



NCDEQ Coal Ash Impoundment Closure Plan Decision

Belews Creek Steam Station

Attachment 1: Hearing Officer's Report and Public Comments

August 14, 2020



Hearing Officer's Report – Proposed Closure Plan for the Coal Ash Impoundment at Belews Creek Steam Station

Date: August 14, 2020

Facility: Belews Creek Steam Station
County: Stokes
Owner & Operator: Duke Energy Carolinas, LLC

Purpose

The purpose of this document is to provide an administrative record of the public input process on the proposed Closure Plan for the subject facility as required by G.S. 130A-309.214(b) of Session Law 2016-95 House Bill 630 (referred to as the Coal Ash Management Act or CAMA).

Regulatory Background Summary

CAMA required that the North Carolina Department of Environmental Quality (NCDEQ) develop proposed classifications for all coal combustion residuals 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.

On November 13, 2018, NCDEQ issued a final low-risk classification for the Belews Creek Steam Station based on the determination that Duke Energy met the requirements of 130A-309.213(d)(1). On April 1, 2019, NCDEQ further determined that Duke Energy was required to close the coal combustion residuals (CCR) impoundment at the Belews Creek Steam Station via excavation per 130A-309.214(a)(3)(a). On April 26, 2019, Duke Energy appealed the determination that the impoundment should be excavated.

On December 31, 2019, NCDEQ received the proposed Closure Plan for the Belews Creek Steam Station per the CAMA deadline. Staff from the NCDEQ's Division of Waste Management; Division of Energy, Mineral, and Land Resources; and Division of Water Resources reviewed the Closure Plan for completeness and the requirements of 130A-309.214(a)(4). NCDEQ also received the proposed Corrective Action Plan for groundwater remediation for the Belews Creek Steam Station. The Division of Water Resources staff also reviewed the Corrective Action Plan as some of its components are also components of the Closure Plan.

On December 31, 2019, NCDEQ entered into a Settlement Agreement with Duke Energy and the Community Groups represented by the Southern Environmental Law Center regarding the closure of the Belews Creek Steam Station. The Settlement Agreement added further requirements to the closure efforts and corrective action activities at the site and established some milestone dates for reporting, corrective action, and closure goals.

On January 31, 2020, the parties to the Settlement Agreement filed a Consent Order with the Wake County Superior Court. The Consent Order was subsequently signed by Wake County Superior Court Judge Paul Ridgeway on February 5, 2020.

Site History/Background Summary

The Belews Creek Steam Station (BCSS) is owned and operated by Duke Energy Carolinas, LLC (Duke Energy) in Stokes County, North Carolina along Belews Lake, a manmade lake constructed on Belews Creek in the early 1970s. BCSS is a two-unit, coal-fired power generation facility that is one of the largest steam plants in the Carolinas, with a capacity of 2,240 megawatts. It began commercial operation in 1974 and is currently in active operation. BCSS operates one impoundment for storing wet sluiced CCR, which is referred to as the Basin. The Basin was constructed from 1970 to 1972 and has been operational since 1974. Based on the Basin boundary delineated by Duke Energy, the boundary containing CCRs that practically requires closure is about 270 acres in size. Duke Energy has reported an in-place CCR tonnage of 11.97 million tons as of July 2019 for the Basin. The Basin includes two embankment structures functioning as dams, known as Ash Basin Main Dam and Pine Hall Road Embankment Dam, which are regulated by NCDEQ (State ID STOKE-116). Process flows of CCR waste streams have ceased for the Basin and decanting operations have been initiated to remove bulk water.

