# Comments on Draft Dam Assessment Report – Oklaunion Plant

**- June 7, 2011 -**

AEP has reviewed the draft report provided by Dewberry & Davis (D&D) as part of their assessment of the ash impoundment facilities at the Oklaunion Plant and would like to offer the following comments. AEP's comments are denoted in italic print after each excerpt from the D&D draft report.

## INTRODUCTION, SUMMARY CONCLUSIONS AND RECOMMENDATIONS

In summary, the Oklaunion Power Station Wastewater Evaporation Ponds are rated **POOR** for continued safe and reliable operation. These ratings are based only on the lack of critical studies and investigations available to the assessors to determine the inundation potential of the dams and potential for dam safety deficiencies or the future closure plans for the non-incised ponds. If the non-incised pond (Pond 6) is to remain open, the following recent and current information, studies and analysis are needed: breach analysis, and hydraulic and hydrological studies. If the non-incised pond (Pond 6) is in the process of being closed, a report indicating the closure plan and schedule needs to be submitted. Upon receipt of data showing adequate hydraulic and structural soundness or a proper closure plan the rating can be changed to satisfactory.

*The only ash impoundment at the Oklaunion Plant that is not incised is the Evaporation Pond 6. In general, AEP believes that the information and comments noted in the main text of this assessment report do not substantiate a Poor rating for this facility inspected by the consultant.*

*The POOR rating is based on lack of "critical" studies as noted above. However, Sections 6 through 9 of the draft report do not identify any "critical" studies that would warrant a Poor rating. AEP agrees that an analysis should be performed to verify the storage and hydraulic capacity of Pond 6. This study would also confirm and set the maximum operating water levels. AEP will select the design flood event applicable to a small, low hazard dam as per the State of Texas requirements for this evaluation in conducting this study. AEP is also currently performing a stability analysis of the Pond 6 embankment.*

*The dam breach analysis and corresponding flood inundation map do not seem warranted to make an assessment of the structural integrity or hydraulic capacity of this*

*facility.* ***It is requested that the consultant re-evaluate the need for a dam breach analysis as it relates to the intent of these inspections.***

### 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 fly ash management unit.

*The solids contained in Pond 6 are composed primarily of materials that have been cleaned out of other evaporation ponds prior to their relining and FGD sludge, not fly ash.*

### 2.2.1 Fly Ash

4. The ash is stockpiled to be either sold to a 3rd party for beneficial reuse or to be permanently disposed of in the landfill.

*Almost all fly ash produced at this plant has been sold to third-parties for beneficial reuse. As a consequence, the plant does not have a landfill. The minute quantities that have not been sold, e.g., produced from equipment cleaning during plant outages, were permanently disposed of in Pond 6.*

### 2.2.3 Boiler Slag

Boiler slag is same as Bottom Ash. See entry above.

*This plant does not produce boiler slag.*

| **Table 2.3: Maximum Capacity of Unit** | |
|---|---|
| **Wastewater Evaporation Pond 6** | |
| **Surface Area (acre)1** | 58.0 |
| **Current Storage Capacity (cubic yards)1)** | Unknown * |
| **Current Storage Capacity (acre-feet)** | Unknown * |
| **Total Storage Capacity (cubic yards)1** | Unknown * |
| **Total Storage Capacity (acre-feet)** | Unknown * |
| **Crest Elevation (feet)** | Unknown * |
| **Normal Pond Level (feet)** | Unknown * |
| * Data was not provided by Utility | |

*The maximum operating pool for this facility is at El. 1205 ft. with a minimum crest elevation of 1208 ft. providing a minimum freeboard of 3 ft. The maximum storage, including all solids contained in the pond,, is 763.1 ac-ft.*

### 4.2.3 Current Operational Procedures

Bottom Ash and boiler slag waste are wet conveyed to the Evaporation Pond Complex.

*This plant does not produce boiler slag.*

**Appendix A/B/C**

*We note that D&D has chosen to include a copy of all documents provided to them by AEP as appendices to the report. While we have not raised a claim of business confidentiality for these documents, we do not believe it is necessary to include the several hundred pages of supporting documents that we provided for D&D's review. In reviewing the final reports posted by EPA on their website for other facilities, most reports from the earlier rounds of site assessments contain none of these types of documents and question why it is now being done.*

*We strongly recommended that these documents be deleted and as an alternative that a list of the documents that were provided be given as a bibliography in an appendix, similar to what was done by Paul C. Rizzo Associates, Inc. for Duke Energy's Dan River Steam Station, (see Appendix E):*

*http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/surveys2/dan-river-final.pdf*

NOTE

Subject: EPA Comments on AEP OK Public Service Co - Oklaunion Power Station, Vernon, TX
Round 9 Draft Assessment Report

To: File

Date: September 8, 2011

1. On p. ii, paragraph 3, first line – "In summary, the Oklaunion Power Station Wastewater Evaporation Ponds are rated **POOR** for continued safe and reliable operation." Please correct statement to reflect that only one pond was rated. This is also a good place to include a statement indicating that although two other ponds were included in the survey, they were not rated as they were incised and determined not to be a threat to fail.

2. On p. 1-1, section 1.1.3 "Conclusions Regarding the Adequacy of Supporting Technical Documentation" the report includes the following statement: "The supporting technical documentation was inadequate with the exception of original Plans and Specifications of **the of the** Management Unit." However, on p. ii, second paragraph, the report states: "We found the supporting technical documentation adequate (Section 1.1.3)." Please correct the inconsistency and the typo (in bold, above) in the statement in Section 1.1.3.

3. On p. 1-2, section 1.1.6 "Conclusions Regarding the Adequacy of Maintenance and Methods of Operation" the report includes the following statement: "The current maintenance and methods of operation appear to be adequate for the fly ash management unit." All other references to the unit are the "non incised pond (Pond 6)" and this statement refers to the "fly ash management unit." Please use one term for the management unit.

4. On p. 1-2, add a period at the end of the sentence in section 1.2.2.

5. On p. E-1, replace "E-1" with "9-1" (page 29 of the document). Also replace the comma with a period at the end of the sentence in section 9.3.2.

M E M O R A N D U M

TO: Jana Englander

FROM: Jerry Strauss

cc:

Date: November 30, 2011

SUBJECT: AEP Oklaunion Power Station

EPA Comments:

- Clarified the report is only assessing the one non-incised Pond.
- Clarified the adequacy/inadequacy of the documentations and studies
- Eliminated references to fly ash management unit and other editorial comments

UTILITY COMMENTS:

- AEP does not agree with the POOR rating, but admits they did not do either a structural stability analysis nor an H&H study. AEP stated in its response to comments that it is currently performing the H&H and stability analyses.
- Eliminated references to boiler slag
- Remainder of comments are corrections to technical data
- AEP has asked that Appendix A be reduced in size.