

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

In the Matter of:

ELECTRONIC APPLICATION OF JACKSON	)	
PURCHASE ENERGY CORPORATION FOR	)	CASE NO.
AUTHORITY TO EXTEND ITS DEBT LIMIT;	)	2026-00033
ESTABLISH A PERPETUAL LINE OF CREDIT;	)	
AND ENTER DEBT OBLIGATIONS	)	

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**VERIFIED APPLICATION**

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Comes now Jackson Purchase Energy Corporation, (“Jackson Purchase” or the “Applicant”), by and through counsel, pursuant to KRS 278.300, 807 KAR 5:001 Sections 4, 7, 12, 14, 18 and other applicable law, and for its Application requesting that the Kentucky Public Service Commission (“Commission”) enter an Order for authorization to increase its maximum debt limit; change its revolving line of credit to a perpetual line of credit (“LOC”); and, enter into a loan agreement. Jackson Purchase respectfully pleads as follows:

**I. INTRODUCTION AND FILING REQUIREMENTS**

1. Jackson Purchase is a not-for-profit, member-owned, rural electric distribution cooperative organized under KRS Chapter 279. Jackson Purchase is engaged in the business of distributing retail electric power to approximately 30,000 members in the Kentucky counties of Ballard, Carlisle, Graves, Livingston, Marshall and McCracken. It owns approximately 3,000 circuit miles of distribution line in its service territory and purchases its power requirements from Big Rivers Electric Corporation pursuant to a Wholesale Power Contract dated October 14, 1977,

and subsequent amendments. Jackson Purchase is a “utility” as that term is defined in KRS 278.010(3)(a), and subject to the rates and service jurisdiction of the Commission.

2. Pursuant to 807 KAR 5:002, Section 14(1), Jackson Purchase’s mailing address is 6525 U.S. Hight 60 West, Paducah, Kentucky 42001. Jackson Purchase’s electronic mail address is meredith.kendall@jpenergy.com. Jackson Purchase’s telephone number is (270) 442-7321 and its fax number is (270) 441-0866. Jackson Purchase requests the following individuals be included on the service list:

Greg Grissom, President & Chief Executive Officer

greg.grissom@jpenergy.com

Meredith Kendall, Chief Financial Officer and Vice-President of Finance and Accounting

meredith.kendall@jpenergy.com

L. Allyson Honaker, Counsel for Jackson Purchase

allyson@hloky.com

Heather S. Temple, Counsel for Jackson Purchase

heather@hloky.com

Meredith L. Cave, Counsel for Jackson Purchase

meredith@hloky.com

3. Pursuant to 807 KAR 5:001, Section 14(1), the facts upon which this Application is based are as follows: in order to ensure the Applicant’s liquidity and ability to make investments that will enable it to serve its Owner-Members, the Applicant is seeking approval to increase its maximum debt limit (“MDL”) to \$250 million; enter into a \$10 million PowerVision Loan with the National Rural Utilities Cooperative Finance Corporation (“CFC”); and increase its LOC with CFC from \$5 million to \$10 million and change the LOC from revolving to perpetual. Jackson

Purchase believes this financial plan will allow it to complete its United States Department of Agriculture (“USDA”) Rural Utility Service (“RUS”) Construction Work Plan and give the Cooperative the additional capital to maintain its financial metrics. Additional information regarding the use of the loan can be found in Paragraph 12 to this Application.

4. Pursuant to 807 KAR 5:001, Section 14(2), Jackson Purchase is a Kentucky corporation, in good standing, and was incorporated on June 12, 1937. A Certificate of Good Standing is attached to this Application as **Exhibit 1**.

5. Pursuant to 807 KAR 5:001, Section 18(1)(b), a description of Jackson Purchase’s property, field of its operation, and statement of original cost of Applicant’s property are provided in **Exhibit 2** of this Application.

6. Pursuant to 807 KAR 5:001, Section 18(1)(c), Jackson Purchase states it is not issuing any stock.

7. Pursuant to 807 KAR 5:001 Section 18(1)(d), the proceeds of the proposed transaction(s) will be used to fund ongoing capital expenditures associated with its Construction Work Plan and for general corporate purposes.

8. Pursuant to 807 KAR 5:001 Section 18(1)(e), there is no property currently planned to be specifically acquired or constructed directly by the proceeds of the transaction. The authority to raise the MDL is necessary to enter the PowerVision Loan, which will be used to fund ongoing capital expenditures associated with the Construction Work Plan and general corporate purposes. The increase in the LOC and changing of the terms are for general corporate purposes.

9. Pursuant to 807 KAR 5:001, Section 18(1)(f), the authority to raise the MDL, enter the PowerVision Loan, and the perpetual LOC will not be utilized to discharge or refund obligation.

10. Pursuant to 807 KAR 5:001 Section 18(2)(a), a financial exhibit as described in Section 12 of 807 KAR 5:001 is attached hereto and incorporated herein as **Exhibit 3**. Unless otherwise specified, pursuant to 807 KAR 5:001, Section 12(1), said exhibits cover operations for the consecutive twelve (12) month period ending November 30, 2025, which is not more than ninety (90) days prior to the date this Application is filed, and contains the following information:

a. Pursuant to 807 KAR 5:001, Section 12(2)(a) – (c), Applicant is a not-for-profit rural electric cooperative corporation which has no stock authorized, issued, or outstanding.

b. Pursuant to 807 KAR 5:001, Section 12(2)(d), Jackson Purchase has a “Full Title of Document” (“Mortgage”). The mortgage was entered on June 3, 2024. The amount of indebtedness authorized is \$200 million. As of November 30, 2025, Jackson Purchase has \$95,364,089.11 outstanding.<sup>1</sup> There are no sinking funds associated with the Mortgage.

c. Pursuant to 807 KAR 5:001, Section 12(2)(e) – (g), a description of the Applicant’s Bonds and Notes Outstanding is included in **Exhibit 4**. Jackson Purchase has no other forms of indebtedness.

d. Pursuant to 807 KAR 5:001, Section 12(2)(h), Jackson Purchase has no capital stock and has paid no dividends at any time during the five previous fiscal years.

e. Pursuant to 807 KAR 5:001, Section 12(2)(i), a detailed income statement and balance sheet are provided in **Exhibit 3**.

11. Pursuant to 807 KAR 5:001, Section 18(2)(b), Jackson Purchase’s mortgage was not originally approved by the Commission because it is backed by RUS and is not subject to Commission approval pursuant to KRS 278.300(10). Jackson Purchase is providing a copy of the mortgage as **Exhibit 5**.

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<sup>1</sup> Please see Application, Exhibit 5, Direct Testimony of Meredith Kendall for information regarding the face value of Jackson Purchase’s debt compared to the actual principal owed.

12. Pursuant to 807 KAR 5:001, Section 18(2)(c), there is no specific proposed acquisition of property or proposed construction associated with this application, other than completing Jackson Purchase's Construction Work Plan. Jackson Purchase is attaching a copy of its Construction Work Plan as **Exhibit 6**.

13. Resolutions from the Applicant's Board of Directors for this Application and the issuance of indebtedness are attached as **Exhibit 7**.

14. Jackson Purchase is providing the Direct Testimony of Meredith Kendall, Chief Financial Officer and Vice-President of Finance & Accounting as **Exhibit 8**.

### **III. REQUEST FOR FINANCING**

15. KRS 278.300(1) provides that no utility shall assume any obligation or liability until authorized by the Commission. The authorization to issue evidence of indebtedness may only be granted if the indebtedness is for a lawful object within the purpose of the utility, is necessary or appropriate for the proper performance by the utility, will not impair the utility's ability to perform that service, and that the issuance is reasonably necessary and appropriate for that purpose.<sup>4</sup>

16. The issue of these evidences of indebtedness in this Application: is for a lawful objective within the purpose of Jackson Purchase; is necessary or appropriate for the proper performance by Jackson Purchase; will not impair Jackson Purchase's ability to perform that service; and is reasonably necessary and appropriate for that purpose. The financing proposed in this proceeding will enable Jackson Purchase to assist in the financing of the construction of projects in the Construction Work Plan that are needed to allow Jackson Purchase to continue to

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<sup>4</sup> See KRS 278.300(3).

provide safe and reliable service to its members. The financing will also allow Jackson Purchase to maintain its financial metrics and cash flow.

17. Jackson Purchase is requesting an increase in its MDL referred to in Schedule A: Part One of its Mortgage with RUS from \$200 million to \$250 million. The maximum debt limit calculation is based on the Cooperative's face value of all outstanding debt, which is currently \$197,447,918.33. However, Jackson Purchase's outstanding long-term debt was \$95,364,089 as of November 30, 2025.

18. Jackson Purchase is requesting to enter into a \$10 million Power Vision Loan with CFC. The Cooperative has no specific intent to use these funds, other than as supplemental funding in case of an emergency or in the case that the Cooperative cannot access funds through RUS.

19. Jackson Purchase is requesting to increase its line of credit with CFC from \$5 million to \$10 million. Funds from lines of credit are used to temporarily supplement the cooperative's cash flow. The line of credit agreement would still require Jackson Purchase to pay down the line of credit principal balance for a period of at least 5 consecutive business days for each 12-month period while the Agreement is in effect. The Cooperative also wishes to convert the line of credit agreement from a revolving agreement to a perpetual agreement, assuming no other changes are made to the agreement, to simplify recordkeeping and minimize administrative burden.

### **CONCLUSION**

WHEREFORE, on the basis of the foregoing, Applicant respectfully requests that the Commission enter an Order allowing:

- 1) Authorization to increase Jackson Purchase's maximum debt limit on its mortgage from \$200 million to \$250 million;

- 2) Apply and enter into a \$10 million Power Vision loan with CFC;
- 3) Increase its line of credit with CFC from \$5 million to \$10 million and move from a revolving line of credit to a perpetual line of credit; and
- 4) All other relief to which the Applicant may be entitled.

This 12<sup>th</sup> day of February 2026.

Respectfully submitted,

*Heather S. Temple*

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L. Allyson Honaker  
Heather S. Temple  
Meredith L. Cave  
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allyson@hloky.com  
heather@hloky.com  
meredith@hloky.com

*Counsel for Jackson Purchase Energy Corporation*

### **CERTIFICATE OF SERVICE**

This is to certify that the foregoing electronic filing was transmitted to the Commission for filing on February 12, 2026; that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding; by virtue of the Commission's July 22, 2021 Order in Case No. 2020-00085, no paper copies of this filing will be made.

*Heather S. Temple*

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*Counsel for Jackson Purchase Energy Corporation*

VERIFICATION

The undersigned, on behalf of Jackson Purchase Energy Corporation and pursuant to KRS 278.300(2), hereby verifies that all of the information contained in the foregoing Application is true and correct to the best of my knowledge, opinion and belief as of this 11<sup>th</sup> day of February, 2026.

Jackson Purchase Energy Corporation.

BY: Meredith Kendall

ITS: Vice President of Finance & Accounting

COMMONWEALTH OF KENTUCKY

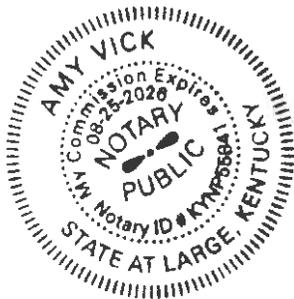
COUNTY OF MCCRACKEN

The foregoing Verification was signed, acknowledged and sworn to before me the 11<sup>th</sup> day of February, 2026 by Meredith Kendall, the Vice President of Finance and Accounting of Jackson Purchase Energy Corporation, a Kentucky corporation, on behalf of the corporation.

[Signature]  
NOTARY PUBLIC

MY COMMISSION EXPIRES: 8/25/2026

NOTARY ID. NO. KYNP55841



# **Exhibit 1**

**Commonwealth of Kentucky**  
**Michael G. Adams, Secretary of State**

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

**Certificate of Existence**

Authentication number: 310441

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

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

**JACKSON PURCHASE ENERGY CORPORATION**

JACKSON PURCHASE ENERGY CORPORATION is a corporation duly incorporated and existing under KRS Chapter 14A and KRS Chapter 273, whose date of incorporation is June 12, 1937 and whose period of duration is perpetual.

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

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this 29<sup>th</sup> day of April, 2024, in the 232<sup>nd</sup> year of the Commonwealth.



*Michael G. Adams*

Michael G. Adams  
Secretary of State  
Commonwealth of Kentucky  
310441/0025598

## **Exhibit 2**

## **JACKSON PURCHASE ENERGY CORPORATION**

### **EXHIBIT 2 – DESCRIPTION OF PROPERTY**

#### **807 KAR 5:001, Section 18(1)(b)**

Jackson Purchase Energy Corporation (“Jackson Purchase”), headquartered in Paducah, Kentucky, is a not-for-profit electric distribution cooperative. Jackson Purchase purchases wholesale electricity from Big Rivers Electric Corporation. Jackson Purchase then provides electric power service to approximately 30,000 members in the Kentucky counties of Ballard, Carlisle, Graves, Livingston, Marshall and McCracken. Jackson Purchases owns over 3,000 miles of distribution lines and the substations necessary to support this distribution line infrastructure.

As of November 30, 2025, Jackson Purchase had total utility plant in-service at an original cost of \$232,272,033 (gross) and construction work-in-progress at an original cost of \$6,621,453.

## **Exhibit 3**

## **JACKSON PURCHASE ELECTRIC COOPERATIVE**

### **FINANCIAL EXHIBIT**

#### **807 KAR 5:001 Section 12**

- 807 KAR 5:001 Section 12 (1)(a) – the financial exhibit is based on operations covering a period not more than ninety (90) days prior to the date this application is filed.
- 807 KAR 5:001 Section 12 (2)(a)-(c) – Jackson Purchase is a not-for-profit rural electric cooperative corporation which has no stock authorized, issued, or outstanding.
- 807 KAR 5:001 Section 12 (2)(d) – Jackson Purchase has a “Restated Mortgage and Security Agreement” (“Mortgage”). The Mortgage was executed on June 3, 2024 and has not been modified. The amount of indebtedness authorized to be secured is up to and including \$200 million. As of November 30, 2025, Jackson Purchase has 197,447,918.33 in original face value outstanding with \$95,364,089.11 outstanding principal. There are not sinking fund provisions associated with the Mortgage.
- 807 KAR 5:001 Section 12 (2)(e)-(g) – a description of Jackson Purchase’s bonds and notes outstanding are included in Exhibit 4. Jackson Purchase does not have other forms of indebtedness.
- 807 KAR 5:001 Section 12 (2)(h) – Jackson Purchase has no capital stock and has paid no dividends at any time during the five previous fiscal years.
- 807 KAR 5:001 Section 12 (2)(i) – a detailed income and balance sheet is included in this Exhibit 3.

