# CLECO POWER LLC DOLET HILLS POWER STATION



### **CCR ANNUAL INSPECTION**

### **ASH BASIN NO. 2**

**JANUARY 2023** 

Providence Engineering and Environmental Group LLC 1201 Main Street
Baton Rouge, LA 70802
(225) 766-7400
www.providenceeng.com
Providence Project No: 002-309



#### **TABLE OF CONTENTS**

<u>Secti</u>	<u>on</u>	<u>Page</u>
1.0	GENERAL INFORMATION	1-1
2.0	QUESTIONS FOR OWNER'S REPRESENTATIVE	2-1
3.0	PHYSICAL DAM FEATURES - RESERVOIR	2-1
4.0	PHYSICAL DAM FEATURES - INTAKE WORKS	4-1
5.0	PHYSICAL DAM FEATURES - OUTLET WORKS	5-1
6.0	SLOPE PROTECTION - EXTERIOR SLOPES	6-1
7.0	SLOPE PROTECTION - INTERIOR SLOPES	7-1
8.0	SLOPE PROTECTION - ABUTMENT/ TOE	8-1
9.0	SURFACE IMPOUNDMENT CREST	9-1
10.0	PHYSICAL DAM FEATURES – SPILLWAY	10-1
11.0	DOCUMENTATION REVIEW	11-1

#### **LIST OF APPENDICES**

#### **Appendix**

- A Photograph Log
- B P.E. Certification

## SECTION 1.0 GENERAL INFORMATION

ANNUAL CCR SURFACE IMPOUNDMENT INSPECTION:			
Facility Name:		Cleco Dolet Hills Power Station	
Address:		963 Power Plant Rd. Mansfield, LA	
Surface Impoundment Name :	Ash Basin No. 2	Owner:	Cleco Power LLC
Surface Impoundment ID:	P-0037M3	Operator:	Cleco Power LLC
Nearest City:	Mansfield	Parish:	DeSoto
Inspector:		Gary J. Leonards, P.E.	
Company:		Providence Engineering & Environmental Group LLC	
Date of Inspection:		12/12/2022	
Weather at Time of Inspection:		Cloudy, Overcast	

#### **DESCRIPTION OF THE OPERATION OF THE SURFACE IMPOUNDMENTS:**

The bottom ash and economizer ash are mixed with water and sluiced in a slurry form to either of the two Ash Basins. Ash slurry pipelines within each basin enable the discharge of the slurry at multiple points within each basin. The discharge into each respective basin begins at the end of the pipeline network at the point furthest from the weir box, and proceeds toward the front of the pond. As a basin fills with ash, sections of the discharge pipe are removed as needed so that ash can be uniformly deposited and the storage capacity of each basin fully utilized. The ash-laden water is retained in the Ash Basins for a period of time sufficient to settle most of the suspended particles out of the sluice water. Both Ash Basins capture and retain rainfall runoff from drainage areas upstream of the basin dikes.

Bottom ash is sluiced to Ash Basins No. 1 and No. 2. When one basin is in service collecting ash which settles out of the recirculating sluice water, the other basin is drained and cleaned, as needed. Ash Basin No. 2 is currently in the final closure stage.

1.0 GENERAL INFORMATION			
Owner Contact:	Elizabeth Lee	Phone:	318-793-1194
Plant Manager:	Robert Breedlove	Phone:	318-484-7679
Dam Status:	OperationalFinal Closure Stage	Year Built:	1984
Latitude:	32° 02.14' N	Longitude:	93° 33.65' W
Dam Size:	420 Acre-Feet @ 243.5 ft.		
Bottom of Pond Elevation	215 ft. NAVD 88	Top of Dike Elevation:	246 ft. NAVD 88
Low Operating Level Elevation:	225 ft. NAVD 88	High Operating Level Elevation:	240.5 ft. NAVD 88
High Operating Level Storage:	335 acre-feet @ 240.5 ft. NAVD 88		
Maximum Storage: 420 acre-feet @ 243.5 ft. NAVD 88			
Maximum Surface Impoundment Area:	33.5 Acres		
Offsite Drainage Area: Discharges to Secondary Pond, thence to Mundy Bayou			
Spillway/Overflow Structure Type:	Internal adjustable concrete stoplog overflow weir structure that drains through culvert to Secondary Pond. Also, an auxiliary overflow spillway drains to the Secondary Pond. The auxiliary spillway has 6" riprap on the bottom and sides of the spillway up to elevation 246.0 NAVD 88. Spillway modifications made to support final closure activities.		

