the Commission regarding the Interim Energy Charge on July 26, 2004.
15 The completion of a wind assessment in Empire's Missouri service territory may help to
16 identify opportunities and provide the incentives to support the development of wind
17 resources in Southwest Missouri.

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

19 A. Yes. Thank you.

STATE OF MISSOURI
PUBLIC SERVICE COMMISSION

In the Matter of Empire District Electric)
Company and Its Tariff Filing to Implement)
A General Rate Increase for Electric Service)
)

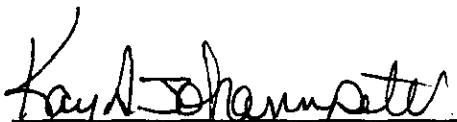
Case No. ER-2004-0570

AFFIDAVIT OF RICK ANDERSON

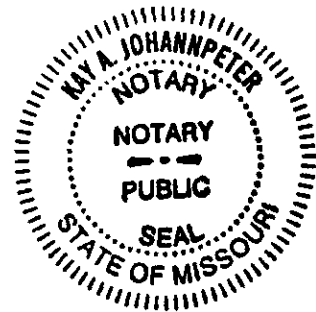
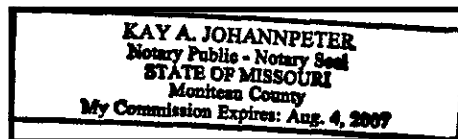
STATE OF MISSOURI)
)
COUNTY OF COLE) ss.

Rick Anderson, being duly sworn on her oath, hereby states that he has participated in the preparation of the foregoing Surrebuttal Testimony in question and answer form; that the answers in the foregoing Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters were true and correct to the best of his knowledge, information and belief.


Rick Anderson


Notary Public

My commission expires:



Subscribed and sworn before me this 23rd day of November, 2004.