

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE**  
**PUBLIC SERVICE COMMISSION OF KENTUCKY**

**IN THE MATTER OF**

**AN APPLICATION OF KENTUCKY POWER )  
COMPANY FOR; (1) A CERTIFICATE OF PUBLIC )  
CONVENIENCE AND NECESSITY AUTHORIZING )  
THE COMPANY TO CLOSE THE BIG SANDY ) Case No. 2015-00152  
PLANT COAL ASH IMPOUNDMENT; AND )  
(2) FOR ALL OTHER REQUIRED APPROVALS )  
AND RELIEF )**

**KENTUCKY POWER COMPANY RESPONSES TO  
COMMISSION STAFF'S SUPPLEMENTAL SET OF DATA REQUESTS**

**October 15, 2015**





**Kentucky Power Company**

**REQUEST**

Refer to Kentucky Power's response to Commission Staff's Initial Request for Information ("Staff's First Request"), Item 8. Provide a general explanation as to why the estimated costs for the Big Sandy Ash Pond closure differ from the costs associated with the Amos and Gavin ash pond closures.

**RESPONSE**

Each of the fly ash reservoir closure projects has its own site specific requirements and differences that impact the overall cost of closure construction. Generally, the major cost drivers associated with the closures are related to the quantity of ash excavation and fill, availability of protective cover material, and the source for any required borrow material. Depending on the relative quantities or ease of obtaining material, the overall project cost can vary significantly. For example, at Gavin the ash grading for closure is relatively simple and the pond is surrounded by mined out areas that can provide an abundance of easily accessible fill material. In addition, there are no wetlands impacts at Gavin. Conversely, the Big Sandy fly ash pond requires more complex ash grading, and the wetlands that surround the impoundment limit the size and increase the number of borrow areas that will need to be developed to provide fill material. Even though the Gavin pond size is twice that of the Big Sandy pond, the cost to close it is not proportionately larger than the Big Sandy closure because of these site specific differences. Similar variations affect the comparative cost of the Amos pond closure as well.

**WITNESS:** Joseph G DeRuntz

**Kentucky Power Company**

**REQUEST**

Refer to Kentucky Power's response to Staff's First Request, Item 15, KPC0\_1\_15\_Attachment.pdf., the Project Charter. Refer to pages 3-4 of 6 of the attachment. Reconcile the budget numbers from the Project Charter with the estimated costs of \$62.3 million for the closure of the Big Sandy Ash Pond.

**RESPONSE**

The original concept for closure of the Big Sandy Impoundment called for a "turtle back" design, in which the fly ash cap system is mounded and storm water flows into a perimeter drainage channel. That design was changed to a V-channel design based on internal engineering reviews. The modified design significantly reduced the cost of required excavation and fill by approximately \$40 million. Other adjustments to the estimated costs include increases based on the new design (erosion control, drainage, and geomembrane), but the changes in the amount of earthwork required was the major component that impacted the estimated cost. Please see KPCo\_2\_2\_Attachment 1.pdf.

**WITNESS:** Joseph G DeRuntz

**Kentucky Power Company**

**REQUEST**

Refer to Kentucky Power's response to Staff's First Request, Item 19.c. Until a final order is issued in this proceeding, provide updates, when available, to the ongoing study of the option of permittee-responsible mitigation as compared to purchasing wetland credits.

**RESPONSE**

Kentucky Power agrees to provide informational updates, as they become available.

**WITNESS:** Joseph G DeRuntz