### SECTION 2.0 QUESTIONS FOR OWNER'S REPRESENTATIVE

2.0 QUESTIONS FOR OWNER'S REPRESENTATIVE		
Construction Plans Available?	☑ Yes ☐ No	
Site Facility Map Available?	☑ Yes ☐ No	
Operations and Maintenance Manual Available?	☑ Yes ☐ No	
Emergency Action Plan Available?	☑ Yes ☐ No	
Recent Modification or Improvements?	Final Closure Stage	
Are Routine Inspections Completed?	☑ Yes ☐ No	
Is Routine Maintenance Completed?	☑ Yes ☐ No	
Is There Vehicle Access to the Pond?	☑ Yes ☐ No	
Is Access Available During Heavy Rains?	☑ Yes ☐ No	
Are Routine Inspection Logs Kept On-site?	☑ Yes ☐ No	
Offsite Drainage Area:	Discharges to Secondary Pond, thence to Mundy	
	Bayou.	
Spillway/Overflow Structure Type:	Internal adjustable concrete stoplog overflow weir structure that drains through culvert to Secondary Pond, thence to Mundy Bayou Also, an auxiliary overflow spillway drains to the Secondary Pond. The auxiliary spillway has 6" riprap on the bottom and sides of the spillway up to elevation 246.0 NAVD 88. Spillway modifications made to support final closure activities.	

### SECTION 3.0 PHYSICAL DAM FEATURES - RESERVOIR

3.0 PHYSICAL DAM FEATURES – RESERVOIR:		
Staff Gauge Type:	Level Gauge Indicator Removed	
Staff Gauge Elevation at Time of Inspection:	N/A	
Normal Operating Elevation:	225 ft. NAVD 88	
Typical Operation:	Discharges to Secondary Pond	
Are there any visible swirls?	☐ Yes ☑ No	
If yes, describe (size, location, etc.)		
Is there excessive CCR buildup in the surface impoundment?	☐ Yes ☑ No	
If yes, describe (size of area, location, severity, etc.)		
Approximate volume of Impounded water at time of inspection:	200,000 gallons	
Approximate volume of CCR at time of inspection:	CCR material removal in progress. Nearly all material removed.	
Findings:	Ash Basin No. 2 is in final closure stage.	
Other observations on the reservoir:	None	

# SECTION 4.0 PHYSICAL DAM FEATURES - INTAKE WORKS

4.0 PHYSICAL DAM FEATURES – INTAKE WORKS:		
Number of Intakes:	0	
Description (1):	N/A	
Size and Type:	N/A	
Control:	N/A	
Can Flow be Shutoff or Bypassed:	✓ Yes □ No	
Is the in-flow piping free of debris and otherwise unobstructed?	N/A	
If no, describe (type of debris, reason for obstruction, etc.)		
Describe the quality of discharge from hydraulic structure (turbidity, depth, etc.)	Ash sluicing operations have ceased. Sluice piping is being removed.	
Findings:	Ash slucing operations have ceased. Sluice piping is being removed.	
Other observations on the intake works:	None	

### SECTION 5.0 PHYSICAL DAM FEATURES - OUTLET WORKS

5.0 PHYSICAL DAM FEATURES – OUTLET WORKS:		
Number of Outlets:	One	
Outlets/Culvert Pipe Sizes:	36 Inches	
Type of Pipes:	Corrugated Metal Pipe from internal overflow weir	
	structure to Secondary Pond.	
Control:	Adjustable concrete stoplog overflow weir structure	
Can Flow be Shutoff or Bypassed:	☑ Yes ☐ No	
Describe the overall condition of the hydraulic structure:	☑ Functioning Normally	
(Check all that apply)	☐ Not Functional	
	☐ Deteriorated	
	☐ Damaged	
	☐ Adequate	
	☐ Inadequate Other:(describe)	
Is there evidence of erosion around the hydraulic structure?	□ Yes ☑ No	
If yes, describe (size of area, location, severity, etc.)		
Is the hydraulic structure outlet flowing freely and unobstructed?	☑ Yes □ No	
If no, describe (type of debris, reason for obstruction, etc.)		
Describe the quality of discharge from the hydraulic structure (turbidity, depth, etc.)	Construction stormwater being routed to Secondary Pond.	
Findings:	Ash Basin No. 2 in final closure stage.	
Other observations on the outlet works:	None	

