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U.S. Environmental Protection Agency
EPA Docket Center (EPA/DC)
Attn: Docket No. **EPA-HQ-OLEM-2019-0172**
Mail Code 28221T
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Subject: Duke Energy Comments on *Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; A Holistic Approach to Closure Part A: Deadline to Initiate Closure; Proposed Rule*. 84 Fed. Reg. 65941 (December 2, 2019)

Duke Energy Business Services LLC (“Duke Energy”), on behalf of Duke Energy Carolinas, LLC, Duke Energy Indiana, LLC, Duke Energy Ohio, Inc., Duke Energy Kentucky, Inc., Duke Energy Florida, LLC and Duke Energy Progress, LLC, appreciates the opportunity to provide the U.S. Environmental Protection Agency (“EPA” or “Agency”) with comments on the proposed rule *Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; A Holistic Approach to Closure Part A: Deadline to Initiate Closure* (“Part A rule”), 84 Fed. Reg. 65941.

In 2015, Duke Energy embarked on a comprehensive strategy to close all coal ash basins across our service territories, developing the scope of projects necessary to cease flows of coal combustion residuals (“CCR”) and non-CCR wastestreams into CCR surface impoundments across its fleet. This work was driven in part by state requirements and initiated sooner than what would have been required by federal CCR regulation. The holistic approach we’ve taken toward closure and the investments we’ve made to enhance CCR and wastewater management and close ash basins were designed to comply with both federal and state laws and regulations, including the coal combustion residuals rule (“CCR Rule”), Steam-Electric

Effluent Limitation Guidelines (“ELG rule”) and the North Carolina Coal Ash Management Act (“CAMA”). The scope and pace of this work have positioned Duke Energy as a leader in closing ash basins.

As of January 2020, Duke Energy has achieved many significant milestones toward the goal of closure of all ash basins:

- Flows of CCR and non-CCR wastestreams have ceased into ash basins except one site, at which alternative disposal capacity is scheduled to be complete in 2020.
- The excavation of 12 ash basins is complete, with nearly 28 million tons of ash moved to fully lined facilities or recycled.
- Dry ash management projects at operating coal plants are now in service. Duke Energy had previously provided information to EPA on the timeline for completion of those projects. See “Duke Energy Timing to Initiate Closure Information Submission,” EPA-HQ-OLEM-2019-0172-0006. This work included new dry ash handling systems, wastewater treatment and stormwater management systems. All production ash is now being handled dry in lined landfills or recycled, with the exception of two generating units that are retiring.
- Decanting or dewatering is underway at most basins after receiving the necessary approvals from state regulators.
- In December 2019, North Carolina regulators, community groups and Duke Energy agreed to a plan to permanently close the company’s remaining nine coal ash basins in the state, primarily by excavation with ash moved to lined landfills. Under the plan, almost 80 million tons of ash will be excavated from the remaining basins in North Carolina. The company is already removing ash from basins at other facilities, bringing the total amount of material to be excavated in North Carolina to approximately 124 million tons.
- Duke Energy is building ash beneficiation units to process ash excavated from basins at three sites in North Carolina so it can be recycled into concrete: Buck in Salisbury, H.F. Lee in Goldsboro and Cape Fear in Moncure. Ash that has been stored in basins, sometimes for decades, needs additional processing to remove moisture and carbon to meet ASTM technical specifications for use in concrete. The first of these beneficiation units is expected to start processing ash for market use in 2020. Once the three units come online in 2020

and 2021, Duke Energy will have the capacity to recycle more coal ash than we produce in the Carolinas each year.

- Duke Energy has built new composite lined landfills at our Dan River, Robinson and Sutton plants specifically to accommodate ash excavated from basins. The Dan River and Sutton landfills are operational and have received excavated ash; both landfills now have cells undergoing closure. We are awaiting the permit to operate the Robinson landfill.
- We have designed landfills for two other stations – W.S. Lee and Asheville – that, once permitted, will be built to store excavated ash at those sites. The permitting process is underway. At our Marshall and Cliffside stations, operational landfills currently take production ash but will also be used for the storage of ash excavated from basins. We have submitted excavation plans to North Carolina regulators and plan to build landfills at four additional sites to accommodate ash excavated from basins.
- The company has undertaken a number of projects and design enhancements to make our sites more resilient to climate impacts, including erosion during severe weather. For example, at our Sutton Station, we've designed the landfill cover to withstand Category 3 hurricane-force winds. Numerous ash basin dam safety improvements were completed in 2018.

