# **ORIGINAL**



#### COMMONWEALTH OF KENTUCKY

# BEFORE THE PUBLIC SERVICE COMMISSION

# In the Matter of:

ELECTRONIC APPLICATION OF	)	
BIG RIVERS ELECTRIC CORPORATION	)	Cogo No
FOR A CERTIFICATE OF PUBLIC	)	Case No.
CONVENIENCE AND NECESSITY TO	)	2021-00275
CONSTRUCT A 161 KV TRANSMISSION LINE	)	2021-00279
IN McCRACKEN COUNTY, KENTUCKY	)	

**VERIFIED APPLICATION** 

And

APPLICATION EXHIBITS

FILED: September 22, 2021

# **ORIGINAL**

1	COMMONWEALTH OF KENTUCKY
2	BEFORE THE PUBLIC SERVICE COMMISSION
3	
4 5	IN THE MATTER OF:
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	ELECTRONIC APPLICATION OF )
	BIG RIVERS ELECTRIC CORPORATION ) FOR A CERTIFICATE OF PUBLIC ) Case No.
	CONVENIENCE AND NECESSITY TO ) 2021-00275
	CONSTRUCT A 161 KV TRANSMISSION LINE )
	IN MCCRACKEN COUNTY, KENTUCKY )
7	
	<u>VERIFIED APPLICATION</u>
8	
9	1. Big Rivers Electric Corporation ("Big Rivers" or the "Company")
10	submits this application (the "Application") pursuant to KRS 278.020(2), 807 KAF
11	5:001 Sections 15 and 19, and 807 KAR $5:120$ , seeking (i) a certificate of public
12	convenience and necessity (" $CPCN$ ") to construct a 3.8 mile 161 kilovolt (" $kV$ ")
13	transmission line in McCracken County, Kentucky, and (ii) a finding that no
14	CPCN is required for two related substation projects or, alternatively a CPCN for
15	any of the projects that the Kentucky Public Service Commission (the
16	"Commission") determines require a CPCN. In support of its Application, Big
17	Rivers states as follows:
18	INTRODUCTION
19	2. As fully discussed in the Direct Testimony of Michael T. Pullen,
20	attached hereto as Exhibit A and incorporated herein by reference, Big Rivers

2	projects liste	ed below:
3	a.	Project A - A 3.8 mile, 161 kV transmission line circuit will be added
4		from Big Rivers' existing McCracken County Substation to a new
5		substation to be constructed adjacent to Jackson Purchase Energy
6		Corporation's ("Jackson Purchase") Maxon Substation, proposed
7		below as Project C. The majority of this circuit will be built above
8		Big Rivers' existing 69 kV transmission line (the "Line 21-O"), with
9		two slight alignment adjustments to accommodate clearance
10		requirements at crossings with other transmission lines. As
11		explained fully below, while some of Big Rivers' existing easements
12		will need to be expanded, no new property owners will be effected.
13	b.	Project B - a 161 kV line terminal addition within Big Rivers'
14		existing McCracken County Substation.
15	c.	Project C - a new 161/13.8 kV substation adjacent to Jackson
16		Purchase's existing Maxon Substation in west Paducah at the
17		Industrial West Park (the "West Paducah Substation").
18	d.	All proposed facilities will be located in McCracken County,
19		Kentucky. 807 KAR 5:120 Sections 2(1)(b); 807 KAR 5:001 Section
20		15(2)(c).
21		

1 proposes to construct the three transmission line or transmission substation

- 1 3. As the all-requirements wholesale supplier for Jackson Purchase,
- 2 one of Big Rivers' three distribution cooperative members (the "Members"), Big
- 3 Rivers is obligated to provide Jackson Purchase with adequate voltage levels and
- 4 acceptable facility loadings under all normal and single contingency conditions.
- 5 The proposed transmission system improvement projects are needed to enable Big
- 6 Rivers to fulfill that obligation by increasing the capacity of the existing 69 kV
- 7 distribution system within Jackson Purchase's service territory.
- 8 4. The existing 69 kV distribution system is inadequate to serve the
- 9 anticipated load growth from economic development at the Industrial West Park
- 10 in Paducah, McCracken County, Kentucky. The proposed construction projects
- 11 will also provide Big Rivers the ability to enhance reliability to existing retail
- 12 members of Big Rivers' Members. 807 KAR 5:120 Section 2(1)(b); 807 KAR 5:001
- 13 Section 15(2)(c).
- Due to the length and voltage of the Project A transmission line,
- 15 KRS 278.020 will require Big Rivers to obtain a CPCN for its construction.
- 16 6. Big Rivers does not believe the other projects require a CPCN, and
- 17 Big Rivers is seeking a finding from the Commission that no CPCN is required for
- 18 those two projects. The authority of the Commission to issue such a finding is
- 19 found in 807 KAR 5:001 Section 19. 807 KAR 5:120 Section 2(1)(a); 807 KAR
- 20 5:001 Section 14(1).

- 7. If the Commission disagrees that no CPCN is required, then Big
- 2 Rivers requests in the alternative that the Commission grant a CPCN for Project
- 3 B and Project C.

## 4 FILING REQUIREMENTS

- 5 8. The Applicant, Big Rivers, is a rural electric cooperative corporation
- 6 organized pursuant to KRS Chapter 279. Its full name is Big Rivers Electric
- 7 Corporation. Big Rivers' mailing address is P.O. Box 24, Henderson, Kentucky
- 8 42419-0024, and its street address is 201 Third Street, Henderson, Kentucky
- 9 42420. Big Rivers' address for electronic mail service is <u>regulatory@bigrivers.com</u>.
- 10 807 KAR 5:120 Section 2(1)(a); 807 KAR 5:001 Section 14(1).
- 11 9. Big Rivers owns generating assets and purchases, transmits, and
- 12 sells electricity at wholesale. Its principal purpose is to provide the wholesale
- 13 electricity requirement of its three distribution cooperative Members: Jackson
- 14 Purchase, Kenergy Corp., and Meade County Rural Electric Cooperative
- 15 Corporation. The Members in turn provide retail electric service to approximately
- 16 119,000 consumer/retail members located in 22 western Kentucky counties:
- 17 Ballard, Breckenridge, Caldwell, Carlisle, Crittenden, Daviess, Graves, Grayson,
- 18 Hancock, Hardin, Henderson, Hopkins, Livingston, Lyon, Marshall, McCracken,
- 19 Mclean, Meade, Muhlenberg, Ohio, Union and Webster.
- 20 10. Big Rivers was incorporated in the Commonwealth of Kentucky on
- 21 June 14, 1961, and hereby attests that it is currently in good standing in
- 22 Kentucky. 807 KAR 5:120 Section 2(1)(a); 807 KAR 5:001 Section 14(2).

- 1 11. A table of each regulatory requirement for filing, cross-referenced to
- 2 the location in this Application where the requirement is satisfied, is attached
- 3 hereto as Exhibit B.

## 4 DESCRIPTION OF THE PROJECTS

- 5 12. The Project A proposed route map, with a scale of one inch equals
- 6 1000 feet, and showing the location of the proposed transmission line, is attached
- 7 hereto as Exhibit C. 807 KAR 5:120 Section 2(2).
- 8 13. Project B will be constructed at Big Rivers' McCracken County 69 kV
- 9 substation, located at 5486 Bradford Road, West Paducah, Kentucky, as shown on
- 10 the maps attached to this Application. The proposed West Paducah substation,
- 11 Project C, will be constructed adjacent to Jackson Purchase's Maxon Substation
- 12 located at 5425 Commerce Drive Paducah, Kentucky in the Industrial Park West.
- 13 Maps showing the proposed location of the proposed construction projects are
- 14 attached as Exhibit D. 807 KAR 5:001 Section 15(2)(d)(1).
- 15 14. The Industrial Park West is an approximately 136.6 acre facility
- 16 located west of the Paducah city center and adjacent to I-24. It is also the
- 17 anticipated location for future energy-intensive commercial cryptocurrency
- 18 mining operations, including Blockware Mining LLC ("Blockware"). Big Rivers,
- 19 Jackson Purchase, and Blockware have negotiated special contracts for electric
- 20 service, which the Commission is currently reviewing in Case No. 2021-00282.1

<sup>&</sup>lt;sup>1</sup> See In the Matter of: Electronic Tariff Filing of Big Rivers Electric Corporation and Jackson Purchase Energy Corporation for Approval and Confidential Treatment of a Special Contract and Cost Analysis Information and a Request for Deviation from the Commissions

- 1 15. The proposed projects will increase capacity for the Industrial Park
- 2 West area to 100 MW, enabling Big Rivers to serve Blockware, as well as other
- 3 anticipated economic development in the Industrial Park West. Further details
- 4 regarding the Industrial Park West economic development and the need for the
- 5 proposed projects are provided in the Direct Testimony of Mr. Pullen.
- 6 16. The proposed construction projects are required for the public
- 7 convenience and necessity. The transmission line and substation projects will
- 8 allow acceptable service to be provided to Jackson Purchase in light of the above
- 9 referenced load growth in its service territory. The new construction will also
- 10 enhance reliability for existing retail members. Additionally, Big Rivers
- 11 anticipates a return on its investment as a result of the new construction being
- 12 included in the rates for transmission service under Big Rivers' Open Access
- 13 Transmission Tariff that could serve as an offset to future rate increases for Big
- 14 Rivers' Members. 807 KAR 5:120 Section 2(1)(b); 807 KAR 5:001 Section 15(2)(a).
- 15 17. The majority of the Project A transmission line will overbuild the
- 16 existing 69kV transmission line and will follow the existing 69kV transmission
- 17 line route, allowing Big Rivers to utilize existing rights-of-way. The Project A
- 18 transmission line does require some expansion of existing easements, and as fully
- 19 illustrated in the maps attached as Exhibit D, no new landowners will be affected
- 20 by this proposed new circuit.

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September 24, 1990 in Administrative Case No. 327, Case No. 2021-00282 (Originally filed as TFS No. 2021-00257).

- 1 18. The expansion of existing easements is required for three reasons.
- $2\,\,$  First, the general arrangement of Project B requires that the proposed 161 kV
- 3 circuit enter the McCracken Substation on the North side, requiring expansion of
- 4 the existing Big Rivers easement on the adjacent property by 62 ½ feet. Second,
- 5 due to the additional height of the proposed 161 kV circuit, several existing
- 6 easements will be expanded in order for Big Rivers to install additional guy boxes.
- 7 Finally, the proposed route veers slightly from the existing transmission line's
- 8 alignment at two separate locations, in order to maintain the required phase-to-
- 9 phase and phase-to-ground clearances at the crossing points with four
- 10 transmission lines owned by Louisville Gas and Electric Company–Kentucky
- 11 Utilities Company ("LG&E-KU") or Tennessee Valley Authority ("TVA").<sup>2</sup> At the
- 12 first location, near the McCracken County Substation, Big Rivers proposes to
- 13 rebuild the existing 69 kV line along a new alignment, allowing the new 161 kV
- 14 line to be built along the existing 69 kV route. The new 69 kV alignment would
- 15 require a 100 foot wide (50 feet either side of center line) easement expansion, as
- 16 shown by Exhibit D. At the second location near Massac Creek, Big Rivers
- 17 proposes to build the new 161 kV transmission line along a new alignment north
- 18 of the existing 69 kV alignment. The existing 69kV line will be rebuilt along the
- 19 existing 69 kV alignment. Along the new 161 kV alignment, the existing 50 foot
- 20 wide easement will need to be expanded by 112 ½ feet. This is noted on the

 $<sup>^2</sup>$  Exhibit C and Exhibit D illustrate where the route of the Project A transmission line crosses a LG&E-KU 161 kV transmission line, two TVA 161 kV transmission lines, and a TVA 500 kV transmission line.

- 1 attached map in, Exhibit D.
- 2 19. The Project A transmission line will involve the replacement of
- 3 existing poles. The new poles will typically be constructed using monopole steel
- 4 structures for tangent structures, and three-pole steel for angle structures and
- 5 large angled dead-end structures. Conventional construction equipment will be
- 6 used to frame and install the poles. The electrical conductors will then be strung,
- 7 dead-ended, and clipped-in using conventional equipment and processes.
- 8 Sketches of proposed typical structures are attached here to as Exhibit E. 807
- 9 KAR 5:120 Sections 2(1)(b), (2)(b); 807 KAR 5:001 Section 15(2)(c).
- 10 20. Because of the opportunity to overbuild the existing transmission
- 11 line, no alternative routes for the proposed circuit were considered.
- 12 21. A drawing of the McCracken County Substation's existing layout and
- 13 a drawing showing the Project B addition to the substation are attached hereto as
- 14 Exhibit F. A drawing of Project C, the proposed West Paducah Substation is
- 15 attached here to as Exhibit G. 807 KAR 5:001 Section 15(2)(c). In accordance
- 16 with the Commission's COVID-related Orders in Case No. 2020-00085, Big Rivers
- 17 is not filing two paper copies of the maps or sketches.<sup>3</sup>
- Big Rivers will initially fund the proposed projects with general cash
- 19 reserves, but it continues to investigate the best source of financing for the

<sup>&</sup>lt;sup>3</sup> As the Commission's July 22, 2021, Order in Case No. 2020-00085 does not specifically reference 807 KAR 5:001 Section 15(2)(d)'s requirement for two (2) copies in paper medium of the maps and plan, specifications, and drawings, to the extent necessary, Big Rivers requests that the Commission allow it to deviate from the requirements of 807 KAR 5:001 Section 15(2)(d). The deviation requested is authorized by 807 KAR 5:001 Section 22.

