

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)	CASE NO.
COOPERATIVE INC, FROM NOVEMBER 1,)	2022-00264
2021 THROUGH APRIL 30, 2022)	

DIRECT TESTIMONY OF JULIA J. TUCKER
ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

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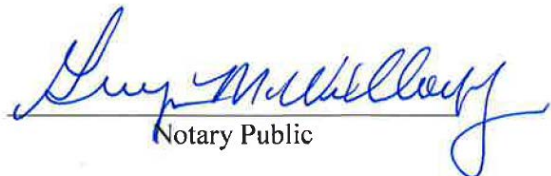
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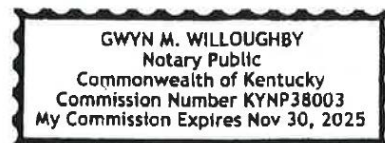
STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Julia J. Tucker, being duly sworn, states that she has read the foregoing prepared testimony and that she would respond in the same manner to the questions if so asked upon taking the stand and that the matters and things set forth therein are true and correct, to the best of her knowledge, information and belief.



Subscribed and sworn before me on this 29 day of September 2022.


Notary Public



1 **Q. Please state your name and address.**

2 A. My name is Julia J. Tucker, and my business address is 4775 Lexington Road,
3 Winchester, Kentucky 40391.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by East Kentucky Power Cooperative, Inc., (“EKPC”) as Director,
6 Power Supply.

7 **Q. As background for your testimony, please briefly describe your educational
8 background and work responsibilities at EKPC.**

9 A. I have a Bachelor’s degree in Electrical Engineering from the University of Kentucky.
10 I am a licensed Professional Engineer, Registration Number 15532, in the state of
11 Kentucky. I have worked for EKPC for the past 16 years. I am responsible for the
12 cooperative’s integrated resource planning, renewables planning, load forecasting and
13 market operations functions.

14 **Q. Were there any changes in the wholesale electric power market that occurred
15 during the review period or that EKPC expects to occur within the next two
16 years that have significantly affected or will significantly affect EKPC's electric
17 power procurement practices?**

18 A. PJM has implemented various changes to its business rules as a normal course of
19 action to address stakeholder concerns. EKPC has been able to meet its requirements
20 for these rules utilizing good utility practices, and expects to continue doing so in the
21 two year forward period. Current natural gas and energy market prices reflect a
22 change in the market dynamics. The energy market price reflects an “implied” heat
23 rate when it is compared to the natural gas price. The “implied” heat rate for the
24 market has substantially increased over the past several months. The “implied” heat

1 rate indicates that EKPC could purchase gas at the published price and burn it in the
2 combustion turbines at J.K. Smith Station for less than it could purchase a forward
3 energy product. This dynamic has caused EKPC to evaluate and purchase physical
4 forward gas for the J.K. Smith Station, a practice it has never done in the past.
5 Combustion turbines are peaking units and dispatch of those units used to be very
6 sporadic. Current operating conditions have shown that the combustion turbines are
7 dispatched on a fairly regular basis and purchasing forward physical gas in
8 manageable quantities has been prudent. EKPC will continue to monitor this market
9 condition and operate accordingly.

10 **Q. Describe how EKPC bids its generating units into PJM Interconnection, Inc’s**
11 **(PJM) energy markets, including, but not limited to: how EKPC determines the**
12 **manner in which individual generating units are offered into PJM’s day ahead**
13 **market (must run, economic dispatch, etc); who makes those decisions; and what**
14 **level of control PJM has over the dispatch of EKPC’s generating units.**

15 A. All of EKPC’s generating units, with the exception of Bluegrass 3, are obligated in
16 the PJM Reliability Pricing Model (“RPM”), referred to as the capacity market, and
17 therefore must be offered into the PJM energy market daily. Bluegrass 3 can be
18 offered at EKPC’s discretion. Each day EKPC must describe the availability of each
19 unit. It is either fully available, partially available with partial derate, or on outage
20 due to planned maintenance, short term maintenance or forced outage. For the units
21 that are available or partially available, EKPC offers them into the daily energy
22 market as reserve standby and ready for economic dispatch or as must run units.
23 Each unit is fully described as to its cost and operating parameters based on criteria

1 set by the PJM Operating Agreement. Units described as must run will be required to
2 stay online for that day at least at the minimum load available for dispatch. Units that
3 are on reserve standby and ready for economic dispatch will be considered in PJM's
4 daily energy market clearings through its reliability constrained economic dispatch
5 model. The model will economically dispatch the available units, both must run and
6 ready for dispatch, to meet load and reliability requirements.

7 EKPC places its Spurlock Station coal fired units in must run status when they are
8 available most of the time. Exceptions would be when the unit is available to start up
9 or shut down. The unit could be placed in economics to ensure that it is brought
10 online or taken offline in the most economic manner. Otherwise, EKPC does not
11 desire to incur the additional operating and maintenance costs that would ensue with
12 multiple startups and shutdowns that could occur if the units are left in economic
13 status. Must run ensures that the units remain online and available at least at
14 minimum load levels. EKPC generally describes Cooper Station as available for
15 economic dispatch. Once the unit is online, the status could change to must run to
16 avoid daily startups and shutdowns. The combustion turbines are almost always
17 described as available for economic dispatch. An exception could be when known
18 testing will occur and the units are put into must run status to perform those tests.
19 EKPC defines the dispatch of the SEPA hydro purchases based on water conditions.

20 The decision to place a unit in economic dispatch or must run status is made in the
21 EKPC Market Operations Center ("MOC"). MOC personnel are certified NERC and
22 PJM Operators and are experts in PJM rules and procedures. The planned status of
23 each unit is discussed on a morning operations' call each weekday that includes MOC

1 personnel, Executive Staff, plant personnel, environmental personnel and ACES
2 personnel. Any concerns with the defined status are brought up and discussed.
3 PJM has full authority to request the dispatch of all of EKPC's generating units with
4 the exception of Bluegrass 3. PJM calls the MOC to make the dispatch request. The
5 MOC contacts the plant and relays the request to dispatch. The plant will notify the
6 MOC operator when it is ready to come online or will let them know that they cannot
7 come online and why. The MOC operator will subsequently call PJM back and
8 request them to allow the unit to come online as requested or will notify PJM that the
9 unit is not able to come online and define the reason.

10 **Q. Does this conclude your testimony?**

11 A. Yes