

US EPA ARCHIVE DOCUMENT



DUKE ENERGY OHIO, INC.
139 E. 4th Street
Cincinnati, OH 45202

Via E-Mail and Overnight Courier

February 7, 2011

Mr. Stephen Hoffman
US Environmental Protection Agency
Two Potomac Yard
2733 S. Crystal Drive
5th Floor, N-237
Arlington, VA 22202-2733

Re: Final Dam Safety Assessment Report
W.H. Zimmer Station
1781 US Route 52
Moscow, Ohio 45153

Dear Mr. Hoffman:

Duke Energy Ohio, Inc. received and has reviewed the final report for W.H. Zimmer Station that resulted from the site assessment of the Wastewater Pond Complex conducted on April 28, 2010 by O'Brien & Gere Engineers, Inc., under contract to the United States Environmental Protection Agency (EPA). Duke Energy supports the EPA's objective of ensuring ash basin dam safety and remains committed to the safe operation and maintenance of coal ash basins.

The impoundment facilities at Zimmer are currently under the regulatory authority of the Ohio Department of Natural Resources, Division of Water (ODNR). The ODNR conducts an assessment/inspection of the impoundments at a minimum of once every five years. In addition, Duke Energy regularly conducts internal inspections and periodically contracts third party inspections of the Zimmer Wastewater Pond Complex.

Duke Energy remains committed to meeting all state and federal requirements and managing its coal combustion byproducts impoundments in a safe and responsible manner. Based on ongoing

monitoring, maintenance and inspections, Duke Energy is confident that the Zimmer Wastewater Pond Complex has the structural integrity necessary to protect the public and the environment.

The EPA's report on the W.H. Zimmer Generating Station supports this conclusion and found that acceptable performance is expected in accordance with the applicable safety regulatory criteria. However, the EPA's contractor made several recommendations addressing minor deficiencies and secondary studies/investigations to provide further assurance of continued structural integrity. Duke Energy responds to each of these recommendations as follows:

1. **RECOMMENDATION:** The following minor repairs should be undertaken:
 - Filling of noted rodent burrows and elimination/relocation of rodents.

RESPONSE:

The noted rodent burrows will be filled by August 31, 2011. If the burrow areas appear active at the time they are filled, a plan will be executed to deal with any rodents present in the same timeframe as the burrows are filled.

2. **RECOMMENDATION:** The following long term improvements should also be completed:
 - Regrading to promote positive drainage of wet areas along the outboard toe of the west embankment and western portion of north embankment.

RESPONSE:

In an effort to promote positive drainage of the wet areas along the outboard toe of the west embankment and western portion of the north embankment, the areas will be graded to establish positive drainage. The areas will be graded and seeded by August 31, 2011.

3. **RECOMMENDATION:** Should the wet areas along the toe (as mentioned in recommendation 2 above) return upon completion of regrading, further investigation may be necessary to verify if seepage is an issue. NOTE: This was listed under time frame for completion of repairs/improvements in Section 6.4.

RESPONSE:

If the wet areas along the toe (as mentioned in recommendation 2 above) return upon completion of regrading, Duke Energy will investigate further to verify if seepage is an issue. Duke Energy does not anticipate that this is a seepage issue. This recommendation is considered complete.

Section 6.3 Monitoring and Future Inspection

4. **RECOMMENDATION:** The following items should be monitored more closely and in the event their condition is observed to worsen, immediate action to remedy the situation should be taken:
- Scarping/wave erosion in Wastewater and Clear Water Ponds,
 - Non-uniform slope at the north end of the east embankment, and
 - Erosion on secondary access road on north embankment.

RESPONSE:

The following items are being monitored as part of the routine, internal inspections:

- Scarping/wave erosion in Wastewater and Clear Water Ponds,
- Non-uniform slope at the north end of the east embankment, and
- Erosion on secondary access road on north embankment.

If the above items are found to need action, the appropriate steps will be taken in a timely manner to remedy the situation. This recommendation is considered complete.

5. **RECOMMENDATION:** O'Brien & Gere recommends that Duke Energy continue with its current schedule of weekly inspection and annual third party inspections. O'Brien & Gere also recommends that Duke Energy continue its current practice of regular mowing to manage vegetative growth on the embankment slopes to prevent the growth of woody vegetation, prevent erosion, and facilitate inspection. Consideration should be given to placing rip rap or similar measures to prevent further erosion of the inboard slopes of the embankments at the normal operating water levels.

RESPONSE:

Duke Energy will continue with its routine, internal inspections and annual third party inspections. Duke Energy will also continue its current practice of regular mowing to manage vegetative growth on the embankment slopes to prevent the growth of woody vegetation, prevent erosion, and facilitate inspection. The placement of rip rap or similar measures to prevent further erosion of the inboard slopes of the embankments at the normal operating water levels will be considered and evaluated. Appropriate actions will be taken as conditions warrant. This recommendation is considered complete.

6. **RECOMMENDATION:** Consideration should be given to updating the original slope stability analyses to include all applicable loading conditions and to meet current dam safety standards. While the site is located in an area of relatively low seismic risk, seismic loading should be one of the loading conditions evaluated.

RESPONSE:

Duke Energy engineers will consider and evaluate updating the original slope stability analyses to include all applicable loading conditions. Seismic loading will be one of the loading conditions considered during the evaluation. The evaluation of this recommendation will be complete by August 31, 2011.

If you have any questions regarding the above responses, please contact Ed Sullivan at Duke's corporate offices at 980-373-3719 or via e-mail.

Sincerely,
Duke Energy Ohio, Inc.



David Beck
General Manager, Zimmer Station
Midwest Commercial Generation