

US EPA ARCHIVE DOCUMENT

June 1, 2011

Mr. Stephen Hoffman  
US Environmental Protection Agency (5304P)  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Subject: Comments on DRAFT Dam Assessment Report  
H.F. Lee Steam Electric Plant  
Progress Energy Carolinas, Inc.  
Wayne County, North Carolina

Dear Mr. Hoffman:

Thank you for the opportunity to review and provide comments on the subject report. As you may recall, the coal fired generation units at this facility are scheduled to be replaced with a 900 MW gas-fired combined cycle unit by December 31, 2012. At that time, wastewater will no longer be sent to the ash pond for treatment. With that in mind, the following comments are offered for consideration and inclusion in the final report.

**Section 1.1.8 of the Conclusions and Recommendations Section of the DRAFT document states:**

*The facility is rated FAIR for continued safe and reliable operation due to a lack of sufficient engineering data. Implementation of the following recommendations would help improve the rating. It is anticipated that all ponds would be considered satisfactory for continued safe and reliable operation after completion of the following actions:*

- *Remediate the severe undercutting on Inactive Ash Pond 2,*
- *Document completion of expanded seepage stabilization measures,*
- *Perform periodic monitoring and testing to confirm stability of active ash pond embankment, and*
- *Develop an action plan to address the stability of the embankment to increase factors of safety to meet all applicable standards and requirements.*

Please clarify if the term “facility” is referring to the active ash pond or includes the inactive ash ponds. Also, please clarify in this section that the term “Fair” is defined as “Minor deficiencies may exist that require remedial action and/or secondary studies or investigations.”

Progress Energy will evaluate the necessity of any actions in response to comments 1, 3 and 4 as part of the overall plans to decommission this site after it is closed in 2012. Preparation of plans for the sites closure are being developed now.

In response to the second comment (document completion of the seepage repair), we offer the following information. The repair plan was submitted to the State of North Carolina for review and approval on February 14, 2011. The repair plan for the seepage repair was approved by the State of North Carolina on March 28, 2011. The work to extend the rip rap blanket occurred May 18, 19, 20, 25 & 26, 2011. We are in the process of preparing and submitting final certifications to the State for this project.

#### **1.2.1 Recommendations Regarding the Structural Stability**

Please clarify the structures that these comments are meant to apply.

#### **1.2.3 Recommendations Regarding Continued Safe and Reliable Operation**

There appears to be a syntax issue in the first recommendation that makes it unclear as to what is being recommended. Please clarify the recommendation.

#### **2.3 Size and Hazard Classification**

The report incorrectly indicates that a hazard classification has not been assigned to the ash pond. The North Carolina Division of Land Resources has classified the ash pond dam as “High Hazard”.

#### **4.1.2 Significant Changes/Modifications in Design since Original Construction**

The accuracy of the dates referenced in this Section need to be verified. The report indicates the last of the three inactive ponds was taken out of service in 1973, but our information indicates the pond was taken out of service in 1980, when the active ash pond was put into service.

#### **4.2.1 Original Operational Procedures**

We request the word “reservoir” be removed from this Section and replaced with ash pond. This term may cause confusion with other reservoirs used by the company that have different purposes and are considered waters of the United States. Also, please remove the reference to coal pile runoff. Runoff from the coal pile does not go to the ash pond.

#### **4.2.2 Significant Changes in Operational Procedures and Original Startup**

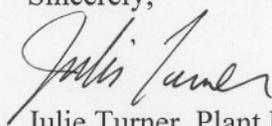
Same comment about dates as in Section 4.1.2 above.

### 5.6.1 Overflow Structure

The riser structures on the inactive ponds do not discharge stormwater runoff.

We certainly appreciate your attention to this matter. If there are any regulatory questions or requests for additional information, please contact Shannon Langley at 919-546-2439; shannon.langley@pgnmail.com. For any questions concerning technical aspects of the plan, please contact Rob Miller at (919) 881-3849.

