# COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC TARIFF FILING OF KENTUCKY	)	
POWER COMPANY FOR APPROVAL OF A	)	CASE NO. 2022-00387
SPECIAL CONTRACT WITH EBON	)	
NTERNATIONAL, LLC	)	

#### ORDER

On October 28, 2022, Kentucky Power Company (Kentucky Power) submitted a contract for firm electric service (Contract) with Ebon International, LLC (Ebon) via the Commission's electronic tariff filing system, with intent to offer Ebon a discounted special contract rate. On November 23, 2022, pursuant to KRS 278.190, the Commission, by its own motion, established this case to investigate the reasonableness of the proposed rates, and suspended the effective date of the proposed rates for five months, up to and including April 26, 2023. The Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention (Attorney General), Kentucky Industrial Utility Customers (KIUC) (jointly, Attorney General/KIUC), and joint movants—Mountain Association, Kentuckians for the Commonwealth, Appalachian Citizens' Law Center, Sierra Club, and Kentucky Resources Council, Inc. (collectively, Joint Intervenors)—were granted intervention.

Kentucky Power responded to three rounds of requests for information from Commission Staff and two rounds of requests for information each from the Attorney

<sup>&</sup>lt;sup>1</sup> Application, Direct Testimony of Brian K. West (West Direct Testimony), BKW Exhibit 1.

General/KIUC<sup>2</sup> and Joint Intervenors. Attorney General/KIUC and Joint Intervenors each responded to one round of requests for information from Kentucky Power. A hearing was conducted on July 20, 2023. Kentucky Power responded to post-hearing requests for information from Commission Staff and from Joint Intervenors. Kentucky Power, the Attorney General/KIUC, and Joint Intervenors filed post-hearing briefs and reply briefs. This matter now stands ready for a decision based upon the evidentiary record.

#### LEGAL STANDARD

The Commission has exclusive jurisdiction over the regulation of rates and service of utilities in Kentucky.<sup>3</sup> Kentucky law provides that a utility may demand, collect and receive fair, just and reasonable rates<sup>4</sup> and that the service it provides must be adequate, efficient and reasonable.<sup>5</sup> KRS 278.190 permits the Commission to investigate any schedule of new rates to determine its reasonableness. KRS 278.030(1) only allows utilities to collect rates that are fair, just and reasonable.

Kentucky Power acknowledges that its Economic Development Rider (EDR) tariff does not apply to the Contract because the tariff limits the total load for all EDR customers to 250 MW,<sup>6</sup> and the Ebon Contract would result in Kentucky Power exceeding this cumulative limit for EDR customers.<sup>7</sup> Additionally, the Contract contains

<sup>&</sup>lt;sup>2</sup> The Attorney General and KIUC entered into a witness sharing agreement (filed Dec. 8, 2022) and answered requests for information jointly.

<sup>&</sup>lt;sup>3</sup> KRS 278.040(2).

<sup>&</sup>lt;sup>4</sup> KRS 278.030(1).

<sup>&</sup>lt;sup>5</sup> KRS 278.030(2).

<sup>&</sup>lt;sup>6</sup> P.S.C. Ky. No. 12, Sheet No. 37-1 (issued Apr. 9, 2021), effective Jan. 14, 2021, stating, "Availability is limited to customers on a first-come, first-served basis until such time as a total of 250 MW of new load has been added to Kentucky Power's system under the EDR."

<sup>&</sup>lt;sup>7</sup> West Direct Testimony at 11, lines 10–12.

provisions outside the EDR tariff. However, Kentucky Power's justification for approval of the Contract is that its purpose is economic development.<sup>8</sup> The Commission may consider any factors that affect the reasonableness of the rates resulting from the Contract, including applying the same standards as it would for an EDR special contract.

In Administrative Case No. 327, the Commission found that EDRs would provide important incentives to large commercial and industrial customers to either locate or expand their facilities in Kentucky, bringing jobs and capital investment into the Commonwealth.<sup>9</sup> Administrative Order 327 contains 18 findings that refined the criteria on which the Commission would evaluate and approve an EDR.<sup>10</sup> In Administrative Order 327, the Commission also directed that a jurisdictional utility filing an EDR contract must comply with Findings 3–17.<sup>11</sup> The Contract is not filed pursuant to Kentucky Power's EDR tariff; however, given the basis of the Contract, the Commission finds that the requirements of Administrative Order 327 represent an appropriate standard to determine if the rates contained therein, and the resulting rates of other customers, are fair, just and reasonable. This treatment is consistent with other Commission matters

<sup>&</sup>lt;sup>8</sup> West Direct Testimony at 3, lines 17-19.

