

Callaway Plant Unit 2

Combined License Application

Part I: General Information

Revision 0
July, 2008

OPC Exhibit No. 411
Case No(s). ER-2008-0318
Date 11-20-08 Rptr XF

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1.0 GENERAL INFORMATION

This part of the Combined License (COL) Application for the {Callaway Plant Unit 2} addresses the requirements of 10 CFR 50.33, "Content of applications; general information," (CFR, 2007a) and provides details of the applicant's corporate identity and location, applicant's ownership organization, the type of licenses being applied for, the applicant's financial qualifications, decommissioning funding assurance, foreign ownership, control, or domination information, and agreement limiting access to classified information.

1.1 APPLICANTS

{The applicant for the COL for Callaway Plant Unit 2 is Union Electric Company d/b/a AmerenUE (AmerenUE). AmerenUE's principal office and place of business is:

{One Ameren Plaza
1901 Chouteau Avenue
St. Louis, MO 63103}

1.1.1 DESCRIPTION OF BUSINESS OR OCCUPATION

{AmerenUE is a Missouri corporation engaged in providing electric and gas service in portions of Missouri, operating as a public utility under the jurisdiction of the Missouri Public Service Commission. AmerenUE was incorporated in 1922, and was the successor to a number of companies, the oldest of which was organized in 1881. AmerenUE is Missouri's largest electric utility, providing electric service to approximately 1.2 million customers across central and eastern Missouri, including the greater St. Louis area. AmerenUE serves 57 Missouri counties and 500 towns. More than half (55 percent) of AmerenUE's electric customers are located in the St. Louis metropolitan area. About 127,000 of AmerenUE's 1.2 million customers are natural gas customers. AmerenUE serves gas customers in more than 90 Missouri communities, including towns in southeast, central, and eastern Missouri. The company owns more than 3,000 miles of natural gas transmission and distribution mains.

AmerenUE owns and operates approximately 9,900 megawatts of generation capability anticipated to be available at time of the expected 2008 peak summer electrical demand. These electricity generating plants include coal, nuclear, gas and hydroelectric facilities in the states of Missouri, Illinois and Iowa. Historically, AmerenUE has built its electricity generating plants, using the services of Architect/Engineering firms and other specialized contractors while retaining the overall responsibility for managing the project. Recently, AmerenUE completed construction of its Peno Creek Plant, a 188 MW combustion turbine electricity generating plant that began commercial operation in 2002, and its Venice Power Station, a 492 MW combustion turbine electricity generating plant that began commercial operation in 2005.

AmerenUE built and is the current license holder for Callaway Plant Unit 1, a 1,190 MWe Westinghouse four loop Pressurized Water Reactor (PWR) of the Standardized Nuclear Unit Power Plant System (SNUPPS) design. Since beginning operation in 1984, Callaway Plant Unit 1 has achieved the fourth highest lifetime generation among the 104 nuclear power plants operating in the United States (209,187,723 megawatt-hours). Callaway Plant Unit 1 also has a strong operational record and has established a consistent record of safe operation throughout its 23-year operating history. In its most recent performance assessment, covering calendar year 2007, the NRC staff stated that the plant "operated in a manner that preserved public health and safety and fully met all cornerstone objectives." The Callaway Plant is a very safe place to work. In 2007, Callaway employees had no accidents resulting in a lost workday. In

2006, the plant received the prestigious Edison Electric Institute (EEl) Safety Achievement Award for outstanding worker safety.

AmerenUE has successfully completed significant performance upgrades of Callaway Plant Unit 1. In 1988, AmerenUE successfully implemented a project to uprate Callaway Plant Unit 1; increasing its rated power by approximately five percent. In Spring 2004, the main condenser was replaced resulting in an approximate 4 MWe increase in the plant's gross electric output. In Fall 2005, the steam generators and turbine rotors were replaced resulting in an approximate 60 MWe increase in the plant's gross electric output. AmerenUE accomplished both of these complex projects in 2005 during a normal refueling outage and its steam generator replacement efforts resulted in a new record for the shortest steam generator replacement outage. There were no accidents or events resulting in a lost workday, and total radiological dose was well below project estimates and industry averages.}

1.1.2 ORGANIZATION AND MANAGEMENT OF APPLICANT

{Simplified organizational charts depicting the relationship between AmerenUE, its parent company, Ameren Corporation (Ameren), and affiliated companies is provided in Figure 1.0-1. The organization and management of the business entities depicted on the figure are discussed below.