- 1 construction costs. Big Rivers likely will seek financing for the projects from the
- 2 Rural Utilities Service ("RUS") or National Rural Utilities Cooperative Finance
- 3 Corporation ("CFC"). As necessary under KRS 278.300, Big Rivers will seek
- 4 approval of financing related to the projects' cost in a subsequent proceeding. 807
- 5 KAR 5:001 Section 15(2)(e).
- 6 23. The total estimated cost of the projects is \$12,700,000, including
- 7 capitalized interest and estimated purchase prices for right-of-way and land. The
- 8 estimated construction cost of Project A is \$7,456,000. Project B's estimated
- 9 construction cost is \$782,000. Project C's estimated construction cost is
- 10 \$4,462,000.
- 11 24. The estimated cost of operation of the new construction for all three
- 12 projects, including the cost of taxes and operation and maintenance, based on
- 13 historical averages, is approximately \$914,329 per year. The construction of these
- 14 projects by Big Rivers does not involve sufficient capital outlay to materially
- 15 affect the existing financial condition of Big Rivers. 807 KAR 5:120 Section
- 16 2(1)(b), (7); 807 KAR 5:001 Section 15(2)(f).
- 17 25. Big Rivers has not yet obtained any permits for the proposed
- 18 construction, but any permits from public authorities required for the
- 19 construction will be obtained prior to commencing construction. 807 KAR 5:120
- 20 Section 2(1)(b); 807 KAR 5:001 Section 15(2)(b).

- 1 26. The proposed construction will not compete with any other public
- 2 utilities, corporations, or persons. 807 KAR 5:120 Section 2(1)(b); 807 KAR 5:001
- 3 Section 15(2)(c).

## 4 NOTICE OF PROPOSED CONSTRUCTION

- 5 27. Big Rivers has sent by first-class mail to each property owner over
- 6 whose property the transmission line circuit is proposed to cross, addressed to the
- 7 property owner at the owner's address as indicated by the county property
- 8 valuation administrator records, or has hand-delivered, notice of the proposed
- 9 construction stating:
- 10 a. The Commission case number under which this Application will be
- processed and a map showing the proposed route of the line;
- b. The address and telephone number of the Executive Director of the
- 13 Commission;
- 14 c. A description of his or her rights to request a local public hearing
- and to request to intervene in the case; and
- d. A description of the project.
- 17 807 KAR 5:120 Section 2.
- 18 28. A sample copy of the notice letter is attached hereto as Exhibit H. A
- 19 list of names and addresses of the property owners to whom Big Rivers sent the
- 20 notices is attached hereto as Exhibit I. 807 KAR 5:120 Section 2(4).
- 21 29. A notice of intent to construct the transmission line was published
- 22 on September 16, 2021, in The Paducah Sun, a newspaper of general circulation

1	in McCracken County. The notice included:
2	a. A map showing the proposed route;
3	b. A statement of the right to request a local public hearing; and
4	c. A statement that interested persons have the right to request to
5	intervene.
6	807 KAR 5:120 Section 2(5). A copy of the newspaper notice is attached hereto as
7	Exhibit J. 807 KAR 5:120 Section 2(6).
8	REQUESTS FOR RELIEF
9	Request for a CPCN
10	30. Pursuant to KRS 278.020(1), Big Rivers requests that this
11	Commission issue a CPCN for Project A, the 3.8 mile, 161 kV transmission line
12	circuit addition. Big Rivers further requests the authority to move the location of
13	the line up to 500 feet on either side of the centerline shown on the maps filed
14	with this Application to account for unexpected conditions that could be
15	discovered during the construction process, provided that no new property owners
16	are affected.
17	31. Additionally, Big Rivers requests a finding from the Commission,
18	pursuant to 807 KAR 5:001 Section 19 that the Project B substation upgrade and
19	Project C new substation are ordinary extensions in the usual course of business
20	not requiring a CPCN under KRS 278.020(1)(a)(2). 807 KAR 5:001 Section 15(3)
21	provides:
22 23	A certificate of public convenience and necessity shall not be required for extensions that do not create wasteful duplication of plant,

1	equipment, property, or facilities, or conflict with the existing
2	certificates or service of other utilities operating in the same area and
3	under the jurisdiction of the [C]omission that are in the general or
4	contiguous area in which the utility renders service, and that do not
5	involve sufficient capital outlay to materially affect the existing
6	financial condition of the utility involve, or will not result in increased
7	charges to customers.

- 8 As discussed above, Projects B and C satisfy these criteria, and therefore do not
- 9 require a CPCN. If the Commission disagrees, Big Rivers requests in the
- 10 alternative that the Commission grant a CPCN for Projects B and C. Big Rivers
- 11 further requests the authority to move the Project C substation from the location
- 12 shown on the maps filed with this Application to account for unexpected conditions
- 13 that could be discovered during the construction process.
- WHEREFORE, Big Rivers respectfully requests that the Commission issue
- 15 an order granting it the relief requested in this Application, and all other relief to
- 16 which it may be entitled.

1	On this the 22nd day of September, 2021.
2	Respectfully submitted,
3	
4	/s/ Tyson Kamuf
5	
6	Tyson Kamuf
7	Senthia Santana
8	Gregory E. Mayes, Jr.
9	Big Rivers Electric Corporation
10	201 Third Street
11	P.O. Box 24
12	Henderson, Kentucky 42419-0024
13	Phone: (270) 827-2561
14	Facsimile: (270) 844-6417
15	tyson.kamuf@bigrivers.com
16	senthia.santana@bigrivers.com
17	gregory.mayes@bigrivers.com
18	
19	Counsel for Big Rivers Electric
20	Corporation

## **BIG RIVERS ELECTRIC CORPORATION**

# 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

## **VERIFICATION**

I, Michael T. Pullen, Chief Operating Officer for Big Rivers Electric Corporation, hereby state that I have read the foregoing Application and that the statements contained therein are true and correct to the best of my knowledge and belief, on this 22rd day of September, 2021.

Michael T. Pullen Chief Operating Officer Big Rivers Electric Corporation

COMMONWEALTH OF KENTUCKY )
COUNTY OF HENDERSON )

SUBSCRIBED AND SWORN TO before me by Michael T. Pullen on this the day of September, 2021.

Notary Public, Kentucky State at Large

My Commission Expires

ery Public, Kentucky State-At-Large y Commission Expires: July 10, 2022 D: 604480



# 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 TO CONSTRUCT A 161 KV TRANSMISSION LINE IN McCRACKEN COUNTY, KENTUCKY	Case No. 2021-00275
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**DIRECT TESTIMONY** 

 $\mathbf{OF}$ 

MICHAEL T. PULLEN CHIEF OPERATING OFFICER

ON BEHALF OF

BIG RIVERS ELECTRIC CORPORATION

Filed: September 22, 2021

# DIRECT TESTIMONY

# $\mathbf{OF}$

# MICHAEL T. PULLEN

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1		DIRECT TESTIMONY
2		$\mathbf{OF}$
3		MICHAEL T. PULLEN
4		
5	I.	INTRODUCTION
6	Q.	Please state your name, business address and occupation.
7	A.	My name is Michael T. Pullen. My business address is 201 Third Street,
8		Henderson, Kentucky 42420. I am the Chief Operating Officer for Big Rivers
9		Electric Corporation ("Big Rivers" or the "Company").
10		
11	Q.	Please summarize your education and professional experience.
12	A.	I graduated from the University of Mississippi in 1985 with a Bachelor of
13		Science in Electrical Engineering and Murray State University in 2005 with
14		a Masters of Business Administration. I am a registered Professional
15		Engineer in the Commonwealth of Kentucky. I worked at Electric Energy,
16		Inc. from 1990 to 2014. I served in a variety of engineering, maintenance,
17		and operation roles including Group Supervisor Maintenance; Manager
18		Systems-Dispatch; Manager, Generation; and Director, Operations. I also
19		was employed by Ameren Illinois from 2014 to 2015 and served in substation
20		construction management. I began my career with Big Rivers in February

1		2015 as the Vice President of Production. Currently, I serve as the Chief
2		Operating Officer for Big Rivers. See Exhibit Pullen-1.
3		
4	Q.	Please summarize your duties at Big Rivers.
5	A.	As the Chief Operating Officer for Big Rivers, I oversee all activities related
6		to the operation and maintenance of the corporation's coal and gas-fired
7		generating facilities, including fuel procurement and management, power
8		plant engineering and construction, and environmental compliance. In
9		addition to these responsibilities, I oversee all activities related to the bulk
10		transmission system including operation, maintenance, engineering, and
11		construction, as well as the purchasing, and information technology activities
12		for the corporation.
13		
14	Q.	Have you previously testified before the Kentucky Public Service
15		Commission ("Commission")?
16	A.	Yes. I provided testimony on behalf of Big Rivers in Case No. 2019-002691 in
17		which the Company requested that the Commission enforce the series of
18		contracts between Big Rivers and the City of Henderson and the City of
19		Henderson Utility Commission (collectively, "HMP&L") related to the

<sup>&</sup>lt;sup>1</sup> In the Matter of: Application of Big Rivers Electric Corporation for Enforcement of Rate and Service Standards, P.S.C. Case No. 2019-00269.

1	William L. Newman Station Two ("Station Two") generating plant. I recently
2	provided written testimony in Case No. 2021-00079,2 in which the
3	Commission approved the conversion of the generating units at Big Rivers'
4	Green Station to gas-fired units and in Case No. 2019-00435,³ in which Big
5	Rivers sought and obtained approval of its 2020 Environmental Compliance
6	Plan, a certificate of public convenience and necessity, and other relief. I also
7	testified in Case No. 2016-00278,4 in which Big Rivers sought and obtained
8	an order from the Commission declaring that Big Rivers was not responsible
9	for the variable costs of any "Excess Henderson Energy," that Big Rivers
10	declined to take. I responded to requests for information in Case No. 2019-
11	0269, Case No. 2020-00064, Case No. 2021-00079, and Case No. 2018-
12	$00146.^{5}$

<sup>&</sup>lt;sup>2</sup> In the Matter of: Electronic Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity Authorizing the Conversion of the Green Station Units to Natural Gas-Fired Units and An Order Approving the Establishment of a Regulatory Asset, P.S.C. Case No. 2021-00079.

<sup>&</sup>lt;sup>3</sup> In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval of its 2020 Environmental Compliance Plan, Authority to Recover Costs through a Revised Environmental Surcharge and Tariff, the Issuance of a Certificate of Public Convenience and Necessity for Certain Projects, and Appropriate Accounting and Other Relief, P.S.C. Case No. 2019-00435.

<sup>&</sup>lt;sup>4</sup> In the Matter of: Application of Big Rivers Electric Corporation for a Declaratory Order, P.S.C. Case No. 2016-00278.

<sup>&</sup>lt;sup>5</sup> In the Matter of: Application of Big Rivers Electric Corporation for Termination of Contracts and a Declaratory Order and for Authority to Establish a Regulatory Asset, P.S.C. Case No. 2018-00146.

