COMMONWEALTH OF KENTUCKY
BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

In the Matter of:

Electronic Application of Duke Energy Kentucky, Inc. for a Certificate of Public Convenience and Necessity Authorizing the Company to Close the East Bend Generating Station Coal Ash Impoundment and For All Other Required Approvals and Relief	)))))))	Case No. 2016-00398

PETITION OF DUKE ENERGY KENTUCKY, INC.
FOR CONFIDENTIAL TREATMENT OF INFORMATION
CONTAINED IN ITS RESPONSE TO COMMISSION STAFF'S FIRST SET OF DATA REQUESTS DATED JANUARY 17, 2017

Duke Energy Kentucky, Inc. (Duke Energy Kentucky or Company), pursuant to 807 KAR 5:001, Section 13, respectfully requests the Commission to classify and protect certain information provided by Duke Energy Kentucky in its response to Data Request No. 4, as requested by Commission Staff (Staff) in this case on January 17, 2017. The information that Staff seeks through discovery and for which Duke Energy Kentucky now seeks confidential treatment (Confidential Information) includes an estimate for external labor (contractor), equipment, and material costs for the Company to construct new and necessary water redirection and wastewater treatment processes, and to close and repurpose its existing coal ash impoundment so as to accommodate the new and necessary water redirection and treatment processes at its East Bend Generating Station (Project), respectively.[1]

In support of this Petition, Duke Energy Kentucky states:

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[1] *See* Data Request No. 4.

1. The Kentucky Open Records Act exempts from disclosure certain commercial information.[2] To qualify for this exemption and, therefore, maintain the confidentiality of the information, a party must establish that disclosure of the commercial information would permit an unfair advantage to competitors of that party. Public disclosure of the information identified herein would, in fact, prompt such a result for the reasons set forth below.

2. The information submitted and for which the Company is seeking confidential protection in Data Request No. 4 seeks documentation of detailed construction costs for this Project. The confidential detailed costs of the construction associated with the Project are identified in the accompanying attachment and were derived from a competitive bidding process. Disclosing this information would provide the third parties' competitors with sensitive pricing information that they could use to disadvantage the third parties in future projects and potentially prevent the Company from receiving competitive pricing and otherwise undermining the bidding process and impacting the costs that customers would ultimately pay. Further, disclosure of this information would very likely impair Duke Energy Kentucky's relationship with these third parties.

3. The Confidential Information is distributed within Duke Energy Kentucky, only to those who must have access for business reasons, and is generally recognized as confidential and proprietary in the energy industry.

4. The Confidential Information for which Duke Energy Kentucky is seeking confidential treatment is not known outside of Duke Energy Corporation.

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[2] KRS 61.878(1)(c).

5. Duke Energy Kentucky does not object to limited disclosure of the confidential information described herein, pursuant to an acceptable protective agreement, with the Attorney General or other intervenors with a legitimate interest in reviewing the same for the purpose of participating in this case.

6. This information was, and remains, integral to Duke Energy Kentucky's effective execution of business decisions. And such information is generally regarded as confidential or proprietary. Indeed, as the Kentucky Supreme Court has found, "information concerning the inner workings of a corporation is 'generally accepted as confidential or proprietary.'" *Hoy v. Kentucky Industrial Revitalization Authority*, 904 S.W.2d 766, 768 (Ky. 1995).

7. In accordance with the provisions of 807 KAR 5:001, Section 13(3), the Company is filing one copy of the Confidential Information separately under seal, and one copy without the confidential information included.

8. Duke Energy Kentucky respectfully requests that the Confidential Information be withheld from public disclosure for a period of ten years. This will assure that the Confidential Information – if disclosed after that time – will no longer be commercially sensitive so as to likely impair the interests of the Company or its customers if publicly disclosed.

9. To the extent the Confidential information becomes generally available to the public, whether through filings required by other agencies or otherwise, Duke Energy Kentucky will notify the Commission and have its confidential status removed, pursuant to 807 KAR 5:001 Section 13(10)(a).

