# COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC EXAMINATION OF THE	)	
APPLICATION OF THE FUEL ADJUSTMENT	)	CASE NO.
CLAUSE OF EAST KENTUCKY POWER	)	2020-00246
<b>COOPERATIVE, INC FROM NOVEMBER 1, 2019</b>	)	
THROUGH APRIL 30, 2020	)	

# RESPONSES TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION TO EAST KENTUCKY POWER COOPERATIVE, INC. DATED OCTOBER 9, 2020

#### **COMMONWEALTH OF KENTUCKY**

#### **BEFORE THE PUBLIC SERVICE COMMISSION**

#### In the Matter of:

ELECTRONIC EXAMINATION OF THE)APPLICATION OF THE FUEL ADJUSTMENT)CLAUSE OF EAST KENTUCKY POWER)COOPERATIVE, INC FROM NOVEMBER 1, 2019)THROUGH APRIL 30, 2020)

#### CERTIFICATE

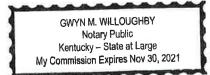
## STATE OF KENTUCKY ) ) COUNTY OF CLARK )

Mark Horn, 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 Second Request for Information in the above-referenced case dated October 9, 2020, 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.

Mark Horn

Subscribed and sworn before me on this  $23^{4}$  day of October 2020.

Notary Public - #590567 Commission expires - 11/30/2021



#### **COMMONWEALTH OF KENTUCKY**

#### **BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

ELECTRONIC EXAMINATION OF THE)APPLICATION OF THE FUEL ADJUSTMENT)CLAUSE OF EAST KENTUCKY POWER)COOPERATIVE, INC FROM NOVEMBER 1, 2019)THROUGH APRIL 30, 2020)

#### 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 Second Request for Information in the above-referenced case dated October 9, 2020, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Subscribed and sworn before me on this  $23^{\text{H}}$  day of October 2020.

Notary Puble - #590567 Commission expires - 11/30/2021



#### **COMMONWEALTH OF KENTUCKY**

#### **BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

ELECTRONIC EXAMINATION OF THE)APPLICATION OF THE FUEL ADJUSTMENT)CLAUSE OF EAST KENTUCKY POWER)COOPERATIVE, INC FROM NOVEMBER 1, 2019)THROUGH APRIL 30, 2020)

CASE NO. 2020-00246

### CERTIFICATE

## STATE OF KENTUCKY ) ) COUNTY OF CLARK )

Julia J. Tucker, 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 Second Request for Information in the above-referenced case dated October 9, 2020, 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.

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Subscribed and sworn before me on this 22 day of October 2020.

Notary Public + #590567

Commission expires - 11/30/2021

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

# PSC CASE NO. 2020-00246 FUEL ADJUSTMENT CLAUSE RESPONSE TO INFORMATION REQUEST

# STAFF'S SECOND REQUEST FOR INFORMATION DATED 10/09/2020 REQUEST 1 RESPONSIBLE PARTY: Julia J. Tucker

**<u>Request 1.</u>** Refer to EKPC's response to Commission Staff's First Request for Information (Staff's First Request), Item 3, Attachment 1d. Provide for each EKPC generating unit by month the number of hours each unit ran and the number of hours the unit's bid into the PJM energy markets (day ahead and spot) was at or below the PJM Zonal Locational Marginal Price (LMP).

**<u>Response 1.</u>** Units might run when the bid is higher than the LMP for testing, system reliability, or unit operational constraints. Comparing the bid to the LMP does not take any of these conditions into account, nor does it consider start up or shut down costs. A base load unit, such as all four of the Spurlock units, requires a significant amount of time and expense to start up and shut down. Therefore, EKPC looks ahead multiple days and considers the overall cost to serve when determining if it should leave its baseload units on line as "must run" units or place them in "economic" status. When

the units are offered as "must run" then PJM must dispatch them at least at the minimum load and the unit will receive the hourly LMP regardless if it is cheaper or not. When placed in "economic" status, PJM will determine the overall economics for the 24 hour period and will dispatch the unit economically. The requested comparison provides a quick view of the unit's bid costs to the cleared LMPs. Refer to the table provided on page 3 of 3 of this response.