1	11.	BACKGROUND
2	Q.	What is the purpose of your testimony in this proceeding?
3	A.	I am filing this testimony in support of Big Rivers' application ("Application")
4		for the necessary authority to construct certain transmission system
5		improvements necessary to provide wholesale electric service to Jackson
6		Purchase Energy Corporation ("Jackson Purchase") in light of load growth
7		anticipated in the west Paducah area in McCracken County, Kentucky
8		resulting from economic development in the Industrial Park West.
9		
10	Q.	Are you sponsoring any Exhibits?
11	A.	Yes. I have prepared the following exhibits to my testimony:
12		• Exhibit Pullen-1 – Professional Summary
13		• Exhibit Pullen-2 – Paducah Greater Economic Development
14		Announcement.
15		• Exhibit Pullen-3 – Press Articles Regarding Blockware's Investment
16		
17	III.	NEED FOR THE PROPOSED PROJECTS
18	Q.	Please describe the proposed transmission system improvements.
19	A.	There are three transmission line or substation projects needed to continue to
20		provide reliable electric service to Jackson Purchase:

Project A consists of the construction of a new 3.8 mile, 161 kV

1	transmission line circuit addition largely above Big Rivers' existing $69~\mathrm{kV}$
2	transmission line ("Line 21-O") from its existing McCracken County
3	Substation to a new substation to be constructed adjacent to Jackson
4	Purchase's Maxon Substation, proposed below as Project C. The existing 69
5	kV line conductor and hardware will be upgraded as new structures are
6	installed for this project.
7	Project B consists of the construction of a 161 kV line terminal addition
8	at Big Rivers' existing McCracken County Substation. This will include the
9	installation of a power circuit breaker, switches, and associated protective
10	relaying for the new 161kV transmission line, Project A. In addition, plans
11	are to upgrade protective relaying on the existing 69 kV circuit that will be
12	over-built during construction.
13	• Project C consists of the construction of a new 161/13.8 kV substation
14	adjacent to Jackson Purchase's existing Maxon substation in West Paducah
15	at the Industrial Park West (the "West Paducah Substation"). This will
16	include the installation of a new 161-13.8 kV autotransformer, power circuit
17	breakers, switches, and all protective relaying required.
18	Specifically, Big Rivers is requesting a certificate of public convenience
19	and necessity ("CPCN") for the Project A transmission line and a finding that

no CPCN is required for the Project B or Project C construction. However, if

the Commission determines that a CPCN is required for the other two

20

1		projects, Big Rivers requests in the alternative that the Commission grant a
2		CPCN for those projects.
3		
4	Q.	Please describe why the proposed transmission system
5		improvements described above and in the Application are needed.
6	A.	The three transmission system construction improvement projects are needed
7		to continue to provide reliable electric service to Big Rivers' Member-Owner,
8		Jackson Purchase. More specifically, the improvements are needed to allow
9		Jackson Purchase to continue to reliably serve the Industrial Park West in
10		Paducah, McCracken County Kentucky, by strengthening the current 69 kV
11		transmission system. This will accommodate the anticipated load growth in
12		the area resulting from future energy-intensive cyber currency mining
13		facilities locating in the Paducah community. As the Commission is aware,
14		Blockware Mining, LLC ("Blockware") plans to locate such a facility in
15		Paducah's Industrial Park West. <sup>6</sup> The new construction will also enhance
16		reliability for existing retail members.
17		The Greater Paducah Economic Development ("GPED") announced
18		that due to the recent enactment of legislation, 7 competitive power rates from

<sup>&</sup>lt;sup>6</sup> See In the Matter of: Electronic Tariff Filing of Big Rivers Electric Corporation and Jackson Purchase Energy Corporation for Approval and Confidential Treatment of a Special Contract and Cost Analysis Information and a Request for Deviation from the Commissions September 24, 1990 in Administrative Case No. 327, P.S.C. Case No. 2021-00282 (Originally filed as TFS No. 2021-00257).

<sup>&</sup>lt;sup>7</sup> The recently enacted legislation includes tax incentives to encourage the use and growth of blockchain technology in the Commonwealth through the location and expansion of commercial

Big Rivers and Jackson Purchase, and its relationship with Navier, Inc., a
leading expert in mining digital currency, GPED has seen an increase in
interest in Paducah as "a hotspot for cryptocurrency miners." See Exhibit
Pullen-2, a copy of GPED's Press Release.

The assurance of long-term available and competitively priced power is a critical factor all commercial cryptocurrency mining operations consider as part of their decision-making process in where to locate new facilities, as 95% of the operating expenses for a cryptocurrency mining operation is its electricity costs. The proposed transmission improvements are needed in order support the Commonwealth's policy of encouraging the growth of blockchain technology.

Big Rivers is in the process of installing a 69/13kV transformer and breakers at Maxon Substation to facilitate Blockware's contracted initial load. This project is referred to as "Phase I Transmission Upgrades" in the retail agreement for electric service between Jackson Purchase and Blockware. Blockware plans to double its investment in Paducah and its

cryptocurrency mining operations in the Commonwealth, rather than in other states competing for such businesses. *See* the Recitals of House Bill 230 (Effective July 1, 2021) at <u>CHAPTER 122 (HB 230, Rudy and others ) (ky.gov)</u>; *see also* Senate Bill 255 (Effective July 2021) at <u>CHAPTER 141 (SB 255, Smith) (ky.gov)</u>

<sup>8</sup> See https://www.blockwaresolutions.com/research-and-publications/2020-halving-analysis.

<sup>&</sup>lt;sup>9</sup> See In the Matter of: Electronic Tariff Filing of Big Rivers Electric Corporation and Jackson Purchase Energy Corporation for Approval and Confidential Treatment of a Special Contract and Cost Analysis Information and a Request for Deviation from the Commissions September 24, 1990 in Administrative Case No. 327, P.S.C. Case No. 2021-00282, Direct Testimony of Mark J. Eacret (June 21, 2021).

1		power demand within 24 to 36 months. Earlier this year, Blockware
2		announced its plans to build its facility in Paducah and purchase 14,000
3		mining rigs, having raised \$25 million in capital funding. See Exhibit Pullen-
4		3, two articles including a <u>PaducahSun.com</u> article dated July, 1, 2021,
5		"Bitcoin Mining Operation Raises \$25 Million for Facility, Rigs." This
6		additional load was also contemplated in the retail agreement for service, as
7		were the additional transmission improvements that would be required.
8		These improvements, which are the proposed projects that are the subject of
9		this case, are identified in the retail agreement as the Phase II Transmission
10		Upgrades.
11		Additionally, other commercial cryptocurrency mining businesses have
12		reached out to Big Rivers and Jackson Purchase. In fact, Big Rivers and
13		Jackson Purchase are currently negotiating with a second such business
14		looking to locate in the Industrial Park West in Paducah. The proposed
15		construction will enable Big Rivers to have the transmission needed to
16		provide service for both Blockware's planned expansion and this second
17		business.
18	Q.	Are any interstate benefits expected to be achieved by the
19		construction projects?
20	A.	Yes. The construction projects are needed not only to serve the new
21		Blockware facility, but they will also enable Big Rivers and Jackson Purchase

to provide electric service to other new and expanded loads in the McCracker
County area, as well as provide the ability to enhance reliability to existing
Members. The proposed transmission upgrades provide supplementary
system reliability benefits including reducing transformer loading at the
McCracken Substation by approximately 30 megawatts, improving
transmission line pole reliability by replacing wooden poles with double
circuit steel poles, and improving voice and data communication by the
installation of a robust and reliable fiber optic network. $^{10}$ The construction
projects will additionally strengthen the transmission system.

#### 10 **IV.** REASONABLENES OF THE PROPOSED PROJECTS

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#### What is the estimated construction cost for the projects? 11 **Q**.

12 A. Big Rivers estimates that the total construction costs for the Project A transmission line will be \$7,456,000. The estimated construction costs are \$782,000 for Project B (the upgrades to McCracken County Substation), and \$4,462,000 for Project C (the construction of a new substation).

> The estimated cost for Project C includes an estimated purchase price of the necessary land for the proposed West Paducah Substation, as initially

<sup>&</sup>lt;sup>10</sup> See In the Matter of: Electronic Tariff Filing of Big Rivers Electric Corporation and Jackson Purchase Energy Corporation for Approval and Confidential Treatment of a Special Contract and Cost Analysis Information and a Request for Deviation from the Commissions September 24, 1990 in Administrative Case No. 327, P.S.C. Case No. 2021-00282, Big Rivers' Response to the Commission Staff's Second Request for Information, Item 3 (Sept. 15, 2021).

1		estimated as \$150,000. However, the Paducah McCracken County Industrial
2		Development Authority, the current owner of the proposed new substation
3		location property, recently received the authority to gift the property to Big
4		Rivers for the proposed construction.
5	Q.	How will Big Rivers recover the construction cost?
6	A.	Any Large Industrial Customers locating at the Industrial Park West will be
7		required to provide a proportionate share of credit support for the
8		construction costs. $^{11}$ The construction cost will be included in the rates for
9		transmission service under Big Rivers' Open Access Transmission Tariff as
10		well.
11	Q.	What steps were taken to ensure that the projects are not excessive
12		in investment or scope?
13	A.	Project A largely adds a new circuit over an existing transmission line
14		utilizing existing rights-of-way. This results in less cost, less impact to
15		property owners, and no duplication of facilities.
16		Deviations from the existing transmission route occur where the route
17		crosses other transmission lines. Absent these deviations, excessively tall
18		structures would be required to add the new circuit, which would create a

<sup>&</sup>lt;sup>11</sup> See In the Matter of: Electronic Tariff Filing of Big Rivers Electric Corporation and Jackson Purchase Energy Corporation for Approval and Confidential Treatment of a Special Contract and Cost Analysis Information and a Request for Deviation from the Commissions September 24, 1990 in Administrative Case No. 327, P.S.C. Case No. 2021-00282, Direct Testimony of Mark J. Eacret (June 21, 2021); Big Rivers' Response to the Commission Staff's Second Request for Information, Item 2 (Sept. 15, 2021).

1		barrier to future transmission lines entering the McCracken County
2		Substation and would not be maintainable while crossing under the $500\mathrm{kV}$
3		transmission line. These deviations are noted in the map attached as Exhibit
4		D to the Application.
5		Project B consists of minimal upgrades to the existing McCracken
6		Substation necessary for the new 161 kV transmission line. Likewise, Project
7		C consists of a substation to meet current needs, while allowing for additional
8		future facilities if the need continues to increase.
9		
10	Q.	Why does Big Rivers believe no CPCN is required projects B and C?
11	A.	The projects consisting of an upgrade to an existing substation and
12		construction of a substation in order to upgrade the 69 kV system to a 161 kV
13		system are ordinary extensions in Big Rivers' usual course of business. They
14		do not require a CPCN because 1) they do not create any wasteful duplication
15		of plant, equipment, property, or facilities; 2) the construction does not
16		compete with facilities of existing public utilities; and 3) the investment

required is insufficient to cause a material financial impact to Big Rivers and

will not result in increased electric servicer rates to retail customers on the

Big Rivers system.<sup>12</sup> The total estimated construction costs for the combined

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<sup>&</sup>lt;sup>12</sup> See KRS 278.020(1) and 807 KAR 5:001, Section 9(3).

1	three projects (\$12,700,000) is 1.06% of Big Rivers' net utility plant. As of
2	December 31, 2020, Big Rivers' net utility plant was estimated at \$1.2 billion
3	
4 <b>V.</b>	CONCLUSION
5 <b>Q</b> .	What action by the Commission does Big Rivers seek in this
6	proceeding?
7 A.	Big Rivers requests that the Commission find that the public convenience
8	and necessity require the construction by Big Rivers of Project A and issue a
9	CPCN for that project. Big Rivers requests that the Commission find that
10	Projects B and C are ordinary extensions of existing systems in the usual
11	course of business for which no CPCN is required. Alternatively, Big Rivers
12	requests that the Commission grant a CPCN for all projects which the
13	Commission determines require a CPCN. Additionally, Big Rivers requests
14	the flexibility to move the Project A transmission line up to 500 feet in either

direction of the centerline shown on the route maps filed with the

Application, so long as no easements are required on property owners other

than those over whom the existing rights-of-way cross and the flexibility to

move the proposed West Paducah Substation from the location shown on the

maps, to account for unexpected conditions that could be discovered during

21 Q. Does this conclude your testimony?

the construction process.

22 A. Yes.

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## BIG RIVERS ELECTRIC CORPORATION

# 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

#### VERIFICATION

I, Michael T. Pullen, Chief Operating Officer for Big Rivers Electric Corporation, verify, state, and affirm that I prepared or supervised the preparation of the Direct Testimony filed with this Verification, and that Direct Testimony is true and accurate to the best of my knowledge, information, and belief after a reasonable inquiry on this  $22^{nol}$  day of September, 2021.

Michael T. Pullen
Chief Operating Officer
Big Rivers Electric Corporation

COMMONWEALTH OF KENTUCKY )
COUNTY OF HENDERSON )

SUBSCRIBED AND SWORN TO before me by Michael T. Pullen on this the day of September, 2021.

Notary Public, Kentucky State at Large

My Commission Expires

Notary Public, Kentucky State-At-Large My Commission Expires: July 10, 2022 ID: 604480

# **Professional Summary**

Michael T. Pullen Chief Operating Officer Big Rivers Electric Corporation 201 Third Street Henderson, KY 42420 Phone: 270-844-6186

# **Professional Experience**

Big Rivers Electric Corporation - 2015 to present Chief Operating Officer Executive Vice President Vice President Production

Ameren Illinois – 2014-2015 Manager Substation Construction

Electric Energy, Inc. – 1990-2014
Director Operations
Manager Generation
Manager Systems-Dispatch
Group Supervisor Maintenance

## **Education**

Master of Business Administration Murray State University

Bachelor of Science Electrical Engineering University of Mississippi

# \*\*\*For Immediate Release June 9, 2021\*\*\*





Greater Paducah Economic Development is pleased to announce Blockware Mining, Inc. is expanding in Paducah, KY. Blockware Mining is a technology-based company specializing in cryptocurrency mining. Blockware will be investing \$50 million and hiring 20 new employees over the next 24 - 36 months in a new technology center on five acres in Industrial Park West. Upon completion of the new facility, Blockware is anticipated to have a \$5.7 million recurring annual economic impact on the community.

