# COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

I	ln	th	10	M	latter	Of:

ELECTRONIC APPLICATION OF KENTUCKY	)	
UTILITIES COMPANY FOR APPROVAL OF	)	CASE NO.
SPECIAL CONTRACT BETWEEN KENTUCKY	)	2023-00123
UTILITIES COMPANY AND BLUEOVAL SK. LLC	)	

#### ORDER

On April 14, 2023, Kentucky Utilities Company (KU) filed an application, pursuant to KRS 278.160 and 807 KAR 5:011, Section 13, requesting Commission approval of a special contract (Contract) between KU and BlueOval SK, LLC (BlueOval SK) for provision of electric service to support new electric vehicle (EV) battery production facilities located in Hardin County, Kentucky. The Contract offers a discounted special contract rate and was not filed under KU's economic development rider (EDR) tariff.<sup>1</sup>

BlueOval SK is an intervenor in this proceeding. Pursuant to a procedural schedule established on April 27, 2023, KU responded to two rounds of discovery. BlueOval SK filed notice that it elected not to file witness testimony. On September 19, 2023, KU filed a request to submit the matter for a decision based on the written record.

This matter now stands submitted for a decision.

<sup>&</sup>lt;sup>1</sup> See Direct Testimony of Michael Horning (Horning Direct Testimony) (filed Apr. 14, 2023) at 9. KU stated that the reason for the special contract is the unique load profile and the associated cost to serve BlueOval SK. Although BlueOval SK's operations will create economic opportunities in Kentucky, these economic opportunities are not the reason for the special contract rates.

#### LEGAL STANDARD

The Commission has exclusive jurisdiction over the regulation of rates and service of utilities in Kentucky under KRS 278.040(2). Pursuant to KRS 278.030(1), a utility may demand, collect, and receive fair, just and reasonable rates and, pursuant to KRS 278.030(2), the service the utility provides must be adequate, efficient and reasonable. 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.

Although KU did not file the Contract under the terms of its EDR tariff,<sup>2</sup> KU's justification for approval of the Contract, that it ensures that BlueOval SK has the long-term, stable price signal to proceed with the single largest economic development project in Kentucky, implicates economic development rates. 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>3</sup> Administrative Order 327 contains 18 findings that refined the criteria on which the Commission would evaluate and approve an EDR contract.<sup>4</sup> In Administrative Order 327, the Commission also directed that a jurisdictional utility filing

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<sup>&</sup>lt;sup>2</sup> Hornung Direct Testimony at 9.

<sup>&</sup>lt;sup>3</sup> Administrative Case No. 327, *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>4</sup> Administrative Order 327 at 24–28.

an EDR contract must comply with Findings 3 through 17.<sup>5</sup> The Contract is not filed pursuant to KU'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 whether the rates contained in the Contract are fair, just and reasonable and do not result in KU's other customers subsidizing electric service to BlueOval SK. This treatment is consistent with other Commission matters in which EDR contracts were filed as special contracts without application under an EDR tariff.<sup>6</sup>

The relevant findings of Administrative Order 327 are as follows:<sup>7</sup>

- Finding 3: EDRs should be implemented by special contract negotiated between the utilities and their large commercial and industrial customers.<sup>8</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>9</sup>

<sup>&</sup>lt;sup>5</sup> Administrative Order 327 at 28, ordering paragraph 1.

<sup>&</sup>lt;sup>6</sup> See Case No. 2020-00019, *Electronic Application of Kentucky Power Company for Approval of a Contract for Electric Service with Air Products and Chemicals, Inc.* (Ky. PSC Apr. 23, 2020), Order finding that the special contract should be treated as an economic development rate under the purposes of Administrative Case No. 327. Additionally, the Commission found that the reporting requirements of Findings 7 and 11 of Administrative Order 327 and the continuing obligation to demonstrate in future rate proceedings that nonparticipating ratepayers were not adversely affected as set forth in Finding 8 were appropriate. *See also* Case No. 2023-00045, *Electronic Tariff Filing of Big Rivers Electronic Corporation and Kenergy Corp for Approval of a Special Contract with Economic Development Rates with Pratt Paper (KY), LLC,* (Ky. PSC Feb. 10, 2023), in which the application was not filed pursuant to an EDR tariff, but the Joint Applicants and the Commission applied the findings of Administrative Order 327 in analyzing the reasonableness of the contract and the rates resulting from the contract.

<sup>&</sup>lt;sup>7</sup> Findings 7 and 11 relate to annual reports of information regarding EDR customers; their relevance in this proceeding is discussed below. Finding 8 relates to filings in future rate case proceedings, and it is discussed below 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 of an EDR. No comments have been filed in this proceeding.

<sup>&</sup>lt;sup>8</sup> Administrative Order 327 at 25, ordering paragraph 3.

<sup>&</sup>lt;sup>9</sup> Administrative Order 327 at 25, ordering paragraph 4.

