

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



CCR COMPLIANT
FAULT AREAS ASSESSMENT

ASH MANAGEMENT LANDFILL
CELL 4

AGENCY INTEREST NO. 2922

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

DECEMBER 2023

Providence Engineering and Environmental Group LLC
1201 Main Street
Baton Rouge, LA 70802
(225) 766-7400
www.providenceeng.com
Providence Project No: 002-322



TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
2.0 FAULT AREAS ASSESSMENT	1
3.0 CONCLUSION	2

LIST OF APPENDICES

Appendix

A Certification

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 257.62(a).

Per 40 CFR §257.62(b), Cleco must obtain certification from a qualified professional engineer that the fault areas assessment meets the requirements of 40 CFR 257.62(a) and is included in **Appendix A**.

2.0 FAULT AREAS ASSESSMENT

40 CFR 257.62 (a) states:

New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must not be located within 60 meters (200 feet) of the outermost damage zone of a fault that has had displacement in Holocene time unless the owner or operator demonstrates by the dates specified in paragraph (c) of this section that an alternative setback distance of less than 60 meters (200 feet) will prevent damage to the structural integrity of the CCR unit.

The owner or operator of a new CCR landfill or any lateral expansion of a CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of the fault areas assessment no later than the date of initial receipt of CCR in the CCR unit.

40 CFR 257.53 states that a fault is a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side. It also states that Holocene means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch, at 11,700 years before present, to present.

The fault locator map created on the USGS website, Mineral Resources, Online Spatial Data, By State (<https://mrdata.usgs.gov/geology/state/state.php?state=LA>) indicates no faults located within 60 meters (200 feet) of the Ash Management Area Landfill.

3.0 CONCLUSION

Based on the results from the fault areas assessment, Providence concludes that Cell 4 of the landfill is not located within 60 meters (200 feet) of the outermost damage zone of a fault that has had displacement in Holocene time. Also, over 50 soil borings have been conducted at the facility and faults have not been noted within the facility. Cell 4 meets the requirements at 257.62 of the CCR regulations.

APPENDIX A
CERTIFICATION

APPENDIX A
CERTIFICATION

I certify that this Fault Areas Assessment fulfills the minimum requirements of 40 CFR 257.62(a), as applicable. This certification is based on my review of the Cleco Brame Fault Areas Assessment and operational information about the CCR units.

Gary J. Leonards, P.E.

Name

30568

Registration No.

Louisiana

State

Signature

Date

12/29/23



(Seal)