

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF BIG RIVERS	)	
ELECTRIC CORPORATION FOR A CERTIFICATE	)	
OF PUBLIC CONVENIENCE AND NECESSITY	)	CASE NO.
AUTHORIZING CONSTRUCTION OF A NEW	)	2022-00433
TRANSMISSION OPERATIONS CENTER AND AN	)	
ORDER AUTHORIZING BIG RIVERS TO	)	
DISPOSE OF PROPERTY	)	

ORDER

On January 24, 2023, Big Rivers Electric Corporation (BREC) filed an application pursuant to KRS 278.020 and 807 KAR 5:001E, Section 15, seeking a Certificate of Public Convenience and Necessity (CPCN) to construct a new transmission operations center (TOC). BREC also sought approval pursuant to KRS 278.218 to sell its existing energy transmission & substation (ET&S) facility. There are no intervenors in this proceeding. BREC responded to one set of requests for information from Commission Staff. On March 21, 2023, BREC filed a letter requesting that the case be submitted for a decision on the written record.

This case stands submitted for a decision on the written record.

LEGAL STANDARD

No utility may construct or acquire any facility to be used in providing utility service to the public until it has obtained a CPCN from this Commission.<sup>1</sup> To obtain a CPCN, the

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<sup>1</sup> KRS 278.020(1). Although the statute exempts certain types of projects from the requirement to obtain a CPCN, the exemptions are not applicable.

utility must demonstrate a need for such facilities and an absence of wasteful duplication.<sup>2</sup>

“Need” requires:

[A] showing of a substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed or operated.

[T]he inadequacy must be due either to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business; or to indifference, poor management or disregard of the rights of consumers, persisting over such a period of time as to establish an inability or unwillingness to render adequate service.<sup>3</sup>

“Wasteful duplication” is defined as “an excess of capacity over need” and “an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties.”<sup>4</sup> To demonstrate that a proposed facility does not result in wasteful duplication, the Commission has held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed.<sup>5</sup> Although cost is a factor, selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication.<sup>6</sup> All relevant factors must

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<sup>2</sup> *Kentucky Utilities Co. v. Pub. Serv. Comm'n*, 252 S.W.2d 885 (Ky. 1952).

<sup>3</sup> *Kentucky Utilities Co.*, 252 S.W.2d at 890.

<sup>4</sup> *Kentucky Utilities Co.*, 252 S.W.2d at 890.

<sup>5</sup> Case No. 2005-00142, *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky* (Ky. PSC Sept. 8, 2005), Order at 11.

<sup>6</sup> See *Kentucky Utilities Co. v. Pub. Serv. Comm'n*, 390 S.W.2d 168, 175 (Ky. 1965). See also Case No. 2005-00089, *Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for the Construction of a 138 kV Electric Transmission Line in Rowan County, Kentucky* (Ky. PSC Aug. 19, 2005), final Order.

be balanced.<sup>7</sup>

KRS 278.218(1) states,

(1) No person shall acquire or transfer ownership of or control, or the right to control, any assets that are owned by a utility as defined under KRS 278.010(3)(a) without prior approval of the commission, if the assets have an original book value of one million dollars (\$1,000,000) or more and:

(a) The assets are to be transferred by the utility for reasons other than obsolescence; or

(b) The assets will continue to be used to provide the same or similar service to the utility or its customers

(2) The commission shall grant its approval if the transaction is for a proper purpose and is consistent with the public interest.

### BACKGROUND

BREC was granted a CPCN to build a new headquarters facility and sell the existing headquarters building in Case No. 2021-00314.<sup>8</sup> The previous headquarters building was built in 1966, with additional buildings completed up to 1981.<sup>9</sup> The Final Order in Case No. 2021-00314 noted that the new headquarters building was smaller than the existing one, and that BREC intended to relocate some operations to a new TOC.<sup>10</sup> BREC recently transitioned into its newly constructed headquarters facility; however, its transmissions system operations and maintenance facilities are located at

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<sup>7</sup> Case No. 2005-00089, *East Kentucky Power Cooperative, Inc.* (Ky. PSC Aug. 19, 2005), final Order at 6.