WHEREFORE, Duke Energy Kentucky, Inc., respectfully requests that the Commission classify and protect as confidential the specific information described herein.

Respectfully submitted,

DUKE ENERGY KENTUCKY, INC.

Rocco O. D'Ascenzo (92796)
Associate General Counsel
Amy B. Spiller (85309)
Deputy General Counsel
Duke Energy Kentucky, Inc.
139 East Fourth Street, 1313 Main
Cincinnati, Ohio 45201-0960
Phone: (513) 287-4320
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E-mail: rocco.d'ascenzo@duke-energy.com

CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing has been served via overnight mail to the following party on this 31st day of January 2017.

Rocco O. D'Ascenzo

Rebecca W. Goodman
Executive Director
Office of Rate Intervention
Office of the Attorney General
1024 Capital Center Drive
Suite 200
Frankfort, KY 40601-8204
(502)696-5453
Rebecca.Goodman@ky.gov

VERIFICATION

STATE OF OHIO)
) **SS:**
COUNTY OF HAMILTON)

The undersigned, Tammy Jett, Principal Environmental Specialist, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing data requests and they are true and correct to the best of her knowledge, information, and belief.

Tammy Jett

Tammy Jett, Affiant

Subscribed and sworn to before me by Tammy Jett on this 24th day of January 2017.

NOTARY PUBLIC

My Commission Expires:

NOTARIAL SEAL
STATE OF OHIO

ROCCO O. D'ASCENZO
ATTORNEY AT LAW
Notary Public, State of Ohio
My Commission Has No Expiration
Section 147.03 R.C.

VERIFICATION

STATE OF OHIO)
) **SS:**
COUNTY OF HAMILTON)

The undersigned, Joseph G. Potts, Principal Engineer, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests and they are true and correct to the best of his knowledge, information, and belief.

Joseph G. Potts, Affiant

Subscribed and sworn to before me by Joseph G. Potts on this 23RD day of JANUARY, 2017.

NOTARY PUBLIC

ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2019

My Commission Expires: 1/5/2019

VERIFICATION

STATE OF OHIO)
) **SS:**
COUNTY OF HAMILTON)

The undersigned, Daniel Hartmann, Lead Engineer, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests and they are true and correct to the best of his knowledge, information, and belief.

Daniel Hartmann, Affiant

Subscribed and sworn to before me by Daniel Hartmann on this 23rd day of JANUARY, 2017.

NOTARY PUBLIC

My Commission Expires: 1/5/2019

ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2019

VERIFICATION

STATE OF OHIO)
) **SS:**
COUNTY OF HAMILTON)

The undersigned, Subhashini Chandrasekar, Senior Engineer, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing data requests and they are true and correct to the best of her knowledge, information, and belief.

Subhashini C.

Subhashini Chandrasekar, Affiant

Subscribed and sworn to before me by Subhashini Chandrasekar on this 24TH day of JANUARY, 2017.

Adele M. Frisch

NOTARY PUBLIC

ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2019

My Commission Expires: 1/5/2019

VERIFICATION

STATE OF NORTH CAROLINA)
) **SS:**
COUNTY OF MECKLENBURG)

The undersigned, David Renner, Vice President Coal Combustion Products Engineering, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests and they are true and correct to the best of his knowledge, information, and belief.

David Renner, Affiant

Subscribed and sworn to before me by David Renner on this 25th day of January 2017.

NOTARY PUBLIC

My Commission Expires: Oct. 29, 2018

MURIEL R. SPEAR
NOTARY PUBLIC
Mecklenburg County
North Carolina
My Commission Expires 10/29/2018

KYPSC CASE NO. 2016-00398
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Duke Energy Kentucky
Case No. 2016-00398
Staff First Set Data Requests
Date Received: January 17, 2017

STAFF-DR-01-001

REQUEST:

Refer to the Application, page 3, paragraph 5. Provide the status of the construction of the West Landfill at East Bend.