**807 KAR 5:001, Section 12(2)(i)**

**Detailed Income and Balance Sheet**

<b>FINANCIAL AND STATISTICAL REPORT</b>	<b>BORROWER DESIGNATION</b> Kentucky 20 McCracken
	<b>BORROWER NAME</b> Jackson Purchase Energy Corporation
	<b>ENDING DATE</b> November 30, 2025

**CERTIFICATION**

We hereby certify that the entries in this report are in accordance with the accounts and other records of the system and reflect the status of the system to the best of our knowledge and belief.

*Meredith Kendall*

Signature of Office Manager or Accountant

*1/8/26*

Date

*Ray H. Anderson*

Signature of Manager

*1/8/26*

Date

**PART A. STATEMENT OF OPERATIONS**

ITEM	YEAR-TO-DATE			THIS MONTH (d)
	LAST YEAR (a)	THIS YEAR (b)	BUDGET (c)	
1. Operating Revenue and Patronage Capital	87,455,573	104,053,128	73,117,308	7,856,912
2. Power Production Expense	0	0	0	0
3. Cost of Purchased Power	63,191,536	76,255,439	44,786,147	6,060,075
4. Transmission Expense				
5. Distribution Expense - Operation	3,898,563	3,524,462	4,656,017	410,841
6. Distribution Expense - Maintenance	5,293,010	7,470,668	8,616,113	683,623
7. Consumer Accounts Expense	1,024,690	1,035,760	1,091,075	83,806
8. Customer Service and Informational Expense	0	0	0	0
9. Sales Expense	9,174	5,924	5,500	(991)
10. Administrative and General Expense	3,784,777	3,873,976	4,297,330	322,836
11. Total Operation & Maintenance Expense (2 thru 10)	<b>77,201,750</b>	<b>92,166,229</b>	63,452,182	<b>7,560,190</b>
12. Depreciation & Amortization Expense	7,137,022	7,546,702	7,463,960	700,889
13. Tax Expense - Property	0	0	0	0
14. Tax Expense - Other	77,852	86,986	85,600	8,308
15. Interest on Long-Term Debt	2,385,991	2,554,506	2,585,319	238,194
16. Interest Charged to Construction (Credit)	0	0	0	0
17. Interest Expense - Other	201,106	306,355	212,840	42,224
18. Other Deductions	1,000	0	1,000	0
19. Total Cost of Electric Service (11 thru 18)	<b>87,004,721</b>	<b>102,660,778</b>	73,800,900	<b>8,549,805</b>
20. Patronage Capital & Operating Margins (1 minus 19)	<b>450,852</b>	<b>1,392,350</b>	(683,592)	<b>(692,893)</b>
21. Non Operating Margins - Interest	247,605	192,780	116,382	11,796
22. Allowance for Funds Used During Construction	0	0	0	0
23. Income (Loss) from Equity Investments	0	0	0	0
24. Non Operating Margins - Other	29,476	49,026	0	0
25. Generation & Transmission Capital Credits	0	0	0	0
26. Other Capital Credits & Patronage Dividends	417,920	612,641	160,000	0
27. Extraordinary Items	0	0	0	0
28. Patronage Capital or Margins (20 thru 27)	<b>1,145,853</b>	<b>2,246,797</b>	(407,210)	<b>(681,097)</b>

**PART B. DATA ON TRANSMISSION AND DISTRIBUTION PLANT**

ITEM	YEAR-TO-DATE		ITEM	YEAR-TO-DATE	
	LAST YEAR (a)	THIS YEAR (b)		LAST YEAR (a)	THIS YEAR (b)
1. New Services Connected	383	355	5. Miles Transmission		
2. Services Retired	97	109	6. Miles Distribution Overhead	2,342	2,334
3. Total Services In Place	34,039	34,115	7. Miles Distribution Underground	656	662
4. Idle Services (Exclude Seasonal)	3,227	3,250	8. Total Miles Energized (5+6+7)	<b>2,998</b>	<b>2,996</b>

FINANCIAL AND STATISTICAL REPORT		BORROWER DESIGNATION	
		Kentucky 20 McCracken	
		PERIOD ENDING	
		11/30/2025	
<b>PART C. BALANCE SHEET</b>			
<b>ASSETS AND OTHER DEBITS</b>		<b>LIABILITIES AND OTHER CREDITS</b>	
1. Total Utility Plant in Service	232,272,033	28. Memberships	89,460
2. Construction Work in Progress	6,621,453	29. Patronage Capital	53,251,040
<b>3. Total Utility Plant (1+2)</b>	<b>238,893,486</b>	30. Operating Margins - Prior Years	0
4. Accum. Provision for Depreciation and Amort	89,424,671	31. Operating Margins - Current Year	1,392,350
<b>5. Net Utility Plant (3-4)</b>	<b>149,468,815</b>	32. Non-Operating Margins	854,447
6. Nonutility Property - Net	0	33. Other Margins & Equities	755,658
7. Investment in Subsidiary Companies	0	<b>34. Total Margins &amp; Equities (28 thru 33)</b>	<b>56,342,955</b>
8. Invest. in Assoc. Org. - Patronage Capital	2,996,997	35. Long-Term Debt RUS	76,192,351
9. Invest. in Assoc. Org. - Other - General Funds	0	(Payments-Unapplied (\$ _____))	0
10. Invest in Assoc. Org. - Other - Nongeneral Funds	1,945,940	36. Long-Term Debt - Other (Net)	19,171,738
11. Investments in Economic Development Projects	0	(Payments-Unapplied (\$ _____))	0
12. Other Investments	0	<b>37. Total Long-Term Debt (35+36)</b>	<b>95,364,089</b>
13. Special Funds	1,285	38. Obligations Under Capital Leases	0
<b>14. Total Other Property &amp; Investments (6 thru 13)</b>	<b>4,944,222</b>	39. Accumulated Operating Provisions	2,560,414
15. Cash-General Funds	2,990,916	<b>40. Total Other Noncurrent Liabilities (38+39)</b>	<b>2,560,414</b>
16. Cash-Construction Funds-Trustee	0	41. Notes Payable	9,000,000
17. Special Deposits	0	42. Accounts Payable	8,237,536
18. Temporary Investments	0	43. Consumers Deposits	3,738,899
19. Notes Receivable - Net	0	44. Other Current & Accrued Liabilities	2,512,852
20. Accounts Receivable - Net Sales of Energy	7,229,229	<b>45. Total Current &amp; Accrued Liabilities (41 thru 44)</b>	<b>23,489,287</b>
21. Accounts Receivable - Net Other	786,052	46. Deferred Credits	(142,330)
22. Materials & Supplies - Electric and Other	5,621,306	<b>47. Total Liabilities &amp; Other Credits (34+37+40+45+46)</b>	<b>177,614,415</b>
23. Prepayments	595,172	<b>ESTIMATED CONTRIBUTIONS IN AID OF CONSTRUCTION</b>	
24. Other Current & Accrued Assets	5,911,281	53. Balance Beginning of the Year	18,722,170
	<b>23,133,956</b>	54. Amount Received This Year (Net)	692,443
26. Deferred Debits	67,422	<b>55. Total Contributions in Aid of Construction</b>	<b>19,414,613</b>
<b>27. Total Assets &amp; Other Debits (5+14+25+26)</b>	<b>177,614,415</b>		
<b>PART D. NOTES TO FINANCIAL STATEMENTS</b>			
<b>Part C - Estimated Contributions in Aid of Construction</b>			
An accurate estimate of Contributions in Aid of Construction on plant cannot be made. The amount shown reflects contributions made since inception of tracking.			
THE SPACE BELOW IS PROVIDED FOR IMPORTANT NOTES REGARDING THE FINANCIAL STATEMENT CONTAINED IN THIS REPORT.			

## **Exhibit 4**

Exhibit 4 is an Excel Spreadsheet being provided separately.

## **Exhibit 5**

Jackson Purchase is proving its Restated Mortgage and Security Agreement under seal pursuant to a Motion for Confidential Treatment.

## **Exhibit 6**

# Jackson Purchase Energy Corporation

## Kentucky 20 McCracken

### CONSTRUCTION WORK PLAN (CWP)

Jan 2024 – Dec 2027

Prepared By:

Travis Spiceland, P.E.  
Vice President of Engineering  
Registration No. 37856

I certify that this 2024-2027 Construction Work Plan was prepared by me or under my direct supervision, and that I am a duly registered professional engineer under the laws of the Commonwealth of Kentucky.

10/5/2023

Date

By: Travis Spiceland, P.E.

Travis Spiceland, P.E.

**JACKSON PURCHASE ENERGY CORPORATION  
2024 – 2027 CONSTRUCTION WORK PLAN**

**Kentucky 20 McCracken**

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## **Executive Summary**

### **Purpose of Report**

This report documents the engineering analysis of the Jackson Purchase Energy Corporation (JPEC) electric distribution system and summarizes the proposed construction for the four-year planning period from 2024-2027.

The report also provides engineering support, in the form of descriptions, costs and justification of required new facilities for a loan application to RUS in order to finance the proposed construction program.

### **General Basis of Study**

For this 2024-2027 Construction Work Plan (CWP), information from JPEC's Long Range Plan (LRP), previous CWP and our current Load Forecast (LF) was considered. System loading was obtained by using 2018-2022 non-coincident peak loads grown at rates historically established. This method provides design loading of 184.4 MW for Summer and 185.7 MW for Winter in year 2027. The RUS approved 2012 LRP called for a peak of 238 MW while the 2023 LF calls for a peak of 155 MW. The load forecast, which was completed by JPEC's power supplier Big Rivers Electric Corporation (BREC), includes potential impacts of future Demand Side Management (DSM) programs as well as electric vehicle (EV) saturation.

An analysis, using RUS guidelines and the design criteria herein, of thermal loading, voltages, and physical conditions was performed on all the substations, distribution lines and major equipment of the existing system. Milsoft's WindMill software was used to analyze the distribution circuits during the peak loading periods. For each deficiency that was determined, alternative solutions were investigated and economically evaluated so that the most cost-effective construction, if required, could be proposed.

The Cooperative's 2012 LRP load projections and recommendations were reviewed and found to be adequate for this four-year planning period. All the construction proposed herein is consistent with the LRP unless otherwise noted and explained.

The Cooperative's 2019 Operations and Maintenance Review, (Review Rating Summary; RUS Form 300), was used to determine construction required to replace physically deteriorated equipment and material, upgrade portions of the system to conform with code or safety requirements, and/or improve reliability or quality of service.

Any new distribution or power supply construction requirements were considered simultaneously as a "one system" approach for the orderly and economic development of the total system. All proposed construction and recommendations relative to power supply and delivery were discussed with the Cooperative's power supplier, BREC.

### **Results**

Upon completion of the proposed construction, the system will provide adequate and dependable service to nearly 30,885 meters; 25,637 residential, 5,191 small

commercial, 15 large commercial and industrial loads. Average monthly residential usage is projected to be 1,195 kWh.

Although no new loads are defined, there are considerable amounts of developable land for both residential and industrial growth in the JPEC territory.

## Service Area

Jackson Purchase Energy Corporation, whose headquarters are in Paducah, Kentucky, provides service to customers in Ballard, Carlisle, Graves, Livingston, Marshall, and McCracken Counties in western Kentucky.

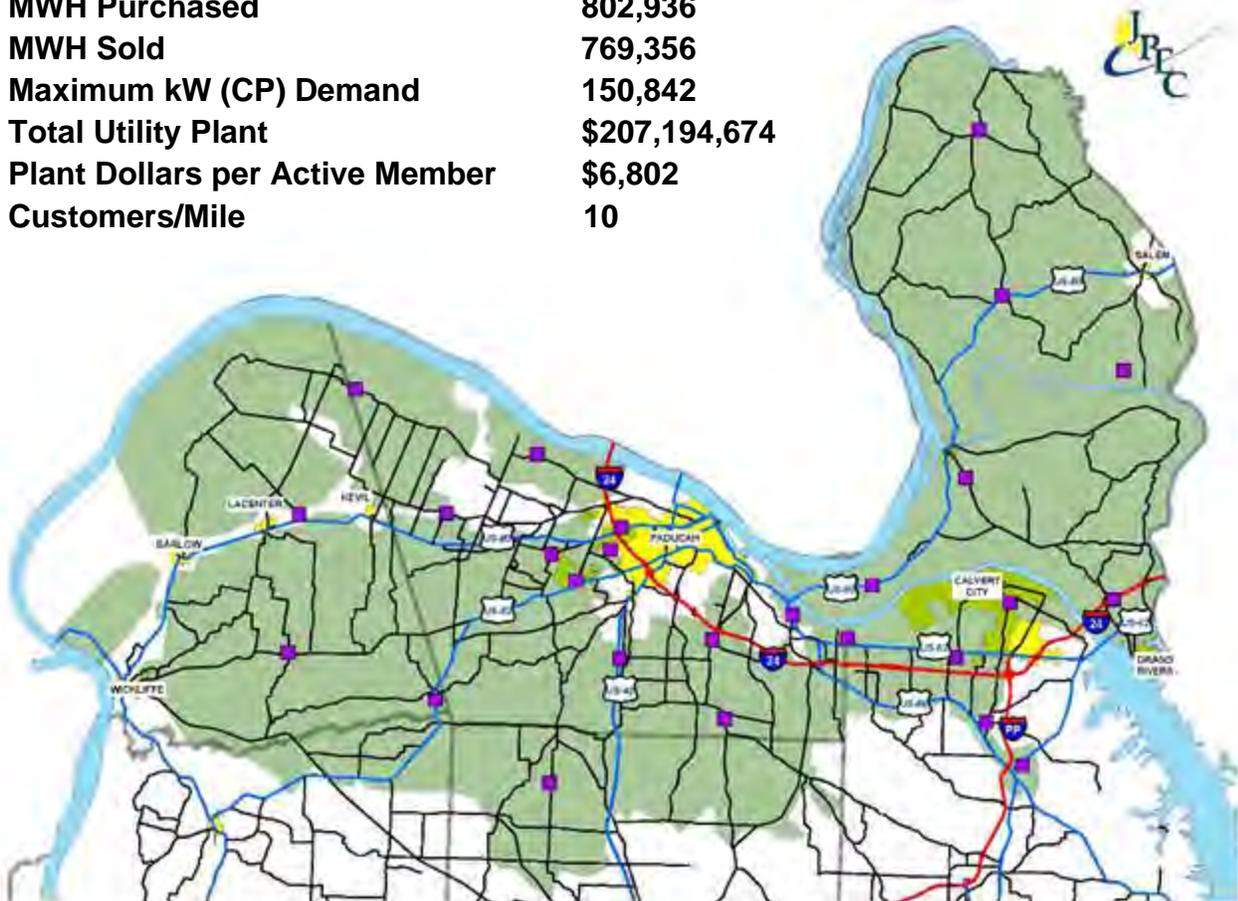
JPEC's service area is comprised mostly of rolling hills and farmland. Much of the service area is rural/residential in nature, but JPEC also serves strong commercial, industrial, and tourism loads. JPEC's service area is adjacent to Kentucky Lake, the Mississippi and Ohio Rivers.

