

Note: Red text indicates data has been updated from PVA data based on landowner contact and/or additional research.

PSC Filing ID	County Parcel ID	Owner	Mailing Address	Mailing City	Mailing State	Mailing Zip	Crossed by ROW		County	Date of Data Review
							including Blowout	Within 400' Filing Area		
1	155-00-00-912.00	AEP					Yes	Yes	Pike	May 2023
2	155-00-00-049.00	W J WILLIAMSON & BEN -EST (LIZA CALDWELL)	PO BOX 1569	HUNTINGTON	WV	25716	Yes	Yes	Pike	May 2023
3	166-00-00-022.00	PENTMAN LLC	PO BOX 21926	CHATTANOOGA	TN	37424	No	Yes	Pike	May 2023
4	155-30-00-002.01	JACOB JACKSON	260 SHARON HEIGHTS	FOREST HILLS	KY	41527	Yes	Yes	Pike	May 2023
5	155-30-00-017.00	SOUTHSIDE REAL ESTATE & SOUTHSIDE PROFESSIONAL BLDG	79 MALL RD SUITE D	S WILLIAMSON	KY	41503	Yes	Yes	Pike	May 2023
6	155-00-00-905.00						No	Yes	Pike	May 2023
7	166-00-00-027.00	SOUTHSIDE REAL ESTATE & SOUTHSIDE PROFESSIONAL BLDG	79 MALL RD SUITE D	S WILLIAMSON	KY	41503	Yes	Yes	Pike	May 2023
8	155-30-00-018.00	LEE I RESTAR & MARY JUNE RESTAR	872 FOREST HILLS RD	FOREST HILLS	KY	41527	Yes	Yes	Pike	May 2023
9	155-30-00-018.01	ORLEAN HOPKINS	854 FOREST HILLS RD	FOREST HILLS	KY	41527	Yes	Yes	Pike	May 2023
10	155-00-00-059.00	MOORE DENNY & SHARON	79 MALL RD SUITE D	S WILLIAMSON	KY	41503	No	Yes	Pike	May 2023
11	155-00-00-057.00	DENNY MOORE & SHARON MOORE	79 MALL RD SUITE D	S WILLIAMSON	KY	41503	Yes	Yes	Pike	May 2023
12	155-00-00-055.01	MCCOY LORA	PO BOX 6	FOREST HILLS	KY	41527	Yes	Yes	Pike	May 2023
13	155-00-00-057.00	DENNY MOORE & SHARON MOORE	79 MALL RD SUITE D	S WILLIAMSON	KY	41503	Yes	Yes	Pike	May 2023
14	155-00-00-058.00	SOUTHSIDE REAL ESTATE & SOUTHSIDE PROFESSIONAL BLDG	79 MALL RD SUITE D	S WILLIAMSON	KY	41503	Yes	Yes	Pike	May 2023
15	155-00-00-050.03	SOUTHSIDE REAL ESTATE DEV INC & SOUTHSIDE PROFESSIONAL BLDG	79 MALL RD SUITE D	S WILLIAMSON	KY	41503	Yes	Yes	Pike	May 2023
16	155-00-00-050.00	DARREL SAMMONS	PO BOX 255	PIKEVILLE	KY	41502	Yes	Yes	Pike	May 2023
17	166-00-00-101.00	JACK DARRELL SAMMONS	2850 ROAD FRK	SIDNEY	KY	41564	Yes	Yes	Pike	May 2023
18	155-00-00-071.01	RONALD SCOTT	822 MIKES BR RD	PIKEVILLE	KY	41501	Yes	Yes	Pike	May 2023
19	166-00-00-054.00	HELEN WILLIAMSON SMITH	4841 BALDWIN RD	HILLIARD	OH	43026	Yes	Yes	Pike	May 2023
20	156-00-00-042.00	TIERNEY LAWRENCE LAND CO. (DON COMBS)	203 MAIN ST.	PIKEVILLE	KY	41501	Yes	Yes	Pike	May 2023
21	167-00-00-009.01	LEE DOTSON & BRENDA J DOTSON	PO BOX 217	HARDY	KY	41531	Yes	Yes	Pike	May 2023
22	156-00-00-063.00	LAUREN LAND CO	1051 MAIN ST 2	MILTON	WV	25541	Yes	Yes	Pike	May 2023
23	156-00-00-062.00	LAUREN LAND CO	1051 MAIN ST 2	MILTON	WV	25541	Yes	Yes	Pike	May 2023
24	156-00-00-058.00	IRVIN WORKMAN	PO BOX 526	BELFRY	KY	41514	Yes	Yes	Pike	May 2023
25	156-00-00-059.00	ROY M BROWN	168 PECCO HOLLOW RD	BELFRY	KY	41514	No	Yes	Pike	May 2023
26	156-00-00-060.00	TOM BALL & CLAUDETTE BALL	488 PECCO HOLLOW RD	BELFRY	KY	41514	Yes	Yes	Pike	May 2023
27	156-00-00-061.00	HALLS FAMILY PROPERTIES, C/O RUSSELL J HALL	PO BOX 221	BELFRY	KY	41514	Yes	Yes	Pike	May 2023
28	156-00-00-063.03	MANLEY GENEVA	7140 VIVIAN	TAYLOR	MI	48180	No	Yes	Pike	May 2023
29	156-00-00-044.00	IRENE SALYERS & GEORGE SALYERS	514 ANGELA CT	HAMPTON	VA	23669	No	Yes	Pike	May 2023
30	156-00-00-059.00	ROY M BROWN	168 PECCO HOLLOW RD	BELFRY	KY	41514	Yes	Yes	Pike	May 2023
31	156-00-00-043.00	TIERNEY LAWRENCE LAND CO. (DON COMBS)	203 MAIN ST.	PIKEVILLE	KY	41501	Yes	Yes	Pike	May 2023
32	167-00-00-020.00	BUFORD COOL & MELITA COOL; C/O DEBBIE SNAPP	PO BOX 481	BELFRY	KY	41514	Yes	Yes	Pike	May 2023
33	167-30-03-001.00	KENTUCKY POWER CO LLC	PO BOX 16428	COLUMBUS	OH	43216	Yes	Yes	Pike	May 2023
34	167-30-02-001.00	TIERNEY LAWRENCE LAND CO. (DON COMBS)	203 MAIN ST.	PIKEVILLE	KY	41501	Yes	Yes	Pike	May 2023
35	167-30-02-001.01	ROBERT ALLEY	7 HATCHER ST	BELFRY	KY	41514	No	Yes	Pike	May 2023
36	167-30-02-001.00	TIERNEY LAWRENCE LAND CO. (DON COMBS)	203 MAIN ST.	PIKEVILLE	KY	41501	Yes	Yes	Pike	May 2023
37	167-00-00-053.01	NANCY MAY HALL HEIRS, C/O EDNA DARNEY	RD 1 BOX 265	NEW SALEM	PA	15468	No	Yes	Pike	May 2023
38	167-00-00-052.00	JOHN MURPHY & NANCY MURPHY					Yes	Yes	Pike	May 2023
39	167-00-00-051.00	GERALD HAGER & POLLY HAGER	PO BOX 24	BELFRY	KY	41514	Yes	Yes	Pike	May 2023
40	167-00-00-050.00	GERALD B HAGER III	PO BOX 24	BELFRY	KY	41514	Yes	Yes	Pike	May 2023
41	167-00-00-049.00	WILL HEIRSHIP MURPHY					Yes	Yes	Pike	May 2023
42	167-00-00-048.00	CHARLES R STUMP	74 LITTLE MUDLICK BR	BELFRY	KY	41514	Yes	Yes	Pike	May 2023
43	167-00-00-033.00	CHARLES R STUMP	74 LITTLE MUDLICK BR	BELFRY	KY	41514	Yes	Yes	Pike	May 2023
44	167-00-00-066.00	CELIA SMITH VARNEY (RICK DAUGHTERY)	304 POTOMAC ROAD	BURNS FLAT	OK	73647	Yes	Yes	Pike	May 2023
45	167-00-00-034.01	KINZER BUSINESS REALTY LTD	PO BOX 155	ALLEN	KY	41601	Yes	Yes	Pike	May 2023
46	167-00-00-034.02	WESLEY JAMES SMITH & MAGGIE KALIN	123 LITTLE MUDLICK BR	BELFRY	KY	41514	Yes	Yes	Pike	May 2023
47	167-00-00-027.01	JAMES CHURCH AND SHEILA CHURCH	140 LOGGINS ROAD	BELFRY	KY	41514	Yes	Yes	Pike	May 2023

Note: Red text indicates data has been updated from PVA data based on landowner contact and/or additional research.

PSC Filing ID	County Parcel ID	Owner	Mailing Address	Mailing City	Mailing State	Mailing Zip	Crossed by ROW		County	Date of Data Review
							including Blowout	Within 400' Filing Area		
48	168-00-00-001.00	ELLIS R HAGER & DARLENE HAGER	PO BOX 312	BELFRY	KY	41514	Yes	Yes	Pike	May 2023
49	168-00-00-004.00	JOSHUA S REED & JENNA L REED	278 GOODMAN RD	WILLIAMSON	WV	25661	Yes	Yes	Pike	May 2023
50	168-00-00-006.00	BETSY COLEMAN AND JOHNNY COLEMAN	204 DOYLE MTN	HUDDY	KY	41535	Yes	Yes	Pike	May 2023
51	168-00-00-013.00	CLEO S DAVIS AND CHRIS B DAVIS	186 DAVIS LANE	HUDDY	KY	41535	Yes	Yes	Pike	May 2023
52	168-00-00-014.00	BRIDGETT TAYLOR					Yes	Yes	Pike	May 2023
53	168-00-00-020.03	LAUREN LAND CO	1051 MAIN ST 2	MILTON	WV	25541	Yes	Yes	Pike	May 2023
54	168-00-00-015.00	KENTUCKY POWER CO		PIKEVILLE	KY	41501	Yes	Yes	Pike	May 2023
55	168-00-00-016.00	ARVOL G CASSADY; C/O KATHY CASSADY	PO BOX 814	BELFRY	KY	41514	No	Yes	Pike	May 2023
56	168-00-00-013.10	RANDALL MAPES	PO BOX 129	FREEBURN	KY	41528	No	Yes	Pike	May 2023
57	168-40-01-021.02	CLEO S DAVIS AND CHRIS B DAVIS	186 DAVIS LN	HUDDY	KY	41535	No	Yes	Pike	May 2023

Notice Of Proposed Electric Transmission Line Construction Project

Kentucky Power Company (“the Company”) proposes to construct or rebuild approximately 6.5 miles of 69 kV transmission in Pike County, Kentucky (“Belfry Area Transmission Line Project”). The Belfry Area Transmission Line Project will connect the existing New Camp 69 kV Substation and the existing Stone 69 kV Substation via the new Orinoco 69 kV Substation.

Kentucky Power proposes to construct the Orinoco 69 kV Substation and perform related distribution line work to connect the Orinoco 69 kV Substation and the existing distribution line system. The Company also proposes to perform related work, including certain substation retirements, at the Stone 69 kV Substation and New Camp 69 kV Substation, to perform reconfiguration work at the New Camp 69k kV tap, and to perform replacement work at the Hatfield 69 kV Substation.

Kentucky Power proposes to retire the following facilities:

(a) the 6.5 mile section of the existing 46 kV transmission line located in the Commonwealth between the existing Stone Substation in Pike County, Kentucky and the Sprigg Substation in Mingo County, West Virginia;

(b) the existing Belfry 46 kV Substation; and

(c) the 0.75 mile Turkey Creek 69 kV transmission line and the Turkey Creek Tap.

The proposed 69 kV transmission line will be built using both existing right-of-way and right-of-way to be acquired. The right-of-way will generally be maintained at a 100 foot width, except where a wider right-of-way of up to 400 feet is required in areas of unusually steep terrain or where doing so is required by the safe and efficient operation of the proposed transmission line.

All construction proposed by Kentucky Power as a part of this project will be performed in Pike County, Kentucky.

Kentucky Power plans to file an application with the Public Service Commission of Kentucky on or after May 29, 2023 seeking a certificate of public convenience and necessity authorizing construction of Belfry Area Transmission Line Project. The Company previously requested a certificate of public convenience and necessity for this proposed project in 2022. The Company is re-filing the request. The application and the Commission proceeding have been assigned Case No. 2023-00040.

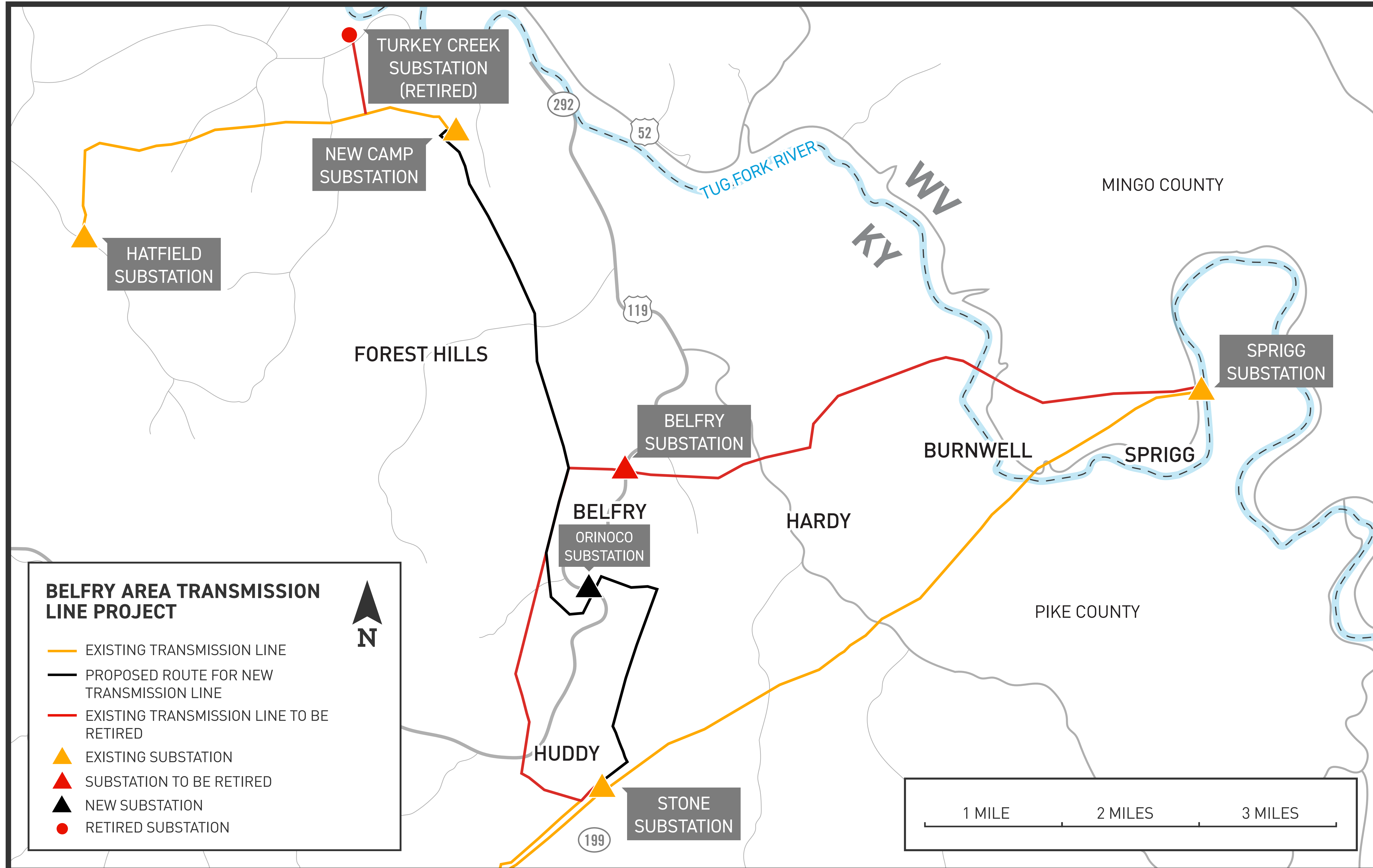
Any interested person under KRS 278.020(9), including any person over whose property the Belfry Area Transmission Line Project will cross, may request a local public hearing in Pike County where the transmission line is located. The request must be in writing and should be delivered to the Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602-0615. The phone number of the Executive Director of the Public Service Commission is (502) 564-3940. The request for a local public hearing must be delivered to the Executive Director no later than thirty days after the date the application is filed. The request for a local public hearing must comply with the requirements of 807 KAR 5:120, Section 3.

A person may seek to intervene as a party in the Commission proceeding to review Kentucky Power's application by filing a timely written request for intervention in accordance with the requirements of 807 KAR 5:001, Section 4(11) and 807 KAR 5:120, Section 3(3).

The application and other filings in connection with Kentucky Power's application may be accessed at <http://psc.ky.gov> under Case No. 2023-00040 when filed. Project updates and further information may also be found on the Company's website: KentuckyPower.com/Belfry.

A map of the proposed route for the line is included.

BELFRY AREA TRANSMISSION LINE PROJECT





869828-v1-KPCO_-_Belfry_CPCN_Refile.docx

DocVerify ID: 4FADB862-7499-4FB7-8572-D3D479D8F7FE
Created: June 09, 2023 10:35:40 -8:00
Pages: 2
Remote Notary: Yes / State: KY

This document is a DocVerify VeriVaulted protected version of the document named above. It was created by a notary or on the behalf of a notary, and it is also a DocVerify E-Sign document, which means this document was created for the purposes of Electronic Signatures and/or Electronic Notary. Tampered or altered documents can be easily verified and validated with the DocVerify veriCheck system. This remote online notarization involved the use of communication technology.

Go to www.docverify.com at any time to verify or validate the authenticity and integrity of this or any other DocVerify VeriVaulted document.

E-Signature Summary

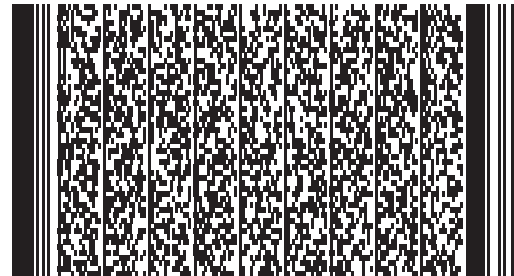
E-Signature 1: Cortney Mustard (CM)

June 09, 2023 10:42:59 -8:00 [C87A75CD9D5B] [167.239.221.101]
camustard@aep.com (Principal) (Personally Known)

E-Signature Notary: Jennifer Young (JAY)

June 09, 2023 10:42:59 -8:00 [A0E6345A180B] [161.235.221.105]
jayoung1@aep.com

I, Jennifer Young, did witness the participants named above electronically sign this document.



**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

The Electronic Application Of Kentucky Power)
Company For A Certificate Of Public Convenience)
And Necessity To Construct 69 kV Transmission) Case No. 2023-00040
Lines And Associated Facilities In Pike County,)
Kentucky (“Belfry Area Transmission Line Project”))

Verified Statement In Accordance With 807 KAR 5:120, Section 2(3)

Cortney A. Mustard, Project Outreach Supervisor, American Electric Power Service Corp., being duly sworn, states as follows:

1. The statements contained in this verification are based upon my personal knowledge, or my review of the records of Kentucky Power Company within the purview of my duties for the Company, or otherwise available to me.

2. The records of the Property Valuation Administrator of Pike County, Kentucky, subject to the corrections and updates described in paragraph 3 below, indicate the 400-foot corridor (including the currently proposed right-of-way) for Kentucky Power Company’s Belfry Area Transmission Line Project will cross property owned by the persons listed on Exhibit A to this verification.

3. Certain of the addresses obtained from the records of the Property Valuation Administrator of Pike County, Kentucky were determined through earlier mailings or other landowner contact efforts to be incorrect or otherwise undeliverable. Where the Company was able to determine the correct mailing addresses through landowner communication or other research, Kentucky Power used the updated addresses to ensure the landowners received the required notice.

4FADB862-7499-4FB7-8572-D3D479D8F7FE --- 2023/06/09 10:35:40 -8:00 --- Remote Notary



4. On June 9th, 2023 the persons on Exhibit A were mailed the notice required by 807 KAR 5:120, Section 2(3). The form of the notice mailed is attached to this verification as Exhibit B.

Further the affiant sayeth naught.

Cortney Mustard
Signed on 2023/06/09 10:42:59 -8:00

Cortney A. Mustard

Commonwealth of Kentucky)
)
County of Boyd)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Cortney A. Mustard this the 9th day of June, 2023.

