

October 12, 2018

AECOM Project No.
60587593

Basin Electric Power Cooperative
294 County Road 15
Beulah, North Dakota 58523

**Engineer's Certification of Seismic Impacted Zone Demonstration, Existing Bottom Ash Ponds,
EPA Final CCR Rule, Laramie River Station, Wheatland, Wyoming**

1. Purpose

The purpose of this document is to certify that the BECP Laramie River Station existing Bottom Ash Ponds are located within a Seismic Impact Zone as specified in the Final CCR Rule at 40 CFR § 257.63, and that the structural components of the units have been designed to resist the impact from the maximum horizontal acceleration in lithified earth material for the site. Presented below is the project background, summary of findings, limitations and certification.

2. Background

According to 40 CFR § 257.63(a) of the EPA Final CCR Rule, any new CCR landfills, existing, and new CCR surface impoundments, and all lateral expansions of CCR units must not be located in seismic impact zones unless the owner the owner or operator demonstrates that all structural components including liners, leachate collection and removal systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.

3. Summary of Findings

Studies carried out by AECOM indicate that the BEPC Laramie River Station is located in a region of risk for earthquake, in which the earthquake peak ground acceleration (PGA) that has a 2% chance of being exceeded in 50 years has a value between 0.10g and 0.14g. However, the structural components of the Bottom Ash Ponds have been designed to resist the impact from the maximum horizontal acceleration in lithified earth material for the site without discharge of waste or contaminants. In accordance with 40 CFR § 257.63 the results of the study performed on the existing Bottom Ash Ponds have determined that the units meets the appropriate Seismic Impact Zones requirements.

4. Certification

I, Jeremy Thomas, being a Registered Professional Engineer in good standing in the State of Wyoming, do hereby certify, to the best of my knowledge, information, and belief, that the information contained in this certification has been prepared in accordance with the accepted practice of engineering and that the information contained herein is accurate as of the date of my signature below. I further certify, for the above-referenced CCR Unit, that the Seismic Impact Zones Demonstration for CCR dated October 12, 2018 meets the requirements of 40 CFR § 257.63(a).

Jeremy M. Thomas
Printed Name

October 12, 2018
Date

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