<sup>&</sup>lt;sup>9</sup> Administrative Case No. 327 [Docket No. 19000327], *An Investigation Into the Implementation of Economic Development Rates by Electric and Gas Utilities* (Ky. PSC Sept. 24, 1990) (Administrative Order 327), Order at 25.

<sup>&</sup>lt;sup>10</sup> Administrative Order 327 at 24–28.

<sup>&</sup>lt;sup>11</sup> Administrative Order 327 at 28, ordering paragraph 1.

where EDRs were filed as a special contract without application under an EDR "tariff." 12

The relevant findings of Administrative Order 327 are as follows:<sup>13</sup>

- Finding 3: EDRs should be implemented by special contract negotiated between the utilities and their large commercial and industrial customers.<sup>14</sup>
- Finding 4: An EDR contract should specify all terms and conditions, including the rate discount and related provisions, jobs and capital investment created, customer-specific fixed costs, minimum bill, estimated load and load factor, and length of contract.<sup>15</sup>
- Finding 5: An EDR contract should only be offered during periods of excess capacity for the utility, and the utility must demonstrate that the EDR contract will not cause it to fall below a reserve margin essential for system reliability.<sup>16</sup>
- Finding 6: A utility should demonstrate that the EDR exceeds the marginal cost associated with serving the customer.<sup>17</sup>
- Finding 9: The EDR contract should include a provision providing for the recovery of EDR customer-specific fixed costs over the life of the contract.<sup>18</sup>

<sup>&</sup>lt;sup>12</sup> See Case No. 2023-00045, Electronic Tariff Filing of Big Rivers Electric Corporation and Kenergy Corp. for Approval of a Special Contract with Economic Development Rates with Pratt Paper (Ky), LLC, (Ky. PSC Feb. 10, 2023), Order.

<sup>&</sup>lt;sup>13</sup> Finding 13 is not relevant to this proceeding because it applies to contracts designed to retain the load of existing customers, not to attract new customers. Findings 15 and 16 are not relevant to this preceding because they apply to gas utilities, not electric utilities. Finding 17, while relevant to this proceeding merely states that comments submitted by the Cabinet or other interested parties pertaining to an EDR contract should be filed with the Commission no more than 20 days following the filing or an EDR. No comments have been filed in this proceeding. Findings 7 and 11 relate to annual reports of information regarding EDR customers. Finding 8 relates to filings in future rate case proceedings.

<sup>&</sup>lt;sup>14</sup> Administrative Order 327 at 25, ordering paragraph 3.

<sup>&</sup>lt;sup>15</sup> Administrative Order 327 at 25, ordering paragraph 4.

<sup>&</sup>lt;sup>16</sup> Administrative Order 327 at 25, ordering paragraph 5.

<sup>&</sup>lt;sup>17</sup> Administrative Order 327 at 26, ordering paragraph 6.

<sup>&</sup>lt;sup>18</sup> Administrative Order 327 at 26, ordering paragraph 9.

- Finding 10: The major objectives of EDRs are job creation and capital investment. However, specific job creation and capital investment requirements should not be imposed on EDR customers. 19
- Finding 12: For new industrial customers, an EDR should apply only to load which exceeds a minimum base level.<sup>20</sup> For existing industrial customers, the EDR should apply only to load which exceeds a minimum base level, for new industrial customers, and the EDR contract should identify and justify the minimum usage level required for a new customer.<sup>21</sup>
- Finding 14: The term of an EDR contract should be for a period twice the length of the discount period, with the discount period not exceeding five years.<sup>22</sup>

## PROPOSED SPECIAL CONTRACT

On August 23, 2022, Kentucky Power and Ebon executed the Contract for Kentucky Power to provide Ebon with service under a discounted rate, subject to approval by the Commission. Kentucky Power stated that Ebon plans to invest approximately \$50 million<sup>23</sup> in a cryptocurrency mining facility in Louisa, Kentucky, located on real property leased to Ebon by Kentucky Power adjacent to the Big Sandy generating station.<sup>24</sup> Ebon expected to create 50 to 100 new jobs as part of this plan.<sup>25</sup> Ebon's estimated load is 100 MW during the first two years of the contract and 250 MW thereafter.<sup>26</sup> Ebon would take service under Kentucky Power's Demand Response

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<sup>&</sup>lt;sup>19</sup> Administrative Order 327 at 26, ordering paragraph 10.

