ANNUAL INSPECTION BY A QUALIFIED PROFESSIONAL ENGINEER

ALL CCR IMPOUNDMENTS

CCR Rule Section 257.83(b)

ASBURY POWER PLANT

21133 Uphill Lane
Asbury, Missouri 64832

December 13, 2025

The Empire District Electric Company

Prepared by:

PALMERTON & PARRISH, INC.

12/13/25

Brandon Parrish, P.E.
MO P.E. 2010000852

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December 13, 2025

The Empire District Electric Company
Asbury Power Plant
21133 Uphill Lane
Asbury, Missouri 64832

RE: **Annual Inspection by a Qualified Professional Engineer** –
CCR Rule Section 257.83(b)
The Empire District Electric Company – Asbury Power Plant
Asbury, Missouri
PPI Project Number: 231518-2025

To Whom It May Concern:

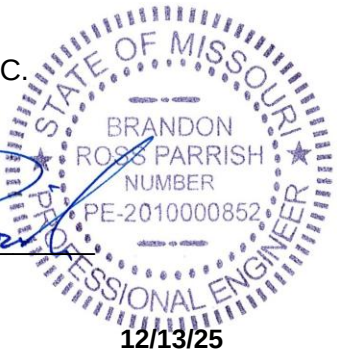
The attached Report presents the results of Palmerton & Parrish, Inc.'s (PPI's) **Annual Inspection by a Qualified Professional Engineer** at the Empire District Electric Company's (Empire's) CCR Impoundment at the Asbury Power Plant (Asbury CCR Impoundment).

PPI has been involved with several projects at the Asbury Power Plant since 2010, including closure, and has been able to observe and study the condition of the existing CCR Impoundment periodically throughout that time. Based upon historical information provided by Empire, PPI's professional training and experience, the results of PPI's studies, and PPI's observations during visual inspection of the CCR Impoundment, the Asbury CCR Impoundment was designed and constructed, and is operated and maintained, in general accordance with recognized and generally accepted engineering standards.

Of note, in 2023 closure of the impoundment occurred using ClosureTurf. Most of the items noted during the 2025 Annual Inspection are related to surface runoff from the ClosureTurf and subsequent erosion issues on the surrounding berms. Maintenance of these items is recommended.

In accordance with Section 257.105(g) of the CCR Rule, a copy of this document should be maintained in Empire's operating records. In accordance with Section 257.107(g), a copy of this document should also be posted to Empire's CCR Compliance website. Notification of the availability of this document should be provided to the State Director, as required in Section 257.106(g).

PALMERTON & PARRISH, INC.
By:



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CCR RULE SECTION 257.83(b)

THE EMPIRE DISTRICT ELECTRIC COMPANY – ASBURY POWER PLANT

ASBURY, MISSOURI

1.0 INTRODUCTION

"CCR Rule Section 257.83(b) Annual inspections by a qualified professional engineer. (1) If the existing or new CCR surface impoundment or any lateral expansion of the CCR surface impoundment is subject to the periodic structural stability assessment requirements under Section 257.73(d) or Section 257.74(d), the CCR unit must additionally be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards..."

Section 257.83(b) requires completion of an Annual Inspection of all CCR Impoundments by a qualified professional engineer, including a review of available documentation and previous inspection reports, and a visual inspection of the CCR unit and any hydraulic structures underlying the base of the CCR unit. This Report has been prepared in general accordance with the requirements of Section 257.83(b)(2) Inspection Report.

2.0 REVIEW OF AVAILABLE INFORMATION – CCR RULE §257.83(b)(1)(i)

PPI has worked on numerous Projects at the Asbury Power Plant throughout the years. Since 2010, PPI has been involved as the Geotechnical Engineer of Record for projects including the Asbury Environmental Retrofit, Asbury Office Building, Asbury Railroad Embankment Repair, and the Asbury Coal Ash Site Structural Assessment. Pertinent to the CCR Rule, PPI assisted Empire with preparation of a weekly inspection report form. PPI transitioned completion of monthly monitoring tasks to Empire's staff at the end of 2016.

PPI reviewed our internal files pertaining to the Asbury CCR Impoundment as part of this Levee Inspection Report. Information pertaining to the original design and construction of the Asbury CCR Impoundment is summarized in PPI's Report entitled "Coal Ash Site Structural Assessment Report," dated December 28, 2012. In general, the Asbury CCR Impoundment was subdivided into three (3) operating ponds: the Lower Pond, South Pond, and Upper Pond. The Upper Pond is subdivided into two (2) cells, identified as Upper Pond – A and Upper Pond – B.