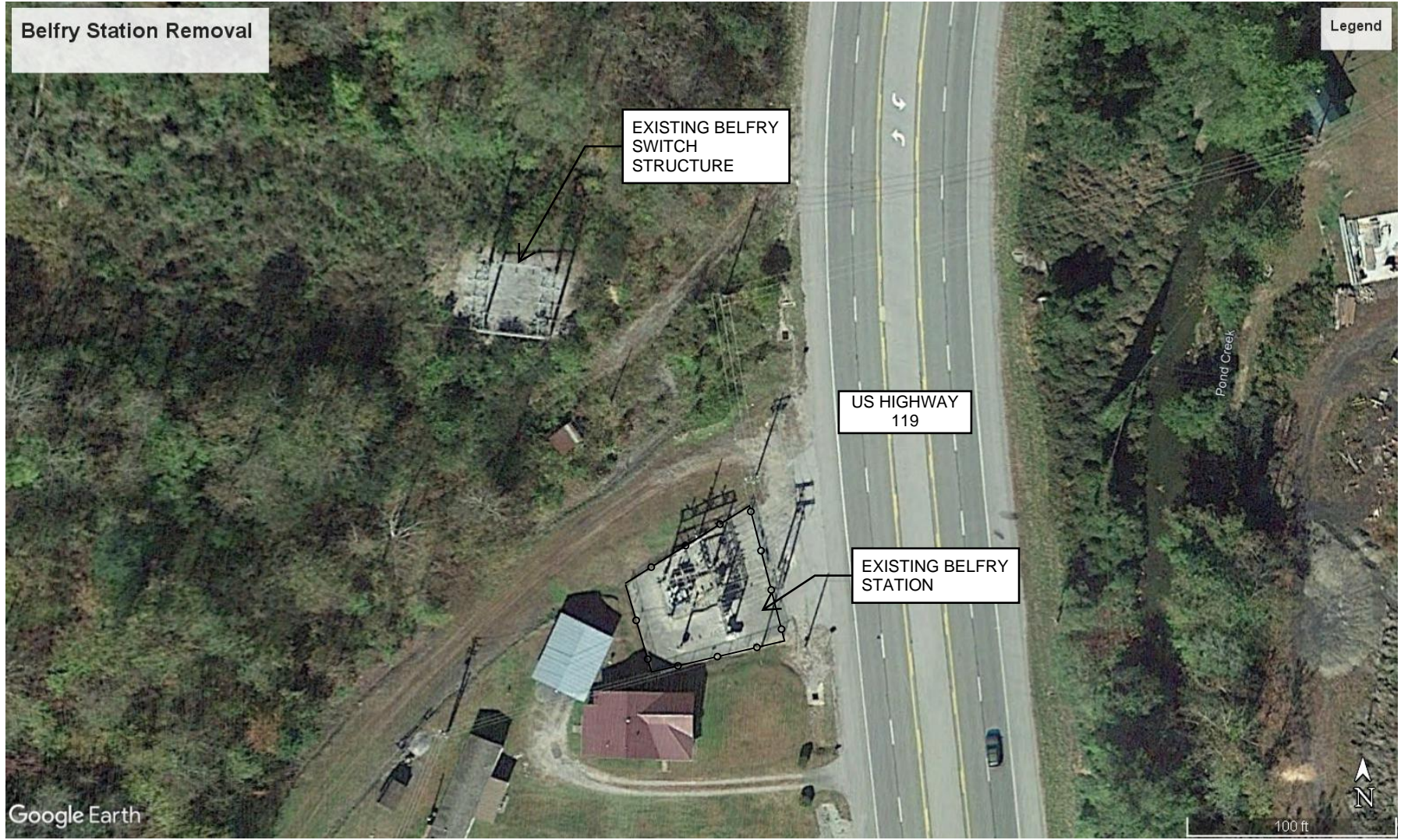
JAY
Signed on 2023/06/09 10:42:59 -8:00
Notary Public

JENNIFER A. YOUNG
ONLINE NOTARY PUBLIC
STATE AT LARGE KENTUCKY
Commission # KYNP31964
My Commission Expires Jun 21, 2025
Notary Stamp 2023/06/09 10:42:59 PST A0E6345A180B

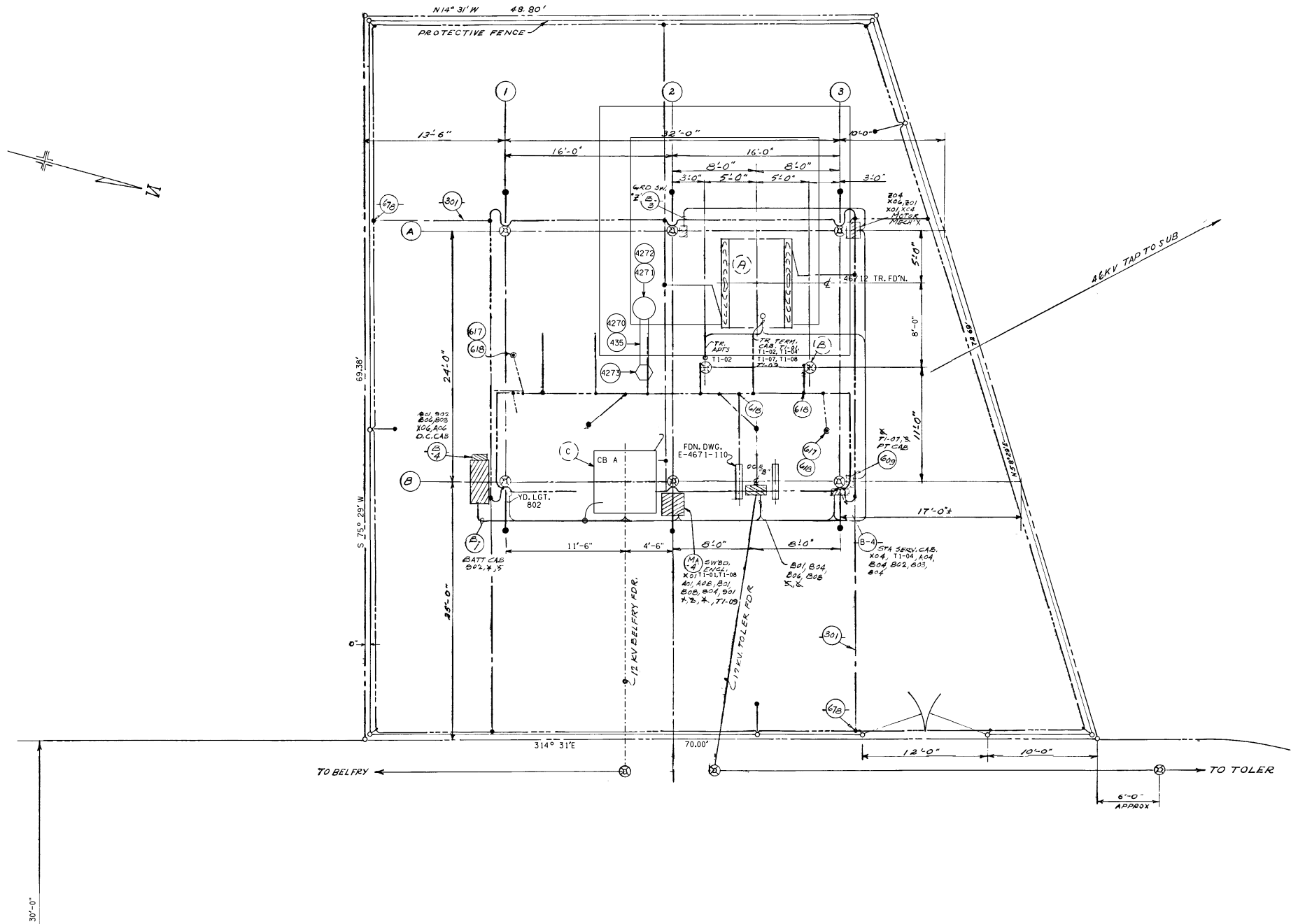
Notarial act performed by audio-visual communication



BELFRY STATION (RETIREMENT) EXHIBIT



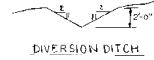
SUBSTATION LOCATION MAP



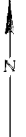
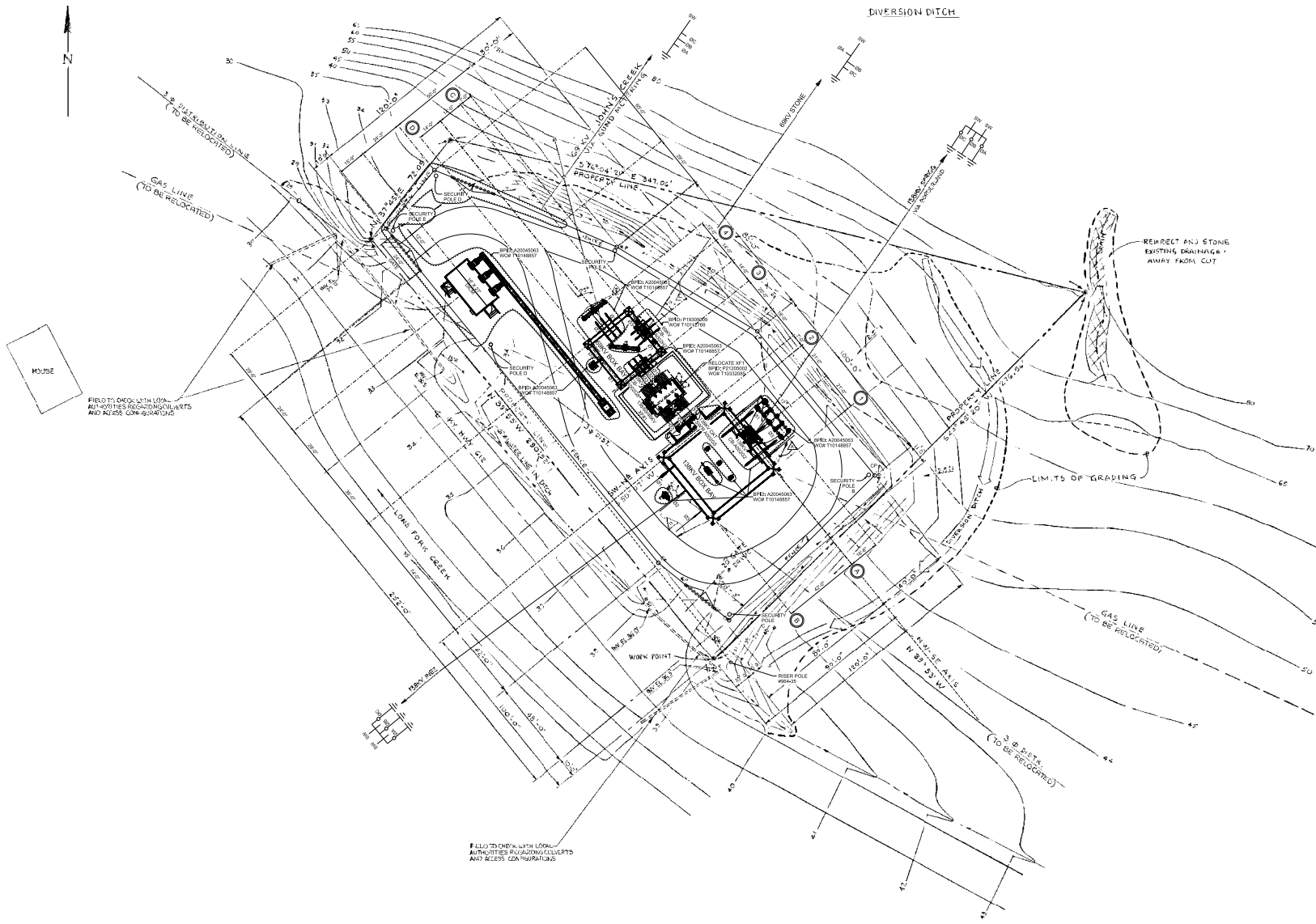
HATFIELD STATION EXHIBIT



SUBSTATION LOCATION MAP



DIVERSION DITCH



HOUSE

FIELD TO CHECK WITH LOCAL AUTHORITIES REGARDING UTILITIES AND ACCESS CORRELATIONS

REPECT AND STONE EXISTING DRAINAGE AWAY FROM CUT

LIMITS OF GRADING

GAS LINE (TO BE RELOCATED)

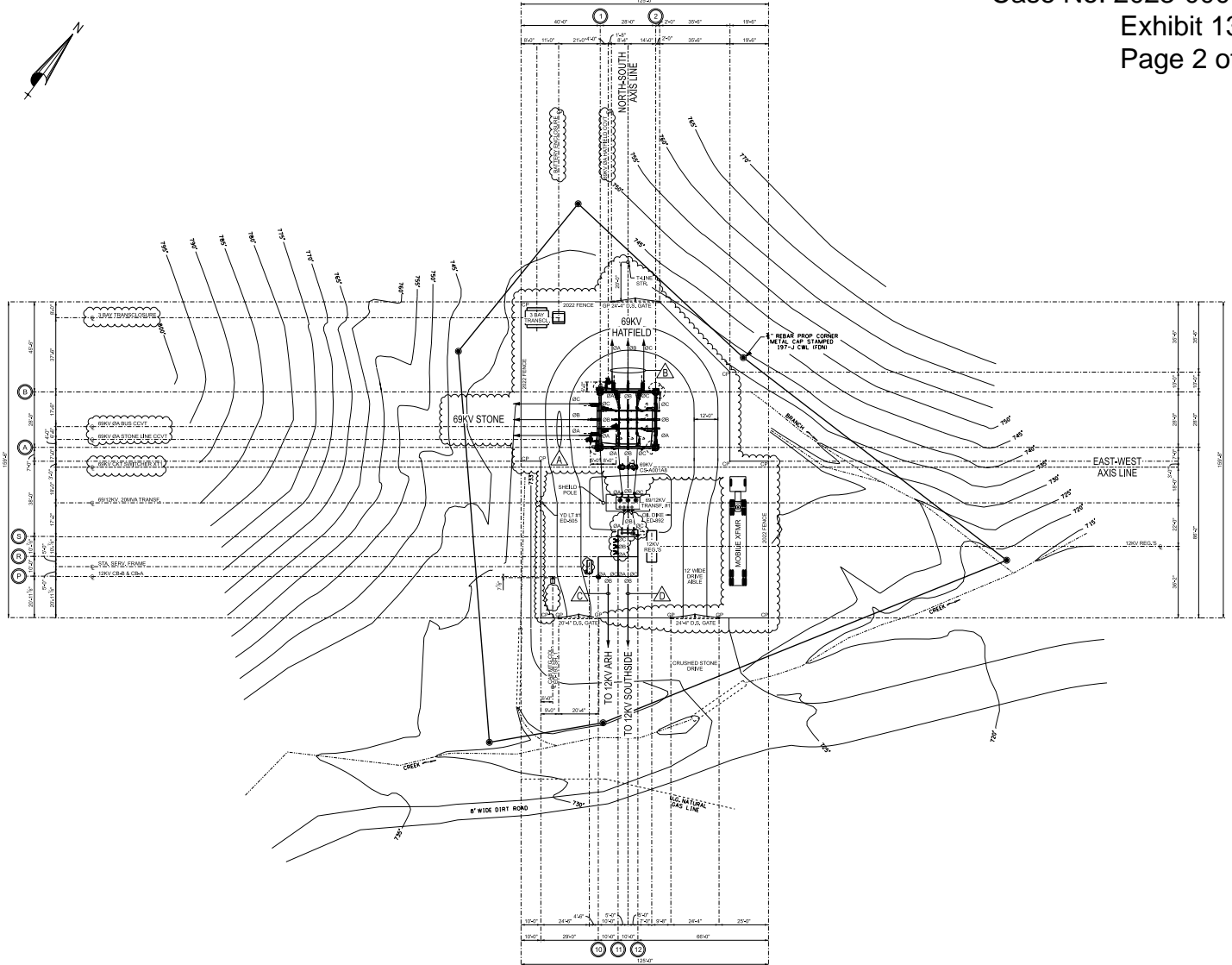
3" & 4" PIERS (TO BE RELOCATED)