Interstate 24, which links Nashville to the Midwest, bisects the service area from east to west. A section of the new Interstate 69 runs along the eastern service area along with other major state and federal highways that run throughout the service area. JPEC service area also contains major railway lines, a regional airport, and four rivers.

JPEC operates 29 delivery points that are served at 69 kV and distributes power at a primary voltage of 7.2/12.47 kV over approximately 2,988 miles of line. JPEC also has two direct serve customers. One is served at 69/4.6 kV and the other is served at 69/13 kV.

The following data is from Jackson Purchase Energy Corporation's 12/31/2022 RUS Form 7:

<b>Total Number of Consumers</b>	<b>30,459</b>
<b>MWH Purchased</b>	<b>802,936</b>
<b>MWH Sold</b>	<b>769,356</b>
<b>Maximum kW (CP) Demand</b>	<b>150,842</b>
<b>Total Utility Plant</b>	<b>\$207,194,674</b>
<b>Plant Dollars per Active Member</b>	<b>\$6,802</b>
<b>Customers/Mile</b>	<b>10</b>





## **Summary of Construction Program and Costs**

JPEC’s distribution system was analyzed to identify the construction requirements needed to adequately serve the projected CWP load of 185.7 MW. Improvements were identified based on voltage drop, conductor loading, economic conductor analysis and operational experience. An explanation of each system improvement is located in Section IV.

An overall breakdown of proposed construction projects by RUS 740C codes is listed below in Table I-C-1

**Table I-C-1  
System Additions and Improvements Summary**

<b>RUS Form 740C Category</b>	<b>Category Name</b>	<b>Estimated Cost</b>
100	New Distribution Lines	\$ 6,367,708
200	Tie Lines/New Construction	\$ 600,000
300	Conversion & Line Changes	\$ 2,593,504
400	New Substation/Switching/Metering	\$ -
500	Substation/Switching/Metering Changes	\$ 8,775,000
600	Misc. Distribution Equipment	\$ 33,205,686
700	Other Distribution Items	\$ 6,121,639
<b>2024 - 2027 CWP Total</b>		<b>\$ 57,663,537</b>

100 – New overhead and underground line construction

200 – New tie lines

300 – Conversion and line changes

400 – New construction of substations

500 – Substation upgrades, replacements, and other changes

600 - Miscellaneous distribution equipment and pole changes. This includes aged conductor replacements, voltage regulators, switched capacitors, sectionalizing, automated meters, transformers, pole changes, line relocations, and fiber.

700 - Other distribution Items, outdoor lighting, software and hardware for AMI, and SCADA/DA

JACKSON PURCHASE ENERGY CORPORATION 2024-2027 CWP  
COST SUMMARY SPREADSHEET

NEW-CONSTRUCTION - RUS CODE 100

ITEM	RUS CODE	Miles	Avg. \$/Consumer	# Cons	2024	2025	2026	2027	TOTAL
New Underground Construction	101	68.8	\$4,678.73	999	\$1,067,656	\$1,132,249	\$1,200,750	\$1,273,396	\$4,674,051
New Overhead Construction	102	14.5	\$3,840.49	441	\$386,868	\$410,274	\$435,096	\$461,419	\$1,693,657
		83.3							
<b>Total Code 100:</b>				1440	\$1,454,524	\$1,542,523	\$1,635,846	\$1,734,815	<b>\$6,367,708</b>

TIE LINES/NEW CONSTRUCTION - RUS CODE 200

SUB-SECTION	RUS CODE	Original Conductor	INST. COND/#PH	\$/MI	# OF MILES	2024	2025	2026	2027	TOTAL
Draffenville, New Hwy 68 Circuit	201-20*	N/A	750 ALUG	\$500,000	1.2	\$600,000	\$0	\$0	\$0	\$600,000
<b>Total Code 200:</b>				\$ 500,000.00	1.2	\$600,000	\$0	\$0	\$0	<b>\$600,000</b>

LINE CONVERSION / REPLACEMENT - RUS CODE 300

SUB-SECTION	RUS CODE	Original Conductor	INST. COND/#PH	\$/MI	# OF MILES	2024	2025	2026	2027	TOTAL
Burna PROH_00034077 - PROH_00034145	301-12*	1ph #2 ACSR	3ph 1/0 ACSR	\$181,747	2.2	\$0	\$0	\$0	\$399,843	\$399,843
Culp PROH_00028600 - PROH_00028642	342-30	1ph #2 ACSR	3ph 1/0 ACSR	\$164,851	0.55	\$0	\$90,668	\$0	\$0	\$90,668
Cumberland PROH_00033215 - PROH_00033281	315-30	1ph #2 ACSR	3ph 1/0 ACSR	\$157,000	2.51	\$394,070	\$0	\$0	\$0	\$394,070
Draffenville PROH_00031223 - PROH_00031224	366-30	1ph #1/0 ACSR	3ph 1/0 ACSR	\$157,000	0.1	\$15,700	\$0	\$0	\$0	\$15,700
Grand Rivers PROH_00041851 - PROH_00035334	376-30	1ph #2 ACSR	3ph 1/0 ACSR	\$173,093	0.8	\$0	\$0	\$131,551	\$0	\$131,551
Grand Rivers PROH_00035691 to PROH_00035728	339-16*	1ph #2 ACSR	3ph 1/0 ACSR	\$181,747	0.3	\$0	\$0	\$0	\$54,524	\$54,524
Joy PROH_00042185 - PROH_00036619	305-30	1ph #2 and #1/0 ACSR	3ph 1/0 ACSR	\$164,850	2.71	\$0	\$446,744	\$0	\$0	\$446,744
Kansas PROH_00014298 - PROH_00014303	361-30	1ph #2 ACSR	3ph 336 ACSR	\$168,000	1.02	\$0	\$171,360	\$0	\$0	\$171,360
Ledbetter PROH_00038602 - PROH_00038616	331-30	1ph #2 ACSR	3ph 1/0 ACSR	\$157,000	0.41	\$64,370	\$0	\$0	\$0	\$64,370
Ledbetter PROH_00042326 - PROH_00038936	331-31	1ph #2 ACSR	3ph 1/0 ACSR	\$164,852	0.25	\$0	\$41,213	\$0	\$0	\$41,213
Lovellville PROH_00044960 - PROH_00010373	349-30	1ph #2 ACSR	3ph 336 ACSR	\$160,000	0.61	\$97,600	\$0	\$0	\$0	\$97,600
Possum Trot PROH_00027430 - PROH_00027448	378-30	1ph #2 ACSR	3ph 1/0 ACSR	\$181,747	0.47	\$0	\$0	\$0	\$85,421	\$85,421
Possum Trot PROH_00001611 - PROH_00030312	378-31	1ph #2 ACSR	3ph 1/0 ACSR	\$157,000	0.98	\$153,860	\$0	\$0	\$0	\$153,860
Smithland PROH_00001929 - PROH_00040695	332-30	1ph #2 ACSR	3ph 1/0 ACSR	\$173,093	1.24	\$0	\$0	\$214,635	\$0	\$214,635
Smithland PROH_00081251 - PROH_00039826	332-31	1ph #2 ACSR	3ph 1/0 ACSR	\$173,093	1.34	\$0	\$0	\$231,945	\$0	\$231,945
* Carryover from previous plan										
<b>TOTAL CODE 300</b>					15.45	\$725,600	\$749,985	\$578,131	\$539,788	<b>\$2,593,504</b>

SUBSTATION IMPROVEMENTS - RUS CODE 500'S

ITEM	RUS CODE	Original Equipment	Recommended Equipment	# Items	2024	2025	2026	2027	TOTAL
Draffenville - Substation Upgrade	511*		Add recloser to existing structure		\$35,000	\$0	\$0	\$0	\$35,000
Kansas - Substation Upgrade	513		Upgrade recloser source and load switches on each feeder		\$25,000	\$0	\$0	\$0	\$25,000
Kevil - Substation Upgrade	514	Upgrade to 15/20/25 MVA transformer, add ckt regulation, add control house w/ solid state relays			\$0	\$1,000,000	\$2,420,000	\$0	\$3,420,000
New York - Substation Upgrade	508*	Upgrade to solid state relays w/ cabinet, add feeder regulation, add 69kV circuit breaker			\$0	\$1,635,000	\$0	\$0	\$1,635,000
Smithland - Substation Upgrade	515	Upgrade to 15/20/25 MVA transformer, add ckt regulation, add control house w/ solid state relays			\$0	\$0	\$1,000,000	\$2,660,000	\$3,660,000
* Carryover from previous plan									
<b>TOTAL CODE 500</b>					\$60,000	\$2,635,000	\$3,420,000	\$2,660,000	<b>\$8,775,000</b>

MISCELLANEOUS DIST. EQUIPMENT - RUS CODE 600'S

ITEM	RUS CODE	# Items	2024	2025	2026	2027	TOTAL
New Transformers/Meters	601		\$1,668,185	\$6,431,854	\$1,379,423	\$1,460,545	\$10,940,007
Service Upgrades	602		\$178,155	\$188,934	\$200,364	\$212,486	\$779,939
Sectionalizing	603		\$371,528	\$390,104	\$409,609	\$430,090	\$1,601,331
Voltage Regulators	604		\$50,000	\$51,500	\$53,045	\$54,636	\$209,181
Capacitors	605		\$50,000	\$51,500	\$53,045	\$54,636	\$209,181
Pole Replacement	606		\$3,108,587	\$3,296,657	\$3,496,105	\$3,707,619	\$13,608,968
Conductor Replacement	608		\$600,000	\$618,000	\$636,540	\$655,636	\$2,510,176
Smart Grid Fiber	616		\$500,000	\$515,000	\$530,450	\$546,364	\$2,091,814
Misc	607		\$300,000	\$309,000	\$318,270	\$327,818	\$1,255,088
<b>TOTAL CODE 600</b>			<b>\$6,826,455</b>	<b>\$11,852,549</b>	<b>\$7,076,851</b>	<b>\$7,449,831</b>	<b>\$33,205,686</b>

OTHER DIST. ITEMS - RUS CODE 700'S

ITEM	RUS CODE	# Items	2024	2025	2026	2027	TOTAL
Outdoor Lights- Replacement	701		\$1,267,200	\$1,370,477	\$941,061	\$646,196	\$4,224,934
Outdoor Lights-New	702		\$81,609	\$84,898	\$88,319	\$91,879	\$346,705
AMR/AMI Equipment	705		\$1,275,000	\$275,000	\$0	\$0	\$1,550,000
<b>TOTAL CODE 700</b>			<b>\$2,623,809</b>	<b>\$1,730,375</b>	<b>\$1,029,380</b>	<b>\$738,075</b>	<b>\$6,121,639</b>

2024-2027 Kentucky 20 - McCracken

<b>CONSTRUCTION WORK PLAN TOTAL:</b>			<b>\$12,290,388</b>	<b>\$18,510,432</b>	<b>\$13,740,208</b>	<b>\$13,122,509</b>	<b>\$57,663,537</b>
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## **DISTRIBUTION DESIGN CRITERIA**

Each of the following criteria items were reviewed and accepted by the RUS General Field Representative and management of Jackson Purchase Energy Corporation

All construction proposed herein is designed to meet, at a minimum, the standards of adequacy for voltages, thermal loading, safety and reliability on the system as described below.

1. The minimum voltage on primary distribution lines is 118 volts (120 bolt base, 126 volts at source) after no more than 2 stages of regulation beyond the substation.
2. Primary conductors loaded over 60% of their thermal rating (50% for major tie lines between substations) will be evaluated.
3. The following equipment will be evaluated if the nameplate rating is thermally loaded by more than the percentage shown:
  - a. 85% - Power Transformers (OA rating)
  - b. 90% - Substation and Line Voltage Regulators
  - c. 90% - Oil Circuit Reclosers
  - d. 90% - Line Fuses
4. Loading on single phase lines should be limited to no more than 35 amperes to mitigate potential balancing and sectionalizing problems. Exceptions may be allowed, and load shifts or conductor multi-phasing will be recommended on a case-by-case basis.
5. Poles and/or crossarms to be replaced if found to be physically deteriorated by visual inspection and/or test.
6. Capacitor banks should be installed on distribution lines as required to maintain at least a 98% power factor at peak loading conditions. Capacitor switching will be utilized for this purpose as required.
7. Aged Conductors (and associated poles and hardware as required) should be replaced as needed.
8. New substations and existing substation upgrades will be coordinated with Big Rivers Electric Corporation.

## **Distribution Line and Equipment Costs**

Construction cost estimates for the four-year planning period are shown in Table II-B-1. Cost estimates for distribution equipment are shown in Table II-B-2.

