

Post-Closure Care Plan

Columbia Dry Ash Disposal Facility

Phase 1 Module 1

Phase 1 Module 2

Phase 1 Module 3

Phase 1 Module 4

Phase 1 Module 5

Phase 1 Module 6

Phase 2 Module 10

Phase 2 Module 11

Phase 2 Module 12

Phase 2 Module 13

Prepared for:

Wisconsin Power and Light Company

Columbia Energy Center

W8375 Murray Road

Pardeeville, Wisconsin 53954

SCS ENGINEERS

25224152.00 | July 11, 2025

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PE CERTIFICATION

| | |
|--|--|
|  | <p>I, Phillip Gearing, hereby certify that I am a licensed professional engineer in the State of Wisconsin in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 500 to 538, Wis. Adm. Code.</p> <p>Specifically,</p> <ul style="list-style-type: none"> • This Post-Closure Care Plan was prepared by me or under my direct supervision and meets the requirements of 40 CFR 257.104(d) and NR 514.07(10)(d). |
|  | 07/11/2025 |
| (signature) | (date) |
| <p style="text-align: center;">Phillip E. Gearing (printed or typed name)</p> <p>License number <u> E-45115 </u></p> <p>My license renewal date is <u> July 31, 2026 </u>.</p> <p>Pages or sheets covered by this seal:</p> <p>ALL</p> | |

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1.0 INTRODUCTION AND PROJECT SUMMARY

On behalf of Wisconsin Power and Light Company (WPL), SCS Engineers (SCS) has prepared this Post-Closure Care Plan for the Columbia (COL) Dry Ash Disposal Facility Phase 1, Modules 1 through 6 and Phase 2, Modules 10 through 13 as required by 40 Code of Federal Regulations (CFR) 257.104 and Wisconsin Administrative Code NR 514.07(10)(d), as stated below.

40 CFR 257.104(d). *“Written post-closure plan – (1) Content of the plan. The owner or operator of a CCR unit must prepare a written post-closure plan that includes, as a minimum, the information specified in paragraphs (d)(1)(i) through (iii) of this section.”*

NR 517.07 (10)(d). *“A written long-term care plan that addresses all of the following: 1. A description of the monitoring and maintenance activities and the frequency at which those activities will be performed. The activities shall include, at a minimum, all of the following:”*

The COL facility includes an active coal combustion residual (CCR) landfill, which currently consists of the following modules, located in Phase 1 and Phase 2 of the facility.

- **Phase 1, Module 1** – This module has received final cover over outer sideslope areas that will no longer receive additional CCR. The final cover placed complies with the CCR Rule. Intermediate cover has been placed over remaining areas.
- **Phase 1, Module 2** – This module has received final cover over a majority of the west slope that will no longer receive additional CCR. The final cover placed complies with the CCR rule. Intermediate cover has been placed over a majority of the in-place CCR.
- **Phase 1, Module 3** – This module has received final cover over a majority of the west slope that will no longer receive additional CCR. The final cover placed complies with the CCR rule. Intermediate cover has been placed over a majority of the in-place CCR outside the final cover area. Approximately a quarter of the module is open for active CCR placement.
- **Phase 1, Module 4** – This module has received final cover over a majority of the west slope that will no longer receive additional CCR. The final cover placed complies with the CCR rule. Intermediate cover has been placed over a majority of the in-place CCR outside the final cover area. Approximately a quarter of the module is open for active CCR placement.
- **Phase 1, Module 5** – This module has received intermediate cover over a majority of the in-place CCR.
- **Phase 1, Module 6** – This module is covered by intermediate cover.
- **Phase 2, Module 10** – This module is currently being filled. A portion of the south slope has received intermediate cover.
- **Phase 2, Module 11** – This module is currently being filled.
- **Phase 2, Module 12** – This module was constructed in 2024 and will start receiving CCR in 2025.

- **Phase 2, Module 13** – This module was constructed in 2024 and will start receiving CCR in 2025.