<sup>8</sup> Case No. 2021-00314, *Electronic Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity Authorizing Construction of a New Headquarters Facility and an Order Authorizing Big Rivers to Sell Its Existing Headquarters Facility* (Ky. PSC Dec. 7, 2021), Order at 9.

<sup>9</sup> Case No. 2021-00314, Dec. 7, 2021 Order at 1.

<sup>10</sup> Case No. 2021-00314, Dec. 7, 2021 Order at 2.

an existing ET&S facility, while 27 employees in its engineering, department, control center, and data center are housed at the old headquarters building.<sup>11</sup>

The existing ET&S facility was built in 1979, with an additional warehouse for vehicle storage added in 1984.<sup>12</sup> The facility includes 5,000 square feet of office space and 24,000 square feet of warehouses and vehicle storage and maintenance space, including on-site fueling, compressed gas storage, loading dock, and oil storage area.<sup>13</sup> Thirty-five employees work at the ET&S facility in vegetation management, line maintenance, substation maintenance, and substation and communication operations.<sup>14</sup> BREC stated that a substantial portion of the 5.6-acre site is situated within an area identified by the Federal Emergency Management Agency (FEMA) as a Special Flood Hazard Area, making it unsuitable for additional facility construction.<sup>15</sup>

BREC argued that the existing ET&S facility does not meet its present needs because it has insufficient storage space for materials and equipment, diminishing their useful lives and exposing them to theft and vandalism.<sup>16</sup> BREC also asserted that the old headquarters building is not sufficiently secure for a building housing its control center and data center. BREC stated that the control center is the single location for remote control of the entire transmission system and generating unit dispatch and the data center is the primary location for all business-critical applications and data, including computing

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<sup>11</sup> Application, Exhibit D, Direct Testimony of Robert W. Berry (Berry Testimony) at 6–7.

<sup>12</sup> Berry Testimony at 5.

<sup>13</sup> Berry Testimony at 5.

<sup>14</sup> Berry Testimony at 6.

<sup>15</sup> Berry Testimony at 5.

<sup>16</sup> Berry Testimony at 8.

equipment reserved exclusively for emergency management services.<sup>17</sup> However, BREC asserted that these areas are insufficiently hardened against severe weather and physical attacks or intrusions. The control center has an exterior glass wall, and personnel must shelter at a different location during extreme weather.<sup>18</sup> BREC stated that, although the existing control and data centers currently comply with North American Electric Reliability Corporation (NERC) standards, BREC is concerned with the following security issues based on NERC guidelines: inadequate protection from tornados, large interior and exterior windows, lack of physical hardening, and lack of slab-to-slab walls.<sup>19</sup>

BREC proposed to construct a single TOC facility that will host all of the above-referenced operations for maximum efficiency and coordination, with ample storage space and modern security measures as contemplated by NERC standards. BREC proposed to construct a 100,358 square foot TOC facility in Owensboro, including 29,691 square feet of office space, 13,067 square feet for vehicle maintenance, and 57,600 square feet of warehouse storage space.<sup>20</sup>

BREC stated that it chose an Owensboro location because it is centrally located in BREC's service territory, with fast access to major roads,<sup>21</sup> and because the city of Owensboro provided significant financial incentives. The city of Owensboro offered (1) a rebate in the amount of one-third of the real property purchase price and \$18,360.00 per

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<sup>17</sup> Berry Testimony at 8–9, 13.

<sup>18</sup> Berry Testimony at 9.

<sup>19</sup> BREC's Response to Commission Staff's First Request for Information (Staff's First Request) (filed Mar. 6, 2023), Item 6(a).

<sup>20</sup> Application at 4.

