2.8 RELATED FEDERAL PROJECT ACTIVITIES

This section discusses the Federal activities that are related to this project and identifies whether there is a need for another Federal agency to participate in the review of the environmental report. Actions related to the granting of licenses, permits, or approvals by other Federal agencies for this project are not discussed in this section.

The project consists of one new nuclear generating plant (Callaway Plant Unit 2) being co-located with one currently licensed nuclear generating plant (Callaway Plant Unit 1) on the Callaway Plant site. Union Electric doing business as ("d/b/a") AmerenUE is applying for a Combined Operating License (COL) for the nuclear power plant.

2.8.1 LAND ACQUISITION AND USE OF ELECTRICAL TRANSMISSION CORRIDORS

AmerenUE owns the 7,354 acre (2,976 hectare) Callaway Plant site and is the owner and operator of the currently licensed Callaway Plant Unit 1 nuclear power plant. The Callaway Plant Unit 2 will be co-located on the existing Callaway Plant site. The midpoint of the Callaway Plant Unit 2 containment will be 1,350 ft (411 m) northwest of the midpoint of the containment for the existing Callaway Plant Unit 1 on previously disturbed land. Therefore, no Federal action is required to acquire the site.

The net electric generation of the project is to be distributed using existing transmission corridors to the north and south. The onsite and offsite portions of the existing corridor to the south will be widened by 150 ft (46 m) to accommodate new power transmission towers and 345 KV transmission lines.

The Missouri Public Service Commission (PSC) as part of AmerenUE entering the Midwest Independent Transmission System Operator (MISO) retains final authorization of all lines in Missouri. PSC retains the right to grant the certificate of any new line in Missouri, even in certificated territory. This situation would presume that the PSC approved Callaway Plant Unit 2 and its related transmission requirements through the Missouri Integrated Resource Plan (IRP), MISO would "approve" the transmission through its generation queue and MISO Transmission Expansion Planning process, and the PSC through the certification process of any transmission upgrades in uncertified areas would have a second opportunity to exercise approval authority.

2.8.2 COOLING WATER SOURCE AND SUPPLY

The Collector Well River Intake System provides makeup water from the Missouri River for the two natural draft circulating water system (CWS) cooling towers and the four Essential Service Water System (ESWS) mechanical draft cooling towers. Two of the four ESWS cooling towers will operate at all times during normal plant operation. Groundwater drawn from an existing onsite well supplies water to the potable and sanitary water system and the fire water distribution system.

Seven separate acts of Congress since 1912 provided for the construction and maintenance of a Missouri River navigation channel and bank stabilization works. The projects, constructed and maintained by the US Army Corps of Engineers (USACE), are collectively known as the Missouri River Bank Stabilization and Navigation Project, (BSNP). The resulting highly controlled, narrow channel reduced the available fish and wildlife habitat that were supported by the natural channel and meander belt. Consequently, the fish and wildlife populations have declined as have recreational opportunities that they used to provide. In the early 1980s, the Kansas City District of the USACE completed a study demonstrating it was economically feasible to mitigate fish and wildlife resources lost to the construction of the BSNP project. In 1986, Congress authorized construction of the Missouri River Mitigation Project (USACE, 2007a).

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The Missouri River Mitigation Project is designed to mitigate, or compensate, for fish and wildlife habitat losses that resulted from past channelization efforts. The Project extends from Sioux City, Iowa, to the mouth of the Missouri River near St. Louis. The project will develop approximately 166,750 acres (67,482 hectares) of land in separate locations along the river in four States including Missouri. Preservation or restoration is being accomplished by means of land acquisition, dredging filled-in areas, reopening historic chutes, bank stabilization, dike notching, pumping, dike/levee construction, vegetative plantings, and vegetation and land management.

The operational 423 acre (172 hectare) Tate Island unit of the Missouri River Mitigation Project is located on the left bank of the river in Callaway and Montgomery Counties between river miles 113 and 110 (182 and 177 km), approximately 2 ½ river miles (4 km) downstream of the Callaway Plant Unit 2 discharge. It provides shallow water, bottomland hardwood, and island sandbar habitats (USACE, 2007b).