Phase 1, Modules 1 through 3 were previously described as separate existing CCR landfills, although they are contiguous and are managed as a single landfill by the facility and by the DNR. WPL has clarified in the operating record for the Columbia facility that Modules 1 through 3 are one existing CCR landfill as defined in 40 CFR 257.53 of the federal CCR Rule. Phase 1, Modules 4 through 6 and Phase 2, Modules 10 and 11 are considered to be new CCR landfills that initiated construction after October 19, 2015, and is therefore managed as a separate CCR unit under the CCR Rule even though they are contiguous to the existing CCR landfill (Modules 1 through 3). Phase 2, Modules 12 and 13 were constructed in 2024 and should begin receiving CCR in 2025. Construction of additional modules is not currently planned prior to retirement of the Columbia Energy Center, which is currently scheduled to occur in 2029.

The site location is shown on **Figure 1**. **Figure 2** shows proposed final cover grades and monitoring locations.

Phase 1, Module 1 has been partially closed with a final cover as described in the Closure Plan for the existing CCR landfill. The remaining open areas of this module will be closed when CCR materials reach final waste grades, as described in the Plan of Operations approved by the WDNR. The future final cover system is planned to differ from the existing final cover system, as explained in the Closure Plan. Following the closure of the CCR units at COL, WPL will conduct post-closure care in accordance with 40 CFR 257.104(b) for the required 30 years and with NR 514.07(10)(d) for the required 40 years per NR 506.084(2).

2.0 MONITORING AND MAINTENANCE ACTIVITIES

40 CFR 257.104(d)(1)(i). *“A description of the monitoring and maintenance activities required in paragraph (b) of this section for the CCR unit, and the frequency at which these activities will be performed.”*

NR 514.07(10)(d)(1). *“A description of the monitoring and maintenance activities and the frequency at which those activities will be performed.”*

| Monitoring and Maintenance Activities | Frequency |
|--|-------------------------------------|
| Mowing | Semi-Annually |
| Inspections by Owner/Operator | Quarterly |
| Repair to Final Cover for Erosion Concerns | As needed, determined by inspection |
| Sedimentation Basin Cleaning | As needed, determined by inspection |
| Leachate Collection Line Cleaning | Annually |
| Environmental Monitoring (groundwater, leachate) | Semi-Annually |

The owner/operator will perform quarterly inspections of the landfill surface, leachate control system, and groundwater monitoring systems. If issues are noticed during the inspection, action will be taken to remedy the situation. Eroded areas will be repaired and reseeded. Repairs or replacement will be performed on the groundwater monitoring system as needed.

2.1 FINAL COVER MAINTENANCE

Mowing will be performed semi-annually during the growing season unless additional mowing is required in response to the vegetation growth rate. During quarterly inspections, if eroded areas are noted, WPL will repair and reseed the area.

2.2 LEACHATE COLLECTION AND REMOVAL SYSTEM MAINTENANCE

The leachate collection and removal system for the existing CCR landfill and existing/future units will be maintained to meet state requirements including leachate collection line cleaning, leachate collection video inspection, and any needed repairs to the existing system. Leachate collection video inspection will occur at 5-year intervals, following the annual pipe cleaning required by NR 506.07(5)(c). The video camera inspection will extend a minimum of 300 feet onto the base grades of each leachate collection line. Leachate will be removed for treatment in accordance with state and federal requirements.

2.3 GROUNDWATER MONITORING AND SYSTEM MAINTENANCE

CCR wells, as defined by NR 500.03(26y) and approved by the Department, will be maintained and sampled semi-annually for the parameters listed in Appendix III to Part 257 and listed in Appendix I, Table 1A to NR 507, and in accordance with 40 CFR 257.90-98 and NR 507.15 (3). Assessment monitoring parameters, if required by the Department, would also be sampled semi-annually.

Non-CCR monitoring wells at the site will be maintained and sampled as approved by the Department in writing.

Sampling and analysis will be conducted in accordance with the Groundwater Sampling and Analysis Plan.