FIELD TO CHECK WITH LOCAL AUTHORITIES REGARDING UTILITIES AND ACCESS CORRELATIONS

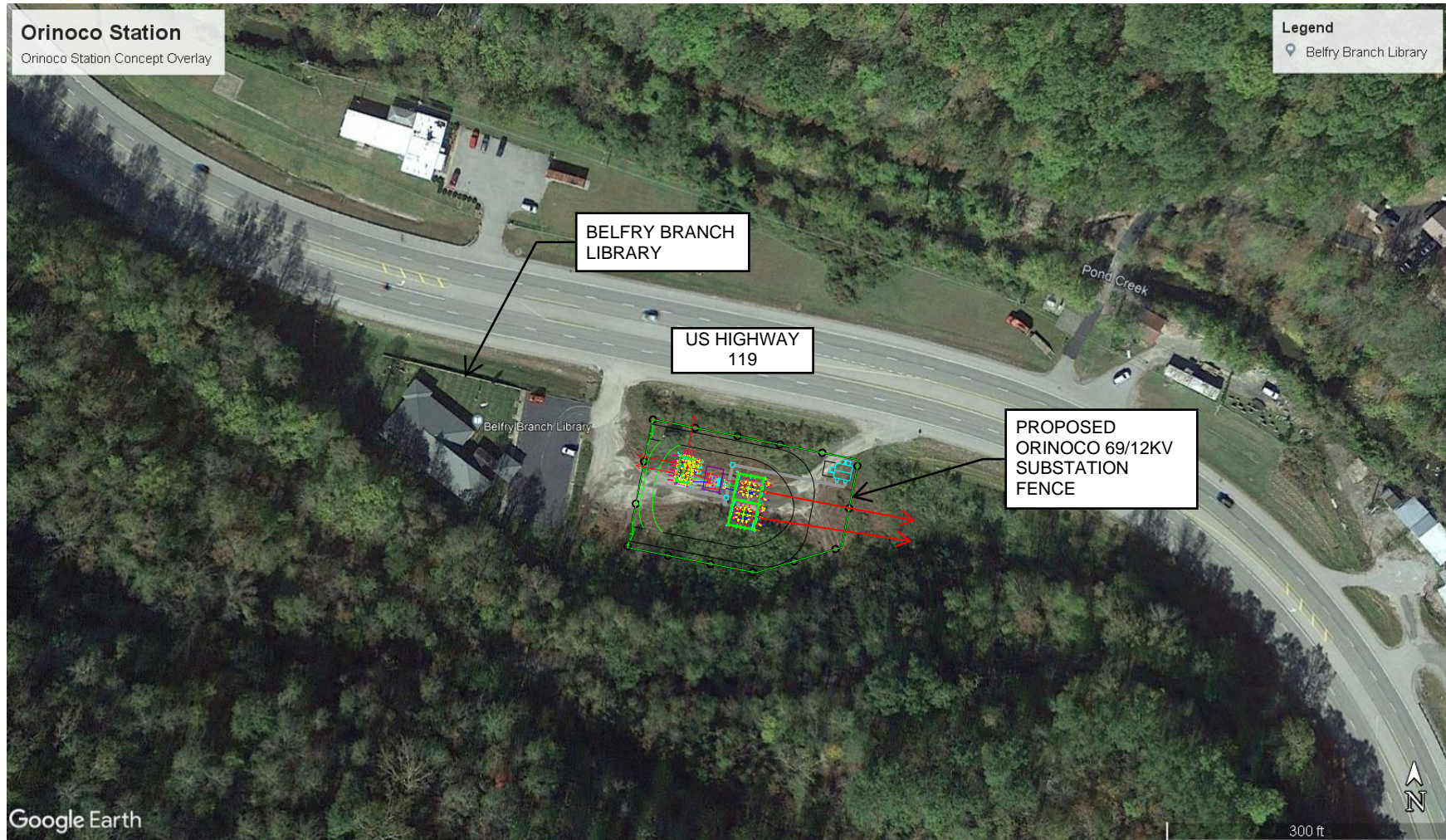
NEW CAMP STATION EXHIBIT



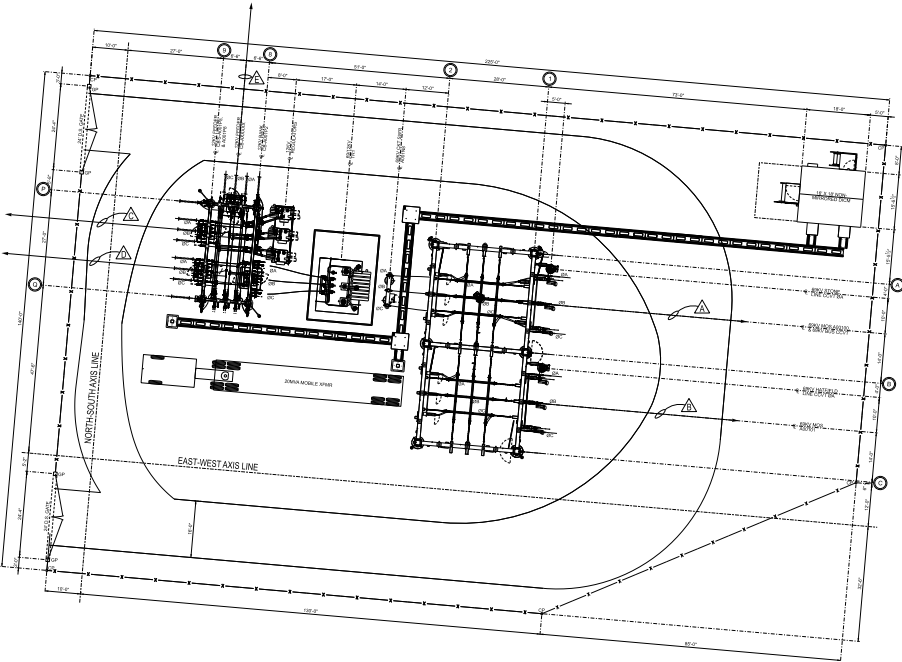
SUBSTATION LOCATION MAP



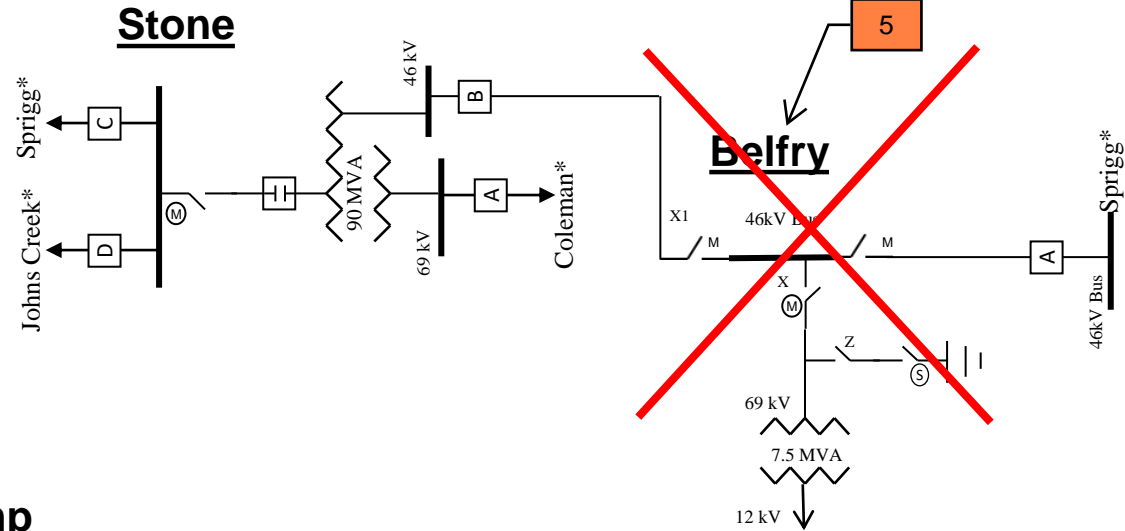
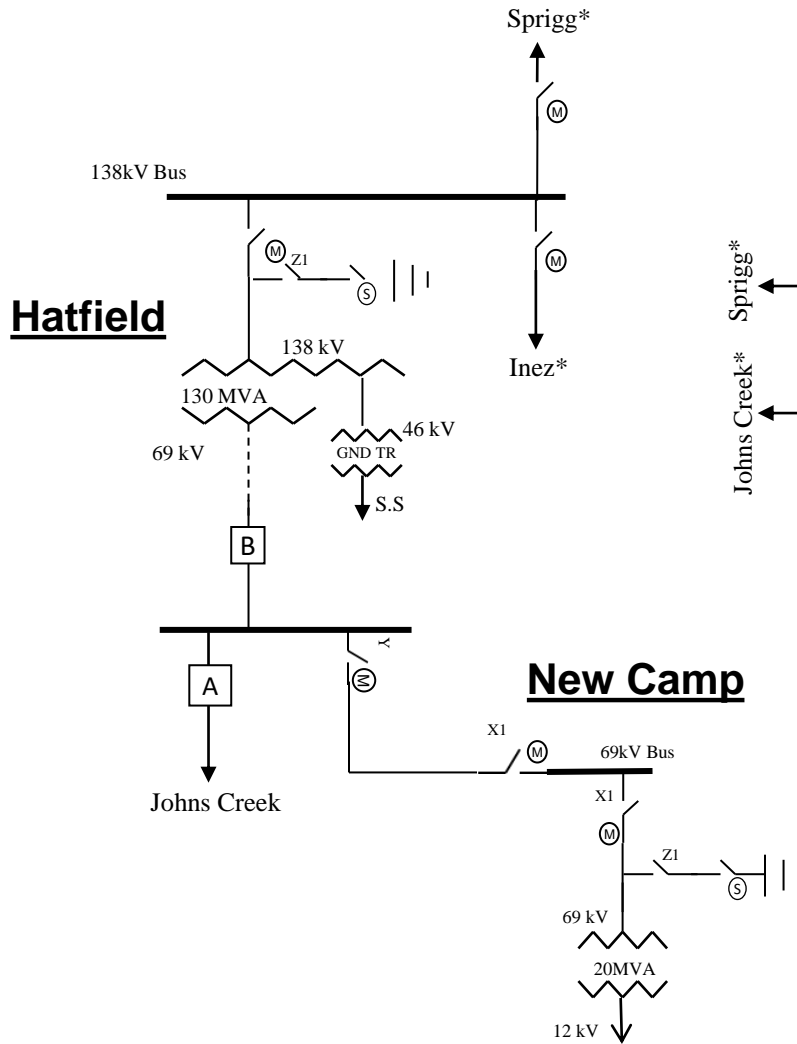
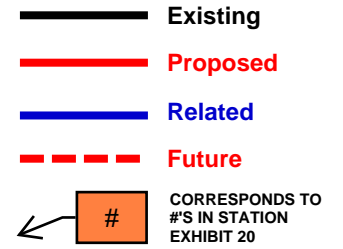
ORINOCO SUBSTATION EXHIBIT



SUBSTATION LOCATION MAP

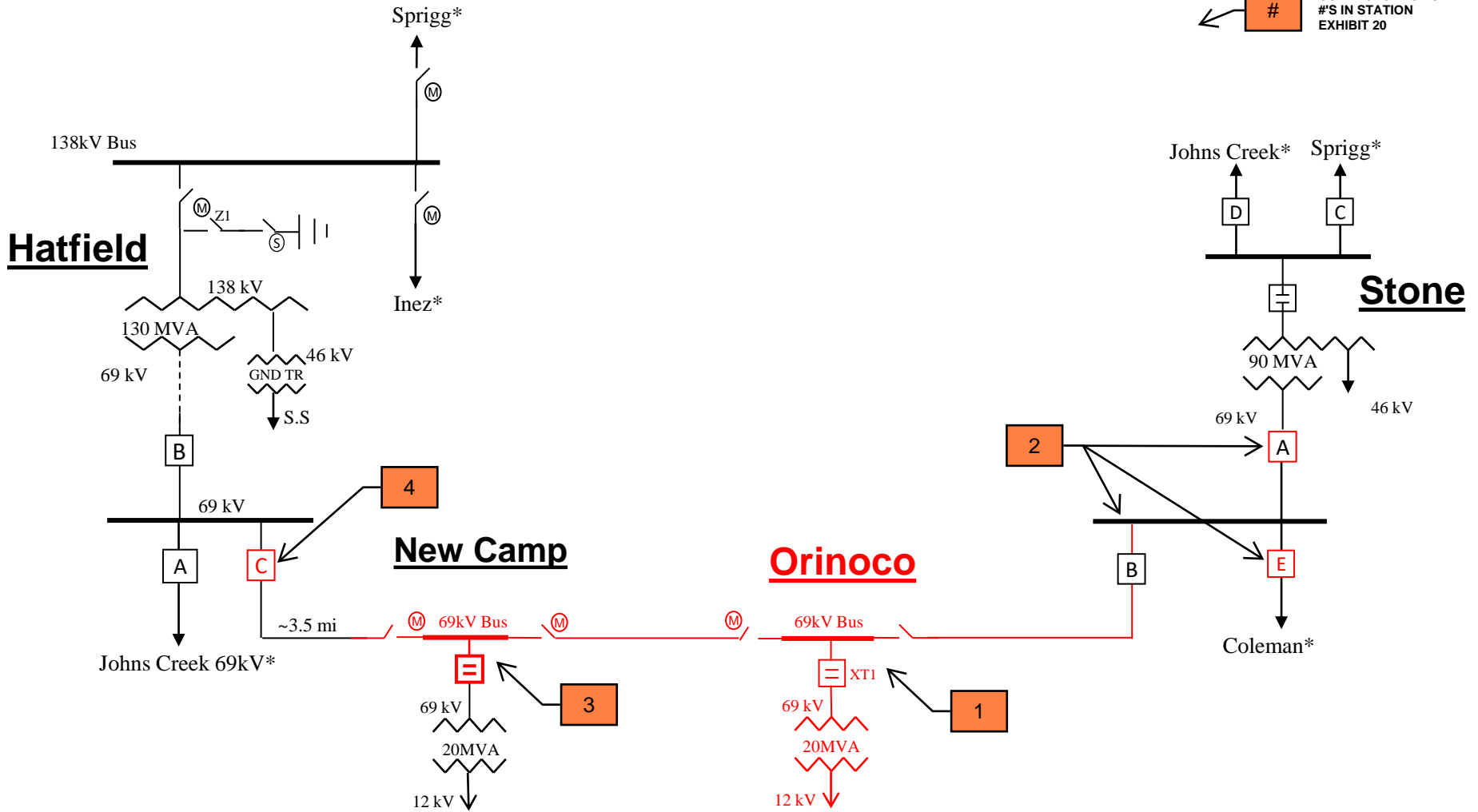
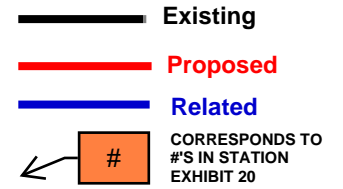


System Electrical Diagram (Existing)



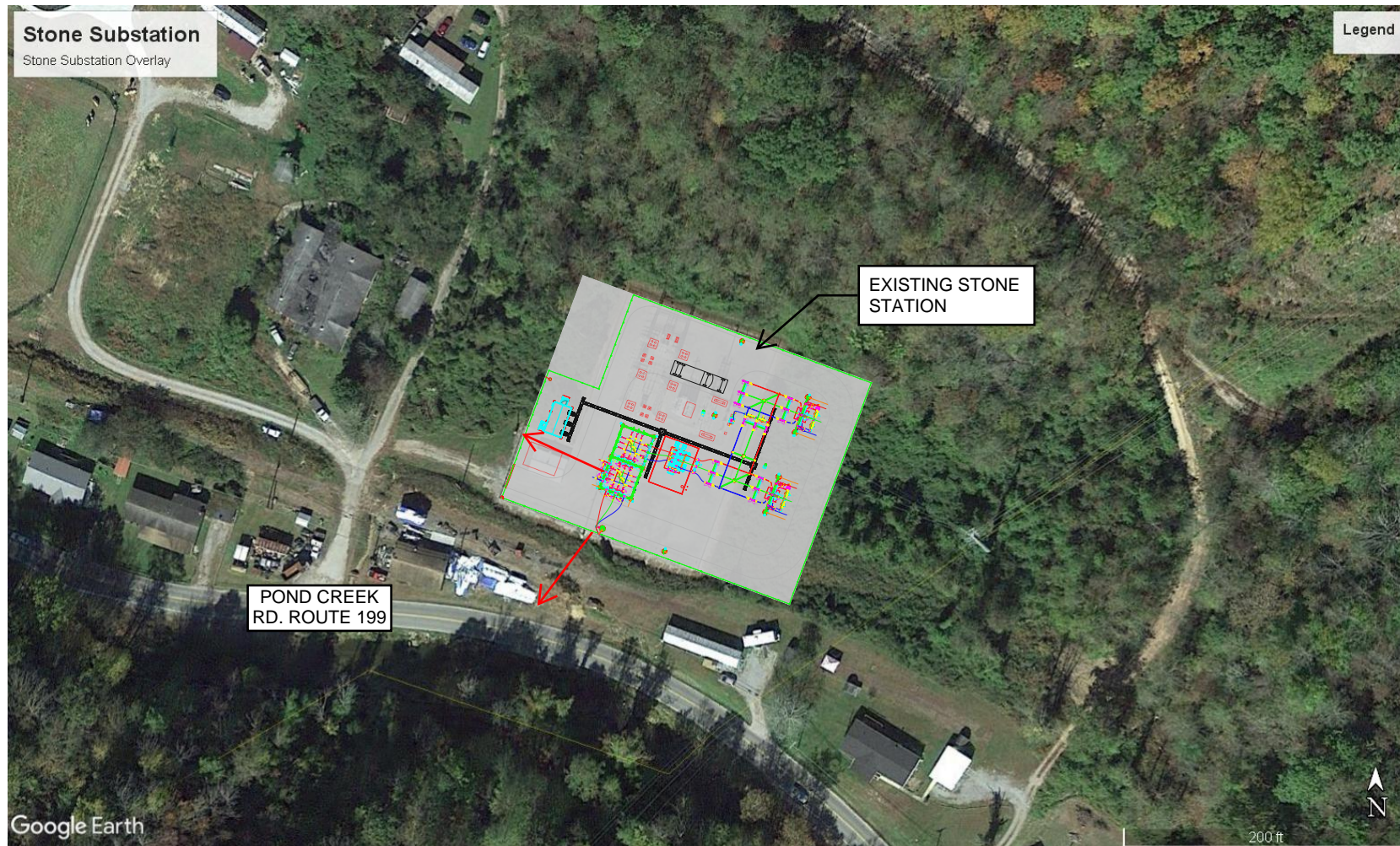
(*Stations Not Shown Completely)

System Electrical Diagram (Proposed)

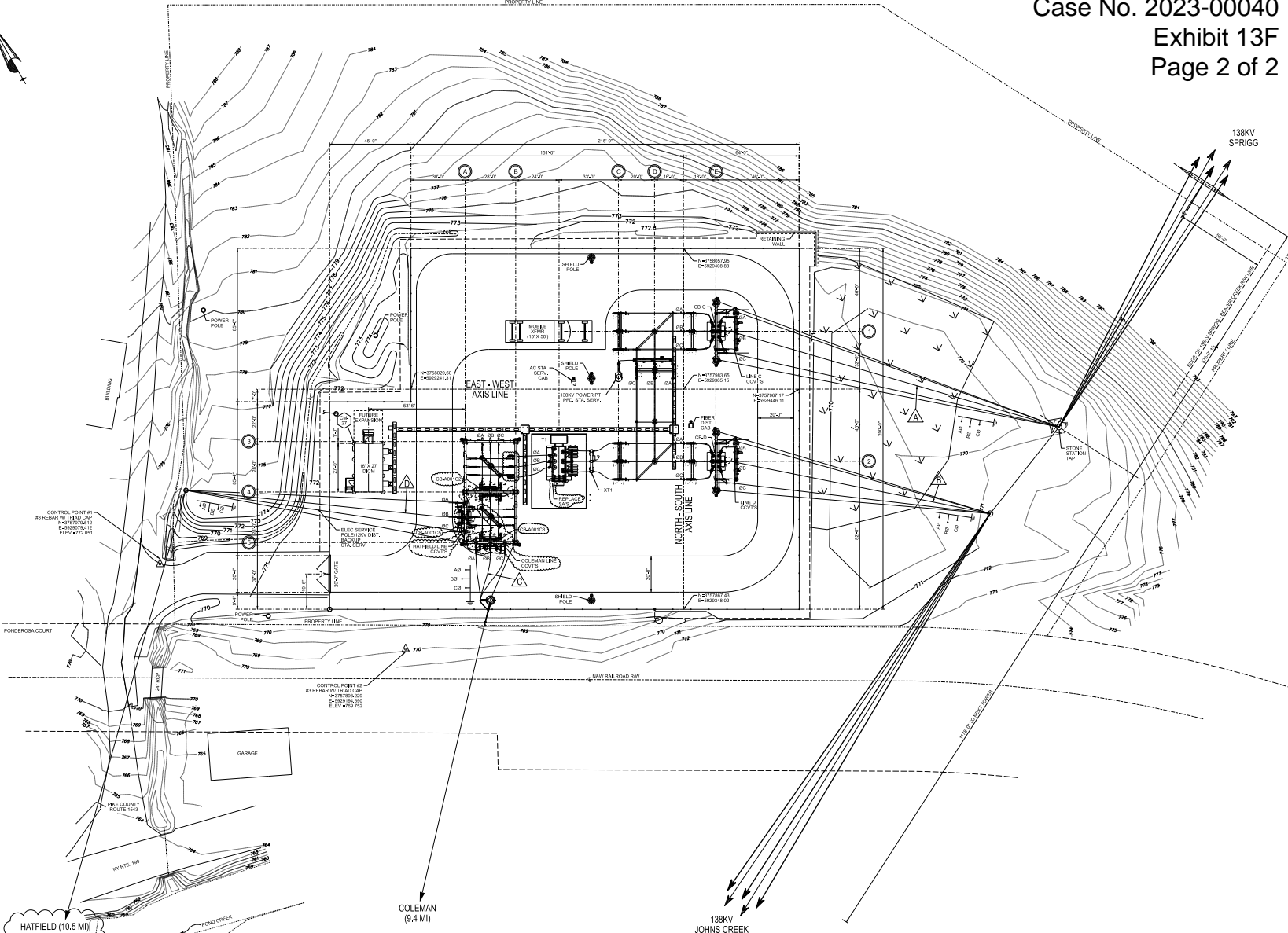


(*Stations Not Shown Completely)

STONE STATION EXHIBIT



SUBSTATION LOCATION MAP



LEGALS

LEGAL NOTICE
Hatfield Auto Sales, Inc., PO Box 129 Belfry, KY 41514, Phone, 606-353-4532, is seeking to obtain a clear title on a 2003 MiniCooper VIN : WMWRC33473TC 44035. The owner of record is Mark Hatfield 507 Route 65 Williamson, WV 25661. If anyone has any claim to this vehicle, they must contact Hatfield Auto Sales, Inc. within ten (10) days of the last legal publication of this notice.

NOTICE OF SALE COMMON-WEALTH OF KENTUCKY PIKE CIRCUIT COURT DIVISION I ACTION NO.: 22-CI-00541
Lakeview Loan Servicing, LLC PLAINTIFF VS. Jody Richard Cecil, Tabitha Cecil, Pike County, Kentucky DEFENDANT

By virtue of Judgment and Order for Sale, of the Pike Circuit Court, entered December 16, 2022 and March 22, 2023. I shall proceed to offer for sale, at the door of the Pike County Courthouse, at Pikeville, Pike County, Kentucky, to the highest bidder at public auction on Wednesday, May 31, 2023, at the hour of 9:00 a.m., or thereabout, on the following terms: at the time of sale, the successful bidder(s) shall pay cash or make a deposit of 10%, with the balance payable

LEGALS

within 30 days, except that the deposit shall be waived if the first lienholder is the successful bidder; any other purchaser who does not pay cash in full, shall be required to execute a bond, with surety thereon acceptable to the Master Commissioner and pre-approved by the Master Commissioner by noon, two (2) business days before the sale date, to secure the unpaid balance of the purchase price, in accordance with KRS 426.705 the bond shall bear interest at the rate the judgment bears from the date of the sale until paid, and shall have the same force and effect as a Judgment and shall remain and be a lien on the property until paid; the successful bidder(s) shall have the privilege of paying all of the balance of the purchase price prior to the expiration of the thirty (30) day period, the following described real estate along which is being sold for enforcement of liens in the amount of \$ 121,145.87 plus interest at a rate of 6.125% from August 1, 2021, fees and cost, owed to Plaintiff, by Defendant, Jody Richard Cecil, said real estate being located in Pike County, Kentucky, and in accordance with Master Commissioner Administrative Procedures Part IV, is described as follows: A LOT OR

LEGALS

TRACT OF LAND ON JENNYS FORK OF COWPEN CREEK, A TRIBUTARY OF THE BIG SANDY RIVER, IN PIKE COUNTY, KENTUCKY, TO WIT: BEGINNING ON A STAKE AT THE JENNYS FORK ROAD AT THE MOUTH OF THE DRAIN; THENCE RUNNING UP THE DRAIN APPROXIMATELY 150 FEET TO A STEEL STAKE; THENCE TURNING LEFT HANDED AND RUNNING APPROXIMATELY 200 FEET TO A STEEL STAKE AT THE FORMER HOMER THOMPSON LINE (NOW COLEMAN LINE); THENCE TURNING LEFT AND RUNNING DOWN THE HILL APPROXIMATELY 150 FEET TO JENNYS FORK ROAD; THENCE RUNNING WITH JENNYS FORK ROAD APPROXIMATELY 200 FEET TO THE BEGINNING CORNER. SAID LOT BEING A PART OF TRACT NO. 5 (DESCRIPTION PROVIDED BY GRANTOR.) THERE IS RESERVED AS HERETOFORE CONVEYED A 12 FOOT ROADWAY OR DRIVEWAY EASEMENT ACROSS THIS PROPERTY FROM THE JENNYS FORK ROAD TO THE PROPERTY OF THOMAS HAYNES AS THAT ROAD OR DRIVE IS PRESENTLY

LEGALS

CONSTITUTED. T O G E T H E R WITH MANUFACTURED HOME DESCRIBED AS 1999 NORRIS VICTORI; SERIAL # N02010952TNAB; HUD LABEL #S: TEN 412255 & TEN 412256 The purchaser at the commissioner's sale shall take real estate free and clear of the claims of the parties to this action but it shall be sold subject to: Easements, restrictions, stipulations, any matters disclosed by an accurate survey or inspection of the property; and any assessments for public improvements levied against the property. Bidders will have to comply promptly with these terms. Any announcements made by the Master Commissioner on date of sale shall take precedence over printed matter contained herein. This the 3rd day of May 2023.

Stephen L. Hogg Master Commissioner P.O. Box 734 Pikeville, KY 41501 pikemastercommissioner@gmail.com

NOTICE OF BLASTING SCHEDULE
Application Number 898-1067

This is notice that Clintwood JOD, LLC, 15888 Ferrell's Creek Road, Belcher, KY, 41513, (606)835-4006, Permit #898-1067 will be blasting at Motley Fork of Fedscreek, Latitude 37° 25' 37", Longitude 82° 12' 39". Blasting will be done daily, between May 1,

LEGALS

2023, and May 31, 2024. No blasting will be conducted before sunrise or after sunset. At least 10 minutes before the detonation, company personnel will control access to the area. Five (5) minutes before a detonation, the signal will be given which will consist of three (3) long blasts of a siren. One (1) minute prior to the detonation, the signal will be given which will consist of three (3) short blasts of a siren. The all-clear signal will be given after the detonation, which will consist of one (1) long blast of a siren following the inspection of the blasted area. Blasting will not be conducted at times different from those given above except in emergency situations where rain, lightning, other atmospheric conditions, or operator or public safety requires unscheduled detonation. Prior to these detonations, the following audible warning will be given: A one (1) minute series of long blasts of a siren five (5) minutes prior to detonation. Also prior to detonations in emergency situations the permittee, using audible signals, shall notify all persons within one half (1/2) mile of the blasting site.

NOTICE OF BLASTING SCHEDULE
Application Number 898-1077

This is notice that Clintwood JOD, LLC, 15888 Ferrell's Creek Road, Belcher, KY, 41513, (606)835-4006, Permit #898-1077 will be

LEGALS

blasting at Long Fork of Johns Creek, Latitude 37° 28' 16", Longitude 82° 16' 28". Blasting will be done daily, between May 1, 2023, and May 31, 2024. No blasting will be conducted before sunrise or after sunset. At least 10 minutes before the detonation, company personnel will control access to the area. Five (5) minutes before a detonation, the signal will be given which will consist of three (3) long blasts of a siren. One (1) minute prior to the detonation, the signal will be given which will consist of three (3) short blasts of a siren. The all-clear signal will be given after the detonation, which will consist of one (1) long blast of a siren following the inspection of the blasted area. Blasting will not be conducted at times different from those given above except in emergency situations where rain, lightning, other atmospheric conditions, or operator or public safety requires unscheduled detonation. Prior to these detonations, the following audible warning will be given: A one (1) minute series of long blasts of a siren five (5) minutes prior to detonation. Also prior to detonations in emergency situations the permittee, using audible signals, shall notify all persons within one half (1/2) mile of the blasting site.

