

**Goss
Samford**

ATTORNEYS AT LAW | PLLC

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November 19, 2018

Via Hand Delivery

Ms. Gwen Pinson
Executive Director
Kentucky Public Service Commission
P.O. Box 615
211 Sower Boulevard
Frankfort, KY 40602

RECEIVED

NOV 19 2018

PUBLIC SERVICE
COMMISSION

Re: *In the Matter of: The Application of East Kentucky Power Cooperative, Inc. for Approval to Amend Its Environmental Compliance Plan and Recover Costs Pursuant to Its Environmental Surcharge, and for the Issuance of a Certificate of Public Convenience and Necessity, Case No. 2018-00270*

Dear Ms. Pinson:

Enclosed, please find an original and six copies of the Responses to Commission Staff's and the Attorney General's First Sets of Information Requests, to be filed on behalf of East Kentucky Power Cooperative, Inc. in the above-styled docket. Please return a file-stamped copy of this filing to my office.

Should you have any questions or require additional information, please let me know.

Sincerely,



David S. Samford

Enc.

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

RECEIVED

NOV 19 2018

**PUBLIC SERVICE
COMMISSION**

IN THE MATTER OF:

**THE APPLICATION OF EAST KENTUCKY)
POWER COOPERATIVE, INC. FOR APPROVAL)
TO AMEND ITS ENVIRONMENTAL)
COMPLIANCE PLAN AND RECOVER COSTS)
PURSUANT TO ITS ENVIRONMENTAL)
SURCHARGE, AND FOR THE ISSUANCE OF)
A CERTIFICATE OF PUBLIC CONVENIENCE)
AND NECESSITY)**

CASE NO. 2018-00270

**RESPONSES TO COMMISSION STAFF'S FIRST REQUEST FOR
INFORMATION TO EAST KENTUCKY POWER COOPERATIVE, INC.**

DATED NOVEMBER 2, 2018

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

THE APPLICATION OF EAST KENTUCKY)
POWER COOPERATIVE, INC. FOR APPROVAL)
TO AMEND ITS ENVIRONMENTAL)
COMPLIANCE PLAN AND RECOVER COSTS) CASE NO. 2018-00270
PURSUANT TO ITS ENVIRONMENTAL)
SURCHARGE, AND FOR THE ISSUANCE OF)
A CERTIFICATE OF PUBLIC CONVENIENCE)
AND NECESSITY)

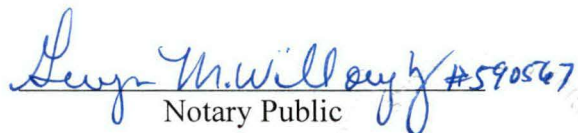
CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

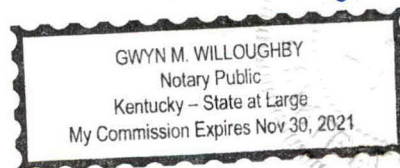
Craig A. Johnson, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's First Request for Information in the above-referenced case dated November 2, 2018, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.



Subscribed and sworn before me on this 19th day of November 2018.



Notary Public



COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

THE APPLICATION OF EAST KENTUCKY)
POWER COOPERATIVE, INC. FOR APPROVAL)
TO AMEND ITS ENVIRONMENTAL)
COMPLIANCE PLAN AND RECOVER COSTS)
PURSUANT TO ITS ENVIRONMENTAL)
SURCHARGE, AND FOR THE ISSUANCE OF)
A CERTIFICATE OF PUBLIC CONVENIENCE)
AND NECESSITY)
CASE NO. 2018-00270

CERTIFICATE

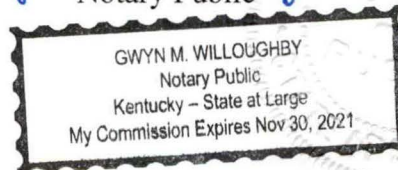
STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Jerry B. Purvis, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's First Request for Information in the above-referenced case dated November 2, 2018, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Handwritten signature of Jerry Purvis over a horizontal line.

Subscribed and sworn before me on this 19th day of November 2018.

Handwritten signature of Gwyn M. Willoughby # 590567
Notary Public



COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION


IN THE MATTER OF:

THE APPLICATION OF EAST KENTUCKY)
POWER COOPERATIVE, INC. FOR APPROVAL)
TO AMEND ITS ENVIRONMENTAL)
COMPLIANCE PLAN AND RECOVER COSTS) **CASE NO. 2018-00270**
PURSUANT TO ITS ENVIRONMENTAL)
SURCHARGE, AND FOR THE ISSUANCE OF)
A CERTIFICATE OF PUBLIC CONVENIENCE)
AND NECESSITY)

CERTIFICATE

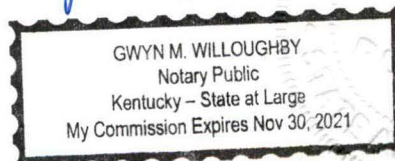
STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Isaac S. Scott, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's First Request for Information in the above-referenced case dated November 2, 2018, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.



