Goss Samford

ATTORNEYS AT LAW | PLLC

David S. Samford
david@gosssamfordlaw.com
(859) 368-7740

January 19, 2018

Via Hand-Delivery

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

Re: PSC Case No. 2017-00376

Dear Ms. Pinson:

On behalf of East Kentucky Power Cooperative, Inc. ("EKPC"), please find enclosed for filing in the record of the above-referenced case one (1) redacted original and six (6) redacted copies of EKPC's Response to Commission Staff's First Request for Information propounded January 5, 2018. Also enclosed in a separate sealed envelope marked confidential is one (1) copy of the Response with certain confidential information highlighted.

In addition, please find enclosed one (1) original and six (6) copies of EKPC's Motion for Confidential Treatment.

Please do not hesitate to contact me if you have any questions or concerns.

Very truly yours,

David S. Samford (by Ryan Lewis)

David S. Samford

Enclosures

RECEIVED

JAN 19 2018

PUBLIC SERVICE COMMISSION

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, SETTLEMENT OF CERTAIN ASSET RETIREMENT OBLIGATIONS AND ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITYAND OTHER RELIEF	)	**CASE NO. 2017-00376**

MOTION FOR CONFIDENTIAL TREATMENT

Comes now East Kentucky Power Cooperative, Inc. ("EKPC"), by and through counsel, pursuant to KRS 61.878, 807 KAR 5:001, Section 13 and other applicable law, and for its Motion requesting that the Kentucky Public Service Commission ("Commission") afford confidential treatment to information contained in certain responses to requests for information filed in the above-captioned proceeding, respectfully states as follows:

1. On November 20, 2017 EKPC filed an Application requesting the Commission to enter an Order: approving EKPC's proposed amendment of its Environmental Compliance Plan ("Compliance Plan"); granting authority to recover the costs associated with said Compliance Plan amendment through its existing environmental surcharge; issuing a Certificate of Public Convenience and Necessity ("CPCN") for the facilities associated with said Compliance Plan

amendment; and allowing the settlement of certain Asset Retirement Obligations and regulatory asset.

2. The Commission issued a procedural Order on December 14, 2017 and its First Request for Information on January 5, 2018.

3. Request No. 3 from the January 5th request for information states as follows:

> Refer to the Mosier Testimony at page 15, lines 16-18. Explain in more detail the statement that the retirement of Spurlock Units 1 and 2 would result in EKPC losing its status as a net generator in PJM. Quantify the impacts, if any, of EKPC no longer being a net generator in PJM.

4. In response to Request No. 3, EKPC is providing actual and projected membership costs and benefits for EKPC as a net generator in PJM. This information is sensitive and proprietary.

5. Request No. 4 from the January 5th request for information states as follows:

> Refer to the Direct Testimony of Jerry B. Purvis ("Purvis Testimony") at page 14, lines 20-23. With respect to the Spurlock landfill, state whether a Fugitive Dust Control plan has been developed. If so, provide a copy of that plan.

6. In response to Request No. 4, EKPC is providing a copy of its Fugitive Dust Control plan. The Fugitive Dust Control plan contains maps of Spurlock Station. These maps contain detailed information regarding the location and characteristics of utility facilities currently located on or near the Spurlock Station site.

7. Along with the Application filed on November 20, 2017, EKPC filed Motion for Confidential Treatment for additional maps of Spurlock Station, also the actual and projected cost and benefit information was filed under seal on July 31, 2017 in Case No. 2012-00169 as part of EKPC's annual PJM report. These motions are still outstanding.

8. The actual and projected cost and benefit information along with the maps are being tendered in redacted form in the public version of EKPC's filing and in an un-redacted form filed under seal herewith. These documents are hereinafter referred to as the "Confidential Information."

9. The Confidential Information contains sensitive and proprietary information regarding the costs and benefits of EKPC's participation in PJM as a net generator and information that describes the location of critical energy infrastructure information pertaining to the physical facilities for generating and transmitting electricity. The Confidential Information is retained by EKPC on a "need-to-know" basis and is not publicly available. This information would be useful to those looking to disrupt, damage or destroy the equipment and facilities of EKPC. Likewise, KRS 61.878(1)(m)(1) protects "[p]ublic records the disclosure of which would have a reasonable likelihood of threatening public safety by exposing a vulnerability in preventing protecting against, mitigating, or responding to a terrorist act...." and specifically exempts from public disclosure certain records pertaining to public utility critical systems. *See* KRS 61.878(1)(m)(1)(f). Thus, disclosure of the Confidential Information would be highly prejudicial to EKPC, EKPC's owner-members and those owner-members' retail members. Furthermore, the Confidential Information includes actual and projected PJM membership costs and benefits and would reveal information that is highly sensitive, commercially valuable and strictly proprietary. The public disclosure of this information would potentially harm EKPC's competitive position in the marketplace, to the detriment of EKPC and its customers.

10. The Kentucky Open Records Act exempts the Confidential Information from public disclosure. *See* KRS 61.878(1)(c), (m). As set forth above, disclosure of the Confidential Information would permit an unfair advantage to third parties. Moreover, the Kentucky Supreme

Court has stated, "information concerning the inner workings of a corporation is 'generally accepted as confidential or proprietary.'" *Hoy v. Kentucky Industrial Revitalization Authority*, 907 S.W.2d 766, 768 (Ky. 1995). Because the Confidential Information is critical to EKPC's effective execution of business decisions and strategy, it satisfies both the statutory and common law standards for being afforded confidential treatment. Moreover, the Confidential Information is distributed within EKPC only to those employees who must have access for business reasons, and is generally recognized as confidential and proprietary in the energy industry. The Confidential Information for which EKPC is seeking confidential treatment is not known outside of EKPC. This Confidential Information was, and remains, integral to EKPC's effective execution of business decisions and strategy.

11. EKPC does not object to limited disclosure of the Confidential Information, pursuant to an acceptable confidentiality and nondisclosure agreement, to the Attorney General or any other intervenors with a legitimate interest in reviewing the same for the sole purpose of participating in this case.

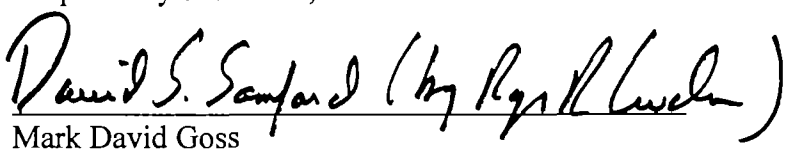
12. In accordance with the provisions of 807 KAR 5:001, Section 13(2), EKPC is filing one copy of the Confidential Information separately under seal. Confidential treatment is sought for the entirety of the maps attached in EKPC's Response to Information Request 4.

13. In accordance with the provisions of 807 KAR 5:001, Section 13(3), EKPC respectfully requests that the Confidential Information be indefinitely withheld from public disclosure. This will assure that the Confidential Information will be less likely to include information that continues to be commercially sensitive or critical energy infrastructure information so as to impair the interests of EKPC if publicly disclosed.

WHEREFORE, on the basis of the foregoing, EKPC respectfully requests the Commission to enter an Order granting this Motion for Confidential Treatment and to so afford such protection from public disclosure to the un-redacted copies of Confidential Information, which is filed herewith under seal, for an indefinite period of time.

This 19h day of January 2018.

Respectfully submitted,



Mark David Goss
David S. Samford
GOSS SAMFORD, PLLC
2365 Harrodsburg Road, Suite B325
Lexington, KY 40504
(859) 368-7740
mdgoss@gosssamfordlaw.com
david@gosssamfordlaw.com

Counsel for East Kentucky Power Cooperative, Inc.

CERTIFICATE OF SERVICE

This is to certify that a true and correct copy of the foregoing document has been served by depositing same into the custody and care of the U.S. Postal Service, postage pre-paid, on this 19th day of January 2018, addressed to the following:

Rebecca W. Goodman, Executive Director
Kent Chandler, Assistant Attorney General
Office of Rate Intervention
Office of the Attorney General
700 Capitol Ave., Suite 20
Frankfort, KY 40601-8204

Counsel for East Kentucky Power Cooperative, Inc.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN AND RECOVER 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	)	**CASE NO. 2017-00376**

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Robin Hayes, being duly sworn, states that she 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 January 5, 2018, and that the matters and things set forth therein are true and accurate to the best of her knowledge, information and belief, formed after reasonable inquiry.

Robin Hayes

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

Gwyn M. Willoughby
Notary Public #590567

GWYN M. WILLOUGHBY
Notary Public
Kentucky – State at Large
My Commission Expires Nov 30, 2021

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN AND RECOVER 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	)	**CASE NO. 2017-00376**

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 January 5, 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.

Craig A. Johnson

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

Gwyn M. Willoughby #590567

Notary Public

GWYN M. WILLOUGHBY
Notary Public
Kentucky – State at Large
My Commission Expires Nov 30, 2021

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Don Mosier, 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 January 5, 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.

Don Mosier

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

Gwyn M. Willoughby #590567
Notary Public

GWYN M. WILLOUGHBY
Notary Public
Kentucky – State at Large
My Commission Expires Nov 30, 2021

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN AND RECOVER 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	)	**CASE NO. 2017-00376**

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 January 5, 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.

Jerry B. Purvis

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

Gwyn M. Willoughby #590567
Notary Public

GWYN M. WILLOUGHBY
Notary Public
Kentucky – State at Large
My Commission Expires Nov 30, 2021

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN AND RECOVER 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	)	**CASE NO. 2017-00376**

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 January 5, 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.

Isaac S. Scott

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

Gwyn M. Willoughby #590569
Notary Public

GWYN M. WILLOUGHBY
Notary Public
Kentucky – State at Large
My Commission Expires Nov 30, 2021

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN AND RECOVER 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	)	**CASE NO. 2017-00376**

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 January 5, 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.

Sam Yoder

Subscribed and sworn before me on this 17 day of January 2018.

Sara Beth Acton
Notary Public

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

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN AND RECOVER 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	)	CASE NO. 2017-00376

RESPONSES TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO EAST KENTUCKY POWER COOPERATIVE, INC. DATED JANUARY 5, 2018

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2017-00376
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 1
RESPONSIBLE PARTY: Don Mosier

Request 1. Refer to the Direct Testimony of Don Mosier ("Mosier Testimony") at page 4 regarding EKPC's strategic plan.

Request 1a. State how often EKPC reviews and updates its strategic plan.

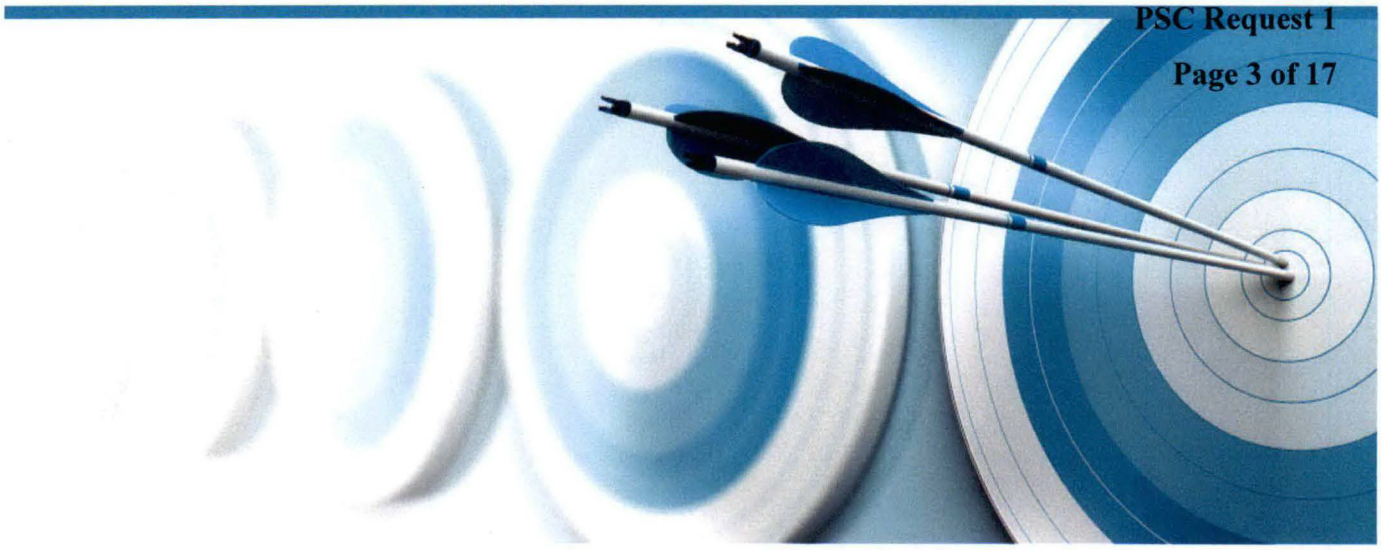
Response 1a. Reviews are performed on an ongoing basis and EKPC's strategic plan is updated as necessary. Typically the EKPC Board of Directors meets every year to review the strategic plan, and if necessary updates it. In 2017 the Board did not make any changes to the 2016 Strategic Plan.

Request 1b. Provide a copy of the 2016 Strategic Plan.

Response 1b. A copy of the 2016 Strategic Plan is provided on pages 3 through 17 of this response.

Request 1c. When does EKPC anticipate updating the 2016 Strategic Plan?

Response 1c. EKPC anticipates holding a Strategic Planning Board Retreat in 2018, at which point the strategic plan may be updated.



EAST KENTUCKY POWER COOPERATIVE

2016-17 Strategic Plan

AIMING FOR EXCELLENCE

EAST KENTUCKY POWER COOPERATIVE

A Touchstone Energy Cooperative

Contents

About East Kentucky Power Cooperative

EKPC is a not-for-profit, member-owned cooperative providing wholesale electricity to its 16 owner-member distribution cooperatives, which serve 530,000 Kentucky homes, farms, businesses and industries across 87 counties. EKPC provides power through coal-fueled plants located in Mason and Pulaski counties, renewable energy plants in Barren, Boone, Laurel, Greenup, Hardin and Pendleton counties, along with gas peaking units, hydroelectric power and nearly 2,800 miles of transmission lines. Together, EKPC and its owner-member cooperatives are known as Kentucky's Touchstone Energy Cooperatives.

EKPC at a Glance

- Assets — $3.3 billion
- Employees — 670
- Generating capacity (coal) — 1,687 megawatts
- Generating capacity (natural gas) — 1,556 megawatts
- Generating capacity (renewable)* — 184.5 megawatts
- Miles of transmission lines — 2,838 miles
- Number of substations — 366
- Meters served by owner-member co-ops — 530,168
- 2015 energy sales — 13.2 million megawatt hours
- 2015 operating revenue — $885.1 million
- 2015 net margin — $49.3 million

Statistics as of December 2015

** Includes contracts for hydro power from the Southeastern Power Administration*

MISSION & VALUES

Mission Statement

EKPC exists to serve its member-owned cooperatives by safely delivering reliable and affordable energy and related services.

Values

These are the shared beliefs and culture that underlie everything we do at EKPC.

Safety
- Safety is an essential part of everything we do.
- We will promote a safe, secure, and healthy environment.

Service
- Our customers are our priority and service is our goal.
- We will act with a sense of urgency, with a focus on quality.
- We will listen and be responsive to the needs of our member-owners.

Honesty and Integrity
- Honesty is non-negotiable.
- We will be open and honest in our communication, even when it is difficult.
- We will always act in the best interest of EKPC.

Respect
- Treating everyone with respect and compassion is necessary for partnership.
- We understand that each person is important and brings a different perspective and approach; we value them all.

Teamwork
- We will never lose sight of the fact that we are a team.
- All of our actions reflect on all of our employees and member-owners.

EKPC is Aiming for Excellence

This booklet provides an overview of EKPC's Strategic Plan. The plan was developed by our Board of Directors, which represents the 16 electric cooperatives that own EKPC.

The three fundamental components of the Strategic Plan are:

Mission. The mission statement explains why EKPC exists.

Values. These are the shared beliefs and culture that underlie everything we do at EKPC.

Strategic Objectives. These eight objectives are the heart of the Strategic Plan because they provide the expectations of EKPC's Board of Directors.

This plan encompasses the goals, direction and ground rules for EKPC, as determined by our owners. It provides the basis for each of EKPC's business units to develop their own plans for achieving the strategic objectives. A set of metrics has been developed to track each business unit's progress toward implementing the business plans.

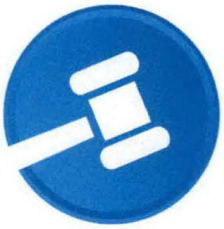
It is critically important that each and every employee understands the role they play. Each employee's goals and objectives should align with the goals and objectives of their business unit and EKPC as a whole. When that happens, everybody should be pulling in the same direction.