- 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>10</sup>
- Finding 6: A utility should demonstrate that the EDR exceeds the marginal cost associated with serving the customer.<sup>11</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>12</sup>
- 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.<sup>13</sup>
- Finding 12: For new industrial customers, an EDR should apply only to load which exceeds a minimum base level.<sup>14</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>15</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>16</sup>

#### PROPOSED SPECIAL CONTRACT

On February 22, 2023, and February 24, 2023, KU and BlueOval SK, respectively, executed the Contract for KU to provide BlueOval SK with service under a discounted rate, subject to approval by the Commission. KU stated that BlueOval SK will invest

<sup>&</sup>lt;sup>10</sup> Administrative Order 327 at 25, ordering paragraph 5.

<sup>&</sup>lt;sup>11</sup> Administrative Order 327 at 26, ordering paragraph 6.

<sup>&</sup>lt;sup>12</sup> Administrative Order 327 at 26, ordering paragraph 9.

<sup>&</sup>lt;sup>13</sup> Administrative Order 327 at 26, ordering paragraph 10.

<sup>&</sup>lt;sup>14</sup> Administrative Order 327 at 26, ordering paragraph 12.

<sup>&</sup>lt;sup>15</sup> Administrative Order 327 at 26, ordering paragraph 12.

<sup>&</sup>lt;sup>16</sup> Administrative Order 327 at 27, ordering paragraph 14.

approximately \$5.8 billion and create approximately 5,000 jobs at its proposed facility.<sup>17</sup> KU maintained that BlueOval SK is expected to attract millions in additional investment by suppliers and related businesses locating in the area.<sup>18</sup> KU pointed to announcements that EV battery component suppliers will relocate to Kentucky, with one producer investing almost \$1 billion and creating 400 jobs in Christian County, Kentucky, and an industrial aluminum foil manufacturing operation investing \$238.7 million and creating 122 jobs in Hardin County, Kentucky.<sup>19</sup>

BlueOval SK will construct two plants, with Plant 1 expected to begin commercial operations in early 2025 and Plant 2 beginning commercial operation approximately eight months later.<sup>20</sup> Prior to Plant 1 beginning commercial operations, BlueOval SK will take transmission-level service under a standard Rate Retail Transmission Service (RTS) contract.<sup>21</sup>

Under the Contract terms, KU will deliver 140 MW of firm power to BlueOval SK during the first year of the Contract term and 260 MW of firm power during each subsequent year over the 20-year term of the Contract.<sup>22</sup> The maximum contract demand can be changed with the consent of both parties upon one year's notice.<sup>23</sup> The Contract

<sup>&</sup>lt;sup>17</sup> Application, paragraph 6.

<sup>&</sup>lt;sup>18</sup> Application, paragraph 6.

<sup>&</sup>lt;sup>19</sup> Direct Testimony of John A. Bevington (Bevington Direct Testimony) (filed Apr. 14, 2023) at 5–6.

<sup>&</sup>lt;sup>20</sup> Hornung Direct Testimony at 3.

<sup>&</sup>lt;sup>21</sup> Application, paragraph 18.

<sup>&</sup>lt;sup>22</sup> Application, paragraph 16.

<sup>&</sup>lt;sup>23</sup> Application, paragraph 16.

rates become effective when BlueOval SK's Plant 1 begins commercial operations, which is expected to occur in the first half of 2025.<sup>24</sup>

The Contract rates consist of the following:

- (1) A basic service charge per day that is the same as the basic service charge contained in Rate RTS. KU explained that future adjustments to the Contract basic service charge will be the same as adjustments to Rate RTS approved by Commission Order in future proceedings.<sup>25</sup>
- (2) An energy charge per kWh day that is the same as the energy charge per kWh contained in Rate RTS. KU explained that future adjustments to the Contract energy charge will be the same as adjustments to Rate RTS approved by Commission Order in future proceedings.<sup>26</sup> KU stated that under the Contract the basic service charge and energy charge are designed to track directly with the otherwise applicable RTS rate as those are set by Commission Order.<sup>27</sup>
- (3) A maximum load demand charge per kVA based on peak, intermediate, and base demand periods. KU explained that the maximum load demand charge differs from those in Rate RTS because the load profile of BlueOval SK is significantly different from the rate class and does not match any customer taking service under Rate RTS and does not fit within any other tariffed rate.<sup>28</sup> KU stated that, in the Contract, it agreed not to seek

<sup>&</sup>lt;sup>24</sup> Application, paragraph 18.

<sup>&</sup>lt;sup>25</sup> Application, paragraphs 19–20; Hornung Direct Testimony at 6. In addition, KU will include BlueOval SK in all subsequent future cost of service studies. KU's Response to Commission Staff's First Request for Information (Staff's First Request) (filed June 23, 2023), Item 6b.