Sincerely,



Julie Turner, Plant Manager  
H.F. Lee Energy Complex

NOTE

Subject: EPA Comments on Progress Energy Carolinas Inc, Lee Power Station,  
Goldsboro, NC  
Round 9 Draft Assessment Report

To: File

Date: October 5, 2011

1. On p. ii, INTRODUCTION, SUMMARY CONCLUSIONS AND RECOMMENDATIONS, second paragraph, replace “As detailed in Section 1.2.5” with “As detailed in Section 1.2.2.”
2. Four management units were assessed at this facility: Active Ash Pond, Ash Pond 1 (in-active), Ash Pond 2 (in-active), and Ash Pond 3 (in-active). This should be stated in the INTRODUCTION, SUMMARY CONCLUSIONS AND RECOMMENDATIONS section and reflected in the title of the report.
3. The conclusions and recommendations do not appear to support a rating of fair for all units. In section 1.8, the report states “the facility is rated..” Please refrain from rating the facility, each individual unit must be given a condition rating.
4. On p. 1-1, section 1.1.5, the report states “The overall assessment of the ash pond embankment system was that it was in satisfactory condition;” this statement contradicts the condition rating of fair.
5. Page 2-5: capacity of unit table only for active ash pond, if other units rated, should there be an equivalent table for them?
6. Section 6.1.4 states that “A dam breach analysis and inundation map development was performed for the site and the result was that there could potentially be two bridges and a mobile home community that could be affected if a breach occurred on the east side of the ash ponds.” Might this statement warrant a higher ranking than “low” hazard potential?
7. In section 7.3 ASSESSMENT OF STRUCTURAL STABILITY, the reports states: “Overall, the structural stability of the dam appears to be satisfactory.” This “satisfactory” statement conflicts with the fact that the FOS has not been met for section AB-1 as stipulated in section 7.1.4:
8. Add a semicolon at end of first bullet in section 1.2.1.
9. The last statement in section 2.3 states: “a Federal Hazard Classification of **Low** appears to be appropriate for this facility.” Please provide a ranking for each individual unit, not the facility as a whole.

10. Please label each document in Appendix A prior to the beginning of the document.
11. In Appendix A, the 2010 inspection report is a draft, was there a final version? Also, is there a final version of the Feb 2011 MACTEC report?
12. In Appendix A, several inspection reports refer to the ash pond and a cooling pond. The February 2011 report discusses an active ash pond, a cooling pond and an inactive ash pond. Please explain -- The written report provides only one mention of a cooling lake in section 6.1.4. Does this cooling lake contain CCRs?
13. The following was not addressed in the report for either pond: “Is any part of the impoundment built over wet ash, slag, or other unsuitable materials (like TVA)?” Please address for each Pond.

MEMORANDUM

TO: Jana Englander

FROM: Jerry Strauss

cc:

Date: December 21, 2011

SUBJECT: PEC, Lee Power Station, Response to Comments

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Split the ratings for the 4 reports. Two are Satisfactory and 2 are Fair. This is a change from the Draft Report.

EPA Comments:

- Title of Report, Introduction, and Section 1 summaries reflect 4 separate management units.
- Capacity is only relevant/provided for the Active Ash Pond. Inactive ponds are assumed to have 0 capacity since they have not received ash for 30 years; plus no capacity data were provided.
- The Active Ash Pond, based on the ability of its waste to flow in ponded water and its location, now has a Significant Hazard rating.
- Report now explains that the Section AB-1 "failure" is surficial/shallow and will not result in a breach of the dam. The surficial failure is on the inside slope and fails into the pond.
- We were not provided Final versions of many documents.
- The cooling lake does not contain CCR.
- Questions concerning built over ash/slag are addressed in the last page of each checklist.

Utility Comments:

- Utility also requested clarification on which ponds we were addressing.
- Recommendations clarified as to what we recommend.
- Dates revised per utility.
- "Reservoir" removed in Section 4.
- Riser structure discussion revised.