RESPONSE:

The first cell (Cell 1) of the West Landfill is under construction. The liner and the leachate collection system have been installed and the drainage installation is nearly complete. The sedimentation pond construction is also nearly completed. When the last element is finished, the concrete inlet channel, the pond will be ready to receive water and leachate from the landfill. The force main from the sediment pond to the ash pond is completed. The lift station structure has been installed and installation of the mechanical and electrical components is in progress. Cell 1 is about 98 percent complete.

PERSON RESPONSIBLE: Tammy Jett

Duke Energy Kentucky
Case No. 2016-00398
Staff First Set Data Requests
Date Received: January 17, 2017

STAFF-DR-01-002

REQUEST:

Refer to the Application, Exhibit 6, page 2 of 2, paragraph 6. Explain why the proposed retention basin would not be regulated by the Division of Waste Management.

RESPONSE:

The new water retention basin will not be regulated by Division of Waste Management as mentioned in Exhibit 6 because the retention basin will not manage solid waste or special waste from that point on. The Division of Water will regulate the new water retention basin. The Division of Waste Management will still oversee any residual groundwater issues or activities related to the former ash basin.

PERSON RESPONSIBLE: Tammy Jett

Duke Energy Kentucky
Case No. 2016-00398
Staff First Set Data Requests
Date Received: January 17, 2017

STAFF-DR-01-003

REQUEST:

Refer to the Application, Exhibit 7, page 11 of 157. Section 2.4.1 states, "A screening process was completed to evaluate potential combinations of technologies that were considered feasible to provide the performance required and that also were in operation at other facilities with sufficient experience to confirm their viability for long term successful operation." Provide a copy of this analysis.

RESPONSE:

Refer to Exhibit 7, pg 31-33.

The information is located in Appendix A and includes a Technology Assessment Memorandum from Burns & McDonnell dated 7/25/2016 that describes the alternatives considered for the East Bend site and estimated performance.

Also Refer to Exhibit 7, pg 34-76

The information in Appendix B includes the Water Re-Direction Design Basis used by Burns & McDonnell dated 7/7/2016 for all the Duke Facilities, Indiana, Kentucky, North Carolina.

PERSON RESPONSIBLE: Joseph Potts

Duke Energy Kentucky
Case No. 2016-00398
Staff First Set Data Requests
Date Received: January 17, 2017

STAFF-DR-01-004 PUBLIC
(As to Attachment only)

REQUEST:

Refer to the Application, Exhibit 7, page 157 of 157. Provide Appendix K, which appears to have been submitted to Duke Kentucky separately from the Project Definition Report prepared by Burns & McDonnell Engineering Company, Inc.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment only)

The Capital Cost Estimate from Appendix K is for the water redirection and new retention basin construction evaluated by Burns & McDonnell, and is attached as STAFF-DR-01-004 Confidential Attachment. This estimate is for external labor (contractor), equipment, and material costs and does not include any costs for Duke Energy Kentucky's internal labor expense or loadings.

PERSON RESPONSIBLE: Joseph Potts

CONFIDENTIAL PROPRIETARY TRADE SECRET

ATTACHMENT STAFF-DR-01-004

FILED UNDER SEAL

Duke Energy Kentucky
Case No. 2016-00398
Staff First Set Data Requests
Date Received: January 17, 2017

STAFF-DR-01-005

REQUEST:

Refer to the Direct Testimony of David Renner ("Renner Testimony"), page 6, line 9. Explain in detail the consequences if Duke Kentucky were not to be in compliance with the Steam Electric Effluent Limitation Guidelines ("ELG Final Rule") beginning November 2018.

RESPONSE:

As mentioned in Dave Renner's testimony, Duke Energy Kentucky has determined that in order to comply with the ELG and CCR Final Rules, the Company must begin construction of the new process water systems and water redirects within sufficient time to meet the new rules. Compliance with ELG requirements is required beginning November 2018.

If East Bend Station (Station) were not in compliance with the Steam Electric Effluent Limitation Guidelines (ELG) beginning November 2018, the Station would be required to go into an outage until such time as it could comply with the ELG requirements as outlined in the Station's NPDES permit. The consequence of this would be the loss of the Station's approx.. 655 megawatts of capacity as well as the associated energy production necessary to meet the Company's load obligations. Duke Energy Kentucky would be forced to rely upon market purchases to satisfy load obligations until such time as the Station is in compliance.

