



Indianapolis Power & Light Company
Harding Street Generating Station

Annual Inspection of CCR Surface Impoundments



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CERTIFICATION PAGE

I certify that this report was prepared by me or under my supervision and that I am a registered professional engineer under the laws of the State of Indiana.

This report is released for use under the authority of David Nielson, Indiana PE #10300076 on January 10, 2020.

Certified By: David E. Nielson

Date: January 10, 2020

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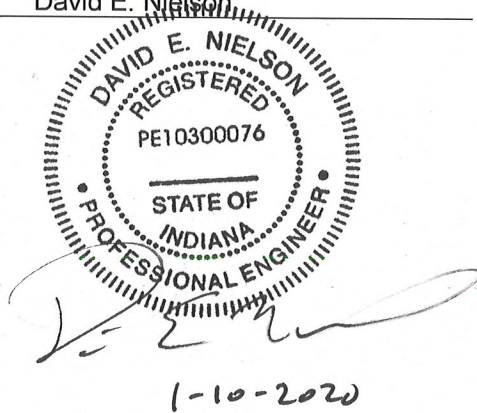


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1 PURPOSE

Pursuant to 40 CFR 257.83(b)(2), this document provides the annual inspection report for the applicable existing coal combustion residual (CCR) surface impoundments at Indianapolis Power & Light Company's (IPL) Harding Street Generating Station. The following applicable CCR units were visually inspected on November 18, 2019, by Mr. David Nielson, P.E. (licensed in IN, IL, MI, NV, and WA):

- Pond 1,
- Pond 2A/2B, and
- Pond 3.

2 INSPECTION OF EXISTING CCR SURFACE IMPOUNDMENTS

Federal CCR Rule References: 40 CFR 257.83(b)(1)(i) & 257.83(b)(1)(ii)

This annual inspection of the CCR surface impoundments included:

1. Review of previously generated information regarding the status and condition of each CCR surface impoundment including, but not limited to, operating records, publicly accessible Internet site entries, design and construction drawings, and other documents and reports,
2. A visual inspection of the applicable CCR surface impoundments and appurtenant structures to identify signs of any distress or malfunction, and
3. A visual inspection of the accessible portions of known hydraulic structures underlying the bases of the CCR surface impoundments and passing through the dikes of the CCR surface impoundments for structural integrity and continued safe and reliable operation.

The following sections present the observations and findings from the visual inspection of the CCR surface impoundments.

2.1 CHANGES IN GEOMETRY

Federal CCR Rule Reference: 40 CFR 257.83(b)(2)(i)

No noticeable changes in geometry were observed while performing the visual inspection of dike surfaces of the CCR surface impoundments.

2.2 REVIEW OF EXISTING INSTRUMENTATION

Federal CCR Rule Reference: 40 CFR 257.83(b)(2)(ii)

Each CCR surface impoundment outlet structure is equipped with a staff gauge. Maximum staff gauge readings since the last annual inspection (December 5, 2018) are reported in Section 2.3. It should be noted that the ponds are generally dry and, as such, the water level was below the staff gauges.

2.3 IMPOUNDMENT PARAMETERS

Federal CCR Rule References: 40 CFR 257.83(b)(2)(iii), 257.83(b)(2)(iv), & 257.83(b)(2)(v)

Tables 1, 2, and 3 provide various measurable impoundment parameters required by 40 CFR 257.83(b)(2)(iii) through (v) that have been recorded since the last annual inspection in 2018 and at the time this visual inspection was performed.

TABLE 1: APPROXIMATE DEPTH OF WATER AND WATER SURFACE ELEVATION OF CCR SURFACE IMPOUNDMENTS

CCR Surface Impoundment	Minimum Depth ¹ (ft)	Maximum Depth ¹ (ft)	Present Depth ² (ft)	Minimum Elevation ¹ (ft)	Maximum Elevation ¹ (ft)	Present Elevation ² (ft)
Pond 1	N/A ³	N/A ³	N/A ³	N/A ³	N/A ³	N/A ³
Pond 2A/2B	N/A ³	N/A ³	N/A ³	N/A ³	N/A ³	N/A ³
Pond 3	0	4	4	668	672	672

Notes:

1. Since the previous annual inspection on December 5, 2018
2. At the time of visual inspection on November 18, 2019
3. N/A – Pond did not impound significant water at the time of the annual inspection. Ponds 1 and 2/A did not impound water during the prior year.

TABLE 2: APPROXIMATE AVERAGE DEPTH OF CCR AND AVERAGE CCR SURFACE ELEVATION WITHIN CCR SURFACE IMPOUNDMENTS¹

CCR Surface Impoundment	Minimum Depth ² (ft)	Maximum Depth ² (ft)	Present Depth ³ (ft)	Minimum Elevation ² (ft)	Maximum Elevation ² (ft)	Present Elevation ³ (ft)
Pond 1	14	14	14	684	684	684
Pond 2A/2B	14	14	14	684	684	684
Pond 3	3	3	3	673	673	673

Notes:

1. Depths and elevations presented are averages over the aerial extent of each impoundment.
2. Since the previous annual inspection on December 5, 2018
3. At the time of visual inspection on November 18, 2019

TABLE 3: APPROXIMATE STORAGE CAPACITY AND VOLUME OF IMPOUNDED WATER AND CCR AT TIME OF INSPECTION

CCR Surface Impoundment	Approximate Total Available Storage Capacity (ac-ft)	Approximate Actual Volume of Impounded Water (ac-ft)	Approximate Actual Volume of Impounded CCR (ac-ft)
Pond 1	101.8	0	95
Pond 2A/2B	39.5	0	27
Pond 3	120.0	14	28

2.4 VISUAL INDICATION OF ACTUAL OR POTENTIAL STRUCTURAL WEAKNESSES

Federal CCR Rule Reference: 40 CFR 257.83(b)(2)(vi)

S&L observed the exposed interior and exterior slopes, exterior toes of slopes, and crests of slopes for the applicable CCR surface impoundments. S&L did not observe any evidence of existing conditions that are disrupting or could plausibly have the potential to disrupt the operation and safety of the applicable CCR surface impoundments.

S&L observed accessible pipes running through and below the dikes and ponds. S&L did not observe any evidence of existing conditions that are disrupting or could plausibly have the potential to disrupt the operation and safety of the applicable CCR surface impoundments. It is noted that the Citizens Energy Group sewer line could not be accessed for inspection.

2.5 OTHER CHANGES

Federal CCR Rule Reference: 40 CFR 257.83(b)(2)(vii)

No other changes were observed which may have affected the stability or operation of the CCR surface impoundments since the previous annual inspection.

3 CONCLUSION

This annual inspection confirmed that the design, construction, operation, and maintenance of the applicable existing CCR surface impoundments at IPL's Harding Street Generating Station are consistent with recognized and generally accepted good engineering standards.