GPED has been working with Blockware for approximately one year on the expansion project. "The culmination of today's announcement represents teamwork and the ability to get a deal done between numerous organizations. We have diligently worked with Navier (a leading expert in mining digital currency), Big Rivers Electric, Jackson Purchase Energy, Paducah Power, the Paducah McCracken County Industrial Development Authority, the City of Paducah, McCracken County, the Kentucky Cabinet for Economic Development, and numerous community partners to pull this deal together. We have come together as a community to make this investment happen. It is a great thing! We are seeing an increased interest in Paducah as a hotspot for cryptocurrency miners due to the relationship we have with Navier, our ability to offer competitive power rates, and the recently enacted legislation by the state of Kentucky.", stated Bruce Wilcox, President of GPED.

Big Rivers Electric is also investing an additional \$12.7 million in additional utility infrastructure upgrades to Industrial Park West to accommodate 100 megawatts of power. "Big Rivers is happy to partner with Jackson Purchase Energy to bring economic development projects to this region," said Bob Berry, President & CEO of Big Rivers Electric Corporation. "Blockware's announcement to locate in Paducah is good news that will benefit our entire cooperative member system."

Michael Stoltzner, Blockware CEO, stated "...with the support and guidance of Greater Paducah Economic Development facilitating introductions to key people and organizations throughout the process, Blockware qualified for the Kentucky Business Investment Program enabling us to secure a robust incentive package allowing us to effectively grow within the bitcoin network community and keep our costs low. Additionally, GPED assisted in obtaining a 10-year Power Purchase Agreement with Big Rivers/Jackson Purchase Energy, which will allow us to build out a mining facility with the potential to reach up to 100MW".

For additional information contact Bruce Wilcox at 270-210-7392.







# Blockware Raises \$25M to Expand Bitcoin Mining Operations in Kentucky

CONTRIBUTOR
Cheyenne Ligon CoinDesk
PUBLISHED



Blockware has raised \$25 million as North American bitcoin mining looks to seize the moment.

Blockware founder and CEO Michael Stoltzner declined to name entities involved in the funding round, but told CoinDesk the list of investors included several "prominent" individuals and crypto funds. This round brings Blockware's total capital raised to date to \$32 million since its launch in 2019.

The money will be used to purchase 14,000 mining rigs over the next two years, which Blockware has sourced from both Bitmain and the open market. The company will use 8,000 of the rigs to build out its new mining facility in Paducah, Ky., and will sell 6,000 rigs to other U.S.-based bitcoin mining operations.

Stoltzner said he chose Paducah for Blockware's first large-scale mining facility because the city had everything he was looking for: friendly government officials, plenty of skilled and unskilled labor, and most importantly, cheap energy.

The Paducah facility will be built on land that is 100 yards from the Big Rivers Electricoperated energy source that will power Blockware's rigs.

The Chinese government's <u>crackdown</u> on mining operations has caused many to shut down, and bitcoin's hashrate has <u>plummeted</u> in response. The situation has caused many in the crypto community to call for a more global, <u>decentralized</u> mining structure to reduce the network's reliance on Chinese miners. Miners have also been under increased scrutiny in recent months as bitcoin's sustainability debate, led by unofficial crypto figureheads including Tesla CEO <u>Elon Musk</u>, rages on.

#### Power mix

Stoltzner said the company chose to source power from Big Rivers Electric because the company used a mix of renewable and non-renewable sources, including hydroelectric, wind and coal.

"Kentucky is the largest coal-producing state in the country," Stoltzner said. "That's the resource they have. It's a tough argument, and people in Kentucky feel different about that argument than people in California."

Stoltzner said Blockware is working on a program to purchase carbon offsets and is in the early stages of joining the Michael Saylor-led <u>Bitcoin Mining Council</u>.

According to Stoltzner, Blockware's smaller-scale mining operations in upstate New York, Washington state and Newfoundland, Canada, are almost completely run on hydroelectric power.

Ensuring the sustainability of North American bitcoin mining is part of Stoltzner's larger stated goal of increasing the bitcoin hashrate in North America, which currently only accounts for an estimated 10% of the hashrate worldwide.

Bitcoin must be mined domestically in order to fully go mainstream in North America, Stoltzner said.

"What we've seen coming out of China and Eastern Europe – that's not helping to legitimize bitcoin in the industry," Stoltzner said. "I believe that companies operating out of the United States are very much legitimizing crypto and bitcoin. It's got to happen out of the United States."

https://www.paducahsun.com/news/bitcoin-mining-operation-raises-25-million-for-facility-rigs/article\_10011479-efc0-5678-b7e0-b817f972434c.html

EDITOR'S PICK

# Bitcoin mining operation raises \$25 million for facility, rigs

By DEREK OPERLE doperle@paducahsun.com Jul 1, 2021



COURTESY OF UNSPLASH

Looking to seize on the moment, Blockware Mining — the cryptocurrency mining company that recently revealed its plans to build their flagship facility in Paducah — announced it had raised \$25 million in capital during an oversubscribed second funding round.

Blockware founder and CEO Michael Stoltzner said he feels his company is poised for success now with these funds set to go toward the acquisition of 14,000 mining rigs and the completion of a new facility on its five-acre lot in Paducah's Industrial Park West.

"We've had a very successful time as a company. We were incorporated in 2019 and did our first round of funding in the late fourth quarter of that year," Stoltzner said. "We've had a strong two years of growth and I think we've been very well managed and strategic about our purchase and deployment of equipment to different facilities around North America."

The development brings together the collaboration between various community partners, including the Greater Paducah Economic Development, Big Rivers Electric, Jackson Purchase Energy, Paducah Power, the Paducah McCracken County Industrial Development Authority, the city of Paducah, McCracken County and the Kentucky Cabinet for Economic Development.

The mining rigs are going to come to Blockware through a set of purchase programs that will bring regular amounts of new units to the west Kentucky facility each month between this August and July 2022. Getting this deal, Stoltzner told The Sun, was huge for the company.

"Probably the most difficult part of participating in bitcoin mining is the acquisition of equipment because there are only a few manufacturers in the world and they are all based out of China currently," he said. "So we were able to accomplish through our capital raise getting on what's called an annual purchase program where starting in August 2021 through July 2022 we will acquire 1,000 rigs per month for 12 consecutive months from Bitmain and on top of that get an additional 500 rigs per month on a purchase program that runs from January 2022 through March 2022."

Of these total 14,000 rigs, around 8,000 will be installed in the Paducah facility with the remainder to be sold to other entities.

Once installed, the rigs will start earning money by processing data, which Stoltzner is hopeful will be happening by the fourth quarter of this year.

The process consists of an incentivized network of miners competing for monetary rewards based on the "hash rate," or the measuring unit of power needed to solve complex mathematical

puzzles and earn newly-minted bitcoin.

Two sources of income come from mining the bitcoin that is earned each day - transaction

fees and rewards.

Stoltzner is feeling good about the future of Bitcoin and Blockware, despite the decline in the cryptocurrency's value since mid-April and — with the Chinese government's recent crackdown

on mining facilities — he is confident the door is opening for facilities statewide to get a bigger

piece of the daily bitcoin pie.

"We are very bullish on Bitcoin. We're long-term focused on it and we hold a fair amount of the

Bitcoin that we buy in treasury," the CEO said. "We don't convert to U.S. dollars on a daily or

regular basis."

Overall, Stoltzner was riding high Wednesday and in his view the future is bright.

"It's a major accomplishment for us to be able to get on that purchase program and be able to

build out the facility in Paducah," he added. "We're very proud of those accomplishments.

"We've been able to put the pieces in place and now it's just a matter of us executing and

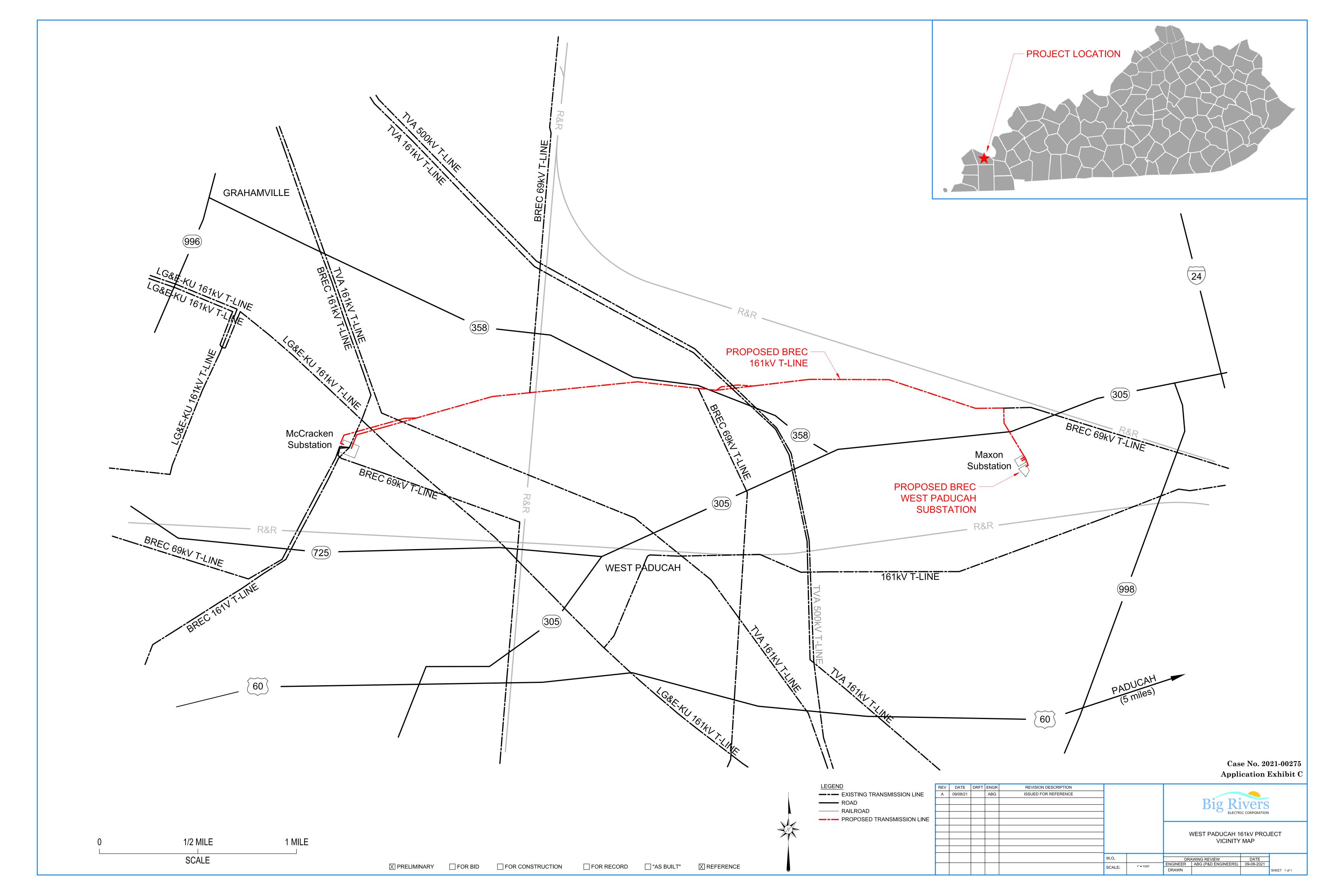
getting the facility built out and starting to take delivery of equipment."