PERSON RESPONSIBLE: Tammy Jett

Duke Energy Kentucky
Case No. 2016-00398
Staff First Set Data Requests
Date Received: January 17, 2017

STAFF-DR-01-006

REQUEST:

Refer to the Renner Testimony, page 7, lines 11-16.

a. State the reasons why and the process by which Duke Kentucky selected Burns & McDonnell and Amec Foster Wheeler PLC to assist it in evaluating compliance options with the ELG Final Rule and the Coal Combustion Residuals Final Rule.

b. State the responsibilities that were assigned to each of the two engineering firms.

RESPONSE:

a. Compliance with the ELG and CCR rules extends over the entire fleet of Duke Energy Corp's coal fired generating stations. As such, Duke Energy Corp decided to engage a single consulting engineer to design the modifications necessary for the Water Redirects and new Retention Basin portions of the work over the entire fleet so that Duke Energy Corp could develop consistent approaches, efficiencies, and cost savings through continuity in designs over a number of stations to the extent possible. Burns & McDonnell was evaluated against other consulting firms in a formal decision making process initiated through an RFP and was selected to perform the work for the entire Duke Energy Corp program.

Amec Foster Wheeler is one of Duke Energy Corp's "strategic alliance partners" selected to perform ash basin closure planning work for several Duke

Energy Corp's coal stations fleetwide. All Duke Energy Corp "strategic alliance partners" are selected through competitive bidding events following a request for proposal (RFP) process. The "strategic alliance partners" have master services agreement (MSA) with Duke Energy Corp to perform ash basin closure projects fleetwide. Amec Foster Wheeler had prior knowledge of East Bend station and performed several engineering projects at the site in the past including projects on the ash basin. Due to these reasons and to maintain continuity, Duke Energy Corp selected Amec Foster Wheeler to perform closure planning work for compliance with CCR Rule at East Bend and a contract was awarded to them after a thorough evaluation of their proposal.

b. Burns & McDonnell was charged with designing the new retention basin after all the existing ash was excavated and redirecting all the water flows from multiple sources to the new retention basin.

The scope of Amec Foster Wheeler's work was to develop a closure plan for East Bend Station ash basin satisfying federal and state requirements and the tasks assigned included development of a Health and Safety Plan, compilation and review of existing site data, site characterization, development of an interpretation and analyses report, closure option feasibility evaluation and closure plan development.

PERSON RESPONSIBLE: Dan Hartmann (referencing Burns and McDonnell)
Subhashini Chandrasekar (referencing Amec)

Duke Energy Kentucky
Case No. 2016-00398
Staff First Set Data Requests
Date Received: January 17, 2017

STAFF-DR-01-007

REQUEST:

Refer to the Renner Testimony, page 10, lines 8-10. Explain how each of the contracts listed will be awarded.

RESPONSE:

Each contract will be awarded through a competitive bid process.

PERSON RESPONSIBLE: Dave Renner

STAFF-DR-01-008

REQUEST:

Refer to the Direct Testimony of Brandon Delis, page 11, lines 2-4.

a. Explain why the estimated current volume of coal combustion residuals contained in the East Bend ash pond was calculated based on "bathymetry surveys, historical topography and soil borings as of 2014" and not at a more current date.

b. What impact would an estimate based upon more recent data have on the scope and cost of closing and removing the East Bend ash pond?