<sup>&</sup>lt;sup>20</sup> Administrative Order 327 at 26, ordering paragraph 12.

<sup>&</sup>lt;sup>21</sup> Administrative Order 327 at 26, ordering paragraph 12.

<sup>&</sup>lt;sup>22</sup> Administrative Order 327 at 27, ordering paragraph 14.

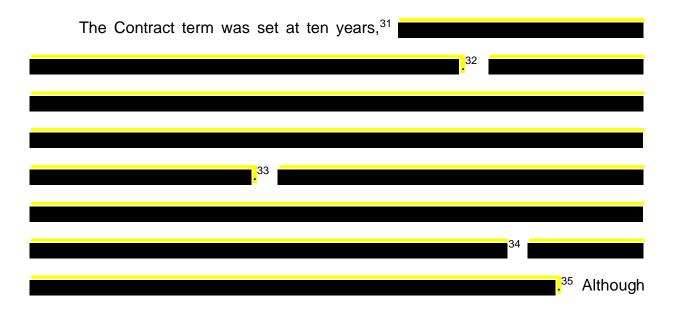
<sup>&</sup>lt;sup>23</sup> West Direct Testimony, BKW Exhibit 1 at 2. Kentucky Power later asserted that the expected investment would be \$250 million. West Direct Testimony at 6, lines 6–7.

<sup>&</sup>lt;sup>24</sup> West Direct Testimony at 6, lines 3–6.

<sup>&</sup>lt;sup>25</sup> West Direct Testimony, BKW Exhibit 1 at 2.

<sup>&</sup>lt;sup>26</sup> West Direct Testimony, BKW Exhibit 1 at 2.

Service (D.R.S.) tariff,<sup>27</sup> with 25 MW designated firm demand and the remaining 225 MW subject to interruption.<sup>28</sup> The tariff limits interruptions to no more than 60 hours per year, six hours per day, and three consecutive hours, with Ebon receiving a monthly credit for being subject to this tariff provision. Under the Contract, Ebon is permitted to disregard a requested interruption but the penalty for failing to curtail its load would be for Ebon to repay a portion of its monthly credit.<sup>29</sup> Ebon estimated a 90 percent load factor.<sup>30</sup>



<sup>&</sup>lt;sup>27</sup> P.S.C. Ky. No. 12, Sheet No. 36-1 (issued Apr. 9, 2021), effective Jan. 14, 2021.

<sup>&</sup>lt;sup>28</sup> West Direct Testimony, BKW Exhibit 1 at 8.

<sup>&</sup>lt;sup>29</sup> West Direct Testimony, BKW Exhibit 1 at 9.

<sup>&</sup>lt;sup>30</sup> Application, Direct Testimony of Brian K. West (West Direct Testimony), BKW Exhibit 1.

<sup>&</sup>lt;sup>31</sup> West Direct Testimony, BKW Exhibit 1 at 16.

<sup>&</sup>lt;sup>32</sup> West Direct Testimony at 11.

<sup>&</sup>lt;sup>33</sup> West Direct Testimony, BKW Exhibit 1 at 10–11.

<sup>&</sup>lt;sup>34</sup> West Direct Testimony, BKW Exhibit 1 at 12–15.

<sup>35</sup> West Direct Testimony, BKW Exhibit 1 at 14.

the Contract did not include a "clawback" provision that would allow Kentucky Power to recover rate discounts from Ebon in the event it were to default on the Contract, Kentucky Power subsequently filed an executed contract addendum<sup>36</sup> into the record that stated, "The Customer may discontinue service under this Contract only by reimbursing the Company for any and all Capacity Discounts and Incremental Discounts received by Customer under this Contract when billed at the applicable rates." The addendum also required Ebon to create at least 25 jobs. As is required by all customers, Ebon is required to pay a deposit of two-twelfths the annual projected billing per Kentucky Power's tariff.<sup>37</sup> The contract makes Ebon responsible for paying for its own substation.<sup>38</sup>