Subscribed and sworn before me on this 19th day of November 2018.

 #590567
Notary Public



COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

THE APPLICATION OF EAST KENTUCKY)
POWER COOPERATIVE, INC. FOR APPROVAL)
TO AMEND ITS ENVIRONMENTAL)
COMPLIANCE PLAN AND RECOVER COSTS)
PURSUANT TO ITS ENVIRONMENTAL)
SURCHARGE, AND FOR THE ISSUANCE OF)
A CERTIFICATE OF PUBLIC CONVENIENCE)
AND NECESSITY)

CASE NO. 2018-00270

CERTIFICATE

STATE OF Missouri)
))
COUNTY OF Jackson)

Sam Yoder, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's First Request for Information in the above-referenced case dated November 2, 2018, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.



Subscribed and sworn before me on this 12 day of November 2018.



Notary Public
SARA BETH ACTON
Notary Public - Notary Seal
STATE OF MISSOURI
Jackson County
My Commission Expires April 20, 2019
Commission # 15634903

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2018-00270

RESPONSE TO INFORMATION REQUEST

**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 11/02/18
REQUEST 1**

RESPONSIBLE PARTY: Craig A. Johnson

Request 1. Refer to the application, paragraphs 12 and 15. Provide the capacity factor for each unit of the Cooper and Spurlock Generating Stations for the last five calendar years and year-to-date.

Response 1. The chart below indicates the annual capacity factors for each unit at Cooper and Spurlock for the requested time period.

	2018 - YTD	2017	2016	2015	2014	2013
Cooper 1	24%	13%	30%	33%	48%	54%
Cooper 2	26%	21%	23%	33%	38%	33%
Spurlock 1	60%	57%	71%	44%	66%	65%
Spurlock 2	77%	74%	75%	70%	81%	78%
Spurlock 3	72%	75%	79%	65%	80%	76%
Spurlock 4	64%	67%	80%	72%	79%	81%

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2018-00270

RESPONSE TO INFORMATION REQUEST

**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 11/02/18
REQUEST 2**

RESPONSIBLE PARTY: Jerry B. Purvis

Request 2. Refer to the application, paragraph 30. Provide the status of the requests to the Rural Utilities Service and the revised Kentucky Pollutant Discharge Elimination System (KPDES) permit application with the Division of Water.

Response 2. The Kentucky Division of Water ("KDOW") issued the final KPDES water permit, Fact Sheet and cover letter on October 23, 2018. The final permit becomes effective on January 1, 2019 and is authorized in Kentucky through December 31, 2023. The Rural Utilities Service has also approved the project.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2018-00270

RESPONSE TO INFORMATION REQUEST

**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 11/02/18
REQUEST 3**

RESPONSIBLE PARTY: Craig A. Johnson and Isaac S. Scott

Request 3. Refer to the application, paragraph 34.

Request 3a. For projects with completion dates before September 15, 2017, explain why these projects were not included in EKPC's proposed amended environmental compliance plan as filed in Case No. 2017-00376.¹

Response 3a. The amended environmental compliance plan filed in Case No. 2017-00376 focused exclusively on an extensive project to allow EKPC to comply with the Disposal of Coal Combustion Residuals from Electric Utilities Rule (“CCR Rule”) and the Effluent Limitation Guidelines and Standards for the Steam Electric Power Generating Point Source Category (“ELG Rule”). The project was comprised of six major components that would be undertaken at the Spurlock generating units. The majority of the pre-September 15, 2017 projects and project components listed in paragraph 34 of the Application focus on allowing EKPC to comply with

¹ Case No. 2017-00376, *Application of East Kentucky Power Cooperative, Inc. for Approval to Amend Its Environmental Compliance Plan and Recovery Costs Pursuant to Its Environmental Surcharge, Settlement of Certain Asset Retirement Obligations and Issuance of a Certificate of Public Convenience and Necessity and Other Relief* (Ky. PSC May 21, 2018).

various federal and state regulations related to special waste, stormwater run-off, mercury, anhydrous ammonia and sulfur trioxides. These pre-September 15, 2017 projects would be undertaken at the Spurlock and Cooper generating units. Given the complexity of the project to comply with the CCR Rule and ELG Rule and the estimated \$262.4 million cost, EKPC believed it was more appropriate not to include these additional pre-September 15, 2017 projects and project components as part of the application in Case No. 2017-00376. To have done so would have added additional levels of complication to an already complex proceeding.