			Œ	Run Hours (1)					¥	otal Hours Bid I	Total Hours Bid less than LMP (2) (3)	(3)		
Unit	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Total	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Total
EKPC BLUEGRASS 1 CT	53	4	0	0	0	2	59		9	7	-	с	2	29
EKPC BLUEGRASS 2 CT	61	с	0	0	0	2	66	194	59	62	24	20	21	380
EKPC BLUEGRASS 3 CT	5	0	0	0	0	2	7		9	7	-	с	2	29
EKPC COOPER 1 F	63	34	0	0	0	0	97	261	95	39	11	16	15	437
EKPC COOPER 2 F	103	0	0	0	0	0	103		111	41	14	19	17	475
EKPC SMITH 1 CT	5	0	7	0	2	0	14		12	6	4	5	9	57
EKPC SMITH 2 CT	-	0	8	0	-	0	10		12	6	4	5	9	57
EKPC SMITH 3 CT	0	0	8	0	0	с	11		12	6	4	5	9	57
EKPC SMITH 4 CT	43	14	24	13	8	5	107		141	112	38	38	41	694
EKPC SMITH 5 CT	42	26	24	13	7	6	121		141	112	38	38	41	694
EKPC SMITH 6 CT	40	27	13	1	80	9	105		141	112	38	38	41	694
EKPC SMITH 7 CT	47	25	17	13	7	4	113		141	112	38	38	41	694
EKPC SMITH 9 CT	143	56	67	10	19	40	335		336	286	152	106	73	1501
EKPC SMITH 10 CT	114	56	99	1	16	57	320		336	286	152	106	74	1502
EKPC SPURLOCK 1 F	721	282	510	627	0	0	2140		732	524	395	321	229	2922
EKPC SPURLOCK 2 F	0	695	529	520	743	720	3207		734	603	468	382	306	3214
EKPC SPURLOCK 3 F	535	724	443	696	147	204	2749		738	474	309	241	166	2649
EKPC SPURLOCK 4 F	553	358	744	677	313	0	2645		737	518	390	313	226	2905
Total	2529	2304	2460	2591	1271	1054	12209	Ű	4490	3322	2081	1697	1313	18990

Hours when net generation was greater than 5 MW
Hours when the bid was less than both the DA and RT LMP were only counted once
Forced, Unplanned and Planned maintenance hours were not deducted from this total

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# PSC CASE NO. 2020-00246 FUEL ADJUSTMENT CLAUSE RESPONSE TO INFORMATION REQUEST

# STAFF'S SECOND REQUEST FOR INFORMATION DATED 10/09/2020 REQUEST 2 RESPONSIBLE PARTY: Mark Horn

**<u>Request 2.</u>** Refer to EKPC's response to Commission Staff's First Request, Item 5, page 2 of 2. Provide an update of the Cooper station coal test purchases and the results of those tests. Be sure to include any changes since the April 16, 2019 hearing in Case No.  $2019-00003^1$  and from Case No.  $2020-00005^2$ .

**<u>Response 2.</u>** The Cooper Station coal test purchase referenced in Case No. 2019-00003 was in regards to testing an "alternate coal quality" that did not meet the typical coal specification, with a lower heat content and a higher ash content, as an effort to lower the plant's dispatch cost. Following the small test in the form of a purchase order,

<sup>&</sup>lt;sup>1</sup> Case No. 2019-00003, Electronic Examination of the Application of the Fuel Adjustment Clause of East Kentucky Power Cooperative, Inc. from November 1, 2016 through October 31, 2018, Hearing Video Transcript of the April 16, 2019 Hearing, 09:40:34.

<sup>&</sup>lt;sup>2</sup> Case No. 2020-00005, An Electronic Examination of the Application of the Fuel Adjustment Clause of East Kentucky Power Cooperative, Inc. From May 1, 2019 through October 31, 2019 (filed April 16, 2020), EKPC's response to Commission Staff's Second Request for Information, Item 2.

EKPC did execute a two-year coal supply contract with a relaxed requirement on the heat and ash content at a price that was below the current market for CAPP coal. This lower quality coal has lowered the dispatch cost for Cooper Station, but has not had a measurable impact on plant operations.