Closure Plan Summary

The closure plan indicates that the nearly all of the coal ash will be excavated. The closure plan provides that ash shall remain underneath the Pine Hall Road Landfill, which is capped with a geosynthetic cap and a soil cap. The amount of ash underneath the Pine Hall Road Landfill is estimated to be no more than 100,000 tons. Approximately 11,870,000 tons of coal ash will be excavated and transported to an onsite landfill. Closure activities for the Basin have already begun with the initiation of decanting under the Special Order by Consent. Upon approval of the Closure Plan by NCDEQ additional actions will commence, including finalization of detailed designs, dewatering and removal of interstitial water, contracting and detailed planning for the closure work, development of the new lined landfill partially within the Basin footprint in conjunction with excavation of the CCR, final grading of the site and landfill, development of storm water features and vegetative covers, and dam removal. The Basin CCR will be removed to a new lined landfill, located partially within the footprint of the Basin and adjacent to Pine Hall Road. The landfill would rise approximately 125 feet above Pine Hall Road. Post-excavation, the Basin site will resemble the land's valley shape before the Basin was created. Soil will be graded to restore contours for stormwater flows, then planted with native grasses for erosion control. The existing Basin dam will be removed and replaced by a small retention dam for stormwater management. Stormwater will flow to the Dan River.

Public Input Summary

In accordance with the requirements of 130A-309.214(b)(1), the Closure Plan was made available to the public for review and input on January 17, 2020. A copy of the proposed closure plan was available to be reviewed at the Stokes County Health Department, Stokes County Public Library, and at the NCDEQ Winston-Salem Regional Office. The Closure Plan was also made available online at:

<https://deq.nc.gov/news/key-issues/coal-ash-excavation/belews-creek-steam-station-coal-ash-closure-plan>

Per 130A-309.214(b)(2)(a), a notice and summary of the proposed Closure Plan was published in The Stokes News newspaper for three consecutive weeks beginning on January 19, 2020. Copies of the Notice were provided as required by 130A-309.214(b)(2)(b) and (c). Per 130A-309.214(b)(4), the 60-day comment period began on January 19, 2020 and ended on March 10, 2020. Comments could be sent to the NCDEQ via email, mail, and oral and/or written comments submitted during the public hearing.

Public Hearing and Oral Comments Summary

In accordance with the requirements of 130A-309.214(b)(3), a Public Hearing was held on February 18, 2020 at 6:00 pm in the Walnut Cove Elementary School located at 1211 Walnut Cove School Road, Walnut Cove, North Carolina. The purpose of the public hearing was to allow the public to comment on the Belews Creek Steam Station Closure Plan. Interested parties were able to submit oral or written statements regarding the proposed Closure Plan. Persons wishing to speak registered at the hearing. Speaking times were allotted per speaker as time allowed.

Approximately 81 people attended the public hearing including 21 staff members from the Division of Waste Management; Division of Energy, Mineral, and Land Resources; Division of Water Resources, and Division of Air Quality, as well as Public Information Officers and the Hearing Officer. A total of 81 individuals signed the attendance sign in sheets at the hearing. The Hearing Officer provided opening comments and David Giachini of the Division of Waste Management gave a brief overview of the Closure Plan. Eleven (11) individuals registered in advance of the hearing to make comments. One of those individuals did not present any comments. Speakers had three minutes for initial presentations and additional time was provided after everyone who registered to speak was finished.

Response to Comments

The North Carolina Department of Environmental Quality (NCDEQ) received three written comments, and ten oral comments delivered at the public hearing, regarding the Belews Creek Coal Ash Impoundment Closure Plan (Closure Plan). A discussion of these comments follow.

Comment: One written commenter 1) opposed cap-in-place at the Belews Creek Coal Ash Impoundment (Belews Creek), 2) expressed concern about the continued leach of contaminants into the groundwater, 3) expressed concern regarding the sufficiency of future groundwater monitoring, and 4) requested that the Walnut Cove community be allowed to vote on the approval or disapproval of the Closure Plan.

Response: The Closure Plan does not allow cap-in-place and requires both the excavation of the coal ash and also the monitoring of groundwater at Belews Creek. The North Carolina Coal Ash Management Act (CAMA) requires that Closure Plans be approved by NCDEQ.

Comment: One commenter stated that excavation should be required and that Duke should pay for the excavation.

Response: The Closure Plan requires excavation of the majority of the coal ash at Belews Creek. The North Carolina Utilities Commission has statutory authority to determine who will pay the costs associated with cleanup of coal ash at the site, including those costs associated with storage of excavated coal ash in a lined landfill. These cleanup costs will be the subject of future

rate cases before the North Carolina Utilities Commission. The public will have an opportunity to provide comments during those rate case hearings.