Request 3b. Provide the status of projects with estimated completion dates of "Fall 2018."

Response 3b. The chart below indicates the current status of the projects requested, and current estimates of their completion dates.

Project	Location	Description	Waste Byproduct Controlled	Applicable Regulation	Construction Status	Estimated Completion	Project Costs (A) Actual (E) Estimated
12-2	Spurlock	Spurlock Landfill Area C – Phase Three	CCR Special Waste	40 CFR 257 401 KAR Chap 45 CWA Section 404	Substantially Complete	Spring 2019 ¹	\$4,737,105 (E)
12-3	Spurlock	Spurlock Landfill Area C - Phase Four	CCR	40 CFR 257 401 KAR Chap 46 CWA Section 404	Construction Ongoing	Summer 2019 ²	\$6,000,000 (E)
24	Spurlock	Spurlock Vacuum Truck Ash Transfer Station	CCR and Particulate Matter	40 CFR 257 401 KAR Chap. 46 401 KAR 59:010	Nearing Completion	December 31, 2018	\$2,664,200 (E)

1 This project is substantially complete. Waste has actively been placed since 1st Quarter of 2018 in the Area C – Phase Three cell. Waste materials must be placed in the cell to reach a

lift elevation that will facilitate installation of the geocomposite liner. Waste placement is necessary to cover the geocomposite liner for Ultraviolet (“UV”) protection, because UV exposure can deteriorate the geocomposite liner.

- 2 Construction is delayed due to weather, primarily due to a significant number of rain days. Waste placement in Area C Phase Four is planned for the Summer of 2019. Given the available air space volume in Spurlock Landfill Area C – Phase Three, along with anticipated capacity factors associated with the Spurlock Station Units, the expected delay in the estimated completion of this project will not impact operations of the Station.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2018-00270

RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 11/02/18

REQUEST 4

RESPONSIBLE PARTY: Craig A. Johnson

Request 4. Refer to the Direct Testimony of Don Mosier (Mosier Testimony) at page 8 regarding the projects contained in the 2018 Environmental Compliance Plan. Provide an update on the status of those projects.

Response 4. All projects in EKPC's Environmental Compliance Plan as approved by the Commission on May 18, 2018 have been completed except Project No. 16 – CCR Rule units and Industrial Water Discharges ("CCR/ELG Project"). Project No. 16, including modifications and improvements of the existing Spurlock Station facilities as part of the "CCR/ELG Project", is currently in various stages of design, and procurement of major contracts. Mobilization for site preparation and foundations is planned to begin in January 2019. Construction of the new bottom ash handling system and new wastewater treatment plant and fly ash storage silo are scheduled to begin in Spring of 2019. Procurement activities associated with preparations for the closure of the on-site coal ash pond have begun and are expected to continue into the early part of 2019.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2018-00270

RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 11/02/18

REQUEST 5

RESPONSIBLE PARTY: Craig A. Johnson

Request 5. Refer to the Mosier Testimony at pages 8-9 and the application, paragraph 34, regarding the amendment to Project No. 12 - Spurlock Landfill Area C Expansion.

Request 5a. Provide the original scope of Project No. 12.

Response 5a. The original scope of Project No. 12, Spurlock Landfill Area C Expansion was to design and construct a sediment pond, and expand the Area C limits of Spurlock Landfill to the permitted boundaries, as outlined in the Kentucky Division of Waste Management ("KDWM") Special Waste Permit for Spurlock Landfill. This landfill cell was the first phase of the Area C expansion area for Spurlock Landfill.

Request 5b. Provide a detailed description of the changes that are being made to Project No. 12.

Response 5b. Project No. 12 has been completed per its original scope which included the design and construction of a sediment pond and the initial phase within Area C, as outlined in Case No. 2010-00083. Due to the needs of Spurlock Station to continue disposal of coal combustion residuals in the Spurlock Landfill, EKPC has continued to expand the landfill within the KDWM permitted limits for Area C. Project No. 12 has been appended by EKPC to track and document all related projects to the Area C expansion of Spurlock Landfill. This includes the initial sediment pond and Phase One cell construction, Phase Two cell construction, Phase Three cell construction, Haul Road Extension, and Phase Four cell construction.

Request 5c. Explain the need to construct phases three and four of the Spurlock Landfill Area C at the same time.

