

June 15, 2018

Mr. Kent Fletcher Environmental Coordinator Western Farmers Electric Cooperative P.O. Box 429, 701 N.E. 7th Anadarko, OK 73005

Re: Wetland Location Restriction Compliance

Hugo Power Plant

Burns & McDonnell Project No: 85009

Dear Mr. Fletcher:

Western Farmers Electric Cooperative (WFEC) retained Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) to conduct a review and provide wetland delineation services and a demonstration report relating to WFEC's Hugo Power Plant (Facility) pursuant to the United States Environmental Protection Agency's (EPA) final rule titled *Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments* in 40 CFR Part 257 Subpart D, published in the *Federal Register* on April 17, 2015 and pursuant to the Oklahoma Department of Environmental Quality's counterpart rule, OAC 252:517, which became effective on September 15, 2016 (collectively, the CCR Rule).

The Facility is located on U.S. Hwy 70, west of Fort Towson, Oklahoma in Choctaw County. The Facility generates three types of ash from burning coal – fly ash, economizer ash, and bottom ash. Bottom ash is sluiced to a CCR impoundment (Impoundment). The Impoundment is divided into two cells - a north cell (CCR2) and a south cell (CCR3). Fly ash and economizer ash generated by the Facility are beneficially reused or managed in an on-site CCR Landfill (Landfill) designated as CCR1. Fly ash is pneumatically transported from the electrostatic precipitator and stored temporarily in silos during normal operations. Fly ash is unloaded directly from the silo and sold for beneficial reuse. Off-specification fly ash is placed in the Landfill where it is managed or later excavated for sale for beneficial reuse. The Landfill is a special waste landfill registered with the State of Oklahoma. The Landfill is located on the west side of the Facility. The CCR Rule requires that new CCR landfills, new and existing CCR surface impoundments, and any lateral expansion of CCR Units not be located within wetlands. 40 C.F.R. § 257.61(a); OAC 252:517-5-2(a).

Burns & McDonnell conducted a wetland delineation for a 206-acre Survey Area, including all of the land within 300 feet outside of the Impoundment and the Landfill, to determine the boundaries and extent of potential waters of the U.S., including wetlands, streams, creeks, and ponds.

The U.S. Fish & Wildlife Service (USFWS) National Wetland Inventory (NWI) map indicates 7 palustrine unconsolidated bottom (PUB) wetlands and 4 lacustrine (LAC) wetlands are located within the Survey Area. Based on shape and position, these wetlands appear to represent the Impoundments, the Landfill, and other ponds associated with the Facility. Wetland presence as



Mr. Kent Fletcher Western Farmers Electric Cooperative June 15, 2018 Page 2

indicated on NWI maps cannot be assumed to be an accurate assessment of potentially occurring jurisdictional wetlands and waters of the U.S. Wetland identification.

A wetland delineation of the Survey Area was completed on July 30, 2015 in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual (1987 Manual) and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region – Version 2.0 (Regional Supplement). The Survey Area was largely composed of pasture areas and wooded riparian areas surrounding the Impoundments and Landfill. The wooded riparian areas were composed of Eastern red cedar (Juniperus virginiana) and green ash (Fraxinus pennsylvanica). Typical soils in the Survey Area were dark grayish brown (10YR 4/2) in color and silt loam in texture. The primary source of hydrology in the Survey Area was overland flow.

One wetland and one stream were identified during the wetland delineation, both outside the footprint of the Impoundment and the Landfill. These facilities were constructed in dry land, and are consequently not waters of the U.S. The delineated features are described below and shown in Figure A-4 (Appendix A) of the wetlands study.

- Wetland 1 (W-1). W-1 is a 0.51 acre palustrine emergent (PEM) wetland located in the southeastern portion of the Survey Area (see Appendix A of wetland study). Vegetation in W-1 was dominated by Virginia wild rye (Elymus virginicus) and dotted knotweed (Persicaria punctata). Wetland hydrology was indicated by water-stained leaves, oxidized rhizospheres in the soil, surface soil cracks, concave geomorphic position, and a positive FAC-neutral test. The soil met hydric soil indicator F3 for a depleted matrix. The soil was dark grayish-brown in color (10YR 4/2) with redoximorphic concentrations present and had a silt loam texture.
- Stream 1 (S-1). S-1 is a 1,123-foot-long ephemeral channel located in the southeastern portion of the Survey Area (see Appendix A). It averaged 10 feet wide and lacked an ordinary high water mark (OHWM). The average bank height was 2 feet, and the substrate consisted of riprap and silt. Common riparian vegetation included Eastern red cedar and green ash. Water was not present at the time of the survey.
- Under the Clean Water Rule published in the *Federal Register* on June 29, 2015, W-1 is likely to be considered a water of the U.S. However, S-1 is likely to be excluded and not considered a water of the U.S. because it lacked an OHWM.

Based on our delineation efforts and the conditions at the time of our site visit, the Impoundment and Landfill at the Facility are not located in wetlands as defined by 40 C.F.R. Section 232.2. Consequently, the Facility is in compliance with the wetland location restrictions identified within the CCR Rule, 40 C.F.R. § 257.61(a) and OAC 252:517-5-2(a).



Mr. Kent Fletcher Western Farmers Electric Cooperative June 15, 2018 Page 3

I certify that I am a "Qualified Professional Engineer" as required by 40 C.F.R. § 257.63(b) and OAC 252:517-5-4(b), respectively, and as defined by 40 C.F.R. § 257.53 and OAC 252:517-1-3, respectively, by the fact that I am a currently registered Professional Engineer in the State of Oklahoma and I have the technical knowledge and experience to make the certifications set forth in this Report.

Sincerely,

Robert Owens, PE Associate Civil Engineer

Oklahoma License Number 21260

cc: Katie Bland, Burns & McDonnell Randy Root, Burns & McDonnell