All too often, after a plan is developed, it sits on a shelf and gathers dust. EKPC's Strategic Plan definitely is *not* one of those plans. Every monthly Board meeting includes reports and updates on EKPC's progress toward implementing the Strategic Plan. And, each year, the Board reviews and makes changes to the Strategic Plan itself in order to adapt to changes in such factors as technology, markets, laws, regulations, the economy, our members and EKPC's workforce.

That's important, because few industries are changing as rapidly as the energy industry. EKPC has a long tradition of leading the way among electric cooperatives nationwide. This plan ensures we will continue to do that, while continuing to safely provide reliable, affordable service to our owner-members.

Anthony "Tony" Campbell
President & CEO

Strategic Objective



Governance

Implement and maintain governance standards that are consistent with modern practices and the needs of the power supply cooperative.

The Board of Directors will foster a culture of transparency and effective governance to ensure that competent and committed directors are accountable, objective, acting with the utmost integrity, and focusing on the best interests of EKPC. The Board, with guidance from the Governance Committee, will pursue best practices in the area of governance to ensure the overall strategic strength of the organization. Such actions will be part of EKPC's culture and not by regulatory mandate.

Critical Success Factors

- Actively pursue best practices in governance and strive to be a model in the industry.
- Ensure owner-members understand the importance of nominating highly qualified candidates willing to make the necessary time commitment to effectively govern a G&T.
- Ensure directors discuss and debate issues while providing effective oversight of the Cooperative.
- Deliver ongoing training for continuous professional and personal growth of Directors.
- Maintain a level of mutual trust and respect with each other and senior management.

Strategic Objective

People

Develop and maintain a high-performance workforce.

EKPC will create a culture of continuous improvement that is focused on the safety, performance, and development of employees while preparing for the future through more effective training and improved succession planning.

Critical Success Factors

- Develop a planned, sustainable safety improvement program.
- Develop and implement a comprehensive strategy to lead the workforce of the future that includes recruiting, development, retention, performance management and compensation that is aligned with the strategic plan of EKPC.
- Be an employer of choice by capitalizing on EKPC's values in leveraging the organization's longstanding dedication to the success of rural communities, of being a good environmental steward and providing rewarding and meaningful careers to employees.
- Prepare for and assemble an engaged and productive workforce, anticipating the currently aging workforce and the changing skills and expectations of the different generations.
- Evaluate and implement strategies to recruit and retain a high-performance workforce.

Financial Integrity

Strength, flexibility and affordability.

EKPC will balance three goals: financial strength, financial flexibility and affordability of its system. This results in resilience to handle financial shocks, the ability to execute new opportunities consistent with other strategic objectives, and low cost to members with improving competitiveness.

- Strength: DSC and TIER maintained within Board Policy 203 ranges. The equity ratio will be managed to ensure adequate equity for anticipated major investments while returning excess equity to member systems through payment of capital credits.
- Flexibility: Maintain liquidity measures consistent with "A" rated G&Ts (90+ days cash and 220+ days liquidity)
- Affordability: Cost to Member Systems at or below long range financial forecast, competitive with adjacent IOUs

Critical Success Factors

- Use cost control and balance sheet management to keep rates affordable.
- Maintain liquidity and capital resources to enable planned and opportunistic investment.
- Drive all financial metrics to levels consistent with "A" credit ratings.
- Develop and implement capital credit payment policy to manage equity levels above 20 percent.
- Board annually reviews returning capital credits to owner-members.

Generation and Transmission Assets

Actively manage EKPC's current and future asset portfolio to deliver reliable and affordable energy from appropriately diversified sources, and work with federal and state stakeholders to ensure the economic viability of EKPC's existing and future resources to meet evolving regulatory challenges including preparation for future curbs on greenhouse gas emissions.

EKPC will actively manage its current and future asset portfolio to diversify energy resources including DSM/EE programs, bilateral market and partnering opportunities, while striving to improve operating performance and efficiencies. In light of the growing risks related to changes to existing and new environmental rules, including future regulation of greenhouse gas emissions, EKPC will actively work with other electric utilities, businesses and industry, regulators and law-makers to manage EKPC's compliance strategies while minimizing costs to our owner-members.

Critical Success Factors

- Provide leadership and vision to identify, exercise due diligence and recommend to the Board supply resources that diversify the portfolio via increased reliance on natural gas, viable renewable resources, distributed generation and bilateral market purchases.
- Engage regional G&T leaders to develop partnership opportunities that seek to provide economies of scale and mutual risk sharing.
- Actively promote and engage our owner-members to expand existing DSM/EE programs, and identify new strategies to increase penetration, the use of demand side resources, including energy efficiency.
- Anticipate and prepare for changes to existing and new environmental rules including future regulations on greenhouse gas emissions.
- Manage the effects of asset aging and PJM's cycling of generation resources to ensure economic life targets are met or exceeded.

Strategic Objective

- Establish quantitative and qualitative condition assessment, investment life and other economic criteria to maximize returns on capital investments and mitigate exposure to stranded costs to limit impact on system reliability and exposure to future regulatory changes.
- Establish balanced performance measures that have clear line of sight to the strategic objectives.
- Define and pursue operational excellence using established performance measures to track progress.
- Use external benchmarking where it helps with goal-setting and identification of leading practices.
- Continue implementing a corporate-wide continuous improvement effort.

Strategic Objective

Rates and Regulatory Relations

Design equitable rate structures, closely manage rate levels and continue to pursue positive relationships with regulators.

EKPC will establish rates that support economic development, build a stronger balance sheet and appropriately apportion costs among the owner-members while working closely and constructively with state and federal regulators.

Critical Success Factors

- Develop and introduce where appropriate a rate structure that is equitable, reflects a true cost of service and incentivizes appropriate end-use behavior.
- Establish a rate level that improves EKPC's equity ratio.
- Avoid rate shock by increasing rates at close to the level of inflation in the long-term, changing gradually from year-to-year.
- Establish relationships and actively engage and partner with state and federal regulators of utilities, the environment and other areas.

Communications and Public Relations

Establish and maintain effective communications with owner-members, employees, customers and our broader communities.

EKPC will ensure consistent and appropriate education and sharing of information with stakeholders, so internal stakeholders will have the information necessary to execute EKPC's Strategic Plan, and external stakeholders will understand EKPC's mission and issues affecting the co-op's ability to fulfill that mission.

Critical Success Factors

- Provide effective communication to board members, system managers, EKPC employees and key external stakeholders, including policy-makers, regulators, community/business leaders, key accounts, advocacy organizations, other utilities and the media.
- Promote the positive actions being taken by EKPC and its owners-member co-ops to improve the quality of life for members and others.
- Educate appropriate stakeholders about EKPC's Strategic Plan.
- Educate stakeholders about the costs, benefits and other impacts of developing industry trends—including renewable energy, federal greenhouse gas regulations, net metering and distributed generation—on affordability and reliability for cooperative owner-members.
- Communicate information necessary to implement, monitor and direct efforts to meet the goals and objectives of the Strategic Plan.
- Ensure effective communication of all strategically important matters to all key stakeholders.
- Provide communications support and resources to owner-members so they can communicate effectively with their stakeholders.
- Track effectiveness of communications, particularly those designed to raise awareness of the Strategic Plan and its key elements.

Strategic Objective

Economic Development

Support the economic interests of EKPC and the members it serves, including strong support for the manufacturing sector.

EKPC will build an economic development capability that focuses on the economic sustainability of its members and their communities through job-creation endeavors, load retention and load-building opportunities.

Critical Success Factors

- Maintain a consistent focus on economic development with full-time resources.
- Partner with members to encourage development that meets the needs of their communities.
- Pursue economic development rates that support fairness among owner-members.

Cyber and Physical Security

Protect EKPC's vital assets, inclusive of physical plant, electronic systems, data, and personnel, from physical or cyber threats posed by malicious parties.

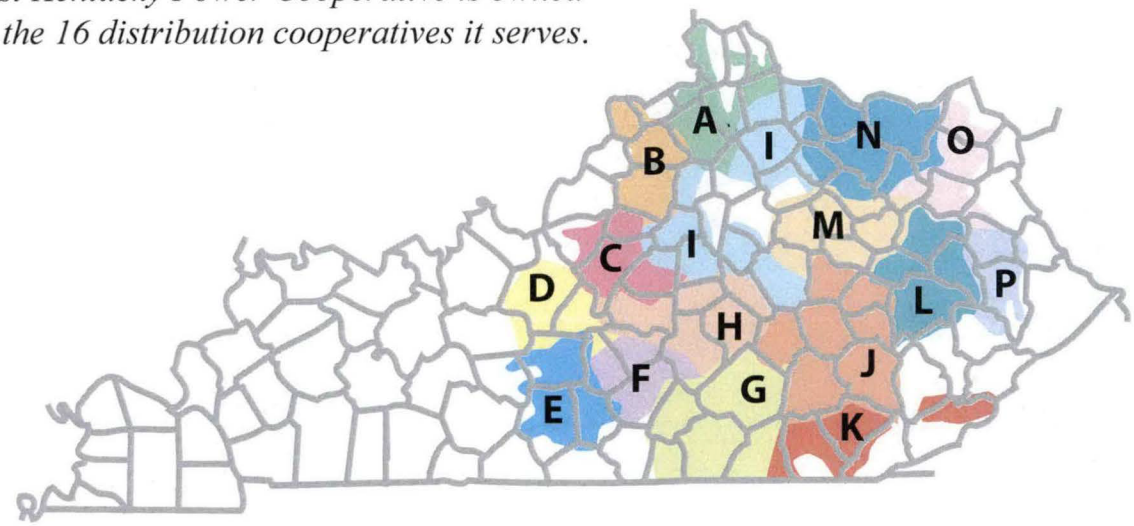
EKPC will seek to understand and deploy best practices as they relate to security both within the electric power industry and as a business in general. EKPC's employees will understand the value of security and will hold a high regard for appropriate mitigation measures deployed.

Critical Success Factors

- Identify vital assets and evaluate potential threats to them.
- Deploy appropriate threat mitigation strategies based on evaluated risk and impact.
- Develop, implement, test, and continuously improve effective response and recovery plans.
- Ensure personnel are trained to recognize, report, and respond to threats as appropriate.
- Develop and maintain collaborations with strategic partners to strengthen physical and cyber security.

EKPC's Owner-Members

East Kentucky Power Cooperative is owned by the 16 distribution cooperatives it serves.



	Cooperative	Location	Web site
A	Owen Electric	Owenton, Ky.	www.owenelectric.com/
B	Shelby Energy	Shelbyville, Ky.	www.shelbyenergy.com/
C	Salt River Electric	Bardstown, Ky.	www.srelectric.com/
D	Nolin RECC	Elizabethtown, Ky.	www.nolinrecc.com/
E	Farmers RECC	Glasgow, Ky.	www.farmersrecc.com/
F	Taylor County RECC	Campbellsville, Ky.	www.tcrecc.com/
G	South Kentucky RECC	Somerset, Ky.	www.skrecc.com/
H	Inter-County Energy	Danville, Ky.	www.intercountyenergy.net/
I	Blue Grass Energy	Nicholasville, Ky.	www.bgenergy.com/
J	Jackson Energy	McKee, Ky.	www.jacksonenergy.com/
K	Cumberland Valley Electric	Gray, Ky.	www.cumberlandvalley.coop/
L	Licking Valley RECC	West Liberty, Ky.	www.lvrecc.com/
M	Clark Energy	Winchester, Ky.	www.clarkenergy.com/
N	Fleming-Mason Energy	Flemingsburg, Ky.	www.fme.coop/
O	Grayson RECC	Grayson, Ky.	www.graysonrecc.com/
P	Big Sandy RECC	Paintsville, Ky.	www.bigsandyrecc.com/

EKPC's Mission

EKPC exists to serve its member-owned cooperatives by safely delivering reliable and affordable energy and related services.

EKPC's Values

- Safety
- Service
- Honesty and Integrity
- Respect
- Teamwork

EKPC's Strategic Objectives

- Governance
- People
- Financial Integrity
- Generation & Transmission Assets
- Rates and Regulatory Relations
- Communications & Public Relations
- Economic Development
- Cyber and Physical Security

EAST KENTUCKY POWER COOPERATIVE
A Touchstone Energy Cooperative
4775 Lexington Road, Winchester KY 40391 • (859) 744-4812 • www.ekpc.coop

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2017-00376
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 2
RESPONSIBLE PARTY: Don Mosier

Request 2. Refer to the Mosier Testimony at page 10 regarding the alternative of retiring Spurlock Units 1 and 2 and replacing that lost capacity with a new 600-Megawatt ("MW") combined-cycle natural gas unit at the Smith Station in combination with the purchase of 200 MW of power through a bilateral power purchase agreement. Fully explain the rationale for this alternative, including a discussion as to whether EKPC considered replacing Spurlock Units 1 and 2 with an 800-MW combined-cycle natural gas unit.

Response 2. EKPC chose to use a 600 MW combined cycle natural gas unit at the Smith Station in its evaluation to balance system operations, economies of scale and EKPC's ability to reliably hedge its load cost exposure. Adding units that are comparatively large, based on EKPC's system size, creates operational issues, adds exposure to the energy hedge position and adds risk to losing a large amount of generation with one outage. Keeping the 800 MW of generation in two distinct resources, as it is today, as opposed to combining it all into one resource helps to mitigate EKPC's operational risks. EKPC did not overlook the 800 MW combined cycle as a potential option, but rather chose the 600 MW combined cycle alternative along with a 200 MW

PPA to balance its operational and risk profiles. EKPC believed this combination provided a better fit for its system and helped to mitigate the risk of having all of the replacement power in one resource. Also, any alternative that considers replacing the existing coal units causes EKPC and its members to incur stranded asset expenses and increases costs to members.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2017-00376
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 3
RESPONSIBLE PARTY: Don Mosier

Request 3. Refer to the Mosier Testimony at page 15, lines 16-18. Explain in more detail the statement that the retirement of Spurlock Units 1 and 2 would result in EKPC losing its status as a net generator in PJM. Quantify the impacts, if any, of EKPC no longer being a net generator in PJM.

Response 3. As previously directed by the Commission, EKPC has sufficient resources to cover its winter peak load and a reasonable margin, all of which can be sold into the PJM capacity market. In PJM, EKPC must purchase enough capacity in the PJM capacity market to cover its summer peak load plus a margin. Since EKPC's winter load is significantly larger than its summer peak load, EKPC's net position in the PJM market is a surplus. EKPC sells the surplus into the PJM capacity market and creates a benefit to EKPC's members. EKPC reported in its annual filing to the PSC on July 31, 2017 that it estimated this benefit from surplus capacity sales to be [redacted] from June 1, 2016 through May 31, 2017. EKPC reported its estimate for this value to be [redacted] for its first ten years of operations in PJM. If EKPC retired over 800 MW of generation at the Spurlock plant without adding another resource to hedge EKPC's winter

demand and energy requirements, it would no longer have more generation to sell into the capacity market than what it would be required to purchase for its summer load requirements. The benefits realized by EKPC being a winter-peaking system in a summer-peaking market would be lost. EKPC would also have an unhedged energy position in the winter that would be detrimental to EKPC and its owner-members.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2017-00376
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 4
RESPONSIBLE PARTY: Jerry B. Purvis

Request 4. Refer to the Direct Testimony of Jerry B. Purvis ("Purvis Testimony") at page 14, lines 20-23. With respect to the Spurlock landfill, state whether a Fugitive Dust Control plan has been developed. If so, provide a copy of that plan.

Response 4. The Fugitive Dust Control plan is provided on pages 2 through 31 of this response. Pages 26 and 27 of 31 are subject to a motion for confidential treatment.

BURNS McDONNELL

Fugitive Dust Control Plan
Spurlock Power Plant

EAST KENTUCKY POWER COOPERATIVE

East Kentucky Power Cooperative

Coal Combustion Residual Rule Compliance

Initial Compliance Plan, Rev. 0
October 6, 2015

Fugitive Dust Control Plan
Spurlock Power Plant

Prepared for

East Kentucky Power Cooperative
Coal Combustion Residual Rule Compliance
Maysville, Kentucky

Initial Compliance Plan, Rev. 0
October 6, 2015

Prepared by

Burns & McDonnell Engineering Company, Inc.
Kansas City, Missouri

INDEX AND CERTIFICATION

East Kentucky Power Cooperative
Fugitive Dust Control Plan
Spurlock Power Plant

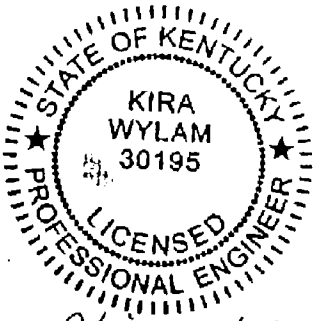
Report Index

Certification

I hereby certify, as a Professional Engineer in the Commonwealth of Kentucky, that the information in this document was assembled under my direct supervisory control. This report is not intended or represented to be suitable for reuse by the East Kentucky Power Cooperative or others without specific verification or adaptation by the Engineer.

