

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Electronic Application Of Kentucky Power Company)	
For A Declaratory Order That The Proposed)	
Installation Of A New Three-Phase Reactor Circuit)	
Breaker And Associated Construction At The Baker)	Case No. 2024-00283
Substation In Lawrence County, Kentucky Is An)	
Ordinary Extension In The Usual Course Of Business)	
And Does Not Require A Certificate Of Public)	
Convenience And Necessity)	

VERIFIED APPLICATION FOR DECLARATORY ORDER

Kentucky Power Company (“Kentucky Power” or the “Company”) applies to the Public Service Commission of Kentucky (“Commission”) pursuant to 807 KAR 5:001, Section 19, for an Order to be issued **no later than January 3, 2025**, declaring that the expansion of the yard (an approximate 640-foot by 185-foot expansion) at the Baker Substation within the property currently owned by Kentucky Power, the relocation of the existing reactors within the expanded yard at the Baker Substation, and the installation of a new three phase 765kV 50kA circuit breaker on the reactors on the Baker-Broadford 765kV line within the Baker Substation in Lawrence County, Kentucky (collectively, the “Baker Reactor Breaker Project”) is an ordinary extension in the usual course of business and does not require a Certificate of Public Convenience and Necessity (“CPCN”). Kentucky Power requests an order to be issued on this application no later than January 3, 2025, so that in the event a CPCN is required, Kentucky Power has sufficient time to prepare and file an application for a CPCN.

In support of its application Kentucky Power states:

APPLICANT

1. **Name and Address:** The Applicant's full name and post office address is:
Kentucky Power Company, 1645 Winchester Avenue, Ashland, Kentucky 41101. The Company's electronic mail address is kentucky_regulatory_services@aep.com.
2. **Incorporation:** Kentucky Power is a corporation organized on July 21, 1919 under the laws of the Commonwealth of Kentucky. The Company currently is in good standing in Kentucky.¹
3. **Business:** Kentucky Power is a public utility principally engaged in the provision of electricity to Kentucky consumers. The Company generates and purchases electricity that it distributes and sells at retail to approximately 163,000 customers located in all, or portions of, the Counties of Boyd, Breathitt, Carter, Clay, Elliott, Floyd, Greenup, Johnson, Knott, Lawrence, Leslie, Letcher, Lewis, Magoffin, Martin, Morgan, Owsley, Perry, Pike, and Rowan. The Company also furnishes electric service at wholesale to the City of Olive Hill and the City of Vanceburg.

THE PROPOSED BAKER REACTOR BREAKER PROJECT

Existing Facilities

4. Kentucky Power's Baker 765/345kV Substation is located approximately ½ mile north of the Big Sandy Plant in Lawrence County, Kentucky and was built around 1967. There are several transmission lines and transformers at the Baker Substation. More than one of the transmission lines are points of interconnection for independent power producers ("IPP"). The entire substation yard is approximately 22 acres but is split between a 765kV section and 345kV

¹ A certified copy of the Company's Articles of Incorporation and all amendments thereto was attached to the Joint Application in *In the Matter Of: The Joint Application Of Kentucky Power Company, American Electric Power Company, Inc. And Central And South West Corporation Regarding A Proposed Merger*, P.S.C. Case No. 99-149. The Company's August 29, 2024 Certificate of Existence is as **Exhibit 1** to this Application.

section. The scope of work that will be performed as part of the Baker Reactor Breaker Project is on the northern 765kV portion of the substation which makes up roughly 15 acres of the substation.

5. The reactors connected to the Baker-Broadford 765kV circuit are used to help control the voltage levels and fluctuations during varying system conditions. There are four reactor units associated with this line in Baker Substation (one for each of the three phases of the system, plus a spare unit). These reactors are large in size, approximately 45 feet tall and weigh roughly 150 tons each. Adding a reactor circuit breaker to the reactors will allow for real-time switching control of the reactors to help maintain voltage levels on the system, especially during high transfer scenarios.