**Table II-B-1**  
**Distribution Equipment Cost Estimates**  
**Annual Projected Unit Costs Per Mile**

<b>Size</b>	<b>Type</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
#2 ACSR	Replace 1-PH	\$56,870	\$59,714	\$62,699	\$65,834
#2 ACSR	Convert 3-PH	\$129,500	\$135,975	\$142,774	\$149,912
1/0 ACSR	Convert 3-PH	\$157,000	\$164,850	\$173,093	\$181,747
336.4 ACSR	Convert 3-PH	\$160,000	\$168,000	\$176,400	\$185,220

**Table II-B-2**  
**Distribution Equipment Cost Estimates**  
**Annual Projected Unit Costs**

<b>Device</b>	<b>Type</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
V. Regulator (1)	656 amp	\$62,250	\$65,363	\$68,631	\$72,062
V. Regulator (1)	548 amp	\$48,125	\$50,531	\$53,058	\$55,711
V. Regulator (1)	438 amp	\$44,250	\$46,463	\$48,786	\$51,225
V. Regulator (1)	328 amp	\$44,000	\$46,200	\$48,510	\$50,936
V. Regulator (1)	219 amp	\$40,125	\$42,131	\$44,238	\$46,450
V. Regulator (1)	150 amp	\$45,250	\$47,513	\$49,888	\$52,383
V. Regulator (1)	100 amp	\$29,338	\$30,804	\$32,345	\$33,962
Capacitors	900kVAR w/ controls	\$18,375	\$19,294	\$20,258	\$21,271
Capacitors	300kVAR fixed	\$4,095	\$4,300	\$4,515	\$4,740
Reclosers	Viper w/ controls	\$35,689	\$37,473	\$39,347	\$41,314
Reclosers	CMR w/ controls	\$6,096	\$6,401	\$6,721	\$7,057

## **Status of Previous CWP Items**

Project Status from the 2020-2023 CWP

<b>Code</b>	<b>Substation</b>	<b>Status</b>
201-21	LED	Completed
201-20	DRA	Carry Over
301-12	BUR	Carry Over
303-12	CAL	Completed
304-23	CUL	Completed
312-12	JOY	Completed
317-12	LIT	Completed
320-12	LIT	Completed
339-16	GRA	Carry Over
340-23	KEV	Deleted
341-16	KAN	Completed
342-16	KRE	Completed
343-16	LOV	Completed
345-16	NEW	Deleted
348-21	NEW	Completed
349-21	NEW	Completed
342-23	KRE	Deleted
506	KAN	Completed
508	NEW	Carry Over
509	KRE	Completed
510	SMI	Completed
511	DRA	Carry Over

## **Analysis of Long-Range Plan**

In July of 2012, Distribution System Solutions, Inc. out of Walton, Kentucky prepared Jackson Purchase Energy Corporation's 2012 Long Range Plan (LRP). The RUS General Field Representative approved the LRP in 2012.

The LRP recommended that JPEC continue to be built and operated at 12.47kV throughout the study period. Alternate plans, including conversion to 25kV were explored but found to be less economical. While feeder losses had the potential to be reduced,

the list of intangible items is extensive and highly expensive compared to the potential lower losses.

During the second block (2016-2019) of the LRP it was determined that four stations; Little Union, Kevil, Kansas, and New York are projected to be overloaded. With the energizing of the Maxon Substation in 2013, it was projected that Little Union would still be overloaded by the end of this time block. Presently, the station is 78% loaded versus the projected 95%. This station does warrant monitoring for possible changes in this CWP, but other stations require immediate improvement.

The LRP recommends the construction of two new substations: Buchanan Road and Ceredo. Ceredo was recommended to alleviate loading issues on New York and Kevil subs. At this time, JPEC does not see the need to build a new station but instead invest in the upgrades of the New York and Kevil stations.

The last recommendation was to upgrade the transformer at the Kansas Substation. This was completed in 2020 providing ample capacity at this station.

The existing LRP should be valid for the next CWP. However, it is recommended that load growth patterns, load projections and proposed load centers be reviewed as needed.

## **Operations and Maintenance Survey**

The current O&M Survey (Review Rating Summary, RUS Form 300) was completed in October 2019. This report is reviewed by the President and CEO and the RUS GFR every four years and is the basis for the following conclusions and recommended items.

The first recommendation is to work with JPEC's joint users to remove their attachments in an effort to remove stub poles around the system.

The second recommendation was to monitor problem trees in heavily residential areas.

The third recommendation was to continue working to reconcile the record of idle services in the billing system with actual idle services in the field and continue to remove idle services from the field.

## **Sectionalizing Study**

A sectionalizing study analyzes the existing overcurrent protection scheme and proposes changes to improve the overall effectiveness of the scheme. Sectionalizing studies take place on a substation-by-substation basis.

The four main goals of a sectionalizing study are:

- (1) **Safety** – Protective devices should be able to detect and interrupt the full range of fault currents available in their zone of protection coverage. Calculated minimum fault current values should be detected and cleared by the protective device.
- (2) **Reliability** – Limit the outage hours per consumer by isolating or “sectionalizing” faulted portions of the circuit so that the minimum number of customers are interrupted. Additional devices – where needed – will further limit the overall outage hours.
- (3) **Coordination** – Good protective device coordination will ensure that the closest device to the fault opens, which can enhance fault locating and reduce overall outage hours.
- (4) **Protection** – A well designed protection scheme will minimize damage to the distribution system by limiting the time that damaging overcurrent is present on the faulted portion of the system.

JPEC plans on updating the sectionalizing study in this CWP period but until then the current 2009 plan will remain in effect. General sectionalizing device costs projections will be listed in the “603” category in this report.

Table II-E-8 Substation Load Table											
	Installed Capability		Existing System <sup>2</sup>				% Increase	4 Year System Unimproved <sup>3</sup>		4 Year System Improved <sup>3</sup>	
			Noncoincident Peak Demand					Noncoincident Peak Demand		Noncoincident Peak Demand	
	Nameplate (MVA)	Rating (kVA)	Peak (kW)	Peak Year	Power Factor @ Peak	Max % Load		2023 Peak (kW)	Max % Load	2023 Peak (kW)	Max % Load
Burna	5/6.25/7	5,000	3,611	2021	96.82%	72%	1.0%	3,758	75%	3,758	75%
Calvert City	12/16/17.9	12,000	6,445	2018	98.16%	54%	1.0%	6,707	56%	6,707	56%
Coleman Road	15/20/25/28	15,000	9,357	2018	93.69%	62%	1.0%	9,737	65%	9,737	65%
Culp	12/16/17.9	12,000	9,444	2022	98.03%	79%	1.0%	9,827	82%	9,827	82%
Cumberland	7.5/8.4	7,500	5,136	2018	91.32%	68%	1.0%	5,345	71%	5,345	71%
Draffenville	7.5/9.375/10.5	7,500	3,609	2019	99.47%	48%	1.0%	3,756	50%	3,756	50%
Freemont	15/18.75/21	15,000	7,927	2022	98.98%	53%	2.0%	8,580	57%	8,580	57%
Grand Rivers	12/16/20/22.4	12,000	8,832	2019	97.43%	74%	1.0%	9,191	77%	9,191	77%
High Point	7.5/9.375/10.5	7,500	2,093	2022	99.38%	28%	1.0%	2,178	29%	2,178	29%
Husbands Road	12/16/17.9	12,000	8,631	2022	97.72%	72%	3.5%	9,904	83%	9,904	83%
Joy	7.5/9.375/10.5	7,500	1,823	2022	100.00%	24%	2.0%	1,973	26%	1,973	26%
Kansas	15/20/25/28	15,000	7,744	2020	98.52%	52%	2.0%	8,382	56%	8,382	56%
<b>Kevil</b>	<b>7.5/9.375/10.5</b>	<b>7,500</b>	<b>6,765</b>	<b>2022</b>	<b>100.00%</b>	<b>90%</b>	<b>2.0%</b>	<b>7,323</b>	<b>98%</b>	<b>7,323</b>	<b>49%</b>
Krebs Station Road	15/20/25	15,000	10,219	2021	100.00%	68%	1.0%	10,634	71%	10,634	71%
La Center	5/6.25/7	5,000	4,143	2021	99.07%	83%	1.0%	4,311	86%	4,311	86%
Ledbetter	12/16/17.9	12,000	8,651	2022	99.70%	72%	3.0%	9,737	81%	9,737	81%
Little Union	12/16/17.9	12,000	9,300	2022	99.02%	78%	3.0%	10,467	87%	10,467	87%
Lovellsville	7.5/9.375/10.5	7,500	6,303	2020	99.45%	84%	3.0%	7,094	95%	7,094	95%
Maxon Road	7.5/9.375/10.5	7,500	4,584	2022	96.02%	61%	1.0%	4,770	64%	4,770	64%
New York	12/16/17.9	12,000	7,439	2022	99.91%	62%	2.0%	8,052	67%	8,052	54%
Olivet Church Road	12/16/17.9	12,000	7,141	2021	99.37%	60%	1.0%	7,431	62%	7,431	62%
Palma	12/16/17.9	12,000	7,982	2019	95.94%	67%	1.0%	8,306	69%	8,306	69%
Possum Trot	12/16/20/22.4	12,000	6,914	2022	99.53%	58%	3.0%	7,782	65%	7,782	65%
Ragland	5/6.25/7	5,000	2,488	2022	100.00%	50%	2.0%	2,693	54%	2,693	54%
Reidland	7.5/9.375/10.5	7,500	6,279	2018	94.35%	84%	1.0%	6,534	87%	6,534	87%
<b>Smithland</b>	<b>7.5/9.375/10.5</b>	<b>7,500</b>	<b>6,674</b>	<b>2022</b>	<b>99.87%</b>	<b>89%</b>	<b>1.5%</b>	<b>7,084</b>	<b>94%</b>	<b>7,084</b>	<b>47%</b>
Strawberry Hill	15/20/25/28	15,000	9,111	2021	94.49%	61%	1.0%	9,481	63%	9,481	63%
Vulcan	12/16/20/22.4	12,000	7,893	2020	98.38%	66%	1.0%	8,213	68%	8,213	68%

1. The transformers at Kevil and Smithland substations will be upgraded according to Section 3, Pages 34-35. The new rating is reflected in the four year improved peak.  
2. Based on substation peak load data.  
3. Based on five-year average growth rates by substation.

## System Outages and Reliability

The record of JPEC’s service interruptions for the past five years is shown in Table II-E-9. The five-year average outage hours per consumer is 4.24. This value fell from the previous five-year average of 4.92 hours per consumer due to reduced severity of MEDs. Excluding storms, the five-year average outage hours per consumer rose slightly from the previous CWP. This is due partly due to the increase in scheduled work.

**Table II-E-9**

### **SUMMARY OF SERVICE INTERRUPTIONS**

Outage Hours per Consumer

Year	Power Supply	Major Storms	Scheduled	Other	Total	Total Without Storms
2018	0.21	6.10	0.10	1.74	8.14	2.05
2019	0.00	4.45	0.10	2.19	6.74	2.29
2020	0.03	0.16	0.13	1.39	1.71	1.55
2021	0.14	0.00	0.15	1.89	2.18	2.18
2022	0.02	0.18	0.15	2.06	2.42	2.24
Average	0.08	2.18	0.13	1.86	4.24	2.06

Outage Minutes per Consumer

Year	Power Supply	Major Storms	Scheduled	Other	Total	Total Without Storms
2018	12.52	365.76	5.79	104.50	488.58	122.82
2019	0.00	266.94	6.20	131.16	404.29	137.36
2020	1.63	9.82	7.86	83.57	102.88	93.06
2021	8.24	0.00	8.78	113.63	130.65	130.65
2022	1.31	10.97	9.18	123.88	145.35	134.37
Average	5.60	160.63	7.16	108.21	281.60	120.97

### Historical Cost Data - Table II-E-10

Description	Historical			Projected				Total Work Plan 2024-2027
	2020	2021	2022	2024	2025	2026	2027	
<b>101 - New Underground Customers</b>								
1. New services constructed	263	249	226	246	248	251	253	999
2. Cost per Customer	\$ 6,771.01	\$3,649.45	\$3,773.97	\$4,340.07	\$4,557.07	\$4,784.92	\$5,024.17	
3. Cost of New Customers	\$1,780,776.50	\$908,712.28	\$852,917.79	\$1,067,656.11	\$1,132,249.31	\$1,200,750.39	\$1,273,395.79	\$4,674,051.60
4. Total Wire Footage	89,605	73,192	105,676	89,491	90,386	91,290	92,203	363,369
Average Footage	341	294	468	364	364	364	364	1,455
Total Miles	16.97	13.86	20.01	16.95	17.12	17.29	17.46	68.8
<b>102 - New Overhead Customers</b>								
1. New services constructed	114	115	97	109	110	111	112	441
2. Cost per Customer	\$ 2,490.25	\$2,403.73	\$3,236.49	\$3,560.14	\$3,738.15	\$3,925.05	\$4,121.31	
3. Cost of New Customers	\$ 283,888.71	\$276,428.48	\$313,939.88	\$386,868.44	\$410,273.98	\$435,095.55	\$461,418.84	\$1,693,656.81
4. Total Wire Footage	15,305	22,019	19,132	18,819	19,007	19,197	19,389	76,411
Average Footage	\$ 134	191	197	173	173	173	173	693
Total Miles	2.90	4.17	3.62	3.56	3.60	3.64	3.67	14.5
<b>601 - New Underground Transformers</b>								
1. New transformers added	119	128	97	115	116	117	118	466
2. Cost per Transformer	\$ 2,750.60	\$3,559.91	\$5,002.44	\$4,517.75	\$4,743.64	\$4,980.82	\$5,229.86	
3. Cost of New Transformers	\$ 327,320.95	\$455,668.80	\$485,236.79	\$518,035.33	\$549,376.47	\$582,613.75	\$617,861.88	\$2,267,887.43
<b>601 - New Overhead Transformers</b>								
1. New transformers added	321	393	286	333	337	340	343	1,353
2. Cost per Transformer	\$ 1,262.15	\$1,421.67	\$1,612.61	\$1,913.03	\$2,008.68	\$2,109.12	\$2,214.57	
3. Cost of New Transformers	\$ 405,150.58	\$558,717.66	\$461,206.26	\$ 637,676.67	\$676,256.11	\$717,169.60	\$760,558.36	\$2,791,660.73