The Cooper Station coal test purchase referenced in Case No. 2020-00005 was in regards to testing "block" coal for a blending agent to combat potential moisture issues during the startup of the units at Cooper Station. This larger sized coal could mitigate pluggage issues during normal operations as well. The block coal has proven to be helpful, and a small inventory is currently being maintained in the coal yard.

# PSC CASE NO. 2020-00246 FUEL ADJUSTMENT CLAUSE RESPONSE TO INFORMATION REQUEST

# STAFF'S SECOND REQUEST FOR INFORMATION DATED 10/09/2020 REQUEST 3 RESPONSIBLE PARTY: Mark Horn

**<u>Request 3.</u>** Refer to EKPC's response to Commission Staff's First Request, Item 9. Explain whether EKPC conducts any on-site reviews and inspections of mining operations, scales, and sampling systems and whether it has uncovered or corrected any issues with fuel suppliers or transportation providers.

**Responses 3.** EKPC conducts on-site reviews and inspections of mining operation, scales, and sampling systems on a routine basis. As part of its financial due diligence, EKPC reviews the contract supplier's financials. As part of its physical due diligence, EKPC reviews information relating to permits, reserves, and mining plan. This process is helpful in monitoring supplier performance and making business decisions. Scales and sampling systems are reviewed on a random basis by EKPC's Fuel Department and, at other times, by EKPC's Central Lab. EKPC also requires a report for the bias testing, scale calibration and certification by an independent third party, and requests the opportunity to be present when tasks are conducted. However, EKPC did not audit any of

its fuel or transportation contracts during the period under review. Contract audits are historically for cost-plus coal supply contracts, which were popular in the 1970s. EKPC does not utilize cost-plus contracts. No issues with fuel suppliers or transportation providers were uncovered or corrected during the period under review.

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#### EAST KENTUCKY POWER COOPERATIVE, INC.

# PSC CASE NO. 2020-00246 FUEL ADJUSTMENT CLAUSE RESPONSE TO INFORMATION REQUEST

# STAFF'S SECOND REQUEST FOR INFORMATION DATED 10/09/2020REQUEST 4RESPONSIBLE PARTY:Craig A. Johnson

Request 4.Refer to EKPC's response to Commission Staff's First Request,Item 15, page 6 of 56. The chart shows Unit 003 as having three forced outages and a statusof Maintenance.

**<u>Request 4a.</u>** Explain the difference between the two classifications and what "Maintenance" means in this instance.

**<u>Response 4a.</u>** The status listed as "Forced" means that the unit was immediately taken offline so that inspections, maintenance or repairs could be made prior to placing the unit back online. The status listed as "Maintenance" means that the unit was scheduled for removal from service. PJM defines two types of maintenance outages, "Planned" and "Unplanned". Inspections, maintenance or repairs could be made during a forced outage or one of the scheduled maintenance outage types.

**<u>Request 4b.</u>** Explain how far in advance EKPC must provide notification that maintenance is going to be scheduled.

**<u>Response 4b.</u>** EKPC schedules all maintenance through PJM. PJM may accept or reject a proposed maintenance schedule. A Planned Maintenance Outage is routinely scheduled one year in advance. An Unplanned Maintenance Outage is defined as one where maintenance could be deferred beyond the next weekend and the work has to be done before the next Planned Maintenance Outage. An Unplanned Maintenance Outage is typically much shorter than a Planned Maintenance Outage. The typical notification time to have an Unplanned Maintenance Outage approved or rejected by PJM is one to three days.

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#### EAST KENTUCKY POWER COOPERATIVE, INC.

# PSC CASE NO. 2020-00246 FUEL ADJUSTMENT CLAUSE RESPONSE TO INFORMATION REQUEST

# STAFF'S SECOND REQUEST FOR INFORMATION DATED 10/09/2020 REQUEST 5 RESPONSIBLE PARTY: Julia J. Tucker

Request 5.Refer to EKPC's response to Commission Staff's First Request,Item 15, page 17 of 56. Explain the "Transmission Constraints" experienced by BluegrassStation Unit 001 and Unit 002 that lead to the forced outage in November 2019.