<sup>&</sup>lt;sup>26</sup> Application, paragraphs19–20; Hornung Direct Testimony at 6.

<sup>&</sup>lt;sup>27</sup> Hornung Direct Testimony at 6.

<sup>&</sup>lt;sup>28</sup> Application, paragraphs 19–20.

an increase in demand rates for BlueOval SK that exceed the percentage increases for corresponding demand charges in Rate RTS authorized by the Commission <sup>29</sup>

- (4) Adjustments for applicable riders and mechanisms.<sup>30</sup>
- (5) Applicable charges for excess facilities, which will be billed under the existing Rider EF and be subject to a supplemental contract that will become effective on or before BlueOval SK takes transmission level service through the Glendale industrial substation in fall 2023.<sup>31</sup>
  - (6) Applicable charges or credits, if any, for future renewable energy.<sup>32</sup>

KU maintained that BlueOval SK's load is unique and unlike the load and consumption characteristics of any large industrial customer taking service under KU's tariffed rates, and therefore is not appropriate for service under any of KU's current rate schedules.<sup>33</sup> KU stated that the expected annual load factor when BlueOval SK is in full operation is between 85 and 90 percent, with some monthly load factors at 95 percent.<sup>34</sup> KU noted that the average load factor of customers on KU's Rate RTS is 48 percent and the highest annual load factor of any Rate RTS customer is 76 percent for the 12 months ending December 2022.<sup>35</sup>

<sup>&</sup>lt;sup>29</sup> Hornung Direct Testimony at 6.

<sup>&</sup>lt;sup>30</sup> Application, paragraph 19.

<sup>&</sup>lt;sup>31</sup> Application, paragraphs 19, 21.

<sup>&</sup>lt;sup>32</sup> Application, paragraph 19.

<sup>&</sup>lt;sup>33</sup> Hornung Direct Testimony at 5.

<sup>&</sup>lt;sup>34</sup> Hornung Direct Testimony at 5.

<sup>&</sup>lt;sup>35</sup> Hornung Direct Testimony at 5.

KU asserted that BlueOval SK will use most of its contracted capacity most of the time when fully operational due to BlueOval SK's high load factor and 24-hour operations.<sup>36</sup> KU asserted that a very high load factor results in fixed costs to serve peak demand spread over a greater number of hours, which in turn results in lower overall costs to serve demand and is reflected in lower demand rates.<sup>37</sup>

KU stated that its summer peak demand is 17 percent and that its winter peak demand of 24 percent is the "binding constraint" for KU's resource planning.<sup>38</sup> KU projected that in 2028 it will have a summer peak load of 6,059 MW and a winter peak load of 5,879 MW without BlueOval SK's load.<sup>39</sup> KU asserted that, to meet the 17 percent minimum summer reserve margin, it would need to have 7,089 MW of resources available to serve load. To meet its 24 percent winter minimum reserve margin, KU would need to have 7,290 MW of available resources to serve load.<sup>40</sup> KU stated that BlueOval SK's summer peak load of 260 MW is 35 MW higher than its winter peak load of 225 MW, and thus serving the winter load remains the binding constraint even with BlueOval SK's load.<sup>41</sup>

KU stated that, if it adds new capacity to its generating fleet, the next generating unit will be a natural gas combined cycle (NGCC) unit. Based on recent bids for two

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<sup>&</sup>lt;sup>36</sup> Hornung Direct Testimony at 5.

<sup>&</sup>lt;sup>37</sup> Hornung Direct Testimony at 5.

<sup>&</sup>lt;sup>38</sup> Direct Testimony of Stuart A. Wilson (filed Apr. 14, 2023) (Wilson Direct Testimony) at 2–3.

<sup>&</sup>lt;sup>39</sup> Wilson Direct Testimony at 2–3.

<sup>&</sup>lt;sup>40</sup> Wilson Direct Testimony at 3.

<sup>&</sup>lt;sup>41</sup> Wilson Direct Testimony at 3.

NGCC units with a 641 MW winter capacity and 621 MW summer capacity, <sup>42</sup> KU determined the marginal production demand-related cost of service by calculating BlueOval SK's winter demand share of 225 MW, which results in a BlueOval SK marginal production demand cost of 35.1 percent<sup>43</sup> of the NGCC units' total non-variable revenue requirement.<sup>44</sup> On September 11, 2023, and September 14, 2023, KU and Louisville Gas and Electric Company (LG&E) received updated bids for the proposed NGCC units at Mill Creek Station and Brown Station.<sup>45</sup> The bids for both units contained higher capital costs than anticipated in this proceeding. In addition, the updated bids were for 645 MW NGCC units (summer capacity), rather than the original 621 MW NGCC units. The NGCC unit at the Brown Station was originally the higher-cost unit, and, with the updated bids, it remained more expensive. In Case No. 2022-00402, the Commission approved a Certificate of Public Convenience and Necessity (CPCN) for a generation portfolio that contained a new NGCC unit (Mill Creek 5) to replace Mill Creek coal-fired units 1 and 2 at the Mill Creek station.<sup>46</sup>

<sup>&</sup>lt;sup>42</sup> KU stated that the summer capacity of the two NGCC units was 621 MW and that it chose to use the higher-cost unit in the marginal cost of service analysis to "err on the side of caution." Wilson Direct Testimony at 3. See also Case No. 2022-00402, *Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates and Approval of a Demand Side Management Plan and Approval of Fossil Fuel-Fired Generating Unit Retirements*, Application (filed Jan. 6, 2023).