6. PJM Interconnection LLC (“PJM”) and Kentucky Power identified an immediate operational need at the Baker Substation. During day-to-day operations, the reactors may need to be switched off or on based on real time system conditions. Currently, during high load conditions as well as high transfer conditions, the line reactors may need to be switched off to manage low 765kV conditions. The current reactors cannot be switched off while the 765kV line is energized, which poses operational risk and adds unnecessary operation cycles to the main line breakers. The addition of a reactor circuit breaker allows for switching the reactors in and out of service without also having to take the 765kV transmission circuit they are attached to out of service. This operational flexibility is necessary to ensure regional system reliability and optimal performance. Due to long-lead times on the materials, Kentucky Power expects to have the project completed in 2027.

7. Further, the existing reactors are located in a space-constrained area in the 765kV yard, lack necessary space clearances to add the proposed reactor circuit breaker, and must be

relocated to install the reactor circuit breaker. The existing Baker – Broadford 765kV line reactors are currently located directly under the 765kV line and are between the station structure and the eastern fence line of the station. The eastern fence line directly abuts US Route 23 which precludes acquiring any additional space in the easterly direction. This necessitates expanding the 765kV yard northward on Kentucky Power land and relocating the existing reactors into an expanded portion as shown on **Exhibit 2**.

Proposed Project

8. Kentucky Power, together with PJM, has identified a solution to fully address the operational needs identified at the Baker Substation. Kentucky Power would:

- a) Expand the yard (an approximate 640-foot by 185-foot expansion) at the Baker Substation within the property currently owned by Kentucky Power;
- b) Relocate the existing reactors within the expanded yard at the Baker Substation;
- c) Install a new three phase 765kV 50kA circuit breaker on the reactors on the Baker-Broadford 765kV line within the Baker Substation; and
- d) Using bus lines, re-connect the existing Baker-Broadford 765kV circuit to the relocated reactors.

9. Kentucky Power also would perform other somewhat nominal construction as part of this project, including relocating an existing gas pipeline, partially modifying an existing access drive, and moving the existing security perimeter fence, all within the property currently owned by Kentucky Power.

10. The Company has included a copy of the general arrangement drawing as **Exhibit 2** that demonstrates the existing Baker Substation and the construction that would be performed as part of the Baker Reactor Breaker Project.

11. The Baker Reactor Breaker Project is a PJM baseline project. There are no PJM supplemental projects associated with the Baker Reactor Breaker Project.

12. No new property or right of way would need to be acquired in order to complete the Baker Reactor Breaker Project. Additionally, there would be minimal environmental impacts associated with the proposed expansion – a large majority of the expansion area is cleared and graded (see Exhibit 2, Photograph Inset).

Estimated Project Cost

13. Kentucky Power estimates that the cost of the Baker Reactor Breaker Project would be approximately \$23.5 million, which includes the estimated installation and removal costs for materials, internal labor, outside services, fleet costs, contingency, and overheads.

14. As of June 30, 2024, this amount represents less than 1% of Kentucky Power’s net utility plant in service.

15. Kentucky Power anticipates funding the cost of the Baker Reactor Breaker Project through its operating cash flow and other internally generated funds.

16. Because the Company’s costs associated with the project are recovered through its FERC-regulated formula rates, Kentucky Power is responsible for its allocated share of the project under the AEP East Transmission Agreement. Kentucky Power’s allocation of total AEP East Zonal costs is roughly 5.62%, so the Company will be responsible for approximately \$1.35 million of the total costs of the Baker Reactor Breaker Project. This amount is expected to be less than the potential costs of not addressing the need for the project or addressing it by other means.

ALTERNATIVES TO RESOLVING THE EXISTING FACILITY’S OPERATIONAL CONCERNS

17. The Baker Reactor Breaker Project, as described in this application, is a PJM-mandated baseline project that will increase regional system operational flexibility. PJM and

Kentucky Power identified real-time operational issues that must be addressed, and the proposed project is the least cost, reasonable alternative that fully addresses the identified issues. For example, as part of the project, the Company will be relocating and adding reactor circuit breakers to existing equipment completely within property already owned by Kentucky Power. The only other plausible (though not reasonable) option would be to construct a new greenfield substation and a new connecting 765kV transmission line, which would be neither efficient nor cost-effective. It would be prohibitively more expensive.