# MARGINAL COST ANALYSIS

Kentucky Power originally provided a marginal cost summary that estimated net revenue of \$18,854,844 from the Contract.<sup>39</sup> Kentucky Power provided several iterations of its marginal cost analysis that showed nominal net revenues ranging from \$62,625,082 to \$487,590,158, depending on the total revenue, capacity cost, and transmission cost forecasts.<sup>40</sup> Kentucky Power stated the energy costs are estimated using the PJM Day-Ahead Locational Marginal Pricing and transmission expenses were based on additional

<sup>&</sup>lt;sup>36</sup> Special Contract Addendum (filed July 24, 2023).

<sup>&</sup>lt;sup>37</sup> P.S.C. Ky. No 12, Sheet 2-3 (issued Apr. 9, 2021), effective Jan. 14, 2021; Kentucky Power's Response to Commission Staff's First Request for Information (Staff's First Request), Item 3(b).

<sup>&</sup>lt;sup>38</sup> West Direct Testimony, BKW Exhibit 1 at 6–7.

<sup>&</sup>lt;sup>39</sup> West Direct Testimony, BKW Exhibit 2.

<sup>&</sup>lt;sup>40</sup> Rebuttal Testimony of Lera Kahn (Kahn Rebuttal Testimony), Exhibit LKM-R1 and Kentucky Power's Response to Commission Staff's Post-Hearing Request for Information (Staff's Post-Hearing Request), Item 4, Attachment 1.

PJM Network Integration Transmission Service costs.<sup>41</sup> Kentucky Power estimated that the base and Fuel Adjustment Clause (FAC) revenue would equal the increased energy costs. Kentucky Power also originally estimated that PJM NITS expenses would increase by 5 percent annually, but later provided estimates for 10 and 15 percent increases.<sup>42</sup>

Kentucky Power argued that the analysis should not include capacity costs for Ebon because Kentucky Power will be generally capacity deficient after the expiration of the Rockport Unit Power Agreement, but provided estimated capacity costs based on contracts with affiliates and PJM Interconnection, LLC (PJM) Net Cost of New Entry (CONE).<sup>43</sup> Kentucky Power directed inquiries about its capacity requirements and expected capacity to its 2023 Integrated Resource Plan (IRP).<sup>44</sup> Kentucky Power's IRP indicated that Kentucky Power does not have the installed capacity (ICAP) and existing capacity contracts to meet its existing customers' estimated load beginning in 2026.<sup>45</sup> Kentucky Power intends to make up the difference and provide capacity for Ebon via market purchases through PJM.<sup>46</sup> These purchases would include hedging to attempt to protect against future price changes.<sup>47</sup> Kentucky Power has asserted that with planned capacity purchases through PJM, and that because capacity has never been directly

<sup>&</sup>lt;sup>41</sup> Kentucky Power's Response to Staff's First Request, Item 9.

 $<sup>^{\</sup>rm 42}$  Kahn Rebuttal Testimony, Exhibit LKM-R1 and Kentucky Power's Response to Staff's Post-Hearing Request, Item 4, Attachment 1.

<sup>&</sup>lt;sup>43</sup> West Direct Testimony at 8–9 and Kentucky Power's Response to Staff's First Request, Item 9.

<sup>&</sup>lt;sup>44</sup> Kentucky Power's Response to Staff's First Request, Item 5(a).

<sup>&</sup>lt;sup>45</sup> Case No. 2023-00092, *Electronic 2022 Integrated Resource Planning Report of Kentucky Power Company* (filed Mar. 20, 2023), IRP at 320, Exhibit G-11.

<sup>&</sup>lt;sup>46</sup> Hearing Video Transcript (HVT) of the July 20, 2023 Hearing at 09:30:59–09:31:23.

