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CASE NO. ER-2007-0002

Exhibit No.: 648
Issues: Callaway Power Plant
Witness: Charles D. Naslund
Sponsoring Party: Union Electric Company
Type of Exhibit: Rebuttal Testimony
Case No.: ER-2007-0002
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REBUTTAL TESTIMONY

OF

CHARLES D. NASLUND

ON

BEHALF OF

UNION ELECTRIC COMPANY
d/b/a AmerenUE

St. Louis, Missouri
January, 2007

AmerenUE Exhibit No. 48
Case No(s) ER-2007-0002
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1 **Q. What is the technical basis, economic basis or other basis provided by**
2 **Mr. Wood, Mr. Brosch, Mr. Dunkel or Mr. Selecky that Callaway can or will have its**
3 **40-year license extended to 60 years?**

4 A. Each of the witnesses base their proposal extend the depreciable life of the
5 Callaway Plant to 60 years on the supposition that since the NRC licenses of numerous other
6 nuclear plants have been extended, the license for the Callaway Plant can and will be
7 extended. Other than this supposition, no technical studies, economic studies or any other
8 evidence has been provided by any of these witnesses to support their position on this issue.

9 **Q. How many of the individuals providing testimony on extending**
10 **Callaway's license life have participated in the license extension process for a nuclear**
11 **plant?**

12 A. None.

13 **Q. What issues could affect AmerenUE's decision to seek a license extension**
14 **for the Callaway Plant?**

15 A. Callaway's current license remains in effect until June 11, 2024 at midnight.
16 There are numerous scenarios that could threaten AmerenUE's ability to extend the license
17 that will not be known until later in Callaway's licensed life. These include: additional
18 terrorist attacks in the USA or on nuclear plants in other countries, lack of adequate water
19 supplies in the Missouri river to cool the plant, political changes in our country, significant
20 nuclear safety issues with generation 2 nuclear plants or economics that don't support the
21 need to extend the license. Any one of these issues could lead to a decision by AmerenUE to
22 not seek an extension of Callaway's life.

1 **Q. What studies has AmerenUE completed to investigate technical and**
2 **economic issues that would need to be evaluated to allow extension of Callaway's**
3 **license?**

4 A. No studies have been completed to investigate the technical issues or
5 economic issues that would need to be evaluated to make a prudent decision on license
6 extension.

7 **Q. What technical issues are known today that would need to be resolved to**
8 **allow the extension of Callaway's license?**

9 A. All components currently in Callaway were specified for a 40 year life by the
10 original architect engineers, Westinghouse Electric and Bechtel Corporation. While two
11 major components of Callaway have been replaced (Steam Generators and Turbines) as
12 noted in the Staff's testimony, there are literally thousands of components (approximately
13 130,000) and miles of cable and piping that would have to be assessed for life extension or
14 replaced, before a license extension would be granted. We already know that many of these
15 components will have to be replaced to allow a license extension, including most of the
16 buried pipe systems at the plant, the reactor vessel head and numerous other alloy 600 welds
17 in the reactor coolant system.

18 **Q. In Mr. Brosch's testimony on pages 46 – 50 he recommends that if the**
19 **depreciable life of the plant is not extended to 60 years, then the capital investments**
20 **recently made at the Callaway Plant should not be included in AmerenUE's rate base.**

1 **He also implies that Callaway's operations and maintenance (O&M) expenses are being**
2 **incurred simply to allow life extension of Callaway out to 60 years. Is this correct?**

3 A. No. All capital investments made at the Callaway Plant, including the large
4 investments in Steam Generators and Turbines were justified and completed to allow
5 Callaway to operate safely and economically to the end of its current 40 year life. All O&M
6 expenses referenced by Mr. Brosch are expenses required to monitor and track component
7 life during the course of the existing plant license life. These requirements are imposed on
8 the plant in the Technical Specifications issued by the NRC to operate the plant and are
9 further defined in the American Society of Mechanical Engineers' code and Institute of
10 Electrical and Electronic Engineers standards. None of the capital or O&M expenses noted in
11 Mr. Brosch's testimony were expended based on plant life extension beyond 40 years.

12 **Q. Is the license extension process by the NRC a government funded**
13 **process?**

14 A. No. Current estimates are that AmerenUE's costs for submitting an
15 application for a license extension with the NRC, and NRC review of the application will be
16 at least \$20 million over a 3-4 year period. In addition, component replacement costs or
17 remediation would also need to be completed at a currently undefined cost. It would not be
18 beneficial for either AmerenUE or its customers for the Company to prematurely incur these
19 considerable costs.

20 **Q. Does this conclude your Rebuttal Testimony?**

21 A. Yes, it does.