18. As such, the Baker Reactor Breaker Project as described in this Application avoids wasteful duplication of new equipment and lines and is the least cost, most reasonable alternative to fully address the baseline operational issues identified by Kentucky Power and PJM.

THE CONSTRUCTION OF THE PROPOSED BAKER REACTOR PROJECT IS AN ORDINARY EXTENSION IN THE USUAL COURSE OF BUSINESS AND DOES NOT REQUIRE A CPCN

Statutory and Regulatory Standard

19. The legal standard for determining whether a proposed facility is “an ordinary extension in the usual course of business” is set forth in KRS 278.020(1)(a) and 807 KAR 5:001, Section 15(3).²

20. KRS 278.020(1)(a) states:

No person, partnership, public or private corporation, or combination thereof shall commence providing utility service to or for the public or begin the construction of any plant, equipment, property, or facility for furnishing to the public any of the services enumerated in KRS 278.010, **except:**

...

² See Order at 4, *The Application of Northern Kentucky Water District (A) For Authority to Issue Parity Revenue Bonds in the Approximate Amount of \$16,545,000; and (B) A Certificate of Convenience and Necessity for the Construction of Water Main Facilities*, Case No. 2000-00481 (Ky. P.S.C. Aug. 30, 2001) (“When viewed together, KRS 278.020(1) and Administrative Regulation 807 KAR 5:001, Section 9(3) clearly identify those facilities for which a Certificate of Public Convenience and Necessity is not required.”) (referring to §15(3) prior to revisions in 807 KAR 5:001 that resulted in renumbering).

2. Ordinary extensions of existing systems in the usual course of business;

...

until that person has obtained from the Public Service Commission a certificate that public convenience and necessity require the service or construction [emphasis added].

21. 807 KAR 5:001, Section 15(3), provides:

Extensions in the ordinary course of business. No certificate of public convenience and necessity will be required for extensions that do not create wasteful duplication of plant, equipment, property or facilities, or conflict with the existing certificates or service of other utilities operating in the same area and under the jurisdiction of the commission that are in the general area in which the utility renders service or contiguous thereto, and that do not involve sufficient capital outlay to materially affect the existing financial condition of the utility involved, or will not result in increased charges to its customers.

22. Distilling this statute and this regulation to their essentials, the Commission has declared that a CPCN is not necessary “for facilities that do not result in the wasteful duplication of utility plant, do not compete with the facilities of existing public utilities, and do not involve a sufficient capital outlay to materially affect the existing financial condition of the utility involved or to require an increase in utility rates.”³

23. “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.”⁴ To demonstrate that a proposal does not result in wasteful duplication, “the applicant must demonstrate that a thorough review of all reasonable alternatives has been

³ *Id.*

⁴ Order at 11-12, *In The Matter Of: Electronic Application Of Big Rivers Electric Corporation For Approval Of Solar Power Contracts*, Case No. 2020-00183 (Ky. P.S.C. Sept. 28, 2020) (citing *Kentucky Utilities Co. v. Pub. Serv. Comm’n*, 252 S.W.2d 885, 890 (Ky. 1952)).

performed.”⁵ “Selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication.”⁶ “All relevant factors must be balanced.”⁷

24. The Commission has generally determined the materiality of an extension’s capital outlay by comparing the cost of the extension to a utility’s net plant in service.⁸ Applying that standard, the Commission has nearly always held that an extension that will require a capital outlay in excess of 10 percent of a utility’s net plant in service will materially affect a utility’s financial condition, and has generally found recently that extensions that approach five percent of a utility’s net plant in service will do the same.⁹ Conversely, the Commission has generally found that an extension that will require a capital outlay of **less than one percent** of net plant in service is an extension in the ordinary course of business.¹⁰

25. For example, in Case No. 2021-00275, the Commission concluded that two projects (Project B – a new line terminal addition at an existing substation and Project C – a new

⁵ *Id.* (citing *In the Matter of: Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky*, Case No. 2005-00142 (Ky. P.S.C. Sept. 8, 2005)).