 $<sup>^{43}</sup>$  225 MW divided by 641 MW = 35.1 percent. The Commission notes that the percentage will decline slightly due to the increased size of the updated NGCC unit bids.

<sup>&</sup>lt;sup>44</sup> Wilson Direct Testimony at 3–4.

<sup>&</sup>lt;sup>45</sup> Case No. 2022-00402, *Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates and Approval of a Demand Side Management Plan and Approval of Fossil Fuel-Fired Generating Unit Retirements* (filed Sept.15, 2023) KU and LG&E's Response to Joint Intervenors' Post-Hearing Request for Information, Item 1a.

<sup>&</sup>lt;sup>46</sup> Case No. 2022-00402, Nov. 6, 2023 final Order at 171. The Commission also denied the retirement of the Ghent 2 and Brown 3 coal units and approved the addition of solar, battery storage and demand-side management resources.

KU asserted that the negotiated demand rates will cover all marginal costs to serve the demand.<sup>47</sup> KU calculated two demand revenue streams by first using the negotiated Contract rates over the 20-year Contract period and with a 0.5 percent escalation factor beginning in 2028.<sup>48</sup> KU used BlueOval SK's projected average monthly demand for the base, intermediate and peak billing intervals.<sup>49</sup> KU calculated the net marginal demand revenue by subtracting BlueOval SK's 35.1 percent share of the NGCC units' incremental capacity cost.<sup>50</sup> KU estimated that under the proposed Contract, the net present value revenue requirement in 2023 dollars of BlueOval SK's demand revenues will exceed the marginal demand related cost of service by \$97.1 million without escalation and by \$108.0 million with escalation.<sup>51</sup>

KU argued that because the Contract energy charge was identical to its Rate RTS energy charge, including the energy charge in the marginal cost study was not appropriate.<sup>52</sup> KU asserted that the energy rate is primarily composed of two elements: fuel and variable operations and maintenance costs (O&M). Fuel cost is fully recovered through base rates and the Fuel Adjustment Clause. KU's projected variable O&M for the 641 MW NGCC unit is \$1.08 per MWh, which is lower than its system average variable

<sup>&</sup>lt;sup>47</sup> Application, paragraph 23.

<sup>&</sup>lt;sup>48</sup> Wilson Direct Testimony at 4.

<sup>&</sup>lt;sup>49</sup> Wilson Direct Testimony at 4.

<sup>&</sup>lt;sup>50</sup> Wilson Direct Testimony at 4 and Table 1 at 5.

<sup>&</sup>lt;sup>51</sup> Wilson Direct Testimony at 4 and Table 1 at 5. See also KU's Response to Staff's First Request, Item 4, and Attachment KU DR1 PSC Attach to Q04 – CPCN Financial Model BOSK Share of BR12 Confidential.

<sup>&</sup>lt;sup>52</sup> Wilson Direct Testimony at 6.

O&M component of the existing Rate RTS energy rate. KU argued that BlueOval SK's energy charge revenues should equal or exceed its marginal energy charge revenues.<sup>53</sup>

KU argued that the Contract does not create unreasonable preferences or advantages prohibited by KRS 278.170(1) and is consistent with similar special contracts with large industrial customers at rates different from tariffed rates in which significant load will cover all variable costs and contribute to fixed costs, while benefitting all customers.<sup>54</sup>

#### **DISCUSSION AND FINDINGS**

Because KU'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 all other factors that affect reasonableness of rates. The following paragraphs will address the findings of Administrative Order 327 that are applicable to this proceeding:

Finding 3: EDRs should be implemented by special contract negotiated between the utilities and their large commercial and industrial customers.<sup>55</sup>

KU submitted the proposed Contract, executed by both parties. These documents contain the negotiated rates, terms, and conditions of the Contract. Therefore, the Commission finds that the 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

<sup>&</sup>lt;sup>53</sup> Wilson Direct Testimony at 6–7.

<sup>&</sup>lt;sup>54</sup> Application, paragraph 27, and Wilson Direct Testimony at 6–7.