LEGALS

NOTICE OF BLASTING SCHEDULE
Application Number 898-1091

This is notice that Clintwood JOD, LLC, 15888 Ferrell's Creek Road, Belcher, KY, 41513, (606)835-4006, Permit #898-1091 will be blasting at Merry Branch of Long Fork of Johns Creek and Entry Hollow of Grapevine Creek, Latitude 37° 27' 33", Longitude 82° 15' 01". Blasting will be done daily, between May 1, 2023, and May 31, 2024. No blasting will be conducted before sunrise or after sunset. At least 10 minutes before the detonation, company personnel will control access to the area. Five (5) minutes before a detonation, the signal will be given which will consist of three (3) long blasts of a siren. One (1) minute prior to the detonation, the signal will be given which will consist of three (3) short blasts of a siren. The all-clear signal will be given after the detonation, which will consist of one (1) long blast of a siren following the inspection of the blasted area. Blasting will not be conducted at times different from those given above except in emergency situations where rain, lightning, other atmospheric conditions, or operator or public safety requires unscheduled detonation. Prior to these detonations, the following audible warning will be given: A one (1) minute series of long blasts of a siren five (5) minutes prior to detonation. Also prior to detonations in emergency situations the permittee, using audible signals, shall notify all persons within one half (1/2) mile of the blasting site.

LEGALS

persons within one half (1/2) mile of the blasting site.

NOTICE OF BLASTING SCHEDULE
Application Number 898-1088

This is notice that Clintwood JOD, LLC, 15888 Ferrell's Creek Road, Belcher, KY, 41513, (606)835-4006, Permit #898-1088 will be blasting at First and Second Fork of Big Creek of Levisa Fork, Latitude 37° 27' 07", Longitude 82° 14' 27". Blasting will be done daily, between May 1, 2023, and May 31, 2024. No blasting will be conducted before sunrise or after sunset. At least 10 minutes before the detonation, company personnel will control access to the area. Five (5) minutes before a detonation, the signal will be given which will consist of three (3) long blasts of a siren. One (1) minute prior to the detonation, the signal will be given which will consist of three (3) short blasts of a siren. The all-clear signal will be given after the detonation, which will consist of one (1) long blast of a siren following the inspection of the blasted area. Blasting will not be conducted at times different from those given above except in emergency situations where rain, lightning, other atmospheric conditions, or operator or public safety requires unscheduled detonation. Prior to these detonations, the following audible warning will be given: A one (1) minute series of long blasts of a siren five (5) minutes prior to detonation. Also prior to detonations in emergency situations the permittee, using audible signals, shall notify all persons within one half (1/2) mile of the blasting site.

LEGALS

mittee, using audible signals, shall notify all persons within one half (1/2) mile of the blasting site.

NOTICE OF BLASTING SCHEDULE
Application Number 898-1075

This is notice that Clintwood JOD, LLC, 15888 Ferrell's Creek Road, Belcher, KY, 41513, (606)835-4006, Permit #898-1075 will be blasting at Johnson Fork of Lower Elk Creek, Latitude 37° 32' 29", Longitude 82° 02' 24". Blasting will be done daily, between May 1, 2023, and May 31, 2024. No blasting will be conducted before sunrise or after sunset. At least 10 minutes before the detonation, company personnel will control access to the area. Five (5) minutes before a detonation, the signal will be given which will consist of three (3) long blasts of a siren. One (1) minute prior to the detonation, the signal will be given which will consist of three (3) short blasts of a siren. The all-clear signal will be given after the detonation, which will consist of one (1) long blast of a siren following the inspection of the blasted area. Blasting will not be conducted at times different from those given above except in emergency situations where rain, lightning, other atmospheric conditions, or operator or public safety requires unscheduled detonation. Prior to these detonations, the following audible warning will be given: A one (1) minute series of long blasts of a siren five (5) minutes prior to detonation. Also prior to detonations in emergency situations the permittee, using audible signals, shall notify all persons within one half (1/2) mile of the blasting site.



The Mission of Christian Appalachian Project (CAP) is "building hope, transforming lives, and sharing Christ's love through service in Appalachia." CAP is currently seeking qualified candidates for the following job opening:

HOME REPAIR MANAGER II
Martin, KY

Monday – Friday 8:00 a.m. – 4:30 p.m.
(Some nights and weekends)

This position is responsible for the daily direction and supervision of the Sandy Valley, South Region, Home Repair program. This program supports CAP's mission of "Building hope, transforming lives, and sharing Christ's love through service in Appalachia" by providing safe and comfortable homes to families in our service area. We accomplish this by combining skilled staff with skilled and unskilled volunteers as well as funding from generous donors to repair homes. This manager would provide coaching and development to staff, leadership and growth to the program, and management of the program components. Integrity, good written and oral communication skills, and customer focus are some key skills necessary for success in this role.

QUALIFICATIONS: Bachelor's in a related field is required; 2 or more years of successful experience in a related field, or a combination of education and experience; DOT medical card. You must have the ability to: crawl, kneel, and/or climb; Lift 80 lbs. from the ground and carry 50 ft. and place on a shelf at 36 inches; Lift 45 lbs. and carry 50 ft. with one hand; climb a 10 ft. step ladder carrying 70 lbs.; Lift 50 lbs. from ground and place on a 100-inch shelf, may use a step ladder if needed; walk 100 ft. on uneven ground.

Christian Appalachian Project has a great benefits package that is designed to help you stay healthy, feel secure, and maintain a work/life balance. Offering a competitive benefits package is just one way we strive to provide our employees with a rewarding workplace. CAP offers the following benefits: Medical Plans, FSA, HSA, Dental, Vision, Life and AD&D, Short Term Disability, Long Term Disability, Whole and Term Life Insurance, Supplemental Insurance Plans, 401k plan with 6% match, 15 Paid Holidays plus extended paid days off at Christmas and a generous Paid Time Off package.

PAY RATE: \$49,608.00 Annually (Pay is negotiable based on experience)

Interested candidates should visit www.christianapp.org to learn more about us and apply for this opening.

Please respond by June 1, 2023

An Equal Employment Opportunity

Notice Of Proposed Electric Transmission Line Construction Project

Kentucky Power Company ("the Company") proposes to construct or re-build approximately 6.5 miles of 69 KV transmission in Pike County, Kentucky ("Belfry Area Transmission Line Project"). The Belfry Area Transmission Line Project will connect the existing New Camp 69 KV Substation and the existing Stone 69 KV Substation via the new Orinoco 69 KV Substation.

Kentucky Power proposes to construct the Orinoco 69 KV Substation and perform related distribution line work to connect the Orinoco 69 KV Substation and the existing distribution line system. The Company also proposes to perform related work, including certain substation retirements, at the Stone 69 KV Substation and New Camp 69 KV Substation, to perform reconfiguration work at the New Camp 69 KV tap, and to perform replacement work at the Hatfield 69 KV Substation. The proposed 69 KV transmission line will be built using both existing right-of-way and right-of-way to be acquired.

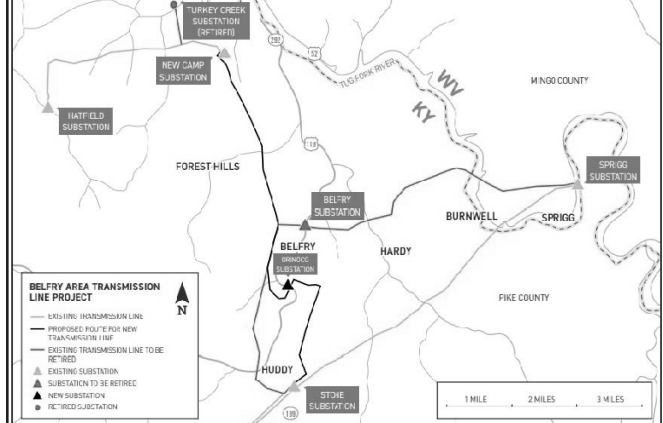
Kentucky Power proposes as part of the Belfry Area Transmission Line Project to retire: (a) the 6.5 mile section of the existing 46 KV transmission line located in the Commonwealth between the existing Stone Substation in Pike County, Kentucky and the Sprigg Substation in Mingo County, West Virginia; (b) the existing Belfry 46 KV Substation; and (c) the 0.75 mile Turkey Creek 69 KV Tap transmission line.

Kentucky Power plans to file an application with the Public Service Commission of Kentucky on or after May 29, 2023 seeking a certificate of public convenience and necessity authorizing construction of Belfry Area Transmission Line Project. The application and the Commission proceeding have been assigned Case No. 2023-00040.

Any interested person under KRS 278.020(9), including any person over whose property the Belfry Area Transmission Line Project will cross, may request a local public hearing in Pike County where the transmission line will be located. The request must be in writing and should be delivered to the Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602-0615. The request for a local public hearing must be delivered to the Executive Director no later than thirty days after the date the application is filed. The request for a local public hearing must comply with the requirements of 807 KAR 5:120, Section 3.

A person may seek to intervene as a party in the Commission proceeding to review Kentucky Power's application by filing a timely written request for intervention in accordance with the requirements of 807 KAR 5:001, Section 4(11) and 807 KAR 5:120, Section 3(3). The application and other filings in connection with Kentucky Power's application may be accessed at <http://psc.ky.gov> under Case No. 2023-00040 when filed.

Comments regarding the application may be submitted by mail to the Public Service Commission of Kentucky, P.O. Box 615, Frankfort, Kentucky 40602, or by sending an e-mail to the Commission's Public Information Officer at psc.info@ky.gov. All comments should reference Case No. 2023-00040. A map of the proposed route for the line is shown below.



The Housing Authority of Pikeville

The Housing Authority of Pikeville provides housing for individuals and families based on income. We have two programs through the U.S. Department of Housing and Urban Development. Those are Public Housing and Housing Choice Vouchers.

With our Public Housing Program, we have a total of 336 units within three locations. Myers Tower, Fairview Court and Hames Park. All are located in the City of Pikeville. We have efficiency units along with 1-bedroom, 2-bedroom, 3-bedroom and 4-bedroom units.

Our Housing Choice Voucher program currently has 370 vouchers that allow prospective tenants to find a participating landlord and the Housing Authority pays the landlord a certain amount of the rent based on the tenant's income. The Housing Authority also has a 60-unit Low Income Tax Credit project, Kentucky Avenue, that is tied to the Housing Choice Voucher program.

In addition to the above HUD related programs, the Housing Authority also has one Rural Development program, Northgate Apartments with 68 units. This project is also income based.

Interested parties should contact the Housing Authority of Pikeville at its offices located at 748 Hambley Blvd., Pikeville, KY 41501. Our phone number for public housing or housing choice vouchers is (606) 432-8124 ext. 207. For our Kentucky Ave project or our Northgate Apartments, please call (606) 437-6679. We are happy to answer any questions. To find out more about the Housing Authority of Pikeville or get an application please visit our website at www.hapky.org Applications can also be picked up at our office or can be mailed.

The Housing Authority of Pikeville is an equal housing opportunity agency. We do business in accordance with the fair housing law.



NOTARIZED PROOF OF PUBLICATION

STATE OF KENTUCKY

COUNTY OF FRANKLIN

Before me, a Notary Public, in and for said County and State, this 22nd day of

May, 2023, came Holly Willard personally known to me, who being

duly sworn, states as follows: That she is the Bookkeeping Assistant

of the Kentucky Press Service and the attached sheets show proof of publication

for the Kentucky Power Company ad in the Pikeville Appalachian News Express

on May 16, 2023.

Signed Holly Muller

Notary Public Bennie J. Howard

My commission expires 9-18-2024
Id. # 14119



An AEP Company

BOUNDLESS ENERGY™

News from Kentucky Power

MEDIA CONTACT:

Cindy Wiseman
External Affairs and Customer Service
Cell: 606-585-6847
cgwiseman@aep.com; KentuckyPower.com

FOR IMMEDIATE RELEASE

KENTUCKY POWER PLANS POWER GRID IMPROVEMENTS IN PIKE COUNTY

ASHLAND, Ky., Aug.19, 2021 – Kentucky Power officials plan upgrades to the electric transmission system in Pike County. The Belfry Area Transmission Line Project involves:

- Building 6 to 8 miles of 69-kilovolt (kV) electric transmission line
- Building the Orinoco Substation

The project allows crews to retire approximately 9 miles of 46-kV transmission line that includes aging wooden poles from the 1940s and retire outdated equipment at the Belfry Substation. Installing modern equipment and upgrading facilities reduces the need for frequent equipment maintenance and improves electric service reliability by providing a second source of power to customers served from the New Camp Substation located in South Williamson.

"This project modernizes the local electric transmission system and ensures that Pike County residents continue to receive reliable electric service." said Brett Mattison, Kentucky Power president and chief operating officer.

Company representatives are evaluating several route options for the new transmission line. The project begins at the New Camp Substation and continues southeast to the proposed Orinoco Substation located along Route 119. From there, the project continues south through Belfry to the Stone Substation near Route 199.

The Kentucky Power project team invites landowners in the project area to visit KentuckyPower.com/Belfry to learn more about the project enter a virtual open house and provide feedback by **Thursday, September 23**.

Area landowners can expect to receive a packet in the mail that includes additional project details and a comment card they can return with their feedback. The packet also includes an invitation to two virtual town hall events on **Thursday, September 9**. Details on how to join the events can be found on the project website. Landowners and community members are invited to join one of these live events online or by phone to learn more about the project, ask questions and share input.

The project team plans to use feedback from the virtual open house, comment cards, virtual town hall events and additional field work to determine a power line route that minimizes impact to the community and environment.

Kentucky Power
Page 2 of 2

Company officials plan to file an application with the Kentucky Public Service Commission in early 2022. If the project receives approval, company representatives expect construction to begin in summer 2023 and conclude fall 2024.

Kentucky Power, with headquarters in Ashland, provides electric service to about 165,000 customers in 20 eastern Kentucky counties, including Boyd, Breathitt, Carter, Clay, Elliott, Floyd, Greenup, Johnson, Knott, Lawrence, Leslie, Letcher, Lewis, Magoffin, Martin, Morgan, Owsley, Perry, Pike and Rowan. Kentucky Power is an operating company in the American Electric Power (AEP) system, one of the largest electric utilities in the U.S., delivering electricity and custom energy solutions to nearly 5.4 million regulated customers in 11 states. AEP also owns the nation's largest electricity transmission system. AEP's headquarters are in Columbus, Ohio.

Filing Requirements

<u>Citation</u>	<u>Requirement</u>	<u>Location</u>
807 KAR 5:001, Section 14(1)	Applicant And Project Information.	Application (“App.”) at ¶¶ 1-4; <i>passim</i>
807 KAR 5:001, Section 14(2)	Corporate Information.	App. at ¶ 1; n. 1.
807 KAR 5:001, Section 14(3)	Limited Liability Company Information.	Not applicable.
807 KAR 5:001, Section 14(4)	Limited Partnership Information	Not applicable.
807 KAR 5:001, Section 15(1)	Information Required For Certificates Of Public Convenience And Necessity To Bid On Franchises.	Not applicable.
807 KAR 5:001, Section 15(2)	Requirements of 807 KAR 5:001, Section 14.	<i>Supra.</i>
807 KAR 5:001, Section 15(2)(a)	Facts Demonstrating The Proposed Construction Is Required By The Public Convenience And Necessity.	App. at ¶¶ 10-11, 76-87; App. Exh. 3, 5, 17-20; Koehler Test. at 10-15, 16-17.
807 KAR 5:001, Section 15(2)(b)	Franchises And Permits.	App. at ¶¶ 72-75; Reese Test. at 28-30.
807 KAR 5:001, Section 15(2)(c)	Full description of the location and route of the proposed facilities.	App. at ¶¶ 12-27; App. Exh. 2, 4, 10; 13; Koehler Testimony at 10-11; Reese Test. at 20-21, 24-27; West Testimony at 7-8.
807 KAR 5:001, Section 15(2)(c)	Description Of Construction.	App. at ¶¶ 12-27; App. Exh. 6-9, 13; Koehler Testimony at 15-16; West Testimony at 14-15.
807 KAR 5:001, Section 15(2)(c)	Competitors.	App. ¶ 87.

<u>Citation</u>	<u>Requirement</u>	<u>Location</u>
807 KAR 5:001, Section 15(2)(d)(1)	Map To Suitable Scale Showing Route And Neighboring Facilities.	App. Exh. 2, 4. ¹
807 KAR 5:001, Section 15(2)(d)(2)	Plans And Specifications.	App. Exh. 6-9, 13. ²
807 KAR 5:001, Section 15(2)(e)	Manner Of Financing.	App. at ¶ 55; West Test. at 17.
807 KAR 5:001, Section 15(2)(f)	Annual Operating Expenses.	App. at ¶ 56; West Test. at 17.
807 KAR 5:001, Section 15(3)	Extensions In Ordinary Course.	Not applicable.
807 KAR 5:001, Section 15(4)	Renewal Applications.	Not applicable
807 KAR 5:120, Section 1	Notice Of Intent Conforming To The Requirements Of 807 KAR 5:120, Section 1(2).	Filed of record on in Case No. 2023-00040 on March 2, 2023.
807 KAR 5:120, Section 2(1)(a)	All Information Required By 807 KAR 5:001, Section 14.	<i>Supra.</i>
807 KAR 5:120, Section 2(1)(b)	All Information Required By 807 KAR 5:001, Section 15(2)(a)-(c) And 807 KAR 5:001, Section 15(2)(e)-(f).	<i>Supra.</i>
807 KAR 5:120, Section 2(2)(a)	Map Showing Centerline, Right-Of-Way, And Boundaries Of Properties Crossed By Right-Of-Way.	App. Exh. 4.
807 KAR 5:120, Section 2(2)(b)	Sketches Of Typical Support Structures.	App. Exh. 6-9.
807 KAR 5:120, Section 2(2)(c)	Separate Map Showing Alternate Routes Considered	App. Exh. 10 at 5-10; App. Exh. 10 at Attachment C; Exhibit 11; <i>see generally</i> Reese Test. at 20-24.

¹ The maps show a preferred centerline and are not an actual design. Kentucky Power will supplement its filing with maps certified in accordance with KRS 322.340 once the project is in service.

² The structure exhibit drawings are conceptual representative sketches and not actual designs. Kentucky Power will supplement its filing with plans certified in accordance with KRS 322.340 once the project is in service.

<u>Citation</u>	<u>Requirement</u>	<u>Location</u>
807 KAR 5:120, Section (2)(3)	Verified Statement Concerning Mailed Notice To Property Owners.	App. Exh. 12; West Test. at 15-16.
807 KAR 5:120, Section (2)(4)	Sample Copy Of Notices Conforming To 807 KAR 5:001, Section 120, Section (2)(3).	App. Exh. 12.
807 KAR 5:120, Section (2)(5)	Statement Of Publication Of Notice Of Proposed Electric Transmission Line Project	App. Exh. 14; West Test. at 16.
807 KAR 5:120, Section (2)(6)	Copy Of Published Notice Of Proposed Electric Transmission Line Project (and affidavit of publication)	App. Exh. 14.
807 KAR 5:120, Section (2)(7)	Capital Outlay	App. ¶ 55; West Test. at 17.



AEP Transmission Planning Criteria and Guidelines for End-Of-Life and Other Asset Management Needs

December 2020

Document Control

Document Review and Approval

Action	Name(s)	Title
Prepared by:	Jomar M. Perez	Manager, Asset Performance and Renewal
Approved by:	Nicolas Koehler	Director, East Transmission Planning
Approved by:	Wayman L. Smith	Director, West Transmission Planning
Approved by:	Kamran Ali	Managing Director, Transmission Planning

Review Cycle

Quarterly	Semi-annual	Annual	As Needed X
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Revision History

Version	Revision Date	Changes	Comments
1.0	01/04/2017	N/A	1 st Release
2.0	1/18/2018	Format Update	2 nd Release
3.0	11/09/2018	Content Additions	3 rd Release
4.0	12/14/2020	End-Of-Life Criteria	4 th Release

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1.0 Introduction

The American Electric Power (AEP) transmission system consists today of approximately 40,000 miles of transmission lines, 3,600 stations, 5,000 power transformers, 8,000 circuit breakers, and operating voltages between 23 kV and 765 kV in three different RTOs – the Electric Reliability Council of Texas (ERCOT), the PJM Interconnection (PJM), and the Southwest Power Pool (SPP), connecting over 30 different electric utilities while providing service to over 5.4 million customers in 11 different states.

AEP's interconnected transmission system was established in 1911 and is comprised of a very large and diverse combination of line, station, and telecommunication assets, each with its own unique installation date, design specifications, and operating history. As the transmission owner, it is AEP's obligation and responsibility to manage and maintain this diverse set of assets to provide for a safe, adequate, reliable, flexible, efficient, cost-effective and resilient transmission system that meets the needs of all customers while complying with Federal, State, RTO and industry standards. This requires, among other considerations, that AEP determine when the useful life of these transmission assets is coming to an end and when the capability of those assets no longer meets current needs, so that appropriate improvements can be deployed. AEP refers to these issues as transmission owner identified needs that address condition, performance and risk. AEP identifies these needs through the transmission planning criteria and guidelines outlined in this document. Specifically, this document constitutes the AEP transmission planning criteria and guidelines for End-Of-Life and other asset management needs as required in the FERC-approved Attachment M-3 to the PJM Tariff. AEP does not address any End-Of-Life or other asset management needs through the baseline planning criteria AEP files with its FERC Form 715.

AEP's transmission owner identified needs must be addressed to achieve AEP's obligations and responsibilities. Meeting these obligations requires that AEP ensures the transmission system can deliver electricity to all points of consumption in the quantity and quality expected by customers, while reducing the magnitude and duration of disruptive events. Given these considerations, criteria and guidelines are necessary to identify and quantify needs associated with transmission facilities comprising AEP's system. AEP identifies the needs and the solutions necessary to address those needs on a continuous basis using an in-depth understanding of the condition of its assets, and their

associated operational performance and risk, while exercising engineering judgment coupled with Good Utility Practices [1].