⁶ *Id.* (citing *In The Matter Of: Kentucky Utilities Co. v. Pub. Serv. Comm’n*, 390 S.W.2d 168, 175 (Ky. 1965). See also, *In the Matter of: The Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity to Construct a 138 kV Electric Transmission Line in Rowan County, Kentucky*, Case No. 2005-00089, (Ky. P.S.C. Aug. 19, 2005)).

⁷ *Id.* (citing Order at 6, *In the Matter of: East Kentucky Power Cooperative, Inc.*, Case No. 2005-00089 (Ky. P.S.C. Aug. 19, 2005)).

⁸ Order at 13, *In The Matter Of: Electronic Application Of Kentucky Utilities Company And Louisville Gas And Electric Company For Declaratory Order That The Proposed Construction Of Lisle Avenue Operations Center And The Proposed Purchase Of An Office Building In Eastern Jefferson County Are Ordinary Extension In The Usual Course Of Business And Do Not Require A Certificate Of Public Convenience And Necessity*, Case No. 2023-00415 (Ky. P.S.C. April 4, 2024).

Order at 4, *In the Matter of: Application of Northern Kentucky Water District For Approval of Dixie Highway Water Main Improvements, Issuance of a Certificate of Convenience and Necessity and Approval of Financing*, Case No. 2014-00171 (Ky. P.S.C. Aug. 6, 2014).

⁹ *Id.*

¹⁰ *Id.* (citing Order at 4, *In The Matter Of: Application Of Northern Kentucky Water District For Approval Of Dixie Highway Water Main Improvements, Issuance Of A Certificate Of Convenience And Necessity And Approval Of Financing*, Case No. 2014-00171 (Ky. P.S.C. Aug. 6, 2014)).

161/13.8 kV substation)¹¹ were considered extensions in the ordinary course of business.¹² As part of the analysis, the Commission concluded that the projects will not compete with other utilities and that Big Rivers took steps to ensure that the projects were not excessive in scope. The Commission also compared the costs of the Projects against Big Rivers' net utility plant value. The cost of Big Rivers' Projects B and C equaled less than 1% of the net utility plant.

Application to the Baker Reactor Breaker Project

26. For the reasons stated in paragraph 17 above, the construction of the Baker Reactor Breaker Project would not result in wasteful duplication. The Baker Reactor Breaker Project is the least cost, most reasonable solution to identify and resolve the baseline operational issues identified at the Baker substation.

27. The Baker Reactor Breaker Project, as described herein, does not necessarily require a CPCN, nor is it prohibited from being considered an extension in the ordinary course of business. KRS 278.020(1) and 807 KAR 5:001, Section 15(3) contain no disqualification of a project like the Baker Reactor Breaker Project as an extension in the ordinary course. Neither state that such a project is excluded or otherwise prohibited from being an extension in the ordinary course. In the absence of such language, the statute and regulation must be applied uniformly to all types of utility plant, facilities, and property.

28. Neither AEP, Kentucky Transmission Company, Inc., nor any successor entity, would own or invest in the Baker Reactor Breaker Project. Kentucky Power would own the portion of the project located in the Commonwealth in its entirety.

¹¹ "Project A" in the application was 3.8 mile, 161kV transmission line circuit for which a CPCN was required because of the length and voltage.

¹² *In The Matter Of: Electronic Application Of Big Rivers Electric Corporation For A Certificate Of Public Convenience And Necessity To Construct A 161 kV Transmission Line In McCracken County, Kentucky*, Case No. 2021-00275.

29. The Baker Reactor Breaker Project would be completed entirely within the property currently owned by Kentucky Power, which is within Kentucky Power's service territory. No other utility provides electric service within Kentucky Power's certified territory consistent with the prohibitions contained in KRS 278.018. Therefore, the project would not compete with the facilities of any other utility in the area.