Kira Wylam, KY #30195
BMcD Engineer, P.E. (state & license)

Date: 10/6/2015



Kira Wylam
10-6-2015

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LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
ALM	Asset Lifecycle Management
CCR	Coal Combustion Residual
CEM	Continuous Emissions Monitor
CFR	Code of Federal Regulations
EKPC	East Kentucky Power Cooperative
EPA	Environmental Protection Agency
EU	Emission Unit
RCRA	Resource Conservation and Recovery Act
U.S.C.	United States Code
U	Unit

LIST OF TERMS/DEFINITIONS

Environmental – Refers to the specific division within EKPC management that handles environmental concerns and permits.

CCR fugitive dust – Refers to solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than a stack or chimney.

1.0 INTRODUCTION

On April 17, 2015, the Environmental Protection Agency (EPA) issued the final version of the federal Coal Combustion Residual Rule (CCR Rule) to regulate the disposal of coal combustion residual (CCR) materials generated at coal-fired units. The rule will be administered as part of the Resource Conservation and Recovery Act [RCRA, 42 United States Code (U.S.C.) §6901 et seq.], using the Subtitle D approach.

East Kentucky Power Cooperative (EKPC) is subject to the CCR Rule and as such must develop a Fugitive Dust Control Plan per 40 Code of Federal Regulations (CFR) §257.80. This report provides the Fugitive Dust Control Plan for the Spurlock Power Plant located in Maysville, Kentucky.

Possible control measures from 40 CFR §257.80, which were considered, include:

- Locating CCR inside an enclosure or partial enclosure;
- Operating a water spray or fogging;
- Reducing fall distances at material drop points;
- Using wind barriers (enclosures), compaction, or vegetative covers;
- Establishing and enforcing reduced vehicle speed limits;
- Paving and sweeping roads;
- Covering trucks that are transporting CCR;
- Reducing or halting operations during high wind events; or
- Applying a daily cover.

The above control measures, which are noted from 40 CFR §257.80 of the CCR Rule, may be appropriate dust control measures for emission points. Not all the above measures are appropriate for the emission points indicated in Section 3. Those control measures not indicated in Section 3, but noted above, may still be applied at the Owner/Operator's discretion if all other specific control measures have failed to reduce fugitive dust emissions.

This Fugitive Dust Plan is in addition to, not in place of, any applicable standards under the Occupational Safety and Health Act or the Clean Air Act.

2.0 PLAN OBJECTIVES

The Fugitive Dust Control Plan identifies specific control measures in Section 3 that EKPC will use to control and minimize fugitive dust emissions at emission points within the facility from becoming airborne as required by the CCR Rule. The plan additionally defines the following:

- Procedures that EKPC personnel will follow to control emissions,
- Means and methods that should be followed to bring emissions within appropriate ranges,
- Specific means and methods that EKPC will take to demonstrate that corrective procedures are followed and to verify the facility is controlling fugitive emissions, and
- Procedure for addressing fugitive dust complaints and subsequent corrective actions.

To meet these objectives, the Fugitive Dust Control Plan:

- Identifies all fugitive emission sources at the facility,
- Identifies the primary and contingent control measures and practices to control and minimize fugitive emissions,
- Identifies means to conduct visible emission observations and subsequent means and methods for corrective actions,
- Identifies fugitive dust control recordkeeping requirements,
- Identifies fugitive dust control notification requirements,
- Identifies that EKPC has fugitive dust control training elements within their infrastructure although not required by the CCR Rule,
- Provides details on completing the Annual Fugitive Dust Report, and
- Provides a process to address fugitive dust complaints from citizens.

3.0 FUGITIVE EMISSION SOURCES AND CONTROLS

The operating practices and control measures that will be implemented and recorded for the fugitive dust sources identified in Table 3-1 are described below. EKPC assigns appropriate personnel the responsibility to monitor and control fugitive emissions in their areas of responsibility.

Table 3-1 lists the fugitive emission sources identified at the facility.

Table 3-1: Fugitive Emission Sources

Source Name	Description
U1 & U2 Fly Ash Loadout	Loadout operation into truck for transfer to landfill
U3 Bed Ash Silo Loadout	Loadout operation into truck for transfer to landfill
U3 Fly Ash Silo Loadout	Loadout operation into truck for transfer to landfill
U4 Bed Ash Silo Loadout	Loadout operation into truck for transfer to landfill
U4 Fly Ash Silo Loadout	Loadout operation into truck for transfer to landfill
Gypsum Waste	Temporarily stored in pile prior to transportation to the landfill
Ash Pond	Storage of CCR material
Landfill	Used for long term storage of CCR waste
Hauling to Landfill	Roads used to transport CCR waste to the landfill

Training is provided by EKPC Environmental at the site every twice a year and includes a section on taking action to prevent fugitive emissions. This training is conducted for appropriate operations personnel.

The following fugitive dust sources are located at the Spurlock Station as described herein.

3.1 U1 & U2 Fly Ash Loadout

Identification: Truck loadout from Unit 1 & 2 Fly Ash Silos is transported to the landfill via dump truck. It is shown in Appendix A as Item 1 and pictured in Figure 3-1. Dust control measures are described in Table 3-2. Maintenance records are kept in the PeopleSoft Asset Lifecycle Management (ALM) system.

As a best management practice, visual observations are made daily and recorded monthly in a log book. Visual observations should be made by a qualified individual or under the direction of a qualified individual who understands EPA Method 22 or EPA Method 9.

As a result of visual observation, additional control measures deemed necessary to minimize fugitive dust may be implemented at the Owner/Operator's discretion.

Figure 3-1: Spurlock U1&U2 Fly Ash Loadout

Table 3-2: U1&U2 Fly Ash Loadout Control Measures

Description of Control Measures	Explanation of How the Measures Selected are Applicable and Appropriate for Site Conditions
Adding water as needed	The application of water suppresses dust formation during the drop into the truck. Wetting CCR with water is acceptable as it serves to condition the CCR material to a moisture content that will prevent wind dispersal. Wetting CCR is allowed if there are insignificant or de minimis amounts of CCR within those free liquids or if it moistens the CCR and does not result in free liquids.
Controlling the flow rate	A smooth, homogenous flow of materials reduces surface disturbances and reduces the amount of dust generated.
Using telescopic chutes	In the event the mixers are not functioning to condition the ash during dry loadout, a telescopic chute shall be used to reduce the distance that the material travels while exposed to open air which will aid to minimize dust created by the drop into the truck.
Using skirting	Skirting helps keep dust inside the structure during loading into the truck.

3.2 U3 Bed Ash Silo Loadout

Identification: Truck loadout from Unit 3 Bed Ash Silo is transported to the landfill via bulk tank truck or dump truck. It is shown in Appendix A as Item 2 and pictured in Figure 3-2. The dust control measures are described in Table 3-3. Maintenance records are in kept in the ALM system.

As a best management practice, visual observations are made daily and recorded monthly in a log book. Visual observations should be made by a qualified individual or under the direction of a qualified individual who understands EPA Method 22 or EPA Method 9.

As a result of visual observation, additional control measures deemed necessary to minimize fugitive dust may be implemented at the Owner/Operator's discretion.

Figure 3-2: U3 Bed Ash Loading Operation

Table 3-3: U3 Bed Ash Silo Loadout Control Measures

Description of Control Measures	Explanation of How the Measures Selected are Applicable and Appropriate for Site Conditions
Using telescopic chutes	A telescopic chute shall be used to reduce the distance that the material travels while exposed to open air which will aid to minimize dust created by the drop into the truck.
Using bulk tank trucks	A closed truck will prevent fugitive dust from escaping during loading and travel.

3.3 U3 Fly Ash Silo Loadout

Identification: Truck loadout from Unit 3 Fly Ash Silo is transported to the landfill via dump truck. It is shown in Appendix A as Item 3 and pictured in Figure 3-3. Dust control measures are described in Table 3-4. Maintenance records are in kept in the ALM system.

As a best management practice, visual observations are made daily and recorded monthly in a log book. Visual observations should be made by a qualified individual or under the direction of a qualified individual who understands EPA Method 22 or EPA Method 9.

As a result of visual observation, additional control measures deemed necessary to minimize fugitive dust may be implemented at the Owner/Operator's discretion.

Figure 3-3: U3 Fly Ash Truck Loading Operation

Table 3-4: U3 Fly Ash Silo Loadout Control Measures

Description of Control Measures	Explanation of How the Measures Selected are Applicable and Appropriate for Site Conditions
Adding water as needed	The application of water suppresses dust formation during the drop into the truck. Wetting CCR with water is acceptable as it serves to condition the CCR material to a moisture content that will prevent wind dispersal. Wetting CCR is allowed if there are insignificant or de minimis amounts of CCR within those free liquids or if it moistens the CCR and does not result in free liquids.
Controlling the flow rate	A smooth, homogenous flow of materials reduces surface disturbances and reduces the amount of dust generated.

Description of Control Measures	Explanation of How the Measures Selected are Applicable and Appropriate for Site Conditions
Using telescopic chutes	In the event the mixers are not functioning to condition the ash, during dry loadout, a telescopic chute shall be used to reduce the distance that the material travels while exposed to open air which will aid to minimize dust created by the drop into the truck.
Using skirting	Skirting helps keep dust inside the structure during loading into the truck.

3.4 U4 Bed Ash Silo Loadout

Identification: Truck loadout from Unit 4 Bed Ash Silo is transported to the landfill via bulk truck or dump truck. It is shown in Appendix A as Item 4 and pictured in Figure 3-4. Dust control measures are described in Table 3-5. Maintenance records are in kept in the ALM system.

As a best management practice, visual observations are made daily and recorded monthly in a log book. Visual observations should be made by a qualified individual or under the direction of a qualified individual who understands EPA Method 22 or EPA Method 9.

As a result of visual observation, additional control measures deemed necessary to minimize fugitive dust may be implemented at the Owner/Operator's discretion.

Figure 3-4: U4 Bed Ash Loading Operation

Table 3-5: U4 Bed Ash Silo Loadout Control Measures

Description of Control Measures	Explanation of How the Measures Selected are Applicable and Appropriate for Site Conditions
Controlling the flow rate	A smooth, homogenous flow of materials reduces surface disturbances and reduces the amount of dust generated.
Using telescopic chutes	A telescopic chute shall be used to reduce the distance that the material travels while exposed to open air which will aid to minimize dust created by the drop into the truck.
Using bulk tank trucks	A closed truck will prevent fugitive dust from escaping during loading and travel.

3.5 U4 Fly Ash Silo Loadout

Identification: Truck loadout from Unit 4 Fly Ash Silo is transported to the landfill via dump truck. It is shown in Appendix A as Item 5 and pictured in Figure 3-5. Dust control measures are described in Table 3-6. Maintenance records are in kept in the ALM system.

As a best management practice, visual observations are made daily and recorded monthly in a log book. Visual observations should be made by a qualified individual or under the direction of a qualified individual who understands EPA Method 22 or EPA Method 9.

As a result of visual observation, additional control measures deemed necessary to minimize fugitive dust may be implemented at the Owner/Operator's discretion.

Figure 3-5: U4 Fly Ash Loading Operation

Table 3-6: U4 Fly Ash Silo Loadout Control Measures

Description of Control Measures	Explanation of How the Measures Selected are Applicable and Appropriate for Site Conditions
Adding water as needed	The application of water suppresses dust formation during the drop into the truck. Wetting CCR with water is acceptable as it serves to condition the CCR material to a moisture content that will prevent wind dispersal. Wetting CCR is allowed if there are insignificant or de minimis amounts of CCR within those free liquids or if it moistens the CCR and does not result in free liquids.
Controlling the flow rate	A smooth, homogenous flow of materials reduces surface disturbances and reduces the amount of dust generated.
Using telescopic chutes	In the event the mixers are not functioning to condition the ash, during dry loadout, a telescopic chute shall be used to reduce the distance that the material travels while exposed to open air which will aid to minimize dust created by the drop into the truck.
Using skirting	Skirting helps keep dust inside the structure during into the truck.

3.6 Gypsum Waste

Identification: Gypsum waste is stored in a pile and loaded via a loader into a dump truck for transportation to the landfill. It is shown in Appendix A as Item 6 and pictured in Figure 3-6. Dust control measures are described in Table 3-7. Maintenance records are in kept in the ALM system.

As a best management practice, visual observations are made daily and recorded monthly in a log book. Visual observations should be made by a qualified individual or under the direction of a qualified individual who understands EPA Method 22 or EPA Method 9.

As a result of visual observation, additional control measures deemed necessary to minimize fugitive dust may be implemented at the Owner/Operator's discretion.

Figure 3-6: Gypsum Pile and Loadout Operations

Table 3-7: Gypsum Waste Control Measures

Description of Control Measures	Explanation of How the Measures Selected are Applicable and Appropriate for Site Conditions
Adding water as needed	The application of water suppresses dust formation during the drop into the truck. Wetting CCR with water is acceptable as it serves to condition the CCR material to a moisture content that will prevent wind dispersal. Wetting CCR is allowed if there are insignificant or de minimis amounts of CCR within those free liquids or if it moistens the CCR and does not result in free liquids.
Removal of waste to landfill	Removal of gypsum waste to the landfill prevents dust buildup.

3.7 Ash Pond

Identification: The Ash Pond is used to store CCR waste that is transferred to landfill via a dump truck. It is shown in Appendix A as Item 7 and pictured in Figure 3-7. Dust control measures are described in Table 3-8. Maintenance records are in kept in the ALM system. Fugitive dust emissions could result from the unloading and removal of CCR waste from the pond.

As a best management practice, visual observations are made daily and recorded monthly in a log book. Visual observations should be made by a qualified individual or under the direction of a qualified individual who understands EPA Method 22 or EPA Method 9.

As a result of visual observation, additional control measures deemed necessary to minimize fugitive dust may be implemented at the Owner/Operator's discretion.

Figure 3-7: Ash Pond

Table 3-8: Ash Pond Control Measures

Description of Control Measures	Explanation of How the Measures Selected are Applicable and Appropriate for Site Conditions
Adding water as needed at the bottom ash loading area	The application of water suppresses dust formation. Wetting CCR with water is acceptable as it serves to condition the CCR material to a moisture content that will prevent wind dispersal. Free liquids resulting from wetting is allowed as long as drainage is back to the pond. Wetting is only needed if fugitive dust emissions are deemed outside of the Pond vicinity.
Remove CCR to Landfill	Any fugitive dust noted in temporary piles could be addressed by removing the CCR and hauling it in covered trucks to the landfill.

3.8 Landfill

Identification: The Landfill is used for long term storage of CCR waste. It is shown in Appendix A as Item 8. Dust control measures are described in Table 3-9 and shown in Figure 3-8. Maintenance records are maintained by the landfill contractor. Fugitive dust emissions result from wind erosion, material loading/unloading (i.e., mechanical disturbance), work performed moving CCR material, and capping the landfill.

As a best management practice, visual observations are made daily and recorded monthly in a log book. Visual observations should be made by a qualified individual or under the direction of a qualified individual who understands EPA Method 22 or EPA Method 9.

As a result of visual observation, additional control measures deemed necessary to minimize fugitive dust may be implemented at the Owner/Operator's discretion.

Figure 3-8: Truck Unloading at Landfill

Table 3-9: Landfill Control Measures

Description of Control Measures	Explanation of How the Measures Selected are Applicable and Appropriate for Site Conditions
Adding water as needed	The application of water suppresses dust formation. Wetting CCR with water is acceptable as it serves to condition the CCR material to a moisture content that will prevent wind dispersal. Wetting CCR is allowed if there are insignificant or de minimis amounts of CCR within those free liquids or if it moistens the CCR and does not result in free liquids.
Landfill final cover system	Once the landfill CCR reaches its final elevation, it will be closed with a cover system as indicated in the Kentucky Division of Waste Management Permit.