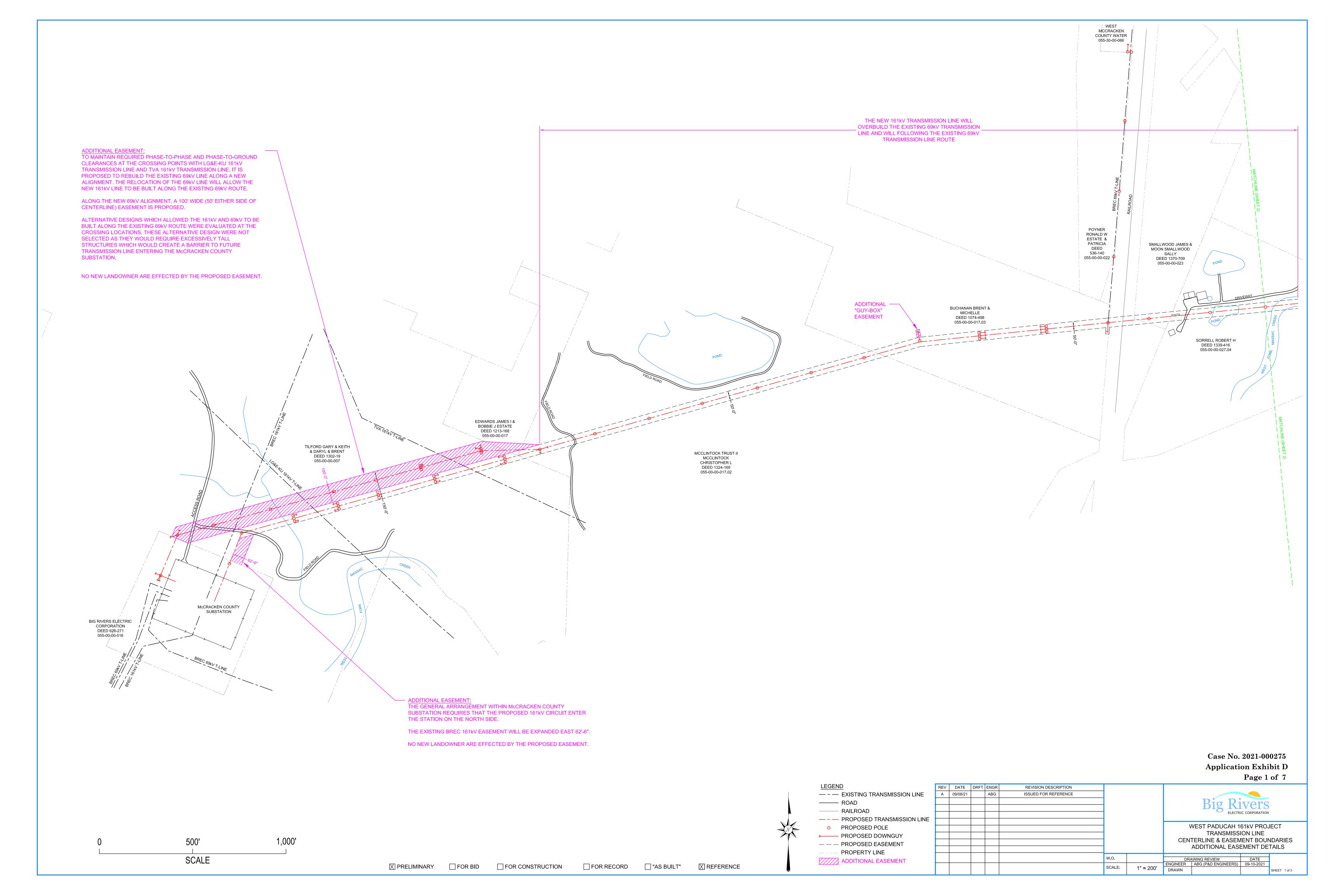
REFERENCES FO	OR COMPLIANCE WITH STATUTORY AND FILING REQUIREMENTS	REGULATORY
Law / Regulation	Filing Requirement	Location in Application
	IN GENERAL	
807 KAR 5:001 Section 14(1)	The full name, mailing address, and electronic mail address of the Applicant	Application № 8
807 KAR 5:001 Section 14(1)	A request for the order, authorization, permission or certificate desired	Application <b>P</b> 1, 5-7, 30-31, and Page 12
807 KAR 5:001 Section 14(1)	A reference to the particular provision of law authorizing the relief requested	Application
807 KAR 5:001 Section 14(1)	The facts on which the application is based	Application <b>P</b> 2-4, 13-26; Exhibit A (Pullen Testimony)
807 KAR 5:001 Section 14(2)	State and date of incorporation; attest to good standing in state	Application № 10

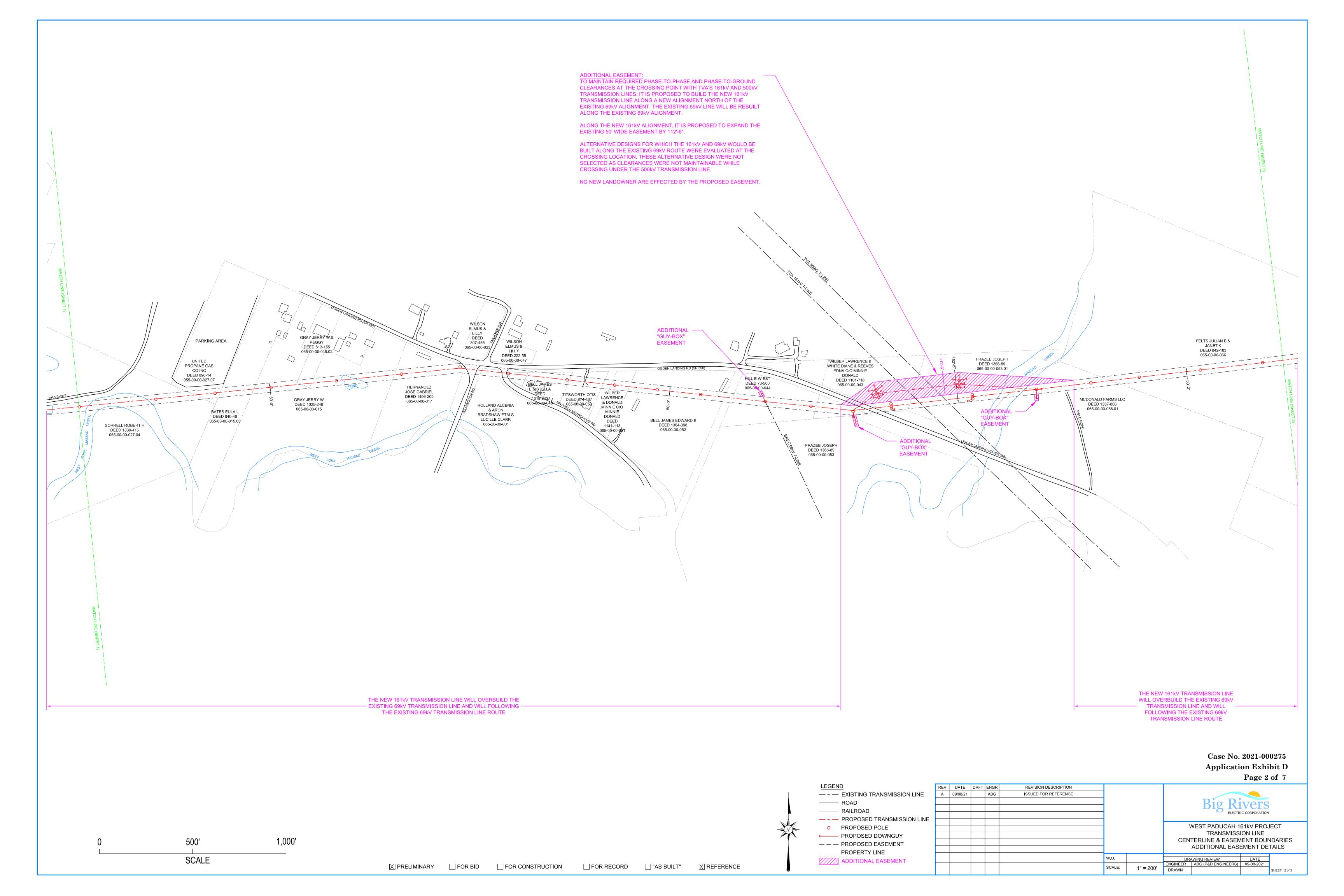
Law / Regulation	Filing Requirement	Location in
		Application
	CPCN	
807 KAR 5:001 Section 15(2)(a)	The facts relied upon to show that the proposed construction or extension is or will be required by public convenience or necessity;	Application № 16; Exhibit A (Pullen Testimony)
807 KAR 5:001 Section 15(2)(b)	Copies of franchises or permits, if any, from the proper public authority for the proposed construction or extension, if not previously filed with the commission.	Application № 25
807 KAR 5:001 Section 15(2)(c)	A full description of the proposed location, route, or routes of the proposed construction or extension, including a description of the manner of the construction and the names of all public utilities, corporations, or persons with whom the proposed construction or extension is likely to compete.	Application PP 2, 12-13; Exhibit A (Pullen Testimony); Exhibits C and D (maps); Exhibits E, F, and G (sketches)
807 KAR 5:001 Section 15(2)(d)(1)	Maps to suitable scale showing the location or route of the proposed construction or extension, as well as the location to scale of like facilities owned by others located anywhere within the map area with adequate identification as to the ownership of the other facilities;	Exhibits C and D

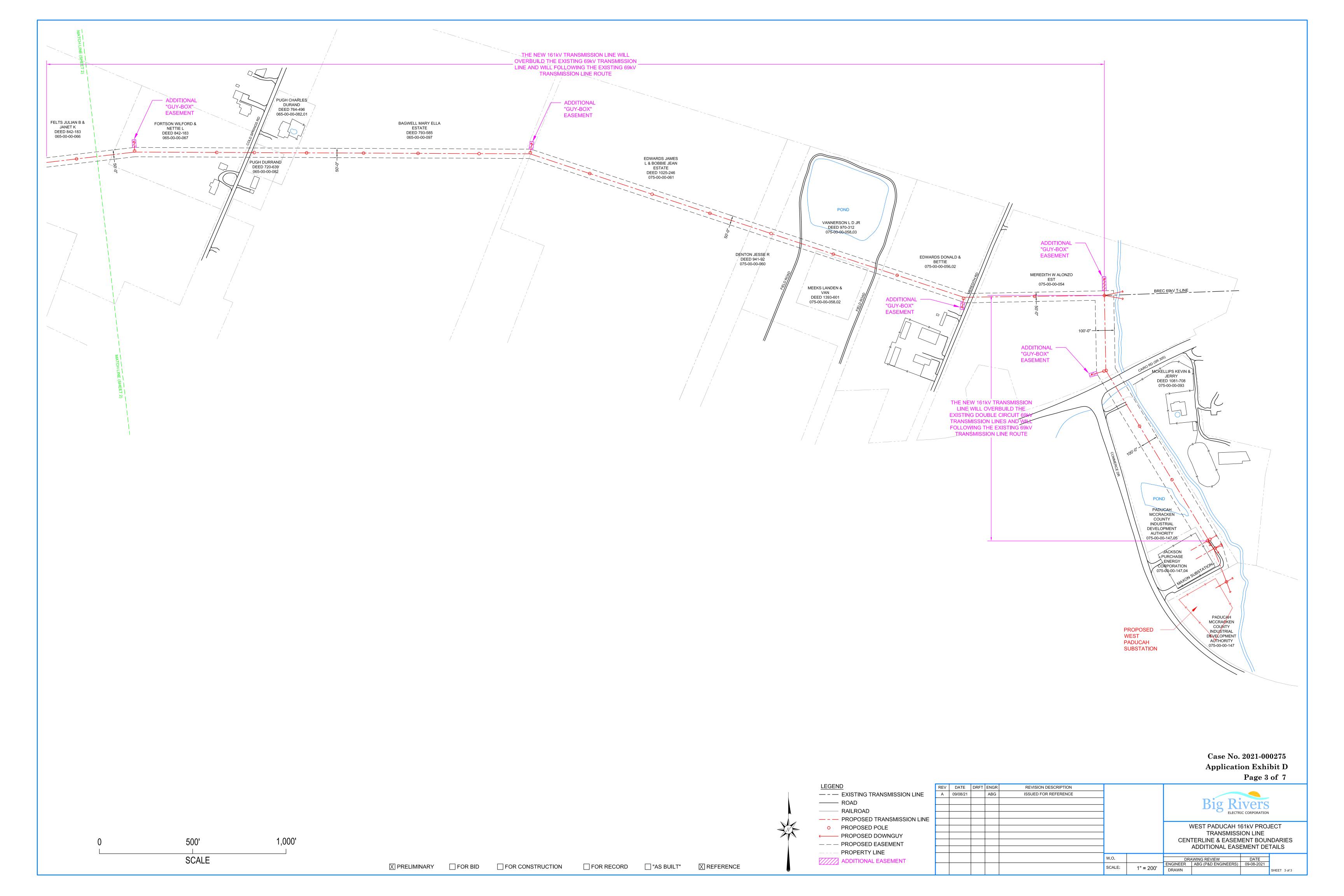
807 KAR 5:001 Section 15(2)(d)(2)	Plans and specifications and drawings of the proposed plant, equipment, and facilities	Exhibits D, E, F, and G
807 KAR 5:001 Section 15(2)(e)	The manner in detail in which the applicant proposes to finance the proposed construction or extension.	Application ₱ 22
807 KAR 5:001 Section 15(2)(f)	An estimated annual cost of operation after the proposed facilities are placed into service.	Application № 24
	Applicable Transmission Line	
807 KAR 5:120 Section 2(2)	Three (3) maps of suitable scale, but no less than one (1) inch equals 1,000 feet for the project proposed.  (a) The map detail shall show the location of the proposed transmission line centerline and right of way, and boundaries of each property crossed by the transmission line right of way as indicated on the property valuation administrator's maps, modified as required.  (b) Sketches of proposed typical transmission line support structures shall also be provided.  (c) A separate map of the same scale shall show any alternative routes that were considered;	Exhibits C, D, and E; Application P20
807 KAR 5:120 Section 2(3)	A verified statement that, according to county property valuation administrator records, each property owner over whose property the transmission line right-of-way is proposed to cross has been sent by first-class mail, addressed to the property owner at the owner's address as indicated by the county property valuation administrator records, or hand delivered regulatory notice.	Application P 27
807 KAR 5:120 Section 2(4)	A sample copy of each notice provided to a property owner and list of the names and addresses	Exhibits H (Sample Notice); Exhibit I (List)
807 KAR 5:120 Section 2(5)	A statement that a notice of intent was published	Application № 29
807 KAR 5:120 Section 2(5)	A copy of the newspaper notice	Exhibit J (Newspaper Notice)
807 KAR 5:120 Section 2(7)	A statement as to whether the project involves sufficient capital outlay to materially affect the existing financial condition of the utility involved	Application № 24

