

North Carolina Department of Environment and Natural Resources

Pat McCrory Governor John E. Skvarla, III Secretary

NOTICE OF DEFICIENCY

June 26, 2014

<u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Duke Energy Corporation Attention: Mr. John Toepfer, PE 410 S. Wilmington St./NC14 Raleigh, North Carolina 27601

Duke Energy Corporation Attention: Mr. John Elnitsky, Vice President Project Management and Construction Post Office Box 1006 Charlotte, North Carolina 28201

RE:

1970 Ash Pond Dam

CHATH-077 – High Hazard Potential

Cape Fear River Basin Chatham County

Dear Mr. Toepfer and Mr. Elnitsky:

As you know, the Dam Safety Law of 1967 (Law), as amended, provides for the certification and inspection of dams in the interest of public health, safety, and welfare, in order to reduce the risk of failure of such dams; to prevent injuries to persons, damage to property; and to ensure the maintenance of stream flows.

On May 1, 2014, the Raleigh Regional Office (RRO) received a digital copy of an internal inspection of the spillway system for the referenced dam. This submittal was in response to an information request issued by our Division on March 5, 2014, where we requested that Duke Energy camera inspect all such facilities. This dam has a spillway structure with both reinforced concrete and fiberglass components.

We have reviewed the camera inspection video, and have noted that it documents significant deformation and fractures in the fiberglass barrel component. Some infiltration staining was also documented. Although the activation of this spillway would be a rare event, these conditions could

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compromise the structure and appear serious enough to justify further engineering study in order to determine appropriate remedial measures. This dam is categorized as a high hazard potential structure. In the event of dam failure, significant environmental damage to the Cape Fear River could occur due to release of coal ash and water stored behind the dam.

In order to ensure the safety of this dam, you must provide for an appropriate engineering review of the video, focusing on the defects outlined in this Notice relative to overall structural integrity, and including recommendations for timely repair or decommissioning of the structure. Plans and specifications based on the results of the review must be filed with the Division of Energy, Mineral and Land Resources for approval pursuant to the North Carolina Administrative Code, Title 15A, Subchapter 2D – Dam Safety (15A NCAC 2K). Please note that any excavations in the dam or repair work must be approved by this Division before any work is done.

Please submit a written response as quickly as possible, but no later than thirty (30) days following receipt of this Notice to advise us of your intended actions in this matter. This response must include a schedule for repair plan development and implementation. If we do not receive a timely response, we will present the case information for appropriate enforcement action in accordance with North Carolina General Statute 143-215.36, as needed to achieve full compliance with the Law.

It is recommended that you direct questions related to repair applications or the dam plan review process to our central office dam safety staff at (919) 707-9220. All plans, specifications, design data, and calculations must be submitted to the State Dam Safety Engineer. If you have any questions regarding this letter, please contact me at (919) 791-4200. Your cooperation and consideration in maintaining a safe dam is appreciated.

Sincerely,

cc:

John L. Holley, Jr., PE, CPESC

Regional Engineer Land Quality Section

> Steven M. McEvoy, PE, State Dam Safety Engineer Water Quality Regional Operations Supervisor