3.9 Hauling to Landfill

Identification: Roads are used by trucks to transport CCR waste to the landfill. It is shown in Appendix A as Item 9. Dust control measures are described in Table 3-10 and shown in Figure 3-9. Maintenance records are maintained by the landfill contractor.

As a best management practice, visual observations are made daily and recorded monthly in a log book. Visual observations should be made by a qualified individual or under the direction of a qualified individual who understands EPA Method 22 or EPA Method 9.

As a result of visual observation, additional control measures deemed necessary to minimize fugitive dust may be implemented at the Owner/Operator's discretion.

Figure 3-9: Landfill Watering Trucks

Table 3-10: Hauling to Landfill Control Measures

Description of Control Measures	Explanation of How the Measures Selected are Applicable and Appropriate for Site Conditions
Adding water as needed	The application of water suppresses dust formation. Wetting CCR with water is acceptable as it serves to condition the CCR material to a moisture content that will prevent wind dispersal. Wetting CCR is allowed if there are insignificant or de minimis amounts of CCR within those free liquids or if it moistens the CCR and does not result in free liquids.
Control vehicle speed	Haul road emissions are generated by the disturbance of dust caused by moving traffic. Slower traffic creates less dust.
Cover trucks	The ash trucks shall be covered with a tarp during transportation to the landfill. This reduces the amount of dust that is generated by wind passing over the hauled material due to the motion of the truck.
Limit vehicle traffic	Landfill haul roads are labeled to reduce unnecessary traffic.

4.0 PROCEDURES FOR LOGGING CITIZEN COMPLAINTS

A requirement to the CCR fugitive dust control plan per the CCR Rule (see Section 257.80(b)(3)) indicates that owners and operators of all CCR units will implement formal procedures to log citizen complaints involving CCR fugitive dust events. These complaints must then be included as part of the annual CCR fugitive dust control report. The annual report must be placed in the CCR Operating Record and on the owner's CCR public website.

EKPC has established a webform on the CCR Rule Compliance Data and Information website to log citizen complaints. This webform will be used by the public to submit their complaints related to fugitive dust. Complaints received via another method (such as phone, mail, or email) will be entered into the webform and officially submitted by the EKPC personnel who received the complaint. After receiving the citizen complaint, EKPC personnel will manually log the complaint on a Microsoft Excel worksheet that will be used to track all complaints and all resolutions to those complaints. This Excel worksheet will be included in the annual CCR fugitive dust control report to meet the requirements of the CCR Rule. A screenshot of the citizen complaint webform and the citizen complaint log can be found in Appendix B.

5.0 PERIODIC ASSESSMENT AND ANNUAL REPORT

EKPC may amend the written CCR fugitive dust control plan at any time. However, EKPC must amend the written plan whenever there is a change in conditions that would substantially affect the written plan, such as, but not limited to, the construction and operation of a new CCR unit. The plan and any subsequent amendments must be certified by a qualified professional engineer. The first annual report must be completed no later than 14 months after placing the initial CCR fugitive dust control plan in the facility's Operating Record. Subsequent annual reports are to be placed in the Operating Record 12 months following the previous annual report. The initial CCR fugitive dust control plan must be placed in the facility's Operating Record no later than October 19, 2015.

Upon modification of the CCR Fugitive Dust Plan, the following steps must be taken:

- Certify plan by qualified professional engineer
- Place the updated CCR Fugitive Dust Plan in the Operating Record
- Notify affected plant personnel of new procedures
- Publish the updated CCR Fugitive Dust Plan to the CCR website within 30 days of placing in the Operating Record

EKPC is required to prepare an annual CCR fugitive dust control report that includes:

- A description of the actions taken by the owner or operator to control CCR fugitive dust,
- A record of all citizen complaints, and
- A summary of any corrective measures taken.

6.0 RECORD OF REVISIONS AND UPDATES MADE TO PLAN

Revision Number	Date	Revisions Made	By Whom
0	10/6/2015	Initial Compliance Plan	Burns & McDonnell

APPENDIX A - SITE MAP OF FUGITIVE DUST SOURCES INCLUDED IN PLAN

REDACTED

Subject to Motion for Confidential Treatment.

REDACTED

Subject to Motion for Confidential Treatment.

APPENDIX B - FUGITIVE DUST CITIZEN COMPLAINT DOCUMENTS

Your Contact Information

If you do not provide your name or other information, it may be impossible for us to refer, respondto, or investigate your compliant.

First/Given Name

Last/Family Name:

Street Address:

City/Town:

Zip/Post Code:

Email Address:

Your email address is required if you would like us to send you a reference number for your complaint. The reference number will make it possible for you to access your complaint letter.

Phone Number:

Your Complaint

Power Station Cooper Power Station

Date:

Time:
Hour: 1 **Minutes:** 01 **AM/PM** AM

Location:

Weather Conditions:

What is your complaint?

Submit

East Kentucky Power Cooperative

CCR Rule Compliance

Fugitive Dust Citizen Complaint Log

LAST UPDATED: 15-Dec-15

REFERENCE NUMBER	STATION	UNIT/ LOCATION	DESCRIPTION	REMEDIAL ACTION REQUIRED	PLANT LEVEL RESPONSIBLE PERSON(S)	DATE OF COMPLAINT	DATE OF INITIATING REMEDY	DATE REMEDY COMPLETED	ACTION CLOSED (Y/N)	WORK ORDER NO.	LOCATION OF FILES ON H: DRIVE

BURNS McDONNELL

CREATE AMAZING.

Burns & McDonnell World Headquarters
9400 Ward Parkway
Kansas City, MO 64114
O 816-333-9400
F 816-333-3690
www.burnsmcd.com

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2017-00376
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 5
RESPONSIBLE PARTY: Jerry B. Purvis

Request 5. Refer to the Purvis Testimony at pages 16-17 regarding beneficial reuse.

Request 5a. Under the CCR Rule, who will make the determination as to whether a CCR material qualifies for beneficial reuse?

Response 5a. A qualified professional or a professional engineer hired by EKPC will assess, analyze and make the recommendation as to whether or not a CCR material qualifies for beneficial reuse as well as to the nature of its encapsulation or unencapsulation. EKPC is open to beneficial re-use of CCR materials and takes advantage of those opportunities when the business case is advantageous to its owner-members.

Request 5b. State whether CCR generated at the Spurlock Station could qualify for beneficial reuse under the CCR Rule.

Response 5b. Some of the CCR generated at Spurlock Station has and does qualify under the CCR regulations to be used as beneficial re-use. The CCR regulations limit unencapsulated uses, not to exceed 12,400 tons each. EKPC contracts with some local city and county road departments who mix and blend bottom ash with their road salt. Salt blended with bottom ash is used to de-ice city and county roads in order for local citizens to achieve better traction during inclement weather.

Synthetic gypsum which results from the scrubbing process at coal-fired power plants, can be used in the production of wall board and in certain cases as a soil amendment to grow crops. Fly ash can be and has been used in road bed materials, cementitious flowable fills, and in pozzolonic concrete blocks. Other fly ashes can be used in the production of bowling balls.

EKPC has entertained several opportunities over the years to use CCR as beneficial re-use and has enlisted the University of Kentucky Center for Applied Research to find new ways to utilize CCR.

EAST KENTUCKY POWER COOPERATIVE, INC.
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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 6
RESPONSIBLE PARTY: Jerry B. Purvis

Request 6. Refer to the Purvis Testimony at page 19, lines 21-23. State whether EKPC is considering constructing a new landfill at the Spurlock Generating Station. If so, explain the need for a new landfill.

Response 6. EKPC is planning to construct a new landfill at Spurlock Station contiguous with the existing landfill, and has submitted a Registered Permit-by-Rule application to the Kentucky Division of Waste Management under 401 KAR Chapter 46. Currently, EKPC has approximately 6,000,000 cubic yards ("cy") of permitted, unconstructed capacity remaining in the Spurlock Landfill, and plans on 1,800,000 cy of CCR to be generated and placed in the landfill per year. This provides slightly more than three years of capacity for disposal with normal operations, which includes small incremental volumes of ash removed from the existing ash pond. The existing available capacity diminishes to two years of capacity for normal operations plus the ash pond removal project of approximately 1,750,000 cy. Hence, the need for additional disposal capacity and permitted landfill space. EKPC plans to dispose of the ash resulting from the Spurlock

ash pond clean closure by removal project in the permitted area associated with Peg's Hill Registered Permit-by-Rule application.

Uncertainty and risk exist with pending litigation (*Leach vs. Kentucky Energy and Environmental Cabinet & LG&E*) regarding the promulgated state CCR regulations under 401 KAR 46. Due to risk associated with pending litigation in Franklin Circuit Court to the state's CCR regulations under Chapter 46, the time required for permitting and engineering timelines, normal ash generation and disposal activities, and the capacity consumed by the ash pond clean closure by removal project, EKPC has submitted the Registered Permit-by-Rule in order to ensure uninterrupted operations. An interim agreement has been negotiated by the Kentucky Energy and Environmental Cabinet with plaintiffs and interveners that allow pond closure by removal and landfill expansions for capacity under Chapter 46, the Registered Permit by Rule Program. As a prudent utility, EKPC plans and permits landfill space ahead of need so as to not exercise regulatory agencies in emergency situations.

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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 7
RESPONSIBLE PARTY: Jerry B. Purvis

Request 7. Refer to the Purvis Testimony at page 22, lines 12-14. State whether EKPC anticipates that the Kentucky Division of Water, upon its review of EKPC's Kentucky Pollutant Discharge Elimination System renewal permit, and using a reasonable potential analysis, will find that the pollutants discharged at the Spurlock Station will meet water quality standards.

Response 7. EKPC's renewal application is pending the review and determination by the Kentucky Division of Water ("KDOW"). EKPC plans to meet the EPA's National Effluent Limitation Guidelines and the anticipated new water quality KDOW finalize and issue a new and unanticipated water quality-based effluent limitation based on the reasonable potential analysis for Spurlock Station in EKPC's permit renewal application, EKPC has requested a compliance plan, schedule and possible re-opener to the permit to allow it the opportunity to develop or modify the compliance plans.

EAST KENTUCKY POWER COOPERATIVE, INC.
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RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 8
RESPONSIBLE PARTY: Craig A. Johnson

Request 8. Refer to the Direct Testimony of Craig A. Johnson ("Johnson Testimony") at page 3 regarding the Spurlock Station.

Request 8a. Explain why Unit 1 has a cold-side electrostatic precipitator ("ESP") and Unit 2 has a hot-side ESP.

Response 8a. Unit 1 went into commercial operation in 1977 with a hot-side ESP. When the Selective Catalytic Reduction ("SCR") was installed in 2002, the best technology application was to build new pollution control equipment that included the SCR, a new cold-side ESP and new air heater. The original hot-side ESP was demolished right after the SCR installation. The hot-side ESP on Unit 2 is original equipment.

Request 8b. Explain why the Gilbert Unit and Unit 4 are equipped with dry scrubbers and Units 1 and 2 have wet scrubbers.

Response 8b. The Gilbert Unit and Unit 4 use Circulating Fluidized Bed ("CFB") combustion technology. CFB combustion is different than the traditional pulverized coal combustion used on Units 1 and 2. The limestone used as an absorbent is pulverized and blown directly into the main furnace with CFB technology. Ninety percent of the sulfur is removed during the combustion of coal in the main furnace. The back end pollution control devices for sulfur removal for Gilbert and Unit 4 are dry scrubbers which reduce the sulfur in the flu gas by an additional 80%. On Units 1 and 2, all sulfur removal is done by the wet scrubbers after the combustion process. At the time of the technology selection for Units 1 and 2, wet scrubbers had a long history of operation in the electric industry and dry scrubbers large enough to remove the required amount of sulfur would have been considered new and unproven technology.

Request 8c. For each of the units at the Spurlock Station and the Cooper Station, provide the annual capacity factors for the time period 2015-2017.

Response 8c. The chart below indicates the annual capacity factors for each unit at Cooper and Spurlock for the requested time period.

Unit	2015	2016	2017
Cooper 1	25%	23%	10%
Cooper 2	27%	21%	17%
Spurlock 1	44%	71%	55%
Spurlock 2	66%	69%	50%
Spurlock 3 (Gilbert)	58%	74%	66%
Spurlock 4	68%	79%	58%

EAST KENTUCKY POWER COOPERATIVE, INC.
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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 9
RESPONSIBLE PARTY: Craig A. Johnson

Request 9. Refer to the Johnson Testimony at page 4, lines 2-4. Explain in detail what the Work Process Optimization process entails.

Response 9. Work Process Optimization is a process employed by EKPC to identify, plan, schedule, document, measure, analyze, and audit maintenance work in our plants. It includes methods and tools to manage backlogs, and develop and review both preventative maintenance and repair/response activities. The process is heavily integrated in a computer maintenance management system that is used to initiate, track, and measure work orders that are dispatched to appropriate work groups. The work groups plan their activities based on a prioritization ranking, execute the work, and then provide feedback that is used for analysis and continuous improvement. The overall objective is to achieve low cost maintenance through optimized work processes. The goal is to create a standardized, consistently executed reliability process, improve communication and coordination between stakeholders, and increase the efficiency and effectiveness of the work being performed. This approach to managing maintenance work is common in our industry and is considered a "best-in-class practice".

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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 10
RESPONSIBLE PARTY: Craig A. Johnson

Request 10. Refer to the Johnson Testimony at page 6, lines 12-16. State whether the Cooper Station is currently in compliance with the CCR and ELG Rules.

Response 10. Cooper Station is currently in compliance with the CCR and ELG regulations. EKPC does not anticipate that projects or modifications will be necessary to continue to operate Unit 1 and Unit 2 at Cooper in compliance with CCR and ELG regulations.

EAST KENTUCKY POWER COOPERATIVE, INC.
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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 11
RESPONSIBLE PARTY: Craig A. Johnson

Request 11. Refer to the Johnson Testimony, pages 7-10, regarding the alternatives evaluated by EKPC. Provide the incremental annual operating and maintenance expense for each alternative.

Response 11. Of the initial five options considered, EKPC completed financial analyses for only the proposed project and the conversion of Units 1 and 2 to natural gas. In 2024, the incremental operation and maintenance expense for the Unit 1 and Unit 2 gas conversion alternative is projected to be $26.6 million less than the current operating and maintenance expense for those units. This expense was escalated annually in the financial evaluation. EKPC did not analyze the remaining three alternatives for reasons discussed in the Direct Testimony of Robin Hayes on page 3.

EAST KENTUCKY POWER COOPERATIVE, INC.
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RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 12
RESPONSIBLE PARTY: Craig A. Johnson

Request 12. Refer to the Johnson Testimony at page 11, lines 3-4. Provide the basis for the estimated $3.12 million in stranded costs associated with the proposed CCR/ELG Project.

Response 12. The estimated stranded cost of $3.12 million was determined based upon EKPC's expected net book value ("NBV") of assets to be retired as a direct result of the CCR/ELG Compliance Project on the dates when they will be taken out of service, per the planned project schedule. The table below is a breakdown of the respective assets and their associated NBVs at retirement.

System	Description	Net Book Value
Units 3 & 4 Dry Scrubber	Rotary Recycle Mixers	$1,272,979
Units 3 & 4 Fly Ash Silo	Ash Pugmill Mixers	$459,542
Unit 1 Bottom Ash System	All Ash Conveyance Equipment	$271,418
Units 1 & 2 Fly Ash System	Fly Ash Transfer Equip, Building, Piping, Pugmill Mixers, Pumps, Electrical	$503,177
Unit 2 Bottom Ash System	All Ash Conveyance Equipment	$610,381
	Total Retirement Asset Value	$3,117,497

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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 13
RESPONSIBLE PARTY: Craig A. Johnson

Request 13. Refer to the Johnson Testimony at page 12, lines 6-14, regarding the fly ash storage silos.

Request 13a. What is the capacity of the current and proposed fly ash storage silos?

Response 13a. The current silo and the proposed silo are planned to provide approximately 4,000 tons of fly ash storage each.

Request 13b. What is the average daily fly ash production at the Spurlock Station?

Response 13b. Ash production varies from day to day based on the amount of ash in the coal, equipment availability, and demand. Based on data from the last five years, the total average annual ash production for Spurlock Station was 4,148 tons/day. Ash production can be significantly higher or lower than this value based on the factors above.

Request 13c. Refer also to the Johnson Testimony at pages 16-17. Fully explain the need for the silo as a redundant process for the removal of dry fly ash, given that the fly ash will be transported to the silo via vacuum exhausters and pressure blowers and then ultimately transported by truck to the Spurlock landfill.