<sup>21</sup> Application at 4.

acre, up to 45 acres, for the acreage BREC selected for construction, (2) \$30,000 to help cover utility connections, (3) to build a road to access the property, and (4) a rebate on 50 percent of the General Occupational Fund Occupational Fee on gross employee wages for ten years.<sup>22</sup> BREC explained that the proposed project would be built on land purchased by BREC in 2021 for \$5,140,710.<sup>23</sup> BREC further explained that this property is larger than is necessary for the proposed project and BREC may sell or lease the surplus.<sup>24</sup>

BREC stated that the estimated cost of construction is \$52,779,254,<sup>25</sup> with an estimated \$158,113 in annual operations and maintenance (O&M) cost.<sup>26</sup> BREC further stated that the annual O&M expense for the existing ET&S facility is \$368,574, resulting in a \$1,183,521 net increase in net operating costs when factoring in recovery of the capital investment.<sup>27</sup> BREC maintained that this analysis does not factor in the sale of existing facilities or surplus land. BREC stated that it considered partnering with one of its owner-member cooperatives, Kenergy Corporation (Kenergy), which was interested in leasing surplus land from BREC for its own headquarters. BREC stated that Kenergy decided to postpone its decision to relocate its headquarters, but may be interested in leasing the surplus acreage in the future, which would provide BREC with an additional

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<sup>22</sup> Berry Testimony at 12.

<sup>23</sup> Application, Exhibit E, Direct Testimony of Talina R. Mathews, Ph.D. (Mathews Testimony) at 5.

<sup>24</sup> Mathews Testimony at 5, 12.

<sup>25</sup> Mathews Testimony at 5. This figure includes \$1,199,864, representing the cost of the portion of land the facility would be built upon.

<sup>26</sup> Application at 7.

<sup>27</sup> Mathews Testimony at 12. This analysis is based on a comparable square footage basis and reflect projected first year amounts.

revenue stream not accounted for in its current cost-benefit analysis:<sup>28</sup>

	Proposed Transmission Operations Center	Existing ET&S, Energy Control, Information Systems and Engineering	Savings/ (Cost)
Operation and Maintenance			
Utilities	33,210	137,018	103,308
Insurance	74,353	34,270	(40,083)
Building& Grounds	29,250	111,971	82,721
Elevator	0	1,965	1,965
Contractor/Janitorial	<u>20,040</u>	<u>83,350</u>	63,310
<b>Total O&amp;M</b>	<b>156,853</b>	<b>368,574</b>	<b>211,721</b>
Property Tax	705,970	31,227	(674,743)
Depreciation	1,031,588	244,368	(787,220)
Occupational Tax Rebate	<u>(66,721)</u>	<u>0</u>	<u>66,721</u>
<b>Net Operating Costs</b>	<b>1,827,690</b>	<b>644,169</b>	<b>(1,183,521)</b>

*Note: The operating costs in the above table reflect the proposed TOC cost on a comparable square footage basis. Also, the operating costs reflect the projected year 1 amounts. Some of the line items may be subject to inflation.*

BREC stated that it is pursuing financing through a Rural Utilities Service (RUS) loan, New Markets Tax Credits (NMTC), National Rural Utilities Cooperative Finance Corporation (CFC), and local banks.<sup>29</sup>

BREC stated that it evaluated alternative options for addressing its transmission

<sup>28</sup> Mathews Testimony at 12.

<sup>29</sup> Mathews Testimony at 9-10. BREC has not filed an application requesting approval of financing specific to funding this project; however, the Commission did approve an amended and restated \$150,000 revolving line of credit and a new \$135,000 loan from CFC, with a stated purpose of, in part, constructing new facilities and improving existing facilities. Case No. 2023-00087, *Electronic Application of Big Rivers Electric Corporation for Approval to Issue Evidences of Indebtedness* (Ky. PSC May 15, 2023), Order at 1, 4.

control and warehouse needs. According to BREC, expanding the existing ET&S facility to add warehouse or office space was not feasible because that facility is located in a flood plain and is not suitable for relocating critical facilities or for new construction.<sup>30</sup> BREC stated that it also deemed relocating ET&S operations to the existing headquarters building inappropriate because the downtown Henderson location would not be appropriate for the type of industrial traffic and vehicle housing that transmission operations require.<sup>31</sup> BREC stated that it considered purchasing Henderson Municipal Power & Light's (HMPL) electric system and using HMP&L's facilities for ET&S operations. BREC further stated that HMPL rejected BREC's purchase offer.<sup>32</sup>