Response 5c. Over the last 8 years there have been increasingly more stringent liner and leachate requirements for the construction of CCR landfills. Most recently, the CCR Rule established even more stringent leachate construction and performance criteria, which will require the use of a geocomposite leachate drainage layer over the entirety of each cell at the Spurlock Landfill. The physical properties of the materials used to manufacture this geocomposite layer make it expensive, highly sensitive to UV exposure, and challenging to install properly. EKPC utilizes ash generated at Spurlock Station for cover material over the geocomposite, which is the most cost efficient strategy available. The types and volumes of ash generated, characteristics of the landfill valley, operational conditions of the landfill cell, access to the landfill cell, and weather

conditions are all integral factors in the placement of cover over the geocomposite. Due to the limited allowable UV exposure, complex landfill development process, and effort to minimize cost to EKPC owner-members, EKPC has chosen to deploy the geocomposite in sub-phases for Area C Phase Three. These deployments result in segmented Construction Progress Reports to the KDWM, and operating permits that are unique to the incremental sub-phases. This change, in response to the CCR Rule requirements, is reflected in the Area C Phase Three project; the first landfill cell project executed by EKPC after the effective date of the CCR Rule. To adhere to EKPC's Landfill Development Plan, Area C Phase Four construction commenced in 2018; concurrent with the final sub-phases of geocomposite deployment for Area C Phase Three.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2018-00270

RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 11/02/18

REQUEST 6

RESPONSIBLE PARTY: Jerry B. Purvis

Request 6. Refer to the Mosier Testimony at page 16 regarding the need for the proposed Coal Pile Runoff (CPR) Project, and refer also to the Direct Testimony of Jerry B. Purvis (Purvis Testimony) at pages 25-26 as well as the Direct Testimony of Craig A. Johnson (Johnson Testimony) at pages 7- 8.

Request 6a. Explain in detail the need for this proposed project in light of the Effluent Limitations Guideline and the revised KPDES permit. In particular, provide an explanation as to the risk of non-compliance with the Spurlock Station's KPDES permit and the likelihood of the current configuration of the Spurlock existing CPR Pond not being able to accept and control four to five inches of rainfall to meet the limitations for Total Suspended Solids of 50 mg/l as a daily maximum as well as maintain concentrations of pH from a minimum of 6 and a maximum of 9. Include in this explanation whether EKPC has quantified this risk exposure.

Response 6a. EKPC does not budget or plan for exceedances to any Environmental Protection Agency ("EPA"), and/or Kentucky permit programs including but not limited to: EPA,

National Pollutant Discharge Elimination System (“NPDES”) or KPDES programs. The KDOW issued the final KPDES water permit on October 23, 2018 for Outfall 005, the CPR pond, (“CPR”) with Total Suspended Solids (“TSS”) limitations of 50 mg/l as a daily maximum, not to exceed 6 to 9 for concentrations of pH. The existing CPR pond can currently contain a 2-year, 24-hour storm and occasional overflows occur at this facility. The likelihood of this facility receiving a 4- to 5-inch rain is high and overtopping the existing pond infrastructure will occur in these instances, potentially causing violations of EKPC’s current permit limitations. Publicly available data from the EKPC Discharge Monitoring Reports to KDOW demonstrate the number of times the pond overflowed since April 2015. Please see below;

Date	Flow (MGD)
Sep-18	0.063
Feb-18	0.126
Jul-17	0.2535
Jun-17	0.063
Mar-17	0.042
Dec-16	0.127
Apr-15	0.141

Proposed modifications to the CPR pond will eliminate the risk of overflows for the designed rainfall events.

EKPC can be assessed up to \$53,484 per day per pollutant should the facility have an exceedance to the permit water quality standard, CWA, 33 U.S.C. 1319(d). Quantification of

this fine can mean \$53,484 per day for every day back to the date the permittee can demonstrate compliance. Discharge Monitoring Reports are filed monthly. Should the EPA and the Kentucky Department of Environmental Protection elect, at their discretion to levy a fine, and the timing of the occurrence lands at the beginning of a month, EKPC could be fined up to thirty (30) times the daily penalty which equates to \$1,604,520 plus any damages or cleanups costs associated with a one-time event per water quality standard.

Request 6b. Explain whether EKPC has quantified the mitigation of risk against non-compliance with the Spurlock Station's KPDES permit that the proposed CPR Project will achieve.

Response 6b. The quantified risk of non-compliance for each water quality standard for the CPR is up to \$1,604,520 per pollutant. However, this quantified risk is an assessment of only the environmental impact and does not reflect the negative impacts to financial costs, agency financial ratings, and increase to the cost of borrowing funds or qualifying for funds in the public capital markets. Exceedances to permit limitations also impact the qualitative risk. This is why EKPC never plans or budgets for exceedances to permit standards.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2018-00270

RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 11/02/18

REQUEST 7

RESPONSIBLE PARTY: Craig A. Johnson

Request 7. Refer to the Mosier Testimony at page 17, lines 8-9. Confirm that all completed projects included in EKPC's proposed amendment are currently in service and necessary to comply with state and federal rules and regulations impacting coal-fired generation facilities.