Response 13c. This project will eliminate the ash pond, leaving only one silo as the temporary repository for ash prior to removal by truck to the Spurlock landfill. Should there be an equipment or environmental control malfunction in the silo, or if extensive maintenance were required for the silo which is currently over 30 years old, neither Spurlock Unit 1 nor Spurlock Unit 2 would generate power. If there were a transportation problem with hauling, and a single silo filled, there would be no additional storage capacity to provide enough time to address the situation. The ash transfer station will also have redundant features, making the existing silo the only single-contingency failure point in the system, unless a second silo is added.

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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 14
RESPONSIBLE PARTY: Craig A. Johnson

Request 14. Refer to the Johnson Testimony, pages 13 and 18. Confirm that EKPC is not requesting a CPCN for a Spurlock landfill expansion in this proceeding.

Response 14. EKPC is not requesting a CPCN for a Spurlock landfill expansion in this proceeding.

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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 15
RESPONSIBLE PARTY: Craig A. Johnson

Request 15. Refer to the Johnson Testimony, pages 17 and 19 and Exhibit RH-1, page 1 of 2. Confirm that EKPC's proposed timeline will eliminate wet ash handling at the Spurlock Stations by approximately 2021.

Response 15. EKPC confirms that installation and commissioning of dry ash transport systems for Spurlock Unit 1 and Spurlock Unit 2 are planned for completion such that wet ash handling will be eliminated by approximately 2021.

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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 16
RESPONSIBLE PARTY: Craig A. Johnson

Request 16. Refer to the Johnson Testimony at page 18, lines 13-15.

Request 16a. State whether the expanded portion of the Spurlock landfill will be compliant with the CCR Rule.

Response 16a. The Peg's Hill Landfill at Spurlock Station will meet all design requirements contained within the CCR Rule. The design includes a composite liner system that consists of an upper component of 60-mil high-density polyethylene geomembrane liner and a lower component consisting of a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1 x 10-7 centimeters per second. The leachate collection system has been designed with a geocomposite liner, in conjunction with an aggregate encased piping network, to maintain less than a 30-centimeter depth of leachate over the composite liner. All run-on and run-off storm water controls have been designed to contain and convey the storm water generated in a 25-year, 24-hour storm event.

Request 16b. Provide the size and estimated cost of the expanded portion of the Spurlock landfill.

Response 16b. The Peg's Hill landfill development at Spurlock Station is being permitted for a total of 181 acres of disturbance. This includes 102 acres for waste limits, 2 acres for sediment ponds, and 77 acres of ancillary disturbances associated with all required compliance structures (e.g. groundwater monitoring points, sediment control structures, diversion ditches, roadways, underdrains, and borrow areas). This expansion will provide 25,000,000 cubic yards of capacity. EKPC plans for generation and disposal of 1,800,000 cubic yards of CCR per year; resulting in a Peg's Hill Landfill life of approximately 14 years, assuming normal operating conditions.

The initial phases of construction in the development of Peg's Hill are included in EKPC's current 3-year Capital Work Plan. These sub-projects include construction of sediment ponds, stream mitigation for surface water impacts of the development of the landfill, and the first cell for waste disposal. Costs for the initial phases are currently estimated to total $10,300,000. Additional project costs would be incurred for the construction of subsequent cells.

EAST KENTUCKY POWER COOPERATIVE, INC.
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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 17
RESPONSIBLE PARTY: Craig A. Johnson

Request 17. Refer to the Johnson Testimony at page 21, lines 6-10. Fully explain why EKPC chose to retain Burns & McDonnell Engineering Company, Inc. and whether EKPC considered other consulting firms to assist EKPC with CCR and ELG Rules compliance efforts.

Response 17. Burns & McDonnell was selected based on performance history with EKPC and the technical strength of their staff to support CCR and ELG compliance efforts. More details are included in the attached internal justification that was presented in support of the selection of Burns & McDonnell for this project, and a listing of their CCR/ELG experience.

Sole Source Justification
Spurlock CCR & ELG Compliance Project – Engineering Services
March 2017

Burns & McDonnell Engineering Company, Inc (BMCD) was selected by EKPC for a major project in 2008 after competitive solicitation and extensive evaluation of 4 major Engineering firms that had demonstrated expertise providing engineering services in the power industry (BMCD, Stanley, Black & Veatch, Sargent & Lundy, LLC). Since that time, BMCD has performed a number of projects and technical studies for EKPC on both a sole source and competitively selected basis.

Since 2012, during the long and complicated development of the CCR and ELG regulations by EPA, BMCD served as part of EKPC's evaluation team, providing technical support and expert input as to the interpretation of the regulations and the development of viable solution alternatives.

Most recently BMCD completed a Project Scoping Report that provides the culmination of our efforts to establish a preliminary design, sequencing, and integration of the project components necessary to achieve compliance with CCR & ELG at our Spurlock Generating Station. Pending EK Board approval of the award of an RUS 211 Engineering Services Contract to BMCD (with Limited Notice to Proceed), detailed design will begin for the project.

Due to the high degree of technical involvement by BMCD in the Spurlock design and their previously demonstrated expertise to assist EKPC with implementing project plans of this size and complexity, Staff recommends an internal sole source approval so the contract can be presented to the EKPC Board for approval. This is a large, critical project with a long duration – hiring a known and substantial entity, that is intimately familiar with our plant and our plan is both prudent and cost effective.

Additional factors considered when arriving at this sole source recommendation.

- The currently proposed technical solution chosen for ELG is very innovative. BMCD has a successful track record with the implementation of this type of technology for the power industry.
- BMCD also helped with the selection of the PAX system for bottom ash removal resulting in a $20 million savings to the project. It is not advisable to embark on a project like this with a new firm that may not have the experience with the installation of this cutting edge equipment.
- BMCD is ranked #14 in Engineering News Records Top 500 Engineering Firms (based on design services revenue) and #1 by ENR in the electric power industry sector. (see attached)
- They have a large and well qualified technical staff with a solid "bench" should the need arise (5300 employees).
- They are employee owned and their growth strategy does not rely on mergers & acquisitions, which means consistency and central values ("what you see is what you get"), not a brochure based proposal that is assembled from various disparate subsidiaries.
- BMCD is ranked #16 in Fortune's 2016 100 Best Companies to Work For – their employees have a vested interest in assuring our success.

BURNS McDONNELL

Summary of CCR/ELG Compliance Efforts

Client Name	Total MW	Master Planning Study/Support	Technology Assessment	Project Definition/Preliminary Design	Owner's Engineer	Major Equipment Specification	EPC Contractor	EPC Specification	Detailed Design	Construction Support	Description
AEP	721		X								Bottom ash technology assessment/consulting
AEPCO	408	X									Study to review bottom ash conversion options and pond closure impacts
Alcoa	755	X	X								Study to review bottom ash and fly ash conversion options
Alliant Energy	1,368	X	X	X		X					Compliance planning studies, pond closure cost estimates, bottom ash conversion technology assessments and equipment specifications
Basin Electric Cooperative	3,000	X									CCR/ELG Regulatory Impact assessments
Big Rivers Electric Corporation	1,950	X	X	X	X						CCR/ELG Compliance Planning efforts, Pond Closure studies, Ash Handling/FGD segregation studies
City Water Power & Light (Springfield, IL)	663	X	X	X	X	X			X		CCR/ELG compliance planning study, specs for under boiler conveyor and thermal ZLD system, design for
Cleco	4,263	X	X	X							Fleetwide Environmental compliance study, Bottom ash technology assessments, pond closure studies, and CCR/ELG project definition studies
Confidential - Midwest US	5,656	X									CCR Compliance planning studies
Confidential - Midwest US	2,147			X		X	X		X	X	EPC Contractor for remote bottom ash conversions and thermal ZLD
Confidential Client - Midwest	229			X	X				X		Pond modifications for NPDES permit compliance
Confidential Client - Northeast US	1,100	X									Study to review bottom ash conversion options
Confidential Client - Southeast US	3,607	X									CCR/ELG Regulatory Impact assessments
Confidential Client - Southeast US	1,835				X						Consulting support - FGD operations
Confidential Client - Southwest US	370	X	X								Bottom ash technology assessment
Deseret	500	X									CCR Compliance planning study
DTE	4,676	X	X	X	X						Water balance verification, compliance schedule development, technology alternatives assessment, additional tasks ongoing
Duke Energy	18,666	X		X		X			X	X	Water Redirection Program = Remote SFCs, Under Boiler SFC, FGD - Phys/Chem + Bio, non-CCR relocation
Dynegy	628	X									ELG Study
East Kentucky Power Cooperative	2,117	X	X	X	X				X		CCR/ELG Studies, Project Definition Studies, Pond Closure Design
Hoosier	1,314	X	X	X	X				X		CCR/ELG Studies, design for FGD treatment system modifications
Kansas City Kansas Board of Public Utilities	261	X	X								CCR documentation, groundwater monitoring, compliance schedule development, and support for plant-led technology evaluation
Kansas City Power & Light	5,351	X	X	X	X	X			X	X	CCR/ELG compliance studies, Under-boiler SFC retrofits, Under Boiler SFC on new unit, technology evaluations, water balance updates and verification

BURNS McDONNELL

Summary of CCR/ELG Compliance Efforts

Client Name	Total MW	Master Planning Study/Support	Technology Assessment	Project Definition/Preliminary Design	Owner's Engineer	Major Equipment Specification	EPC Contractor	EPC Specification	Detailed Design	Construction Support	Description
Louisville Gas & Electric / Kentucky Utilities	6,010	X	X	X	X	X		X		X	Underboiler submerged chain conveyor system retrofits, remote submerged chain conveyor retrofits, pneumatic bottom ash system specifications, fly ash system retrofits, and gypsum dewatering system retrofits.
Luminant	4,358	X									CCR impact assessment
MidAmerican Energy Company	3,404	X	X	X	X				X		CCR/ELG planning studies, water balance verification, bottom ash technology evaluations, CCR pond closure design
Minnesota Power	1,373	X	X	X		X			X	X	CCR/ELG planning studies, water balance verification, bottom ash technology evaluations, separated the bottom ash system from the combined bottom ash and fly ash transfer system at one site
NIPSCO	3,087	X	X	X							CCR Compliance Planning, study to review bottom ash conversion and pond closure options
NV Energy	1,029	X									Water balance update
Oklahoma Gas and Electric	2,854	X	X	X	X				X		CCR compliance study and plant modifications, bottom ash conversion technology assessment and business case studies
OPPD	1,312	X									Water balance update
Owensboro Municipal Utilities	445	X	X	X							CCR/ELG Compliance Study
Pacificorp	458	X	X	X							CCR Compliance Study, Bottom Ash Alternatives Assessment
Platte River Power Authority	294	X	X	X	X	X					CCR planning studies, bottom ash equipment specifications
Public Service New Hampshire	460	X	X	X	X	X			X	X	Thermal ZLD design, bottom ash technology evaluation, water balance update
San Miguel Electric Cooperative	410	X	X	X							CCR compliance planning study - bottom ash conversions and pond closure
Seminole Electric Cooperative	1,430	X	X	X							Bottom ash conversion studies
SMEPA	400	X	X								CCR/ELG impact assessment
Vectren Corporation	945	X	X								CCR/ELG compliance planning study
Westar Energy	2,958	X	X	X	X				X		Study to review wastewater treatment and bottom ash conversion options, scrubber modfications, design for constructed wetlands treatment system
Western Farmers Electric Cooperative	446	X	X	X	X	X					CCR compliance planning study, bottom ash technology review, under boiler conveyor conversion specifications
Xcel Energy	2,129	X	X								CCR compliance study, water balance review
	95,387										

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2017-00376
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 18
RESPONSIBLE PARTY: Craig A. Johnson

Request 18. Refer to the Johnson Testimony at page 22, lines 11-14. Provide in more detail how the Cooper Station Retrofit Project and the Cooper Unit 1 Duct Reroute Project were timely completed, on budget, and resulted in high quality product under the multiple contract approach.

Response 18. EKPC sponsored the fully integrated schedule for each of these projects, thereby managing float and coordination of handoffs between the various equipment and construction contracts. Because a single critical path for the entire project could be statused, verified, and gauged by EKPC according to our specified scheduling standards, we could project the schedule weeks ahead to identify potential problems and work with contractors to mitigate them. By managing the project with multiple contracts, EKPC cuts out the profit associated with Engineer/Procure/Construct (EPC) or Single Prime Construction contracts. When scope, schedule, material, or other changes or critical decisions are necessary, EKPC makes a determination based on value or advantage to the Cooperative as opposed to a profit motive by a single-managing or EPC contractor. Because every contract is written directly with EKPC, the

project team bids, evaluates, and administers each of them and has included pricing structure and terms favorable to EKPC. This also results in reliable tracking and projections of project cost throughout the course of the project. By establishing the contractual relationship with specific equipment vendors, EKPC has direct influence on and involvement in quality and service which are not only valuable for the installation, check out, and start-up of equipment and systems but also potentially for future maintenance. Additionally, the EKPC project team on site to manage the project via multiple contracts is involved in activities on a daily basis which not only provides an excellent system for quality control, but also critical training to support long-term ownership of the assets.

This multiple contract approach was used for the Cooper Station Retrofit Project and the Cooper 1 Duct Reroute Project and resulted in both projects being completed on time and within their respective estimates. The installed systems and equipment have operated per EKPC's expectations, and in accordance with contractual requirements and guarantees.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2017-00376
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 19
RESPONSIBLE PARTY: Robin Hayes

Request 19. Refer to the Direct Testimony of Robin Hayes ("Hayes Testimony") at page 3, regarding the EKPC Spurlock Gas Conversion Study Report. Provide a copy of that report.

Response 19. A copy of the EKPC Spurlock Gas Conversion Study Report is provided on pages 2 through 32 of this response.

BURNS McDONNELL

EKPC Spurlock Gas Conversion Study

EAST KENTUCKY POWER COOPERATIVE

East Kentucky Power Cooperative

Burns & McDonnell Project No. 87633

Revision 0
7/5/2016

EKPC Spurlock Gas Conversion Study

Prepared for

East Kentucky Power Cooperative
Burns & McDonnell Project No. 87633

Revision 0
7/5/2016

Prepared by

Burns & McDonnell Engineering Company, Inc.
Kansas City, Missouri

INDEX AND CERTIFICATION

East Kentucky Power Cooperative
Gas Conversion Study
Spurlock Power Plant

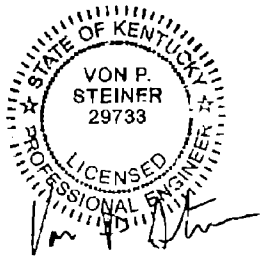
Report Index

Certification

I hereby certify, as a Professional Engineer in the Commonwealth of Kentucky, that the information in this document was assembled under my direct supervisory control. This report is not intended or represented to be suitable for reuse by the East Kentucky Power Cooperative or others without specific verification or adaptation by the Engineer.

Von Steiner, KY #29733
BMcD Engineer, P.E. (state & license)

Date: 7/5/2016



Jul 5 2016

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1.0 EXECUTIVE SUMMARY

East Kentucky Power Cooperative (EKPC) operates the Hugh L. Spurlock Generating Station (Spurlock) in Maysville, KY. Spurlock consists of four operating coal-fired units: Unit 1 is a 330 MW pulverized coal fired unit built in 1971, Unit 2 is a 585 MW pulverized coal fired unit built in 1981, Unit 3 is a 300 MW circulating fluidized bed (CFB) unit built in 2002, and Unit 4 is a 300 MW circulating fluidized bed (CFB) unit built in 2006.

EKPC is evaluating natural gas conversion of Spurlock Units 1, 2, 3 and 4 and a future addition of two 442 MW natural gas fired 1-on-1 combined-cycle gas turbine (CCGT) units at their Spurlock facility in Maysville, KY. Burns & McDonnell (BMcD) has completed high-level budgetary cost estimates which include the cost of converting Units 1 through 4 to burn natural gas and coal. Additionally, budgetary costs of a new natural gas pipeline to the facility were estimated. Gas pipeline sizing and cost estimates were based, in part, on estimated natural gas flow rates for various operational scenarios for Units 1 and 2 including conversions to burn natural gas at 100%, 75%, 50% and 25% with coal as the remainder fuel. Units 3 and 4 were evaluated for conversion to operate with 10% natural gas and the remaining fueled by coal. Two different natural gas pipeline interconnects were considered at Columbia Gas Transmission (Columbia Gas) and Texas Eastern Transmission Company, LP (TETCO) for the new natural gas pipeline to the site (routes shown in Attachment 1). The project total installed cost ranges from $222M to $286M with the size and location of the pipeline interconnect being a significant factor in the cost variability of the project (cost estimates provided in Attachment 2).