Apart from the Missouri River Mitigation Project, The Big Muddy National Fish and Wildlife Refuge is owned and operated by the U.S. Fish and Wildlife Service (USFWS), an agency of the U.S. Department of the Interior. The refuge was created in September of 1994, "for the development, advancement, management, conservation and protection of fish and wildlife resources". The USFWS has Congressional approval to acquire up to 60,000 acres (24,000 hectares) of floodplains and adjacent lands on the lower Missouri River between Kansas City and St. Louis, Missouri. The refuge consists of several units at intervals along the river named for towns that once flourished, pioneers, or facts or landmarks that are identified with the river called the Big Muddy (USFWS, 2007a).

The St. Aubert Island Unit is within the 6 mile (10 km) vicinity of the Callaway site. It is located in northern Osage County and contains 1,124 acres (455 hectares) comprised of about 700 acres (280 hectares) of bottomland and 400 acres (160 hectares) of upland forests and old fields. This unit does not have any public access except from the Missouri River. Access is provided from the Mokane Access and the Chamois Access, both of which are managed by the Missouri Department of Conservation.

Cumulative impacts to the Missouri River and associated natural resources are addressed in Chapter 10.

Although the USACE and the USFWS are involved in habitat restoration projects on the Missouri River, Federal action to ensure the availability of a cooling water source and supply is not anticipated during the lifetime of the proposed project.

2.8.3 OTHER FEDERAL ACTIONS AFFECTING CONSTRUCTION OR OPERATION

No Federal projects or activities were identified that must be completed as a condition of plant construction or operation.

2.8.4 FEDERAL AGENCY PLANS USED TO JUSTIFY THE NEED FOR POWER

The need for the power generated by the project has not been justified based on plans or commitments of any Federal agency for significant new power purchases.

2.8.5 PLANNED FEDERAL PROJECTS CONTINGENT ON PLANT CONSTRUCTION OR OPERATION

No planned Federal projects have been identified that are contingent upon construction and operation of the project.

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2.8.6 NON-FEDERAL POTENTIAL IMPACTS

Planned non-Federal projects and activities in the region of the project are as follows:

The addition of two landfill gas-to-energy plants is planned by Columbia Water and Light, the municipally owned utility of Columbia. The first of these projects will generate 3.1 MWe of electrical power from landfill gas at the Allied Waste Landfill in Jefferson City. The second project will generate 2.1 MWe of electrical power from landfill gas at the Columbia Landfill (CWL, 2007).

The identified non-Federal projects involve harnessing for beneficial use landfill gas that is currently being flared. The most common energy conversion process used in landfill gas-to-energy plants of this size utilizes internal combustion engine/turbine generator sets. As such, the environmental impacts of the landfill gas-to-energy projects will likely be similar to those of the existing facilities and would not be expected to contribute adversely to cumulative impacts affecting environmental resources (e.g., water consumption, water quality, air quality, radiological emissions, transportation infrastructure, or socioeconomic resources) in the region.

It is reasonable to conclude that any Federal activities involving these other non-Federal projects will be independent of and unrelated to the Callaway Plant Unit 2 facility.

2.8.7 REFERENCES

CWL, 2007, Columbia Power and Light, 2007 Renewable Energy Report, February 2007.

FERC 2006, Docket No. RM06-12-000; Order No. 689 Regulations for Filing Applications for Permits to Site Interstate Electric Transmission Facilities, November 16, 2006.

FERC, 2007b, Order by the U.S. Department of Energy (DOE) on its August 2006 National Electric Transmission Congestion Study designating the Mid-Atlantic Area National Interest Electric Transmission Corridor (Docket No. 2007-OE-01); and the Southwest Area National Interest Electric Transmission Corridor (Docket No. 2007-OE-02) under section 216 of the Federal Power Act (FPA), Approved for Publication October 2, 2007.

USACE, 2007a, U.S. Army Corps of Engineers, Northwestern Division, Kansas City District, Missouri River Mitigation Project, http://www.nwk.usace.army.mil/projects/mitigation. Accessed October 2007.

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