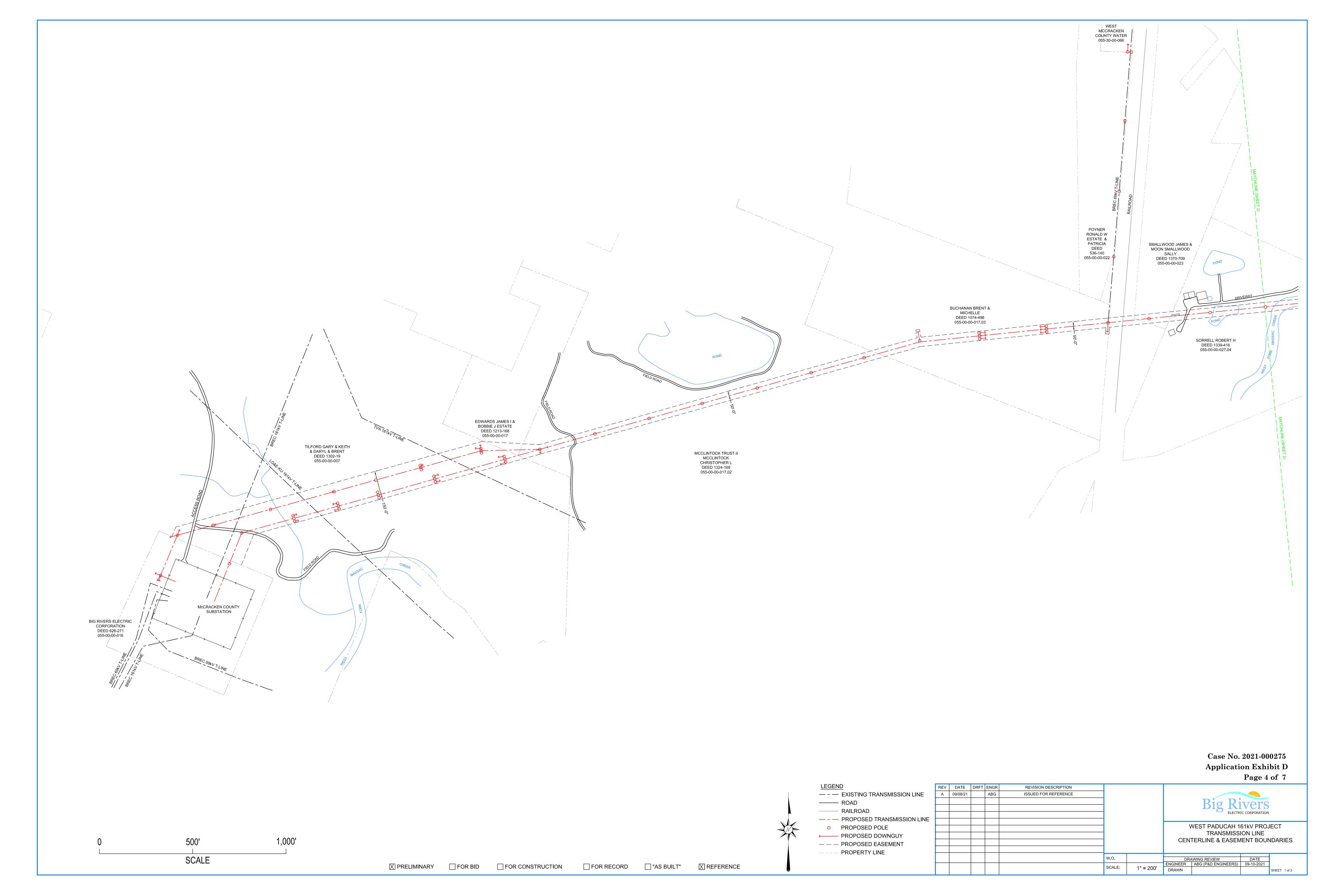
Law / Regulation	Filing Requirement	Location in
		Application
	DECLARATORY ORDER	
807 KAR 5:001	An application for declaratory order shall:	The Application is
Section 19(2)	(a) be in writing;	in writing.
	(b) contain a complete, accurate, and concise	
	statement of facts upon which the application is	
	based;	
	(c) fully disclose the applicant's interest;	
	(d) identify all statues, administrative	
	regulations, and orders to which the application	
	relates; and	
	(e) state the applicant's proposed resolution or	
	conclusion	
807 KAR 5:001	Applications for declaratory orders shall be	The Application is
Section 19(6)	supported by affidavit or shall be verified.	verified.

