

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. 1	Owner:	Cleco Power LLC
Surface Impoundment ID:	P-0037	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:		1/13/2016	
Weather at Time of Inspection:		Sunny	
DESCRIPTION OF THE OPERATION OF THE SURFACE IMPOUNDMENTS:			
<p>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.</p> <p>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.</p>			
GENERAL			
Owner Contact:	Anna Hanna	Phone:	318-682-8562
Plant Manager:	Pat Dupuy	Phone:	318-682-8525
Dam Status:	Operational	Year Built:	1984
Latitude:	32° 01.82' N	Longitude:	93° 33.68' W
Dam Size:	400 Acre-Feet @ 253.5 ft.		
Bottom of Pond Elevation	220 ft. NAVD 88	Top of Dike Elevation:	256 ft. NAVD 88
Low Operating Level Elevation:	230 ft. NAVD 88	High Operating Level Elevation:	251 ft. NAVD 88
High Operating Level Storage:	330 acre-feet @ 251.0 ft. NAVD 88		
Maximum Storage:	400 acre-feet @ 253.5 ft. NAVD 88		
Maximum Surface Area:	30 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 256.0 NAVD 88.		

QUESTIONS FOR OWNER'S REPRESENTATIVE	
Construction Plans Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Site Facility Map Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Operations and Maintenance Manual Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Emergency Action Plan Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Recent Modification or Improvements?	Repaired exterior western levee in 2014. Installed new level gauge in 2016.
Are Routine Inspections Completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is Routine Maintenance Completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is There Vehicle Access to the Pond?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is Access Available During Heavy Rains?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are Routine Inspection Logs Kept On-site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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 256.0 NAVD 88.

PHYSICAL DAM FEATURES – RESERVOIR:	
Staff Gauge Type:	Level Gauge Indicator
Staff Gauge Elevation at Time of Inspection:	230.0 ft. NAVD 88
Normal Operating Elevation:	246.0 ft. NAVD 88
Typical Operation:	Discharges to Secondary Pond, thence to Mundy Bayou
Are there any visible swirls?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size, location, etc.)	
Is there excessive CCR buildup in the surface impoundment?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Approximate volume of Impounded water at time of inspection:	150 acre-feet
Approximate volume of CCR at time of inspection:	100,000 cubic yards
Findings:	The reservoir was inspected and appeared to be in satisfactory condition. No corrective actions are required at this time.
Other observations on the reservoir:	None

PHYSICAL DAM FEATURES – INTAKE WORKS:	
Number of Intakes:	Four
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:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Description (2):	Chemical Sump Pipe
Size and Type:	9 Inch Fiberglass/PVC
Control:	Valve
Can Flow be Shutoff or Bypassed:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Description (3):	Intermittent Treated Sanitary Discharge
Size and Type:	4 Inch HDPE
Control:	Controlled by Pumps at Sanitary Unit
Can Flow be Shutoff or Bypassed:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Description (4):	Boiler Area Sump Water
Size and Type:	12 Inch Steel Pipe
Control:	Controlled by Pumps at Plant
Can Flow be Shutoff or Bypassed:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is the in-flow piping free of debris and otherwise unobstructed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If no, describe (type of debris, reason for obstruction, etc.)	
Describe the quality of discharge from hydraulic structure (turbidity, depth, etc.)	The inflowing water contains bottom ash which is sluiced 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

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:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Describe the overall condition of the hydraulic structure: (Check all that apply)	<input checked="" type="checkbox"/> Functioning Normally <input type="checkbox"/> Not Functional <input type="checkbox"/> Deteriorated <input type="checkbox"/> Damaged <input type="checkbox"/> Adequate <input type="checkbox"/> Inadequate Other:(describe)
Is there evidence of erosion around the hydraulic structure?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Is the hydraulic structure outlet flowing freely and unobstructed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If no, describe (type of debris, reason for obstruction, etc.)	
Describe the quality of discharge from the hydraulic structure (turbidity, depth, etc.)	The outflowing water is relatively clear and discharges to the Secondary Pond
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

SLOPE PROTECTION – EXTERIOR SLOPES:	
Describe the vegetation on the exterior slope: (Check all that apply)	<input type="checkbox"/> Recently Mowed <input type="checkbox"/> Overgrown (>6 inches) <input checked="" type="checkbox"/> Good Cover <input type="checkbox"/> Sparse <input type="checkbox"/> Other: (describe)
Is there any erosion on the exterior slope?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Is there any erosion protection on the exterior slopes? (e.g. riprap, other)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (riprap - adequate, inadequate, etc.)	
Are there any Crack/Rills Observed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Are there any Sinkholes Observed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Are there any trees on the slopes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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:	Contractor recently smoothed rills on the exterior slope and hydromulched the area.

SLOPE PROTECTION – INTERIOR SLOPES:	
Describe the vegetation on the interior slopes: (Check all that apply)	<input type="checkbox"/> Recently Mowed <input type="checkbox"/> Overgrown (>6 inches) <input checked="" type="checkbox"/> Good Cover <input type="checkbox"/> Sparse <input type="checkbox"/> Other: (describe)
Is there any erosion on the interior slope?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Is there any erosion protection on the interior slopes? (e.g. riprap, other)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe what type and it's condition (riprap - adequate, inadequate, etc.)	
Are there any Crack/Rills Observed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Are there any Sinkholes Observed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Findings:	The interior slope was inspected and appeared to be in satisfactory condition. No corrective actions are required at this time.
Other observations on the interior slopes: None	

SLOPE PROTECTION – ABUTMENT/TOE:	
Describe the vegetation on the Abutment/Toe: (Check all that apply)	<input type="checkbox"/> Recently Mowed <input type="checkbox"/> Overgrown (>6 inches) <input checked="" type="checkbox"/> Good Cover <input type="checkbox"/> Sparse <input type="checkbox"/> Other: (describe)
Is there any erosion on the abutment/toe?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Is there any erosion protection on the abutment/toe? (e.g. riprap, other)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe what type and it's condition (riprap - adequate, inadequate, etc.)	
Are there any Crack/Rills Observed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size of area, location, severity, etc.)	
Is there any Seepage Observed:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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:	Contractor recently smoothed rills on the exterior slope and hydromulched the area.