Description	Historical			Projected				Total Work Plan 2024-2027
	2020	2021	2022	2024	2025	2026	2027	
<b>601 - New Meters AMI New Customers</b>								
1. New Meters for Customers	240	0*	539	355	358	362	365	1,440
2. AMI Replacement Meters				2,500	27,860			30,360
3. Cost per Meter	\$263.55	----	\$296.57	\$179.50	\$184.50	\$220.00	\$225.00	
4. Cost of New Meters	\$63,252.00	----	\$159,849.95	\$512,472.50	\$5,206,221.00	\$79,640.00	\$82,125.00	\$5,880,458.50
*No meters were purchased in 2021								
<b>602 - Service Upgrades</b>								
1. Number of Service Upgrades	26	49	42	46	46	46	47	185
2. Cost per Service Upgrade	\$ 1,779.16	\$5,537.82	\$3,361.66	\$ 3,915.50	\$4,111.28	\$4,316.84	\$4,532.68	
3. Cost of Service Upgrades	\$ 46,258.16	\$271,353.41	\$141,189.73	\$178,155.31	\$188,933.71	\$200,364.20	\$212,486.23	\$779,939.44
<b>603 - Sectionalizing Equipment</b>	\$ 265,987.37	\$138,665.38	\$656,855.00	\$371,527.71	\$390,104.10	\$409,609.30	\$430,089.77	\$1,601,330.88
<b>604 - Voltage Regulators</b>	N/A	\$7,575.44	N/A	\$50,000.00	\$51,500.00	\$53,045.00	\$54,636.35	\$209,181.35
<b>605 - Capacitors</b>	N/A	N/A	N/A	\$50,000.00	\$51,500.00	\$53,045.00	\$54,636.35	\$209,181.35
<b>606 - Poles - Addition/Replacement</b>								
1. Replacement of Poles	1,120	846	810	925	935	944	953	3,757
2. Additional Poles	53	33	66	51	51	52	52	206
3. Total Poles	1,173	879	876	976	986	996	1,006	3,963
4. Cost per Pole Change	\$ 2,293.25	\$2,275.87	\$3,033.36	\$3,185.03	\$3,344.28	\$3,511.49	\$3,687.07	
5. Cost of Poles	\$2,689,978.25	\$2,000,491.78	\$2,657,224.08	\$3,108,587.33	\$3,296,656.86	\$3,496,104.60	\$3,707,618.93	\$13,608,967.72
<b>608 - Conductor Replacement</b>	\$ 100,724.20	\$247,112.44	\$207,348.94	\$600,000.00	\$618,000.00	\$636,540.00	\$655,636.20	\$2,510,176.20
<b>701 &amp; 702 - Outdoor Lights</b>								
1. New Outdoor Lights Added (702)	91	126	119	112	113	114	115	455
2. Replacement of Outdoor Lights (701)	211	809	1,581	1,739	1,826	1,217	812	5,594
3. Total Outdoor Lights	302	935	1,700	1,851	1,939	1,331	927	6,049
4. Cost per Outdoor Light	\$ 717.02	\$734.31	\$670.96	\$ 728.65	\$750.51	\$773.03	\$796.22	
5. Cost of Outdoor Lights	\$ 216,541.22	\$686,583.93	\$1,140,628.95	\$1,348,809.38	\$1,455,375.05	\$1,029,380.76	\$738,074.16	\$4,571,639.35

## **NEW MEMBER EXTENSIONS – RUS CODE 100**

A total of 1,440 new services are anticipated – 999 of which are underground, 441 are overhead construction. The total projected cost for new service construction is \$6,367,708.

The average length of service per overhead customer is 173 feet, and 364 feet for underground. The total projected length for the work plan period is approximately 83 miles.

## TIE LINES/NEW CONSTRUCTION – RUS CODE 200

### **Draffenville Substation, New Hwy 68 Ckt**

#### **Code 201-20**

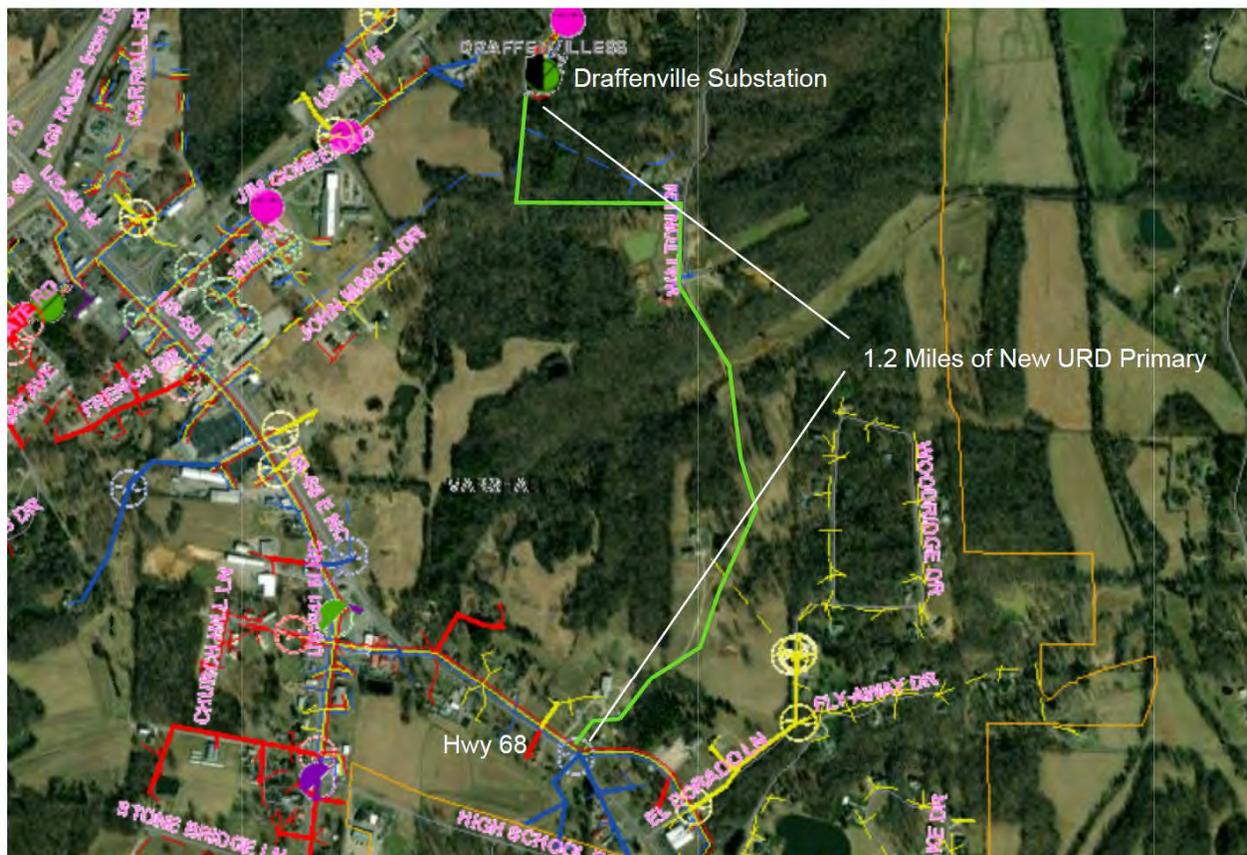
Estimated Cost: \$600,000

Year: 2024

#### **Description of Proposed Construction**

There will be a new feeder added to the Draffenville substation in order to provide a tie point and improve overall reliability of the station. This project will consist of building 1.2 miles of new underground line.

The total projected cost for the upgrades at Draffenville is \$600,000.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

### **Burna Substation, Smithland 14254**

#### **Code 301-12**

Estimated Cost: \$399,843

Year: 2027

#### **Description of Proposed Construction**

Sections PROH\_00034077 to PROH\_00034145 – Convert 2.2 miles of single-phase #2 ACSR to three-phase 1/0 ACSR. These line sections are along Maxfield Rd (KY-1608) from US-60 west to Duley Rd (CR-1323) in Smithland.

#### **Reason for Proposed Construction**

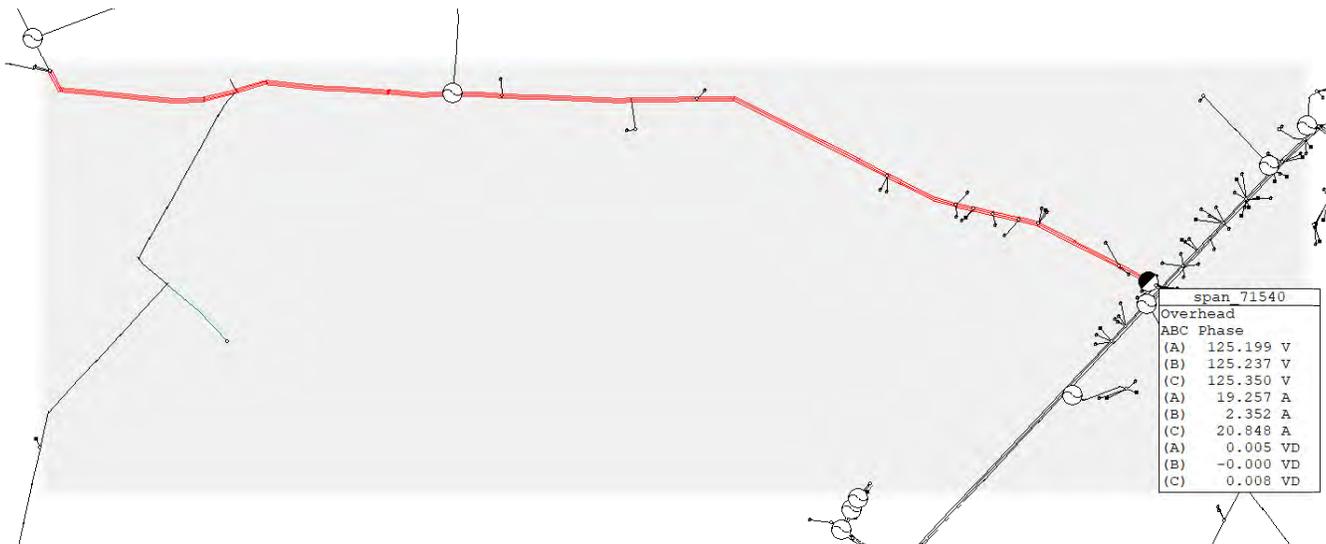
Design Criteria (DC) Item 4 is being violated. (43 amps on single phase)

#### **Results of Proposed Construction**

DC Item 4 will be met.

#### **Alternative Corrective Plan Investigated**

All potential backfeeds consist of aged copper, which would not be a preferred solution for sustaining the additional load of the backfeed; and would not improve system reliability. 1/0 ACSR was chosen instead of a smaller conductor because this tap may eventually become a three-phase tie point helping to relieve the area North of Smithland.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

**Culp Substation, Sharpe 42244**

**Code 342-30**

Estimated Cost: \$90,668

Year: 2025

### **Description of Proposed Construction**

Sections PROH\_00028600 to PROH\_00028642 – Convert 0.55 miles of single-phase #2 ACSR to three-phase #1/0 ACSR. These line sections are along Sharpe School Rd from Hwy 68 north to Hunters Lane in Calvert City.

### **Reason for Proposed Construction**

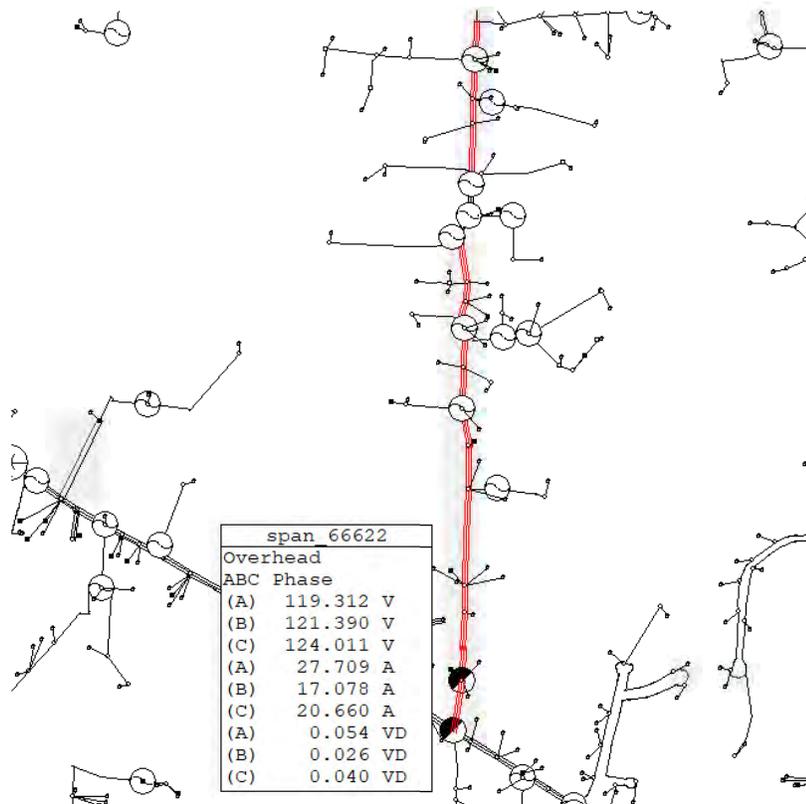
Design Criteria (DC) Item 4 is being violated. (66 amps on single phase)

### **Results of Proposed Construction**

DC Item 4 will be met.

### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

**Cumberland Substation, Pinckneyville 15224**

### **Code 315-30**

Estimated Cost: \$394,070

Year: 2024

### **Description of Proposed Construction**

Sections PROH\_00033215 to PROH\_00033281 – Convert 2.51 miles of single-phase #2 ACSR to three-phase 1/0 ACSR. These line sections are along Kitchen Rd from Pinckneyville Rd east to Shelby Rd near Salem.