1.1.3 ORGANIZATION

Ameren was created by the December 1997 merger of CIPSCO Incorporated and Union Electric Company. In 2003, Ameren grew with the acquisition of CILCORP Inc., parent of Central Illinois Light Company. In 2004, Ameren acquired Illinois Power Company from Dynegy Inc.

Ameren employees, totaling approximately 9,000, provide energy services to approximately 2.4 million electric customers and nearly one million natural gas customers across 64,000 square miles in Illinois and Missouri. Ameren is a publicly traded company (AEE), and its securities are traded on the New York Stock Exchange and are widely held.

Ameren is a holding company and the parent of AmerenUE, its wholly owned subsidiary. In addition to AmerenUE its principal subsidiaries are:

CILCORP Inc. is the parent of Central Illinois Light Company d/b/a AmerenCILCO (AmerenCILCO), an Illinois corporation based in Peoria, Illinois, which is a public utility under the jurisdiction of the Illinois Commerce Commission engaged in providing electric and natural gas service in portions to Peoria and 26 surrounding communities. AmerenCILCO provides electricity to 200,000 electric and 213,000 natural gas customers in 19 counties in east and central Illinois.

Central Illinois Public Service Company d/b/a AmerenCIPS (AmerenCIPS), an Illinois corporation based in Springfield, Illinois, is a public utility under the jurisdiction of the Illinois Commerce Commission engaged in providing electric service in 70 counties throughout a 20,500-square-mile area. AmerenCIPS today serves nearly 400,000 retail electric customers and almost 200,000 retail gas customers in 576 communities with a service territory that includes more than 7 percent of Illinois's population and 35 percent of its surface area.

Illinois Power Company d/b/a AmerenIP (AmerenIP), an Illinois corporation based in Decatur, Illinois, is a public utility under the jurisdiction of the Illinois Commerce Commission engaged in providing electric service to over 600,000 electric customers and



to more than 400,000 gas customers — an aggregate population of 1.4 million — in 313 incorporated municipalities across 15,000 square miles of central, east central and southern Illinois.

Ameren Services Company, a Missouri Corporation, provides support services to Ameren and its subsidiaries.

Ameren Energy Resources Company, LLC, a Delaware LLC is the holding company for non-rate-regulated generation, marketing and fuels services companies.

Ameren exercises control and oversight of its subsidiaries through its holding company structure. Oversight of Callaway Plant Unit 1 is accomplished in many ways, including through the Nuclear Oversight Committee of Ameren's Board of Directors. The Nuclear Oversight Committee's charter is posted on Ameren's website at http://www.ameren.com/Investors/adc_iv_NuclearOversightCommittee.asp. The charter provides that the Committee's duties include providing Board-level oversight of Ameren's nuclear generating facilities as well as long-term plans and strategies of Ameren's nuclear power program and making appropriate reports to Ameren's Board of Directors. The Nuclear Oversight Committee held six meetings in 2007.

1.1.4 MANAGEMENT

The business and affairs of AmerenUE are managed under the direction of a Board of Directors, currently consisting of six directors. The names and addresses of AmerenUE's directors and principal officers, all of whom are United States citizens, are as follows:

Directors	Address
Warner L. Baxter	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Daniel F. Cole	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Richard J. Mark	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Adam C. Heflin	Union Electric Company-Callaway Plant P.O. Box 620 Fulton, Missouri 65251
Steven R. Sullivan	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Thomas R. Voss	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149