<sup>&</sup>lt;sup>47</sup> Kentucky Power's Response to Commission Staff's Third Request for Information (Staff's Third Request), Item 3.

assigned to particular customers, it will have the necessary excess capacity to serve Ebon's expected load.<sup>48</sup>

### INTERVENOR TESTIMONY

The Attorney General/KIUC argued that the Contract should not be approved by the Commission because the marginal cost of providing service for Ebon will not be covered by revenue from Ebon due to energy, transmission, and capacity cost estimates that are unreasonable, 49 and that there is an unacceptable level of risk in Kentucky Power's plan depending on successfully interrupting Ebon's load.50 The Attorney General/KIUC argued that energy costs are not recovered in the manner in which Kentucky Power forecasted and the recovery mechanism will under-recover the actual energy costs from Ebon while increasing costs for other ratepayers.51 The Attorney General/KIUC asserted that transmission costs are understated due to an escalation factor that does not reflect recent trends and the assumption that Kentucky Power will be able to perfectly interrupt Ebon for the ten-year term.52 The Attorney General/KIUC argued that the Contract would increase Kentucky Power's load by approximately 25 percent and increase energy sales by approximately 36 percent so the impact on Kentucky Power's system is significant.53

<sup>&</sup>lt;sup>48</sup> West Direct Testimony at 9, lines 1–14.

<sup>&</sup>lt;sup>49</sup> Direct Testimony of Stephen J. Baron (Baron Direct Testimony) (filed Feb. 8, 2023), at 5, lines 4–6, and 7, lines 5–9.

<sup>&</sup>lt;sup>50</sup> Baron Direct Testimony at 5–6, lines 13–20, 1–16.

<sup>&</sup>lt;sup>51</sup> Baron Direct Testimony at 19–23.

<sup>&</sup>lt;sup>52</sup> Baron Direct Testimony at 23 and 31–34.

<sup>&</sup>lt;sup>53</sup> Baron Direct Testimony at 13.

Joint Intervenors argued that the Contract should not be approved by the Commission. Joint Intervenors stated that Kentucky Power lacks the capacity to serve Ebon's load; that unlike under the EDR tariff, other ratepayers would be responsible for the cost of additional capacity; that ratepayers will be responsible for property tax increases resulting from improvements to the leased property; that the economic development benefits are minimal; and that insufficient evidence was provided that Ebon would not locate its facility within the service territory absent the discount.<sup>54</sup> Joint Intervenors also argued that Kentucky Power's load and capacity forecast were inconsistent,<sup>55</sup> that it was not clear whether Kentucky Power's IRP planning included Ebon,<sup>56</sup> that it was unclear how capacity market purchases were factored into the marginal cost analysis,<sup>57</sup> and that the floor price bank should be limited.<sup>58</sup>

# **DISCUSSION AND FINDINGS**

As Kentucky Power's rationale for entering into the Contract is, at least in part, economic development, the Commission will apply the criteria set forth in Administrative Order 327 regarding EDR contracts, in addition to any other factors that affect reasonableness of rates. The following paragraphs will address the findings of Administrative Order 327 that are applicable to this proceeding:

<sup>&</sup>lt;sup>54</sup> Direct Testimony of Stacy L. Sherwood (Corrected) (filed Mar. 17, 2023), at 4–5, lines 10–22, 1–5.

<sup>&</sup>lt;sup>55</sup> Direct Testimony of Chelsea Hotaling (Hotaling Direct Testimony) (filed Feb. 8, 2023) at 7, lines 7–8.

<sup>&</sup>lt;sup>56</sup> Hotaling Direct Testimony at 8, lines 2–3.

<sup>&</sup>lt;sup>57</sup> Hotaling Direct Testimony at 13, lines 3–16.

<sup>&</sup>lt;sup>58</sup> Hotaling Direct Testimony at 17, lines 2–9.

Finding 3: EDRs should be implemented by special contract negotiated between the utilities and their large commercial and industrial customers.<sup>59</sup>

Kentucky Power submitted the proposed Contract, executed by both parties. These documents contain the negotiated terms of the special contract. The Commission finds the proposed Contract complies with Finding 3 of Administrative Order 327.

Finding 4: An EDR contract should specify all terms and conditions of service including, but not limited to, the applicable rate discount and other discount provisions, the number of Jobs and capital investment to be created as a result of the EDR, customer-specific fixed costs associated with serving the customer, minimum bill, estimated load, estimated load factor, and length of contract. <sup>60</sup>

Kentucky Power has established the following: (1) all discounts for the first five years of the contract;<sup>61</sup> (2) the estimated capital investment of \$25 million and 50 to 100 jobs to be created;<sup>62</sup> (3) expected fixed costs totaling \$4,801,185 in distribution costs;<sup>63</sup> (4) minimum estimated bill based on floor price calculation and banking of floor price credits;<sup>64</sup> (5) estimated load of up to 250 MW and load factor of 90 percent;<sup>65</sup> and (6) a ten-year contract term.<sup>66</sup> No fixed minimum number of jobs or amount of investment is

<sup>&</sup>lt;sup>59</sup> Administrative Order 327 at 25, ordering paragraph 3.