Duke Energy appreciates that in developing the Part A rule, EPA considered the company's experience and timelines for construction of alternative disposal capacity previously provided to the Agency. *Id.* As detailed in that submission, because ash basins have served an integral role in the overall wastewater treatment at electric generating stations, it was necessary to construct numerous new systems in order to take ash basins out of service. This included submerged flight conveyors for bottom ash handling at eight (8) sites, lined water retention basins for process water and stormwater at nine (9) sites, and new wastewater treatment systems at eight (8) sites. It was a multiyear effort to design, permit, secure equipment and contracting services and construct those systems. As a result, Duke Energy has largely already completed the work necessary to meet the cease receipt deadline in the Part A rule. However, we appreciate that EPA recognizes that site-specific circumstances may require additional time for some projects. Based on our experience in completing construction of these systems, Duke Energy respectfully offers the following suggestions for the Agency to consider.

I. A Transition Period Is Warranted For Units That Have Already Made A Section 257.103 Certification

Under the CCR rule, if an owner/operator does not have alternative CCR disposal capacity on-site or off-site, the facility may secure additional time to develop such capacity by certifying under Section 257.103(a) that CCR must continue to be managed in the unit due to the absence of alternative disposal capacity both on-site and off-site of the facility, or under Section 257.103(b) by certifying that the facility will cease operation of the coal-fired boilers within a specified time frame. This alternative closure provision allows the owner/operator to continue placing CCR into a basin while developing alternative on-site or off-site disposal capacity or progressing toward closure of its coal-fired boilers. In the Part A rule, the Agency has proposed that surface impoundments requiring additional time to develop alternative disposal capacity for CCR *and/or* non-CCR wastestreams beyond November 30, 2020 must apply for an extension under Section 257.103(f) by submitting a demonstration to EPA (or participating State Director) for a site-specific deadline to cease flows and initiate closure. However, the Agency recognizes some facilities have already posted certifications under the current Section 257.103(a) or (b), stating EPA will “either implement a transition period to allow sufficient time to complete the documentation that may be required” or for facilities needing to continue to receive CCR only, “a system that would grandfather these units in.” 84 Fed. Reg. 65958. Duke Energy supports a transition period or separate consideration for units that have already commenced developing alternative disposal capacity or retirement planning and posted the required certification in accordance with paragraph (a) or (b) of Section 257.103.

The Agency is proposing that to obtain approval under Section 257.103(f), “the owner or operator must demonstrate that it is not technically feasible to complete the development/ installation of alternate capacity prior to November 30, 2020.” 84 Fed. Reg. 65954. The Agency is seeking comment on whether the site-specific alternatives to the cease receipt deadline should only be for non-CCR wastestreams, rather than CCR *and/or* non-CCR wastestreams. *Id.* As an initial point, Duke Energy’s experience is that because CCR surface impoundments have been integral for managing non-CCR wastestreams – including non-CCR wastestreams subject to regulation under the Effluent Limitation Guidelines – and serve multiple functions in the production of electricity, the alternative closure provisions should apply to both CCR and non-

CCR wastestreams. In the preamble to the final CCR rule, EPA explained that it did not intend for the accelerated closure of surface impoundments under the rule if this would result in the closure of coal-fired electric generating units leading to the disruption of power to the wider community. 80 Fed. Reg. 21,302, 21,423 (Apr. 17, 2015). As EPA continues to recognize, utilities “could not immediately cease the placement of wastestreams into their surface impoundments without causing potentially significant disruptions to plant operations and thus the provision of electricity to their customers, as they lack additional capacity to manage these wastes elsewhere as laid out in their filings to the *Waterkeeper* court[.]” 84 Fed. Reg. 65945. Having separate provisions for CCR and non-CCR wastestreams would unnecessarily complicate the reporting and documentation for alternative closure dates, particularly when the systems being developed are designed to handle both CCR and non-CCR wastestreams. Requiring documentation for CCR alternative capacity under one provision and non-CCR alternative capacity under a separate provision would essentially be requiring duplicate reporting and introduce unneeded confusion.