3.0 POST-CLOSURE PERIOD CONTACTS

40 CFR 257.104(d)(1)(ii). *“The name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure period.”*

NR 514.07(10)(d)(2). *“The name, address, telephone number, and email address of the person or office to contact about the facility during long-term care.”*

Currently, the contact information for COL during the post-closure/long-term care period is as follows:

Columbia Energy Center
Attn: Plant Manager
W8375 Murray Road
Pardeeville, WI 53954
(608) 742-0711
CCRProgram@alliantenergy.com

4.0 POST-CLOSURE PERIOD SITE USE

40 CFR 257.104(d)(1)(iii). *“A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other component of the containment system or the function of the monitoring systems unless necessary to comply with the requirements of the subpart...”*

NR 514.07(10)(d)(3). *“A description of the planned uses of the property during long-term care. Post-closure uses may not disturb the integrity of the final cover, liner, or any other component of the landfill, or the function of the monitoring systems unless approved in writing by the department...”*

The final use of the COL Dry Ash Disposal Facility will be privately owned green space. With this use, there will be no disturbance of the final cover or any other landfill-related components.

5.0 CERTIFICATIONS

40 CFR 257.104(d)(4). *“The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written post-closure plan meets the requirements of this section.”*

NR 500.05. *“Unless otherwise specified, all submittals for review and approval of any initial site report, feasibility report, plan of operation site investigation report, remedial action options report, construction documentation report, or closure plan, or any modifications to those plans, shall include all of the following:*

- (4) **CERTIFICATION.** *(a) The reports and plan sheets shall be under the seal of a licensed professional engineer.”*

Phillip Gearing, PE, a licensed profession engineer in the State of Wisconsin, has overseen the preparation of this Post-Closure Care Plan. A certification statement is provided on **page iii** of this plan.

6.0 RECORDKEEPING AND REPORTING

40 CFR 257.104(b)(2)(iii). *“The owner or operator has completed the written post-closure plan when the plan including the certification required by paragraph (d)(4) of this section, has been placed in the facility’s operating record as required by Section 257.105(i)(4).”*

NR 506.17(2)(e). *“The written operating record shall contain the plan of operation, plan modifications, construction documentation, department approvals, annual reports, inspection records, monitoring and corrective action records, notifications to the department, and records of public comments received during any public comment period.”*

The Post-Closure Care Plan will be placed in the facility’s operating record and on Alliant Energy’s CCR Rule Compliance Data and Information website, as will all amendments.