Response 7. All projects listed in Attachment CJ-1 to the Johnson Testimony are included in the proposed amendment, have been completed, or are in service with the exception of Project 24 - Spurlock Station Vacuum Truck ash Transfer Station, which is currently 85% complete and is on schedule for an in service date prior to the end of 2018. Each of these projects is necessary to comply with state and federal rules and regulations impacting coal-fired generation facilities.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2018-00270

RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 11/02/18

REQUEST 8

RESPONSIBLE PARTY: Craig A. Johnson

Request 8. Refer to the Johnson Testimony at page 9, lines 5- 7. Fully explain why EKPC chose to retain Burns & McDonnell Engineering Company, Inc, and whether EKPC considered other consulting firms.

Response 8. Yes. EKPC considered other firms that currently work with EKPC or have worked with EKPC in the past on projects consistent with the scope of this project. Burns & McDonnell was selected based on performance history with EKPC, extensive knowledge of the CPR Pond and related facilities at the Spurlock Station, and the technical strength of its staff to support the preparation of the Scoping Report in further development of the CPR Project. A listing of Burns & McDonnell's CPR and applicable Ash Pond project experience is included in the attached.



Coal Combustion Residual Pond and Plant Pond Experience for Utility Facilities

Client Name	Facility Name	Location (City/County)	Location (State)	Type of Pond(s)	Siting Study	Study	Permitting	Design	Membrane Liner	Construction	O/E	Year Completed (approx)	Description (optional)
Kansas City Power & Light	Sibley Generating Station	Sibley	MO	Fly Ash Pond, 2 Coal Pile Runoff Ponds, Slag Pond, Process Pond				X				ongoing	Pond closures as part of plant de-commissioning
Kansas City Power & Light	Montrose Generating Station	Montrose	MO	2 Ash Ponds Coal Pile Runoff Pond, 2 Wastewater Ponds, 3 Sanitary Lagoons, and Neutralization Pond				X				ongoing	Pond closures as part of plant de-commissioning
Kansas City Board of Public Utilities Duke Energy	Nearman Creek Power Station Multiple Plants	Kansas City various	KS FL, IN, KY, NC	Bottom Ash Pond Retention Ponds		X	X	X	X	X	X	ongoing	Closure by removal for 15 acre pond Design of retention ponds required due to ash pond closures
East Kentucky Power Cooperative	Spunlock Station	Maysville	KY	CCR (multiple streams) Pond Closure + Repurpose Portion of Closed Pond as Process Pond			X	X	X	X		ongoing	Closure by removal of existing ash pond and re-purposing portion of pond as a process pond
Kansas City Power & Light	LaCygne Power Plant	LaCygne	KS	Air Quality Control CCR (multiple streams)						X		ongoing	Supporting construction for CCR Pond Closures
Kansas City Power & Light Ameren	LaCygne Power Plant Meramec	LaCygne St Louis	KS MO	Bottom Ash Pond Fly Ash and Bottom Ash Ponds		X		X	X	X		ongoing	Pond closure by removal Design and construction support for closure of multiple ash ponds
GasPower Confidential	Chinook Station Southern Coal Plants (2)	Swift Current various	SK LA	New Evaporation Pond Bottom Ash/Fly Ash ponds		X		X	X	X	X	ongoing	Part of EPC combined cycle project Closure alternatives assessment and closure plan development
Confidential	Midwest Coal Plant		MO	Multiple Ash Ponds			X	X		X		ongoing	Ash Pond Closure Design and Permitting Support
MidAmerican Energy MidAmerican Energy	Neal North Power Station Walter Scott Jr. Generating Station	Sergeant Bluff Council Bluffs	IA IA	Ash Pond Ash Pond		X	X	X		X		2017	Closure Design for 3 Ash Ponds and Construction Support Closure Design for 150 Acre Ash Pond and Construction Support
Kansas City Power & Light East Kentucky Power Cooperative	Iatan Power Plant Dale Station	Weston Ford	MO KY	Ash Pond Multiple Ash Ponds		X	X	X		X		ongoing	Ash Pond Closure Design and Construction Support Pond closure study, permitting support, design, and construction support for clean closure
Confidential	40 MW Coal Plant		MO	Ash Pond Improvements		X		X				ongoing	Groundwater Plan, Engineering Assessment and Design improvements requested by MDNR following NOV. Project is ultimately expected to include design and construction of modifications to berms.
Kansas City Kansas Board of Public Utilities	Nearman	Kansas City	KS	Bottom Ash Pond		X	X					2017	Closure plan submitted to KDHE/CCR website
Platte River Power	Rawhide Station	Wellington	CO	Reclaim Pond		X		X	X			2017	Composite liner to repurpose an existing ash pond after conversion to dry handling
Western Farmers Electric Cooperative	Hugo	Hugo	OK	Ash Ponds		X		X			X	2017	Closure alternatives assessment and closure plan development
Oklahoma Gas & Electric	Muskogee	Muskogee	OK	Bottom Ash Sludge Pond			X	X			X	2017	Closure of inactive sludge pond downstream of dewatering bins - specs/design/permitting support
Oklahoma Gas & Electric	Sooner	Red Rock	OK	Bottom Ash Sludge Pond		X		X			X	2015	Support to relocate flows from pond and allow closure prior to CCR compliance date
East Kentucky Power Cooperative	Spunlock Station	Maysville	KY	Coal Pile Runoff Pond		X		X		X		2017	Coal Pile Runoff Pond design and construction support
Kansas City Power & Light Confidential	Hawthorn Power Plant Midwest Coal Plant	Kansas City KY	MO KY	Ash Pond Ash Pond			X					2017	Ash Pond Closure Design and Construction Support Initial Feasibility and Project Scoping Reports for modifications to the existing ash pond and ash piping systems.
City of Independence, Missouri	Missouri City Plant	Missouri City	MO	Settling Pond		X	X	X	X	X	X	2017	Designing and permitting of plant wash down and storm water pond and outfall
MidAmerican Energy	Louisa Generating Station	Muscatine	IA	Ash Pond		X						2015	Ash Pond Closure Study
Alliant	Fox Lake Plant	Sherburn	MN	Ash Pond		X						2015	Pond closure study



