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 engineering

January 2017

TABLE OF CONTENTS

Figures

Attachment

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. The site is located as shown on Figure 1.

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 8, 2016 and January 4, 2017.

2.0 Review of Available Information

Pivotal reviewed all weekly inspection reports up to the current date as per the CCR rule effective date October 19, 2015. Additionally, Pivotal visited the landfill operator's office, conducted interviews and reviewed records. 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, Pivotal's discussion with the landfill operator did not indicate that there were issues regarding the stability of the landfill or the stockpiles of coal ash.

3.0 Visual Inspection

On December 8, 2016 and January 4, 2017, Pivotal made a visual inspections of the CADL. Pivotal personnel walked the entire perimeter of the landfill and inspected internal stockpiles for the following inspection requirements:

- Any changes in geometry of the structure since the previous annual inspection;
- The approximate volume of the CCR contained in the unit at the time of the inspection;
- Any 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

- Any other changes which may have affected the stability or operation of the CCR unit since the previous annual inspection.

During the inspection 16 photographs were taken to document the current the condition of the CCR unit. Descriptions and locations of the photographs are included in Attachment 1.

The annual inspection conducted on December 8, 2016 and January 4, 2017 represents the second 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 changes to the geometry of the internal stockpiles at the CADL and there were changes to the perimeter levees. These will not affect the stability of the CCR unit.

On December 8, 2016, approximate quantity of CCR at the CADL was 310,000 tons based on topographic surveys conducted during 2015 and subsequent production and sales of CCR.

4.0 Summary

On December 8, 2016 and January 4, 2017, Pivotal conducted the second 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.

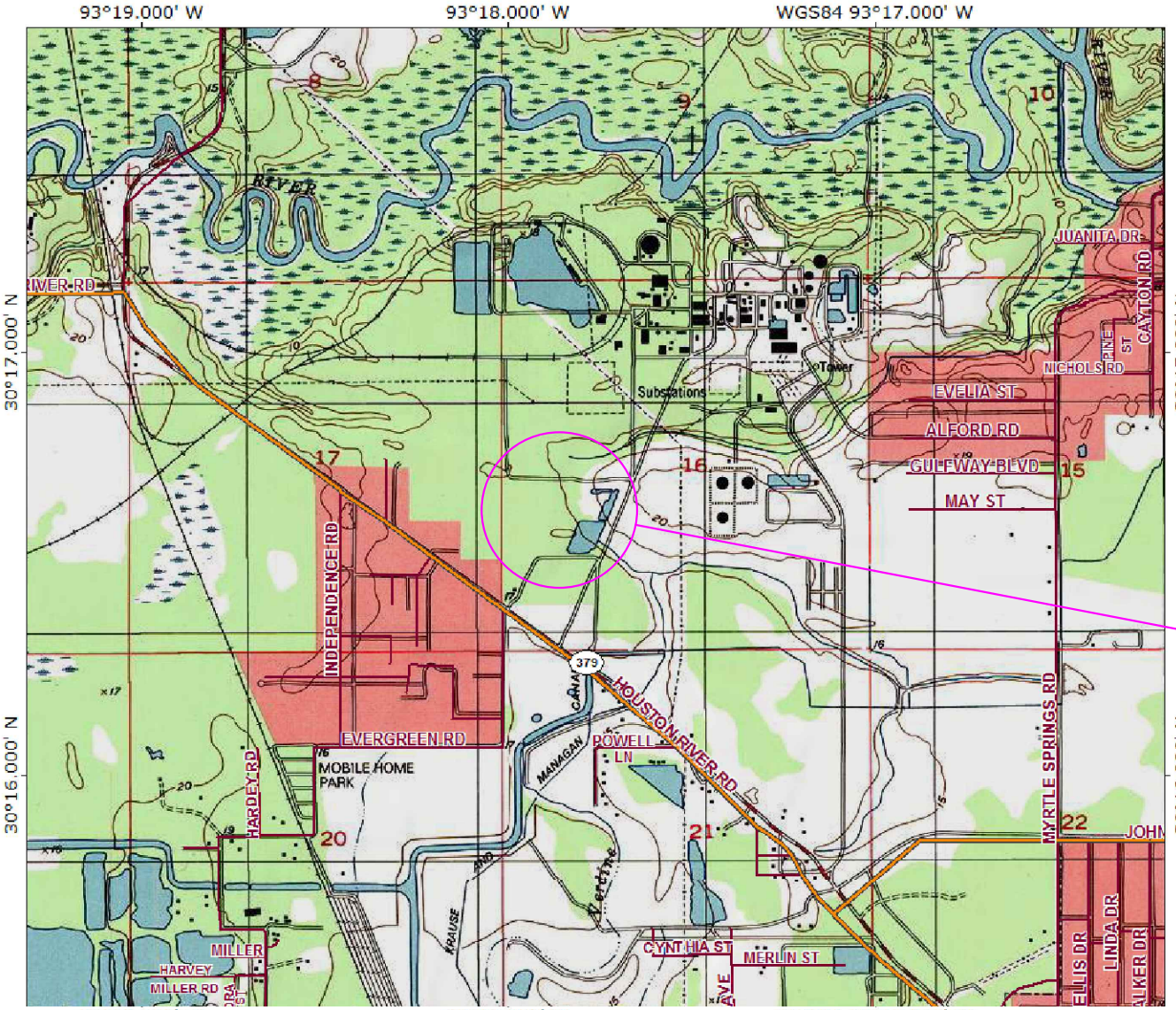
Pivotal did not note any issues affecting the stability of the CCR landfill or conditions that are disrupting or could have the potential to disrupt the operation of the CADL.

5.0 Certification

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

Signature: _____
Engineer: Tarek Elnaggar, PE
Registration No: 23832
State: Louisiana
Date: 1/5/17

FIGURE



COAL ASH DISPOSAL LANDFILL
SITE LOCATION MAP

NELSON COAL GENERATING STATION
3500 HOUSTON RIVER ROAD, WESTLAKE, LOUISIANA

Pivotal Engineering LLC
CIVIL, ELECTRICAL, ENVIRONMENTAL & MECHANICAL ENGINEERING
1515 POYDRAS STREET, STE. 1875
NEW ORLEANS, LA. 70112
(504) 799-3653 (504) 799-3654(FAX)

DATE	DESCRIPTION REVISIONS	BY

SCALE: NOT TO SCALE	DRAWN BY: Y.S.
DATE: JANUARY 4, 2015	CHECKED BY: T.E.
JOB NO. 15-125	

FIG. NO. 1

ATTACHMENT 1

PHOTO LOG

Photo 1: NW Corner looking East

Photo 2: NW Corner looking South

Photo 3: Mid North Side looking West

Photo 4: Mid North Side looking South

Photo 5: Mid North Side looking East

Photo 6: Mid West Side looking North

Photo 7: Mid West Side looking South

Photo 8: Mid West Side looking East

Photo 9: Mid West Side looking North

Photo 10: SW Corner looking East

Photo 11: Mid South Side looking East

Photo 12: Mid South Side looking North

Photo 13: Mid East Side looking South

Photo 14: Mid East Side looking North

Photo 15: SE Corner looking West

Photo 16: SE Corner looking North