<sup>&</sup>lt;sup>55</sup> Administrative Order 327 at 25, ordering paragraph 3.

with serving the customer, minimum bill, estimated load, estimated load factor, and length of contract.<sup>56</sup>

KU has established the following points: (1) Demand rates, which are the only discounted rates in the Contract, extend for the life of the 20-year Contract.<sup>57</sup> (2) The BlueOval SK project is estimated to have a capital investment of approximately \$5.8 billion and to create approximately 5,000 jobs at the proposed production facility.<sup>58</sup> (3) BlueOval SK requested the construction of certain facilities behind the meter. These facilities will be constructed, maintained and operated by KU and billed to BlueOval SK under KU's Standard Rate Rider EF – Excess Facilities tariff.<sup>59</sup> (4) Neither the Contract nor Rate RTS contain a minimum bill provision. However, as part of its incremental cost study, KU estimated sample monthly bills based upon BlueOval SK's expected load, load factor and rates as provided in KU's Rate RTS and the Contract.<sup>60</sup> KU asserted that BlueOval SK's average annual load factor will range from 85 to 90 percent.<sup>61</sup> The sample bill contained three years of estimated monthly bills. The monthly load factor ranges from

<sup>&</sup>lt;sup>56</sup> Administrative Order 327 at 25, ordering paragraph 4.

<sup>&</sup>lt;sup>57</sup> Wilson Direct Testimony at 4 and Table 1 at 5. *See also* KU's Response to Staff's First Request, Item 4, and Attachment KU DR1 PSC Attach to Q04 – CPCN Financial Model BOSK Share of BR12 Confidential. In addition, the discounted demand rates may increase, but not exceed the percentage increase authorized for corresponding demand rate in Rate RTS. KU also will not seek to recover demand related fixed costs through the Contract's Energy Charge or Basic Service Charge. Hornung Direct Testimony at 4 and 6 and Application, Special Contract, Appendix A.

<sup>&</sup>lt;sup>58</sup> Application, paragraph 6, and Special Contract Recitals, paragraph 5.

<sup>&</sup>lt;sup>59</sup> Application, Special Contract Article VII and Appendix A.

<sup>&</sup>lt;sup>60</sup> Application, Special Contract Appendix A, Hornung Direct Testimony at 4-5 and KU's Response to Staff's First Request, Item 4 and Attachment KU DR1 PSC Attach to Q04 – CPCN Financial Model BOSK Share of BR12 – Confidential, Tab BOSKSampleBill.

<sup>&</sup>lt;sup>61</sup> Hornung Direct Testimony at 5.

In the second year, 2026, the minimum estimated bill is \_\_\_\_\_\_. In the third year, 2027, the minimum estimated bill is \_\_\_\_\_\_. (5) BlueOval SK has an estimated load of up to 260 MW and an annual load factor of an average annual 85 to 90 percent. (6) The KU BlueOval SK Contract has a 20-year term. No fixed minimum number of jobs or amount of investment is necessary or required by precedent.

The Commission finds that the Contract substantially complies with Administrative Order 327, Finding 4, because the Contract sets forth what rate is being discounted and for how long, the amount of capital investment expected, the estimated load and the length of the Contract. The Contract only indicates that monthly load factors may exceed 95 percent; however, the cost study provides a range of annual load factors. Although a minimum bill provision is not included in the Contract, KU has provided sample bills based upon BlueOval SK's expected load, load factor, and rates as provided in KU's Rate RTS and the Contract.

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>65</sup>

<sup>&</sup>lt;sup>62</sup> KU's Response to Staff's First Request, Item 4, and Attachment KU DR1 PSC Attach to Q04 – CPCN Financial Model BOSK Share of BR12 - Confidential, Tab BOSKSampleBill.

<sup>&</sup>lt;sup>63</sup> Hornung Direct Testimony at 4–5. See also: Application, Special Contract Article I and Article V. The Contract indicates the estimated load of the facilities after the first year of the contract term to be 260 MW and for monthly load factor to exceed 95 percent. The estimated demand during the first year of the contract is 140 MW.

<sup>&</sup>lt;sup>64</sup> Hornung Direct Testimony at 6.

<sup>&</sup>lt;sup>65</sup> Administrative Order 327 at 25, ordering paragraph 5.

KU's minimum reserve margin targets are 17 percent summer and 24 percent winter. In 2028, KU projects summer and winter peaks of 6,059 MW and 5,879 MW without the BlueOval SK load. To meet the additional load at a 17 percent summer and 24 percent winter reserve margin, KU will need generating capacity of 7,089 MW summer and 7,290 MW winter resources available. As discussed above, KU filed a parallel proceeding, Case No. 2022-00402, in which it was granted a CPCN to construct and acquire an NGCC unit, renewable facilities, and battery storage. In its application in Case No. 2022-00402, KU stated that its 2028 projected total dispatchable generating capacity is 7,313 MW summer and 7,637 MW winter and total projected supply is 8,686 MW summer (37.4 percent reserve margin) and 8,072 MW winter (32.2 percent reserve margin). For these reasons, the Commission finds that the Contract complies 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.