Coal Combustion Residual Pond and Plant Pond Experience for Utility Facilities

Client Name	Facility Name	Location (City/County)	Location (State)	Type of Pond(s)	Siting Study	Study	Permitting	Design	Membrane Liner	Construction	CVE	Year Completed (approx)	Description (optional)
Alliant	Prairie Creek Station	Cedar Rapids	IA	Bottom ash ponds		X					X	2014	Pond closure strategy assessment, water redirection study to identify options if outfall is removed
Nebraska Public Power District	Sheldon Station	Haliam	NE	Process Pond, Metal Cleaning Waste Pond, Coal Pile Runoff Pond, and Blue River Surge Pond		X	X	X		X		2009	
MidAmerican Energy	Neal North Power Station	Salix	IA	Ash Pond Improvements				X				2006	Improvements to ash pond discharge system including discharge structure and piping
Duke Energy (formerly Cinergy)	Wabash River Generating Station	Terre Haute	IN	Fly Ash Pond		X	X	X	X	X		2005	Permitting & design of 130-acre HDPE-lined ash pond including life cycle/pace utilization study & storm water and industrial runoff flow redirection study
Sempra Energy Resources	Mesquite Generating Station	Arlington	AZ	Evaporation Ponds			X	X	X	X		2004	two 60-acre HDPE-lined evaporation ponds
MidAmerican Energy	Neal South Power Station	Salix	IA	Air Heater Wash Pond				X	X	X		2003	4-acre HDPE-lined pond, pump stations, and piping
Confidential	Bushton, Kansas Storage	Bushton	KS	Brine Pond			X	X	X	X	X	1999	7-acre double geosynthetic-lined brine pond
Arizona Electric Power Cooperative	Apache Station	Cochise	AZ	Fly Ash/FGD/Evaporative Pond	X	X	X	X	X			1995	Ash & FGD Disposal Study, (incl. siting), permitting support, and design of disposal facility (seven adjoining HDPE-lined ponds covering 285 acres)
Associated Electric Cooperative	New Madrid Power Plant	Marston	MO	Fly Ash Pond		X	X	X	X	X		pre-2000	120-acre HDPE-lined fly ash pond
Utilicorp United, Inc. (now operating under KCP&L Greater Missouri Operations Company)	Sibley Generating Station - Phase I	Sibley	MO	Fly Ash Ponds		X	X	X		X		pre-2000	Existing ash pond modifications to facilitate pond cleaning operations to support Phase I- Initial landfill development including haul road, sedimentation pond and associated storm sewer discharge
Associated Electric Cooperative	Thomas Hill Power Plant	Thomas Hill	MO	Fly Ash Pond		X	X	X		X		pre-2000	ash pond closure permitting and design
Associated Electric Cooperative	Thomas Hill Power Plant	Thomas Hill	MO	Ash Pond		X	X	X				pre-2000	boiler slag and fly ash pond permitting and design; also designed and permitted combustion waste landfill
Sikeston Board of Municipal Utilities	Sikeston Power Station Unit 1	Sikeston	MO	FGD/Bottom Ash and Fly Ash Ponds								pre-2000	bottom ash and fly ash ponds
Basin Electric	Laramie River Station	Wheatland	WY	Fly Ash Pond			X	X	X	X		pre-2000	3 fly ash ponds (20-, 22-, and 45-acre); also designed & constructed combustion waste landfill
Hoosier Electric Cooperative	Merom Station	Merom	IN	Coal Pile Runoff Pond					X			pre-2000	new 1.5 acre HDPE lined pond and HDPE lined existing 1.5 acre pond
Plains Electric Cooperative	Plains-Escalante Generating Station	Prewitt	NM	fly ash/bottom ash pond		X	X	X				pre-2000	study, permit applications, and design for fly ash/bottom ash pond