BREC explained that it considered retrofitting its existing headquarters building, continuing to utilize the existing ET&S facility, and building additional warehouse space and an additional facility to house transmission line and right-of-way operations.<sup>33</sup> BREC stated that it was concerned that retrofitting the existing headquarters building control and data centers to meet security standards would cause too great a disruption to operations, requiring temporary control and data centers, and would not be cost-effective because the changes to the building would require demolition of most of the building. Nevertheless, BREC provided estimated costs for such a retrofit of \$13.6 million.<sup>34</sup> BREC maintained that, under this plan, the existing ET&S facility would be used exclusively as a substation and communications center. BREC asserted that additional warehouse

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<sup>30</sup> BREC's Response to Staff's First Request, Item 7(a).

<sup>31</sup> Berry Testimony at 12–13.

<sup>32</sup> Berry Testimony at 10–11.

<sup>33</sup> Application, Exhibit F, Direct Testimony of Tim Masa. (Masa Testimony) at 10-11.

<sup>34</sup> BREC's Response to Staff's First Request, Item 14(a).



space and vehicle storage, maintenance, and refueling facilities for transmission and right-of-way maintenance would be built at an estimated cost of \$21 million, not including the cost of land.<sup>35</sup> BREC further asserted that this option would eliminate the efficiencies expected to be gained by having all transmissions operations under one roof and would prevent BREC from selling its existing headquarters and ET&S facilities.

Regarding the sale of the existing ET&S facility, BREC stated that if the proposed construction is approved and completed, it would no longer have any need for the old facility, and a sale at market price would be for a proper purpose and consistent with the public interest.

### DISCUSSION AND FINDINGS

Having considered the application and the case, the Commission finds that the CPCN should be granted for the following reasons. The need for a new TOC facility was established by several factors. First, the existing headquarters facility is not adequate for housing the control and data centers considering guidelines for security of critical power infrastructure. Electric reliability is governed by the Federal Energy Regulatory Commission (FERC) pursuant to 16 U.S.C. § 824, and FERC promulgated 18 CFR § 39.1, et seq. (2006), delegating development of electric reliability standards to NERC. These standards include a series of Critical Infrastructure Protection (CIP) guidelines that require development of plans for protecting transmission control and computer systems from physical threats and cyberattacks.<sup>36</sup> BREC identified several risks, including the location of the control and data centers in an area lacking physical hardening due to its

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<sup>35</sup> BREC's Response to Staff's First Request, Item 14(a).

<sup>36</sup> CIP-003-8, CIP-006-6, CIP-010-4, CIP-011-2, CIP-014-3, (last accessed May 3, 2023)

use of large interior and exterior windows and lack of slab-to-slab walls, as would be utilized in a modern control and data center. Therefore, either a new facility should be built, or the existing facility should be retrofitted to adhere to risk assessments performed by BREC pursuant to NERC guidelines.

Significant cost notwithstanding, retrofitting the existing facility would negate the intent of the Commission in Case No. 2021-00314,<sup>37</sup> in which realizing the proceeds of the sale of the old headquarters building was considered in the cost-benefit analysis resulting in approval of the new headquarters building. Those potential proceeds are unavailable as long as the old headquarters building is housing the control and data centers. BREC also has established that additional space for transmission operations is necessary for expansion that is unavailable at the existing ET&S facility to remedy its insufficient storage space for materials and equipment, while also maximizing efficiencies achieved by combining certain departments in the same location. Lastly, both the old headquarters building and existing ET&S facility are in the latter stages of their useful lives. KRS 278.030 states that “[e]very utility shall furnish adequate, efficient, and reasonable service, and may establish reasonable rules governing the conduct of its business and the conditions under which it shall be required to render service.” To meet this goal, a utility must maintain sufficient office space to allow its employees to work in a safe and efficient environment, with sufficient storage and maintenance space to protect its equipment.<sup>38</sup>

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<sup>37</sup> Case No. 2021-00314, Dec. 7, 2021 Order at 8.