<sup>&</sup>lt;sup>60</sup> Administrative Order 327 at 25, ordering paragraph 4.

<sup>&</sup>lt;sup>61</sup> West Direct Testimony, BKW Exhibit 1, Exhibit 1 (Confidentially filed).

<sup>&</sup>lt;sup>62</sup> West Direct Testimony at 6, lines 6–7; Contract at 2.

<sup>63</sup> West Direct Testimony, BKW Exhibit 2.

<sup>&</sup>lt;sup>64</sup> West Direct Testimony, BKW Exhibit 1 at 10–15.

<sup>65</sup> West Direct Testimony), BKW Exhibit 1.

<sup>&</sup>lt;sup>66</sup> West Direct Testimony, BKW Exhibit 1 at 16.

necessary or required by precedent. The Commission finds that the Contract complies with Administrative Order 327, Finding 4.

Finding 5: EDRs should only be offered during periods of excess capacity. Utilities should demonstrate, upon submission of each EDR contract, that the load expected to be served during each year of the contract period will not cause them to fall below a reserve margin that is considered essential for system reliability. Such a reserve margin should be identified and justified with each EDR contract filing.<sup>67</sup>

Kentucky Power contends that although it will not have sufficient ICAP and existing capacity purchase agreements in place to meet its existing customers' expected load for the next ten years, it will be able to buy the necessary capacity through PJM in order to meet this standard. While this assertion may be true, any electric utility that is part of a regional transmission organization can do the same, rendering the excess capacity finding pointless. Unlike provisions under Kentucky Power's EDR tariff, 68 the present contract does not provide for a dollar-for-dollar reduction in the special contract discount when Kentucky Power must purchase capacity on behalf of a customer. It is clear from context, the Commission's excess capacity finding in Administrative Order 327 was meant to reference the capacity position of the system absent the addition of the new EDR load. Furthermore, assuming arguendo, even if the Commission were to accept that a plan to buy capacity at some future time complied with Finding 5, the Commission is concerned with the reasonableness of the proposal with regard to the risk to other customers. Even with some "hedging," the Company's lack of adequate, never mind excess, capacity creates at least two significant risks to Kentucky Power customers. First, Kentucky

<sup>&</sup>lt;sup>67</sup> Administrative Order 327 at 25, ordering paragraph 5.

<sup>&</sup>lt;sup>68</sup> P.S.C. Ky. No 12, Sheet 37-1 (issued Apr. 9, 2021), effective Jan. 14, 2021.

Power's lack of capacity that can produce energy creates the risk that energy prices rise in the footprint, and as a net purchaser of energy, the power bills of all customers will go up.<sup>69</sup> Second, the additional capacity that will be either built or purchased to serve Ebon creates a number of associated risks, including the risk that Kentucky Power is unable to timely curtail Ebon load and the risk that Kentucky Power incurs capacity costs that are not fully recovered from Ebon, or never recovered at all. Both of these possibilities, especially coupled with Kentucky Power's unreasonable position that "capacity costs should not be assigned to individual customers," even though the utility does not have adequate capacity today,<sup>70</sup> and is proposing to discount Ebon's capacity by millions of dollars, creates risk for remaining customers in excess of the benefit of whatever margins would result from our approval of the Contract.

To be clear, the risk of rising (and unrecovered from Ebon) capacity costs is exacerbated by Kentucky Power's reliance on the interruptible load savings included in its marginal cost analysis. The D.R.S. tariff includes fairly narrow windows for curtailment, especially compared to the number of hours of demand that determine cost allocation under current rules.<sup>71</sup> If Kentucky Power misses those curtailment hours, or if Ebon chooses to ignore curtailment requests because it stood to benefit economically from refusal, the proposed contract would increase costs for other customers, degrading any

<sup>&</sup>lt;sup>69</sup> Post-Hearing Brief of the Attorney General and KIUC, at 13, citing hearing testimony and noting, "The PJM energy cost to serve Ebon will be recovered through base rates and the FAC and will be socialized among all customers. Ebon will only pay a proportional share of the increased PJM market purchases, not 100%."

