

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In The Matter Of:

The Application Of Kentucky Power Company For: )  
(1) A Certificate Of Public Convenience And Necessity )  
Authorizing The Company To Close Big Sandy Plant ) Case No. 2015-00152  
Coal Ash Impoundment; And (2) For All Other Required )  
Approvals And Relief )

Kentucky Power Company's Quarterly Status Report  
First Quarter 2019

Kentucky Power Company submits its First Quarter 2019 status report in compliance with Ordering Paragraph No. 3 of the Commission's Order in Case No. 2015-00152. The report provides a detailed listing of the costs incurred by the Company during the first quarter of 2019 and for the project through March 31, 2019, in connection with the closure of the Big Sandy Plant Coal Ash Impoundment. Consistent with the Settlement Agreement approved by the Commission in Case No. 2014-00396, these costs were deferred as they were incurred and added to the unamortized balance of the Decommissioning Rider regulatory asset.

This report also provides a revised budget reflecting the change in the project's means and methods of construction and the execution strategy. The change increased the cost of the work within the original project scope, and includes required additional work outside the original project scope. Both changes are required to enable Kentucky Power to meet environmental requirements associated with Kentucky Power's National Pollution Discharge Elimination System ("NPDES") permit and complete the project. The Company now estimates the total cost at completion for the project will be \$97,506,880. That represents an increase of \$35,180,128 above the June 2015 estimated total cost for the project of \$62,326,752.

Notwithstanding these changes, the project remains on schedule for completion in 2020.

1. Project Changes.

The contractor used well point dewatering systems to dewater and stabilize deposited ash in connection with the closure of the ash pond. The well point dewatering systems collected the ash pore water (the water suspended between the ash particles) into the main pool and discharged through permitted outfall 001 in accordance with Kentucky Power Company's NPDES permit. Through sampling and testing of the discharge water, Kentucky Power determined in December 2017 that the water being discharged from the well point dewatering systems risked exceeding the total suspended solid and toxicity limits of the Company's NPDES permit. To ensure permit compliance, Kentucky Power took proactive steps and discontinued use of the well point dewatering systems prior to the 2018 construction season. The need to abandon the well point dewatering systems necessitated the excavation of drainage channels, the over-excavation of saturated ash, the stockpiling and drying of ash, as well as the use of granular borrow material to stabilize subgrade for cover cap system installation.

After careful consideration of different methods to treat the pore water and maintain permit compliance, Kentucky Power determined that the most cost effective approach was to implement chemical and filtration water treatment systems.

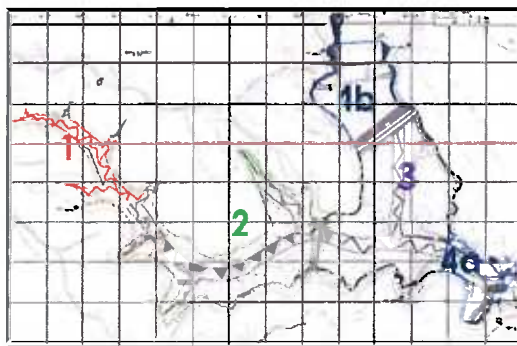
Change in means and methods due to abandonment of the well point dewatering systems, water treatment and water management resulted in an increase to the estimated total cost of \$20,202,481. The largest increases were required for water management (\$7,981,151), water treatment (\$5,940,822), ash excavation and placement (\$2,463,751), borrow excavation and placement (\$1,813,155) and construction contractor's general conditions/overheads (\$2,003,602). Internal project management, engineering & construction (PMEC) (\$5,024,553),

risk management items (\$4,348,834), other construction contracts (\$1,868,289), outside professional services (\$1,564,185), project scope additions and reductions (\$1,481,065), purchased material (\$893,387), overhead (\$3,297,334) offset by contingency reduction (-\$3,500,000) totaling \$14,997,647 contribute to the cost increase.

A breakdown of the changes and the estimated costs are provided as Exhibit 1 to this report.

2. First Quarter 2019 Report.

During the quarter ending March 31, 2019, Kentucky Power continued ancillary site support, including focused activity to manage storm water and to comply with water discharge permitting requirements. Site support activities during the quarter included: erosion & sediment control, site haul road and parking maintenance, surface water management and engineering support of construction activity. Several vendors remain engaged to support water treatment for discharge through the permitted outfall; additional treatment technology remains in place (i.e. sand filters, filter bags, coagulant and flocculent chemical dispensing skids, and an electrocoagulation & filtration unit) to meet total suspended solids and/or constituent limits for discharge water.