Principal Officers

Name	Title	Address
Thomas R. Voss	Chairman, President and Chief Executive Officer	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Warner L. Baxter	Executive Vice President and Chief Financial Officer	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Daniel F. Cole	Senior Vice President, Administration	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Martin J. Lyons	Senior Vice President and Chief Accounting Officer	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Richard J. Mark	Senior Vice President, MO Energy Delivery	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Adam C. Heflin	Senior Vice President and Chief Nuclear Officer	Union Electric Company-Callaway Plant P.O. Box 620 Fulton, Missouri 65251
Steven R. Sullivan	Senior Vice President, General Counsel and Secretary	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Jerre E. Birdsong	Vice President and Treasurer – Risk Management	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Mark C. Birk	Vice President, Power Operations	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Karen C. Foss	Vice President, Public Relations	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Fadi Diya	Vice President, Nuclear Operations	Union Electric Company-Callaway Plant P.O. Box 620 Fulton, Missouri 65251
Timothy E. Herrmann	Vice President, Engineering, Callaway Nuclear Plant	Union Electric Company-Callaway Plant P.O. Box 620 Fulton, Missouri 65251
Lynn M. Barnes	Vice President and Controller	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Gregory L. Nelson	Vice President and Tax Counsel	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149

Principal Officers

Name	Title	Address
Dennis W. Weisenborn	Vice President, Supply Services	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Ronald C. Zdellar	Vice President, Energy Delivery Distribution Services	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149
Stephen M. Kidwell	Vice President, Regulatory Affairs	Union Electric Company P.O. Box 66149 St. Louis, Missouri 63166-6149

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1.1.5 REQUESTED LICENSES AND AUTHORIZED USES

This application is for a Class 103 combined license under 10 CFR 52 (CFR, 2007b) to construct and operate a U.S. EPR nuclear power plant unit at the site of {Callaway Plant Unit 1}, located near {Reform, Missouri}. This U.S. EPR nuclear power plant unit will be used to produce electricity for sale. The period of time for which the license for the unit is requested shall begin upon the NRC's granting of the combined license for {Callaway Plant Unit 2} and shall expire 40 years from the date upon which the NRC makes a finding that acceptance criteria are met under 10 CFR 52.103(g) (CFR, 2007c) or allowing operation during an interim period under 10 CFR 52.103(c) (CFR, 2007c).

In addition, this application is for the necessary licenses issued under 10 CFR 30 (CFR, 2007d), 10 CFR 40 (CFR 2007e), and 10 CFR 70 (CFR, 2007f) to receive, possess, and use byproduct, source and special nuclear material. Byproduct, source, and special nuclear material shall be in the form of sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and fission detectors in amounts as required. Byproduct, source, and special nuclear material in amounts as required, without restriction to chemical or physical form, shall be for sample analysis or instrument and equipment calibration or associated with radioactive apparatus or components. Special nuclear material shall be in the form of reactor fuel, in accordance with limitations for storage and amounts required for reactor operation, as described in Part 2 of this Combined License Application.

The current scheduled date for the completion of construction of {Callaway Plant Unit 2 is December 2017}.

1.1.6 REGULATORY AGENCIES AND LOCAL PUBLICATIONS

The names and addresses of regulatory agencies that have jurisdiction over the rates and services incident to the proposed activity are as follows:

{Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Missouri Public Service Commission
301 West High Street
P.O. Box 360
Jefferson City, Missouri 65102}



Local news publications that circulate in the area around the proposed facility and that are considered appropriate to give reasonable notice of the application to those parties that might have a potential interest in the proposed facility are as follows:

{Advertiser-Courier
136 East 4th Street
Hermann, Missouri 65041

Boone County Journal
209 E Johnson Street
Ashland, Missouri 65010

Centralia Fireside Guard
118 West Sneed
Centralia, Missouri 65240

Columbia Missourian
311 South 9th Street
Columbia, Missouri 65201

Columbia Tribune
701 Cherry Street
Columbia, Missouri 65201

Fulton Sun
115 East 5th Street
Fulton, Missouri 65251

Jefferson City News-Tribune
210 Monroe Street
Jefferson City, Missouri 65101

Mexico Evening Ledger
300 North Washington Street
Mexico, Missouri 65265

St. Louis Post-Dispatch
900 North Tucker Boulevard
St. Louis, Missouri 63166}

1.2 FINANCIAL QUALIFICATIONS

1.2.1 REGULATORY REQUIREMENTS

{Pursuant to the requirements of 10 CFR 50.33(f) (CFR, 2007a) and the guidance provided in NUREG-1577, Revision 1, Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance (NRC, 1999), financial qualifications of AmerenUE to construct and operate Callaway Plant Unit 2 are described in this section. Financing by AmerenUE, along with capital support from its parent company, Ameren, in the form of supplemental short-term funding and common equity, will provide the funding and permanent capital necessary to construct Callaway Plant Unit 2.



