#### **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	)	CASE NO.
AND NECESSITY TO CONSTRUCT A NEW	)	2024-00370
GENERATION RESOURCES; 2) FOR A SITE	)	
COMPATABILITY CERTICATE RELATING TO	)	
THE SAME; 3) APPROVAL OF DEMAND SIDE	)	
MANAGEMENT TARIFFS; AND 4) OTHER	)	
GENERAL RELIEF	)	

RESPONSES TO NUCOR'S POST-HEARING REQUEST FOR INFORMATION TO EAST KENTUCKY POWER COOPERATIVE, INC.

**DATED APRIL 24, 2025** 

#### **COMMONWEALTH OF KENTUCKY**

#### BEFORE THE PUBLIC SERVICE COMMISSION

#### In the Matter of:

	ASE NO.
AND NECESSITY TO CONSTRUCT A NEW ) 20	024-00370
GENERATION RESOURCES; 2) FOR A SITE )	
COMPATABILITY CERTICATE RELATING TO )	
THE SAME; 3) APPROVAL OF DEMAND SIDE )	
MANAGEMENT TARIFFS; AND 4) OTHER )	
GENERAL RELIEF )	

#### **CERTIFICATE**

STATE OF KENTUCKY	)
	)
COUNTY OF CLARK	)

Thomas J. Stachnik, being duly sworn, states that he has supervised the preparation of the Post-Hearing Responses of East Kentucky Power Cooperative, Inc. to NUCOR's Post-Hearing Request for Information in the above-referenced case dated April 24, 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.

7- J. S. C. E

Subscribed and sworn before me on this 29th day of April, 2025.

Notary Public

GWYN M. WILLOUGHBY Notary Public Commonwealth of Kentucky Commission Number KYNP38003 My Commission Expires Nov 30, 2025

#### **COMMONWEALTH OF KENTUCKY**

#### BEFORE THE PUBLIC SERVICE COMMISSION

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THE SAME; 3) APPROVAL OF DEMAND SIDE )	
MANAGEMENT TARIFFS; AND 4) OTHER )	
GENERAL RELIEF )	

#### **CERTIFICATE**

STATE OF KENTUCKY	)
	)
COUNTY OF CLARK	)

Don Mosier, being duly sworn, states that he has supervised the preparation of the Post-Hearing Responses of East Kentucky Power Cooperative, Inc. to NUCOR's Post-Hearing Request for Information in the above-referenced case dated April 24, 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.

Don Mosier

Subscribed and sworn before me on this 29th day of April, 2025.

GWYN M. WILLOUGHBY Notary Public Commonwealth of Kentucky Commission Number KYNP38003

My Commission Expires Nov 30, 2025

EAST KENTUCKY POWER COOPERATIVE, INC.

CASE NO. 2024-00370

POST-HEARING FOR INFORMATION RESPONSE

**NUCOR'S REQUEST DATED APRIL 24, 2025** 

**REQUEST 1** 

**RESPONSIBLE PARTY:** 

Thomas J. Stachnik

Request 1. Please refer to Nucor Ex. 3 (EKPC Response to JI Request 8). Please

provide the average rate increase over the next 20 years only for the projects that are the subject

of this case, excluding RICE and New ERA renewables.

**Response 1.** EKPC has not run a long-range forecast using the scenario described in the

data request as EKPC modeled the projects as a single integrated plan. Unfortunately, such a

model run would take several weeks to accomplish. However, EKPC can offer that in the absence

of the Reciprocating Internal Combustion Engine ("RICE") units that EKPC requested a

Certificate of Public Convenience and Necessity ("CPCN") in No. 2024-00310 and solar projects

that have already been issued CPCNs in Case No. 2024-00129, EKPC would have to replace that

capacity and energy with market purchases that would otherwise be capped at those resources'

cost. The RICE units are expected to offset \$25 million annually in market energy purchases. The

two approved solar projects are expected to offset \$16 million annually in market energy

purchases. In total, if the RICE and approved solar arrays were absent from the economic analysis

## **Nucor Request 1**

### Page 2 of 2

of the generation plan as described in this case, EKPC would need to spend an estimated total of \$41 million more annually in market energy purchases.

# EAST KENTUCKY POWER COOPERATIVE, INC. CASE NO. 2024-00370 POST-HEARING FOR INFORMATION RESPONSE

**NUCOR'S REQUEST DATED APRIL 24, 2025** 

**REQUEST 2** 

**RESPONSIBLE PARTY:** Don Mosier

Request 2. Please refer to the Direct Testimony of Don Mosier at page 13 line 11. Please provide all back-up calculations and documents for the statement that the cost for a 100 MW BESS is \$450,000/MWh.

Refer to EKPC response to Joint Intervenors' First Request for Information, Item 14. In addition, a National Renewable Energy Laboratory ("NREL") report found a 4-hour battery system storage costs \$443/kWh (\$443,000/MWh) for the year 2024.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> See https://www.nrel.gov/docs/fy23osti/85332.pdf. Last accessed May 2, 2025.

# EAST KENTUCKY POWER COOPERATIVE, INC. CASE NO. 2024-00370 POST-HEARING FOR INFORMATION RESPONSE

NUCOR'S REQUEST DATED APRIL 24, 2025 REQUEST 3

**RESPONSIBLE PARTY:** Don Mosier

Request 3. At the hearing Mr. Mosier testified that LG&E's proposed 400 MW BESS would cost \$484,000/MWh (Tr. 50:27/7:51:30). Please provide all back-up calculations and documents that support this statement.

Refer to Case No. 2025-00045, Application, Direct Testimony – Stuart Wilson which shows overnight capital cost ("OCC") for a 4-hour battery storage system of \$1,954/kW. (\$1,954/kW \* 1000kW/MW) / 4 hours storage = \$488,500/MWh.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Electronic Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates, Case No. 2025-00045, Application, Direct Testimony – Stuart Wilson, Exhibit SAW-1 at 20.