Whereas the End-Of-Life needs, as defined in the FERC-approved Attachment M-3 to the PJM Tariff, are limited to transmission facilities rated above 100 kV, these criteria and guidelines apply to all transmission voltages that comprise the AEP transmission system, including those defined as End-Of-Life needs in the FERC-approved Attachment M-3 to the PJM Tariff. In addition, projections of candidate End-Of-Life needs that result from the process outlined in these AEP criteria and guidelines will be provided to PJM in accordance with the provisions in the FERC-approved Attachment M-3 to the PJM Tariff. Current End-Of-Life and other asset management needs will be vetted with stakeholders in accordance with the provisions in the FERC-approved Attachment M-3 to the PJM Tariff.

Addressing these owner identified transmission system asset management needs, as they pertain to condition, performance and risk, will result in the following benefits to customers:

- Safe operation of the electric grid.
- Reduction in frequency of outage interruptions.
- Reduction in duration of outage interruptions.
- Improvement in service reliability and adequacy to customers.
- Reduction of risk of service disruptions (improved resilience) associated with man-made and environmental threats.
- Proactive correction of reliability constraints that stem from asset failures.
- Effective utilization of resources to provide efficient and cost-effective service to customers.

2.0 Process Overview

AEP's transmission owner needs identification criteria and guidelines are used for projects that address equipment material conditions, performance, and risk. AEP uses the three-step process shown in Figure 1 and discussed in detail in this document to determine the best solutions to address the transmission owner identified needs and meet AEP's obligations and responsibilities. This process is completed on an annual basis. In developing the most efficient and cost-effective solutions, AEP's long-term strategy is to pursue holistic transmission solutions in order to reduce the overall AEP transmission system needs.

Figure 1 – AEP Process for Identifying and Addressing Transmission Asset Condition, Performance and Risk Needs



3.0 Step 1: Needs Identification

Needs Identification is the first step in the process of determining system and asset improvements that help meet AEP's obligations and responsibilities. AEP gathers information from many internal and external sources to identify assets with needs. A collective evaluation of these inputs is conducted and considered, and thus, individual thresholds do not apply. In addition, factors can change over time. A sampling of the inputs and data sources is listed below in Table 1.

Table 1 – Inputs Considered by AEP to Identify Transmission System Needs

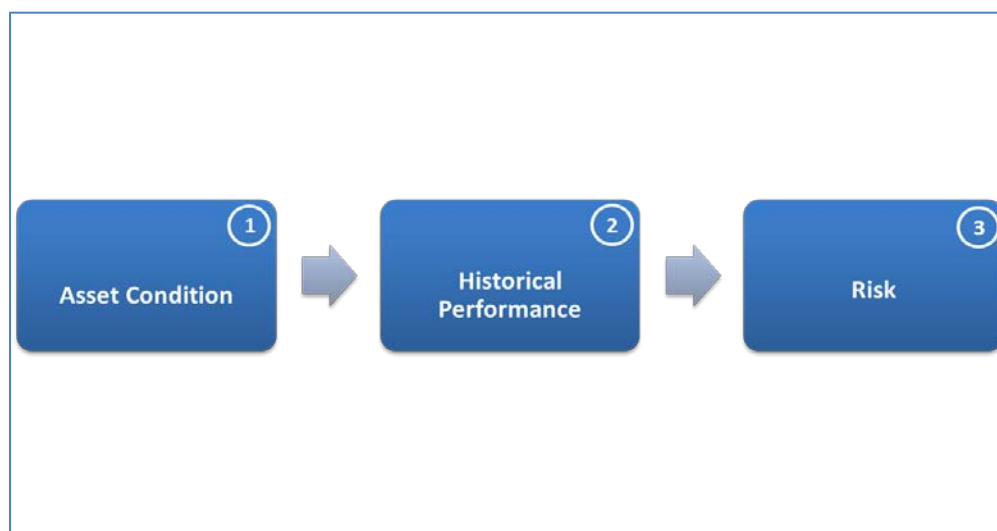
Internal, External, or Both	Inputs	Examples
Internal	Reports on asset conditions	Transmission line and station equipment deterioration identified during routine inspections (pole rot, steel rusting or cracking)
	Capabilities and abnormal conditions	Relay misoperations; Voltage unbalance
	Legacy system configurations	Ground switch protection schemes for transformers;; Transmission Line Taps without switches (hard taps); Equipment without vendor support
	Outage duration and frequency	Outages resulting from equipment failures, misoperations, or inadequate lightning protection
	Operations and maintenance costs	Costs to operate and maintain equipment
External	Regional Transmission Operator (RTO) or Independent System Operator (ISO) issued notices	Post Contingency Local Load Relief Warnings (PCLLRWs) issued by the RTO that can lead to customer load impacts
	Stakeholder input	Input received through stakeholder meetings, such as PJM's Sub Regional RTEP Committee (SRRTEP) meetings or through the AEP hosted Annual Stakeholder Summits
	Customer feedback	Voltage sag issues to customer delivery points due to poor sectionalizing; frequent outages to facilities directly affecting customers
	State and Federal policies, standards, or guidelines	NERC standards for dynamic disturbance recording
Both	Environmental and community impacts	Equipment oil/gas leaks; facilities currently installed at or near national parks, national forests, or metropolitan areas
	Standards and Guidelines	Minimum Design Standards, Radial Lines, Three Terminal Lines, Overlapping Zones of Protection
	Safety risks and concerns	Station and Line equipment that does not meet ground clearances; Facilities identified as being in flood zones; New Occupational Safety and Hazards Administration (OSHA) regulations

These inputs are reviewed and analyzed to identify the transmission assets that are exhibiting unacceptable condition, performance and risk, and thus, must be addressed through the FERC-approved Attachment M-3 planning process.

3.1 Methodology and Process Overview

The AEP transmission system is composed of a very large number of assets that provide specific functionality and must work in conjunction with each other in the operation of the grid. These assets have been deployed over a long period of time using engineering principles, design standards, safety codes, and Good Utility Practices that were applicable at the time of installation and have been exposed to varying operating conditions over their life. The Needs Identification methodology is shown below in Figure 2. AEP addresses the identified needs considering factors including severity of the asset condition and overall system impacts. These are subsequently evaluated versus constraints such as outage availability, siting requirements, availability of labor and material, constructability, and available capital funding in determining the timing and scope of mitigation.

Figure 2 – Needs Identification Methodology



It is AEP’s strategy and goal to develop and provide the more efficient, cost-effective, safe, reliable, resilient, and holistic long-term solutions for the identified needs.

3.2 Asset Condition (Factor 1)

The Asset Condition assessment gathers a standard set of physical characteristics associated with an asset or a group of assets. The set of data points recorded is determined based on the asset type and class. Information assembled during the Asset Condition assessment is used to show the historical

deterioration, current condition, and future expectation of the asset or group of assets on the AEP system.

AEP annually assembles a list of reported condition issues for all of its assets in its system. A detailed follow-up review is conducted to determine if a transmission asset is in need of upgrade and/or replacement. Additionally, this Asset Condition review is used to determine an adequate scope of work required to mitigate the risk associated with a facility's performance and its identified issues. This level of risk is determined through the Future Risk assessment (Factor 3).

Beyond physical condition, AEP's ability to restore the asset in case of a failure is also considered. This is referred to as the future probability of failure adder. Typically, assets that are no longer supported by manufacturers or lack available spare parts are assigned a higher probability of failure adder.

To perform condition assessments, AEP classifies its Transmission assets in two main categories: Transmission Lines and Substations.

3.2.1 Transmission Line Considerations

Design Portion

- A. Age (Original Installation Date)
- B. Structure Type (Wood, Steel, Lattice)
- C. Conductor Type (Size, Material & Stranding)
- D. Static Wire Type (Size & Material)
- E. Foundation Type (Grillage, Direct Embed, Caisson, Guyed V, Drilled Pier etc.)
- F. Insulator Type (Material)
- G. Shielding and Grounding Design Criteria (Ground Rod, Counterpoise, "Butt Wrap" etc.)
- H. Electrical Configuration
 - a. Three Terminal Lines
 - b. Radial Facilities
- I. NESC Standards Compliance
 - a. Structural Strength (NESC 250B, 250C & 250D Compliance)
 - b. Clearances (TLES-047 Compliance)

J. Easement Adequacy (Width, Encroachments, Type; etc.)

Physical Condition

- A. Open Conditions (existing and unaddressed physical conditions associated with a Transmission Line component)
- B. Closed Conditions (previously addressed physical conditions associated with a Transmission Line component)
- C. Emergency Fixes (History of emergency fixes)
- D. Accessibility (Identified areas of difficult access)

3.2.2 Substation Considerations

A. Transformers

- a. Manufacturer
- b. Manufacturing Date
- c. In Service Date
- d. Load Tap Changer Type & Operation History (if applicable)
- e. Dissolved Gas Analysis
- f. Bushing Power Factor
- g. Through Fault Events (Duval Triangles)
- h. Moisture Content (Oil)
- i. Oil Interfacial Tension
- j. Dielectric Strength
- k. Maintenance History
- l. Malfunction Records

B. Circuit Breakers

- a. Manufacturer & Type
- b. Manufacturing Date
- c. In Service Date
- d. Interrupting Medium
- e. Fault Operations
- f. Switched Operations

- g. Spare Part Availability
 - h. Maintenance History
 - i. Malfunction Records
 - j. Breaker Type Population
- C. Secondary/Auxiliary Substation Equipment*
- a. Station Batteries
 - b. Control House
 - c. Station Security
 - d. Station Structures
 - e. Capacitor Banks
 - f. Bus, Cable and Insulators
 - g. Disconnect Switches
 - h. Station Configuration
 - i. Station Service
 - j. Relay Types
 - k. RTU Types
 - l. Voltage Sensing Devices

**AEP substation inspections include assessments of secondary/ancillary equipment. If needed, upgrades to these components are typically included in the scope of projects addressing major equipment and may not necessarily drive stand-alone projects.*

3.3 Historical Performance (Factor 2)

AEP's Historical Performance assessment quantifies how an asset or a group of assets has historically impacted the Transmission system's reliability and Transmission connected customers, helps identify the primary contributing factors to a facility's performance, and baselines the outage probability used in our Future Risk analysis. The metrics used as part of this historical performance assessment include:

- A. Forced Outage Rates
- B. Manual Outage Rates
- C. Outage Durations (Forced Outage Duration in Hours)
- D. System Average Interruption Indices (T-SAIDI, T-SAIFI, T-SAIFI-S, T-MAIFI)

- E. Customer Minutes of Interruption (CMI)
- F. Customer Average Interruption Indices (IEEE SAIDI, CAIDI & SAIFI)
- G. Number of Customers Interrupted (CI)

AEP utilizes this standard set of metrics as a means to quantify the historical performance of an asset. These historical performance metrics allow AEP to further investigate assets that have historically impacted customers the most.

Due to the vast size of the AEP operating territory covering 11 states, AEP segments its needs into seven distinct operating company regions and six voltage classes. This segmentation ensures that variations in geography with respect to vegetation, weather patterns, and terrain can be accounted for within the process of identifying needs for each operating company area. In addition to customers of AEP operating companies, consideration for retail customers that are served at non-AEP wholesale customer service points is also included. In order to account for customers served behind wholesale meter points, AEP gathers information from the parent wholesale provider or in its absence, applies a surrogate customers per MW ratio to estimate the number of customers served by a wholesale power provider's delivery point. This customer count is used to calculate the individual metrics above.

AEP's standard approach is to annually review the historical performance of its assets based on a rolling three-year average, but in some cases AEP may extend the review period beyond three years. AEP classifies all transmission asset outage causes into the following five categories to conduct this review: Transmission Line Component Failure, Substation Component Failure, Vegetation (AEP), Vegetation (Non-AEP), and External Factors. Each transmission asset and its associated performance is quantified and compared against corresponding system totals to determine its percentage contribution to aggregated system performance. An evaluation of outage rates is also performed for Transmission line assets. The observed performance of the assets in any of these categories can point to a need that may need to be addressed.

3.4 Future Risk (Factor 3)

AEP reviews the associated risk exposure (future risk) inherent with each identified asset to determine an asset's level of risk. This risk exposure is quantified assuming the probability of an outage scenario

and is based on the reported condition of the asset and the severity of that condition and what the impact could be to customers or to the operation of AEP's Transmission system. Some of the key items to assess these impacts included in the risk criteria are:

- A. Number of Customers Served
- B. Load Served
- C. Operational Risks
 - a. Post Contingency Load Loss Relief Warnings (PCLLRW's)
 - b. History of Load Shed Events
 - c. Stations in Black Start Paths

In addition to the future risk calculation performed through this process, AEP is systematically reviewing its system to identify and remediate equipment and practices that have resulted in operational, restoration, environmental, or safety issues in the past that cannot be directly quantified, but that remain as acknowledged risks in the AEP Transmission system. These include:

- A. Wood pole construction
- B. Pilot wire protection schemes
- C. Oil circuit breakers
- D. Air Blast circuit breakers
- E. Pipe type oil filled cables
- F. Electromechanical relays
- G. Legacy system configurations
 - a. Missing or inadequate line switches (e.g., hard-taps)
 - b. Missing or inadequate transformer/bus protection
 - c. Three-terminal lines
 - d. Overlapping zones of protection
- H. Non-Standard Voltage Classes
- I. Poor Lightning & Grounding Performance
- J. Radial Facilities
- K. Public vulnerability

These items as described above are reviewed on a case by case basis and considered when holistic system solutions are being developed.

4.0 Step 2: Solution Development

The development of solutions for the identified needs considers a holistic view of all of the needs in which several solution options are developed and scoped. AEP applies the appropriate industry standards, engineering judgment, and Good Utility Practices to develop these solution options. AEP solicits customer and external stakeholder input on potential solutions through the Annual Stakeholder Summits hosted by AEP and also through the PJM Project Submission process. This ensures that input from external stakeholders on identified needs can be received and considered as part of the solution development process.

Solution options consider many factors including, but not limited to, environmental conditions, community impacts, land availability, permitting requirements, customer needs, system needs, and asset conditions in ultimately identifying the best solution to address the identified need. Once the selected solution for a need or group of needs is defined, it is reviewed using the current RTO provided power-flow, short circuit, and stability system models (as needed) to ensure that the proposed solution does not adversely impact or create baseline planning criteria violations on the transmission grid. Finally, AEP reviews its existing portfolio of baseline planning criteria driven reliability projects and evaluates opportunities to combine or complement existing baseline planning criteria driven reliability projects with the transmission owner needs driven solutions developed through this process. This step ultimately results in the implementation of the more efficient, cost-effective, and holistic long-term solutions. Stand-alone projects are created to implement the proposed solution where transmission owner needs driven solutions cannot be integrated into existing projects.

5.0 Step 3: Solution Scheduling

Once solutions are developed to address the identified needs, the scheduling of the solutions will take place. As mentioned in the previous section, if opportunities exist to combine or complement existing baseline planning criteria driven reliability projects with the needs driven solutions developed

through this process, the scheduling will be aligned to the extent possible. In all other situations, AEP will schedule the implementation of the identified solutions in consideration of various factors including severity of the asset condition, overall system impacts, outage availability, siting requirements, availability of labor and material, constructability, and available capital funding. AEP uses its discretion and engineering judgment to determine suitable timelines for project execution.

6.0 Conclusion

This document outlines AEP's criteria and guidelines for transmission owner identified needs that address equipment material conditions, performance, and risk. It outlines the sources and methods considered by AEP to identify assets with needs on a continuous basis and it outlines how solutions are developed and scheduled. AEP will review and modify these criteria and guidelines as appropriate based upon our continuing experience with the methodology, acquisition of data sources, deployment of improved performance statistics and the receipt of stakeholder input in order to provide a safe, adequate, reliable, flexible, efficient, cost-effective and resilient transmission system that meets the evolving needs of all of the customers it serves.

7.0 References

- [1] FERC Pro Forma Open Access Transmission Tariff, Section 1.14, Definition of "Good Utility Practice".
Link: <https://www.ferc.gov/legal/maj-ord-reg/land-docs/rm95-8-0aa.txt>
- [2] AEP Transmission Planning Documents and Transmission Guidelines.
Link: <http://www.aep.com/about/codeofconduct/OASIS/TransmissionStudies/>



AEP Transmission Zone M-3 Process New Camp

Need Number: AEP-2020-AP028

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 04/08/2021

Previously Presented:

Need Meeting 04/20/2020

Solution Meeting 01/15/2021

Project Driver:

Equipment Condition/Performance/Risk

Specific Assumption Reference:

AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions Slide 13)

Problem Statement:

Line Name: Sprigg – Stone 46kV

Original Install Date (Age): 1940

Length of Line: 8.23 mi

Total structure count: 55

Original Line Construction Type: Wood

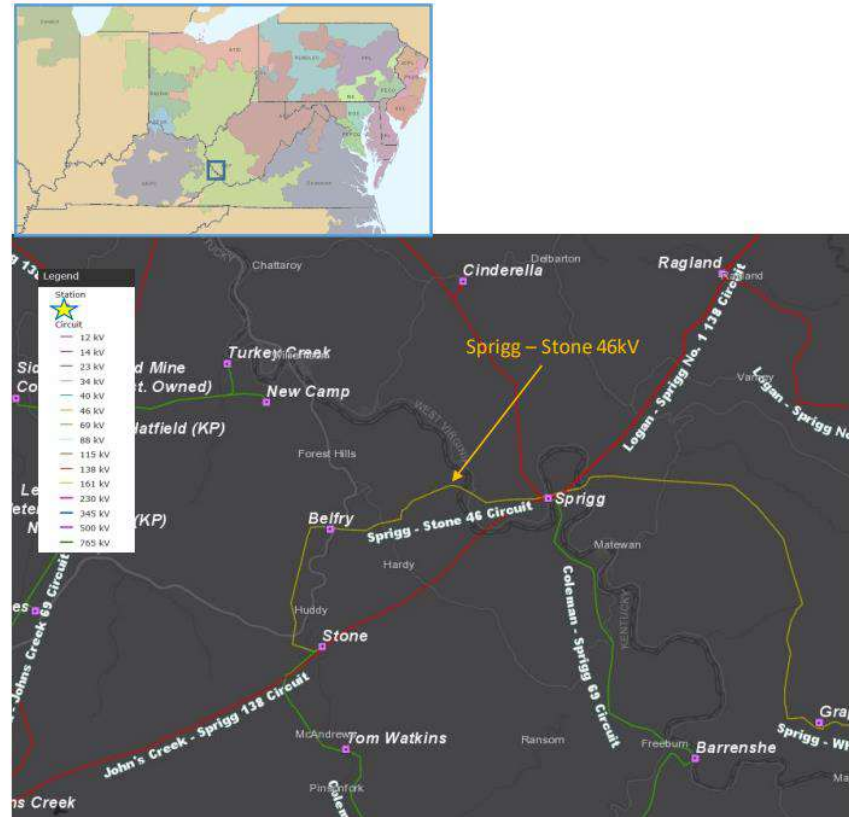
Majority Conductor Type: 3/0 ACSR 6/1 (Pigeon) and 2/0 COPPER

Momentary/Permanent Outages and Duration: 6 Momentary and 7 permanent Outage

CMI (last 5 years only): 1,119,129 minutes

Line conditions:

- 35 structures with at least one open condition, 64% of the structures on this circuit.
- 98 structure related conditions: rotted poles, crossarms and braces, woodpecker damage, bowed braces and loose braces, affecting the crossarm, knee/ vee brace, or pole including rot, split, woodpecker, damaged, loose, and bowed conditions
- 1 open conditions related to the broken strands on a jumper conductor
- 9 hardware related open conditions loose or broken guy wires





AEP Transmission Zone M-3 Process New Camp

Need Number: AEP-2020-AP028

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 04/08/2021

Selected Solution:

In conjunction with the baseline work identified under B3288 presented in 12/18/2020 SRRTEP– West meeting which would install new 69kV line between Stone and New Camp via Orinoco substation, the following is proposed under this solution to address the identified needs on the Sprigg – Stone 46kV line.