### **Reason for Proposed Construction**

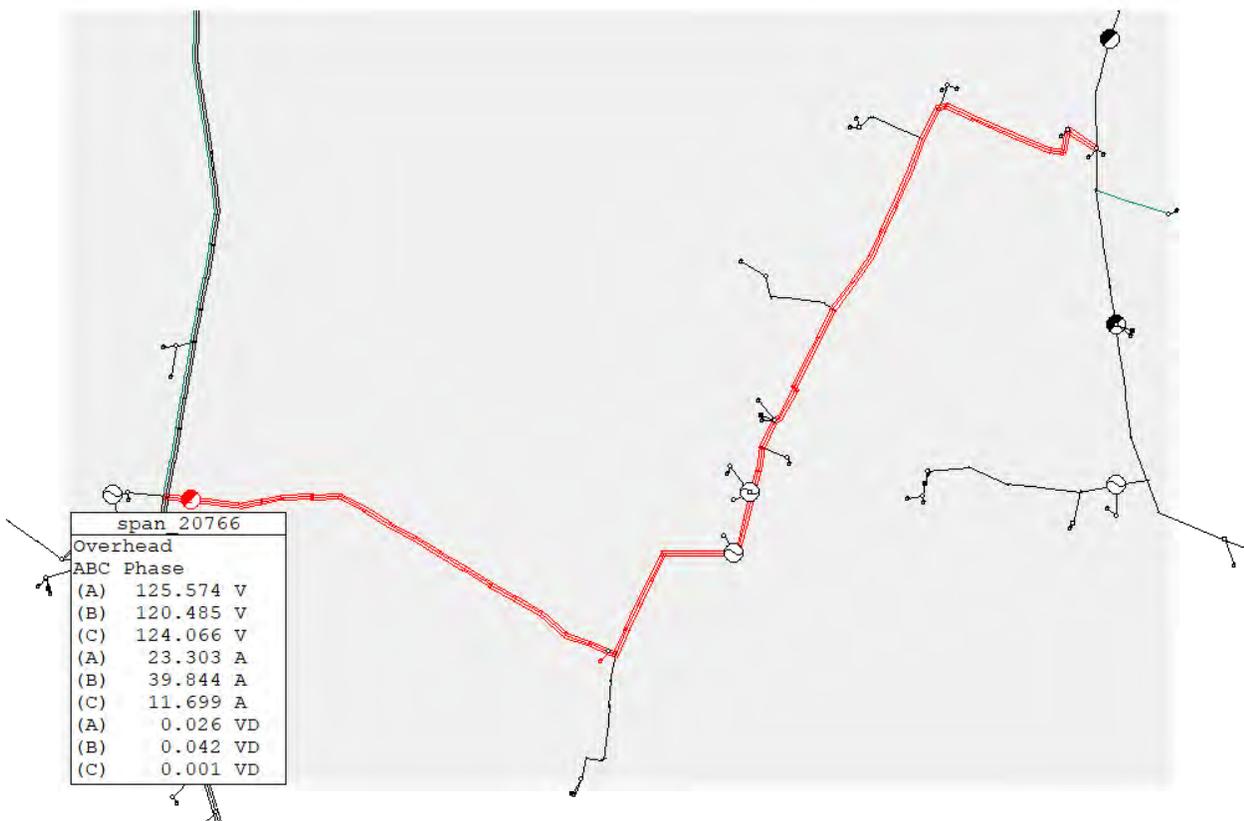
Design Criteria (DC) Items 1 and 4 are being violated. (70 amps on single phase)

### **Results of Proposed Construction**

DC Item 1 and 4 will be met.

### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

**Draffenville Substation, Draffenville 66214**

**Code 366-30**

Estimated Cost: \$15,700

Year: 2024

### **Description of Proposed Construction**

Sections PROH\_00031223 to PROH\_00031224 – Convert .1 mile of single-phase 1/0 ACSR to three-phase 1/0 ACSR. These line sections are along Gate Rd from Native Circle to the end of the road in Benton.

### **Reason for Proposed Construction**

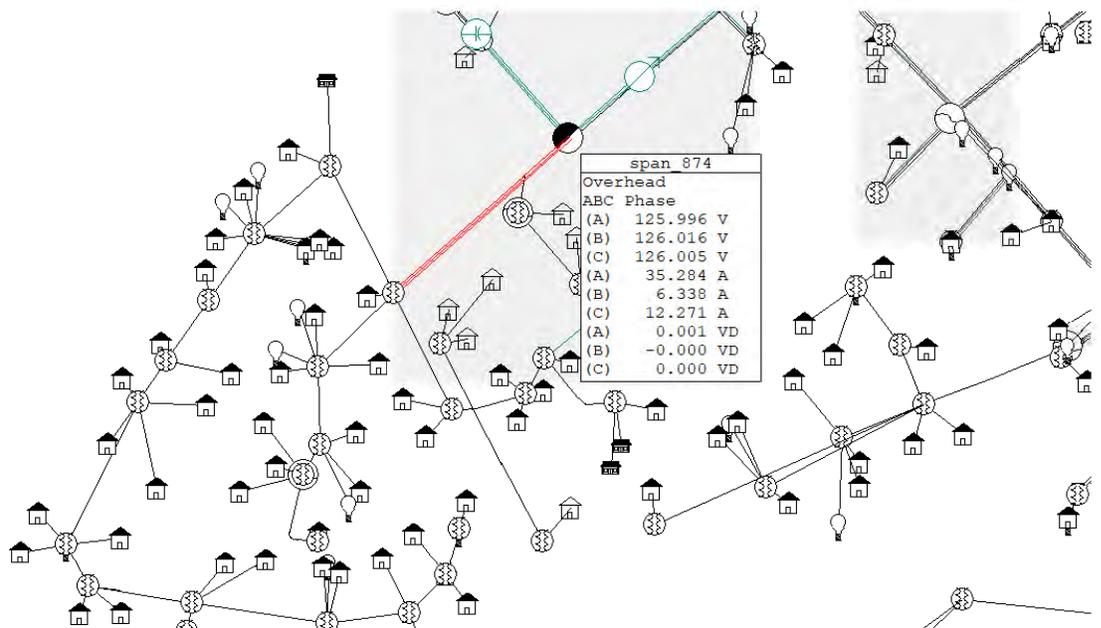
Design Criteria (DC) Item 4 is being violated. (54 amps on single phase)

### **Results of Proposed Construction**

DC Item 4 will be met.

### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

### **Grand Rivers Substation, Smithland 76224**

#### **Code 376-30**

Estimated Cost: \$131,551

Year: 2026

#### **Description of Proposed Construction**

Sections PROH\_00041851 to PROH\_00035334 – Convert .8 miles of single-phase #2 ACSR to three-phase 1/0 ACSR. These line sections are along Red Bud Rd from Dover Rd north to Doe Run Rd in Grand Rivers.

#### **Reason for Proposed Construction**

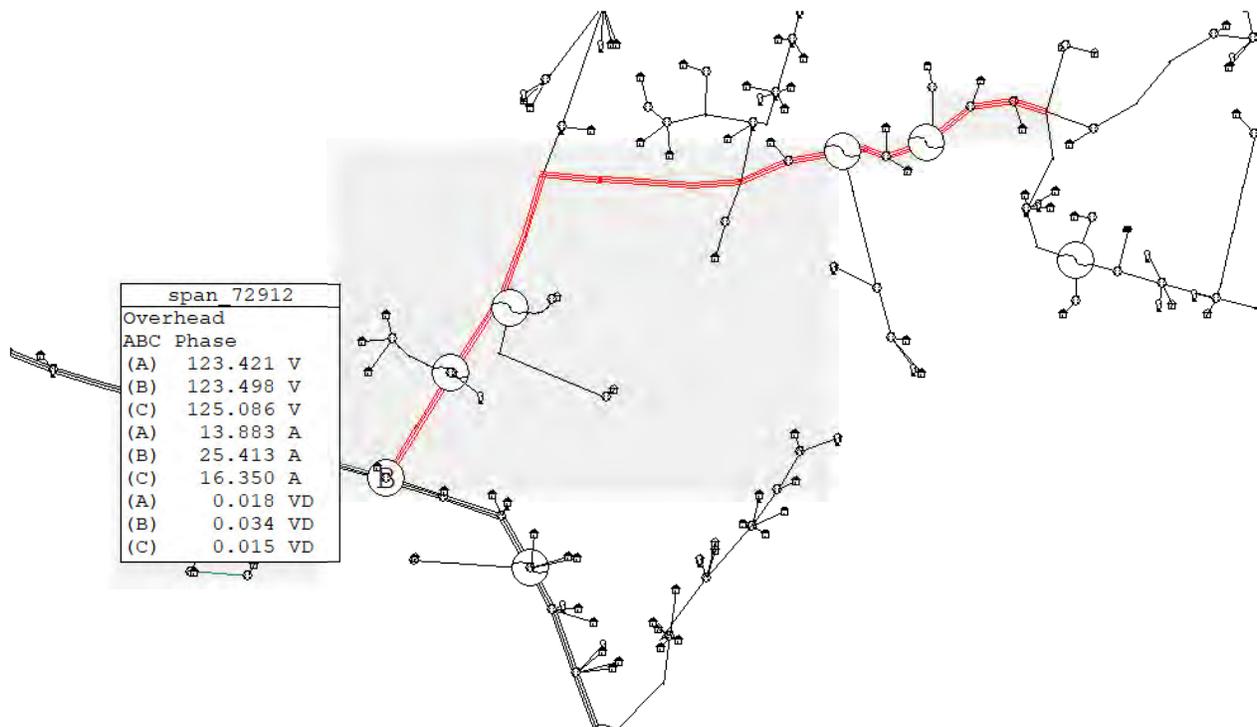
Design Criteria (DC) Item 4 is being violated. (56 amps on single phase)

#### **Results of Proposed Construction**

DC Item 4 will be met.

#### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

### **Grand Rivers Substation, Averitt 7605**

#### **Code 339-16**

Estimated Cost: \$54,524

Year: 2027

#### **Description of Proposed Construction**

Sections PROH\_00035691 to PROH\_00035728 – Convert 0.27 miles of single-phase #2 ACSR to three-phase 1/0 ACSR. These line sections are along Koon Rd (CR-1123) to Jennings Rd in Grand Rivers.

#### **Reason for Proposed Construction**

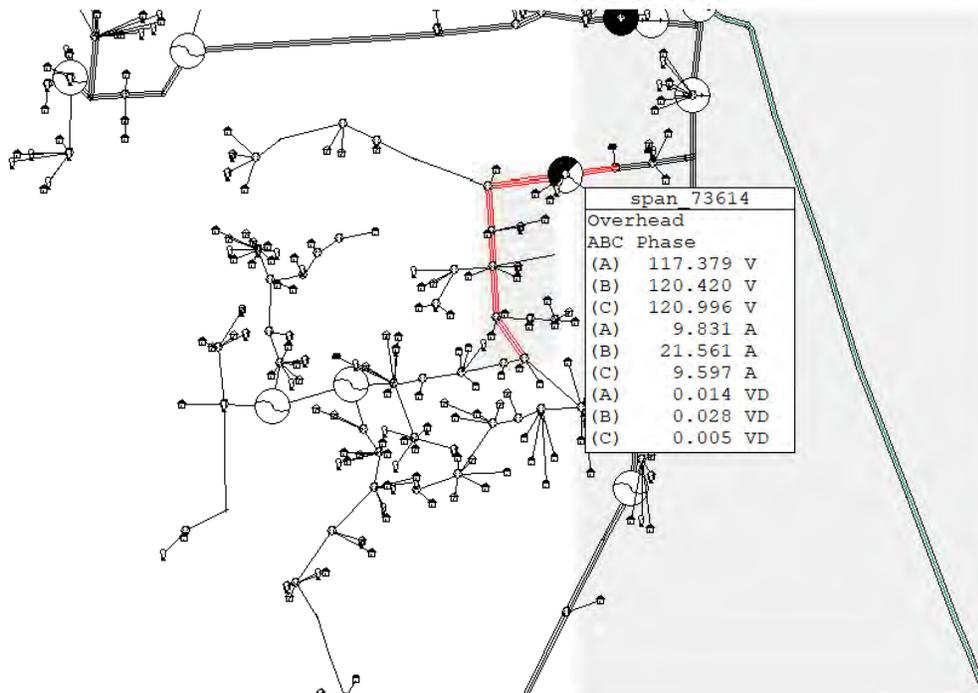
Design Criteria (DC) Items 1 and 4 are being violated. (41 amps on single phase)

#### **Results of Proposed Construction**

DC Item 1 and 4 will be met.

#### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

**Joy Substation, Hampton 17495**

**Code 305-30**

Estimated Cost: \$446,744

Year: 2025

### **Description of Proposed Construction**

Sections PROH\_00042185 to PROH\_00036619 – Convert 2.71 miles of single-phase #2 and 1/0 ACSR to three-phase 1/0 ACSR. These line sections are along Lola Rd from Carrsville Rd west to Cave Springs Rd in Smithland.

### **Reason for Proposed Construction**

Design Criteria (DC) Item 4 is being violated. (62 amps on single phase)

### **Results of Proposed Construction**

DC Item 4 will be met.

### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

### **Kansas Substation, Folsomdale 61224**

#### **Code 361-30**

Estimated Cost: \$171,360

Year: 2025

#### **Description of Proposed Construction**

Sections PROH\_00014298 to PROH\_00014303 – Convert 1.02 miles of single-phase #2 ACSR to three-phase 336 ACSR. These line sections are along KY-1241 running north from Shaw Rd to Alvin Rd in Boaz.

#### **Reason for Proposed Construction**

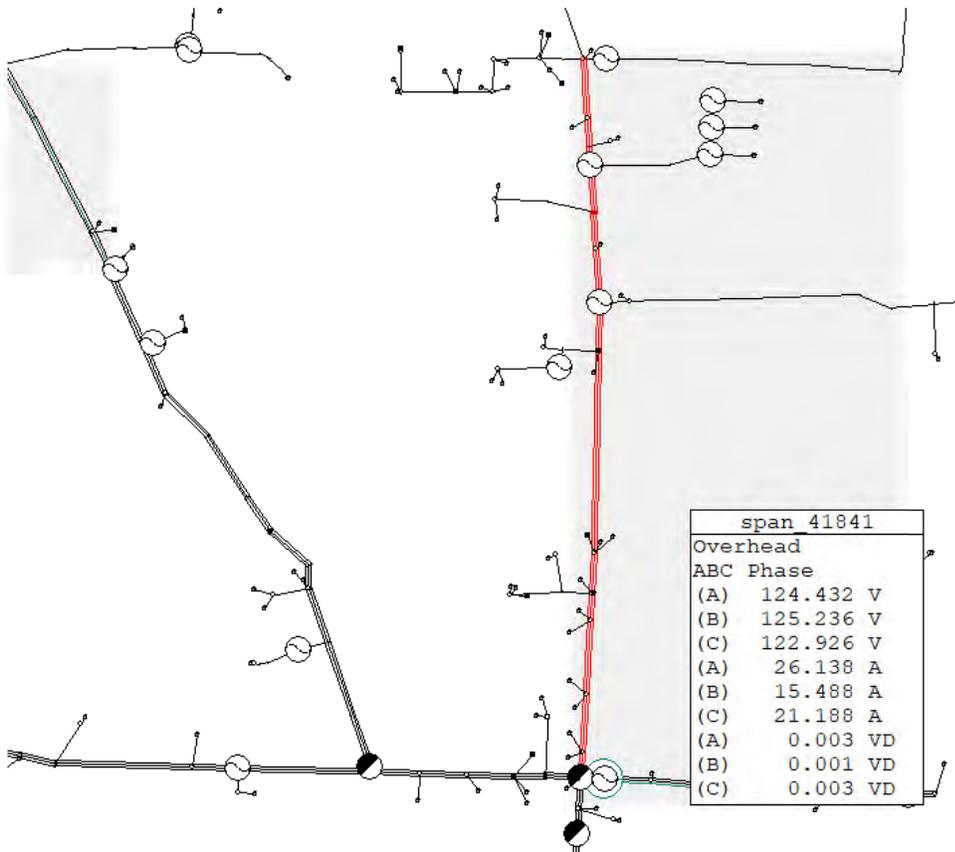
Design Criteria (DC) Item 4 is being violated. (64 amps on single phase)

#### **Results of Proposed Construction**

DC Item 4 will be met.