1.2.2 FINANCIAL DISCLOSURES

Audited financial statements for AmerenUE and Ameren on a consolidated basis for the three most recent fiscal years are provided at <http://www.ameren.com> on the Investors "tab" under Annual Reports. The most recent financial statements filed for AmerenUE and Ameren prior to the submission of this application are also provided in Appendix A (Ameren Corp Form 10-Q, Filed: May 08, 2008). Public filings with the Securities and Exchange Commission, including this information, support the conclusion that AmerenUE, along with Ameren, have reasonable assurance of obtaining funds sufficient for the construction and operation of Callaway Plant Unit 2.

1.2.2.1 Financial Strength

AmerenUE and Ameren have reliable access to the capital markets. As of December 31, 2007, Ameren had a market capitalization of approximately \$11.3 billion and total assets of \$20.7 billion with total operating revenues of \$7.5 billion during fiscal year 2007. At this date and for this fiscal period (ending December 2007), AmerenUE had total assets of \$10.9 billion and total operating revenue of \$3.0 billion.

1.2.2.2 Summary of Credit and Debt Obligations

AmerenUE and Ameren have the capability to raise new capital through the equity and debt capital markets. This section summarizes the amount of these entities' existing debt and credit ratings by Moody's, S&P and Fitch.

At the time of this application, Ameren did not have any long-term debt outstanding at the holding company level. During 2007, Ameren averaged \$198 million of short-term borrowing under its \$1.15 billion corporate credit facility. Ameren can borrow up to the entire amount of the facility.

As of December 31, 2007, AmerenUE had outstanding long-term debt of approximately \$3.2 billion plus current maturities of \$152 million. As of this date, AmerenUE had a total of \$82 million of short-term debt outstanding in the form of commercial paper borrowings. AmerenUE maintains \$500 million of direct 364-day borrowing access under Ameren's \$1.15 billion credit facility in addition to being able to fully access this facility through short-term borrowings from Ameren.

Additional information regarding AmerenUE's and Ameren's credit facilities and long-term financings can be found in Notes 4 and 5 to the annual reports provided at <http://www.ameren.com> on the Investors Home Page under Annual Reports.

1.2.2.2.1 Credit Ratings

The following table presents the principal credit ratings of Ameren and AmerenUE by Moody's, S&P and Fitch in effect on July 7, 2008:

Credit Ratings			
	Moody's	S&P	Fitch
Ameren:			
Issuer/corporate credit rating	Baa2	BBB-	BBB+
Senior unsecured debt	Baa2	BB+	BBB+
Commercial paper	P-2	A-3	F2

Credit Ratings

	Moody's	S&P	Fitch
UE:			
Issuer/corporate credit rating	Baa2	BBB-	A-
Secured debt	Baa1	BBB	A+
Commercial paper	P-2	A-3	F2
Preferred Stock	Ba1	BB	A-

AmerenUE intends to maintain a balanced capital structure as appropriate for regulatory purposes and to maintain investment-grade credit ratings.

1.2.2.2.2 Disclosure of Cost Estimates

Projected construction project costs and estimated initial core fuel supply costs are summarized below.

Callaway Plant Unit 2 Projected Project Cost (\$Millions)	
Projected Commercial Operation Date December 2017	
Plant Cost	\$ []
Transmission Cost	\$ []
Initial Fuel Load	\$ []
Capitalized Allowance for Funds Used During Construction	\$ []
Other Financing Charges	\$ []
Total Capital Project Cost	\$ []

The projected project cost above is based on constructing one U.S. EPR nuclear power plant, site switchyard, collector well water source, transmission lines, remote substation modifications and support structures related to the Callaway Plant Unit 2. The estimate does not anticipate unidentified new technologies, materials or construction techniques nor does it anticipate regulatory changes unknown at this time except for rate recovery discussed below (Construction Work in Progress (CWIP)).