Comment: The Southern Environmental Law Center (SELC), on behalf of Appalachian Voices, the Stokes County Branch of the NAACP and the North Carolina NAACP, commented in support of the excavation of coal ash at Belews Creek. The SELC further commented that 1) all saturated coal ash must be removed and 2) NCDEQ must ensure the protection of Duke Energy's workers and contractors who are cleaning up the coal ash by requiring Duke Energy to create a safe working environment with protective equipment.

Response: The Closure Plan requires that nearly all of the coal ash be removed from the Belews Creek impoundment. Duke Energy will be required to meet all applicable legal statutes and regulations addressing worker safety at Belews Creek. Generally, the statutory authority to regulate worker safety laws is vested in state and federal agencies other than NCDEQ.

Comment: Ten persons provided oral comments at the public hearing. Comments included 1) requests for third party monitoring, citing of a loss of trust in Duke Energy; 2) a request for additional thought and planning for long-term solutions; 3) a request for increased recycling, along with several expressed concerns about the environmental impacts related to recycling; 4) requests to transition to "clean" energy sources such as solar and wind energy, and away from the environmental impacts caused by coal ash and natural gas fracking; 5) requests for the protection of worker safety for workers addressing coal ash removal; 6) a request for the regular monitoring and cleanup of all groundwater contamination, including coal ash saturated in groundwater; 8) a concern that coal ash will not be excavated around the transmission towers; 9) requests for baseline health monitoring for area citizens, along with regular health screenings for coal ash workers; and 10) concerns that the law will change and that the execution of the requirements will be too slow.

Response: The Closure Plan indicates that nearly all of the coal ash will be excavated. Closure by excavation anticipates that no saturated ash would remain in the ash basin footprint. Duke Energy will be required to meet all applicable environmental regulatory requirements at Belews Creek, including monitoring requirements, soil and groundwater cleanup requirements, as well as all requirements relevant to the recycling of coal ash. Duke Energy will also be required to meet all applicable legal statutes and regulations addressing worker safety at Belews Creek. Generally, the statutory authority to regulate worker safety laws is vested in state and federal agencies other than NCDEQ. The statutory authority to require the use of solar and wind energy is also vested in state and federal agencies other than NCDEQ. The closure plan provides that ash shall remain underneath the Pine Hall Road Landfill, which is capped with a geosynthetic cap and a soil cap. The amount of ash underneath the Pine Hall Road Landfill is estimated to be no more than 100,000 tons. Approximately 11,870,000 tons of coal ash will be excavated and transported to an onsite landfill.

Hearing Officer Recommendations

Based on my review of the record and in consultation with subject matter experts in NCDEQ, I recommend approval of the submitted Closure Plan for the coal ash impoundment located at Duke Energy's Belews Creek Steam Station located in Stokes County. I conclude that the Closure Plan is protective of public health, safety and welfare, the environment and natural resources and otherwise complies with the requirements of CAMA.

Gregory W Reeves

Greg Reeves, Hearing Officer

August 14, 2020

Date

RECEIVED

2/7/19

24

Feb. 2, 2019

Dear DEQ,

Companies should have to pay to clean up the messes they've made, to help the environment for years to come.

Please require Duke Energy to excavate the ash at Belews Creek.

Thank you,

Millie Moore

Millie Moore
7635 Belews Creek Road
Belews Creek, NC 27009

RECEIVED

1/23/19

24

Jan 10, 2019

Walnut Cove

Elementary

Comment Sheet

Name: SANDRA DREIS (retired teacher)
WSFCS

Email: sandradreis@yahoo.com

Phone: 336 682 8938

Organization (if applicable): TEEM Temple Emanuel
Environmental Movement

What is your biggest concern about the options for closure being considered?

I worry that the contents in the Coal Ash containment "area" will leech over the years into surrounding soil and cause more problems.

Are there additional criteria DEQ should consider as they evaluate the closure options?

How will the coal ash contaminants in surrounding groundwater continue to be monitored? How often?

What do you want to see in a closure plan?

I'd like to see a safe, lined
containment vessel. Not just a cap-
method: (hasting into the future)
which must be considered seriously.
long term is what counts more than
the cheaper, quicker fix.

