UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

January 12, 2012

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL

Mr. Fred Holt
Progress Energy Carolinas
P.O. Box 1551
Raleigh, North Carolina 27602

Re: Request for Action Plan regarding Progress Energy Carolinas Inc - H. B. Robinson Power Station

Dear Mr. Holt,

On February 24, 2011 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Progress Energy Carolinas Inc - H. B. Robinson Power Station facility. The purpose of this visit was to assess the structural stability of the impoundment or other similar management units that contain “wet” handled CCRs. We thank you and your staff for your cooperation during the site visit. Subsequent to the site visit, EPA sent you a copy of the draft report evaluating the structural stability of the unit at the Progress Energy Carolinas Inc - H. B. Robinson Power Station facility and requested that you submit comments on the factual accuracy of the draft report to EPA. Your comments were considered in the preparation of the final report.

The final report for the Progress Energy Carolinas Inc - H. B. Robinson Power Station facility is enclosed. This report includes a specific condition rating for each CCR management unit and recommendations and actions that our engineering contractors believe should be undertaken to ensure the stability of the CCR impoundment(s) located at the Progress Energy Carolinas Inc - H. B. Robinson Power Station facility. These recommendations are listed in Enclosure 2.

Since these recommendations relate to actions which could affect the structural stability of the CCR management unit(s) and, therefore, protection of human health and the environment, EPA believes their implementation should receive the highest priority. Therefore, we request that you inform us on how you intend to address each of the recommendations found in the final report. Your response should include specific plans and schedules for implementing each of the recommendations. If you will not implement a recommendation, please provide a rationale. Please provide a response to this request by February 13, 2012. Please send your response to:

Mr. Stephen Hoffman
U.S. Environmental Protection Agency (5304P)

1200 Pennsylvania Avenue, NW
Washington, DC 20460

If you are using overnight of hand delivery mail, please use the following address:

Mr. Stephen Hoffman
U.S. Environmental Protection Agency
Two Potomac Yard
2733 S. Crystal Drive
5th Floor, N-5838
Arlington, VA 22202-2733

You may also provide a response by e-mail to hoffman.stephen@epa.gov, kohler.james@epa.gov, and englander.jana@epa.gov.

You may assert a business confidentiality claim covering all or part of the information requested, in the manner described by 40 C. F. R. Part 2, Subpart B. Information covered by such a claim will be disclosed by EPA only to the extent and only by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when EPA receives it, the information may be made available to the public by EPA without further notice to you. If you wish EPA to treat any of your response as "confidential" you must so advise EPA when you submit your response.

EPA will be closely monitoring your progress in implementing the recommendations from these reports and could decide to take additional action if the circumstances warrant.

You should be aware that EPA will be posting the report for this facility on the Agency website shortly.

Given that the site visit related solely to structural stability of the management units, this report and its conclusions in no way relate to compliance with RCRA, CWA, or any other environmental law and are not intended to convey any position related to statutory or regulatory compliance.

Please be advised that providing false, fictitious, or fraudulent statements of representation may subject you to criminal penalties under 18 U.S.C. § 1001.

If you have any questions concerning this matter, please contact Mr. Hoffman in the Office of Resource Conservation and Recovery at (703) 308-8413. Thank you for your continued efforts to ensure protection of human health and the environment.

Sincerely,
/Suzanne Rudzinski/, Director
Office of Resource Conservation and Recovery

Enclosure

Enclosure 2

Progress Energy Carolinas Inc - H. B. Robinson Power Station Recommendations (from the final assessment report)

1.0 CONCLUSIONS AND RECOMMENDATIONS

1.1 CONCLUSIONS

Conclusions are based on visual observations from a one-day site visit on February 24, 2011, and review of technical documentation provided by Progress Energy Carolinas (PEC).

1.1.1 Conclusions Regarding the Structural Soundness of the Management Unit(s)

The ash pond dike embankment and spillway outlet structure appear to be structurally sound based on a review of the engineering data provided by the owner's technical staff and Dewberry engineers' observations during the site visit.

1.1.2 Conclusions Regarding the Hydrologic/Hydraulic Safety of the Management Unit(s)

Hydrologic and hydraulic analyses provided to Dewberry indicate adequate flood storage and spillway capacity to pass the appropriate spillway design flood based on the 50-year design storm without overtopping the dike. Under current ash sedimentation levels and operating water level conditions, the ash pond appears to still have adequate flood storage capacity to meet the requirements of the floodrouting analysis. As the pond fills further with ash, the volume available for flood storage will diminish, and could eventually be less than used in the analysis, unless ash is excavated or other measures taken to restore available flood storage.