30. The construction of the Baker Reactor Breaker Project also would not involve sufficient capital outlay to materially affect Kentucky Power's financial condition. Kentucky Power anticipates funding the cost of the project through its operating cash flow and other internally generated funds. The proposed project is estimated to cost \$23.5 million, which is less than the 1.0% threshold, under which the Commission has determined that a proposed project would not have a material effect on a utility's financial condition.

EXHIBITS

31. The exhibits listed in the Appendix to this Application are attached to and made a part of this Application.

COMMUNICATIONS

32. Kentucky Power respectfully requests that communications in this matter be addressed to the e-mail addresses identified on Kentucky Power's August 27, 2024 Notice of Election of Use of Electronic Filing Procedures.

WHEREFORE, Kentucky Power Company respectfully requests that the Commission issue an Order no later than January 3, 2025:

- (1) declaring that the construction of the Baker Reactor Breaker Project is an ordinary extension in the usual course of business and does not require a CPCN; and
- (2) granting all other required approvals and relief.

Respectfully submitted,



Katie M. Glass
STITES & HARBISON PLLC
421 West Main Street
P. O. Box 634
Frankfort, Kentucky 40602-0634
Telephone: (502) 223-3477
Fax: (502) 560-5377
kglass@stites.com

Kenneth J. Gish, Jr.
STITES & HARBISON PLLC
250 West Main Street, Suite 2300
Lexington, Kentucky 40507-1758
Telephone: (859) 226-2300
Fax: (859) 253-9144
kgish@stites.com
COUNSEL FOR KENTUCKY POWER
COMPANY

APPENDIX

Exhibit 1 August 29, 2024 Certificate of Existence

Exhibit 2 General Arrangement Drawing – Baker Reactor Breaker Project

Commonwealth of Kentucky
Michael G. Adams, Secretary of State

Michael G. Adams
Secretary of State
P. O. Box 718
Frankfort, KY 40602-0718
(502) 564-3490
<http://www.sos.ky.gov>

Certificate of Existence

Authentication number: 318297

Visit <https://web.sos.ky.gov/ftshow/certvalidate.aspx> to authenticate this certificate.

I, Michael G. Adams, Secretary of State of the Commonwealth of Kentucky, do hereby certify that according to the records in the Office of the Secretary of State,

KENTUCKY POWER COMPANY

KENTUCKY POWER COMPANY is a corporation duly incorporated and existing under KRS Chapter 14A and KRS Chapter 271B, whose date of incorporation is July 21, 1919 and whose period of duration is perpetual.

I further certify that all fees and penalties owed to the Secretary of State have been paid; that Articles of Dissolution have not been filed; and that the most recent annual report required by KRS 14A.6-010 has been delivered to the Secretary of State.