RESPONSE:

a. The data from the bathymetric and topographic surveys of 2014 was less than a year old (recent) when Amec Foster Wheeler was engaged (Spring 2015) and commenced the project anaysis. The only other way to determine the pond bottom was to drill the entire pond on a grid (mostly barge) to find the bottom or potentially geophysical type methods. Drilling the entire pond increases risk to workers safety especially in water and could increase the potential for groundwater impacts. In addition, Amec had to use topographic mapping from historical preconstruction and ash pond construction drawings to recreate the bottom of the pond for volumes. Given the other data available and the risks aasociated with collecting additional data, data from 2014 was deemed to be

sufficient and ash volume estimates were developed as accurately as possible based on best information available.

b. The detailed cost estimates were "updated" by adding the actual volumes of generation ash placed in the basin in 2014 and 2015 to the in-place ash inventory developed by Amec. For the years 2016, 2017 and 2018 the estimated tonnage assumption was based on 2015 ash generation data. The estimate also assumes that the plant will stop placing generation ash in the basin by March 2018. Since these assumptions and additional ash volumes have already been incorporated in the detailed cost estimate, there would be no impact on scope and cost by basing it on more recent data.

PERSON RESPONSIBLE: Subhashini Chandrasekar

Duke Energy Kentucky
Case No. 2016-00398
Staff First Set Data Requests
Date Received: January 17, 2017

STAFF-DR-01-009

REQUEST:

Refer to the Delis Testimony, page 14, lines 6-8. Does the estimated $36.1 million associated with the Retention Basin Construction include the cost for the proposed holding basin?

RESPONSE:

Yes, the holding basin cost is associated with the Retention Basin Construction, and is included in the Retention Basin Cost Estimate. Please See Confidential Attachment Staff-DR-01-004 which was filed under seal. This estimate includes external labor, equipment, etc. costs. It does not include internal labor and loadings. The total estimated costs, including internal costs, was submitted as part of the Company's application.

PERSON RESPONSIBLE: Joseph Potts

Duke Energy Kentucky
Case No. 2016-00398
Staff First Set Data Requests
Date Received: January 17, 2017

STAFF-DR-01-010

REQUEST:

Refer to the Delis Testimony, Attachment BD-1.

a. Refer to page 5 of 22, Cost section for the proposed East Bend ash pond closure and removal option. Explain the difference between project (1) showing capital costs of $27.5 million and project (1A) showing capital costs of $22.5 million. Include in this explanation how those estimates were derived.

b. Refer to page 8 of 22, Cost section for the proposed East Bend ash pond close in place option. State how the estimated capital costs of $17.6 million and $18.5 million were derived and provide a breakdown of the estimated long-term operations, maintenance, and monitoring cost of $4.1 million.

c. Refer to page 11 of 22, Cost section for the proposed East Bend ash pond hybrid 1 – reduced footprint option. State how the estimated capital costs of $14.2 million and $14.7 million were derived and provide a breakdown of the estimated long-term operations, maintenance, and monitoring cost of $2.9 million.

d. Refer to page 14 of 22, Cost section for the proposed East Bend ash pond hybrid 2 – reduced footprint option. State how the estimated capital costs of $14.5 million and $15.7 million were derived and provide a breakdown of the estimated long-term operations, maintenance, and monitoring cost of $2.9 million.

e. Refer to page 21 of 22. Option 3A shows a total score of 6.9, compared to the score of 7.0 for Option 1A (which appears to be the option selected by Duke Kentucky). Given the minor difference in scoring, explain the reasons Option 1A is preferred over Option 3A.

RESPONSE:

a. Project 1 or Option 1 includes closure of the ash basin by removal and transferring the ash to the existing West Special Waste Landfill. Project 1A or Option 1A includes closure of the ash basin by removal and transferring the ash to the existing West Special Waste Landfill and then utilizing the pond as an onsite retention basin for process and storm water. The cost estimates developed by Amec Foster Wheeler were planning level order of magniture cost estimates derived solely for purpose of comparing the ash basin closure options for East Bend.

The cost estimates for projects 1 and 1A include costs for mobilization/demobilization; general piping; surveying; erosion and sediment control and stormwater management; earthwork; ash pond dewatering and treatment; ash removal, hauling and placement; design and permitting and contingency. The unit costs used for the planning level cost estimates were derived by Amec Foster Wheeler based on their experience with similar projects, other Duke projects in the Carolinas, budgetary quotes from local contractors and values developed using RS Means.