<sup>&</sup>lt;sup>70</sup> Case No. 2021-00370, *Electronic Investigation of the Service, Rates and Facilities of Kentucky Power Company*, (opened Sept. 15, 2021), June 23, 2023 Order. Also see Reply Brief of Kentucky Power at 9, footnote 12.

<sup>&</sup>lt;sup>71</sup> See Baron Direct Testimony at 27.

purported benefits of the contract. Said otherwise, missing a single interruption would increase costs to all of Kentucky Power's customers.

The Contract fails to mitigate these risks. The Commission finds that the Contract does not comply with Administrative Order 327, Finding 5.

Finding 6: Upon submission of each EDR contract, a utility should demonstrate that the discounted rate exceeds the marginal cost associated with serving the customer. Marginal cost includes both the marginal cost of capacity as well as the marginal cost of energy. In order to demonstrate marginal cost recovery, a utility should submit, with each EDR contract, a current marginal cost-of-service study. A current study is one conducted no more than one year prior to the date of the contract.

Although Kentucky Power provided a number of marginal cost studies showing overall net revenue under the Contract, the results of the studies concern the Commission for multiple reasons. As discussed above, uncertainty regarding the cost of adding a significant amount of capacity via market purchases leaves too great a risk that the rate revenue from Ebon will not exceed the marginal cost of service, including the cost of capacity. Another variable that affects the accuracy of the marginal cost study is the transmission expense escalation factor relied upon by Kentucky Power. However, Kentucky Power acknowledged that its original 5 percent increase was not based on any historical analysis and that a 10 to 15 percent increase was more accurate based on current information.<sup>72</sup> The increase in the escalation factor of transmission expense, all else being equal, erodes the margins resulting from the Contract, even after considering the increase in revenues from Ebon for paying for its portion of transmission expenses as

<sup>&</sup>lt;sup>72</sup> HVT of the July. 20, 2023 Hearing at 16:58:56–16:59:45.

allocated under today's tariffs, both retail and wholesale.<sup>73</sup> There is no evidence in this case that would cause the Commission to find that the historic escalation of transmission investment allocated to Kentucky Power will be any different in the future.

These risks are not borne by Kentucky Power but by its customers, especially those other than Ebon. If Kentucky Power's amended marginal cost assessment assumptions prove correct, Ebon would provide margins in excess of marginal costs and contribute to fixed costs, benefitting other customers. However, if Kentucky Power's marginal costs assumptions prove inaccurate due to failure to interrupt, poor hedging of large energy market exposure, high capacity purchase costs in terms of price and volume, an inability to accurately recover costs from Ebon through rates or increases in transmission expenses, other customers will bear the burden. Based on these risks, and their likelihood of occurring due to the terms of the Contract, the Commission finds that the marginal cost study does not demonstrate the marginal costs associated with Ebon will be appropriately recovered by Ebon. As such, the Commission finds that Kentucky Power has not met its burden to demonstrate that the discounted rate exceeds the marginal cost associated with serving Ebon, and therefore the Contract does not comply with Administrative Order 327, Finding 6.

Finding 9: All EDR contracts should include a provision providing for the recovery of EDR customer-specific fixed costs over the life of the contract.<sup>74</sup>

<sup>&</sup>lt;sup>73</sup> P.S.C. Ky. No 12, Sheet 37-1 (issued Apr. 9, 2021), effective Jan. 14, 2021. Kentucky Power passes capacity cost increases through Tariff PPA and Ebon will only be allocated a portion of those expenses through Tariff PPA.

<sup>&</sup>lt;sup>74</sup> Administrative Order 327 at 26, finding paragraph 9.

The contract incorporates the marginal cost study showing a net positive revenue for the ten-year term of the Contract, therefore recovering fixed costs incurred to provide service to Ebon. As discussed above, the Commission has concerns about the risk inherent in the forecasts underlying the study; however, Ebon will pay for the substation and the remaining distribution investment would be largely recovered over the ten-year term.<sup>75</sup> The Commission finds that with regards to only the distribution investments, the Contract complies with Administrative Order 327, Finding 9. However, due to the Commission's concern with the ability of the contract to cover the marginal fixed costs of capacity, in particular, the contract does not entirely comply with Finding 9.