<sup>38</sup> See Case No. 2022-00065, *Electronic Application of South Eastern Water Association, Inc. for Commission Approval Pursuant to 807 KAR 5:001 and KRS 278.020 for a Certificate of Public Convenience and Necessity to Construct a Customer Service and Operations Facility* (Ky. PSC Aug. 30, 2022), Order at 9-10, in which a 40-year-old headquarters building was approved for replacement.

Regarding lack of wasteful duplication, the traditional evaluation of determining the least-cost alternative to meet the stated need does not apply to replacing obsolete office buildings in the same way. The design options should be limited to what is necessary to meet present needs with additional consideration given to expected growth over the useful life of the building. For several reasons, the Commission finds that the proposed project is a reasonable option that achieves BREC's needs and is sufficiently cost-effective. Although BREC provided cost information for retrofitting the old headquarters to meet NERC guidelines, the Commission agrees that this is not a reasonable option. Demolishing and remodeling much of the building while still in use for the control and data centers would be too disruptive to operations. It would also involve capital expenditures upgrading a building reaching the end of its useful life. This option would also subvert the overall plan set forth in Case No. 2021-00314 to sell that building and thus defray the cost of the new headquarters building. BREC also provided cost information for adding warehouse space while continuing to use the existing ET&S facility. However, this option also eliminates the benefits of selling the existing facility, puts money into a building with dwindling useful life, and prevents BREC from achieving the efficiencies involved in combining related departments into one complex. Building a new TOC facility takes advantage of considerable financial incentives provided by the city of Owensboro that allow BREC to meet its facilities needs essentially at a discount. If BREC were to wait until the older facilities' useful lives were expended to build new facilities, these incentives might not be available. BREC might also not have access to NMTCs as well if new construction is delayed.

Based upon the above discussion, the Commission finds that the request to sell

the existing ET&S building should be approved. Once the TOC facility is constructed and placed into service, the ET&S facility will not be needed. Selling it would be for a proper purpose and is consistent with the public interest because its only remaining use would be for liquidation with proceeds made available for other purposes benefiting ratepayers.

IT IS THEREFORE ORDERED that:

1. BREC is granted a CPCN to construct its new TOC as proposed in its application.

2. BREC shall immediately notify the Commission upon knowledge of any material changes to the project, including, but not limited to, increase in cost and any significant delays in construction.

3. Any material deviation from the construction approved by this Order shall be undertaken only with the prior approval of the Commission.

4. BREC shall file with the Commission documentation of the total costs of the projects, including the cost of construction and all other capitalized costs, within 60 days of the date that construction authorized under this CPCN is substantially completed. Construction costs shall be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for electric utilities as prescribed by the Commission.

5. BREC shall file a copy of the "as-built" drawings and a certified statement that the construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the substantial completion of the construction certificated herein.

6. Any documents filed in the future pursuant to ordering paragraphs 4 and 5 herein shall reference this case number and shall be retained in the post-case

correspondence file.

7. BREC's application requesting approval of the transfer of ownership of its existing ET&S facility is granted on the conditions that:

a. BREC proceeds with the construction of the new headquarters as proposed herein; and

b. The sale price of the existing ET&S facility is not less than its remaining net book value at the time of the transfer.

8. The Executive Director is delegated authority to grant reasonable extensions of time for filing any documents required by this Order upon BREC's showing of good cause for such extension.

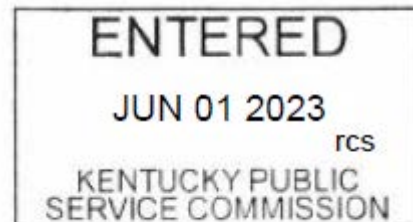
9. This case is closed and removed from the Commission's docket.

PUBLIC SERVICE COMMISSION

  
Chairman

  
Vice Chairman

  
Commissioner



ATTEST:

  
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