## SECTION 6.0 SLOPE PROTECTION - EXTERIOR SLOPES

6.0 SLOPE PROTECTION – EXTERIOR SLOPES:		
Describe the vegetation on the exterior slope: (Check all that	☐ Recently Mowed	
apply)	☑ Good Cover	
	☐ Sparse	
	☐ Other: (describe)	
Is there any erosion on the exterior slope?	☐ Yes ☑ No	
If yes, describe (size of area, location, severity, etc.)		
Is there any erosion protection on the exterior slopes? (e.g.	☐ Yes ☑ No	
riprap, other)		
If yes, describe (riprap - adequate, inadequate, etc.)		
Are there any Crack/Rills Observed?	☐ Yes ☑ No	
If yes, describe (size of area, location, severity, etc.)		
Are there any Sinkholes Observed?	☐ Yes ☑ No	
If yes, describe (size of area, location, severity, etc.)		
Are there any trees on the slopes?	☐ Yes ☑ No	
If yes, describe (type of vegetation, size, location, etc.)		
Findings:	The exterior slope was inspected and appeared to be in satisfactory condition. No corrective actions are required at this time.	
Other observations on the exterior slopes:	None	

### SECTION 7.0 SLOPE PROTECTION - INTERIOR SLOPES

☐ Recently Mowed
☐ Good Cover
☐ Sparse
☑ Other: (describe)
☐ Yes ☑ No
Ash Basin No. 2 in final closure stage. Ash removal operations ongoing.
☐ Yes ☑ No
dequate, etc.)
☐ Yes ☑ No
☐ Yes ☑ No
☐ Yes ☐ No
Ash Basin No. 2 in final closure stage. Ash removal
operations ongoing.
None

## SECTION 8.0 SLOPE PROTECTION - ABUTMENT/ TOE

8.0 SLOPE PROTECTION – ABUTMENT/TOE:		
Describe the vegetation on the Abutment/Toe: (Check all that	☐ Recently Mowed	
apply)	☑ Good Cover	
	☐ Sparse	
	Other: (describe)	
Is there any erosion on the abutment/toe?	☐ Yes ☑ No	
If yes, describe (size of area, location, severity, etc.)		
Is there any erosion protection on the abutment/toe? (e.g.	☐ Yes ☑ No	
riprap, other)		
If yes, describe what type and it's condition (riprap - adequate, inadequate, etc.)		
Are there any Crack/Rills Observed?	☐ Yes ☑ No	
If yes, describe (size of area, location, severity, etc.)		
Is there any Seepage Observed:	☐ Yes ☑ No	
If yes, describe (size of area, location, severity, etc.)		
Findings:	The abutment/toe was inspected and appeared to be in satisfactory condition. No corrective actions are required at this time.	
Other observations on the abutment/toe:	None	

## SECTION 9.0 SURFACE IMPOUNDMENT CREST

9.0 SURFACE IMPOUNDMENT CREST:	
Describe the vegetation on the crest: (Check all that apply)	☐ Recently Mowed
	☑ Good Cover
	☐ Sparse
	✓ Other: (describe) Gravel
Is there a road or driveway on the crest?	✓ Yes □ No
If yes, describe (good condition, numerous cracks, etc.) Good Con-	dition
Are there any ruts, depressions, or holes on the crest?	☐ Yes ☑ No
If yes, describe (size, location, etc.)	
Are there any cracks on the crest?	☐ Yes ☑ No
If yes, describe (length and width, location and direction of cracking, e	etc.)
Are there any trees or other undesired vegetation on the crest?	☐ Yes ☑ No
If yes, describe (size, location, etc.)	
Are there any sinkholes?	☐ Yes ☑ No
If yes, describe (size, location, etc.)	
Findings:	The crest was inspected and appeared to be in satisfactory condition. No corrective actions are required at this time.
Other observations on the crest:	None