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2018-00270
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 11/02/18
REQUEST 9

RESPONSIBLE PARTY: **Jerry B. Purvis**

Request 9. Refer to the Purvis Testimony at pages 26-28 regarding the water quality based effluent limitations (WQBEL). State when EKPC expects the Division of Water to complete its reasonable potential analysis and the likelihood, based upon information and data known to EKPC, that new WQBELs will be placed in the revised KPDES permit for the Spurlock Station.

Response 9. The KDOW reviewed three years' worth of water quality data from the Spurlock Station, made a determination on the Reasonable Potential Analysis, and issued a draft permit on September 10, 2018 to receive public comments. After the EPA and the public reviewed the permit, the KDOW took into consideration any public comments received and issued a Fact Sheet, cover letter and a Final permit on October 23, 2018, adding the new TSS and pH limitations to the Outfall 005, CPR limitations, and the EPA's requirements for ELG, 40 CFR 423, and 316(b).

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RESPONSE TO INFORMATION REQUEST

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REQUEST 10

RESPONSIBLE PARTY: Craig Johnson

Request 10. Refer to the application, paragraph 28.c; the Mosier Testimony at page 14; the Purvis Testimony at page 26; the Johnson Testimony at page 11; and the Spurlock Station CPR Pond Supplemental Storage - Scoping Report (Scoping Report), page 1-1. Confirm that the references to a "100-year, 24-hour" storm event should refer to a "10- year, 24-hour" storm event as mentioned at paragraph 26 of the application; page 9 of the Johnson Testimony; pages 1-1 and 2-1 of the Scoping Report. If this cannot be confirmed, explain why the design criteria for the proposed CPR Pond can be both a "100-year, 24-hour" storm event and a "10-year, 24-hour" storm event.

Response 10. EKPC confirms that the reference to the 100-year, 24-hour storm event in the Project Scoping Report is correct. The reference to the 10-year, 24 hour storm applies to the design of the principal spillway. The 100-year, 24-hour storm event applies to the design of the emergency spillway.

EAST KENTUCKY POWER COOPERATIVE, INC.

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RESPONSE TO INFORMATION REQUEST

**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 11/02/18
REQUEST 11**

RESPONSIBLE PARTY: Isaac S. Scott

Request 11. Refer to the Direct Testimony of Isaac S. Scott (Scott Testimony), page 10, lines 2- 9. Explain why the Cooper and Spurlock landfill closures and asset retirement obligation (ARO) settlements were not included in prior EKPC compliance plan amendments for concurrent recovery as expenses were incurred.

Response 11. EKPC routinely evaluates closure projects for its landfills. The decision to undertake a closure project will consider factors including, but not limited to, the configuration and capacity of the landfill, generation and ash disposal rates, and environmental compliance. Once the decision is made for a landfill closure, the project is broken down into a design phase and a construction phase. The design phase will occur approximately two years before the construction phase while the construction phase can take at least a year. Thus the overall development and execution of a landfill closure project can take at least three years or more.

As noted in Attachment ISS-3 of the Scott Testimony, the expenses incurred with the landfill closures and ARO settlements for the Cooper site were essentially completed in December 2015 and for the Spurlock site were essentially completed in August 2017. The most

recent compliance plan amendment application, Case No. 2017-00376, was filed with the Commission on November 20, 2017. Thus, the expenses associated with the landfill closures and ARO settlements at Cooper and Spurlock had already been incurred by the time that application was filed. The previous compliance plan amendment application, Case No. 2014-00252,² was filed with the Commission on September 8, 2014. The Spurlock landfill closure project would have been in the early design phase and realistic cost estimates would not have been available by the time of the filing of Case No. 2014-00252. While the Cooper landfill closure project would have been further along in the design phase, cost estimates would likely have not been finalized by the time of the filing of Case No. 2014-00252. Consequently, it would have been difficult to incorporate a reasonable estimate of the expenses associated with the ARO settlements in the Case No. 2014-00252 application.

² Case No. 2014-00252, *Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for Construction of an Ash Landfill at J. K. Smith Station, the Removal of Impounded Ash from William C. Dale Station for Transport to J. K. Smith and Approval of a Compliance Plan Amendment for Environmental Surcharge Recovery* (Ky. PSC March 6, 2015).

EAST KENTUCKY POWER COOPERATIVE, INC.