In addition to the cost estimate, a level 1 project schedule was prepared and is included in Attachment 3. The preliminary schedule indicates six years to complete the project from beginning of permitting to substantial completion. Lastly, Attachment 4 provides the expected permit matrix for natural gas conversion and pipeline construction.

2.0 INTRODUCTION

2.1 Project Background

EKPC operates the Spurlock Generating Station in Maysville, Kentucky, which consists of four units. Unit 1 is a 330 MW pulverized coal-fired balanced draft natural circulation, wall fired unit built in 1971. Unit 2 is a 585 MW pulverized coal-fired balanced draft natural circulation, tangentially fired unit built in 1981. Unit 3 is a coal-fired CFB boiler built in 2002. Unit 4 is a coal-fired CFB boiler built in 2006. Spurlock currently burns a range of eastern bituminous coals.

EKPC retained BMcD to evaluate and perform a feasibility study for a natural gas conversion of Units 1, 2, 3 and 4 at their Spurlock facility in Maysville, KY. This includes a new gas transmission line to Spurlock Station and the replacement of burners. Spurlock Unit 1 is a Babcock and Wilcox (B&W) opposed wall coal-fired boiler and has 24 burners. Spurlock Unit 2 is a B&W tangentially coal-fired boiler and has 20 burners. Units 3 & 4 are each 300 MW gross, Alstom circulating fluidized bed boilers that have four igniters. The operational scenarios being considered for Units 1, 2, 3 and 4 are listed below:

- 25% natural gas co-fire on Units 1 & 2 and 10% natural gas co-fire on Units 3 & 4
- 50% natural gas co-fire on Units 1 & 2 and 10% natural gas co-fire on Units 3 & 4
- 75% natural gas co-fire on Units 1 & 2 and 10% natural gas co-fire on Units 3 & 4
- 100% natural gas co-fire on Units 1 & 2 and 10% natural gas co-fire on Units 3 & 4

EKPC is also evaluating a future addition of two 442 MW natural gas fired 1-on-1 combined-cycle gas turbine (CCGT) units to the Spurlock facility. In addition, the gas pipeline has been sized to include a natural gas fired auxiliary boiler to provide 300,000 lb/hr of steam.

The objective of this evaluation is to develop a preliminary estimate of expected costs associated with modifications of Units 1 through 4 required for the natural gas conversion scenarios described above. Additionally, the evaluation is to develop a preliminary routing, sizing and expected cost estimates for a gas transmission line to Spurlock to support converting Spurlock Units 1 through 4, as noted above, to natural gas-fired and to have adequate additional capacity for the two future CCGT units and auxiliary boiler. It should be noted that this evaluation did not include any field environmental assessments for the two preliminary gas line routings which could impact the preliminary cost estimate and schedule.

In addition to the cost estimate, BMcD has provided initial estimates of the expected steam output, boiler thermal efficiency, and unit heat rates for each of the scenarios evaluated.

2.2 Limitations and Qualifications

Estimates and projections prepared by Burns & McDonnell relating to schedules, performance, construction costs, and operating and maintenance costs are based on our experience, qualifications and judgment as a professional consultant. Since Burns & McDonnell has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction contractor's procedures and methods, unavoidable delays, construction contractor's method of determining prices, economic conditions, government regulations and laws (including interpretation thereof), competitive bidding and market conditions or other factors affecting such estimates or projections, Burns & McDonnell does not guarantee that actual rates, costs, performance, schedules, etc., will not vary from the estimates and projections prepared by Burns & McDonnell.

3.0 PROJECT SCOPE & DESIGN INFORMATION

3.1 Natural Gas Supply

Spurlock Station does not currently have a natural gas pipeline at Site. BMcD has evaluated two different possible interconnects with Columbia Gas Transmission (Columbia Gas) and Texas Eastern Transmission Company, LP (TETCO) to connect a pipeline lateral to supply the existing boiler units, the new combined cycle units and the new auxiliary boiler. Preliminary routing for both gas lines can be found in Attachment 1: Pipeline Lateral Routes.

TETCO operates their transmission pipeline system between 800 – 1000 psig, running northeast to southwest about 30 miles southeast of EKPC's Spurlock Station. BMcD's understanding is that Columbia Gas system operating pressure is 700 to 850 psig and is located 21.9 miles west of Spurlock. Table 3-1 lists pipe sizes determined from preliminary hydraulic analysis using the Panhandle B equation with the natural gas flow rate estimate described above for the various operational scenarios. Panhandle B is an industry accepted hydraulic equation for sizing large diameter gas transmission pipelines. Based on various operational scenarios, a 24" size pipeline will provide the flow capacity required for each scenario reviewed in this evaluation, whereas a 20" pipeline would only provide the flow capacity required for generation and ancillary gas for two operational scenarios depicted in Table 3-1.

Interconnect cost estimates and upstream pipeline expansion requirements were submitted to both Columbia Gas and TETCO. In response, Columbia Gas representatives requested a significant level of information regarding project site data including project timeline, land, permits, and regulatory approvals. Columbia Gas were also unwilling to provide a capital expenditure estimate as requested and indicated they were only open to recouping their facility enhancements via a long-term firm transportation agreement. BMcD's interpretation of this response is that Columbia Gas would only entertain providing an interconnect and measurement station for EKPC's gas conversion project if EKPC agreed to a long-term transportation agreement.

On the other hand, TETCO provided capital cost estimates for an interconnect and measurement station. In addition, a conceptual firm transportation proposal was provided detailing TETCO's requirements for an upstream pipeline expansion project necessary to provide firm transportation service.

Table 3-1: Lateral Pipeline Size Required for the Various Operational Scenarios

Operational Scenario	Gas Flow Rates (MMSCFD)	TETCO Pipeline Supply Pressure (psig)	Columbia Gas Pipeline Supply Pressure (psig)	Required Power Plant Pressure (psig)	Size (inch)
Unit 1 & 2 – 100% Units 3 & 4 – 10% 2 CCGT Units Aux Boiler	400	820	770	640	24
Unit 1 & 2 – 75% Units 3 & 4 – 10% 2 CCGT Units Aux Boiler	350	780	740	640	24
Unit 1 & 2 – 50% Units 3 & 4 – 10% 2 CCGT Units Aux Boiler	300	750	715	640	24
Unit 1 & 2 – 25% Units 3 & 4 – 10% 2 CCGT Units Aux Boiler	250	820	770	640	20
Unit 1 & 2 – 100% w/o CCGT & Aux Boiler	250	550	450	100	20

One potential benefit of construction of a lateral to the TETCO system is that there are other major Transmission pipelines located in the vicinity of the proposed tap such as Tennessee Gas Company and Columbia Gulf Transmission, allowing for additional supply options in the future.

3.2 Natural Gas Conversion

Natural gas flow rates associated with the Unit 1 through 4 operational scenarios described above were estimated by BMcD based on coal-fired net electrical output and net heat rate (HHV) data provided by EKPC for Units 1 through 4. Based on experience with other natural gas conversion projects, BMcD estimated a decrease in net electrical output from Units 1 and 2 which varies linearly from 0% to 2.5% as natural gas usage increases from 25% to 100% and an increase in net heat rate (HHV) which varies linearly from 0% to 5% as natural gas usage increases from 25% to 100%. It was estimated that Unit 3 and 4 outputs and heat rates would not change significantly when burning 10% natural gas.

These estimates of Unit 1 through 4 performances when burning natural gas are preliminary. A combustion model and thermodynamic model would have to be completed to more accurately estimate the steam output of the boilers while burning natural gas blends. Combustion modeling of Units 1 through

4 was beyond the intent of this study and should be considered if EKPC decides to pursue fuel conversion.

This analysis does not include:

- A condition assessment of the existing equipment. It is assumed that existing equipment is in good condition and operates as designed.
- Boiler thermal modeling to evaluate surface areas and metallurgy and predict steam cycle conditions and attemperator flow conditions.
- Boiler combustion modeling to evaluate boiler thermal efficiency and predict boiler NOx emissions.

Condition assessments and modeling are recommended if the gas conversion projects progress.

3.3 Future Combined Cycle Units

For sizing the gas pipeline, the net output and net heat rate of the proposed new combined-cycle units were estimated as 442 MW per unit and 7,010 Btu/kWhr (HHV) respectively based on current General Electric (GE) 7F.05 gas turbine performance and typical duct-fired heat recovery steam generator (HRSG), cooling tower and condenser design parameters. Heating of natural gas was assumed to be done by the HRSG and therefore no natural gas heater would be required. The resulting natural gas flow rates for the different operational scenarios are as listed in Table 3-1 above.

For the combined cycle natural gas supply, a new onsite regulation station has been included to reduce the gas pressure at the plant boundary.

3.4 Natural Gas Conversion Permit Matrix

Attachment 4 provides the expected permit matrix for natural gas conversion and pipeline construction. The permitting matrix indicates when the permit application is required, the regulatory agency in charge of the permit, and some details for each specific permit.

4.0 SCHEDULE

4.1 Project Schedule

A level 1 project schedule was prepared by BMcD for the gas conversion project which is included in Attachment 3. Based on the level 1 schedule projections, the project can be completed in a six year timeframe. As part of the project, an outage will be needed to make modifications to the existing plant and perform construction that can only be accomplished while the units are off line.

5.0 COST ESTIMATE

5.1 General

An initial budgetary capital cost estimate for the proposed Spurlock Gas Conversion Project is included in Attachment 2 for four potential pipeline routing scenarios. The project total installed cost ranges from $222M to $286M with the size and location of the pipeline interconnect being a significant factor in the cost variability of the project. No financing fees and interest during construction were included in the Project costs. Additionally, the cost estimate does not include the cost of a combined cycle gas turbine.

5.2 Basis

This is a top-down screening-level estimate suitable for comparing this option to other retrofit options at the plant. This cost estimate was not developed on a bottoms-up basis and is not intended to be used for project execution budgeting purposes. Should EKPC determine that further review of the gas conversion is warranted, BMcD recommends that a more detailed investigation and cost estimate be performed.

The capital costs are based on a multi prime contracting strategy. Gas burners, igniters, nozzle tips, natural gas valves and piping to the burners, regulation equipment, burner management system (BMS) upgrades, and total installation have been estimated based on information from similar projects. Escalation and interest during construction (IDC) are excluded. Any asbestos or hazardous material removal is also excluded from the estimate. Additionally, the evaluation does not include any field environmental studies for the two preliminary gas line routings and this could impact the preliminary cost estimate. A summary of the capital costs is attached to this report.

5.3 Major Pipeline Capital Cost Estimate Assumptions

Several factors can significantly influence the installed costs of pipeline including, but not limited to, construction costs, contracting strategy, Right Of Way (ROW) acquisition, rock, permitting, schedule requirements, and resource availability.

For the purposes of this estimate, the pipeline construction process was assumed to be completed in a typical linear sequence. A typical linear construction sequence on a pipeline includes: clearing, grading, trenching, stringing, welding, lowering the pipeline into the trench, backfilling, commissioning and testing. The following further details the breakdown of the cost that was estimated for a contractor installing a gas pipeline.

Open trench lay costs were estimated based on current 2015 pricing from a contractor budget estimate for work completed in rural areas. An additional premium has been added for construction occurring in rocky

terrain. Based on a review of publicly available data, the Columbia Lateral is assumed to have 30% rock, and the TETCO lateral is assumed to have 50% rock along the route which will require additional construction cost for ditching and padding.

Pipeline installed at road crossings was assumed to be completed by open cut or Auger Installation. An abrasion resistant overlay (ARO) coating for the piping will need to be used to provide additional protection at pipeline crossings which is included in the estimated road crossing costs.

Horizontal directional drilling (HDD) includes a cost for mobilization, staging, welding, drilling, and pull back of the HDD crossing. This cost assumes that the subsurface conditions consist primarily of rock.

Right of Way (ROW) costs were estimated based on typical costs and similar projects for removing trees, debris and large rocks in rural areas to prepare a graded surface for construction activities and to create an estimated 60 foot permanent easement with another 40 foot temporary workspace. After the pipeline trench has been completely backfilled with acceptable material, the restoration crew will replace the topsoil, remove large rocks, and complete any final repairs necessary to restore the disturbed land as required by engineering drawings and permitting.

Emergency valve stations were assumed to be placed along the pipeline route every 8 miles for the design of a pipeline in a Class 3 location as required per DOT Part 192. Emergency valve station cost includes vent valves, security fencing, gravel access roads and site grading.

Cathodic protection estimated costs include test stations, line markers, anodes, and insulating flanges.

A Pipeline Integrity Baseline Survey estimated cost was included and would be expected to be completed to provide a benchmark for a reassessment interval, on which the pipeline will need to be reassessed for any dents, cracks, internal corrosion, or other hazards that could lead to the failure of the pipeline. Integrity reassessments will need to be conducted over the life of the pipeline as required by DOT.

Additional surveying costs were included for aerial imagery, preliminary and final surveying services, construction staking and construction record surveying.

Geotechnical costs were included for soil borings that may be required at road crossings. Typically geotechnical bores will be completed at every Auger and HDD installation.

5.4 Major Gas Conversion Capital Cost Estimate Assumptions

To convert Units 1 & 2 to burn 100% natural gas is based on minimal additional equipment and does not include flue gas recirculation or boiler surface modifications. The main components will include natural gas piping with control valve stations, new low NOx natural gas burners, and igniters. The project includes an upgrade to the existing DCS to allow space for the new gas burner I/O points and for minor controls and BMS modifications based on the conversion. A new onsite regulation station will reduce the gas pressure at the plant boundary. This evaluation includes individual regulating stations at the burner fronts to further reduce the gas pressure for burner supply and control.

In order to convert Units 3 & 4 to co-fire 10% natural gas with coal, minimal additional equipment was assumed. The main components will include natural gas piping with control valve stations and new gas igniters. Costs have been included for control and BMS modifications. A new onsite regulation station will reduce the gas pressure at the plant boundary. This evaluation includes an additional regulating station at the boiler to further reduce the gas pressure for burner supply and control.

Major equipment no longer required after the conversion such as coal handling systems, pulverizers, fabric filters, ash handling equipment, soot blowers, and other coal-related systems are assumed to be abandoned in place. Demolition is included to remove the coal piping from the pulverizer outlet to the burner inlet. Demolition is also included to remove the existing coal burners.

5.5 Owner Costs

Owner costs were assumed to be 6% of the total project costs estimated.