What other comments or information would you like to convey?

I think the community of Walnut Cove
should vote on any proposal, since their
lives will be "disrupted" by
containment activity.

Additional comments may be sent to email to

Belewscomments@ncdenr.gov or mailed to North Carolina Department of
Environmental Quality, c/o Louise Hughes 1601 West Jones Street, Raleigh,
NC 27699-1601.

RECEIVED
3/13/20



SOUTHERN ENVIRONMENTAL LAW CENTER

Telephone 919-967-1450

601 WEST ROSEMARY STREET, SUITE 220
CHAPEL HILL, NC 27516-2356

Facsimile 919-929-9421

March 10, 2020

VIA EMAIL AND U.S. MAIL

N.C. Department of Environmental Quality
Louise Hughes
1601 Mail Service Center
Raleigh, NC 27699-1601
belewscreekcomments@ncdenr.gov

Re: **Comments on Closure Plan – Belews Creek Steam Station**

Dear Ms. Hughes:

Please find enclosed comments on the Belews Creek Steam Station closure plans. If you have any questions, please do not hesitate to get in touch.

Sincerely,



Jennifer Doucette
Legal Administrative Assistant
Southern Environmental Law Center

Enclosure

SOUTHERN ENVIRONMENTAL LAW CENTER

Telephone 919-967-1450

601 WEST ROSEMARY STREET, SUITE 220
CHAPEL HILL, NC 27516-2356

Facsimile 919-929-9421

March 10, 2020

VIA EMAIL AND U.S. MAIL

N.C. Department of Environmental Quality
Louise Hughes
1601 Mail Service Center
Raleigh, NC 27699-1601
belewscreekcomments@ncdenr.gov

Re: Comments on Closure Plan – Belews Creek

Dear Ms. Hughes:

On behalf of Appalachian Voices, the Stokes County Branch of the NAACP, and the North Carolina NAACP, we support Duke Energy's plan to excavate the unlined coal ash basin at Belews Creek in Stokes County.

This result is required by the North Carolina Coal Ash Management Act. As the Department set out in its April 1, 2019 Closure Determination, the ongoing contamination and the risks associated with leaving millions of tons of coal ash saturated in groundwater are too great, and full excavation is the right solution to ensure that groundwater and downstream surface waters are protected.

The closure plan removes approximately 12 million tons of coal ash from the leaking, unlined lagoon at Belews Creek and disposes of it onsite in lined, dry storage. This represents an enormous victory for the Walnut Cove community, which has fought for the safe disposal of coal ash from Belews Creek for nearly a decade. This solution also restores flow to the headwaters of Little Belews Creek, a tributary of the Dan River that has been buried under the coal ash basin for decades. Once Duke Energy removes the coal ash, the creek will run freely, without contaminating the Dan River with coal ash pollution.

We have two requests for the Department:

Each of Duke Energy's coal ash sites contain millions of tons that are saturated in groundwater, and DEQ must ensure Duke Energy removes all of this ash. Appendix E of the closure plan states that if Duke encounters ash saturated in groundwater, "[a] plan will be submitted to NC DEQ by Duke Energy pertaining to the removal of ash if these conditions or other restricting factors occur." Closure Plan, Appendix E, Section 4.3. Because we already know that millions of tons of ash are saturated in groundwater at every one of these sites, DEQ

should require Duke Energy to submit its plan for fully removing saturated ash now, to ensure the plan is adequate and all saturated ash will be removed.

In addition, DEQ must continue to protect North Carolinians by ensuring the safety of the workers who are cleaning up the coal ash. DEQ should require Duke Energy to protect its workers *and* contractors by creating a safe work environment with protective equipment.

We are grateful to Secretary Regan and the whole Department of Environmental Quality for your work to implement CAMA and ensure these sites will be cleaned up once and for all. We fully support this closure plan.

Thank you for your consideration of these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Nicholas S. Torrey", with a long, sweeping underline that extends to the right.

Nicholas S. Torrey
Senior Attorney

cc: Sheila Holman, Assistant Secretary for the Environment
Bill Lane, General Counsel