

CLECO POWER LLC
BRAME ENERGY CENTER
LENA, RAPIDES PARISH, LOUISIANA



CCR COMPLIANT SEISMIC
IMPACT ZONES

ASH MANAGENT LANDFILL
CELL 4

AGENCY INTEREST NO. 2922

D-079-0390/P-0379-R1-M3

DECEMBER 2023

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1.0 INTRODUCTION

On April 17, 2015, the United States Environmental Protection Agency (EPA) issued the final version of the federal coal combustion residuals rule (CCR Rule) to regulate the disposal of CCR materials generated at coal-fired units. The rule is being administered as part of the Resource Conservation and Recovery Act (RCRA, 42 U.S.C. §6901 et seq.), using the Subtitle D approach.

Cleco Power LLC (Cleco) operates an existing coal combustion residuals (CCR) landfill referred to as the Ash Management Landfill at the Brame Energy Center (BEC) located near Boyce, Rapides Parish, Louisiana. The landfill is considered a Type I Industrial Facility by the Louisiana Department of Environmental Quality and operates under solid waste permit P-0379-R1-M3. Cells 1-3 of the Ash Management Landfill were active prior to the effective date of the CCR Rule. On October 11, 2021, the Louisiana Department of Environmental Quality (LDEQ) approved a minor modification for design changes to Cell 4 to comply with CCR design requirements. These changes included raising the excavation grades in Cell 4, changes to final waste grades, raising the perimeter levee elevations, and reorientation of the leachate collection trenches. Cleco contracted and completed the design and construction of the lateral expansion for Cell 4 of the Ash Management Landfill. This report is to certify that Cell 4 of the Ash Management Landfill was designed, operates and meets the criteria outlined in 40 CFR 257.63(a).

Per 40 CFR §257.63(b), Cleco must obtain certification from a qualified professional engineer that the seismic impact assessment meets the requirements of 40 CFR 257.63(a) and is included in **Appendix A**.

2.0 SEISMIC IMPACT ZONES ASSESSMENT

40 CFR 257.63 (a) states:

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 or operator demonstrates by the dates specified in paragraph (c) of this section 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."

40 CFR 257.53 states that a seismic impact zone is defined as an area having 2% or greater probability that the maximum expected horizontal acceleration, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10 g in 50 years. The 2% probability seismic map created on the USGS website, Earthquake Hazards Program, Information by Region Louisiana, (<https://www.usgs.gov/media/images/2014-seismic-hazard-map-louisiana>) indicates between 4% g (0.04 g) and 8% g (0.08 g) for the facility, which is below the specified 0.10 g noted in the regulation.

Based on the results from the seismic impact zones assessment, Providence concludes that the Cell 4 is not located in a seismic impact zone that will exceed 0.10 g in 50 years. Cell 4 meets the requirements at 257.63 of the CCR regulations.

APPENDIX A
CERTIFICATION

APPENDIX A
CERTIFICATION

I certify that this Seismic Impact Zone Assessment fulfills the minimum requirements of 40 CFR 257.63, as applicable. This certification is based on my review of the Cleco Brame Seismic Impact Zones and operational information about the CCR units.

Gary J. Leonards, P.E.

Name

30568

Louisiana

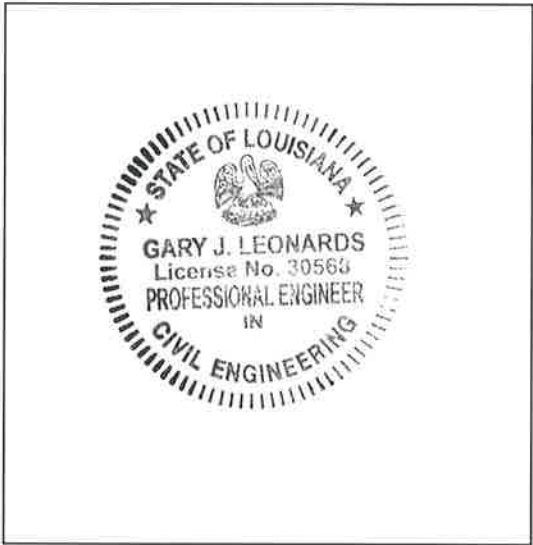
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Signature

Date

12/29/23



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