Significant construction activity during the period included excavation, hauling, and placement of ash and borrow material in Phase 4A within the eastern area of the fly ash pond, final seeding in Phase 2 within the western area, excavation and stockpiling of protective cover material from various borrow areas as well as borrow area reclamation and seeding. The costs incurred during the quarter and the aggregated costs incurred on the project

to date are outlined below. Additionally, the table below includes the amounts identified in the June 2015 “Estimate” included in Exhibit JGD-3 to the testimony of Joseph G. DeRuntz in Case No. 2015-00152, as well as the March 2019 “Revised Estimate.”

Item No.	Task	June 2015 “Estimate”	March 2019 “Revised Estimate”	1 <sup>st</sup> Q 2019	Project-To-Date	Description Current Quarter
01	General Conditions	\$4,493,764	\$26,332,940	\$1,944,011	\$16,436,490	Water management, water treatment and monthly project support costs
02	Clearing & Grubbing	\$855,751	\$885,992	\$4,359	\$877,992	Continued clearing and grubbing within limits of disturbance
03	Stripping Topsoil	\$2,189,274	\$1,845		\$1,845	
04	Excavation	\$11,452,453	\$22,608,221	\$814,822	\$19,563,670	Excavate, load, haul and place ash and excavation of borrow areas
05	Foundation Preparation	\$252,278				
06	Fill	\$5,115,613	\$3,371,782	\$22,689	\$2,069,972	Placement of borrow material
07	Erosion & Sediment Control	\$4,270,174	\$4,069,280	\$16,310	\$1,051,213	Installation and maintenance of erosion and sediment controls
08	Drainage System	\$678,910	\$2,981,115		\$602,726	
09	Roads & Parking Area	\$1,394,714	\$609,912		\$339,237	
10	Chain Link Fence	\$79,722	\$149,502		\$40,200	
11	Piling					
12	Structural Concrete	\$1,409,915				
13	Geotextiles	\$89,969	\$1,916,078		\$1,365,600	
22	Instrumentation	\$239,859	\$165,000			
26	Geomembrane	\$9,460,110	\$5,774,275	\$12,320	\$4,532,624	True up for installation of geomembrane
30	Miscellaneous Structures	\$414,333	\$2,551,181			
36	Demolition, Removals And Alterations	\$325,912	\$276,053			
	<b>CONTRACT AMOUNTS (AS EXPENSED)</b>	\$42,722,752	\$71,693,177	\$2,814,511	\$46,881,569	
99	Project Management, Engineering & Construction (PMEC)	\$2,850,000	\$7,874,553	\$415,162	\$5,378,511	Project team management and oversight of project (e.g. planning, engineering, permitting, procurement, site construction management and cost activities); includes plant employees assigned to execute select work scope

Item No.	Task	June 2015 "Estimate"	March 2019 "Revised Estimate"	1 <sup>st</sup> Q 2019	Project-To-Date	Description Current Quarter
99	Mitigation of Stream Impacts	\$4,200,000	\$2,916,215	\$76,427	\$1,486,780	Continued outside engineering and permitting in support of permit modification for self-mitigation of stream and wetland impacts.
99	Mitigation of Bat Impacts	\$159,000	\$196,608		\$196,608	
99	Borrow Material Processing & Handling	\$5,115,000	\$48,188		\$48,188	
99	Contingency for Construction	\$4,100,000	\$6,168,834			
99	Post Closure Care & Monitoring	\$3,180,000	\$3,180,000			
99	QA/QC Consultant		\$2,131,971	(\$13,420)	\$718,551	QA/QC oversight of construction
	<b>Owner's Direct Cost Additions</b>	\$19,604,000	\$22,516,369	\$478,169	\$7,828,637	
	<b>Overhead</b>		\$3,297,334	\$251,017	\$1,896,856	Indirect overhead costs associated with this project.
	<b>Totals</b>	\$62,326,752	\$97,506,880	\$3,543,697	\$56,607,062	

Respectfully submitted,

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COUNSEL FOR KENTUCKY POWER  
 COMPANY

