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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EO-2010-0255

SURREBUTTAL TESTIMONY

OF

DUANE HIGHLEY

ON

BEHALF OF

**UNION ELECTRIC COMPANY
d/b/a Ameren Missouri**

**St. Louis, Missouri
December, 2010**

**SURREBUTTAL TESTIMONY
OF
DUANE HIGHLEY**

CASE NO. EO-2010-0255

Q. Please state your name and business address.

A: My name is Duane Highley. My business address is 2814 S. Golden, Springfield, Missouri.

Q. What is your occupation?

A. I am Director, Power Production for Associated Electric Cooperative, Inc. (“AECI”).

Q. Please state your educational background and experience.

A. I received a Bachelor's degree in Electrical Engineering in 1983, Magna Cum Laude and a Master's Degree in Engineering Management in 1991, both degrees from the University of Missouri-Rolla (now known as Missouri University of Science and Technology). I have also completed executive education programs at the University of Virginia's Darden School of Business (The Executive Program in 1998) and Harvard Business School (the Advanced Management Program in 2009). I am a Registered Professional Engineer in the State of Missouri.

Since 1983, I have worked in a number of positions for AECl. Initially, I had responsibility for electrical transmission system planning and operations. Beginning in 1985, I became responsible for generation resource planning, power sales and purchase contract management, and fuel management for AECl. Starting in 1990, I added responsibilities for corporate rate studies and financial planning. During this time, I

1 represented AECI in Rate and Repayment study hearings before the United States
2 Department of Energy's Southwestern Power Administration. I also coauthored papers
3 on resource planning and load forecasting which were published by the Institute of
4 Electrical and Electronics Engineers, an organization in which I am recognized as a
5 Senior Member.

6 In 1993, I became Supervisor of Resource Planning with responsibility for rate
7 and cost-of-service studies, financial forecasts, Power Requirements Studies submitted to
8 the United States Department of Agriculture, Rural Utilities Service, and generation
9 resource development planning. At this time, I supervised AECI's Power Marketing
10 function which included long-term and short-term, firm ("requirements") and non-firm
11 power supply contracts with several counterparties, including contracts for the sale of
12 power and energy to Noranda Aluminum, Inc., Missouri's largest industrial electric
13 customer.

14 My experience also includes management of a 1200 MW coal-based electric
15 generating station located in New Madrid, Missouri, from 1996 to 1999. During this
16 time, I testified before the United States House of Representatives Committee on Small
17 Business regarding the Kyoto Protocol.

18 Since 1999, I have served as Director, Power Production with responsibility for
19 the operation and maintenance of nine power plants in three states, with capacity totaling
20 over 5000 MW, and have completed the construction of over \$1 billion in power supply
21 projects. In 2005, I served briefly as AECI's Director, Engineering and Operations
22 which included responsibility again for transmission planning and operations, fuel

1 supply, rate studies, financial forecasts, load dispatching and all power marketing and
2 trading activities, with interchange sales revenue totaling \$450 million per year.

3 **Q. What is the purpose of your testimony in this proceeding?**

4 A. The purpose of my testimony is to respond to the testimony of a number of
5 witnesses in this proceeding who have offered the opinion that the contracts between (a)
6 Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri") and American
7 Electric Power Service Corporation as Agent for the AEP Operating Companies ("AEP")
8 and (b) Ameren Missouri and Wabash Valley Power Association, Inc. ("Wabash"), which
9 are at issue in this case, do not constitute long-term partial requirements contracts.
10 Specifically, I am responding to the testimony of Staff witnesses Dana Eaves and Lena
11 Mantle, Missouri Industrial Energy Consumers witnesses Maurice Brubaker and Henry
12 Fayne, and Missouri Energy Group witness Billie Sue Laconte.

13 **Q. Why are you qualified to offer an opinion on these contracts?**

14 A. I have been employed in the wholesale power supply business with AECEI
15 for over 27 years. AECEI is a wholesale electric power supply cooperative, whose primary
16 purpose is to generate, purchase, sell and transmit electric power and energy at wholesale.
17 I have served in a number of positions at AECEI and during the period from 1985 through
18 1996, I had various responsibilities, direct and indirect, for wholesale power purchase and
19 sales agreements. During the period from 1999 to present, I have served in a senior
20 management role with AECEI, and as a member and sometimes chairman of the senior
21 management team known as the "Contract Committee." The Contract Committee of
22 AECEI has broad oversight responsibility for corporate operations, and reviews all major
23 contracts including wholesale power agreements. As a result, I have developed

1 familiarity with the terms of art and normal characteristics of wholesale power supply
2 contracts.