The estimate above reflects 3% escalation which may or may not be indicative of future commodity and construction prices plus the estimate contains a contingency. It is AmerenUE's position that it will hedge commodities wherever possible and limit price movement when possible through escalation clauses and extra-contractual clauses regarding equitable adjustment to contracts and avoidance of large contingencies in contractors' quotations.

The estimate assumes CWIP will be included in rate base in the State of Missouri. In November, 1976, a voter referendum, Proposition 1, was passed prohibiting CWIP in rate base. It is the position of AmerenUE that AmerenUE can effectively work with the Missouri legislature and the citizens of Missouri to exempt Callaway Plant Unit 2 and its associated facilities from this regulation. Should this effort be unsuccessful, the construction cost estimate would likely increase and AmerenUE would need to reevaluate its options.

There are no federal loan guarantees assumed in the estimate at this time.

1.2.2.2.3 Construction Cost Funding Plan

AmerenUE has a number of options for funding the construction costs and related fuel cycle expenses of the Callaway Plant Unit 2. Since this unit would join Callaway Plant Unit 1 as part of a regulated asset pool eligible for cost recovery in its regulated Missouri jurisdiction, AmerenUE would employ financing through a variety of sources. There is reasonable assurance that AmerenUE and Ameren can access capital sufficient for the construction and initial fuel cycle expenses.

AmerenUE would permanently fund construction costs through three primary sources: cash from operations, debt or other securities issued by AmerenUE, and equity provided by Ameren. AmerenUE would be able to issue short-term debt via borrowings under the \$1.15 billion credit facility or other credit facilities, commercial paper or borrowings from Ameren on a short-term basis to fund a portion of its capital requirements until such time as it elects to issue long-term capital.

The Department of Energy (DOE) has issued the final regulations for the loan guarantee program authorized by Title XVII of the Energy Policy Act of 2005 (EPAAct). The final regulation, effective October 23, 2007, provides that the Department may issue guarantees for up to 100% of the amount of a loan, subject to the EPAAct limitation that DOE may not guarantee a debt instrument for more than 80% of the total cost of an eligible project. On December 19, 2007, Congress passed, and the President subsequently signed into law, an Omnibus Appropriations bill which recommended a loan volume cap of \$18.5 billion for nuclear facilities. The DOE Loan Guarantee Office is moving forward with preparations to issue a solicitation for nuclear projects.

AmerenUE will evaluate the potential of this DOE loan guarantee program and any other available incentives as a potential source of debt funding for the construction of Callaway Plant Unit 2. An acceptable federal loan guarantee program must be accompanied by approval of the Missouri Public Service Commission to fully recover AmerenUE's costs as well as any associated contractual payment obligations that it assumes related to the project. AmerenUE will obtain necessary approvals for the financing of Callaway Plant Unit 2 construction from the appropriate regulatory authorities at the appropriate time.

1.2.2.2.4 Operational Costs

AmerenUE conducts business as a regulated electric utility, and as such, pursuant to 10 CFR 50.33(f) (CFR, 2007a) AmerenUE is exempt from an operational cost financial qualification review. Consequently, projected operating costs are not discussed in this application. Recovery of operating costs for Callaway Plant Unit 2 would be part of periodic rate filings with the Missouri Public Service Commission that would recover operating costs in a manner similar to recovery of operating costs for Callaway Plant Unit 1.}

1.3

DECOMMISSIONING FUNDING ASSURANCE

In accordance with the Commission's regulations in 10 CFR 50.33 (CFR, 2007a) and the guidance provided in NUREG-1577, "Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance," (NRC, 1999) decommissioning financial assurance information is provided in this section. The purpose of this section is to provide reasonable assurance that {AmerenUE} has a viable plan to ensure that funds will be available to decommission {Callaway Plant Unit 2}, when required. As such, this subsection and the associated Appendices constitute the decommissioning report required by 10 CFR 50.75, "Reporting and recordkeeping for decommissioning planning," paragraph (b) (CFR, 2007j).