Operating conditions at the Asbury Power Plant changed considerably since PPI's 2012 Report, as Empire transitioned to a dry hauling system when the Asbury Environmental Retrofit Project was commissioned in November 2014. The amount of impounded operating water has decreased since 2012, and the volume of stored CCR has increased in correlation to the volume of CCR byproduct that has been produced and stored in the CCR Impoundment since that time.

The Asbury Power Plant last burned coal in December 2019 and was officially taken out of service on March 1, 2020. No additional CCR byproduct was placed in the CCR Impoundment in 2020 as a result of Plant operations. The remainder of the coal pile was disposed of in the CCR Impoundment in 2020, as was FGD byproduct resulting from the bag house decommissioning. The Asbury Power Plant completed placement of any material in the CCR Impoundment by April 11, 2021.

Empire commenced with Closure Activities in the second quarter of 2022. The geosynthetic cover system "ClosureTurf" was utilized as the final cap for the Impoundment. The Impoundment Closure was nearing completion as of PPI's January 4, 2023 Inspection. In 2023 the Closure Activities were completed.

In 2024, Annual Inspection by a Qualified Professional Engineer was not performed nor required by Section 257.83(b)(4)(ii) due to performance and submission of the quinquennial structural stability assessment by PPI, dated December 13, 2024.

3.0 VISUAL INSPECTION – CCR RULE §257.83(b)(1)(ii) and §257.83(b)(1)(iii)

PPI completed a visual inspection of the CCR levee impoundment and hydraulic structures in general accordance with the requirements of CCR Rule Sections 257.83(b)(1)(ii) and 257.83(b)(1)(iii). The levee inspection was completed on December 10, 2025 by Mr. Brandon Parrish, P.E., Mr. Donald Noack, P.E. and Mr. Matthew Hedgespeth of PPI. The completed Levee Inspection Form is included in Appendix I.

4.0 CCR RULE §257.83(b)(2) INSPECTION REPORT

Section 257.83(b)(2) lists specific information that is required in the Inspection Report. This entire Report document, including Appendix I constitutes the "Inspection Report" for the purposes of the CCR Rule. The requirements of Section 257.83(b)(2) are summarized in the list below, along with supplemental information as appropriate.

1. Changes in impoundment structure geometry since the previous annual inspection: The last annual stand-alone inspection of the CCR Impoundment, by a licensed third-party Professional Engineer, was completed by Palmerton & Parrish, Inc. (PPI) in 2023, with a formal Inspection Report dated January 17, 2023. However, an inspection was also performed during performance of the quinquennial Structural Stability Assessment Report performed by PPI, submitted December 13, 2024. Between the 2023 and 2024 inspections, the geometry of the Impoundment had changed considerably since Closure Activities were completed in 2023.

During Closure Activities perimeter CCR slopes, above-lying the earthen embankment, were typically flattened as part of the grading for the Closure Project. The final grading of the Impoundment was typically fairly flat, with finished slopes on the order of 1 percent. During grading for the Closure Project, there was a shortage of fill material, and the Design Grading Plan was modified to include grade breaks at two (2) locations. A 4-foot grade break was added in the Northwest area of the Lower Pond, running North to South, and a 2-foot grade break was added in the Southeast area of the Lower

Pond, running East to West. Rip rap channels were installed in general accordance with the Design Grading Plan to facilitate site drainage.

2. Locations and type of any existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection: All historic settlement monuments were removed prior to completion of the Closure Activities.

3. Approximate minimum, maximum, and present elevation of impounded water and CCR since the previous annual inspection: No additional CCR was placed in the Impoundment since the date of the previous annual inspection. The Impoundment was dewatered as part of the Closure Project. The Impoundment was regraded prior to installation of the permanent ClosureTurf Cover System. The maximum CCR elevation underlying the ClosureTurf Cover System after regrading occurs in the Northeast corner of the Lower Pond, at approximate elevation 952 feet.

4. The storage capacity of the impounding structure at the time of the inspection: Closure of the Asbury CCR Impoundment was completed in 2023. There is no remaining storage capacity at the Impoundment.

5. The approximate volume of impounded water and CCR at the time of the inspection: The estimated volume of impounded CCR is on the order of 2,446,700 cubic yards. Historical development of the impounded CCR volume estimate is documented in previous Inspection Reports. There is no impounded water in the Impoundment.

