PACIFICORP ENERGY
A MIDAMERICAN ENERGY HOLDINGS COMPANY
Naughton Power Plant

P.O. Box 191 * Kemmerer, Wyoming 83101

January 14, 2010

Stephen Hoffman
Office of Resource Conservation and Recovery (5304P)
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

Subject: PacifiCorp comments regarding the Assessment of Dam Safety Coal Combustion Surface Impoundments Final Report at the PacifiCorp Naughton Power Station.

Dear Mr. Hoffman:

On December 15, 2009, PacifiCorp Energy received a request to review and comment on the Assessment of Dam Safety Coal Combustion Surface Impoundments Final Report for the PacifiCorp Naughton Power Station. The site assessment was conducted on September 9-10, 2009, by Environmental Protection Agency (EPA) representatives and Clough Harbour & Associates (CHA) to evaluate the safety of coal combustion waste impoundments at the plant. The attached comments constitute PacifiCorp's response to the recommendations within the final report.

Prior to EPA's site assessment, PacifiCorp contracted with a firm specializing in dams and complex geotechnical studies to do an evaluation of all company owned coal combustion waste impoundments. The conclusion of that evaluation was very similar to the results of EPA's site assessment. That is, the impoundments at the Naughton Plant exhibit no signs of structural instability.

PacifiCorp is conducting additional geotechnical studies consistent with the company's independent evaluation. The results of the studies will be used in conjunction with the recommendations provided by EPA's site assessment to implement comprehensive inspection and maintenance procedures, as necessary. PacifiCorp is committed to environmental stewardship and safety at each of its facilities.

If you require further clarification of the information contained in the attached document, please contact Brett Shakespear at (801) 220-2575, or via email at Brett.Shakespear@PacifiCorp.com.

Sincerely,

Angie Skinner
Naughton Plant Managing Director

Enclosure

PacifiCorp Response to EPA Recommendations

4.2 Filling of Depressions, Erosion Rills, and Animal Burrows
We recommend depressions on the FGD #1 Pond dike such as those shown in Photo 3 be backfilled. Ongoing maintenance of backfilling erosion rills and animal burrows should be backfilled. Measures should be taken to discourage burrowing animals from inhabiting the embankment areas.

> **PacifiCorp Response**: The depressions on the FGD #1 Pond dike will be backfilled by June 30, 2010. Any depressions observed during routine inspections will be backfilled during routine maintenance.

4.3 Vegetation Control
CHA understands that PacifiCorp is reluctant to mow the vegetation on the embankments because of the difficulty in establishing and maintaining vegetative growth. CHA understands that crested wheatgrass is appropriate for animal forage and haying, which would suggest it can be cut at least once a year. We recommend PacifiCorp discuss vegetation cutting options with the Wyoming office of the Natural Resources Conservation Service (NRCS) or co-op extension. Cutting of the grass will help deter burrowing animals and allow for better inspection of the embankments immediately after mowing. Sage bushes were found growing on the embankments. These should be removed when observed, and not allowed to grow on the embankments because the deep root system could provide shortened paths for seepage, which can lead to instability in the embankments.

> **PacifiCorp Response**: PacifiCorp discussed options for deterring burrowing animals with the Wyoming Natural Resources Conservation Service December 7, 2009 and is awaiting formal recommendations. PacifiCorp is reluctant to mow the slopes because many of the slopes are steep, mowing the vegetation may damage the dikes by increasing erosion problems and by leaving the clippings behind induce further animal burrowing activities. There is also a safety concern of rolling equipment down the side of the slopes. After consulting with the Natural Resources Conservation Service, PacifiCorp will incorporate its recommendations, as appropriate, into the routine monthly inspections and repairs.

4.4 Cracking
CHA observed cracks in three locations; the northeast dike on FGD #1 Pond, the East Saddle Dike of the North Ash Pond, and on the Intermediate Dike of the North Ash Pond. These cracks appeared shallow, (two feet deep or less) and there were not signs of movement of the slopes around them. However, these cracks should be monitored closely for signs of increasing length, depth, or movement on the slopes.

> **PacifiCorp Response**: The cracks noted in the dikes will be monitored on a biannual basis during routine impoundment inspections. Stakes will be used to monitor the length, width, and depth of the cracks. Initial bi-annual monitoring will be completed on or before May 31, 2010.

4.5 Seepage Monitoring
CHA observed the areas of seepage that PacifiCorp described in the kick-off meeting. Two additional areas were observed that may be seepage or may be related to ponded water from high flows in the South Ash Pond discharge channel. CHA recommends that monitoring structures such as V-notch weirs be installed in the areas of known seepage so quantitative measurements can be made and compared over time. CHA recommends that the areas of standing water and possible seepage to the northwest of the South Ash Pond outlet structure and to the southeast of the point where the discharge channel veers away from the dike, respectively, be evaluated to understand the source of constant moisture in these areas, and corrective actions be taken to reduce standing water in these areas.

PacifiCorp Response: Prior site investigations by geotechnical experts determined that seepage at the referenced locations may be related to blanket drains incorporated into the embankment sections at various locations. Seepage due to the blanket drains would be considered normal and would not require the installation of a monitoring structure. PacifiCorp will install monitoring structures at areas of known seepage not associated with blanket drains by November 30, 2010, in order to measure flows at the seepage areas. A qualified contractor will recommend methods for monitoring the flow at each of the seepage locations. Flows will be measured and recorded during routine, bi-annual inspections.

CHA recommends that the areas of standing water and possible seepage to the northwest of the south ash pond outlet structure and to the southeast of the point where the discharge channel veers away from the dike, respectively, be evaluated to understand the source of constant moisture in these areas, and corrective actions be taken to reduce standing water in these areas.

PacifiCorp Response: Reviews of "As-Constructed" drawings show that blanket drains were incorporated into the construction of the impoundment embankments. The existence of blanket drains in the embankments explains the apparent seepage at the locations identified on the South Ash Pond. The installation of piezometers in the embankments in these locations will confirm the water levels in the embankment and confirm the embankment design. Please refer to PacifiCorp's response to EPA's recommendation for Section 4.6 below.

4.6 Phreatic Surface Monitoring

There are no piezometers installed in the embankments. The stability analyses for the North and South Ash Pond embankments were performed with some assumed phreatic surface elevations. Monitoring of the actual phreatic surface is an approach to confirm that the embankments are performing as designed and CHA recommends installing piezometers for this evaluation. Because the FGD Ponds are lined, there should not be a phreatic surface in the embankments. However, piezometric monitoring can confirm that this is the case and that therefore, the embankments and liner are performing as designed.

PacifiCorp Response: PacifiCorp has conducted a review of the original design drawings and will install piezometers at locations identified by the original drawings. The piezometers will be installed by October 30, 2010. When the piezometers have been installed, initial data will be reviewed by a geotechnical professional to confirm the status of the embankments, and routine monitoring will be schedule as recommended by the geotechnical professional.

4.7 Hydrologic Design

Based on the EPA hazard classification, the FGD #2 Pond should be designed for a ½ PMF design storm and the FGD #1, North and South Ash Ponds should be designed for a full PMF. Because the Naughton Plant is in a region that is on the outer limits of the applicable region for the method for developing the PMP, and because the impoundments were designed for two back-to-back 100-years storms, which in this arid region may be similar in magnitude to a PMP, CHA recommends that PacifiCorp evaluate the PMP for this site, and compare the impacts of this design storm on the impoundments.

PacifiCorp Response: PacifiCorp will engage the services of a qualified engineering firm to evaluate the PMP for the plant location, and the effect any potential change of the PMP would have on storm events. The evaluation will be completed by September 30, 2010.