Replace Belfry substation with Orinoco substation by installing a 69kV box bay and 12kV rural bay to be built in the clear southwest of existing Belfry station. Install 69/12kV 20 MVA transformer and two 12kV breakers. **Estimated Transmission Cost: \$0.65 M (s2446.1)**

Retire Belfry 46kV substation. **Estimated Transmission Cost: \$0 M (s2446.2)**

Retire 46kV equipment from Stone substation. **Estimated Transmission Cost: \$0.07 M (s2446.3)**

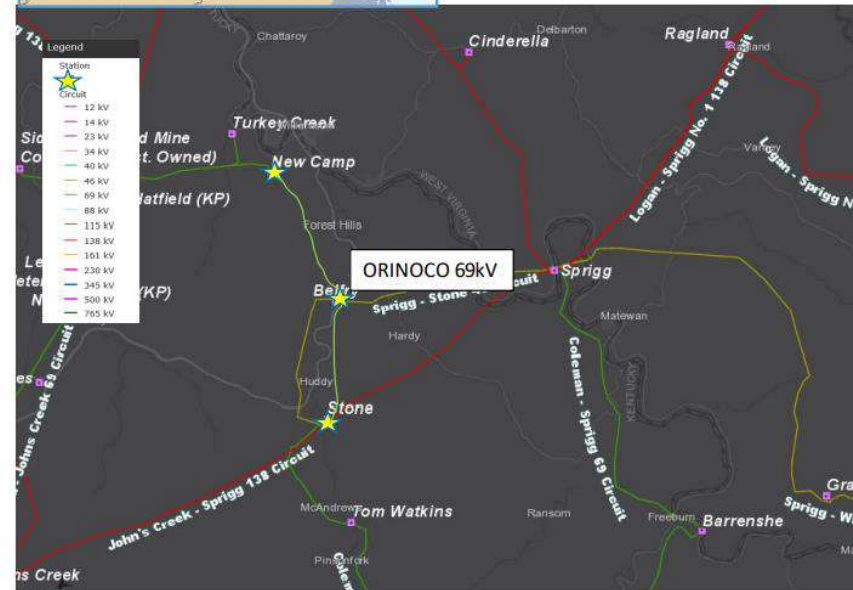
At Hatfield substation, replace MOAB Y with a 69kV Circuit Breaker towards Stone 69kV line via New Camp and Orinoco. **Estimated Transmission Cost: \$0.85 M (s2446.4)**

Retire the 46kV equipment at Sprigg station towards Stone (via Belfry). **Estimated Transmission Cost: \$0.05 M (s2446.5)**

Retire Turkey Creek Tap. **Estimated Transmission Cost: \$0.76 M (s2446.6)**

Retire the ~8.23 miles of the 46kV Sprigg – Stone 46 KV circuit. **Estimated Transmission Cost: \$6.73 M (s2446.7)**

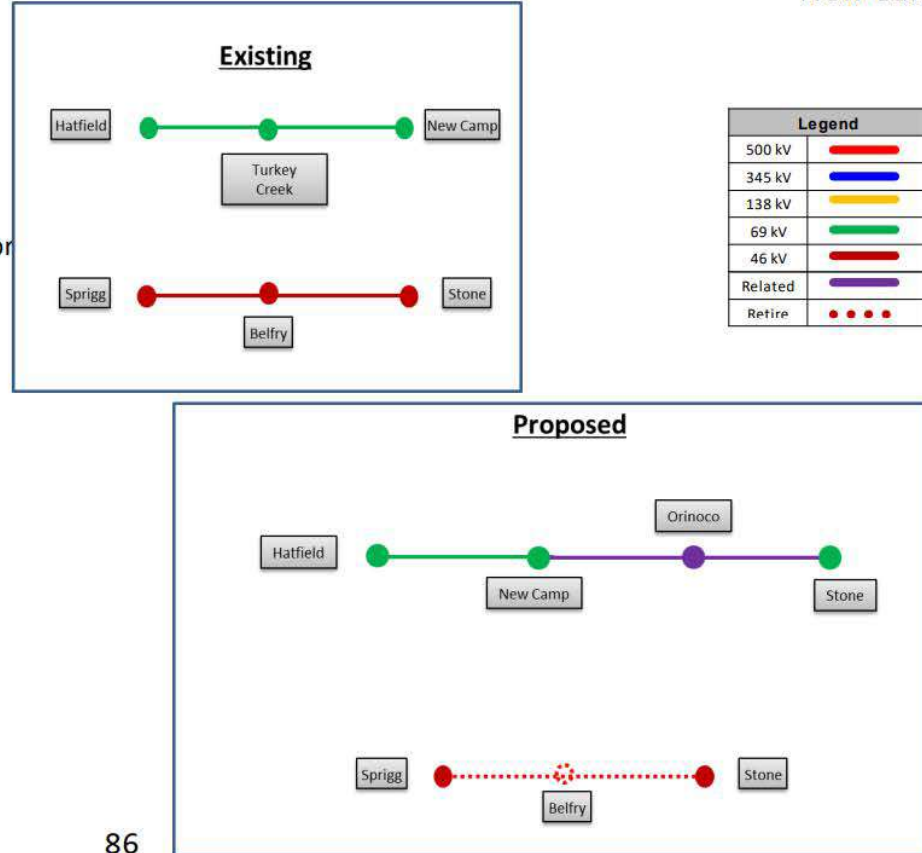
Total Estimated Transmission Cost: \$9.11 M





AEP Transmission Zone M-3 Process New Camp

Need Number: AEP-2020-AP028
Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 04/08/2021
Ancillary Benefits: Removal of obsolete ~8.23 mi of 46kV transmission line and associated equipment
Required In Service Date: 9/1/2025
Projected In Service Date: 12/31/2024
Supplemental Project ID: s2446.1-.7
Project Status: Scoping
Model: N/A



AEP Transmission Zone M-3 Process Pike County, Kentucky

Need Number: AEP-2020-AP028

Process Stage: Need Meeting 01/15/2021

Previously presented: Need Meeting 04/20/2020

Supplemental Project Driver: Equipment Condition/Performance/Risk

Specific Assumption Reference:

AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions Slide 13)

Problem Statement:

Line Name: Sprigg – Stone 46kV

Original Install Date (Age): 1940

Length of Line: 8.23 mi

Total structure count: 55

Original Line Construction Type: Wood

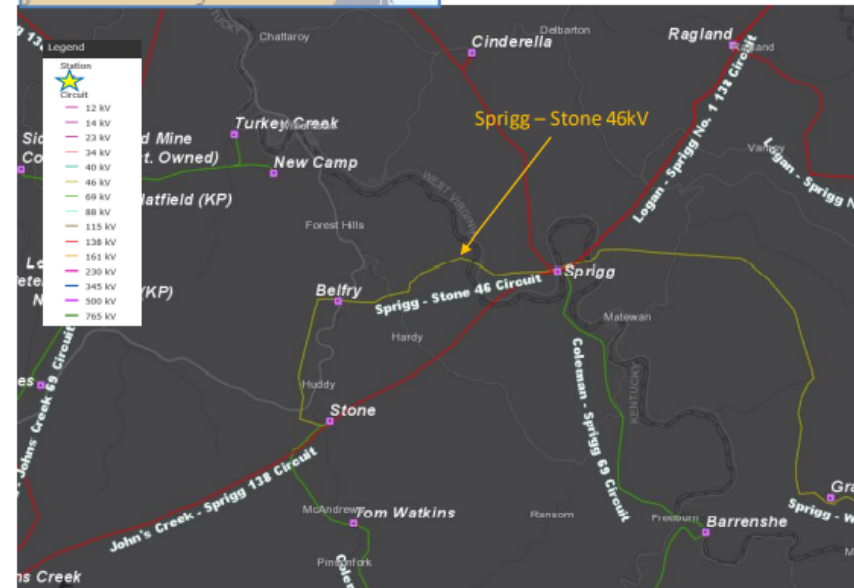
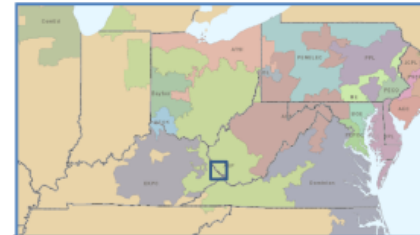
Majority Conductor Type: 3/0 ACSR 6/1 (Pigeon) and 2/0 COPPER

Momentary/Permanent Outages and Duration: 6 Momentary and 7 permanent Outage

CMI (last 5 years only): 1,119,129 minutes

Line conditions:

- 35 structures with at least one open condition, 64% of the structures on this circuit
- 98 structure related conditions: rotted poles, crossarms and braces, woodpecker damage, bowed braces and loose braces, affecting the crossarm, knee/ vee brace, or pole including rot, split, woodpecker, damaged, loose, and bowed conditions
- 1 open conditions related to the broken strands on a jumper conductor
- 9 hardware related open conditions loose or broken guy wires



AEP Transmission Zone M-3 Process Pike County, Kentucky

Proposed Solution:

In conjunction with the baseline work identified under B3288 presented in 12/18/2020 SRRETP – West meeting which would install new 69kV line between Stone and New Camp via Orinoco substation, the following is proposed under this solution to address the identified needs on the Sprigg – Stone 46kV line.

Replace Belfry substation with Orinoco substation by installing a 69KV box bay and 12KV rural bay to be built in the clear southwest of existing Belfry station. Install 69/12kV 20 MVA transformer and two 12kV breakers. **Estimated Transmission Cost: \$0.65 M**

Retire Belfry 46kV substation. **Estimated Transmission Cost: \$0 M**

Retire 46kV equipment from Stone substation. **Estimated Transmission Cost: \$0.07 M**

At Hatfield substation, replace MOAB Y with a 69KV Circuit Breaker towards Stone 69kV line via New Camp and Orinoco. **Estimated Transmission Cost: \$0.85 M**

Retire the 46kV equipment at Sprigg station towards Stone (via Belfry). **Estimated Transmission Cost: \$0.05 M**

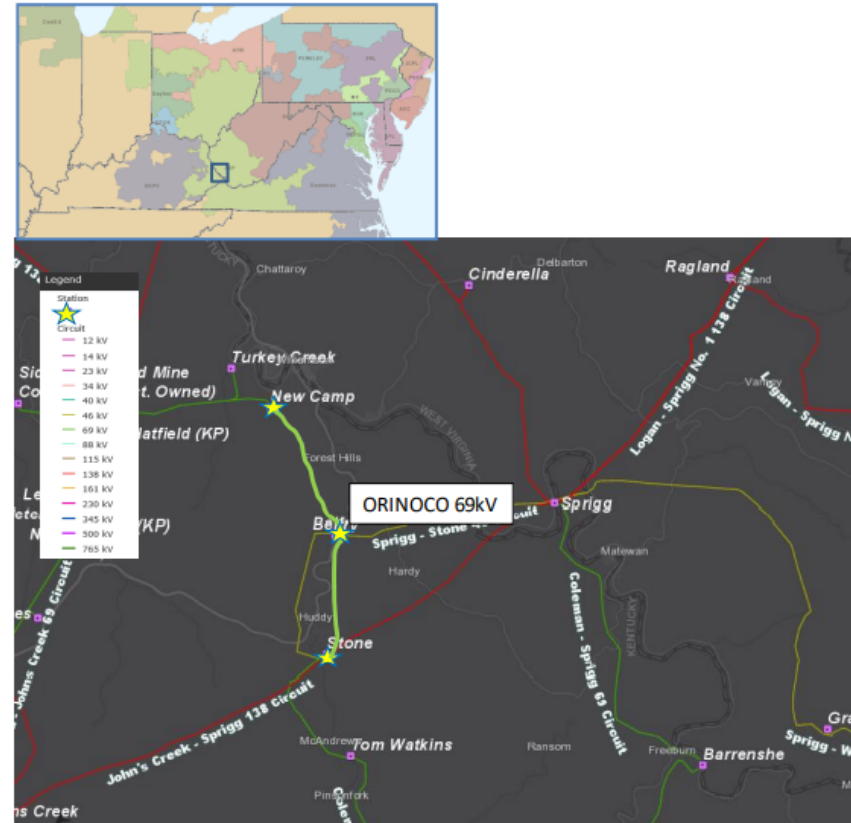
Retire Turkey Creek Tap. **Estimated Transmission Cost: \$0.76 M**

Retire the ~8.23 miles of the 46kV Sprigg – Stone 46 KV circuit. **Estimated Transmission Cost: \$6.73 M**

Total Estimated Transmission Cost: \$9.11 M

Ancillary Benefits:

- Removal of obsolete ~8.23 mi of 46kV transmission line and associated equipment



AEP Transmission Zone M-3 Process Pike County, Kentucky

Alternative Solution:

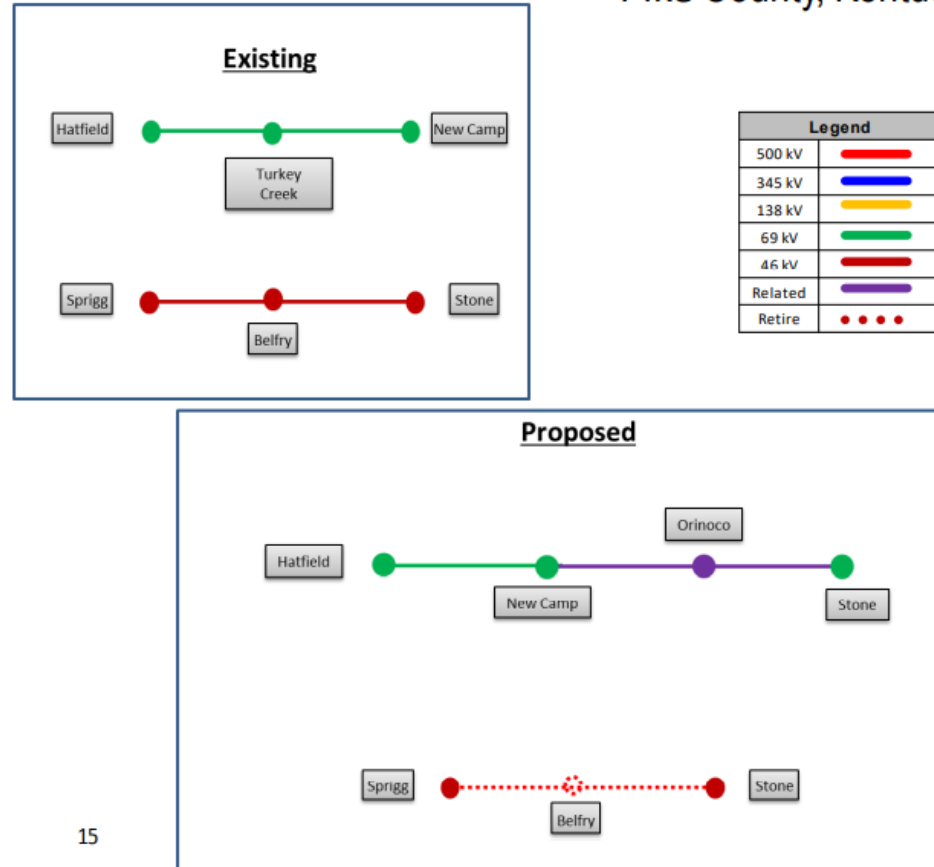
Rebuild 8.23 mi line between Sprigg and Stone to 69kV standards (operated at 46kV) via Belfry Station to address the identified asset needs. Retire the existing ~8.23 miles of the 46kV Sprigg – Stone 46 KV circuit.

Total Estimated Transmission Cost: \$32.1 M

Project Status: Scoping

Required In Service Date: 9/1/2025

Projected In Service Date: 12/31/2024





AEP Transmission Zone: Baseline New Camp - Stone 69kV

Process Stage: Recommended Solution

Criteria: AEP 715 criteria

Assumption Reference: 2025 RTEP assumption

Model Used for Analysis: 2025 RTEP cases

Proposal Window Exclusion: Below 200 kV

Problem Statement:

AEP-VD1160, AEP-VD1161.

In the 2025 Winter RTEP case, voltage drop violations at New Camp 69kV in the event of an N-1-1 scenario that involves the loss 138/69 kV transformer at Johns Creek and loss of Inez - Sprigg 138kV line.





AEP Transmission Zone: Baseline New Camp - Stone 69kV

Recommended Solution:

Construct ~ 2.75 mi Orinoco - Stone 69kV transmission line in the clear between Orinoco station and Stone station. **(B3288.1) Estimated**

Transmission Cost: \$9.23 M

Construct ~ 3.25 mi Orinoco – New Camp 69kV transmission line in the clear between Orinoco station and New Camp station. **(B3288.2) Estimated**

Transmission Cost: \$9.95 M

At Stone substation, Circuit breaker A to remain in place and be utilized as T1 low side breaker, Circuit Breaker B to remain in place and be utilized as new Hatfield (via Orinoco and New Camp) 69KV line breaker. Add new 69KV Circuit Breaker E for Coleman Line exit. **(B3288.3) Estimated**

Transmission Cost: \$0.66 M

Reconfigure the New Camp tap which includes access road improvements/installation, temporary wire and permanent wire work along with dead end structures installation. **(B3288.4) Estimated Transmission Cost: \$0.45 M**

At New Camp substation, rebuild the 69kV bus, add 69KV MOAB W and replace the 69KV Ground switch Z1 with a 69kV Circuit Switcher on the New Camp Transformer. **(B3288.5) Estimated Transmission Cost: \$1.18 M**

Total estimated baseline Cost: \$21.47 M

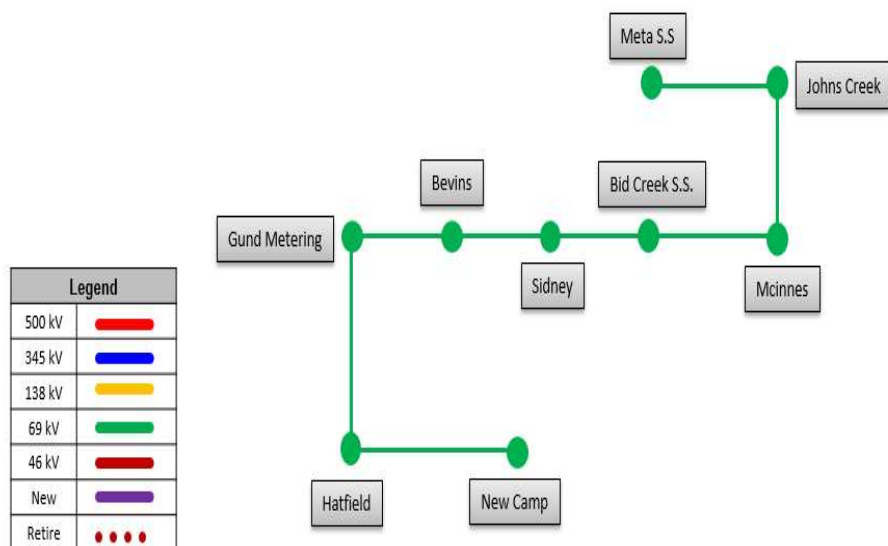
Preliminary Facility Rating:

Branch	SN/SE/WN/WE (MVA)
05ORINOCO – 05STONE 69KV	102/142/129/160
05ORINOCO – 05NEWCAMP 69KV	102/142/129/150

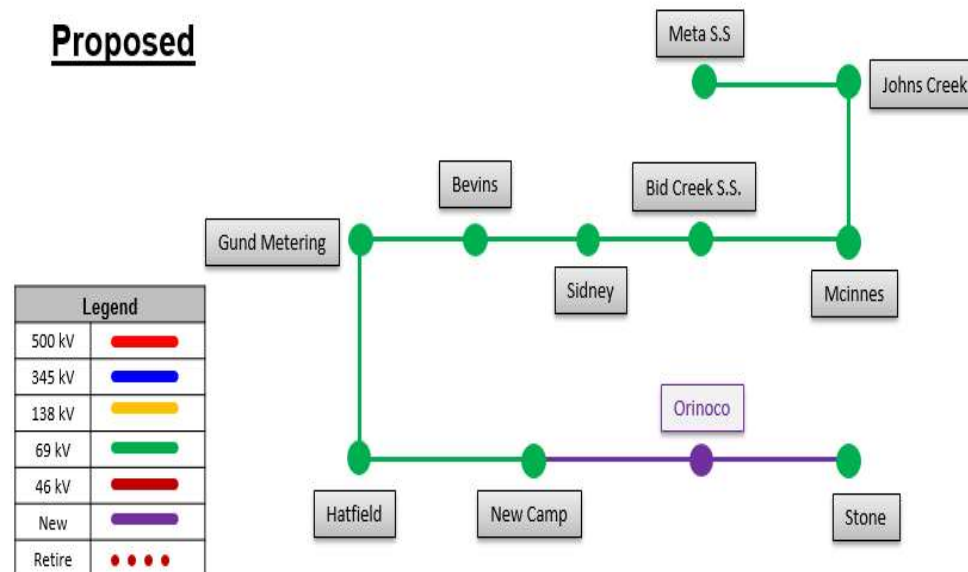


AEP Transmission Zone: Baseline New Camp - Stone 69kV

Existing



Proposed



Ancillary Benefits:

This work addresses the needs identified in AEP-2020-AP028. Removal of obsolete ~8.23 mi of 46kV transmission line, Looped service to New Camp station which is served via a radial ~4.14 mile, 69 kV line from Hatfield Station and serves approximately 14.6 MVA of peak load..