**Responses 5.** EKPC's Bluegrass Station is interconnected to the Louisville Gas and Electric Energy ("LGEE") transmission system. EKPC also has load that is served directly from the LGEE transmission system. EKPC purchases Network Integrated Transmission Service ("NITS") from LGEE to serve its load. EKPC can schedule generation up to the same amount of its load utilizing the NITS transmission. If EKPC generation is expected to exceed its available NITS transmission, then EKPC will strive to purchase additional transmission service from LGEE. Transmission availability is not guaranteed. The amount of transmission available for purchase is publicly posted on LGEE's OASIS web site. At the time that the Bluegrass Station units were considered to be in forced outage, there was not additional transmission available for purchase.

Therefore, the maximum amount of generation that could be utilized at the plant was determined solely by the amount of load / NITS service that was available. All available generation in excess of the NITS service was considered to be in forced outage because additional transmission delivery service was not available.

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### EAST KENTUCKY POWER COOPERATIVE, INC.

# PSC CASE NO. 2020-00246 FUEL ADJUSTMENT CLAUSE RESPONSE TO INFORMATION REQUEST

# STAFF'S SECOND REQUEST FOR INFORMATION DATED 10/09/2020 REQUEST 6 RESPONSIBLE PARTY: Julia J. Tucker

**Request 6.** Refer to EKPC's response to Commission Staff's First Request, Item 15, page 20 of 56. The Green Valley Landfill generator had a forced outage on November 8, 2019, for approximately 59 hours. In that instance and similar instances with the other landfill generators, confirm if EKPC has to purchase energy to make up the small loss, and then, depending on the price, exclude a portion of the price from the fuel adjustment clause.

**Response 6.** All EKPC landfill gas generators are "behind the meter" generators because they are interconnected into the distribution system and not the higher voltage transmission system. EKPC's load served by PJM is measured at the higher voltage transmission system. Therefore, the generation from the landfill gas plants occurs behind the EKPC / PJM load meter, which reduces the amount of energy that EKPC purchases from PJM. When the units are not generating, as would be the case during a forced outage, then EKPC purchases more energy from PJM. For example, if the load at the EKPC / PJM

load meter is normally 5 MW and there is 2 MW of landfill gas generation online, then the meter will read a net of 3 MW. If there is no landfill gas generation, then the meter will read 5 MW. EKPC pays PJM for the metered energy. When a landfill gas unit is not generating, EKPC purchases more energy from PJM than it does when the unit is generating. If the price that EKPC pays PJM for that energy exceeds the cost of its highest cost generating unit, then EKPC must exclude the portion of that cost that exceeds the limit from its fuel adjustment clause.

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#### EAST KENTUCKY POWER COOPERATIVE, INC.

# PSC CASE NO. 2020-00246 FUEL ADJUSTMENT CLAUSE RESPONSE TO INFORMATION REQUEST

# STAFF'S SECOND REQUEST FOR INFORMATION DATED 10/09/2020REQUEST 7RESPONSIBLE PARTY:Craig A. Johnson

**<u>Request 7.</u>** Refer to EKPC's response to Commission Staff's First Request, Item 16. Explain how a generation unit can have a negative capacity factor.

**<u>Response 7.</u>** Capacity factor is calculated using the net generation produced by the unit during a specific period. There are periods when a unit does not have enough net generation to offset the station service usage. Station service is the amount of energy required during the period to operate the unit auxiliaries.

# PSC CASE NO. 2020-00246 FUEL ADJUSTMENT CLAUSE RESPONSE TO INFORMATION REQUEST

# STAFF'S SECOND REQUEST FOR INFORMATION DATED 10/09/2020 REQUEST 8 RESPONSIBLE PARTY: Mark Horn

**<u>Request 8.</u>** Explain whether the Black Lung Disability Trust Fund Excise Tax has affected any existing fuel contracts for EKPC for the period under review through 2020.

**<u>Response 8.</u>** Effective January 1, 2020, 26 USC § 4121 (b) (1) was amended to increase the black lung tax rate on coal from underground mines from \$.50 to \$1.10 per ton. This net increase of \$0.60 per ton is applicable to all tons shipped in 2020 on existing fuel contracts sourced from underground mines per the Black Lung Disability Trust Fund Excise Tax. The Governmental Imposition provision, which allows for such increases to be recovered by the coal supplier, is standard language in EKPC's long-term coal supply agreements. Conversely, EKPC is protected by a Change In Law provision.