5.6 Cash Flow

Cash flow was broken up annually based on typical percentages of total project costs. As seen in Table 5-1, the percentages are reflective of the project schedule activities

Table 5-1: Estimated Annual Cash Flow

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Cost Percentage	2.5%	2.5%	15.0%	20.0%	30.0%	30.0%

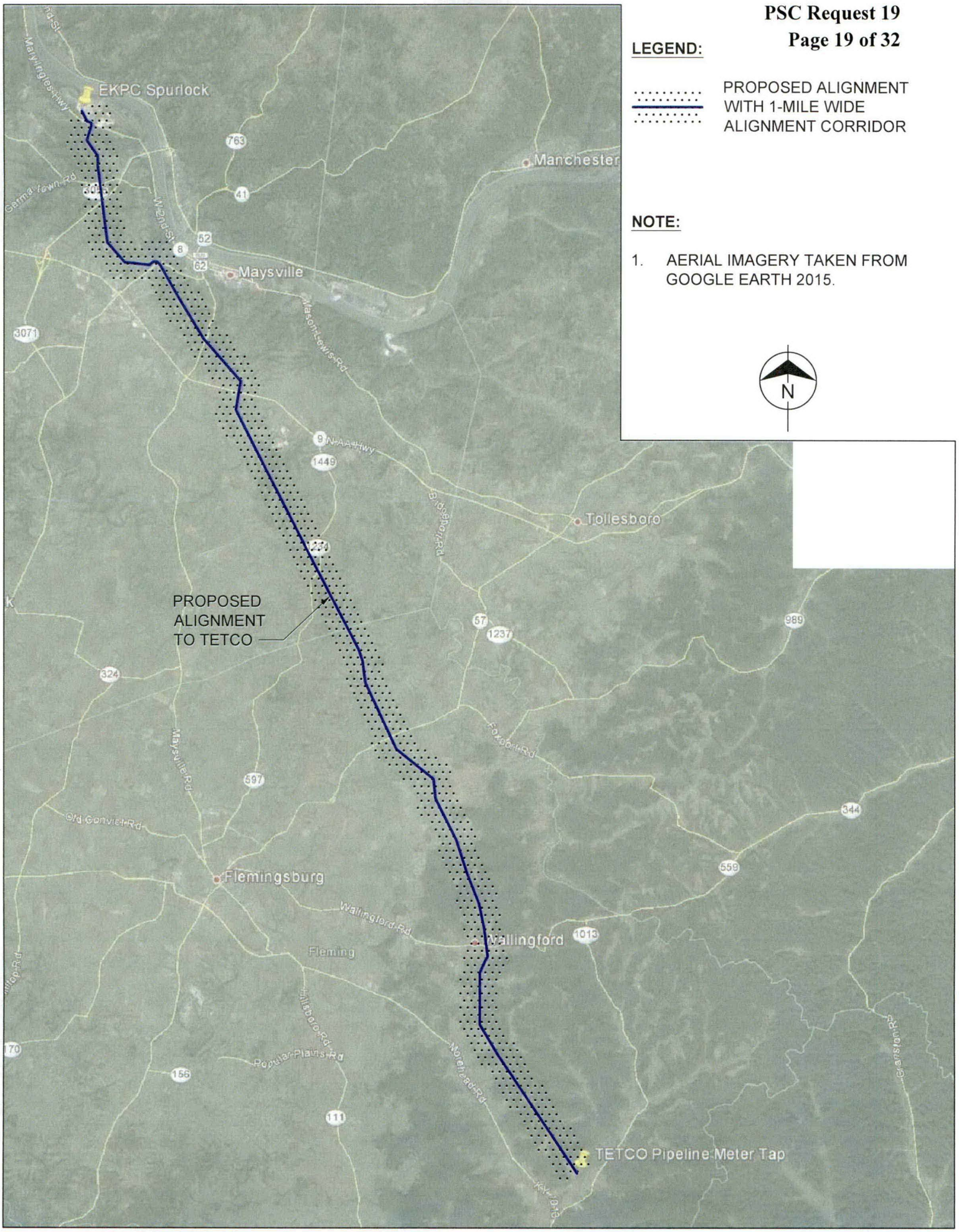
6.0 CONCLUSION AND RECOMMENDATIONS

The project total installed cost ranges from $222M to $286M with the size and location of the pipeline interconnect being a significant factor in the cost variability of the project. This cost estimate was developed on a top down basis to adjust quantities for the EKPC specific units and does not incorporate boiler specific burner quotes. The results are not intended for scope and implementation budgeting purposes. Should EKPC decide to further pursue the coal to natural gas conversion, a more thorough investigation should be performed including a detailed scoping study and budget level capital and operating cost estimates.

7.0 REFERENCES

1. "Title 49 - Transportation." *US Government Printing Office (GPO) - Code of Federal Regulations-DOT CFR 49, Part 192*. Department of Transportation, 1 Oct. 2006. Web. 21 Nov. 2013. <http://www.gpo.gov/fdsys/pkg/CFR-2006-title49-vol1/content-detail.html>.
2. "PHMSA - Enforcement." *Enforcement of DOT CFR 49, Part 192*. U.S. Department of Transportation - Pipeline and Hazardous Materials Safety Administration (PHMSA), n.d. Web. 21 Nov. 2013. <http://www.phmsa.dot.gov/pipeline/enforcement>.
3. "PHMSA - NTSB Safety Recommendations." *PHMSA - NTSB Safety Recommendations*. N.p., n.d. Web. 21 Nov. 2013. <http://www.phmsa.dot.gov/pipeline/regs/ntsb>.
4. "National Transportation & Safety Board (NTSB) - Investigation/Recommendations." *NTSB-Pipelines*. National Transportation & Safety Board-U.S. Department of Transportation, n.d. Web. 21 Nov. 2013. <http://www.ntsb.gov/Surface/pipeline/pipeline.htm>.
5. "Gas Transmission and Distribution Piping Systems ASME B31.8." Law Resource - ASME Pressure Code for Piping Standard. American Society of Mechanical Engineers (ASME), 2003. Web. <https://law.resource.org/pub/us/cfr/ibr/002/asme.b31.8.2003.pdf>.
6. "Clearing and Grading for Pipeline Construction." *News Rss*. N.p., n.d. Web. 09 Jan. 2014. <http://www.ingaa.org/cms/67.aspx>.

ATTACHMENT 1 - PIPELINE LATERAL ROUTES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PROPOSED ALIGNMENT WITH 1-MILE WIDE ALIGNMENT CORRIDOR
NOTE:
1. AERIAL IMAGERY TAKEN FROM GOOGLE EARTH 2015.
N
EKPC Spurlock
Manchester
Maysville
Tollesboro
Flemingsburg
Wallingford
TETCO Pipeline Meter Tap
PROPOSED ALIGNMENT TO TETCO
763
41
52
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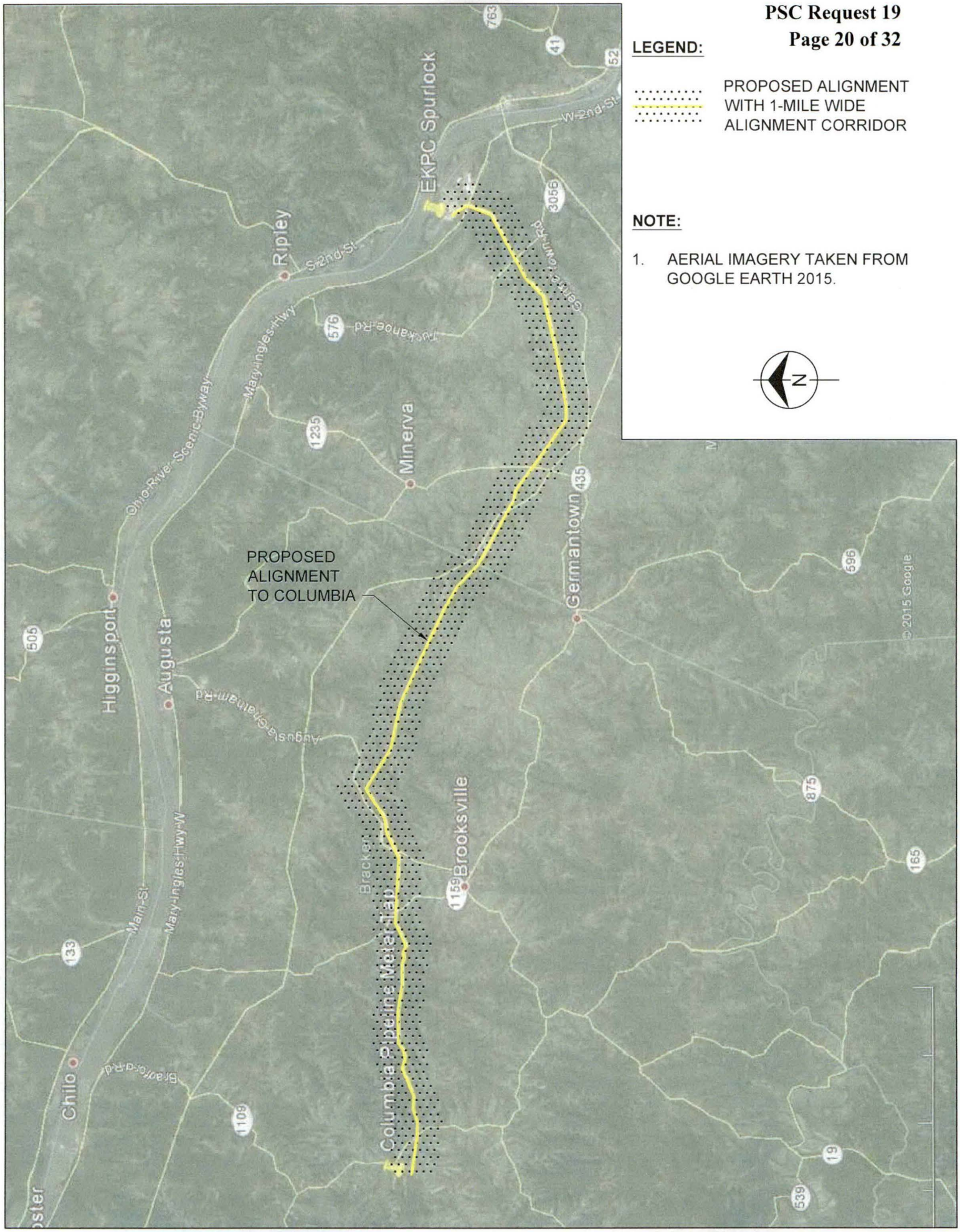
62
3071
9
1449
57
1237
989
324
597
344
559
1013
170
156
111


LEGEND:
PROPOSED ALIGNMENT WITH 1-MILE WIDE ALIGNMENT CORRIDOR
NOTE:
1. AERIAL IMAGERY TAKEN FROM GOOGLE EARTH 2015.
N
PROPOSED ALIGNMENT TO COLUMBIA
EKPC Spurlock
Ripley
Minerva
Germantown
Higginsport
Augusta
Brooksville
Chilo
Columbia Pipeline Metering
Ohio River Scenic Byway
Mary Ingles Hwy
Main St
W 2nd St
S 2nd St
Tuckahoe Rd
Augusta Chatham Rd
Bracken
Bradford Rd
© 2015 Google

ATTACHMENT 2 - EKPC PROJECT COST ESTIMATES

COST ESTIMATE - 20" COLUMBIA GAS LINE
EKPC
SPURLOCK NATURAL GAS CONVERSION
87633
MAYSVILLE, KY

		Total Cost
Spurlock Unit 1		$25,000,000
Spurlock Unit 2		$25,000,000
Spurlock Unit 3		$8,000,000
Spurlock Unit 4		$8,000,000
Gas Line from Plant Boundry to Boiler House		$3,000,000
20" Columbia Gas Transmission Line to Spurlock		$59,200,000
Total Direct Cost		**$128,200,000**
Revision Date	CM and Indirects (15% of Direct Cost)	$19,000,000
10/28/15	Engineering (12% of Direct Cost)	$15,000,000
	Start Up (4% of Direct Cost)	$5,000,000
	Total Indirect Cost	**$39,000,000**
	Total Direct and Indirect Costs	**$167,200,000**
	Estimate Contingency (25% of Direct and Indirect Costs)	$42,000,000
	Total Project Cost	**$209,200,000**
	Owner Cost (6% of Total Project Cost)	$13,000,000
	Total Project Cost	**$222,200,000**

BURNS McDONNELL

COST ESTIMATE - 20" TETCO GAS LINE
EKPC
SPURLOCK NATURAL GAS CONVERSION
87633
MAYSVILLE, KY

	Total Cost
Spurlock Unit 1	$25,000,000
Spurlock Unit 2	$25,000,000
Spurlock Unit 3	$8,000,000
Spurlock Unit 4	$8,000,000
Gas Line from Plant Boundry to Boiler House	$3,000,000
20" TETCO Gas Transmission Line to Spurlock	$86,400,000
Total Direct Cost	**$155,400,000**

Revision Date		
10/28/15	CM and Indirects (15% of Direct Cost)	$23,000,000
	Engineering (12% of Direct Cost)	$19,000,000
	Start Up (4% of Direct Cost)	$6,000,000
	Total Indirect Cost	**$48,000,000**
	Total Direct and Indirect Costs	**$203,400,000**
	Estimate Contingency (25% of Direct and Indirect Costs)	$51,000,000
	Total Project Cost	**$254,400,000**
	Owner Cost (6% of Total Project Cost)	$15,000,000
	Total Project Cost	**$269,400,000**

BURNS McDONNELL

COST ESTIMATE - 24" COLUMBIA GAS LINE
EKPC
SPURLOCK NATURAL GAS CONVERSION
87633
MAYSVILLE, KY

	Total Cost
Spurlock Unit 1	$25,000,000
Spurlock Unit 2	$25,000,000
Spurlock Unit 3	$8,000,000
Spurlock Unit 4	$8,000,000
Gas Line from Plant Boundry to Boiler House	$3,000,000
24" Columbia Gas Transmission Line to Spurlock	$65,100,000
Total Direct Cost	**$134,100,000**

Revision Date		
10/28/15	CM and Indirects (15% of Direct Cost)	$20,000,000
	Engineering (12% of Direct Cost)	$16,000,000
	Start Up (4% of Direct Cost)	$5,000,000
	Total Indirect Cost	**$41,000,000**
	Total Direct and Indirect Costs	**$175,100,000**
	Estimate Contingency (25% of Direct and Indirect Costs)	$44,000,000
	Total Project Cost	**$219,100,000**
	Owner Cost (6% of Total Project Cost)	$13,000,000
	Total Project Cost	**$232,100,000**

BURNS McDONNELL

COST ESTIMATE - 24" TETCO GAS LINE
EKPC
SPURLOCK NATURAL GAS CONVERSION
87633
MAYSVILLE, KY

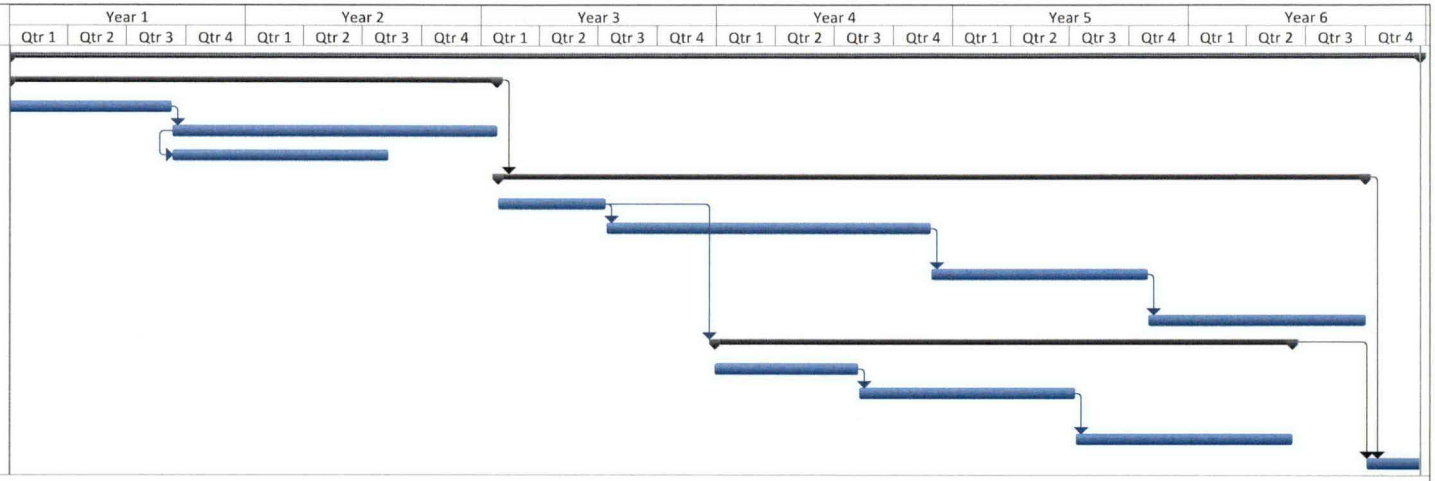
	Total Cost
Spurlock Unit 1	$25,000,000
Spurlock Unit 2	$25,000,000
Spurlock Unit 3	$8,000,000
Spurlock Unit 4	$8,000,000
Gas Line from Plant Boundry to Boiler House	$3,000,000
24" TETCO Gas Transmission Line to Spurlock	$95,100,000
Total Direct Cost	**$164,100,000**

Revision Date		
10/28/15	CM and Indirects (15% of Direct Cost)	$25,000,000
	Engineering (12% of Direct Cost)	$20,000,000
	Start Up (4% of Direct Cost)	$7,000,000
	Total Indirect Cost	**$52,000,000**
	Total Direct and Indirect Costs	**$216,100,000**
	Estimate Contingency (25% of Direct and Indirect Costs)	$54,000,000
	Total Project Cost	**$270,100,000**
	Owner Cost (6% of Total Project Cost)	$16,000,000
	Total Project Cost	**$286,100,000**

BURNS McDONNELL

ATTACHMENT 3 - PROJECT SCHEDULE

ID	Task Name	Duration
1	**EKPC Spurlock Gas Conversion Project**	
2	**Overall**	**27 mons**
3	Project Scoping	9 mons
4	Permitting	18 mons
5	PSC Approval	12 mons
6	**Pipeline**	**48 mons**
7	Interstate Pipeline Selection	6 mons
8	Route Selection/ ROW Acquisition/ Permitting	18 mons
9	Surveying/ Detailed Design / Field Investigations	12 mons
10	Pipeline Construction	12 mons
11	**Gas Conversion**	**32 mons**
12	Detailed Design	8 mons
13	Burner Procurement (Manufacture and Deliver)	12 mons
14	Gas Conversion Construction	12 mons
15	**Tie-In and Commissioning**	3 mons