Required In-Service: 12/1/2025

Projected In-Service: 12/1/2025

Previously Presented: 12/18/2020

Major Components of Proposed Substation Work and Their Purpose

NEW CAMP AREA IMPROVEMENTS 69 kV TRANSMISSION PROJECT

Identifier from Project Description on Page 1 of Application	Project Section	One Line Identifier	Description	One line Asset ID	Associated Assets	Purpose	Driver for Asset Replacement/Installation		
(A) Orinoco	Construct Greenfield Orinoco Substation	(1)	Construct new 69/12KV Distribution Station which will in part replace the existing Belfry Station. The new Station Location will be next to Belfry Branch Library on Route 119. This Station will contain two 69KV Box Bays with Line Switches, one facing towards Stone Station and the other facing Hatfield Station. A 20MVA Distribution Transformer, and a 12KV Rural Distribution Bay will be installed along with 3 Distribution Feeders with Breakers.	69KV Line MOS A00100	Single Phase CCVT	Under Fault conditions, these Line Motor Operated Switches with the assistance of remote end breakers, can be used to sectionalize the faulted portion of the Transmission Line out of service to restore power to the Distribution Transformer and 3 Feeder Breakers.	This project is being constructed to replace the existing 46KV system between Stone and Belfry Stations, and to retire Belfry Station entirely. The new 69KV electrical arrangement will provide looped service between Hatfield, New Camp, Orinoco, and Stone Stations which will increase reliability to customers, and replace aging assets.		
				69KV Line MOS A00101	Single Phase CCVT	To step the voltage down from 69KV Transmission voltage to 12KV Distribution Voltage; Switch A001N7 is used to isolate the transformer from the 69KV bus for maintenance or for Transformer or low side fault; Circuit Switcher A001N8 is to break load to the Transformer due to Transformer or low side fault; Circuit Breaker A001P2 is to isolate the Transformer for maintenance, or clear a 12KV Bus fault.			
				69/12KV Transformer #1	69KV High Side Switch A001N7, and Circuit Switcher A001N8. 12KV low side Circuit Breaker A001P2. 69KV and 12KV Surge Arresters.			The Retirement of the existing 46KV System, and Belfry Substation necessitates this new station be constructed to support the Distribution loads previously fed from Belfry. The new system replacing the 46KV system will now be constructed at 69KV, which necessitates a new 69/12KV Transformer to step the transmission voltage down to the 12KV Distribution voltage.	
				12KV Sharondale CB-A002D5	12KV Line, Bus, and Transfer Disconnect Switches, 12KV Line Surge Arresters, and 12KV Bus Regulators.				The purpose of the Distribution Feeder Breakers are to permit the interruption of fault current or load on the Distribution lines to protect Distribution facilities. They also interrupt potential faults on the 12KV Bus within the Substation to protect those facilities as well. Controls for these Breakers monitor current on the line, and provide automated protection of facilities as programmed.
				12KV Hardy CB-A001P5					
12KV Forrest Hills CB-A001P8									
(B) Stone	Stone Substation modifications	(2)	Remove the 46kV facilities at Stone substation including surge arresters, switch T1S1, grounding transformer and bus potential transformers. Convert the 46kV bus to 69kV and repurpose circuit breaker A for the 69kV side of the transformer and circuit breaker B to feed the new line to New Camp substation. Add a new 69kV circuit breaker for the existing Coleman line.	69kV circuit breaker A001C2	Breaker disconnect switches A001C1 and A001C3 (formerly AS2 and AS1). Switch T1S1 will be removed and bus potential transformers (CCVTs) will remain in service but will be connected to the 69kV leads of the transformer. New CCVTs will be added for the 69kV bus.	This was the original 69kV Coleman line circuit breaker A. It will remain in place and be repurposed for the 69kV side of the 138/69kV transformer. This arrangement will permit the 69kV bus to remain in service while the 138/69kV transformer is out due to a fault or for switching requirements.	This project is being constructed to replace the existing 46KV system between Stone and Belfry Stations, retire Belfry substation entirely and provide two way 69kV service to New Camp substation. The new 69KV electrical arrangement will provide looped service between Hatfield, New Camp, Orinoco, and Stone Stations which will increase reliability to customers, and replace aging assets.		
				69kV circuit breaker A001C5	Breaker disconnect switches A001C4 and A001C6 (formerly BS1 and BS2). New 69kV surge arresters and CCVTs for the new Hatfield line.	This was the original 46kV Sprigg line circuit breaker B and will protect the 69kV bus for faults on the Hatfield line.			
				69kV circuit breaker A001C8	Disconnect switches A001C7 and A001C9. Coleman 69kV line surge arresters and CCVTs.	This is a new 69kV circuit breaker that will protect the 69KV bus for faults on the Coleman line. The surge arresters and CCVTs will be relocated to make room for the new circuit breaker.			
(C) New Camp	New Camp Substation Expansion	(3)	Expand the New Camp substation to include a new 69kV box bay to accommodate the existing line from Hatfield substation and the new line to the new Orinoco substation. Replace the load break switch and add potential transformers to the 12kV side of the 69-12KV transformer plus add surge arresters to both 12kV distribution feeders.	69kV MOS A00083	Single Phase CCVT	Under Fault conditions, these Line Motor Operated Switches with the assistance of remote end breakers, can be used to sectionalize the faulted portion of the Transmission Line out of service to restore power to the Distribution Transformer and 2 Feeder Breakers.	This install will allow for New Camp Station to be fed from two directions, rather than by a single (radial) 69KV line previously. This new Box Bay installation allows for looped service into New Camp Station from Stone and Hatfield Stations.		
				69kV MOS A00084	Single Phase CCVT	Under Fault conditions, these Line Motor Operated Switches with the assistance of remote end breakers, can be used to sectionalize the faulted portion of the Transmission Line out of service to restore power to the Distribution Transformer and 2 Feeder Breakers.			
				Existing 69-12kV transformer	69kV bus CCVT, Mobile disconnect switch A00085, MOS A001A7 and CS A001A8	The new 69kV switch A001A7 is used to isolate the existing transformer from the 69KV bus thus allowing restoration of the loop between Hatfield and Stone substations while the new circuit switcher A001A8 is to interrupt the circuit due to a transformer or low side fault. The 69kV switch A00085 is to facilitate connection of a mobile transformer during required transformer maintenance or failure.			
				12kV MOS A00086	12kV potential transformers	This is a replacement and upgrade for the existing 12kV load break switch and is used in connection and removal of a mobile transformer for maintenance or replacement of the main station transformer. Installation of the 12kV potential transformers are used for voltage indication and in the switching and protection of the main transformer.		This switch upgrade replaces a type of switch that has been known to be hazardous to operate, and allows disconnecting the transformer from the 12KV Bus for maintenance purposes.	
(D) Hatfield	Hatfield Substation- Add 69kV circuit breaker for the New Camp line	(4)	Replace MOS Y with a 69kV circuit breaker and add surge arresters and CCVTs for the New Camp line plus replace the single phase bus CCVT with a three phase installation.	69kV circuit breaker A002H2	Breaker disconnect switches A002H1 and A002H3. Surge arresters and CCVTs for the 69kV line to New Camp plus bus CCVTs.	This new Circuit Breaker will protect the new Stone Line from faults, as well as protect the Hatfield 69KV Bus from fault conditions. The disconnect switches will allow for visible disconnects for breaker maintenance.	Currently the New Camp 69kV substation is radially fed (one source only) from the Hatfield 69kV bus via switch Y. By replacing switch Y with a circuit breaker, the feed to New Camp will be incorporated into a loop system that provides two way service to both New Camp and Orinoco substations.		
(E) Belfry	Belfry Substation Removal	(5)	Retire & remove Belfry Substation and all of it's assets including; Wooden Switch Structure and 46KV Switches 11 and 22, Wooden Box Bay Structure, Transformer #1 and associated high side Motor Operated Switch, and Ground Switch, low side load break switch, and two 12KV Feeders to Belfry, and Toler. Site to be returned to natural state.	46/12KV Transformer #1	Transformer High Side MOS X1 and Ground Switch Z, and Low Side Load Break Switch, and high & low side Surge Arresters.	46KV system in the area is being retired due to aging assets, and an increased number of outages. Belfry Transformer, Structures, Breakers and associated equipment are legacy assets that need to be replaced.	New 69/12KV Orinoco Substation will pick up Distribution loads previously fed from Belfry Substation, and add a 3rd Distribution Feeder as well. These new assets and 69KV looped service will add reliability to system.		
				46KV Circuit Breaker A	Hookstick Bus, Line and Transfer Bus Disconnects.				
				46KV Circuit Breaker B	Hookstick Bus, Line and Transfer Bus Disconnects.				



July 22, 2022

Work Order No. T10111854 / T10109942
BPID No. P19305001 / P19305016

*Geo-Hazard Desktop Study Memorandum
New Camp - Orinoco / Orinoco - Stone 69kV Transmission Lines
Belfry Area Transmission Line Project
Pike County, KY*

Executive Summary

Two (2) new 69kV transmission lines, New Camp – Orinoco and Orinoco - Stone, are proposed between the existing Stone and New Camp stations. The new lines will meet at the proposed Orinoco station. AEP's Civil and Geotechnical Engineering (CGE) group performed a desktop geotechnical hazard (geo-hazard) assessment of the proposed alignments. Landslide and mine related geo-hazards are prevalent throughout the proposed alignments, both of which need to be considered during structure and access road siting, foundation design, and construction.

I. Objective

The purpose of this memorandum is to present the results of the geo-hazard desktop study for the proposed New Camp – Orinoco and Orinoco – Stone 69kV transmission lines.

II. Site and Project Description

The new 69kV transmission lines will total approximately 7 miles in length and replace the existing 46kV transmission line between Sprigg and Stone stations. The work will be near Belfry, KY in Pike County. The study area encompasses about 12.9 square miles roughly centering on the proposed transmission line routes. The geo-hazard desktop study evaluated the study area's general geology and risk for common geo-hazards including coal mining, landslides, scour/erosion, karst, and expansive soils.

III. Terrain and Geology

The terrain throughout the study area is generally mountainous and steep with drainage ravines and valleys. The ground surface elevation varies from about 600 and 1,700 feet.

The study area is underlain by the Pennsylvanian-aged lower part of the Breathitt Formation. This bedrock formation is highly landslide prone. The slide activity is attributed to recent anthropogenic activity (likely pertaining to mining) in addition to late Cenozoic drainage reorganization, valley incision, and periglaciation (Kite et al., 2019). The Breathitt Formation is interbedded with several coal seams.

Coal seams in the study area include Pond Creek, Alma, Upper Elkhorn Number 3, Nosben, Williamson, Fire Clay, Taylor, Peach Orchard, and Winifrede in addition to smaller unnamed coal seams.

USDA NRCS Web Soil Survey (NRCS, 2022) reports the overburden throughout the alignment primarily consists of residuum, colluvium, and mine spoils or “earthy” fill. The soils generally have higher susceptibility to erosion (K factor between 0.41 – 0.50) and high soil slippage potential.

IV. Coal Mining

Approximately 75 percent of the study area has been mined (refer to the attached Vicinity Mining figure). Mining is reported in the Pond Creek and Williamson coal seams as well as other unreported coal seams. The reported mining occurred in the ridge tops. The impact of this mining activity is greatest where closer to the ground surface. Generally, the greater the depth of the mining activity, the less risk of mine subsidence and other mine-related risks. The presence of mine shafts and other features related to extensive mining activity mean there is higher potential for collapse and persistent groundwater seeps that can destabilize slopes.

AEP was made aware by the landowner of an Abandoned Mine Lands (AML) project to mitigate a mine blow out along the proposed alignment. The location is noted on the Vicinity Mining and Landslide Inventory figures. There is a high likelihood that other similar active or previous AML projects exist within the study area.

Even where mining activity did not occur, the presence of several coal seams presents a moderate risk because of their porous composition. Coal seams can convey substantial amounts of water that drain onto side slopes, increasing the landslide hazard where coal seams outcrop. The risk from mining activity is generally moderate throughout the study area, with locally higher risk areas. The mining risk can be mitigated by avoiding mine portals when siting access roads and structures, not placing fill where coal seams outcrop, careful water management near coal seams and mine portals, and considering depth/age/type of mining activity beneath access roads and structures for potential subsidence activity.

V. Landslide Risk

Approximately 15 percent of the study area is reportedly susceptible to debris flow. Another approximately 10 percent of the study area appears to have topography suspicious of historical landslide activity. The desktop study also revealed 44 landslides within the study area. These landslides are reported by the Kentucky Geological Survey and identified by AEP through review of publicly available LiDAR data and aerial imagery. The Landslide Inventory figures show the landslide features throughout the study area. The entire study area is at high risk for landslides, with certain areas at exceptionally higher risk than others including but not limited to areas of documented landslides, drainage ravines, and mine portals. Landslide risk can be mitigated by siting structures and access roads outside of “exceptionally higher risk” areas, proactive landslide mitigation, thorough site reconnaissance to identify unmapped landslide hazards, designing foundations for embedment loss / withstand active earth pressures related to slide movement, and careful water management.

VI. Scour and Erosion Risk

There are minor water features throughout the study area including creeks, branches, and streams. Therefore, there is some risk of flooding, scour, erosion, and/or meandering streams. This risk is enhanced in lower lying areas and within drainage ravines. This risk can be mitigated by selecting

structures in areas at lower risk for future scour and erosion. Where these higher risk areas can't be avoided, the foundations should be designed for potential future scour and erosion.

VII. Karst and Expansive Soils

Karst and expansive soils are not reported within the study area. Therefore, AEP's proposed infrastructure is not at risk due to these geo-hazards.

VIII. Conclusion

Based on the geo-hazard desktop study, the predominant geo-hazards within the study area are landslides, mining activity, and scour/erosion, in order of higher to lower risk.

IX. Limitations

This geo-hazard desktop study is based on readily and publicly available online resources. The possibility remains that unexpected conditions may be present. AEP's CGE group recommends completing site reconnaissance and subsurface exploration to further evaluate geo-hazards within the study area.

X. References




Commonwealth of Kentucky, "Kentucky Coal Mine Maps, KY Mine Mapping Information System", <https://epccgis.ky.gov/minemapping/> (visited May 16, 2022).

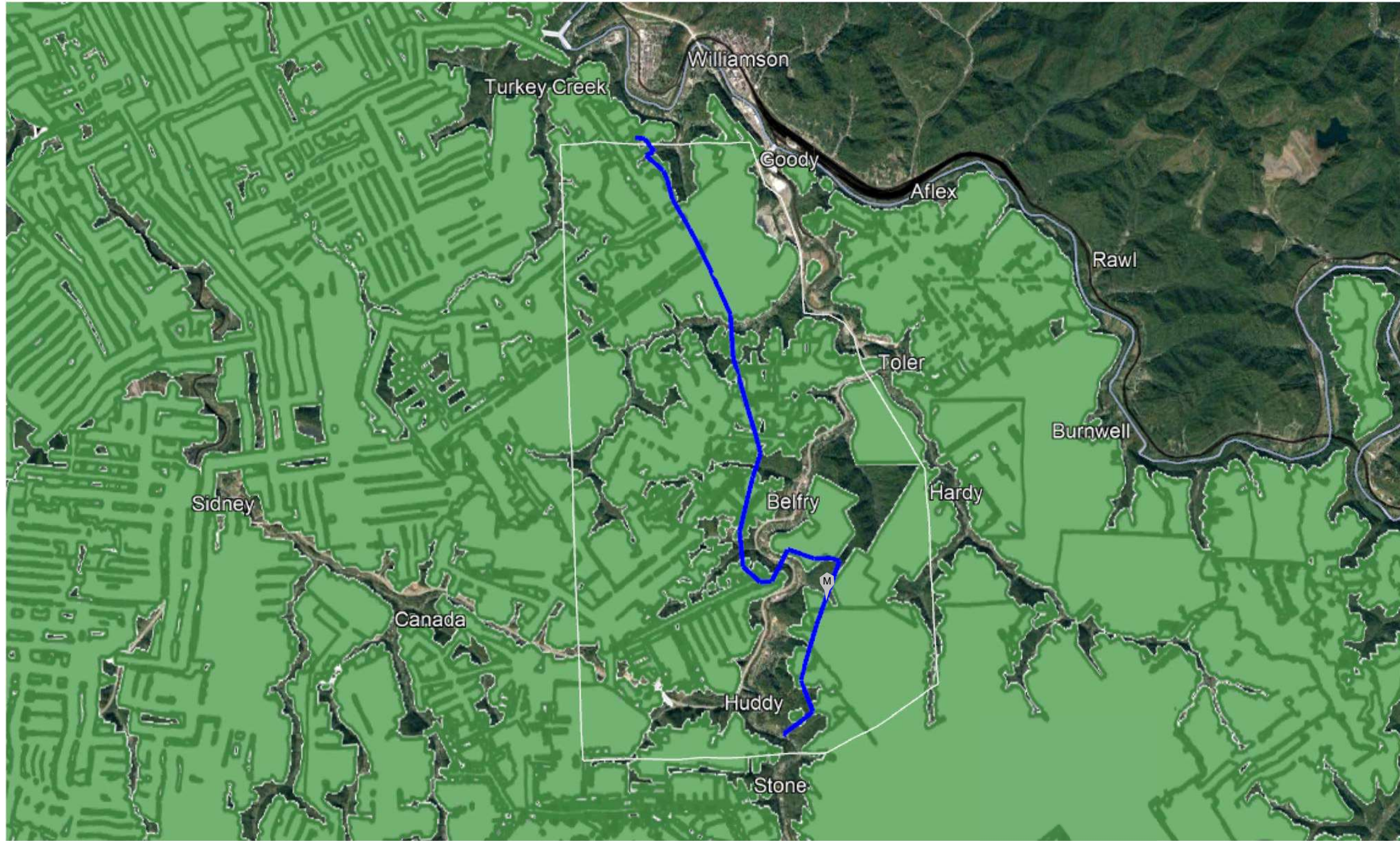
Kentucky Geological Survey, "Landslide Information Map", <https://kgs.uky.edu/arcgis/rest/services/Hazards/LandslideInformationMap/MapServer> (visited May 16, 2022).

Kite et al. (2019), "Session T160: Landslide Inventories, Hazard Assessments, and Risk Reduction" Paper 150-2: <https://gsa.confex.com/gsa/2019AM/meetingapp.cgi/Paper/337478>, West Virginia University Department of Geology and Geography, West Virginia GIS Technical Center.

Noger, M.C., compiler (1988), "Geologic map of Kentucky: sesquicentennial edition of the Kentucky Geological Survey", U.S. Geological Survey and the Kentucky Geological Survey, scale 1:500,000.

NRCS (2022), "Custom Soil Resource Report for Logan and Mino Counties, West Virginia, and Pike County, Kentucky", United States Department of Agriculture, Natural Resources Conservation Service, May 15, 2022, 77 pages.

-  CONCEPTUAL ALIGNMENT
-  MINED AREAS
-  AML PROJECT SITE








OLD DWG #:		STD DWG #:	
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NEW CAMP STUDY AREA WILLIAMSON, KENTUCKY			
VICINITY MINING			
SCALE: NONE	DR: H. INGRAM	ENG: K. BACKLUND	CHK: K. BACKLUND
WSP:	APPD:	DATE: 06-21-22	
		1 RIVERSIDE PLAZA COLUMBUS, OH 43215	DWG. NO. E-7102RGN R 4

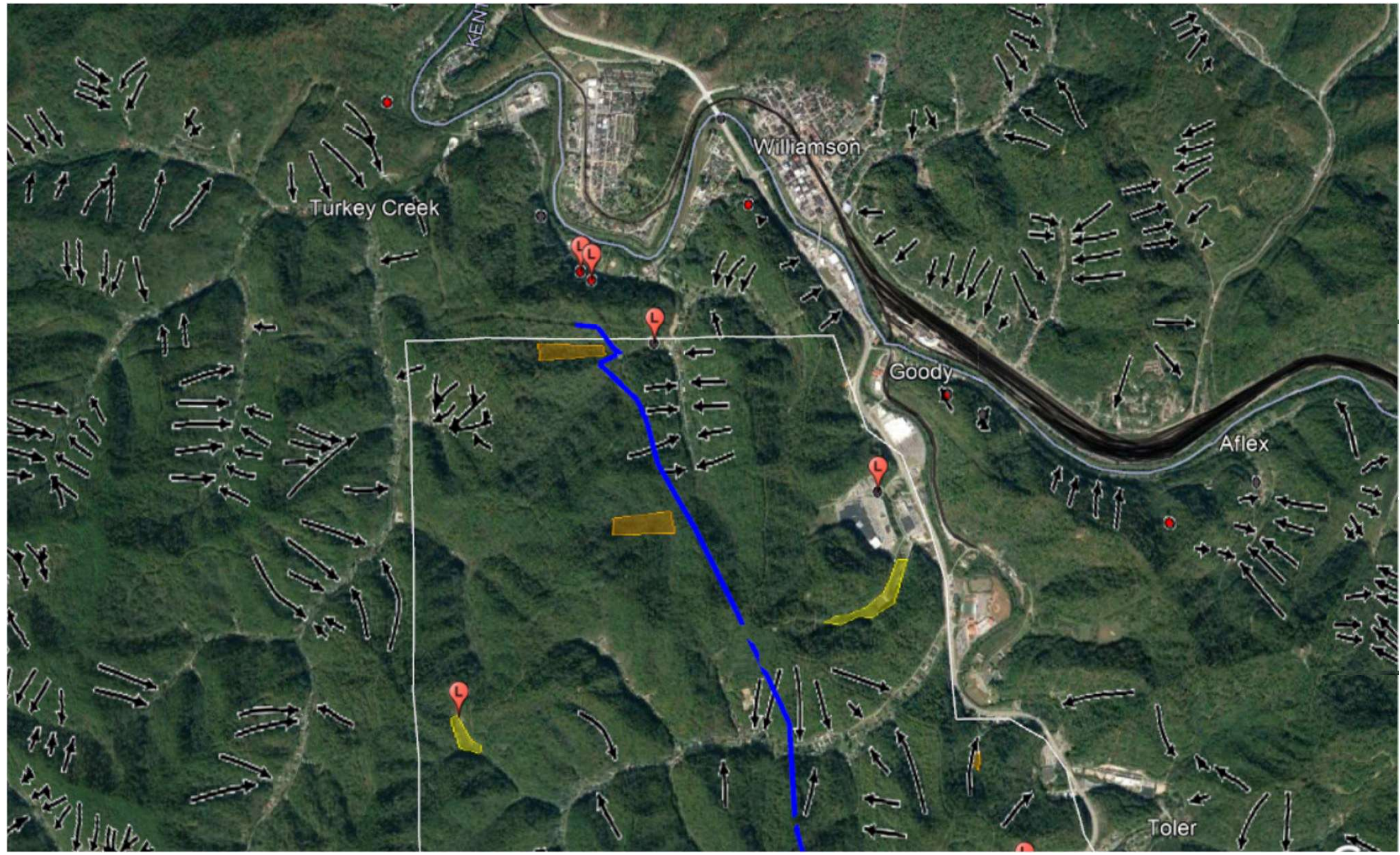


NO.	DATE	REVISION DESCRIPTION	APPR.	DR.	ENG.	CHK.	ISSUE

PLOTTED BY: SUBERS ON: 04/04/2024 AT: 11:04 AM

CADFILEPATH

-  CONCEPTUAL ALIGNMENT
-  AREAS SUBJECT TO DEBRIS FLOW (KGS)
-  ANTHROPOGENIC FEATURES (DESKTOP STUDY)
-  HIGHER RISK FOR LANDSLIDE (DESKTOP STUDY)
-  EXISTING OR HISTORICAL LANDSLIDE (DESKTOP STUDY AND KGS)

