



NCDEQ Coal Ash Impoundment Closure Plan Decision

Buck Combined Cycle Station

August 14, 2020



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On December 31, 2019, Duke Energy submitted its proposed Closure Plan for the Buck Combined Cycle Station (“Buck”) as required by the Coal Ash Management Act (“CAMA”). The North Carolina Department of Environmental Quality (“NCDEQ”) conducted a thorough evaluation of this proposed Closure Plan. In addition to its own evaluation, NCDEQ held a public hearing, circulated the proposed closure plan for public comment, reviewed written public comments and analyzed site specific information provided by Duke Energy and the public.¹ Based on this evaluation, NCDEQ finds that the proposed Closure Plan is protective of public health, safety, and welfare; the environment; and natural resources and generally complies with the requirements of CAMA. Consequently, NCDEQ hereby approves the implementation of the proposed Closure Plan for Buck.

Background:

CAMA, enacted in August 2014, required that the NCDEQ develop proposed classifications for all coal combustion residuals (CCR) surface impoundments, including active and retired sites, for the purpose of closure and remediation based on these sites' risks to public health and the environment. In July 2016, the North Carolina General Assembly enacted House Bill 630, which added N.C.G.S. § 130A-309.216 requiring Duke Energy to identify three sites in North Carolina at which to install and operate ash beneficiation projects capable of processing CCR to specifications appropriate for cementitious products. The statute requires Duke Energy to use commercially reasonable efforts to produce 300,000 tons of usable CCR at each site annually. On October 5, 2016, Duke Energy selected Buck as one of the three ash beneficiation sites. Pursuant to subsection (c) of N.C.G.S. § 130A-309.216, CCR surface impoundments located at a site at which an ash beneficiation project is installed and operating shall be closed no later than December 31, 2029.

Public process for the proposed Closure Plan:

CAMA required that NCDEQ put the proposed Closure Plan to public notice and conduct a public meeting to explain the Plan. NCDEQ held the public meeting for Buck on February 24, 2020 and provided a public comment period through March 16, 2020. Three individuals registered in advance of the hearing to make comments, and one additional individual made comments after the three that registered spoke. Aside from the comments provided by the speakers at the public hearing, NCDEQ received three additional comments via email, written, and/or spoken during the comment period. The main concerns were noise control, environmental monitoring, stormwater and wastewater runoff, air quality from the STAR® plant, the Buck Combined Cycle Station being constructed on/near the most historic site in Rowan County, how the community would be notified

¹ The Hearing Officer’s Report is attached as Attachment 1. Public comments and NCDEQ’s responses are attached to the Hearing Officer’s Report. Additional information reviewed by NCDEQ includes, among other things, environmental data contained in the comprehensive site assessment and proposed corrective action plan, permit requirements, the closure options analysis, ongoing groundwater monitoring, groundwater modeling provided by Duke Energy, NCDEQ’s Closure Determination for Buck, and other data relevant to the CAMA requirements.

if an environmental impact occurred. A discussion of the substantive concerns raised in these comments is included as part of the hearing officer's report.

Evaluation of Closure Plan:

CAMA establishes criteria for NCDEQ's evaluation of Closure Plans. Specifically, CAMA provides that NCDEQ "shall disapprove a proposed Coal Combustion Residuals Surface Impoundment Closure Plan unless the Department finds that the Closure Plan is protective of public health, safety, and welfare; the environment; and natural resources and otherwise complies with the requirements of this Part." N.C. Gen. Stat. § 130A-309-214(c). CAMA sets forth a list of required contents for Closure Plans, including engineering drawings, schematics, and specifications for the proposed Closure Plan, a description of the provisions for the final disposition of the coal combustion residuals, groundwater modeling, and a description of the plan for post-closure monitoring and care for an impoundment for a minimum of 30 years.

NCDEQ finds that under CAMA Duke Energy's proposed Closure Plan for Buck is protective of public health, safety, welfare, the environment, and natural resources. In the Closure Plan, Duke Energy proposes to excavate the coal ash in the CCR impoundments, which NCDEQ has determined is the most environmentally protective closure option. Because the coal ash will be excavated, there will not be any primary contaminant source remaining that can continue to leach contaminant into groundwater. Further, without the coal ash in place, there will be additional options available for remediating contaminated groundwater. As explained in the Buck Closure Determination, "removing the primary source of groundwater contamination will reduce uncertainty and allow for flexibility in the deployment of future remedial measures." Buck Closure Determination, p. 1.

Since a significant portion of the coal ash will be excavated and beneficially reused, and the remaining coal ash will be taken to an on-site landfill, the need to transport coal ash over public roads or by rail car is eliminated. Such onsite disposal also obviates the need to locate additional communities to accept coal ash.

NCDEQ further finds that Duke Energy's proposed Closure Plan for Buck complies with the other requirements of CAMA. Specifically, NCDEQ has determined that Duke Energy has generally included all required elements of a Closure Plan (either directly or through incorporation by reference of the proposed Corrective Action Plan for Buck),² including the following:

- site history and history of site operations;
- site maps;
- results of a hydrogeologic, geologic, and geotechnical investigation of the site;
- results of groundwater modeling at the site;
- engineering drawings, schematics, and specifications for the proposed Closure Plan;
- a description of the construction quality assurance and quality control program to be implemented in conjunction with the Closure Plan;
- a description of the provisions for disposal of wastewater and management of stormwater

² Note that this document does not constitute an approval of the proposed corrective action plan for Buck or any element thereof, NCDEQ will review and take action on that proposal in a separate decisional document.

- and the plan for obtaining all required permits;
- a list of required permits;
- a description of the provisions for the final disposition of the coal combustion residuals;
- a description of the plan for post-closure monitoring and care for an impoundment for a minimum of 30 years;
- an estimate of the milestone dates for all activities related to closure and post-closure;
- projected costs of assessment, corrective action, closure, and post-closure care; and
- a description of the anticipated future use of the site and the necessity for the implementation of institutional controls following closure.

N.C. Gen. Stat. § 130A-309.214(a)(4). However, NCDEQ noted that Duke Energy did not submit an updated Comprehensive Site Assessment (CSA) and CAP that would be sufficient to provide compliance with the applicable requirements under 130A-309.214(a)(4)(c) and (d) and Title 15A of the North Carolina Administrative Code Subchapter 02L. It should be noted that per NCDEQ's letter to Duke Energy dated February 26, 2020, the updated CSA is due February 1, 2021.

Conclusion:

NCDEQ approves the implementation of the proposed Closure Plan for Buck based on its finding that this Plan “is protective of public health, safety, and welfare; the environment; and natural resources and generally complies with the requirements of CAMA” and that an updated CSA will be submitted February 1, 2021 followed by an updated CAP.