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RESPONSE TO INFORMATION REQUEST

**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 11/02/18
REQUEST 12**

RESPONSIBLE PARTY: Isaac S. Scott

Request 12. Refer to the Scott Testimony, Attachment ISS-2, page 3 of 8. In the format of Form 2.1, page 2 of 2, provide the listed information for the September 2018 expense month.

Response 12. Please see page 2 of 2 of this response for the requested information. Please note that this schedule does not reflect the September 2018 expense month balances for the Amended Project 12, which is shown on Form 2.1, page 1 of 2. This schedule also does not reflect the September 2018 expense month balances associated with the ARO-related portions of Amended Project 12 and Project 17. These expenses are to be reported on Form 2.12.

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Report
Plant, CWIP, Depreciation, & Taxes and Insurance Expenses
For the Expense Month Ending September 2018

Form 2.1
Page 2 of 2

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Project No.	Description	Eligible Gross Plant in Service	Eligible Accumulated Depreciation	CWIP Amount Net of AFUDC	Eligible Net Plant in Service	Monthly Depreciation Expense	Monthly Tax Expense	Monthly Insurance Expense
					(2)-(3)=(5)			
	Subtotals, Page 1 of 2	\$0	\$0		\$0	\$0	\$0	\$0
17	Cooper Landfills - Phases 1A & 1B	\$5,325,572	\$0	\$0	\$5,325,572	\$0	\$3,120	\$0
18	Cooper Sediment Pond	\$2,163,009	\$689,655	\$0	\$1,473,354	\$10,449	\$196	\$182
19	Cooper Ash Mixer Unloaders	\$260,441	\$76,830	\$0	\$183,611	\$1,302	\$24	\$23
20	Cooper Ditch and Sediment Trap	\$1,242,055	\$82,255	\$0	\$1,159,800	\$8,226	\$139	\$139
21	Spurlock Station Drainage Improvements	\$13,132,230	\$842,301	\$0	\$12,289,929	\$38,294	\$1,577	\$1,467
22	Spurlock Station HG Compliance	\$2,755,438	\$312,080	\$0	\$2,443,358	\$7,612	\$314	\$292
23	Spurlock Anhydrous Ammonia Secondary Containment	\$0	\$0	\$1,050,780	\$0	\$0	\$464	\$0
24	Spurlock Vacuum Truck Ash Transfer Station	\$0	\$0	\$872,412	\$0	\$0	\$164	\$0
25	Spurlock Units 1 & 2 - Dry Sorbent Injection System	\$3,872,808	\$143,922	\$0	\$3,728,886	\$13,096	\$450	\$419
26	Spurlock Coal Pile Runoff Pond	\$0	\$0	\$135,469	\$0	\$0	\$60	\$0
	Totals, All Pages	\$28,751,553	\$2,147,043	\$2,058,661	\$26,604,510	\$78,979	\$6,508	\$2,522

EAST KENTUCKY POWER COOPERATIVE, INC.

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RESPONSE TO INFORMATION REQUEST

**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 11/02/18
REQUEST 13**

RESPONSIBLE PARTY: Sam Yoder and Craig Johnson

Request 13. Refer to the Scoping Report at page 3-1 regarding the amount of rainfall associated with a 10-year, 24-hour storm event.

Request 13a. Provide the amount of rainfall associated with a 5-year, 24-hour storm event for the area of Maysville, Kentucky.

Response 13a. 5-year: 3.63 inches

Request 13b. Provide the amount of rainfall associated with a 100-year, 24-hour storm event for the area of Maysville, Kentucky.

Response 13b. 100-year: 6.52 inches

Request 13c. Explain whether EKPC considered a 5-year, 24-hour storm event as a design basis for the CPR Project.

Response 13c. No. A 5-year, 24-hour event was not considered. Fundamentally, the appropriate design storm for the modification of the CPR pond must establish adequate capacity to contain and convey stormwater from the CPR pond to the next stage containment, which is currently the ash pond and will be the water mass balance pond at the completion of the CCR/ELG Project. Additionally, the technical team sought to use as much existing piping on the site as possible for cost efficiency. EKPC civil engineering experts directed the technical discussion and evaluation around the selection of the appropriate design storm criteria and selected both the alternatives for design storm consideration and the final criteria used for pond modification design. Burns & McDonnell participated in that discussion, provided input, and performed the technical modeling and evaluations to develop the pond modification design to meet the selected design criteria.

Good engineering practice for ponds and containment basins also provides for protection of the embankments by ensuring the combined control of the principle spillway and emergency spillway for a 100-year, 24-hour storm will not allow stormwater to overtop the crest and threaten the structural integrity of the embankment. After the team's evaluation and discussion, EKPC's civil engineering experts selected the 10-year, 24-hour and 100-year, 24-hour design storms as the appropriate design criteria for CPR pond modifications.