The Agency should also consider that some owners and operators have executed contracts to develop alternative disposal capacity, and such contractual obligations make it impractical to alter the time frame for completion of that capacity. A facility that has already made the Section 257.103 certification and has started development of alternative disposal capacity (design, contracting and procurement) or proceeded down a path toward coal-fired boiler closure has a timeline for ceasing flows “baked” into those contracts, construction schedules and plans. Any modification to that schedule would be difficult to accommodate because of the staging of construction projects, contractor availability, planned unit outages, and weather patterns, or retirement planning and approval processes. The key point is that such a facility is irrevocably committed to completing the development of alternative disposal capacity or cessation of coal-fired operations. This should be a key consideration for a transition period for units that have already posted a Section 257.103 certification. Further, the posting of annual reports documenting the continued lack of alternative capacity and progress toward development of alternative disposal capacity or closure of the coal-fired boilers will provide the Agency with the information it requires to verify that the facility is taking the actions required under the rule’s alternative closure provision.

II. Annual Progress Reports Provide Documentation of Alternative Disposal Capacity Development

By the time the Part A rule is likely finalized in spring 2020, some facilities that have already posted certifications under Section 257.103 will also have posted an annual report pursuant to Section 257.103(a)(1)(iv) or (b)(1)(iii) on “the progress towards the development of alternative CCR disposal capacity,” or “the progress towards the closure of the coal-fired boiler,” respectively. Among other things, this annual report will provide the Agency with information on the selection of alternative capacity, the time frame for completion/securing that capacity and will demonstrate the facility’s diligence in commencing closure of the basin and, if applicable, closure of the coal-fired boilers. The Agency could therefore consider the annual report as triggering a transition period; any facility that has posted an annual progress report required by Section 257.103 *prior to the effective date* of the Part A rule would be required to submit a site-specific timeline request under Section 257.103(f)(1) or (2) by no later than the date on which the next annual report is due (*i.e.*, within 12 months of the first annual report). A facility would have to document progress toward the construction of alternative capacity or retirement in the annual report and remain in compliance with all requirements in the CCR rule, including conducting any necessary corrective action to avail itself of the transition period. For example, a facility that posts an annual report in April 2020 would be required either to cease flows or apply for an extension under Section 257.103(f)(1) or (2) before April 2021. This would incentivize continued progress toward completion of alternate capacity and prevent overlapping and redundant reporting. Moreover, EPA’s receipt of extension requests pursuant to a variable annual reporting schedule, which is based on the reporting time frames set out in paragraphs (a) and (b) of Section 257.103, would avoid a situation wherein the Agency receives a multitude of extension requests from industry at the same time.

Furthermore, this transition period would put these facilities on a reporting time frame consistent with units that have not yet made a Section 257.103(a) certification but would apply to EPA for a site-specific extension under Section 257.103(f). Using the infeasibility of developing alternative capacity as an example, the Agency has proposed that demonstrations for site-specific extensions be submitted to EPA or the Participating State Director for approval “no later than June 30, 2020, or 2 months prior to the facility’s deadline to cease receiving

waste” with final approval no later than four (4) months after receiving a complete demonstration. 84 Fed. Reg. 65957. Under this time frame, presuming a complete demonstration by June 30, 2020, and final Agency approval by October 31, 2020, the first semi-annual report for a facility applying for a site-specific extension would be due by April 2021. Therefore, the transition period is not extending the length of time that a CCR surface impoundment could continue to receive waste without demonstrating a legitimate need for continued operation; rather, the Agency will already have sufficient information on progress toward closure during the transition period.

In conclusion, Duke Energy recommends the Agency implement a transition period for units that have already made a Section 257.103 certification and posted an annual report prior to the effective date of the Part A rule. The annual report would trigger a transition period – a transition period dictated by a schedule currently imposed under Section 257.103(a) or (b) – for the facility to either complete development of alternative disposal capacity (or cease coal-fired operations, as applicable) and cease flows into the CCR unit, or to apply for a site-specific extension under Section 257.103(f). The posting of an annual progress report prior to the effective date of the Part A rule will provide the Agency with ample documentation that the unit is progressing in a responsible and timely manner toward cessation of flows and closure of the CCR surface impoundment.

Thank you for the opportunity to provide comments on the Part A rule. Please contact me at dawn.santoianni@duke-energy.com or 919.546.4032 if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Dawn Santoianni".

Dawn Santoianni
Public Policy Director
Duke Energy