<sup>&</sup>lt;sup>66</sup> Wilson Direct Testimony at 2–3.

<sup>&</sup>lt;sup>67</sup> Case No. 2022-00402, Nov. 6, 2023 final Order at 178.

<sup>&</sup>lt;sup>68</sup> Case No. 2022-00402, Wilson Direct Testimony at 7, Exhibit SAW-1 Appendix D at D-9-D-10. See also Case No. 2022-00402, KU's Response to Commission Staff's First Request for Information, Item 53f, 07\_PSC\_DR1\_LGE\_KU\_Attach\_to\_Q53(f)\_Peak\_Demand\_and\_Resource\_Summary.pdf. The response provides a table showing that from 2023-2028 that KU's dispatchable capacity reserve margin ranges from 23.0 percent-37.4 percent summer and from 37.4 percent-33.2 percent winter. The Commission notes that the dispatchable capacity will increase as a result of the updated bids received for the NGCC units. The updated NGCC generation units are for 645 MW (summer capacity) units and not the original 621 MW NGCC units in 2027. In addition, the Commission's final Order denied KU's and LG&E's request to retire the Ghent 2 and Brown 3 units in 2028 and approved the additions of additional solar, battery storage, and dispatchable Demand-Side Management resources.

As explained above, KU provided a marginal demand cost analysis. The Contract provides for discounted demand rates only with BlueOval SK paying non-discounted tariffed rates on all other charges and riders. Energy rates were not included in the analysis because BlueOval SK will pay non-discounted energy rates throughout the contract term.<sup>69</sup> The analysis demonstrates that once the BlueOval SK facility begins production in 2025, over the life of the Contract, the net present value (NPV) in 2023 dollars of BlueOval SK's incremental demand revenues will exceed the marginal demand-related costs in every year with a cumulative \$97.1 million without escalation and \$108.0 million with escalation, based upon the original cost study presented in this proceeding.<sup>70</sup> In addition, the Contract contains a provision for the discounted demand rates to increase.<sup>71</sup> However, the percentage increases to the Maximum Load Charges for the peak, intermediate, and base periods shall not exceed the percentage increases authorized for the corresponding demand charges in Rate RTS.<sup>72</sup>

KU's marginal cost study as filed is based upon valid cost assumptions. The study indicated that the Contract was cost-effective from the first full year of production and when the escalation factor was applied, the net revenue surpassed \$100 million. It is clear that the updated NGCC unit cost information received from prospective venders late in Case No. 2022-00402, will raise KU's revenue requirement. However, it is not clear how that would affect the Contract's overall cost-effectiveness. The Commission understands that all prospective cost studies of this nature are based on the best cost estimates available at the time the study is conducted and that these cost estimates are likely to change

<sup>&</sup>lt;sup>69</sup> Hornung Direct Testimony at 6.

<sup>&</sup>lt;sup>70</sup> Wilson Direct Testimony at 4 and Table 1 at 5. See also KU's Response to Staff's First Request, Item 4, and Attachment KU DR1 PSC Attach to Q04 – CPCN Financial Model BOSK Share of BR12 Confidential.

<sup>&</sup>lt;sup>71</sup> Application, Special Contract, Article VI.

<sup>&</sup>lt;sup>72</sup> Application, Special Contract, Article VI at 10.

over time. In addition, the Commission notes that besides demand rates, other rates, such as the environmental surcharge, recover demand related costs. Finally, the Commission notes that a positive innovative feature of the Contract is that as KU is authorized to increase its demand rates over time, the associated percentage increases will be applied to the Contract demand rates too. This contract feature will enhance the cost-effectiveness of the Contract overall. The Commission finds that KU in good faith submitted a cost analysis that at the time demonstrated that the discounted demand rate exceeds the marginal cost of providing service to BlueOval, and the cost analysis was conducted no more than one year prior to the execution of the Contract; therefore, the Commission finds that the Contract substantially complies with Administrative Order 327, Finding 6.73 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>

KU stated that BlueOval SK requested construction of certain behind-the-meter facilities that will be constructed, maintained, and operated by KU, and the costs will be charged to and paid by BlueOval SK under KU's Excess Facilities EF tariff.<sup>75</sup> The Contract states that a standard Excess Facilities contract will be entered into and run during construction and then concurrently with the Contract.<sup>76</sup> Because the Contract provides for KU to recover from BlueOval SK the fixed costs associated with providing the requested

<sup>&</sup>lt;sup>73</sup> The Commission notes that the original incremental demand cost study was based upon the more relatively more expensive Brown 3 NGCC unit rather than the Mill Creek 5 NGCC unit. Subsequent to that original study in Case 2022-00402, KU and LG&E received updated cost information from prospective venders reflecting increased NGCC unit costs. Subsequently, the Commission approved a CPCN for the Mill Creek unit 5 and denied the Brown 3 unit CPCN. Therefore, if a new incremental cost were to be conducted, the updated Mill Creek 5 unit's capital cost would be the more appropriate cost. Also, based upon the higher updated unit capital costs, it is not clear what the net effect of a new cost study would be, other than the incremental revenue requirement would be higher than presented previously.