6. 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 appurtenant structures: Evidence of structural weakness was not observed at the time of the inspection. Currently only erosion issues resulting from runoff of the ClosureTurf, requiring maintenance, were observed during the inspection.

7 Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection: As previously mentioned, since the last inspection and subsequent closure, runoff from the ClosureTurf over the anchor trench was observed in several areas, resulting in gully erosion or piping of embankment material. In addition, a slope failure/successive erosion was observed along creek bank to the north of the ClosureTurf boundary within ~25 ft. These items are presented in the attached Annual Inspection for with recommendations for maintenance and repair.

Evidence of animal burrow holes were not noted during the inspection. The Empire District Electric Company should monitor the earthen embankments and ClosureTurf System for evidence of animal activity, and take appropriate corrective actions as needed.

5.0 REPORT LIMITATIONS

This report has been prepared in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area. Palmerton & Parrish, Inc. (PPI) observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. PPI's findings and conclusions must be considered not as scientific certainties, but as opinions based on our professional judgment concerning the significance of the data gathered during the course of this investigation. Other than this, no warranty is implied or intended.

APPENDIX I

LEVEE INSPECTION FORM

LEVEE INSPECTION FORM

Date: 12/10/25

Inspection By: Brandon Parrish, P.E., Donald Nowack, P.E., Matthew Hedgespeth (PPI)

Name: Asbury Power Plant
CCR Surface Impoundment

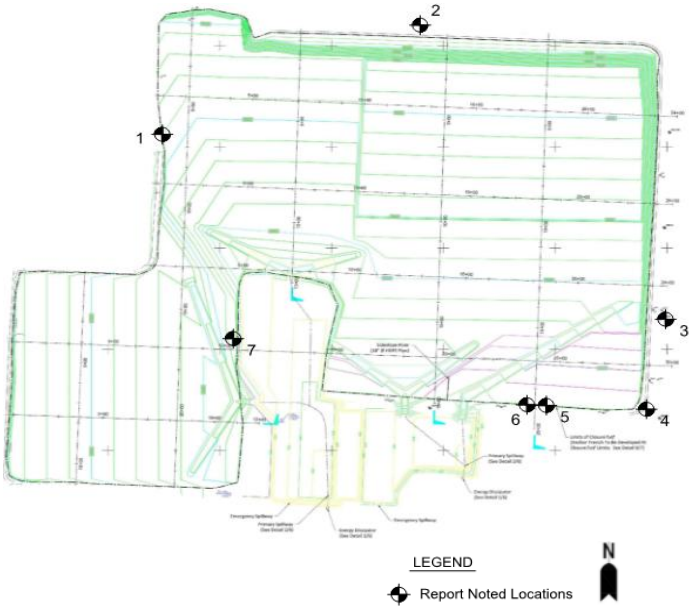
Location: Asbury Missouri
Jasper County

Weather: Clear & Windy

Temperature: 35º to 40º F

Notes / Instructions: Reference previous Annual Levee Inspection prior to commencement of field work. Observe entire perimeter levee of the Impoundment.

The exhibit below is presented for general scale only; the Impoundment Closure was nearing completion at the time of the inspection. The geometry has changed, as noted on this form.



Summarize Overall Condition of Levee Embankments: The overall condition of the perimeter levee embankments is good. Vegetation has been mostly restored following the Closure Project. Drainage flowing over anchor trench on south side (east end) needs addressed.

Summarize Areas of Concern / Recommended Action Items:

The following items were observed during the annual inspection, and correspond to the numbers in the figure above.

No. 1 - NW Erosion Feature. A small (~3'x1.5'x0.5') Erosional feature resulting from moving water towards the impoundment from the perimter road. Drainage appears to be causing fine migration into the perimeter anchor trench filled with large stone.

Recommendation: Fill eroded area & monitor to see if regrading the road in this area is needed.

No. 2 - Erosion & Slope Failure Along Creek on North Side. ~75' long slope failure that is ~25' from the turf edge at the closest point. **Recommendation:** Perform embankment repair to stabilize slope.

No. 3 - Gully erosion on slope near MW5AR. Three (3) 0.5-1 ft. deep gullies are present. **Recommendation:** Re-grade to fill gullies & establish vegetation asap. Monitor to determine if additional erosion protection or re-grading is necessary.