Finding 10: The major objectives of EDRs are job creation and capital investment. However, specific job creation and capital investment requirements should not be imposed on EDR customers.

The Commission has no reason to doubt that jobs will be created and capital will be invested as a result of the Contract. No minimum investment or number of jobs is required.

,<sup>76</sup> so Kentucky Power has incentivized Ebon to create jobs. The Commission finds that the Contract complies with Administrative Order 327, Finding 10.

Finding 12: For new industrial customers, an EDR should apply only to load which exceeds a minimum base level. For existing industrial customers, an EDR shall apply only to new load which exceeds an incremental usage level above a normalized base load. At the time an EDR contract is filed, a utility should identify and justify the minimum incremental usage level and normalized base load required for an existing

<sup>&</sup>lt;sup>75</sup> Kentucky Power's Response to Staff's Post-Hearing Request, Item 4, Attachment 1.

<sup>&</sup>lt;sup>76</sup> West Direct Testimony, BKW Exhibit 1, Exhibit 1 (Confidentially filed).

customer or the minimum usage level required for a new customer.<sup>77</sup>

Kentucky Power's EDR tariff is available to customers with at least 500 kW of demand. While the Contract was not filed pursuant to Kentucky Power's EDR tariff, Ebon's load is above the minimum required. The Commission finds that the Contract complies with Administrative Order 327, Finding 12.

Finding 14: The term of an EDR contract should be for a period twice the length of the discount period, with the discount period not exceeding five years. During the second half of an EDR contract, the rates charged to the customer should be identical to those contained in a standard rate schedule that is applicable to the customer's rate class and usage characteristics.

Ebon's discount period is five years out of a ten-year contract, with the last five years at standard industrial customer rates. The Commission finds that the Contract complies with Administrative Order 327, Finding 14.

The potential benefits of the Contract are twofold. First, Kentucky Power touts the potential economic development benefits. Jobs will seemingly be created by this venture, and Kentucky Power has incentivized the creation of more jobs . Kentucky Power indicated that it expects many of these jobs to be filled locally. Kentucky Power also touted the significant investment of \$250 million in the project. Kentucky Power did not establish that any of its capital investment was in equipment manufactured or sold locally. However, the revenue generated by the facility and the creation of jobs will unquestionably result in an influx of tax dollars to the state

<sup>&</sup>lt;sup>77</sup> Administrative Order 327 at 26–27, ordering paragraph 12.

<sup>&</sup>lt;sup>78</sup> HVT of the July 20, 2023 Hearing at 14:08:48–14:09:03.

and local governments. That the Contract will provide an economic benefit to the area has been established by Kentucky Power. Second, if Kentucky Power's estimates are accurate, then nonparticipating ratepayers will have a portion of their fixed costs covered by the Contract.

However, the Commission is concerned that the risks of approving the Contract outweigh the potential economic and subsidization benefits. These risks include the following:

- Lack of existing generating capacity and over-reliance on as of yet unobtained capacity purchases in the later years of the Contract.
- The likelihood that the cost of future PJM market purchases of energy will materially exceed Kentucky Power's projections and the increases will be recovered in part by nonparticipating customers, in large part due to increases in LMP from Kentucky Power's energy purchases, net of production and sales, and the FAC mechanism as it currently exists.
- Reliance on limited windows for curtailment under the D.R.S. tariff and the likelihood that Ebon could choose not to interrupt service, or that Kentucky Power was unable to accurately curtail.
- Underestimation of transmission costs, due to general escalation of these costs as allocated, higher allocations from increased capacity purchases, and/or failure to interrupt.

The Commission finds that Kentucky Power's Contract filing does not result in fair, just and reasonable rates under KRS 278.030(1) due to the likelihood of resulting increased rates for nonparticipating ratepayers.

## IT IS THEREFORE ORDERED that:

- 1. Kentucky Power's proposed Contract with Ebon is denied.
- 2. This case is closed and removed from the Commission's docket.

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PUBLIC SERVICE COMMISSION

Chairman

Vice Chairmar

Commissioner

**ENTERED** 

AUG 28 2023 rcs

KENTUCKY PUBLIC SERVICE COMMISSION

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