COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF EAST)	
KENTUCKY POWER COOPERATIVE,)	
INC. FOR 1) CERTIFICATES OF PUBLIC)	CASE NO.
CONVENIENCE AND NECESSITY)	2024-00370
TO CONSTRUCT GENERATION)	
RESOURCES; 2) FOR A SITE COMPATIBILITY)	
CERTIFICATE RELATING TO THE SAME;)	
3) APPROVAL OF DEMAND SIDE MANAGEMENT)	
TARIFFS; AND 4) OTHER GENERAL RELIEF)	

SUPPLEMENTAL RESPONSES TO JOINT INTERVENORS' SUPPLEMENTAL

REQUESTS FOR INFORMATION TO EAST KENTUCKY POWER COOPERATIVE,

INC. DATED JANUARY 17, 2025

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF EAST)
KENTUCKY POWER COOPERATIVE,)
INC. FOR 1) CERTIFICATES OF PUBLIC)
CONVENIENCE AND NECESSITY)
TO CONSTRUCT GENERATION)
RESOURCES; 2) FOR A SITE COMPATIBILITY)
CERTIFICATE RELATING TO THE SAME;)
3) APPROVAL OF DEMAND SIDE MANAGEMENT)
TARIFFS; AND 4) OTHER GENERAL RELIEF)

CASE NO. 2024-00370

CERTIFICATE

STATE OF KENTUCKY)) COUNTY OF CLARK)

Jerry Purvis, being duly sworn, states that he has supervised the preparation of the supplemental responses of East Kentucky Power Cooperative, Inc. to Joint Intervenor's Supplemental Request for Information in the above-referenced case dated January 17, 2025, 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 Purvis

Subscribed and sworn before me on this 10th day of February, 2025.

my Millelley Notary Public GWYN M. WILLOUGHEY Notary Public onwealth of Kentucky Common Commission Number KYNP38003 Commission Expires Nov 30, 2025

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EAST KENTUCKY POWER COOPERATIVE, INC. CASE NO. 2024-00370 SUPPLEMENTAL REQUEST FOR INFORMATION RESPONSE

JOINT INTERVENORS' REQUEST DATED JANUARY 17, 2025 REQUEST 47 RESPONSIBLE PARTY: Jerry Purvis

Request 47. Please refer to your response to JI 1-43. With regards to the feasibility of gas co-firing at the Spurlock 3 and 4 CFB units:

a. Confirm that your responses to subpart JI 1-43(a) and (b) should have referenced Attachment BY-3 to the application, rather than Attachment BY-1. If not confirmed, identify where in Attachment BY-1 the feasibility of gas co-firing at the Spurlock 3 and 4 CFB units is addressed.

b. Confirm that the Burns MCDonnell Project Scoping Report provided in Attachment BY-3 identifies as risks that "conversion of the Unit 3 and Unit 4 CFB's for co-firing natural gas requires novel design solutions that are unproven" and that the proposed co-firing modifications for the Unit 3 and Unit 4 CFB boilers "have not been executed to BMcD's knowledge."

c. Referring to p. 7-2 of Attachment BY-3, identify and produce any report or other documentation of the Reaction Engineering, Inc. model results that "show that co-firing the units on 50% gas at full load appears technically feasible."

d. Explain in detail any other engineering studies or research that Burns McDonnell or EKPC carried out or reviewed to determine if conversion of Spurlock Units 3 and 4 for co-

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firing natural gas is "feasible, doable and practicable." Identify and produce any documentation of such studies and research.

Response 47.

a. Confirmed.

b. Confirmed. Burns & McDonnell's Project Scoping Report (PSR) provided in

Attachment BY-3 does identify the novel and unproven design solutions associated with converting the Spurlock Unit 3 and 4 CFB's and the lack of known execution experience converting similar commercial CFB units as potential project risks. It should be noted that the available and anticipated gas-firing technology associated with converting the Spurlock Units 3 & 4 CFB's to co-fire on gas is well established and proven for startup (the technology is not unproven or novel in and of itself). However, its application in co-firing gas in a CFB boiler is limited in practice and experience. Therefore, this was identified as a potential project risk.

c. See attachment *Confidential-JI2.47c.pdf* for documentation supporting that statement filed under seal.

d. No additional engineering studies or research was performed outside of the CFD modeling referenced in 2.47.c, above, as part of the PSR.

Supplemental Response. All modeling files, assumptions, and resource selection explanations have been provided within this case. In addition, EKPC is filing a confidential summary of the REI Report under seal pursuant to a motion for confidential treatment. The actual REI Report is protected under attorney work product privilege.

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Second Supplemental Response. EKPC is filing a the REI Report under seal pursuant to a motion for confidential treatment.