The difference in cost between the costs for projects 1 and 1A can be explained as:

Cost of Project 1A = Cost of Project 1 – Cost of earthwork and borrow fill material required to grade the basin to drain after removal of ash

Basin is not required to be filled if re-purposed.

b. The cost estimates developed by Amec Foster Wheeler were planning level order of magniture cost estimates derived solely for purpose of comparing the ash basin closure options for East Bend. The cost estimates for the closure in place option include costs for mobilization/demobilization; general piping; surveying; erosion and sediment control and stormwater management; earthwork; ash pond dewatering and treatment; cover system construction; design and permitting; post-closure operations and maintenance costs and contingency.

The unit costs used for the planning level cost estimates were derived by Amec Foster Wheeler based on their experience with similar projects, other Duke Energy Corp projects in the Carolinas, budgetary quotes from local contractors and values developed using RS Means. The estimate with a total capital cost of $17.6 million includes a compacted soil layer (CSL) cover system. This has 18" thick compacted fill and 6" thick un-compacted topsoil material. The estimate with a total capital cost of $18.5 million includes a flexible membrane layer (FML) cover system. This has 40-mil textured linear low density polyethylene (LLDPE) geomembrane, a geocomposite drainage layer, 12" thick compacted fill, 24" thick un-compacted fill as vegetative soil material. A breakdown of the estimated long-term operations, maintenance, and monitoring cost of $4.1 million is shown below:

Post Closure Operations and Maintenance Costs				
	Quantity	Unit	Unit Cost	Total Cost
Maintenance	30	YR	$ 78,200	$ 2,346,000
Monitoring	30	YR	$ 58,000	$ 1,740,000
			Subtotal - PCC Costs	$ 4,086,000

c. The cost estimates developed by Amec Foster Wheeler were planning level order of magniture cost estimates derived solely for purpose of comparing the ash basin closure options for East Bend. The cost estimates for the hybrid 1 - reduced footprint option include costs for mobilization/demobilization; general piping; surveying; erosion and sediment control and stormwater management; earthwork; ash pond dewatering and treatment; ash removal, hauling and placement; cover system construction; design and permitting; post-closure operations and maintenance costs and contingency.

The unit costs used for the planning level cost estimates were derived by Amec Foster Wheeler based on their experience with similar projects, other Duke Energy Corp. projects in the Carolinas, budgetary quotes from local contractors and values developed using RS Means. The estimate with a total capital cost of $14.2 million includes a compacted soil layer (CSL) cover system. This has 18" thick compacted fill and 6" thick un-compacted topsoil material. The estimate with a total capital cost of $14.7 million includes a flexible membrane layer (FML) cover system. This has 40-mil textured linear low density polyethylene (LLDPE) geomembrane, a geocomposite drainage layer, 12" thick compacted fill, 24" thick un-compacted fill as vegetative soil material. A breakdown of the estimated long-term operations, maintenance, and monitoring cost of $2.9 million is shown below:

Post Closure Operations and Maintenance Costs				
	Quantity	Unit	Unit Cost	Total Cost
Maintenance	30	YR	$ 39,100	$ 1,173,000
Monitoring	30	YR	$ 58,000	$ 1,740,000
			Subtotal - PCC Costs	$ 2,913,000

d. The cost estimates developed by Amec Foster Wheeler were planning level cost estimates order of magniture cost estimates derived solely for purpose of comparing the ash basin closure options for East Bend. The cost estimates for the hybrid 2 - reduced footprint option include costs for mobilization/demobilization; general piping; surveying; erosion and sediment control and stormwater management; earthwork; ash pond dewatering and treatment; ash removal, hauling and placement; cover system construction; design and permitting; post-closure operations and maintenance costs and contingency.