3 More specifically, as a Senior Planning Engineer from 1985 to 1993, I was a
4 member of the team responsible for negotiating wholesale power supply agreements. I
5 also offered public testimony on behalf of AECI on proposed power supply contracts
6 offered by the United States Department of Energy through the Southwest Power
7 Administration. As the Supervisor of Resource Planning from 1993 to 1996, I supervised
8 the electric power marketing team which had the same responsibility. The long-term
9 contracts with which I was directly involved included electric cooperatives such as
10 Citizens Electric Corporation (of Missouri), Western Farmers (of Oklahoma), KAMO (a
11 wholesale supplier serving in Oklahoma and Missouri), and Arkansas Electric
12 Cooperative (a wholesale supplier in Arkansas), among others; large industrial customers
13 such as Noranda Aluminum and American Cyanamid (both located in Missouri);
14 investor-owned utilities such as Entergy, Kansas City Power and Light, Missouri Public
15 Service Company, The Empire District Electric Company, and Ameren Missouri, among
16 others; and municipal utilities such as Fulton, Missouri, Springfield, Missouri, and others.
17 As I moved into plant operations in 1996, my direct involvement with power supply
18 agreements diminished, but since 1999, I have served as a member and frequent
19 chairperson of the Contract Committee for AECI, with responsibility to review
20 significant power supply contracts, including the negotiation of a long term agreement
21 with Noranda Aluminum. In addition to this, I also negotiated or supervised the
22 negotiation of a large number of agreements for the short-term supply of electric energy.
23 When I served as Director of Engineering and Operations in 2005, I led the corporate

1 division with direct responsibility for all power marketing agreements and responses to
2 RFPs for the cooperative.

3 In summary, over 27 years I have had direct involvement in the negotiation,
4 administration, and review of a number of wholesale power supply agreements, both long
5 and short-term, firm and non-firm, for electric cooperatives, municipal utilities, and
6 investor-owned utilities.

7 **Q. Did you review the AEP and Wabash contracts?**

8 A. Yes I did.

9 **Q. Are these contracts long-term partial requirements contracts?**

10 A. Yes, both contracts are long-term partial requirements contracts. They are
11 long-term because each contract has a term of more than one year, which is commonly
12 and universally considered the demarcation between long-term and short-term power
13 contracts in the power industry, including in the wholesale power markets. In addition,
14 both contracts constitute partial requirements contracts because they provide both the
15 capacity and the energy necessary to meet a portion of the requirements of the
16 counterparties—AEP on its own behalf, and Wabash acting on behalf of Citizens Electric
17 Corporation.

18 **Q. Several witnesses have cited 20-year-old definitions of “long-term”**
19 **and “requirements service” that appear on p. 310 of the Federal Energy Regulatory**
20 **Commission (“FERC”) Form 1. Do these definitions have any relevance to the**
21 **character of the AEP and Wabash contracts?**

22 A. No, they do not. FERC Form 1 is a governmental form that is completed
23 and submitted by utilities to the government annually. The definitions used in that form

1 exist only for the purpose of completing that form. The FERC Form 1 does not define the
2 standard language for power transactions as it is commonly used in the wholesale power
3 supply industry.

4 The definition of “long-term” contained in FERC Form 1 (a term of greater than 5
5 years) is inconsistent with the definition of “long-term” regularly used in the power
6 industry, including by power traders and marketers in determining the character of power
7 supply agreements. In my experience, a “long-term” power supply agreement would be
8 one which covers a period of one year or more. A short-term agreement is commonly
9 understood to be one with a term of less than one year. In practice, different staff will
10 usually be involved in negotiation short-term and long-term agreements. The reason for
11 this is that, as one makes commitments for one year or more, the implications on the
12 long-term power supply balance must be considered. Short-term agreements are
13 normally made within the pre-established power supply balance.

14 Normal utility practice is for a supplier to update its load and capacity balance on
15 an annual basis. Utilities must project their total peak demand based on recent peak
16 trends in load demand plus their “firm” or “requirements” sales, and provide for enough
17 generation capacity to meet that peak demand, plus a prudent level of reserve capacity to
18 provide a margin for reliability. Because of this need to provide for a reserve capacity
19 margin, utilities can buy and sell capacity with or without this margin included. Sales
20 without the margin are “non-firm” or “non-requirements”; sales made that include the
21 margin are “firm” sales, or “requirements” sales. A load-serving entity will normally
22 want to buy requirements service because it is more reliable than a non-firm supply

1 which may be subject to interruption by the supplier. In my experience, the terms
2 “requirements” and “firm” are synonymous.

3 The definition of “requirements service” contained in the FERC Form 1 is
4 inconsistent with, and more restrictive than, the broader meaning of “partial requirements
5 sales” used in the power industry and the wholesale power markets, as well as with the
6 plain meaning of that term. In my 27 years of negotiating, administering and reviewing
7 power sales contracts, I have never seen “long-term” or “requirements service” used in
8 practice in the restrictive manner as Mr. Brubaker, Mr. Fayne, Ms Laconte, Mr. Eaves
9 and Ms. Mantle suggest, nor have I ever considered the definitions contained on page 310
10 of the FERC Form 1 as determinants of the character of a power sales agreement.

11 **Q. Please summarize your testimony and conclusions.**

12 A. The AEP and Wabash contracts are clearly long-term partial requirements
13 contracts as those terms are understood and applied in the power business, including in
14 the wholesale power markets, being of a term of one-year or more and including firm
15 capacity to serve load.

16 **Q. Does this conclude your surrebuttal testimony?**

17 A. Yes.

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