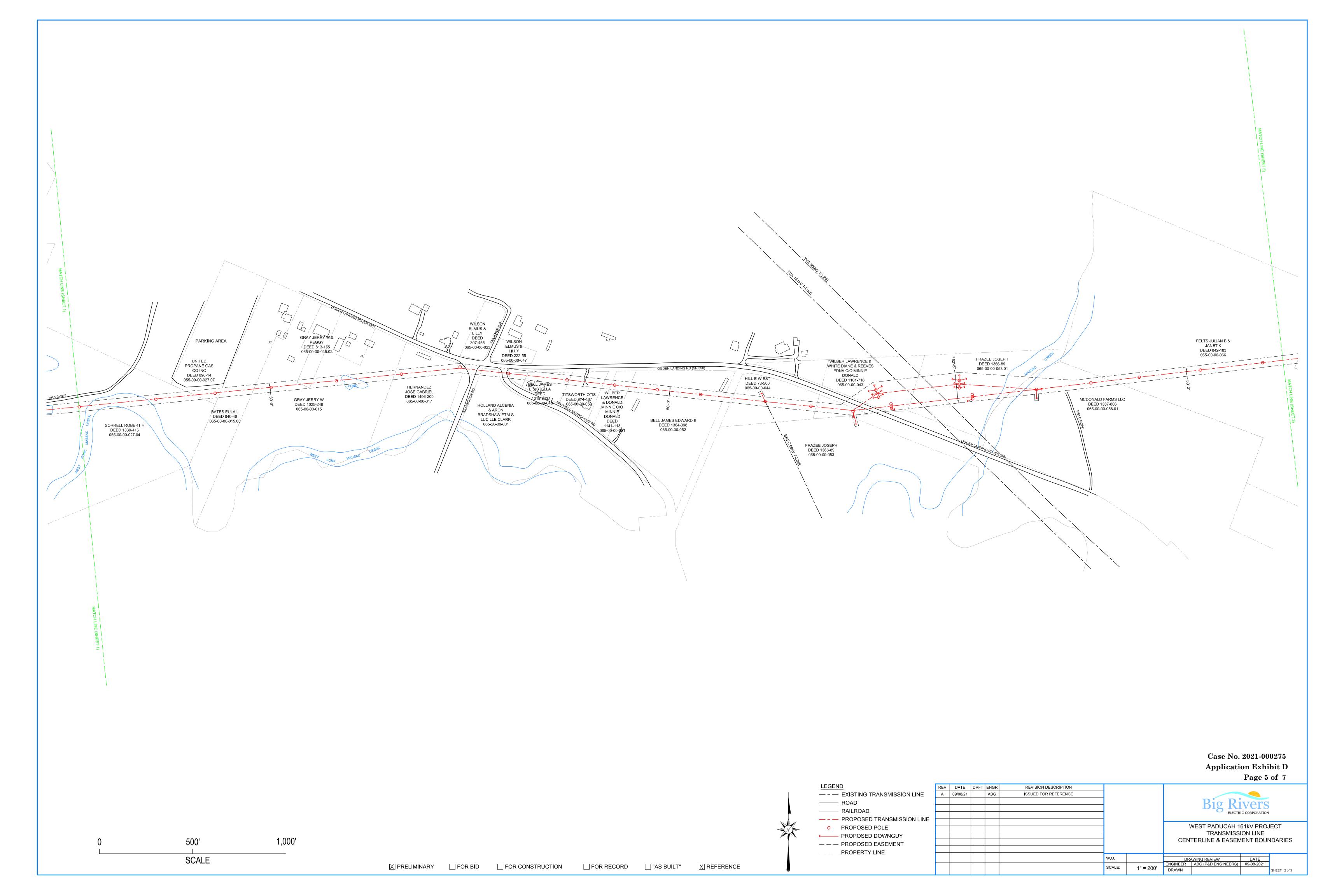


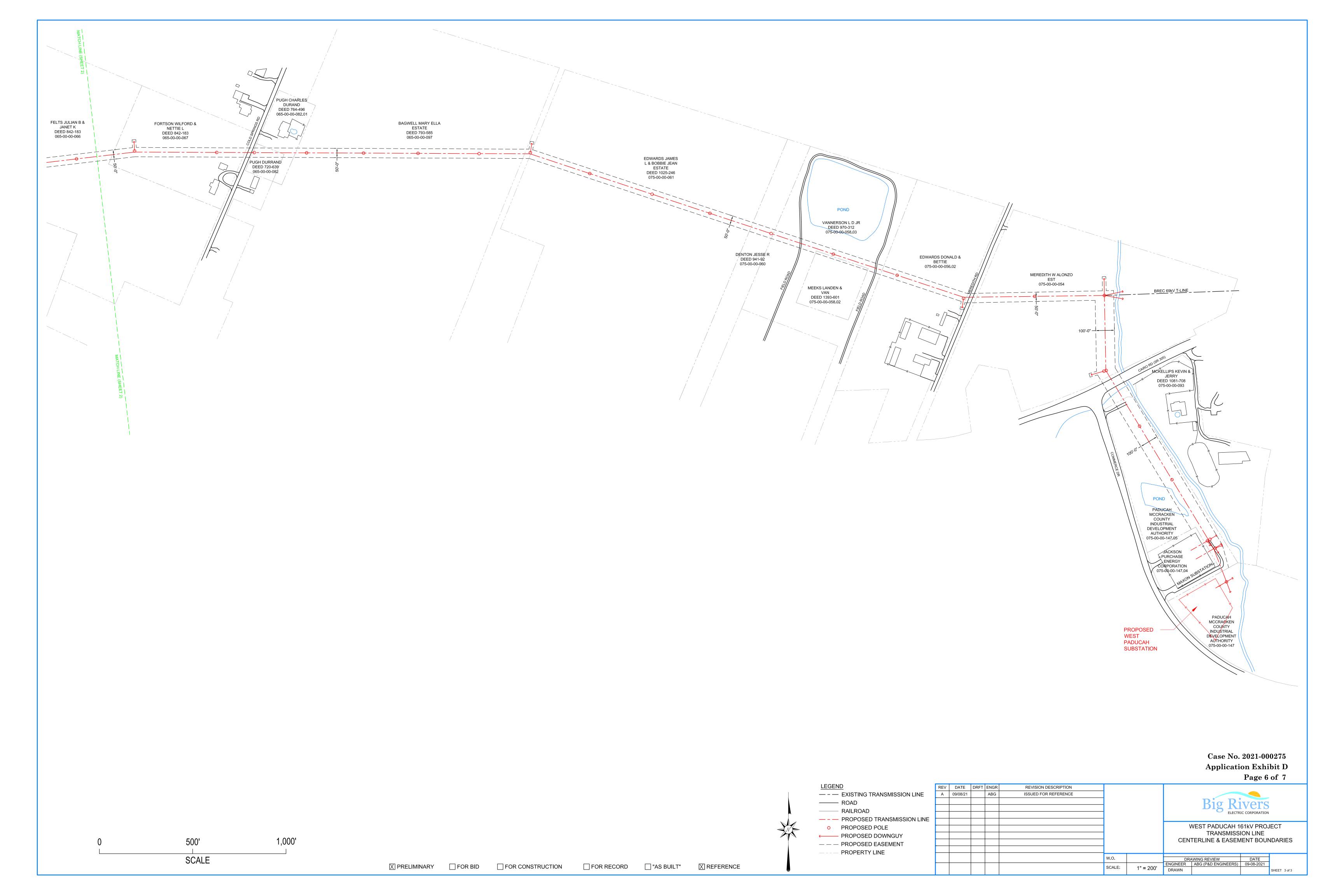


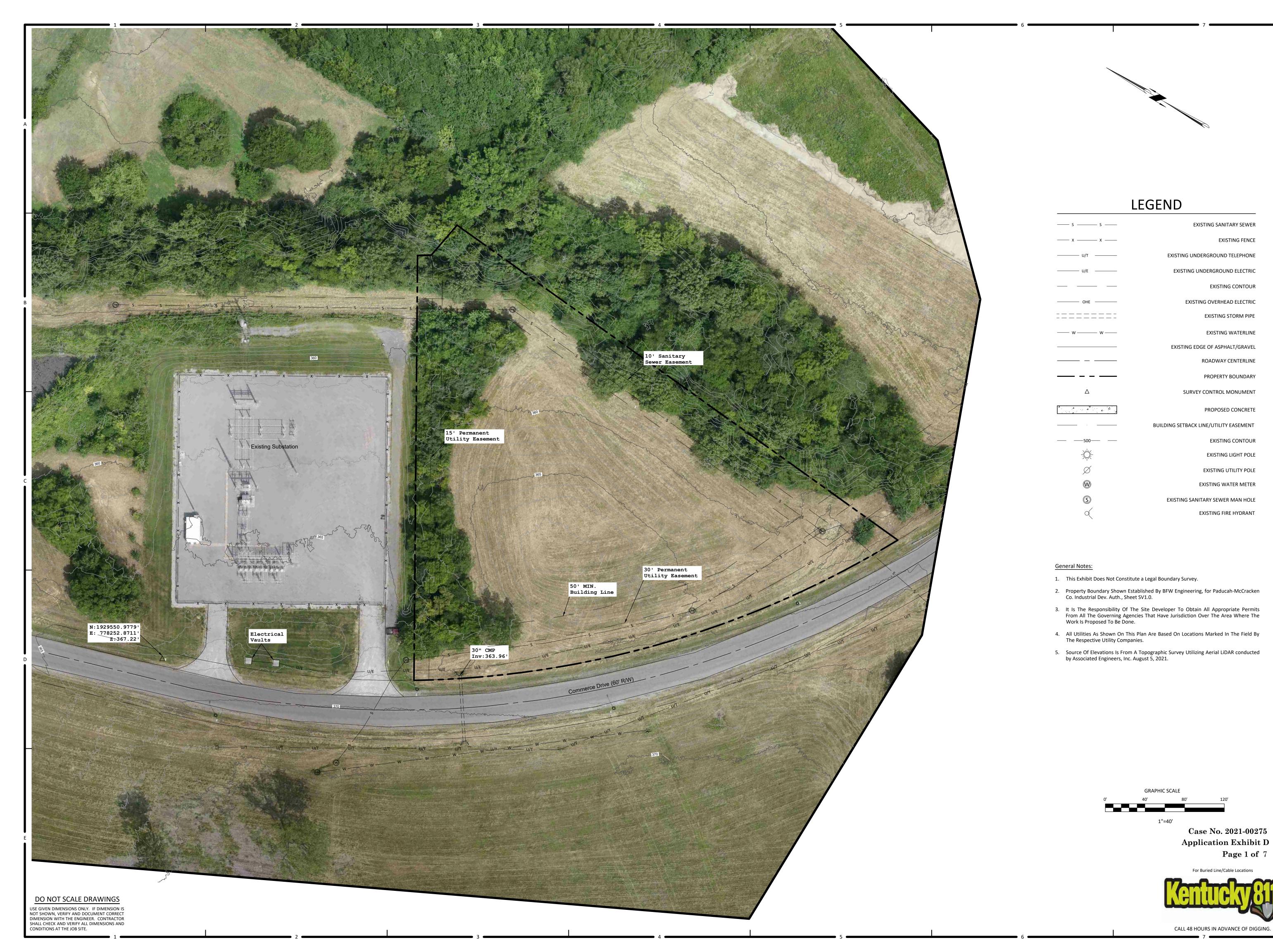




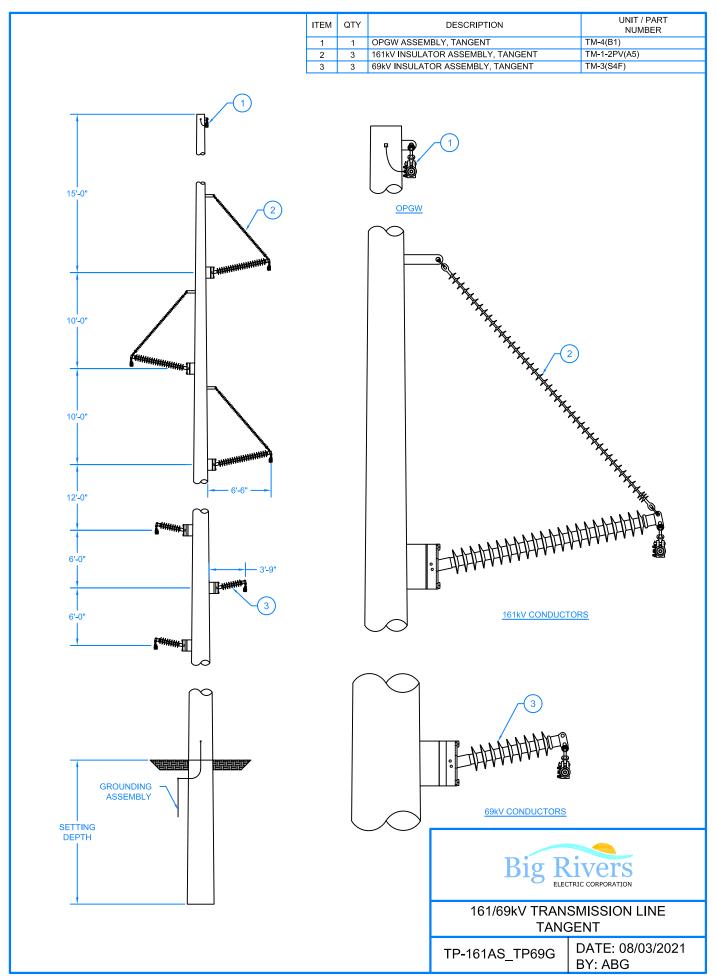








SHEET NUMBER



Case No. 2021-00275 Application Exhibit E



# In the Matter of:

ELECTRONIC APPLICATION OF	)	
BIG RIVERS ELECTRIC CORPORATION	)	
FOR A CERTIFICATE OF PUBLIC	)	Case No.
CONVENIENCE AND NECESSITY TO	)	2021-00275
CONSTRUCT A 161 KV TRANSMISSION LINE IN	)	
McCRACKEN COUNTY, KENTUCKY	)	

# **CONFIDENTIAL**

Application Exhibit F McCracken County Substation Drawings

INFORMATION SUBMITTED WITH MOTION FOR CONFIDENTIAL TREATMENT





# In the Matter of:

ELECTRONIC APPLICATION OF	)	
BIG RIVERS ELECTRIC CORPORATION	)	
FOR A CERTIFICATE OF PUBLIC	)	Case No.
CONVENIENCE AND NECESSITY TO	)	2021-00275
CONSTRUCT A 161 KV TRANSMISSION LINE IN	)	
McCRACKEN COUNTY, KENTUCKY	)	

# **CONFIDENTIAL**

Application Exhibit G Proposed West Paducah Substation Drawings

INFORMATION SUBMITTED WITH MOTION FOR CONFIDENTIAL TREATMENT





201 Third Street P.O. Box 24 Henderson, KY 42419-0024 270-827-2561 www.bigrivers.com

September \_\_\_\_, 2021

[Name] [Address]

RE: Notice of Proposed Electric Transmission Line Construction in

McCracken County Parcel Id: [Parcel #]

## Dear [Name]:

Big Rivers Electric Corporation ("Big Rivers"), a western Kentucky electric generation and transmission cooperative, proposes to construct a 3.8 mile 161 kilovolt transmission line circuit in McCracken County, Kentucky. The purpose of the proposed transmission line circuit is to serve new load growth in the west Paducah area.

The route for the proposed circuit is shown on the attached map. The circuit is proposed to extend from the existing Big Rivers substation located at 5486 Bradford Road, West Paducah, Kentucky ("McCracken County Substation"). It will run east to a substation located at 5425 Commerce Drive, Paducah, Kentucky, adjacent to Jackson Purchase's Maxon Substation ("West Paducah Substation").

Big Rivers is reducing the impacts of this new circuit on McCracken County property owners by utilizing existing easements and existing transmission lines. Big Rivers already has an easement across property you own in McCracken County for an existing transmission line, and it expects to add the new circuit to that existing line. Big Rivers will also replace old wooden poles with newer, stronger steel poles.

Big Rivers anticipates the project may require some very limited additional right-of way. Hunter Rickard, Easement Agent at Big Rivers, is in the process of contacting all owners of property where any existing easements will need to be increased. Mr. Rickard will also notify you before construction begins, and will remain your contact for any crop damage reimbursements. His email address is <a href="https://example.com"><u>Hunter.Rickard@BigRivers.com</u></a> and his phone number is 270-844-6210.

Big Rivers plans to file an application with the Kentucky Public Service Commission ("Commission"), by September 22, 2021, seeking a certificate of public convenience and necessity authorizing this project. The purpose of the Commission's review of Big Rivers' application is to determine whether the proposed circuit is required for public

convenience and necessity. You have the right to move to intervene and participate in the proceeding. You also have the right to request the Commission to conduct a public hearing in McCracken County on that application.

To request to intervene in the Commission's proceeding on Big Rivers' application, or to request a public hearing in that case, you should contact the Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602-0615, telephone number (502) 564-3940. The docket number under which this application will be processed is 2021-00275.

A motion to intervene shall include the movant's full name, mailing address, and electronic mail address and shall state his or her interest in the case and how intervention is likely to present issues or develop facts that will assist the Commission in fully considering the matter without unduly complicating or disrupting the proceedings. The motion may also include a request for delivery of Commission order by United Stations mail and shall state how good cause exists for that means of delivery.

A request for a public hearing shall be requested no later than thirty (30) days after Big Rivers files its application, and shall contain the docket number of the case; the name, address, and telephone number o the person requesting the hearing; and a statement as to if the person requesting the hearing wishes to participate in an evidentiary hearing or to make unsworn public comments. If a person requesting a local public hearing wishes to participate in an evidentiary hearing as well, that person shall also apply to intervene in the Commission's case.

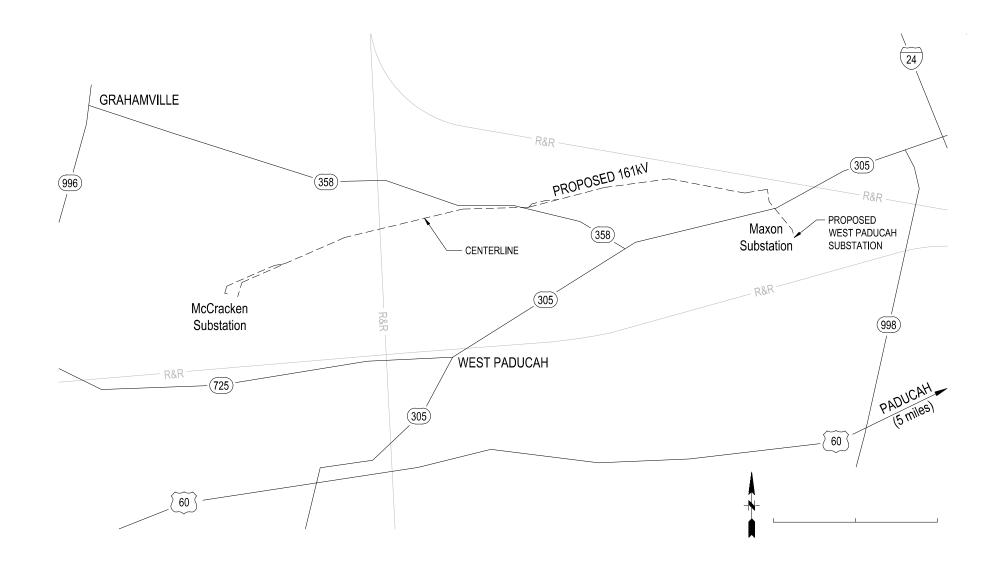
If you have any questions for me, you may contact me at (270) 827-2561 or via email at Jerrod. Thomas@BigRivers.com.