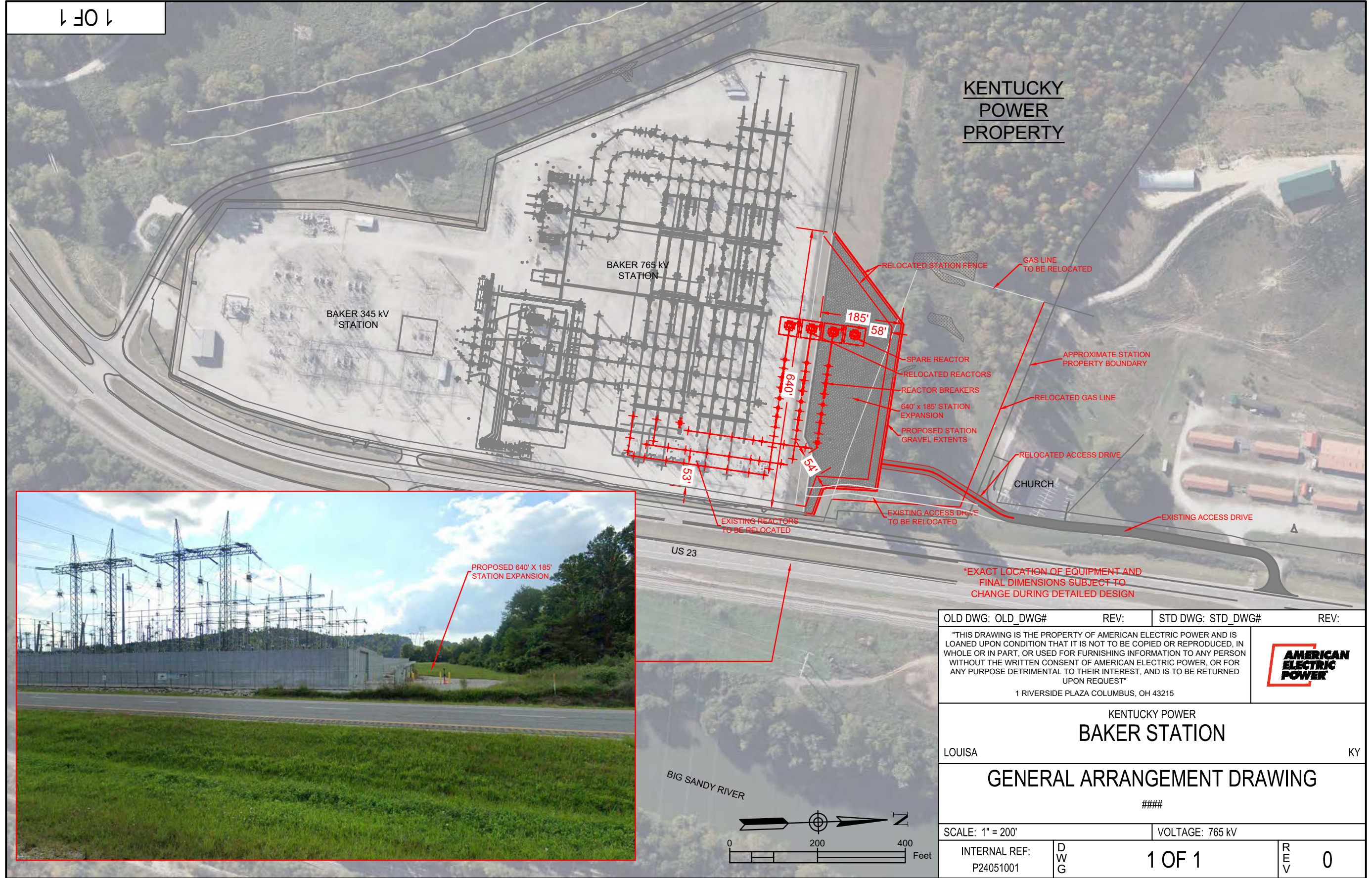
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this 29th day of August, 2024, in the 233rd year of the Commonwealth.



Michael G. Adams

Michael G. Adams
Secretary of State
Commonwealth of Kentucky
318297/0028317

1 OF 1



**KENTUCKY
 POWER
 PROPERTY**

OLD DWG: OLD_DWG#	REV:	STD DWG: STD_DWG#	REV:
THIS DRAWING IS THE PROPERTY OF AMERICAN ELECTRIC POWER AND IS LOANED UPON CONDITION THAT IT IS NOT TO BE COPIED OR REPRODUCED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN CONSENT OF AMERICAN ELECTRIC POWER, OR FOR ANY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST			
1 RIVERSIDE PLAZA COLUMBUS, OH 43215			
AMERICAN ELECTRIC POWER			
KENTUCKY POWER BAKER STATION			
LOUISA			KY
GENERAL ARRANGEMENT DRAWING			
####			
SCALE: 1" = 200'		VOLTAGE: 765 kV	
INTERNAL REF: P24051001	DWG	1 OF 1	REV 0

BY: JUSTIN M STCLAIR
 AT: 4:45:20 PM
 PLOTTED DATE: 8/28/24

*EXACT LOCATION OF EQUIPMENT AND FINAL DIMENSIONS SUBJECT TO CHANGE DURING DETAILED DESIGN