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

<sup>&</sup>lt;sup>75</sup> Hornung Direct Testimony at 8.

<sup>&</sup>lt;sup>76</sup> Application, Special Contract, Article VII at 10, and Hornung Direct Testimony at 8.

facilities, the Commission finds that the Contract complies with Administrative Order 327, 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.

KU asserts that the BlueOval SK is expected to invest approximately \$5.8 billion and to create an estimated 5,000 jobs.<sup>77</sup> 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 customer or the minimum usage level required for a new customer.<sup>78</sup>

BlueOval SK has contracted for 140 MW firm power in year one of the Contract and 260 MW firm power thereafter.<sup>79</sup> The Contract language, which is identical to Rate RTS tariff language, provides for how the monthly billing demand for the Peak, Intermediate, and Base demand periods will be calculated.<sup>80</sup> As explained above, neither the Contract nor

<sup>&</sup>lt;sup>77</sup> Application at 6, and Bevington Direct Testimony at 2. In addition, after the BlueOval SK project was announced, multiple additional projects have been announced to supply the BlueOval SK battery facility. These additional projects are expected to bring additional investment of approximately \$4.7 billion and 4,700 full-time jobs for a total EV related capital investment of \$10.5 billion and 9,700 full-time jobs. Bevington Direct Testimony at 3–7.

<sup>&</sup>lt;sup>78</sup> Administrative Order 327 at 26–27, ordering paragraph 12.

<sup>&</sup>lt;sup>79</sup> Application, paragraph 6; Special Contract Recitals, paragraph 5; Article V, paragraph 5.01; and Hornung Direct Testimony at 5.

<sup>&</sup>lt;sup>80</sup> Application, Special Contract, Appendix A. The Contract language is identical to language provided in KU's Rate RTS tariff.

Rate RTS contain a minimum usage level. However, the marginal demand cost analysis contained sample bills that included assumed loads, load factors of not less than 80 percent, and energy usage levels. Given that BlueOval SK has contracted for stated amounts of firm power with a load factor of between 80 to 95 percent, the Commission finds that this is tantamount to a minimum bill and that the Contract substantially 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.<sup>81</sup>

The general intent of this provision is to ensure that in the second half of the contract period, the margins inherent in the non-discounted tariffed rates will make up for the margins lost due to the discounted contract rates and that the utility does not put itself and its ratepayers at risk of losing money over the life of the contract. The Contract extends over 20 years and provides that only KU's Rate RTS demand rates are discounted and that all other charges and riders will be at non-discounted tariffed rates. Specific behind-the-meter facilities will be provided and paid for according to KU's standard Excess Facilities EF tariff. The marginal cost analysis demonstrates that even with the demand rates discounted in every year, once production begins, there is a projected positive margin in every year with a cumulative NPV in 2023 dollars between

<sup>81</sup> Administrative Order 327 at 27, ordering paragraph 14.

<sup>82</sup> Application, Special Contract, Appendix A.

<sup>83</sup> Application, Special Contract, Section VII at 10 and Hornung Direct Testimony at 8.

\$97.1 million and 108.0 million.<sup>84</sup> Finally, as explained above, The Contract provides that under certain circumstances, the discounted demand rates may be increased during the term of the Contract. The Commission finds that the Contract produces positive margins in year one of the Contract term, that there is a mechanism for discounted rates to increase, and that non-participating ratepayers are sufficiently protected from any subsidization that could result from the Contract. Therefore, the Commission finds that the Contract substantially complies with Administrative Order 327, Finding 14.

The potential economic benefit of the Contract between KU and BlueOval SK includes approximately \$5.8 billion in new capital investment and the creation of approximately 5,000 new full-time jobs. So Governor Andy Beshear's office has referred to the BlueOval SK Battery Park as the single largest economic development project announcement in the history of Kentucky. In addition to the BlueOval SK facility, there have been additional projects announced, bringing an estimated total EV-related capital investment to Kentucky of \$10.5 billion with an estimated 9,700 full-time jobs. This includes a new battery materials production facility in Hopkinsville, Kentucky, that is expected to result in a \$1 billion investment and create 400 full-time jobs; a new industrial aluminum foil manufacturing facility in Hardin County, Kentucky, that is expected to result in a \$238.7 million investment and create 122 full-time jobs; and a new nanomaterials manufacturing facility in Hardin County, Kentucky, that is expected to result in a \$50

<sup>&</sup>lt;sup>84</sup> Wilson Direct Testimony, at 2 and Table 1 at 3.

<sup>85</sup> Bevington Direct Testimony at 2.