#### **Alternative Corrective Plan Investigated**

The new line section will create backfeed capabilities and assist with load support.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

### **Ledbetter Substation, Ledbetter 31244**

#### **Code 331-30**

Estimated Cost: \$64,370

Year: 2024

#### **Description of Proposed Construction**

Sections PROH\_00038602 to PROH\_00038616 – Convert .41 miles of single-phase #2 ACSR to three-phase 1/0 ACSR. These line sections are along Rudd Spees Rd from Hicks Ln south to Cody Cooper Rd in Ledbetter.

#### **Reason for Proposed Construction**

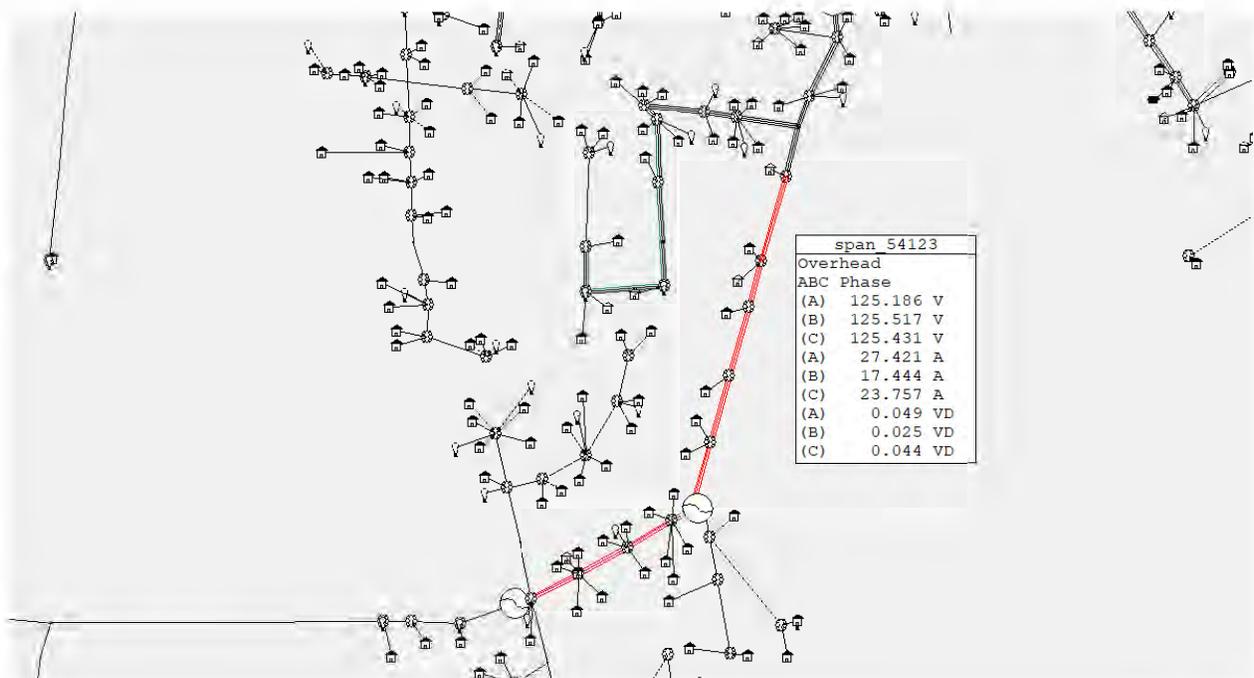
Design Criteria (DC) Item 4 is being violated. (69 amps on single phase)

#### **Results of Proposed Construction**

DC Item 4 will be met.

#### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

### **Ledbetter Substation, Ledbetter 31244**

#### **Code 331-31**

Estimated Cost: \$41,213

Year: 2025

#### **Description of Proposed Construction**

Sections PROH\_00042326 to PROH\_00038936 – Convert 0.25 miles of single-phase #2 ACSR to three-phase 1/0 ACSR. These line sections are along Shelia Drive beginning north of US 60 and running south to Erwin Circle in Ledbetter.

#### **Reason for Proposed Construction**

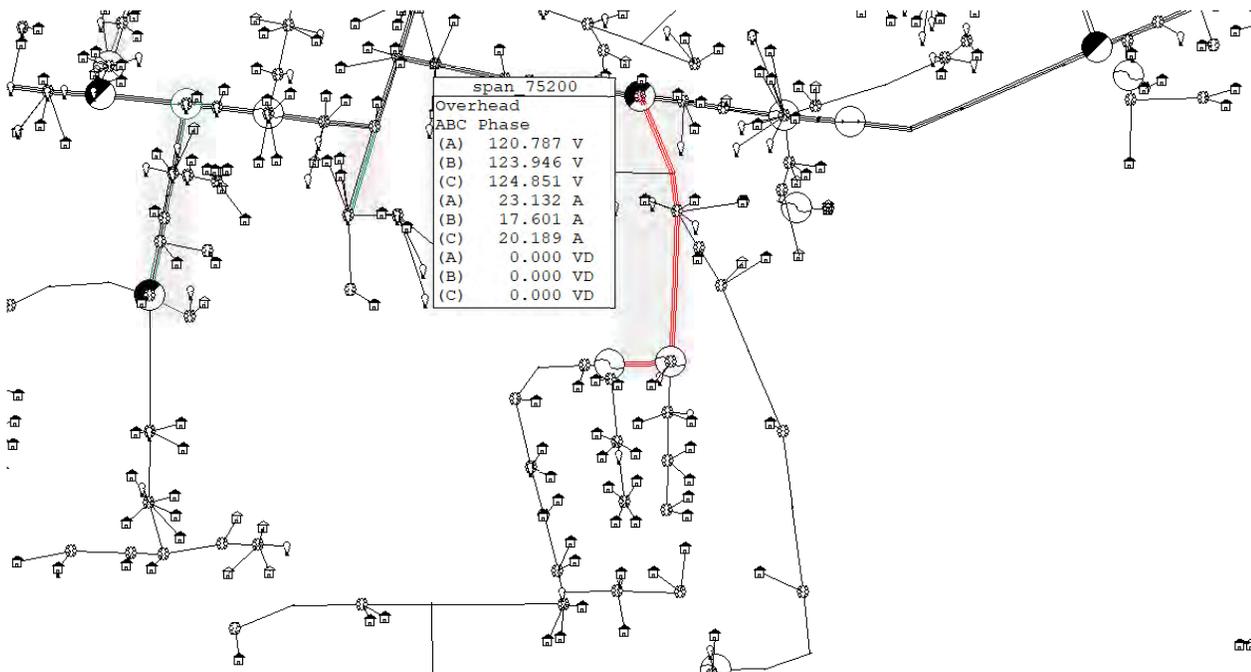
Design Criteria (DC) Item 4 is being violated. (61 amps on single phase)

#### **Results of Proposed Construction**

DC Item 4 will be met.

#### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

**Lovellsville Substation, Lovellsville 49224**

### **Code 349-30**

Estimated Cost: \$97,600

Year: 2024

### **Description of Proposed Construction**

Sections PROH\_00044960 to PROH\_00010373 – Convert 0.61 miles of single-phase #2 ACSR to three-phase 336 ACSR. These line sections run along Hamburg Rd from E Walnut St. north to Upshaw Ln in Lovellsville.

### **Reason for Proposed Construction**

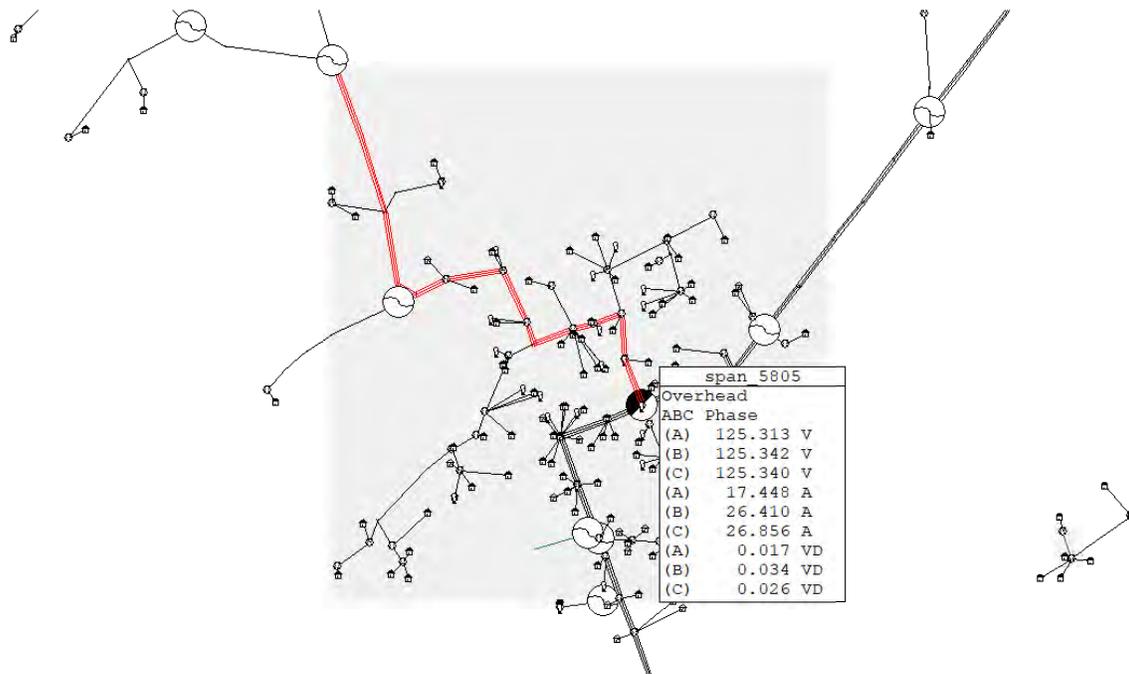
Design Criteria (DC) Item 4 is being violated. (71 amps on single phase)

### **Results of Proposed Construction**

DC Item 4 will be met.

### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

### **Possum Trot Substation, Possum Trot 78224**

#### **Code 378-30**

Estimated Cost: \$85,421

Year: 2027

#### **Description of Proposed Construction**

Sections PROH\_00027430 to PROH\_00027448 – Convert .47 miles of single-phase #2 ACSR to three-phase 1/0 ACSR. These line sections are along Windy Hills Circle and Breeze Ln. from US-62 north to Gale Rd in Calvert City.

#### **Reason for Proposed Construction**

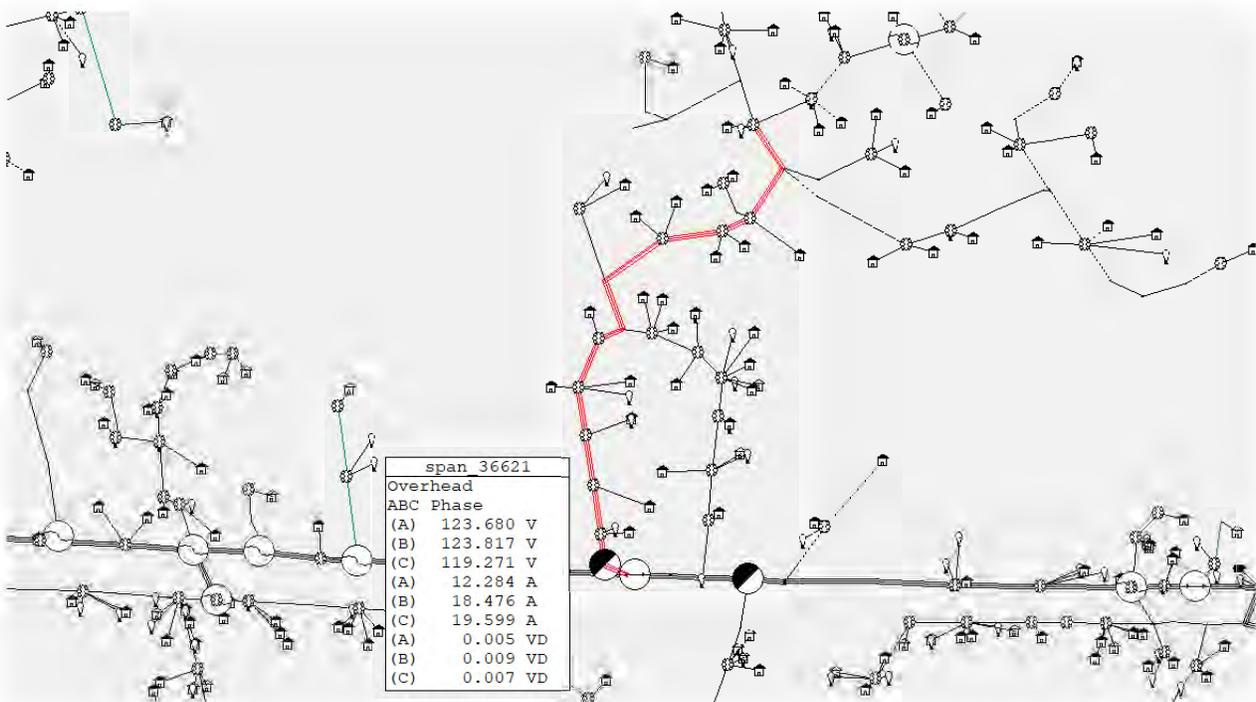
Design Criteria (DC) Item 4 is being violated. (50 amps on single phase)

#### **Results of Proposed Construction**

DC Item 4 will be met.

#### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

### **Possum Trot Substation, Industrial Loop 78254**

#### **Code 378-31**

Estimated Cost: \$153,860

Year: 2024

#### **Description of Proposed Construction**

Sections PROH\_00001611 to PROH\_00030312 – Convert .98 miles of single-phase #2 ACSR to three-phase 1/0 ACSR. These line sections are along Calvert City Rd from Industrial Pkwy east to Retirement Circle in Calvert City.