Project: EKPC Pipeline Schedule v
Date: Wed 3/9/16

Task	Project Summary	Inactive Milestone	Manual Summary Rollup	Deadline	
Split	External Tasks	Inactive Summary	Manual Summary	Progress	
Milestone	External Milestone	Manual Task	Start-only		
Summary	Inactive Task	Duration-only	Finish-only		

ATTACHMENT 4 - NATURAL GAS CONVERSION PERMIT MATRIX

East Kentucky Power Cooperative
Spurlock Power Plant
Natural Gas Conversion Permit Matrix

Item No.	Permit/Clearance	Regulatory Agency	Details	When Required	Anticipated Agency Review Time	Comments
Federal						
1	Notice of Proposed Construction or Alteration	Federal Aviation Administration (FAA)	Must notify the FAA if structures will exceed 200 feet in height or if the structures (stacks & cranes) are located within the 100:1 (distance to height) ratio from the nearest point of the nearest FAA designated airport runway. Notifying the FAA includes completing Form 7460-1 for all required structures and providing a site layout map depicting structure locations.	Prior to construction	45+ days	
2	Section 7 Threatened and Endangered Species Consultation and Clearance	U.S. Fish & Wildlife Service (FWS), Ecological Services	If the project will potentially impact protected species or their respective habitat, or if a Section 404 and/or NPDES permit is required, then the FWS must be contacted. The FWS will determine the level of effort needed for the project to proceed (e.g., habitat assessment, species surveys, avian impact studies, etc.).	Prior to construction	30 days for initial response, additional 30 days for determination of field survey results (if required)	Because the facility site is previously disturbed, a habitat assessment may only be required for the new gas pipeline, if routed through undisturbed areas.
3	Migratory Bird Treaty Act / Bald and Golden Eagle Protection Act Compliance	U.S. Fish & Wildlife Service (FWS), Ecological Services	Required when construction or operation of a proposed facility could impact migratory birds, their nests, and especially threatened or endangered species	Prior to construction	30 days for data request, 30 days for report review	Because the facility site is previously disturbed, a habitat assessment may only be required for the new gas pipeline, if routed through undisturbed areas.
4	Clean Water Act - Section 404 Nationwide Permit 12	U.S. Army Corps of Engineers Louisville District	Required to dredge or place fill in a jurisdictional water, including wetlands Nationwide Permit: Less an or equal to 0.5 acre of wetland impacts	Prior to construction	45 to 60 days for a Nationwide Permit	A wetland delineation will be required to determine the extent of wetland and stream impacts along the new gas pipeline. Any wetland or stream impacts would likely be minimal and qualify for a Nationwide Permit 12. A pre-construction notification will likely be required.
State - Kentucky						
5	National Environmental Policy Act (NEPA) Review	Lead Federal agency	Required pursuant to NEPA for public disclosure of environmental impacts resulting from Federal actions. Process can be a phased approach. The applicant typically prepares a preliminary Environmental Assessment (EA). The agency reviews the document and can either attach a Finding of No Significant Impact or require the preparation of an Environmental Impact Statement (EIS).	Prior to construction	TBD	
6	Certificate of Public Convenience and Necessity	Kentucky Public Service Commission	Required for the construction of electric generating facilities	Prior to construction	120 days after the submission of a complete application	A Notice of Intent must be submitted at least 30 days prior to submitting an application for a certificate.
7	Site Compatibility Certificate	Kentucky Public Service Commission	Required for the construction of electric generating facilities 10 MW or greater	Prior to construction	Reviewed and issued concurrently with the Certificate of Public Convenience and Necessity	The site compatibility certificate application will include a site assessment report. Documentation of compliance with NEPA may be submitted in lieu of a site assessment report.
8	New Source Review Permit	Kentucky Department of Environmental Protection Division for Air Quality	Required for new major stationary sources of air emissions	Prior to construction	6 to 18 months depending on the type of permit needed	Replacement of burner can only likely be accomplished with a State permit (Prevention of Significant Deterioration [PSD] minor). The addition of a new combined-cycle unit will likely trigger PSD major source permitting for at least one pollutant, although several pollutants should be able to "net out" of PSD.

East Kentucky Power Cooperative
Spurlock Power Plant
Natural Gas Conversion Permit Matrix

Item No.	Permit/Clearance	Regulatory Agency	Details	When Required	Anticipated Agency Review Time	Comments
9	Noise Compliance	Kentucky Public Service Commission (as a part of a larger certificate application).	Required to demonstrate that facility operation will comply with State, county, and city noise regulations. The PSC may require/request additional noise mitigation measures.	Prior to construction	180 days	City of Maysville has local regulations based on time of day and receiving land use that will need to be analyzed for the surrounding area and modeled to determine compliance. Review of County ordinances did not find any numerical noise limits. Any compressors along the pipeline and booster stations will be required to meet the FERC limit of an Ldn of 55 dBA.
10	Permit to Construct Across or Along a Stream and/or Section 401 Water Quality Certification (WQC)	Kentucky Department of Environmental Protection Division of Water	Required prior to crossing streams. This permit also provides Section 401 WQC and floodplain construction approval. The purpose of the WQC is to confirm that the discharge of fill materials will be in compliance with the State's applicable water quality standards.	Prior to construction	20 business days	Assumes automatic Water Quality Certification authorization through the Corps' Nationwide Permit 12. The permit application must be reviewed and signed by the local county floodplain coordinator(s) prior to submitting the application to the State.
11	Groundwater Protection Plan	Kentucky Department of Environmental Protection Division of Water	Required for activities that have the potential to pollute groundwater. The Groundwater Protection Plan must define best management practices for groundwater protection.	Prior to operation	Typically no approval process	The Groundwater Protection Plan is not submitted for review unless requested by the State.
12	One-Time/Temporary Discharge Request for Off-Permit Authorization (hydrostatic testing)	Kentucky Department of Environmental Protection Division of Water	Required prior to discharging waters used to hydrostatically test pipelines and/or tanks.	Prior to testing	TBD	
13	General Permit for Stormwater Discharges Associated with Construction Activities	Kentucky Department of Environmental Protection Division of Water	Required for all stormwater discharges from construction activities which will disturb of one or more total acres of land. The General Permit requires the development of a Stormwater Pollution Prevention Plan (SWPPP) prior to submitting a Notice of Intent for permit coverage.	Prior to construction	7 days	The permit also authorizes the discharge of construction dewatering waters if managed through the use of appropriate best management practices.
14	NPDES Operational Discharge Permit (Modification to KY0022250)	Kentucky Department of Environmental Protection Division of Water	A modification to NPDES Permit No. KY0022250 will be required if the quantity or quality of wastewater discharged from the plant site to the Ohio River will change as a result of project activities. Changes to existing outfalls or the need for additional outfalls would also require a permit modification.	Prior to operation	At least 180 days	Project changes will also require a modification to the site's operational SWPPP.
15	National Historic Preservation Act – Section 106 Clearance	Kentucky Heritage Council - State Historic Preservation Office	Under Section 106 of the National Historic Preservation Act, Federal agencies must work with the State Historic Preservation Office to address historic preservation issues when planning projects or issuing funds or permits that may affect historic properties and archaeological resources listed in or determined eligible for the National Register of Historic Places.	Prior to construction	45 Days	Because the facility site is previously disturbed, a Section 106 occurrence may only be required for the new gas pipeline, if routed through undisturbed areas.

Item No.	Permit/Clearance	Regulatory Agency	Details	When Required	Anticipated Agency Review Time	Comments
16	Threatened & Endangered Species Clearance (State)	Kentucky Department of Fish and Wildlife Resources, Kentucky State Nature Preserves Commission, and Kentucky Division of Forestry	Required when a proposed project may impact State-listed species or when a project lies within an area of known occurrence of listed species or the habitat of a listed species	Prior to construction	30 days for initial response, additional 30 days for determination of field survey results (if required)	Because the facility site is previously disturbed, a habitat assessment may only be required for the new gas pipeline, if routed through undisturbed areas.
County						
17	Erosion and Sediment Control Plan	County Conservation Districts	County(ies) may require submittal of the Erosion and Sediment Control Plan or construction SWPPP for review prior to construction at the plant site and along the new gas pipeline.	Prior to construction	TBD	
18	Conditional Use/Zoning Approval	County Engineer/Zoning	May be required if the new gas pipeline is constructed in an area that is not currently zoned for a natural gas pipeline	Prior to construction	TBD	
19	Right-of-Way Permit	County Engineer/Public Works	Required if any part of the natural gas pipeline will be constructed within County rights-of-way.	Prior to construction	TBD	

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Burns & McDonnell World Headquarters
9400 Ward Parkway
Kansas City, MO 64114
O 816-333-9400
F 816-333-3690
www.burnsmcd.com

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2017-00376
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 20
RESPONSIBLE PARTY: Robin Hayes

Request 20. Refer to the Hayes Testimony, page 4, line 13. Explain how the discount rate was determined.

Response 20. The discount rate was determined by reviewing the interest rate at which EKPC could finance the project using Federal Financing Bank debt financing.

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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 21
RESPONSIBLE PARTY: Sam Yoder

Request 21. Refer to the Hayes Testimony, Exhibit RH-1, page 1 of 2. Explain the derivation of the escalation factors used by Burns & McDonnell for engineered equipment and annual inflation for construction contracts.

Response 21. The escalation factors used by Burns & McDonnell for equipment and materials follow the recommendation of IHS Global Insight. Quarterly, IHS Global Insight tracks and predicts tens of thousands of different commodities and world-wide labor, then issues indices that are used extensively by all market sectors. IHS Global Insight provides comprehensive economic, financial, and political coverage of countries, regions, and industries available from any source – covering over 200 countries and spanning more than approximately 170 industries – using a unique combination of expertise, models, data, and software within a common analytical framework to support planning and decision making. IHS Global Insight has over 3,800 clients in industry, finance, and government with revenues in excess of $95 million, 600 employees, and 23 offices in 13 countries covering North and South America, Europe, Africa, the Middle East, and Asia.

EAST KENTUCKY POWER COOPERATIVE, INC.
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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 22
RESPONSIBLE PARTY: Robin Hayes

Request 22. Refer to the Hayes Testimony, Exhibit RH-1. Provide the depreciation rates and depreciable lives used for both the CCR/ELG and the natural gas conversion projects.

Response 22. Please see the following tables for the depreciation rates and depreciable lives used for the CCR/ELG project and the natural gas conversion project.

CCR/ELG Project		
Plant	Depreciation Rate	Depreciable Lives
Waste Water Treatment	4.240%	23.5 years
Unit 3 NIDS/Ash Mixing	4.240%	23.5 years
Unit 4 NIDS/Ash Mixing	3.625%	27.5 years
Unit 3 Ash Mixing	4.240%	23.5 years
Unit 4 Ash Mixing	3.625%	27.5 years
Fly Ash – Spurlock 1	4.959%	20.2 years
Fly Ash – Spurlock 2	4.633%	21.6 years
Pond Chemical Feed	Classified as Land – not depreciable	
Water Mass Balance	Classified as Land – not depreciable	
Bottom Ash – Spurlock 1	5.381%	18.6 years
Bottom Ash – Spurlock 2	4.858%	20.6 years
Balance of Plant	4.240%	23.5 years

Natural Gas Conversion Project		
Plant	Depreciation Rate	Depreciable Lives
Spurlock Unit 1	5.556%	18 years
Spurlock Unit 2	5.000%	20 years
Gas Line from Plant Boundary to Boiler House	4.348%	23 years
20" TETCO Gas Transmission Line to Spurlock	4.348%	23 years
Ash Pond Closure	Classified as Land – not depreciable	
Water Mass Balance (Pond and Berm Development)	Classified as Land – not depreciable	
Boilers for International Paper Steam	4.348%	23 years
Stranded – Spurlock Unit 1	Note 1	
Stranded – Spurlock Unit 1 Scrubber	Note 1	
Stranded – Spurlock Unit 2	Note 1	
Stranded – Spurlock Unit 2 Scrubber	Note 1	
Stranded – Spurlock Common	Note 1	
Note 1: To reflect the impact of stranded assets, depreciation for the scenario was reduced for the depreciation at the current rate. This reduction was maintained until the asset would have been fully depreciated. Depreciable lives and rate determined when planted.		

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COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 23
RESPONSIBLE PARTY: Sam Yoder

Request 23. Refer to the Direct Testimony of Sam Yoder, P.E., Exhibit SY-2, page 1-5, regarding project risks. State whether EKPC has developed any processes to mitigate the scheduling and cost risks. If so, explain fully the risk mitigation processes that EKPC will implement.

Response 23. Proper planning and project controls are key to the mitigation of risks related to cost and schedules. The Project Scoping Report and Project Plan are developed with recent market information regarding cost of equipment and services as well as expected lead times for critical equipment and relevant information to support planned durations for the work and conditions. Financial contingency is included in cost estimates and the project primary milestones and contract completion dates are designed to maintain within the schedule a small but reasonable amount of float that is owned by EKPC. Project controls for schedule include daily/weekly fieldwork verification and EKPC management of an integrated critical path schedule, which will be used to both assess current project status and also forecast and analyze predicted progress so that mitigating steps can be taken to avoid conflicts or schedule slip. A project change

management process will be employed to control all impacts to schedule and cost for issues that arise during the project.

EAST KENTUCKY POWER COOPERATIVE, INC.
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RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 24
RESPONSIBLE PARTY: Isaac S. Scott

Request 24. Refer to the Direct Testimony of Isaac S. Scott ("Scott Testimony"), page 10. Confirm that EKPC's current Rate ES - Environmental Surcharge tariff specifies a Base Environmental Surcharge Factor ("BESF") of 0 percent.

Response 24. EKPC confirms that the current Rate ES – Environmental Surcharge tariff states the BESF is 0 percent. EKPC further confirms that previously when the BESF has been a value other than zero it has been reflected in the applicable Rate ES – Environmental Surcharge tariff.

As described in pages 11 through 13 of the Scott Testimony, EKPC anticipates there will be BESFs because of the early retirement or abandonment of certain utility plant in service in conjunction with the CCR/ELG Project. These early retirements or abandonments are not expected to occur until various dates in 2020. Consequently, when the immediate changes to the Rate ES – Environmental Surcharge tariff were discussed on page 10 of the Scott Testimony, the recognition of BESFs were not included.

The need to update the Rate ES – Environmental Surcharge tariff to recognize the BESFs anticipated in 2020 necessitates revisions to pages 12 and 13 of the Scott Testimony. EKPC had proposed to recognize the BESF component in the surcharge mechanism in the first expense month after the retirement and note the inclusion of the BESF component in the monthly surcharge report and associated cover letter. EKPC had further proposed that if the early retirement or abandonment did not occur by the expected dates, it would note this fact in the monthly surcharge report cover letter. EKPC would recalculate the BESF component for the appropriate expense month and include the revised BESF calculations with the monthly surcharge report.

EKPC now proposes that as soon as the early retirement or abandonment has been finalized, it will submit a revised Rate ES – Environmental Surcharge tariff sheet with the updated BESF component to the Commission for approval through the electronic tariff filing system. EKPC will include all supporting calculations for the BESF component with this filing. EKPC will include the BESF component in the first monthly surcharge report submitted after receipt of the Commission's approval of the revised tariff sheet. If the early retirements and abandonments occur as anticipated, this will necessitate three BESF and tariff revisions over a period of approximately one year.

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RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 01/05/18
REQUEST 25
RESPONSIBLE PARTY: Isaac S. Scott

Request 25. Refer to the Scott Testimony, pages 11-13.

Request 25a. Confirm that a non-zero BESF would be utilized at least until EKPC's next base rate case.

Response 25a. A non-zero BESF reflects the investment in utility plant and associated operating costs for environmental compliance assets being recovered through base rates that have been replaced or retired early due to the deployment of new environmental compliance assets whose costs are recovered through the environmental surcharge. EKPC confirms that a non-zero BESF would be included in the monthly surcharge mechanism from the time the replacement or retirement occurred until the effective date for new base rates resulting from EKPC's next base rate case.

Request 25b. Confirm that a positive BESF reduces the Current Environmental Surcharge Factor.

Response 25b. A positive BESF does not reduce the Current Environmental Surcharge Factor ("CESF"). Rather, a positive BESF reduces the Monthly Environmental Surcharge Factor ("MESF"). The surcharge formula contained in the Rate ES – Environmental Surcharge tariff states that MESF = CESF – BESF.