The unit costs used for the planning level cost estimates were derived by Amec Foster Wheeler based on their experience with similar projects, other Duke projects in the Carolinas, budgetary quotes from local contractors and values developed using RS Means. The estimate with a total capital cost of $14.5 million includes a compacted soil layer (CSL) cover system. This has 18" thick compacted fill and 6" thick un-compacted topsoil material. The estimate with a total capital cost of $15.7 million includes a flexible membrane layer (FML) cover system. This has 40-mil textured linear low density polyethylene (LLDPE) geomembrane, a geocomposite drainage layer, 12" thick compacted fill, 24" thick un-compacted fill as vegetative soil material. A breakdown of the estimated long-term operations, maintenance, and monitoring cost of $2.9 million is shown below:

Post Closure Operations and Maintenance Costs				
	Quantity	Unit	Unit Cost	Total Cost
Maintenance	30	YR	$ 39,100	$ 1,173,000
Monitoring	30	YR	$ 58,000	$ 1,740,000
			Subtotal - PCC Costs	$ 2,913,000

e. Option 1A is closure by removal of the ash basin by exacavting and transferring the ash to the existing onsite landfill and re-purposing the basin as an onsite rentention basin for process and storm water.

Option 3A is closure in place of the ash basin in a reduced footprint by excavating the ash from the east side of the basin and consolidating it in the west side and closing it in place on the west side with geosynthetics and onsite soil. Potential permitting timeframes, constructability and high projects costs associated with implementation of Option 3A, which would require the construction of a separate new outfall (the costs for which are not included in the capital costs for closure), made the hybrid Option 3A unfavorable.

Given the minor difference in scoring, the reason Option 1A has been selected over Option 3A is because when projects other than solely closure were considered (e.g., water redirection project), Option 1A presents several advantages over Option 3A such as better timeline for permitting and more favorable overall project costs. It should be noted that while the capital cost of Option 3A is lesser than that of Option 1A, these costs considered closure costs only, whereas a more holistic approach to project planning, schedule and overall site costs were considered as part of this evaluation and decision.

PERSON RESPONSIBLE: Subhashini Chandrasekar

Duke Energy Kentucky
Case No. 2016-00398
Staff First Set Data Requests
Date Received: January 17, 2017

STAFF-DR-01-011

REQUEST:

Refer to the Delis Testimony, Attachments BD-3 and BD-4. These exhibits provide an abbreviated cost summary by general category. Provide a detailed breakdown of the cost estimated for the projects shown in each of these exhibits.

RESPONSE:

Please see Confidential Attachment to Staff DR-01-004, Appendix K. The detailed cost estimate by Burns and McDonnell provides the detailed information that forms the basis of the BD-3 and BD-4 project estimates. Appendix K only includes external contractor costs and did not include any Duke Energy internal labor costs or loadings.

BD-3 (Water Redirect, also shown as Service Water/Process Water Reroute) is a modification of the Burns and McDonnell Estimate. The Duke Estimate adds Duke Internal costs for engineering and project management and AFUDC (Allowance for Funds Used During Construction). The project contingency is recalculated to include the Duke Energy internal costs.

BD-4 (Lined Retention Basin) is also a modification of the Burns and McDonnell Estimate. The estimate adds Company Internal costs for engineering and project management and AFUDC (Allowance for Funds Used During Construction). The project contingency is recalculated to include the Duke Energy costs.

The following costs are identical between the Detailed Burns & McDonnell and Company summary estimates:

Construction Labor, Construction Material, Construction Equipment, Construction Manangment & Indirect, Contracted Engineering, Engineered Equipment, Startup, Warranty, Escalation.

PERSON RESPONSIBLE: Joseph Potts

Duke Energy Kentucky
Case No. 2016-00398
Staff First Set Data Requests
Date Received: January 17, 2017

STAFF-DR-01-012

REQUEST:

Refer to the Direct Testimony of Tammy Jett, page 15, lines 1-5. State whether the Application for Permit to Construct Across or Along a stream and/or Water Quality Certification has been filed with the Kentucky Department of Environmental Protection.

RESPONSE:

The Application for Permit to Construct Across or Along a stream and/or Water Quality Certification was filed with the Kentucky Department of Environmental Protection via electronic copy on December 8, 2016 with a hard copy to follow. These documents were filed with the Commission and in this docket on December 9, 2016.

PERSON RESPONSIBLE: Tammy Jett