Sincerely yours,

BIG RIVERS ELECTRIC CORPORATION

Jerrod Thomas, P.E. Director Engineering

Enclosure (Map)



Name	Address_Li	City	State	Zip_Code
TILFORD GARY & KEITH				
& DARYL & BRENT	8865 OGDEN LANDING ROAD	WEST PADUCAH	KY	42086
EDWARDS JAMES I &				
BOBBIE J ESTATE	6430 OLD CAIRO ROAD	PADUCAH	KY	42001
MCCLINTOCK TRUST II				
MCCLINTOCK CHRISTOPHER L	8370 OGDEN LANDING ROAD	WEST PADUCAH	KY	42086
BUCHANAN BRENT & MICHELLE	8230 OGDEN LANDING ROAD	WEST PADUCAH	KY	42086
POYNER RONALD W ESTATE & PATRICIA	8030 OGDEN LANDING ROAD	WEST PADUCAH	KY	42086
*WEST MCCRACKEN COUNTY WATER	DISTRICT	WEST PADUCAH	KY	42086
SMALLWOOD JAMES &				
MOON SMALLWOOD SALLY	7936 OGDEN LANDING ROAD	WEST PADUCAH	KY	42086
SORRELL ROBERT H	7830 OGDEN LANDING ROAD	WEST PADUCAH	KY	42086
UNITED PROPANE GAS CO INC	P O BOX 2450	PADUCAH	KY	42002
BATES EULA L	7740 OGDEN LANDING ROAD	WEST PADUCAH	KY	42086
GRAY JERRY W	7720 OGDEN LANDING ROAD	WEST PADUCAH	KY	42086
GRAY JERRY W & PEGGY	7720 OGDEN LANDING ROAD	WEST PADUCAH	KY	42086
HERNANDEZ JOSE GABRIEL	2621 FAIRMONT STREET	PADUCAH	KY	42003
HOLLAND ALCENIA & ARON BRADSHAW				
ETALS LUCILLE CLARK	1353 REED AVE	PADUCAH	KY	42001
WILSON ELMUS & LILLY	7625 OGDEN LANDING ROAD	WEST PADUCAH	KY	42086
BELL JAMES E & STELLA	7540 OGDEN LANDING ROAD	WEST PADUCAH	KY	42086
TITSWORTH OTIS	6350 MAYFIELD METROPOLIS ROAL	WEST PADUCAH	KY	42086
WILBER LAWRENCE & DONALD MINNIE				
C/O MINNIE DONALD	P O BOX 7914	PADUCAH	KY	42002
BELL JAMES EDWARD II	7370 OGDEN LANDING ROAD	WEST PADUCAH	KY	42086
HILL E W EST	RT 1	KEVIL	KY	42053
FRAZEE JOSEPH	6955 MAYFIELD METROPOLIS ROAL	WEST PADUCAH	KY	42086
WILBER LAWRENCE & WHITE DIANE &				
REEVES EDNA C/O MINNIE DONALD	P O BOX 7914	PADUCAH	KY	42002
FRAZEE JOSEPH	6955 MAYFIELD METROPOLIS ROAL	WEST PADUCAH	KY	42086
MCDONALD FARMS LLC	11670 WOODVILLE ROAD	KEVIL	KY	42053
FELTS JULIAN B & JANET K	4445 COLD SPRINGS ROAD	WEST PADUCAH	KY	42086
FORTSON WILFORD & NETTIE L	4515 COLD SPRINGS ROAD	WEST PADUCAH	KY	42086
PUGH DURRAND	4570 COLD SPRINGS ROAD	WEST PADUCAH	KY	42086
PUGH CHARLES DURAND	4570 COLD SPRINGS ROAD	WEST PADUCAH	KY	42086
BAGWELL MARY ELLA ESTATE	3901 MAXON ROAD	PADUCAH	KY	42001
EDWARDS JAMES L & BOBBIE JEAN ESTATE	6430 CAIRO ROAD	PADUCAH	KY	42001
DENTON JESSE R	6361 CAIRO ROAD	PADUCAH	KY	42001
VANNERSON L D JR	6309 CAIRO ROAD	PADUCAH	KY	42001
MEEKS LANDEN & VAN	1215 OXFORD TRACE	PADUCAH	KY	42001
EDWARDS DONALD & BETTIE	4041 ALAMEDA CRESCENT	PADUCAH	KY	42001
MEREDITH W ALONZO EST	6125 OLD CAIRO ROAD	PADUCAH	KY	42001
MCKELLIPS KEVIN & JERRY	101 ORCHARD VIEW DRIVE	PADUCAH	KY	42001
**PADUCAH MCCRACKEN COUNTY				
INDUSTRIAL DEVELOPMENT AUTHORITY		PADUCAH	KY	42001
* Mailed to 2020 Orden Landing Poad West	Paducah KV 42096			

<sup>\*</sup> Mailed to 8020 Ogden Landing Road West Paducah, KY 42086

<sup>\*\*</sup> Mailed to 300 3rd Street Paducah, KY 42003

McCracken Co. | Graves Co. | Marshall Co. | Lyon Co. | Caldwell Co. | Massac Co.

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**Herald Ledger** 





Buy and sell across Western Kentucky & Southern Illinois in one location. Your ad will appear in 6 newspapers!



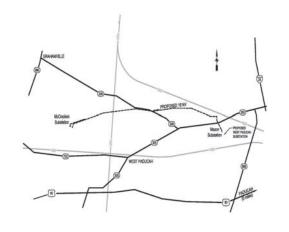
## Notice of Proposed Electric Transmission Line Construction Project

Big Rivers Electric Corporation ("Big Rivers"), a western Kentucky electric generation and transmission cooperative, proposes to construct a 3.8 mile, 161 kilovolt transmission line circuit in McCracken County, Kentucky. The purpose of the proposed transmission line circuit is to serve new load growth in the west Paducah area.

The proposed circuit will largely be built over the top of existing 69 kilovolt transmission lines. The route will begin at the existing Big Rivers substation (McCracken County Substation) located on Bradford Road, West Paducah, Kentucky. It will run east to a substation located at 5425 Commerce Drive, Paducah, Kentucky. The circuit will typically be constructed using single pole steel structures. Big Rivers is sending a letter to each property owner (according to Property Valuation Administrators records) over whose property the proposed circuit is expected to cross.

Big Rivers plans to file an application with the Kentucky Public Service Commission ("Commission"), by September 22, 2021, seeking a certificate of public convenience and necessity authorizing this project. The purpose of the Commission's review of Big Rivers' application is to determine whether the proposed circuit is required for public convenience and necessity. Interested persons have the right to move to intervene and participate in the proceeding. They also have the right to request the Commission to conduct a public hearing in McCracken County on that application.

Interested parties may request to intervene in the Commission's proceeding on Big Rivers' application, or may request a public hearing in that case, by contacting the Executive Director, Public Service Commission, 211 Sower Boulevard. P.O. Box 615. Frankfort. Kentucky 40602-0615, telephone number (502) 564-3940. The docket number under which this application will be processed is Case No. 2021-00275. You may also direct questions to Big Rivers by contacting Jerrod Thomas, Big Rivers Director of Engineering, at (270) 827-2561.



WKATE

**MTTPE** 

LPBEEB

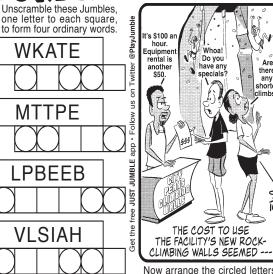
**VLSIAH** 

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Yesterday's

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THAT SCRAMBLED WORD GAME By David L. Hoyt and Jeff Knurek



Now arrange the circled letters to form the surprise answer, as suggested by the above cartoon.

(Answers tomorrow) WOULD **HARBOR** Jumbles: LOBBY Answer: When the last member of their bowling team

arrived, they were - READY TO ROLL

Sudoku is a number-placing puzzle based on a 9x9 grid with several given numbers. The object is to place the numbers 1 to 9 in the empty squares so that each row, each column and each 3x3 box contains the same number only once. The difficulty level of the Conceptis Sudoku increases from Monday to Sunday

## Conceptis SudoKu By Dave Green 4 6 5 9 8 6 5 1 2 9 8 1 9 2 3 4 7 5 9 1 2 7 2 3 5 Difficulty Level ★★★

Answer to previous puzzle

_			_	_	_			
4	7	8	6	1	3	9	5	2
3	1	6	2	5	9	7	8	4
5	9	2	4	8	7	6	1	3
8	3	5	9	4	1	2	7	6
6	4	1	7	2	5	3	9	8
7	2	9	3	6	8	5	4	1
2	8	3	5	7	4	1	6	9
1	6	7	8	9	2	4	3	5
9	5	4	1	3	6	8	2	7
Difficulty Level ★★★						9/13		

Paxton Media Group is the parent company of The Paducah Sun and WPSD-TV. PMG has an immediate opening for a part-time Payroll Clerk.

The position's responsibilities include but are not limited to payroll processing, database maintenance, as well as other administrative functions.

Office experience in a fast paced environment is necessary. Payroll experience is helpful.

Qualified applicants should send resume and salary requirements to:

> Paxton Media Group Human Resources 201 South 4th Street Paducah, KY 42003

No phone calls please.

Paxton Media Group is an equal opportunity employer and does not discriminate on the basis of race, religion, sex, age, national origin or disability.

# Paducah Sun is currently accepting applications for

# PRESS OPERATOR FULL-TIME \$11/HR

The Paducah Sun has an immediate opening for a full time press operator trainee that will be responsible for the performance and printing of area newspapers and special sections. This position will require manual and machine tasks in the setup, maintenance, and operation of the press.

Must be able to work in a teamwork environment during the printing of newspaper publications

We will train to setup the press for each publication run based off of page counts. We will train to observe and monitor machine operations to detect malfunctions and to determine

vhether adjustments are needed We will train to observe images are registering from unit to unit and assure print quality and color

Works with staff members in making routine adjustments during the press run while maintaining

quality throughout the run.

Accurately follows instructions

Works with press staff in performing daily and monthly maintenance and troubleshooting Performs other job duties as assigned.

Requirements:

Must have the ability to read and interpret documents such as safety rules, operating and enance instructions and procedure manuals

Must demonstrate basic computer skills to complete data entry Must have the ability to perform intermediate arithmetic.

Mechanical aptitude from prior work experience is a plus

Must be able to demonstrate effective decision-making skills. Must be willing to work overtime as needed; significant overtime may be required during busy

Must be able to maintain good attendance.

Must be able to lift up to 50 lbs. Must be able to climb stairs on a regular basis

The Paducah Sun Classifieds

are the place to look!

NHAT WE OFFER: Culture based on integrity, respect and accountability. We will provide exceller imprehensive training with numerous learning and development opportunities. The Paducah Sun Paducah KY is a 5 night per week operation printing various area web publications. Benefits include ealth, dental, vision insurance, paid time off and a 401(k) plan.

Please send resume to 408 Ky Ave., Paducah KY 42003 Attention: Matt Jones. Electronic resu

nay be sent to mjones@paducahsun.com. No walk in interviews accepted Paxton Media Group is an equal opportunity employer and does not discriminate on the basis of race, religion, color, sex, age, national origin or disability

0100 ANNOUNCEMENTS

Free Wooden Pallets located behind The Paducah Sun 408 Kentucky Ave Paducah Ky

# Paducah Sun

Now available Classified Specialist Taking your calls Monday-Friday 8AM-4:30PM Call Jodi at <u>270-575-8705</u>

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1466 Krebs Station 16th,17th,18th 6 families, tools DECO, tons of items

0200 EMPLOYMENT

Carpenters Helper wanted, no experience or tools needed, flexible hours, 12/hr Call 270-217-3996 to apply

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0700 REAL ESTATE FOR

**Land For Sale Livingston County** 21.878 acres on Newbern Rd. 1.5 acre pond, underground electricity, great well, 16" X 19" gazebo with water and electricity beautiful building sites 270-969-1456 serious inquires only

0900 LEGALS

In accordance with Chapter 65 and 424 of the KY Revised Statutes, the financial records of the Paducah – McCracken County Industrial Development Authority for the year ending June 30, 2021 are available for viewing at 300 S 3rd St., Paducah, KY 42003.

> PADUCAH BOARD OF ADJUSTMENT

On Monday, September 27, 2021 at 5:30 PM, the Paducah Board of Adjustment will conduct a public hearing regarding:

Case # VAR2021-0011 25 front yard variance request for one two-family structure to be located 15' from the front property line and any future twofamily structures to be located 15' from the front property line. Request is made by Tyler & Ashley Pittman.

The hearing will be held in the Commission Chambers of Paducah City Hall, located at 300 South 5th Street, Paducah KY 42003.

Inquires may be made to 270-444-8690 ext. 2067 or http://www.paducahky.gov/boar d-adjustment.

Applications may be continued

from time to time.