### SECTION 10.0 PHYSICAL DAM FEATURES – SPILLWAY

10.0 PHYSICAL DAM FEATURES – SPILLWAY/OVERFLOW STRUCTURE:		
Type (1):	Internal Concrete Structure with Adjustable Overflow Weir	
Slope Protection:	Encased in concrete	
Approach:	Concrete structure exposed	
Erosion:	None observed	
Vegetation:	Concrete structure exposed	
Findings:	The overflow structure was inspected and appeared to be in satisfactory condition. No corrective actions are required at this time.	
Other observations on overflow structure:	None	
Type (2):	Auxiliary Spillway	
Slope Protection:	6" rip rap up to elevation 246.0 NAVD 88.	
Approach:	6" rip rap up to elevation 246.0 NAVD 88.	
Erosion:	None observed	
Vegetation:	Grass vegetation on top of the rip rap as it enters the Secondary Pond.	
Findings:	The spillway was inspected and appeared to be in satisfactory condition. No corrective actions are required at this time.	
Other observations on the spillway:	None	

# SECTION 11.0 DOCUMENTATION REVIEW

11.0 DOCUMENTATION REVIEW:	
Weekly Inspections Reviewed:	☑ Yes ☐ No
Findings: Vegetation maintenance.	
Monthly Instrument Inspections Reviewed:	☑ Yes ☐ No
Findings: No issues.	
Groundwater Monitoring:	Monitoring wells are in-place for routine monitoring.
Drawings Reviewed:	☑ Yes ☐ No
Are there any changes in the geometry of the surface impoundment	☐ Yes ☑ No ☐ NA
structure since the previous inspection?	
If yes, describe (size, location, etc.)	
Other observations:	Ash Basin No. 2 in final closure stage. Ash removal operations ongoing.

### APPENDIX A PHOTOGRAPH LOG

#### **Cleco Power LLC**



**Site Name:** Dolet Hills Power Station – Ash Basin No. 2

Site Location: Mansfield, DeSoto Parish, LA

Date: December 12, 2022

#### Ash Basin No. 2

#### Direction:

Southerly

#### Comments:

Ash Basin looking at remains of sluice structure and ash removal.



#### Ash Basin No. 2

#### **Direction:**

Easterly

#### Comments:

Northern side of Ash Basin—ash material removed.



#### **Cleco Power LLC**



**Site Name:** Dolet Hills Power Station – Ash Basin No. 2

Site Location: Mansfield, DeSoto Parish, LA

Date: December 12, 2022

#### Ash Basin No. 2

#### **Direction:**

Southerly

#### **Comments:**

Exterior slope of western levee.



#### Ash Basin No. 2

#### Direction:

Northerly

#### Comments:

Exterior slope of western levee.

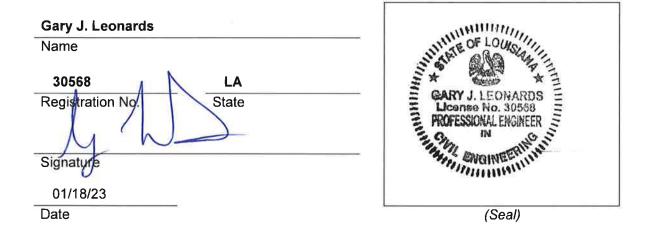


### APPENDIX B P.E. CERTIFICATION

### ASH BASIN NO. 2 CCR ANNUAL INSPECTION

#### PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I have inspected Cleco's Dolet Hills Power Station Ash Basin No. 2 in accordance with the Annual CCR Inspection requirements. This inspection has determined that the design, operation, and maintenance of the Ash Basin No. 2 is in accordance with generally accepted engineering standards and is adequate for the facility.



This inspection was conducted to assess the general overall condition of the reservoir/dam, identify visible deficiencies, and recommend areas for monitoring, and corrective actions. The inspection is based only on visible features/areas of the dam on the day of inspection. The owner should verify the findings of this report and take corrective actions. This inspection does not relieve the owner/operator from their responsibility to conduct routine inspections, maintenance, repairs, modifications, monitoring, and documentation.