SURFACE IMPOUNDMENT CREST:	
Describe the vegetation on the crest: (Check all that apply)	<input type="checkbox"/> Recently Mowed <input type="checkbox"/> Overgrown (>6 inches) <input checked="" type="checkbox"/> Good Cover <input type="checkbox"/> Sparse <input checked="" type="checkbox"/> Other: (describe) Gravel
Is there a road or driveway on the crest?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, describe (good condition, numerous cracks, etc.) Good Condition	
Are there any ruts, depressions, or holes on the crest?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size, location, etc.)	
Are there any cracks on the crest?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (length and width, location and direction of cracking, etc.)	
Are there any trees or other undesired vegetation on the crest?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe (size, location, etc.)	
Are there any sinkholes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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:	The contractor recently hydromulched the area west of the access road including the area under the pipe rack.

PHYSICAL DAM FEATURES – SPILLWAY/OVERFLOW STRUCTURE TYPE:	
Type (1):	Internal Concrete Structure with Adjustable Overflow Weir
Slope Protection:	Encased in concrete
Approach:	Concrete structure surrounded by ash on southern side. Vegetation on the northern side has good cover.
Erosion:	None observed
Vegetation:	Vegetation on the northern side of the structure has good cover.
Findings:	The overflow structure was inspected and appeared to be in satisfactory condition. No corrective actions are required at this time.
Other observations on the overflow structure:	None
Type (2):	Auxiliary Spillway
Slope Protection:	6" rip rap up to elevation 256.0 NAVD 88.
Approach:	6" rip rap up to elevation 256.0 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

DOCUMENTATION REVIEW:	
Weekly Inspections Reviewed:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Findings: Rills were corrected and hydromulched.	
Monthly Instrument Inspections Reviewed:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Findings: No issues	
Groundwater Monitoring:	Monitoring wells are in-place.
Drawings Reviewed:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there any changes in the geometry of the surface impoundment structure since the previous inspection?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
If yes, describe (size, location, etc.)	
Other observations:	Ash will continue to be removed from this pond.

Cleco Power, LLC



Site Name: Dolet Hills Power Station – Ash Basin No. 1

Site Location: Mansfield, DeSoto Parish, LA

Date: January 13, 2016

Ash Basin No. 1

Direction:

Easterly

Comments:

Overflow weir structure with concrete stoplogs. Level gauge attached to structure.



Ash Basin No. 1

Direction:

Easterly

Comments:

Internal slope of northern levee.



Cleco Power, LLC



Site Name: Dolet Hills Power Station – Ash Basin No. 1

Site Location: Mansfield, DeSoto Parish, LA

Date: January 13, 2016

Ash Basin No. 1

Direction:

Westerly

Comments:

External slope of northern levee



Ash Basin No. 1

Direction:

Northerly

Comments:

Internal slope of western levee.



Cleco Power, LLC



Site Name: Dolet Hills Power Station – Ash Basin No. 1

Site Location: Mansfield, DeSoto Parish, LA

Date: January 13, 2016

Ash Basin No. 1

Direction:

Easterly

Comments:

Bottom ash in surface impoundment along the sluice structure.



Ash Basin No. 1

Direction:

Northerly

Comments:

Access road on northern levee.



Site Name: Dolet Hills Power Station – Ash Basin No. 1

Site Location: Mansfield, DeSoto Parish, LA

Date: January 13, 2016

Ash Basin No. 1

Direction:

Northerly

Comments:

Western exterior levee slope showing recently corrected rills and hydromulching.



Ash Basin No. 1

Direction:

Southerly

Comments:

Western exterior levee slope.



**CLECO DOLET HILLS POWER STATION
ASH BASIN NO. 1
CCR ANNUAL INSPECTION**

PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I have inspected Cleco's Dolet Hills Power Station Ash Basin No.1 in accordance with the Annual CCR Inspection requirements. This inspection has determined that the design, operation, and maintenance of the Ash Basin No. 1 is in accordance with generally accepted engineering standards and is adequate for the facility.

James C. Van Hoof

Name

24630

Registration No.

LA

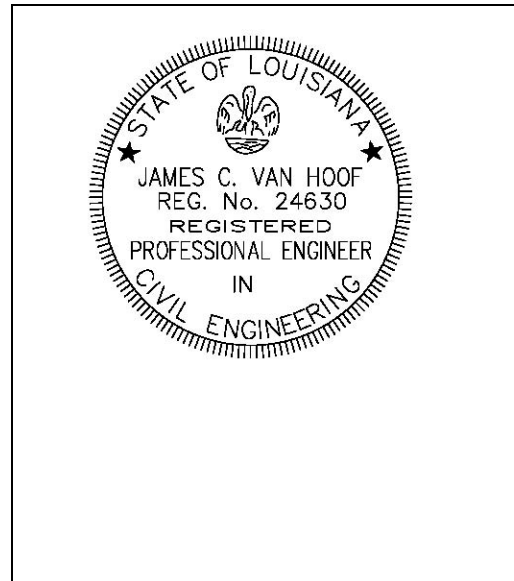
State

James C. Van Hoof, P.E.

Signature

1-14-2016

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.