# CLECO POWER LLC DOLET HILLS POWER STATION



### **CCR ANNUAL INSPECTION**

**ASH BASIN NO. 2** 

**DECEMBER 2021** 

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**Providence Project No: 002-292** 



### **TABLE OF CONTENTS**

<u>Section</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 P	Cleco Dolet Hills Power Station	
Address:		963 Power Plant R	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:		James C. Van Hoof, P.E.		
Company:		Providence Engineering & Environmental Group LLC		
Date of Inspection:		11/12/2021		
Weather at Time of Inspection:		Sunny, cool		

### **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.

1.0 GENERAL INFORMATION			
Owner Contact:	Kaleb Atkins	Phone:	318-682-8562
Plant Manager:	Marty Robinson	Phone:	318-682-8523
Dam Status:	Operational	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:	ow Structure Type: Internal adjustable concrete stoplog overflow weir structure that drains through		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.		

002-297-002NG DHPS Ash Basin 2 CCR Inspect

PROVIDENCE

### 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?	None
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.

### SECTION 3.0 PHYSICAL DAM FEATURES - RESERVOIR

3.0 PHYSICAL DAM FEATURES – RESERVOIR:		
Staff Gauge Type:	Level Gauge Indicator	
Staff Gauge Elevation at Time of Inspection:	224.5 ft. NAVD 88	
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:	100 acre-feet	
Approximate volume of CCR at time of inspection:	220,000 cubic yards	
Findings:	The reservoir was inspected and appeared to be in satisfactory condition. Minor corrective actions are required at this time. Small brush and small trees need to be removed on interior levee.	
Other observations on the reservoir:	None	

### SECTION 4.0 PHYSICAL DAM FEATURES - INTAKE WORKS

4.0 PHYSICAL DAM FEATURES – INTAKE WORKS:		
Number of Intakes:	Three	
Description (1):	Primary Bottom Ash Sluice Pipe	
Size and Type:	12 Inch Steel Pipe	
Control:	Controlled by Pumps at Plant	
Can Flow be Shutoff or Bypassed:	☑ Yes ☐ No	
Description (2):	Chemical Sump Pipe	
Size and Type:	6 Inch Fiberglass/PVC Pipe	
Control:	Valve	
Can Flow be Shutoff or Bypassed:	☑ Yes □ No	
Description (3):	Boiler Area Sump Water	
Size and Type:	12 Inch Steel Pipe	
Control:	Controlled by Pumps at Plant	
Can Flow be Shutoff or Bypassed:	☑ Yes ☐ No	
Is the in-flow piping free of debris and otherwise	☑ Yes □ No	
unobstructed?		
If no, describe (type of debris, reason for obstruction, etc.)		
Describe the quality of discharge from hydraulic structure	The inflowing water contains bottom ash which is sluiced	
(turbidity, depth, etc.)	out of solution.	
Findings:	The intake works were inspected and appeared to be in satisfactory condition. No corrective actions are required at this time.	
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	The outflowing water is relatively clear and discharges to	
(turbidity, depth, etc.)	the Secondary Pond, thence to Mundy Bayou.	
Findings:	The outlet works were inspected and appeared to be in	
	satisfactory condition. No corrective actions are required at this time.	
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

7.0 SLOPE PROTECTION – INTERIOR SLOPES:	
Describe the vegetation on the interior slopes: (Check all that	☐ Recently Mowed
apply)	☑ Good Cover
	☐ Sparse
	☐ Other: (describe)
Is there any erosion on the interior slope?	☐ Yes ☑ No
If yes, describe (size of area, location, severity, etc.)	
Is there any erosion protection on the interior slopes? (e.g.	☐ Yes ☑ No
riprap, other)	
If yes, describe what type and it's condition (riprap - adequate, inade	equate, 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.)	
Findings:	The interior slope was inspected and appeared to be in satisfactory condition. Minor corrective actions are required at this time. Small brush and small trees need to be removed on interior levee.
Other observations on the interior slopes:	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, inade	equate, 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 Cond	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	tc.)
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 surrounded by ash	
Erosion:	None observed	
Vegetation:	Concrete structure surrounded by ash.	
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.
Drawings Reviewed:	☑ Yes  ☐ No
Are there any changes in the geometry of the surface impoundment structure since the previous inspection?	□ Yes ☑ No □ NA
If yes, describe (size, location, etc.)	
Other observations:	None

### APPENDIX A PHOTOGRAPH LOG



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

Site Location: Mansfield, DeSoto Parish, LA

Date: November 12, 2021

### Ash Basin No. 2

### Direction:

Southerly

### Comments:

Ash Basin looking at sluice structure.



### Ash Basin No. 2

### Direction:

Easterly

### Comments:

Northern side of Ash Basin.





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

Site Location: Mansfield, DeSoto Parish, LA

Date: November 12, 2021

### Ash Basin No. 2

### **Direction:**

Southerly

### **Comments:**

Small brush and small trees need to be removed on internal slope of western levee.



### Ash Basin No. 2

### Direction:

Northerly

### Comments:

External slope of western levee.





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

Site Location: Mansfield, DeSoto Parish, LA

Date: November 12, 2021

### Ash Basin No. 2

### **Direction:**

Northerly

### **Comments:**

Access road on western levee.



### Ash Basin No. 2

### **Direction:**

Easterly

### Comments:

Bottom ash sluice structure.





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

Site Location: Mansfield, DeSoto Parish, LA

Date: November 12, 2021

### Ash Basin No. 2

### Direction:

Northwesterly

### Comments:

Overflow weir structure with level gauge.



### Ash Basin No. 2

### Direction:

Westerly

### Comments:

Exterior slope of southern 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.

James C. Van Hoof		
Name		OF LOUSSILE
24630	LA	
Registration No.	State	★ ★ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
James C. Van Hoof, P.E.		REG. No. 24630  REGISTERED  PROFESSIONAL ENGINEER
Signature		THIN ENGINEERING
12/29/2021		
Date	_	(Seal)

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.