<sup>&</sup>lt;sup>86</sup> Bevington Direct Testimony at 2 (citing an April 12, 2023 article accessed by https://kentucky.com).

<sup>&</sup>lt;sup>87</sup> Bevington Direct Testimony at 7.

million investment and create 93 jobs. Another new facility plans to locate in Hopkinsville, Kentucky, to manufacture polyaramid separator technology for inclusion in EV batteries and is estimated to result in a \$500 million investment and create 562 full-time jobs. <sup>88</sup>

Further, the marginal cost analysis shows that even with discounted demand rates, there is a positive margin in every year of the Contract. Using conservative assumptions, the revenue produced by the discounted demand rates will cover all marginal costs to serve demand and contribute nearly \$100 million to fixed costs over the 20-year term of the Contract. As further protection for non-participating ratepayers, in addition to BlueOval SK paying non-discounted rates for all other charges and riders, the Contract rates and riders are subject to increase as the result of future Commission actions. The discounted demand rates may increase also, but only by the same percentage increases as Rate RTS demand rates. Given these facts, the Commission finds that the Contract provides adequate protection to non-participating ratepayers for the risk of subsidizing BlueOval SK.

For the reasons set forth above, the Commission finds that the Contract results in fair, just and reasonable rates under KRS 278.030(1), is in the public interest, and should be approved. The Commission also finds that the Contract should be treated as an economic development rate under the purposes of Administrative Order 327, and to the extent a deviation from the findings contained in Administrative Order 327 is necessary,

<sup>88</sup> Bevington Direct Testimony at 5-7.

<sup>89</sup> Wilson Direct Testimony at 7.

<sup>&</sup>lt;sup>90</sup> Application, paragraph 23; Wilson Direct Testimony at 5–6.

<sup>&</sup>lt;sup>91</sup> Hornung Direct Testimony at 6.

it should be granted for the reasons set forth in this Order. The Commission further finds that, similar to reports filed pursuant to Finding 7 in Administrative Order 327, KU should file annual reports by March 31 each year that detail the marginal costs associated with service to BlueOval SK and the revenues received from providing such service for the prior calendar year. Additionally, similar to reports filed pursuant to Finding 11 in Administrative Order 327, KU should file by March 31 of each year a report with the Commission providing, for the prior calendar year, the information requested in Appendix A to this Order Finally, the Commission finds that, similar to Finding 8, in Administrative Order 327, in order to demonstrate that KU's other customers are not adversely affected by the discounted demand rates contained in the Contract, in any rate proceeding or other matter in which KU files a cost-of-service study with the Commission, KU should provide a detailed cost-of-service analysis demonstrating that its other customers are not adversely affected by the Contract.

# IT IS THEREFORE ORDERED that:

- 1. The Contract between KU and BlueOval SK is approved.
- 2. A deviation from strict compliance with Findings 4, 6, 12, and 14 of Administrative Order 327 is granted.
- 3. By March 31 of each year, KU shall file an annual report with the Commission detailing, for the prior calendar year, revenues received and marginal costs associated with service to BlueOval SK through the term of the Contract.
- 4. KU shall file by March 31 of each year a report with the Commission providing, for the prior calendar year, the information requested in the Appendix to this Order.

- 5. During any rate proceedings filed by KU subsequent to the effective date of the Contract and during the period when KU still has an active Contract with BlueOval SK, KU shall demonstrate, through a detailed cost-of-service analysis, that its other ratepayers are not adversely affected by the special contract rates to BlueOval SK. This demonstration shall also be made if KU files a cost-of-service study in any matter other than a rate proceeding.
- 6. Any documents filed pursuant to ordering paragraphs 3 and 4 of this Order shall reference the number of this case and shall be retained in the post-case correspondence file for this proceeding.
- 7. The Executive Director is designated authority to grant a reasonable extension of time for the filing of any documents required by this Order upon KU's showing of good cause for such extension.
  - 8. This case is closed and removed from the Commission's docket.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

Commissioner

**ENTERED** 

DEC 18 2023

bsb

KENTUCKY PUBLIC SERVICE COMMISSION

ATTEST:

Executive Director

# **APPENDIX**

# APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2023-00123 DATED DEC 18 2023

# ECONOMIC DEVELOPMENT RATE CONTRACT REPORT

UTILITY:	YEAR:		
	Current Reporting Period	Cumulative	
<ol> <li>Number of EDR Contracts -         Total:         Existing Customers:         New Customers:     </li> </ol>			
<ol> <li>Number of Jobs Created -         Total:         Existing Customers:         New Customers:     </li> </ol>			
<ol> <li>Amount of Capital Investment -         Total:         Existing Customers:         New Customers:     </li> </ol>			
4. Consumption -			
(A) DEMAND Total: Existing Customers: New Customers:	kW kW kW	kW kW	/
(B) ENERGY/CONSUMPTION Total: Existing Customers: New Customers:	kW  kW	h kw	/h

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