No. 4 - Seepage at SE corner. Surface appear disturbed within general area. Seepage noted east of the access road slope NW of MW5. **Recommendation:** Repair area by surface grading and placement of a low permeability material such as clay and bentonite. Establish vegegation and monitor.

No. 5 - SE Gully Erosion. ~0.5 to 1' Deep Gully Erosions at this location with mutliple small ones in ~150 ft. length of the berm. **Recommendation:** Fill gullies with compacted fill in the short term, but the entire area appears to drain over the berm in this general area. Regrading of this area may be required, and/or the placement of additional properly constructed permitted outfall(s).

No. 6 - Depression in anchor trench. ~3'X2'X1.5' depression within the rip-rap edge - Down Slope was saturated with slight seepage. A bulge in the berm may indicate piping and deposition of soil fines is occuring. **Recommendation:** Most likely associated with drainage, similar to No. 5. Excavation of the piping area and proper fill placement within the affected area, followed by stone replacement within the anchor trench.

No. 7 - Small area of erosion. ~0.5' to 0.8' Deep Gully Erosions at this location with mutliple smaller ones in ~75 ft. north towards detention basin. **Recommendation:** Regrade and replace with larger stone.

In the west sediment pond erosion was observed below the two letdown structures that extended to the edge of the water pool retained in the pond. At the west letdown, water appears to have eroded soils on the edges of the rip-rap channel and some of the rip-rap has been transported downstream. At the north letdown erosion is occurring on the east side of the rip-rap channel.

Restoring the original grades and installing a wider rip-rap channel with larger stone is recommended. Along the top of the west pond, where sheet flow directly enters the basin off of the turf liner, some minor areas of erosion were noted where the sheet flow appears to be concentrated. These areas can be armored with rip-rap. In the east sediment pond minor erosion was observed below the letdown structures. Placing rip-rap in these areas is recommended.

LEVEE INSPECTION FORM - 12/10/25 Checklist Pg. 1 of 2

ITEM	YES	NO	REMARKS
1. CREST	X		
a. Any visual Settlement?		X	
b. Misalignment?		X	
c. Cracking?		X	
2. INTERIOR LEVEE SLOPES		X	
a. Adequate grass cover?			NA
b. Any erosion?			NA
c. Trees growing on slope?			NA
d. Longitudinal cracks?			NA
e. Transverse cracks?			NA
f. Adequate rip rap protection?			NA
g. Visual depressions or bulges?			NA
h. Visual Settlements?			NA
j. Debris or trash present?			NA
3. EXTERIOR LEVEE SLOPES	X		
a. Adequate grass cover?	X		
b. Any erosion?	X		Refer to No. 1, 2, 3, 5 and 6 above for details.
c. Trees growing on slope?		X	
d. Longitudinal cracks?		X	
e. Transverse cracks?		X	
f. Visual depressions or bulges?	X		Only where erosion is occuring
g. Visual Settlements?	X		Only where erosion is occuring
h. Debris or trash present?		X	
i. Boils or seepage at toe?		X	
j. Seepage on slope face?	X		Refer to No. 4 and 6 above for details.
k. Soft or spongy zones?	X		Refer to No. 4 and 6 above for details.

LEVEE INSPECTION FORM - 12/10/25 Checklist Pg. 2 of 2

ITEM	YES	NO	REMARKS
4 SPILLWAY OUTLET	X		Rip-rap channels funnel stormwater to armored letdowns into two sediment ponds outside of the impoundment area.
a. Is the conduit concrete?		X	Articulated concrete block line the letdowns.
b. Do concrete surfaces show:			NA
(1.) Spalling?			NA
(2.) Cracking?			NA
(3.) Erosion?			NA
(4.) Scaling?			NA
(5.) Exposed Reinforcement?			NA
(6.) Other?			NA
c. Do the joints show:			
(1.) Displacement or offset?			NA
(2.) Loss of joint material?			NA
(3.) Leakage?			NA
d. Is the conduit metal?		X	
(1.) Corrosion present?			NA
(2.) Protective coatings adequate			NA
(3.) Leakage?			NA
e. Seepage around the conduit?			NA
5 DITCHES / SITE DRAINAGE		X	
a. Describe ditch function:			
b. Are ditches free of debris?			
c. Is adequate erosion protection present at the toe of slope around the perimeter?			
6 PHOTOGRAPHS TAKEN:	X		
7 INSTRUMENTATION INTACT:			NA