1.1.3 Conclusions Regarding the Adequacy of Supporting Technical Documentation

The supporting technical documentation is adequate. Engineering documentation reviewed is referenced in Appendix A of the final report.

1.1.4 Conclusions Regarding the Description of the Management Unit(s)

The description of the management unit provided by the owner was overall an accurate representation of what Dewberry observed in the field. However, there appears to be a discrepancy concerning the size of the overflow riser between what is shown in original plans (36-inch diameter RCP) and what is shown in design drawings for the last dike raise in 2002 (48-inch diameter RCP). Record drawings should be corrected or amended, as appropriate, to eliminate confusion as to the size of the buried portion of the riser.

1.1.5 Conclusions Regarding the Field Observations

Dewberry staff was provided access to all areas in the vicinity of the management unit required to conduct a thorough field observation. The visible parts of the embankment dike and outlet structure were observed to have no signs of overstress, significant settlement, shear failure, or other signs of instability. The dike embankment appeared structurally sound. There are no apparent indications of unsafe conditions or conditions needing emergency remedial action. Some minor maintenance is needed (see Subsection 1.2.3).

1.1.6 Conclusions Regarding the Adequacy of Maintenance and Methods of Operation

The current maintenance and methods of operation appear to be adequate for the CCR management unit. There was no evidence of significant embankment repairs or prior releases observed during the field inspection.

1.1.7 Conclusions Regarding the Adequacy of the Surveillance and Monitoring Program

The surveillance program overall is adequate. However, it would be prudent to include periodic interior inspection of the outlet structure with a "borehole" video camera as part of PEC's inspection program for the ash pond dike (see Subsection 9.3.1 of the final report for discussion). The piezometer monitoring program is adequate. In the absence of problem or suspect conditions, there is no need for additional performance monitoring instrumentation at this time.

1.1.8 Classification Regarding Suitability for Continued Safe and Reliable Operation

The facility is SATISFACTORY for continued safe and reliable operation. No existing or potential management unit safety deficiencies are recognized. Acceptable performance is expected under all applicable loading conditions (static, hydrologic, seismic) in accordance with the applicable criteria.

1.2 RECOMMENDATIONS

1.2.1 Recommendations Regarding the Hydrologic/Hydraulic Safety

No recommendations appear warranted at this time. PEC has indicated that the plant plans to maintain flood storage capacity of the ash pond by continuing dry handling of the fly ash and by stacking bottom ash as necessary.

1.2.2 Recommendations Regarding the Description of the Management Unit(s)

It is recommended that record drawings be corrected or amended, as appropriate, to eliminate confusion as to the size of the buried portion of the overflow riser at the Ash Pond. PEC has indicated that the existing riser pipe size will be verified in the field and any necessary changes will be made to the as-built drawings.

1.2.3 Recommendations Regarding the Field Observations

It is recommended that routine maintenance pay particular attention to:

a. Re-establishing good grass cover in areas of sparse grass growth and in areas damaged by mowers;

b. Filling holes in the embankment slope just above the downstream toe riprap with suitable filter materials to minimize continuing erosion of embankment soil into the voids of the riprap; lining the larger holes with filter fabric before filling them with coarse filter stone may be beneficial;

c. Re-establishing soil cover and good grass growth where erosion of backfill soil has exposed an ash sluice line in the slope, in order to arrest continued erosion, which unchecked could eventually result in the development of gullies in the embankment slope along the sluice line(s);

d. Improving drainage from the right (south) downstream toe swale in order to dry up the persistent wet area, which would allow ease of mowing and facilitate inspections;

e. Controlling growth of woody vegetation in the riprap on the upstream slope of the north portion of the dike; and

Although the erosion at the outlet end of the outfall pipe is not serious at this time and is relatively remotely located from the outside toe of the ash pond dike, it would be good practice to protect the bank or otherwise arrest erosion to prevent potential undermining and damage at the end of the outfall pipe.

1.2.4 Recommendations Regarding the Surveillance and Monitoring Program

It is recommended that periodic interior inspection of the outlet structure with a "borehole" video camera be included as part of PEC's inspection program for the ash pond dike (see Subsection 9.3.1 of the final report for discussion).

1.2.5 Recommendations Regarding Continued Safe and Reliable Operation

None of the above recommendations is currently considered urgent but should be done within a reasonable time frame, so that some of them do not grow into bigger issues.