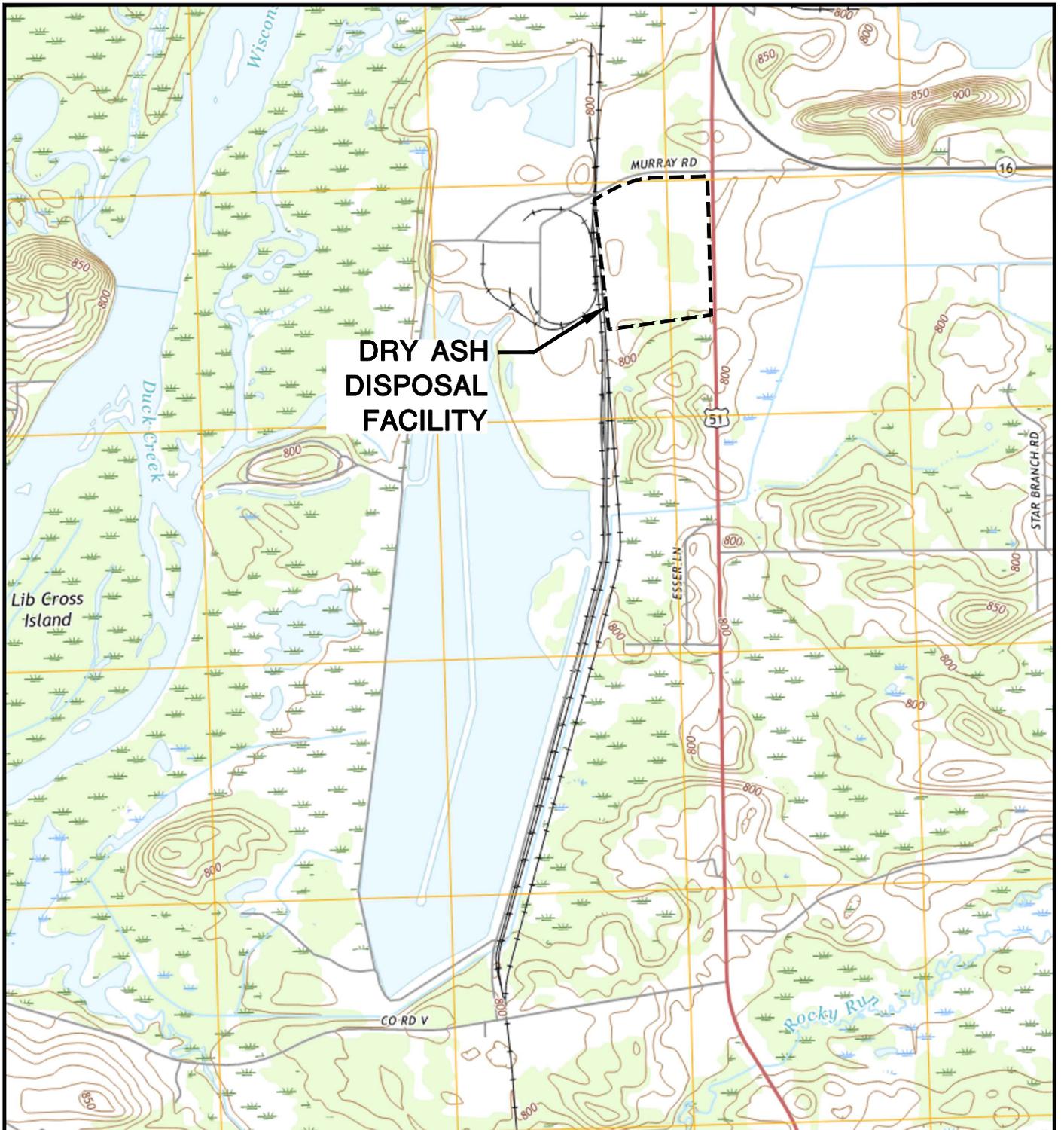
WPL will amend the Post-Closure Care Plan if there is a change in operation of the CCR unit that affects the written Post-Closure Care Plan or, if after post-closure activities have started, unexpected events cause a revision of the plan.

WPL will provide notification of completion of the post-closure care no later than 60 days following the completion of the post-closure care period. The notification will include certification by a qualified professional engineer verifying that post-closure care has been completed in accordance with the plan. The notification will be placed in the facility's operating record and on the website.

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Figures

- 1 Site Location Map
- 2 Post-Closure Care Plan



POYNETTE QUADRANGLE
 WISCONSIN-COLUMBIA CO.
 7.5 MINUTE SERIES (TOPOGRAPHIC)
 2022
 SCALE: 1" = 2,000'



| | | | | | | | | |
|----------|--|-------------|------|--|----------------|----------|--|--------|
| CLIENT | WISCONSIN POWER AND LIGHT COLUMBIA ENERGY CENTER W8375 MURRAY ROAD PARDEEVILLE, WISCONSIN 53954 | | SITE | POST CLOSURE CARE PLAN COLUMBIA DRY ASH DISPOSAL FACILITY TOWN OF PACIFIC, WISCONSIN | | ENGINEER | SITE LOCATION MAP | |
| | PROJECT NO. | 25224152.00 | | DRAWN BY: | RVG | | SCS ENGINEERS 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830 | FIGURE |
| DRAWN: | 06/17/2025 | CHECKED BY: | RJG | APPROVED BY: | PEG 06/30/2025 | | | |
| REVISED: | 06/24/2025 | | | | | | | |