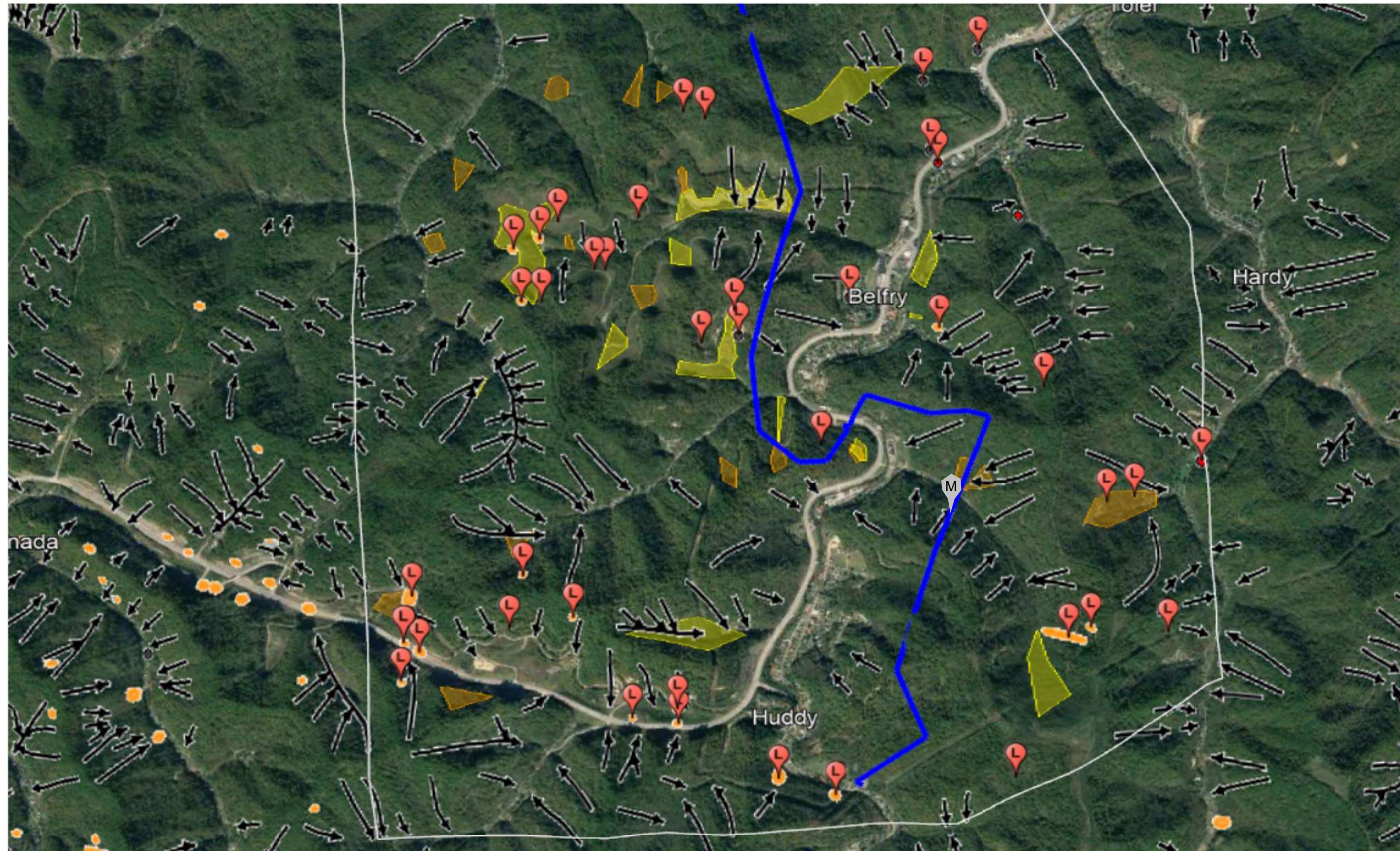


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NEW CAMP STUDY AREA WILLIAMSON, KENTUCKY			
LANDSLIDE INVENTORY (1 OF 2)			
SCALE: NONE	DIR: H. INGRAM	ENG: K. BACKLUND	CH: K. BACKLUND
WOP:		APPD: 06-21-22	DATE: 06-21-22
AMERICAN ELECTRIC POWER 1 RIVERSIDE PLAZA COLUMBUS, OH 43215		DWG. NO. E-7102RGN REV. 4	R 4
NO.	DATE	REVISION DESCRIPTION	APPR. DR. ENG. CK. ISSUE



PLOTTED BY: SUBERS ON: 04/08/2024 AT: 11:04 AM

- CONCEPTUAL ALIGNMENT
- AREAS SUBJECT TO DEBRIS FLOW (KGS)
- ANTHROPOGENIC FEATURES (DESKTOP STUDY)
- HIGHER RISK FOR LANDSLIDE (DESKTOP STUDY)
- EXISTING OR HISTORICAL LANDSLIDE (DESKTOP STUDY AND KGS)
- AML PROJECT SITE



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NEW CAMP STUDY AREA			
WILLIAMSON		KENTUCKY	
LANDSLIDE INVENTORY (2 OF 2)			
SCALE: NONE	DR: H INGRAM	ENG: K BACKLUND	CH: K BACKLUND
DWG:	APPD:	DATE: 08-21-22	REV: 4
1 RIVERSIDE PLAZA COLUMBUS, OH 43215		DWG. NO. E-7102RGN	
AMERICAN ELECTRIC POWER		KENTUCKY POWER COMPANY	



NO.	DATE	REVISION DESCRIPTION	APPR.	DR.	ENG.	CHK.	ISSUE

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Comparison Between Proposed Solution and Electrical Alternative Solutions

	Proposed Solution	Alternative Solution 1ⁱ	Alternative Solution 2
Total Project Cost (Supplemental and Baseline)	The cost of the proposed Project is \$49.0 million.	The cost of this alternative is \$63.8 million.	The Cost of this alternative is \$66.6 million.
Supplemental Components	<ul style="list-style-type: none"> - Retire Turkey Creek 69kV tap. - Construct the new Orinoco 69kV substation - Retire the 46kV Belfry substation. - Retire 6.5 miles in KY of the 8.5 miles of 46kV transmission line between the Stone substation in KY and Sprigg substation in WV. - Retire 46kV equipment at Stone substation - Retire 46kV equipment at the Sprigg towards Stone substations. - At Hatfield substation replace MOAB Y with a 69 kV CB towards Stone substation 	<p>(Supplemental components are identical in Alternative Solution 1 and Alternative Solution 2)</p> <ul style="list-style-type: none"> - Retire the Turkey Creek 69kV tap. - At Hatfield substation replace MOAB Y with a 69 kV CB towards New Camp Substation - Supplemental work at Hatfield substation to install additional new 69kV circuit Breaker and line exit to loop New Camp substation via Hatfield substation. - Supplemental work at Sprigg substation to allow the rebuild of Sprigg – Stone 46kV line - Supplemental work at Stone substation to allow the rebuild of Sprigg – Stone 46kV line - Rebuild 4.0 miles of line between Stone and Belfry substation to 69kV standards and operate at 46kV. - Rebuild 2.5 miles of line between Belfry and Sprigg Line (in KY) to 69kV and operate at 46kV. - Build new 3.1 miles of 69kV line between the Hatfield and New Camp stations to provide looped service to the New Camp Substation. - Replace existing control house at Hatfield Station. 	

	Proposed Solution	Alternative Solution 1	Alternative Solution 2
Baseline Components	<ul style="list-style-type: none"> - Reconfigure the New Camp 69 kV Tap. - Construct approximately 4.2 miles of 69 kV transmission line from New Camp substation to Orinoco substation (proposed New Camp – Orinoco 69 kV Line). - Construct approximately 2.3 miles of 69 kV transmission line from Orinoco Substation to Stone Substation (proposed Orinoco – Stone 69 kV Line). 	<ul style="list-style-type: none"> - Reconfigure the New Camp 69 kV Tap. - Expand the Hatfield Station to allow installation of new 138/69/12kV 130 MVA transformer and related equipment. - At Hatfield substation, expansion of the 138kV and 69kV buses to allow the additional transformer installation and allow the new 69kV line to New Camp substation. - At Hatfield substation, Install a 138kV breaker on the Inez line, new 69kV transformer low side breaker and 138kV circuit switcher. 	<ul style="list-style-type: none"> - Reconfigure the New Camp 69 kV Tap. - Install new 23 MVAR capacitor bank and a 69kV capacitor switcher at the Hatfield substation. - Expand the Hatfield Station to allow for interconnection of the station to the new 69kV line to New Camp. - Replace 9.6 MVAR capacitor bank and associated equipment at Johns Creek substation with a new 23 MVAR capacitor bank. - Installation of a new 11.5 MVAR capacitor bank, a 69kV capacitor bank switcher, and a 69 kV bus at the Sidney substation; and, - Expand Kimper substation and installation of new 11.5 MVAR capacitor bank and 69kV cap bank switcher.

ⁱ The preferred solutions and the alternatives should be considered as indivisible and mutually exclusive projects.



BELFRY AREA

TRANSMISSION LINE PROJECT

Kentucky Power representatives plan to upgrade the electric transmission grid in Pike County. The Belfry Area Transmission Line Project involves building 6-8 miles of 69-kilovolt (kV) electric transmission line and an electrical substation to enhance electric reliability for area customers.



WHAT

- The project involves:
- Building 6-8 miles of 69-kV transmission line
 - Retiring approximately 9 miles of 46-kV transmission line
 - Building the Orinoco Substation
 - Retiring the Belfry Substation

This project involves filing an application with the Kentucky Public Service Commission. Public comment period for this project closes September 23, 2021.

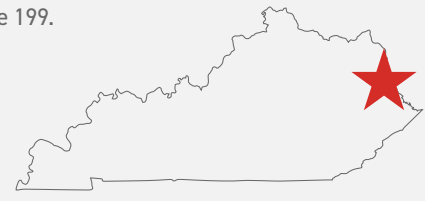
WHY

- Project benefits include:
- Retiring approximately 9 miles of transmission line that includes wooden poles from the 1940's. The line has experienced multiple power outages in recent years.
 - Providing a second source of power to customers served from the New Camp Substation.
 - Upgrading the power grid from a 46-kV system to 69-kV, strengthening the local electric system and increasing reliability for area customers.

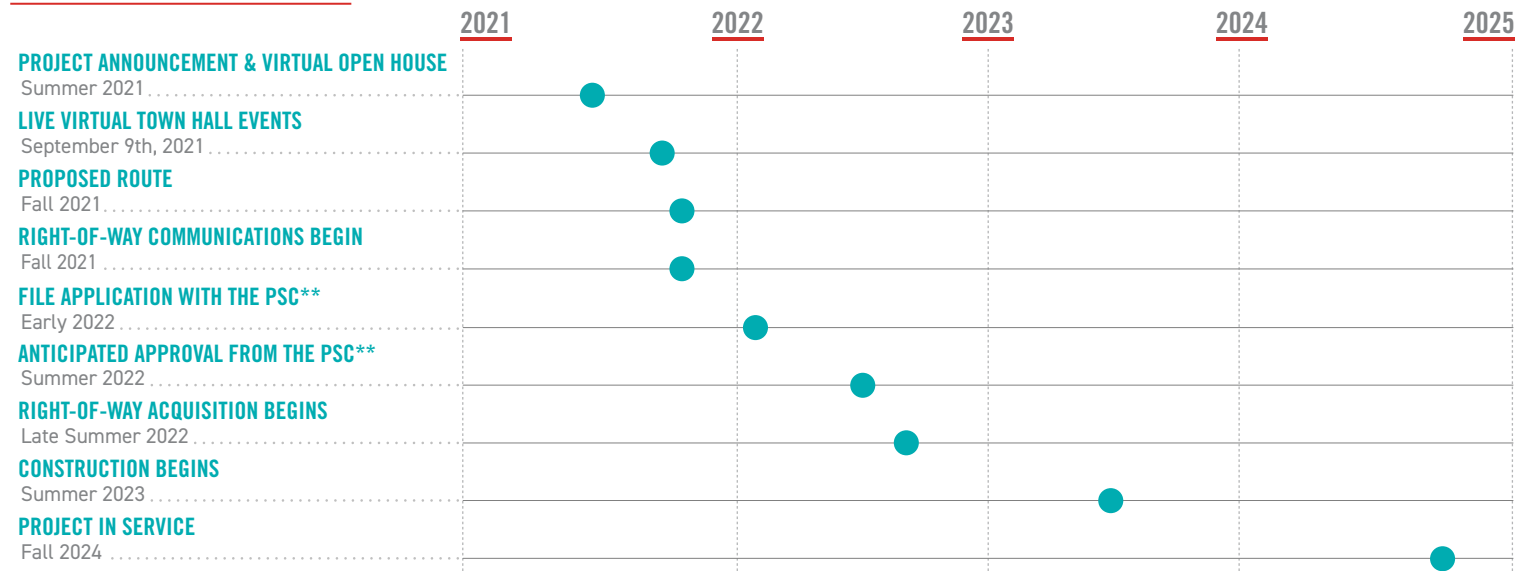
WHERE

The project begins at the New Camp Substation in South Williamson and continues southeast to the proposed Orinoco Substation located along Route 119.

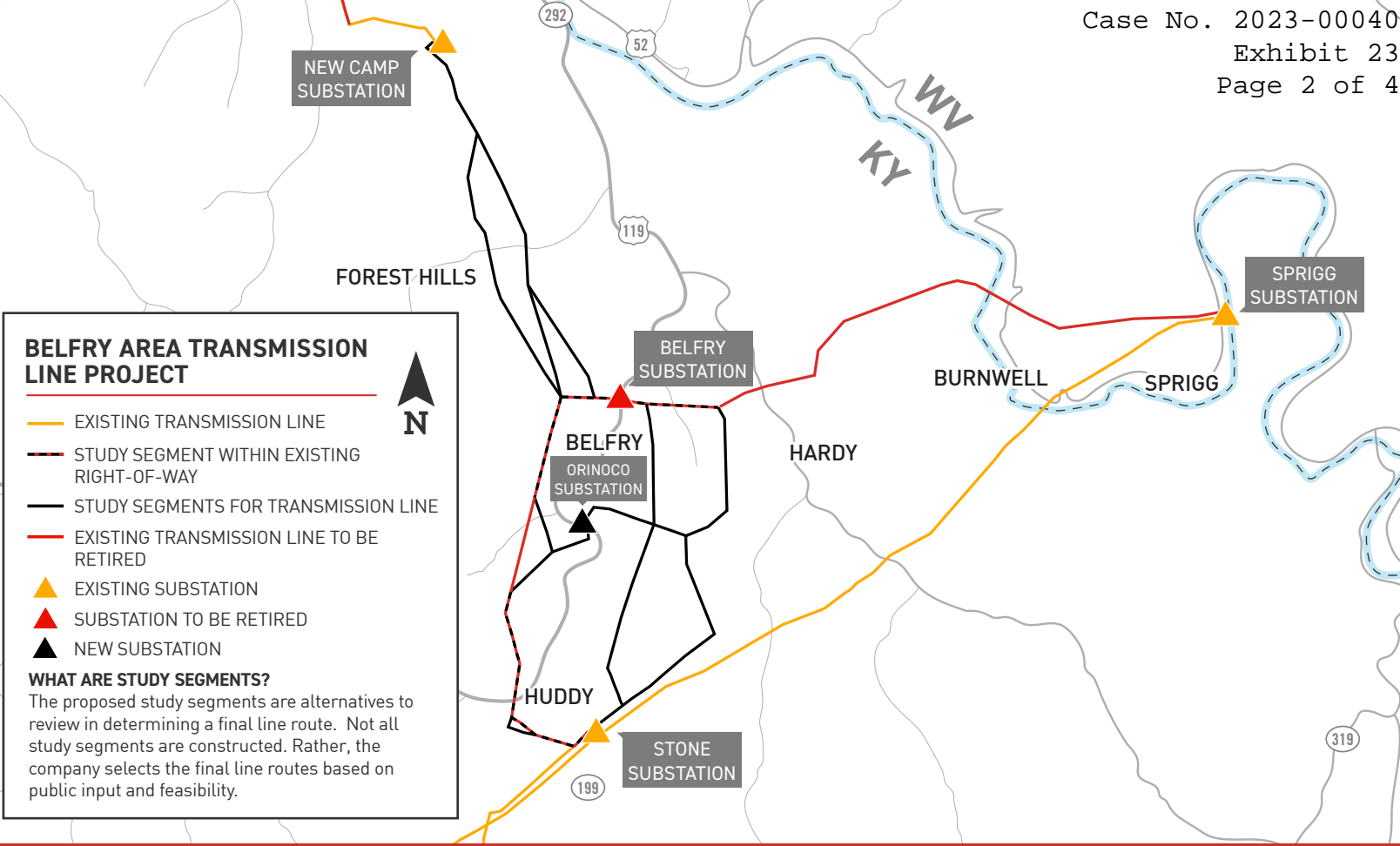
From there the project continues south through Belfry to the Stone Substation near Route 199.



PROJECT SCHEDULE



**Kentucky Public Service Commission *Timeline subject to change



TYPICAL STRUCTURES

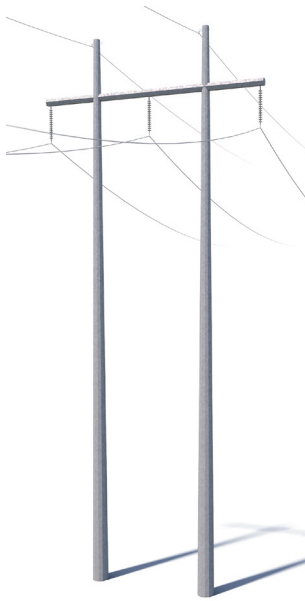
Crews plan to install primarily H-frames. At certain points, crews could use Lattice towers and three-pole structures with guy wire.

Typical Structure Height:

Approximately 80-100 feet*

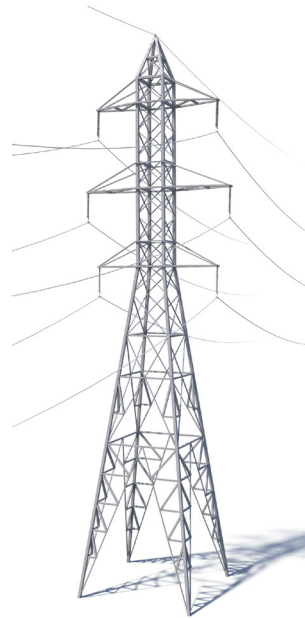
Typical Right-of-Way Width:

Approximately 100 feet*

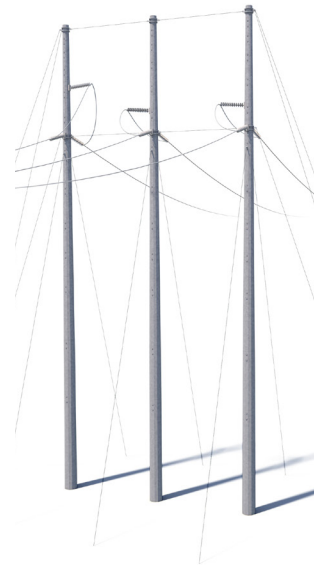


*PRIMARY STRUCTURE TO BE USED

H-FRAME*



LATTICE TOWER



THREE-POLE STRUCTURES

*Exact structure, height and right-of-way requirements may vary

KENTUCKY POWER VALUES YOUR INPUT ABOUT THIS PROJECT. PLEASE SEND COMMENTS AND QUESTIONS TO:

CORTNEY MUSTARD

Project Outreach Specialist

833-760-0604

KentuckyPowerOutreach@aep.com

KentuckyPower.com/Belfry





An **AEP** Company

BOUNDLESS ENERGY™

August 26, 2021

IMPORTANT MESSAGE ABOUT YOUR PROPERTY

Name
Address
City, State Zip
MAP ID:

Subject: Belfry Area Transmission Line Project Announcement – Invitation to Virtual Open House & Live Virtual Town Hall

Dear Neighbor,

You are receiving this letter because you own property or live in the area where Kentucky Power representatives plan to upgrade the local power grid.

The Belfry Area Transmission Line Project in Pike County involves:

- Building 6-8 miles of 69-kilovolt (kV) transmission line
- Retiring approximately 9 miles of 46-kV transmission line
- Building the Orinoco Substation
- Retiring the Belfry Substation

Installing modern equipment and upgrading facilities reduces the need for frequent equipment maintenance and improves electric service reliability by providing a second source of power to customers served by the New Camp Substation.

We are committed to keeping you informed about this project while also keeping our customers and employees safe and healthy during COVID-19. We invite you to learn more and share your input in the ways listed below.

MATERIALS ENCLOSED WITH THIS LETTER:

- Review the enclosed fact sheet for additional project information.
- Locate your property on the enclosed map (please reference the Map ID at the top of this letter to find your property on the map). Feel free to write notes on the map for our project team to review.
- Complete the enclosed comment card and mail it back to us (along with the map if you've written notes on it) in the self-addressed, stamped envelope provided.

PROJECT WEBSITE WITH VIRTUAL OPEN HOUSE:

Please visit **KentuckyPower.com/Belfry** to access project information, view an interactive map, enter our virtual open house and submit comments through a "Contact Us" link.

LIVE VIRTUAL TOWN HALLS:

We plan to host two live virtual town hall events featuring a presentation from the Kentucky Power project team, followed by a Q&A session:

- **Thursday, September 9, 2021 from noon to 1 p.m.**

If joining by phone, dial **1-415-655-0001** and enter the following access code when prompted: **161 978 3600**

If joining online, visit **KentuckyPower.com/BelfryTownHall1**, Event password: **Belfry**

- **Thursday, September 9, 2021 from 5 p.m. to 6 p.m.**

If joining by phone, dial **1-415-655-0001** and enter the following access code when prompted: **161 791 3291**

If joining online, visit **KentuckyPower.com/ BelfryTownHall2**, Event password: **Belfry**



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BOUNDLESS ENERGY™

Please share your input on this project by Thursday, September 23, 2021. We welcome and encourage your feedback.

Our team plans to use your input to determine a power line route that minimizes impact to the community and environment. When sharing your input please feel free to include information about your property, such as:

- Historically significant buildings or landmarks such as cemeteries
- Natural features such as wetlands or springs
- Future plans for your property

We look forward to receiving your feedback.

Sincerely,

Cortney Mustard

Cortney Mustard
Outreach Specialist
833-760-0604
KentuckyPowerOutreach@aep.com