Big Sandy Fly Ash Closure Estimate at Completion Analysis			Approved Funding	Revised EAC	Delta	Project-To-Date 1Q 2019	ETC
AEP Services - PME&C			\$2,850,000	\$5,362,133	\$2,512,133	\$3,560,415	\$1,801,718
Plant Services - GSC				\$2,512,420	\$2,512,420	\$1,579,300	\$933,120
<b>Water Quality Impact on Construction Means &amp; Methods</b>			\$26,176,830	\$46,379,311	\$20,202,481	\$34,489,248	\$11,890,063
Water Management			\$823,727	\$8,804,878	\$7,981,151	\$5,981,481	\$2,823,397
Water Treatment				\$5,940,822	\$5,940,822	\$3,354,756	\$2,586,066
General Conditions			\$4,260,883	\$6,264,485	\$2,003,602	\$3,951,651	\$2,312,835
Borrow Excavation			\$6,168,281	\$9,821,218	\$3,652,937	\$6,997,871	\$2,823,346
Borrow Placement			\$5,115,613	\$3,275,831	(\$1,839,782)	\$2,089,748	\$1,186,083
Ash Excavation & Placement			\$9,808,326	\$12,272,077	\$2,463,751	\$12,113,741	\$158,336
<b>Project Scope Additions &amp; Reductions</b>			\$21,246,589	\$22,727,654	\$1,481,065	\$9,583,413	\$13,144,241
Ash Erosion Protection				\$1,625,000	\$1,625,000	\$0	\$1,625,000
Liner Protection for Water Management				\$1,127,685	\$1,127,685	\$0	\$1,127,685
Miscellaneous EWOs				\$1,001,765	\$1,001,765	\$814,088	\$187,678
Channel Installation*			\$1,071,336	\$1,402,726	\$331,390	\$602,726	\$800,000
Main Dam Spillway Design Evolution				\$341,250	\$341,250	\$0	\$341,250
Blaine Creek Access Road Culvert Replacement				\$270,000	\$270,000	\$0	\$270,000
IFB to IFC - EWO				\$289,000	\$289,000	\$0	\$289,000
Other			\$14,503,485	\$14,415,560	(\$87,925)	\$7,785,622	\$6,629,939
Seeding*			\$1,401,594	\$1,246,570	(\$155,024)	\$312,880	\$933,690
E&S Controls*			\$4,270,174	\$1,008,098	(\$3,262,076)	\$68,098	\$940,000
<b>Risk Management Items</b>			\$0	\$4,348,834	\$4,348,834	\$0	\$4,348,834
Risk Based Quantity Adjustments				\$2,667,773	\$2,667,773	\$0	\$2,667,773
Stabilization Uncertainty				\$776,061	\$776,061	\$0	\$776,061
Fuel Adjustment				\$405,000	\$405,000	\$0	\$405,000
Escalation				\$500,000	\$500,000	\$0	\$500,000
Heavy Civil Contract			\$47,423,419	\$73,455,799	\$26,032,380	\$44,072,661	\$29,383,138
Other Construction Contracts				\$1,868,289	\$1,868,289	\$1,639,543	\$228,745
<b>Construction Contracts</b>			\$47,423,419	\$75,324,088	\$27,900,669	\$45,712,204	\$29,611,883
<b>Outside Professional Services</b>			\$4,359,000	\$5,923,185	\$1,564,185	\$2,997,186	\$2,926,000
<b>Purchased Material</b>			\$414,333	\$1,307,720	\$893,387	\$861,101	\$446,619
<b>Overhead</b>			\$0	\$3,297,334	\$3,297,334	\$1,896,856	\$1,400,478
<b>Contingency</b>			\$4,100,000	\$600,000	-\$3,500,000	\$0	\$600,000
<b>Post Closure Care &amp; Monitoring</b>			\$3,180,000	\$3,180,000	\$0	\$0	\$3,180,000
<b>Total Project</b>			\$62,326,752	\$97,506,880	\$35,180,128	\$56,607,062	\$40,899,818

Notes: Total Project Approved funding aligns with KY PSC Revised Estimate 6/15/2015 Exhibit JGD-3

\* Denotes scope originally to be performed by General Services Crew per the MOU for Plant Personnel Participation in Pond Closure Construction now transferred to Entact.