Coal Ash Disposal Landfill Annual Site Inspection

NELSON POWER GENERATING STATION

Prepared For:

ENTERGY LOUISIANA, LLC – NELSON POWER GENERATING STATION 3500 HOUSTON RIVER ROAD, WESTLAKE, LA 70669



Prepared By:

Consultant: Terry Elnaggar, PE Pivotal Engineering LLC 1515 Poydras Street, Suite 1875 New Orleans, LA 70112 (504) 799-3653

pivotal

January 2024

TABLE OF CONTENTS

1.0	Introduction	1
2.0	Review of Available Information	1
3.0	Visual Inspection	1
4.0	Summary	2
	Certification	

Figures

-		
Figure 1	Site Location	Map

Attachments

Attachment 1 Photo Log

Unit 6 Coal Ash Disposal Landfill Annual Inspection January 2024

1.0 Introduction

In accordance with 40 CFR 257.84, the Unit 6 Coal Ash Disposal Landfill (CADL) at the Nelson Coal Generating Station (Nelson Plant) is required to perform weekly and annual inspections for actual or apparent structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the Coal Combustion Residuals (CCR) landfill. As shown on Figure 1, the site is located on Houston River Road in West Lake, Louisiana.

Pivotal Engineering LLC (Pivotal) was retained by Entergy Louisiana, LLC (Entergy) to assist in developing the weekly inspection criteria and conduct the annual inspection of the CADL. The weekly inspections are conducted by trained on-site personnel. Pivotal conducted the annual inspection on December 5, 2023.

2.0 Review of Available Information

Per the CCR rule effective date October 19, 2015, Pivotal reviewed all the weekly inspection reports in 2023. The weekly inspection reports did not note any of the following concerns:

- Signs of sliding or sloughing of the soil layer or waste material that might indicate a slope failure,
- Signs of tension or other types of cracks or separation at the surface or slopes,
- Signs of erosion from storm water runoff or damage to storm water control facilities, and
- Signs of burrowing or tunneling mammals that could lead to stability issues.

Additionally, the landfill operator indicated that there were no issues regarding the stability of the landfill or the stockpiles of coal ash.

3.0 Visual Inspection

On December 5, 2023, Pivotal made visual inspections of the CADL. Pivotal personnel inspected the entire perimeter of the landfill and inspected internal stockpiles for the following inspection requirements:

- Changes in geometry of the structure since the previous annual inspection;
- Approximate volume of the CCR contained in the unit at the time of the inspection;
- Appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit; and
- Changes which may have affected the stability or operation of the CCR unit since the previous annual inspection.

During the inspection, 12 photographs were taken to document the condition of the CCR unit. Descriptions and locations of the photographs are included in Attachment 1.

The annual inspection conducted on December 5, 2023 represents the ninth since the CCR rule became effective on October 19, 2015. During the inspection, no issues were noted that would affect the stability or operation of the CCR unit.

Pivotal noted minor changes to both the geometry of the internal stockpiles at the CADL and the perimeter levees and ditches. These will not affect the stability of the CCR unit.

On December 5, 2023, the approximate quantity of CCR at the CADL was 440,739 tons based on a topographic survey conducted in 2023 and subsequent production and sales of CCR.

4.0 Summary

On December 5, 2023, Pivotal conducted the ninth required annual inspection of the CADL required under 40 CFR 257.84. The CADL was inspected to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted engineering standards.

Pivotal did not find any issues affecting the stability of the CCR landfill or conditions that are disrupting or could have the potential to disrupt the operation of the CADL.

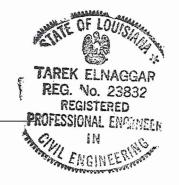
5.0 Certification

Date:

I hereby certify that I have inspected the facility and being familiar with the provisions of 40 CFR, Part 257.84.

Signature: _____ Engineer: Tarek Elhaggar, PE Registration No: 23832 State: Louisiana

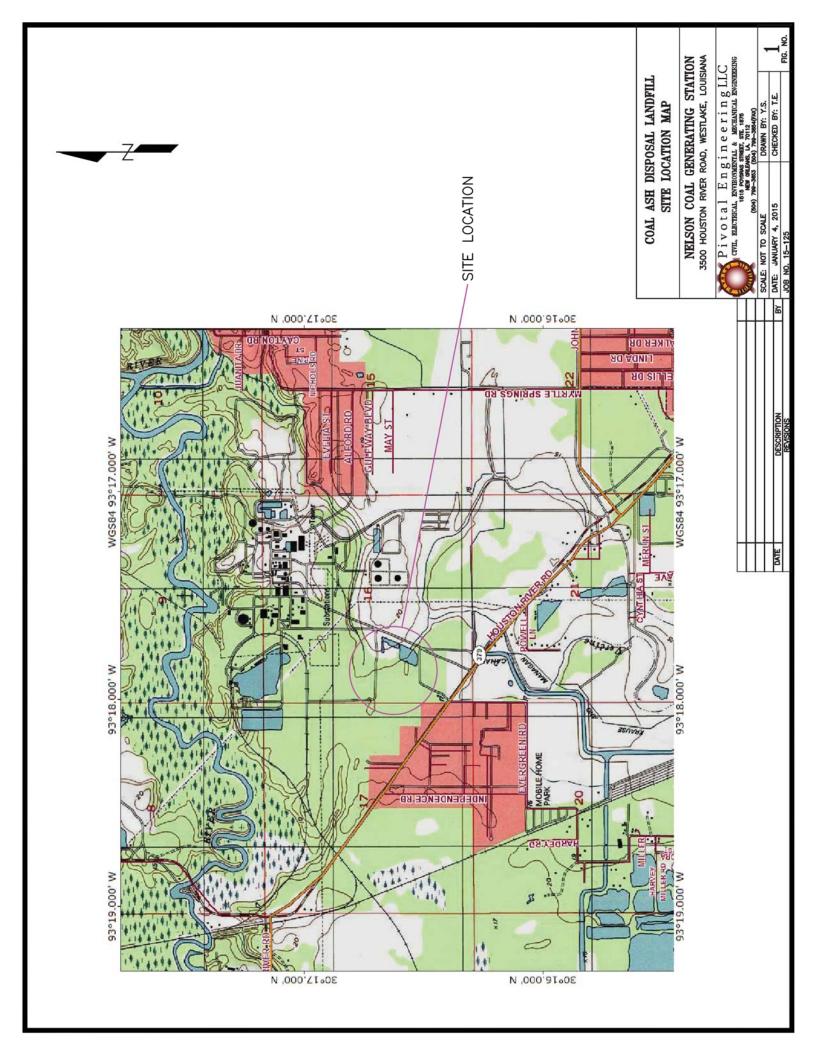
January 5, 2024



2

FIGURES

Figure 1 Site Location Map



ATTACHMENTS

Attachment 1 Photo Log



Photo 1, Southeast east corner, looking North.



Photo 2 Southeast corner, looking West



Photo 3, South Side, looking North.



Photo 4 , Southwest corner, looking East.



Photo 5, Southwest corner, looking North



Photo 6, West Side, looking East.



Photo 7, Northwest corner, looking South.



Photo 8, Northwest corner looking East.



Photo 9, East Side looking South



Photo 10, Northeast Corner, looking West



Photo 11, Northeast Corner, looking South



Photo 12, East side, looking West