#### **Reason for Proposed Construction**

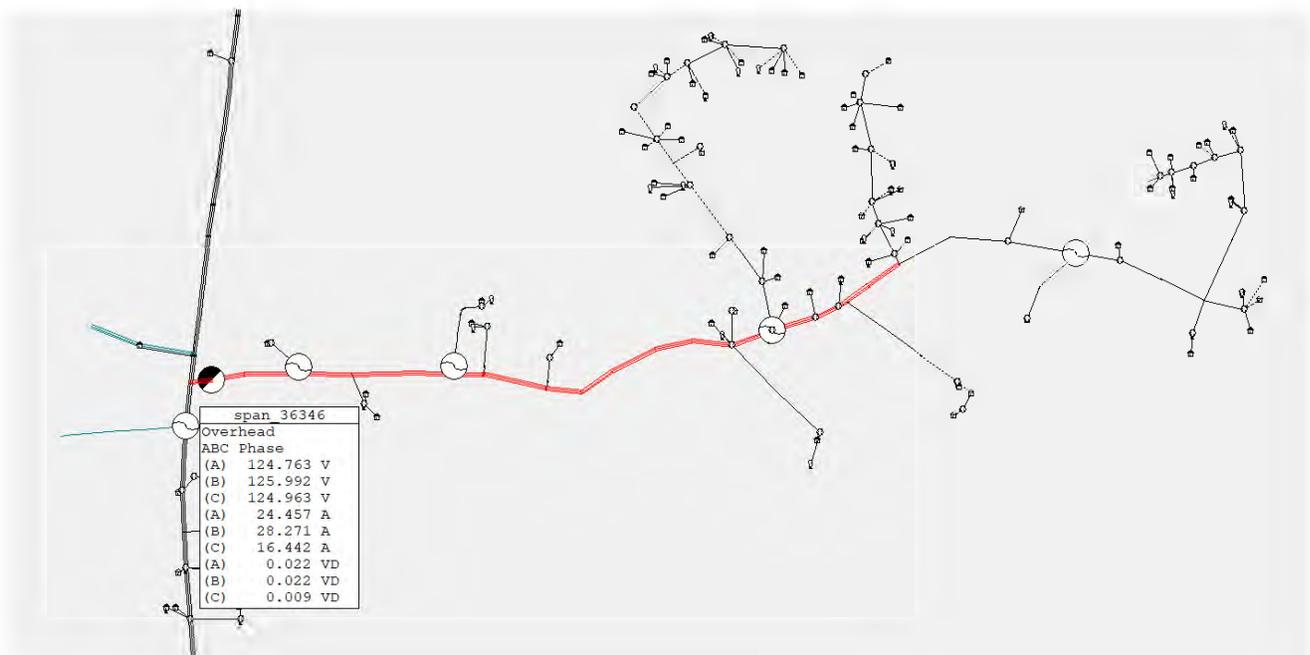
Design Criteria (DC) Item 4 is being violated. (70 amps on single phase)

#### **Results of Proposed Construction**

DC Item 4 will be met.

#### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

### **Smithland Substation, Tiline 32224**

#### **Code 332-30**

Estimated Cost: \$214,635

Year: 2026

#### **Description of Proposed Construction**

Sections PROH\_00001929 to PROH\_00040695 – Convert 1.24 miles of single-phase #2 ACSR to three-phase 1/0 ACSR. These line sections are along Mount Zion Rd from Linley Rd south to Coon Chapel Rd in Smithland.

#### **Reason for Proposed Construction**

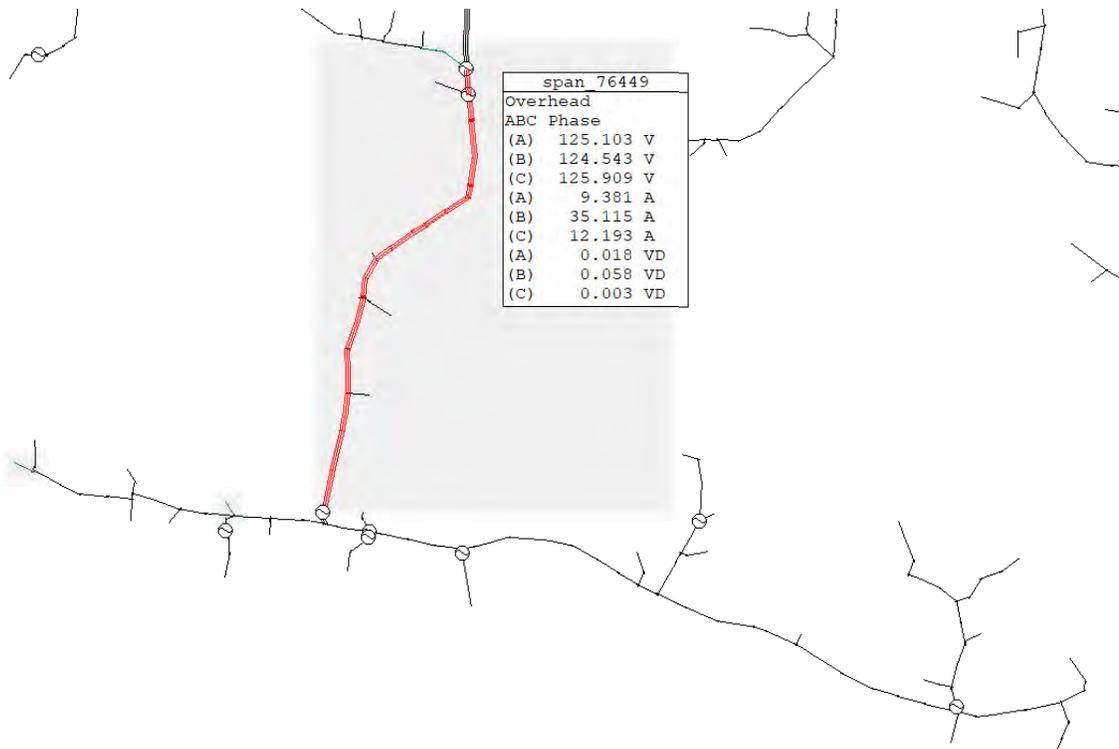
Design Criteria (DC) Item 4 is being violated. (57 amps on single phase)

#### **Results of Proposed Construction**

DC Item 4 will be met.

#### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SYSTEM IMPROVEMENTS – RUS CODE 300**

### **Smithland Substation, Mitchell Store 32244**

#### **Code 332-31**

Estimated Cost: \$231,945

Year: 2026

#### **Description of Proposed Construction**

Sections PROH\_00081251 to PROH\_00039826 – Convert 1.34 miles of single-phase #2 ACSR to three-phase 1/0 ACSR. These line sections are along Paradise Rd from luka Rd north to Country Rd in Grand Rivers.

#### **Reason for Proposed Construction**

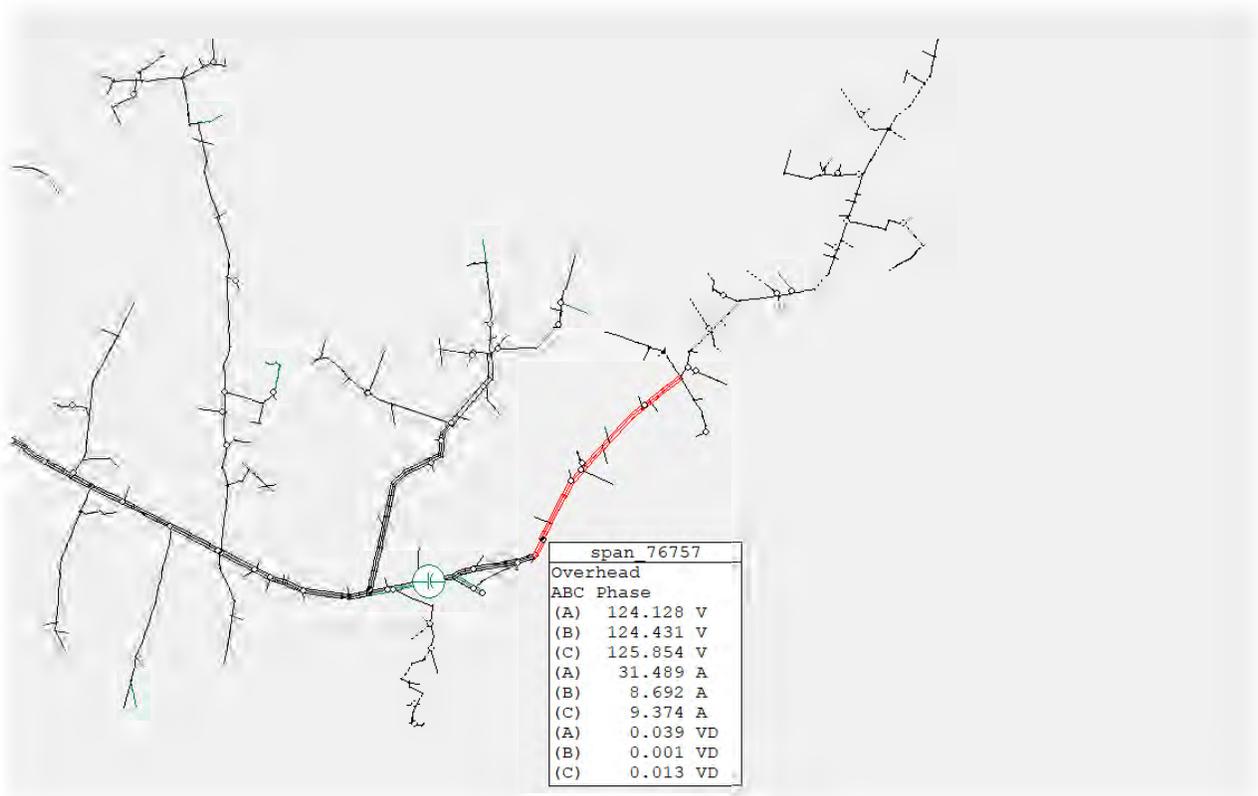
Design Criteria (DC) Item 4 is being violated. (50 amps on single phase)

#### **Results of Proposed Construction**

DC Item 4 will be met.

#### **Alternative Corrective Plan Investigated**

This is a radial tap, no backfeed to relieve loading exists.



## **SUBSTATION UPGRADES– RUS CODE 500**

**Upgrade Kevil Substation to 15/20/25 MVA (514)** - The Kevil substation will be upgraded in 2026. With the increase in transformer size, a 69kV breaker will be used for transformer protection along with installing new solid-state relays and upgrading to feeder regulation.

The total projected cost for the upgrades at New York is \$3,420,000.00.

<b>Kevil Substation Upgrade:</b>	Quantity	Unit Price	Total(Time Escalated)	Years Escalated
Steel Modifications		\$375,000.00	\$409,772.63	3
Transformer:	1 - 69/12.5kV 15/20/25 MVA	\$700,000.00	\$764,908.90	3
Circuit Breaker or Switcher	1 - 69 kV @ \$50,000 ea.	\$50,000.00	\$54,636.35	3
Regulators:	9 - 438 Amp @ \$40,000 ea.	\$40,000.00	\$393,381.72	3
Foundations		\$175,000.00	\$191,227.23	3
Feeder Breakers	3-1200A R-Mags @ \$35,000	\$105,000.00	\$114,736.34	3
Conduit and Control Cable		\$75,000.00	\$81,954.53	3
Relays and Battery Equipment		\$50,000.00	\$54,636.35	3
Switches and Bus Work		\$375,000.00	\$409,772.63	3
Oil Containment		\$80,000.00	\$87,418.16	
Fence/Site Prep		\$100,000.00	\$106,090.00	2
Control House		\$280,000.00	\$305,963.56	3
	<b>Subtotal</b>		<b>\$2,974,498.38</b>	
Testing		\$50,000.00	\$54,636.35	3
	<b>Subtotal</b>		<b>\$3,029,134.73</b>	
Engineering (7.4%)			\$224,155.97	
	<b>Subtotal</b>		<b>\$3,253,290.69</b>	
Contingency (5%)			\$162,664.53	
	<b>Total</b>		<b>\$3,415,955.23</b>	
	<b>Total for Budget</b>		<b>\$3,420,000.00</b>	

**Upgrade New York Substation to feeder regulation (508)** - The New York substation will be upgraded in 2025. The old Krebs Rd transformer was installed at New York in 2023 which increased available capacity. Upgrade in 2025 will include feeder regulation, solid state relays, and 69kV breaker addition.

The total projected cost for the upgrades at New York is \$1,635,000.

<b>New York Substation Upgrade:</b>	Quantity	Unit Price	Total(Time Escalated)	Years Escalated
Steel Modifications		\$100,000.00	\$109,272.70	3
Circuit Breaker or Switcher	1 - 69 kV @ \$70,000 ea.	\$70,000.00	\$76,490.89	2
Regulators:	15 - 438 Amp @ \$40,000 ea.	\$40,000.00	\$636,540.00	2
Foundations		\$50,000.00	\$57,963.70	3
Conduit and Control Cable		\$40,000.00	\$43,709.08	3
Relay Cabinet		\$25,000.00	\$27,318.18	3
<b>Subtotal</b>			\$951,294.55	
Labor (50%)			\$475,647.27	
Testing		\$20,000.00	\$21,854.54	3
<b>Subtotal</b>			\$1,448,796.36	
Engineering (7.4%)			\$107,210.93	
<b>Subtotal</b>			\$1,556,007.29	
Contingency (5%)			\$77,800.36	
<b>Total</b>			<b>\$1,633,807.66</b>	
<b>Total for Budget</b>			<b>\$1,635,000.00</b>	

**Upgrade Smithland Substation to 15/20/25 MVA (515)** – The Smithland substation will be upgraded in 2027. With the increase in transformer size, a 69kV breaker will be used for transformer protection along with installing new solid-state relays and upgrading to feeder regulation.

The total projected cost for the upgrades at Smithland is \$3,660,000.

<b>Smithland Substation Upgrade:</b>	Quantity	Unit Price	Total(Time Escalated)	Years Escalated
Steel Modifications for Highside Breaker		\$100,000.00	\$112,550.88	4
Transformer:	1 - 69/12.5kV 15/20/25 MVA	\$700,000.00	\$787,856.17	4
Circuit Breaker or Switcher	1 - 69 kV @ \$70,000 ea.	\$70,000.00	\$78,785.62	4
Regulators:	9 - 438 Amp @ \$40,000 ea.	\$40,000.00	\$405,183.17	4
Foundations		\$175,000.00	\$202,872.96	5
Feeder Breakers	3-1200A R-Mags @ \$25,000	\$25,000.00	\$84,413.16	4
Conduit and Control Cable		\$75,000.00	\$84,413.16	4
Relays and Battery Equipment		\$50,000.00	\$57,963.70	5
Feeder Bay Steel & Conductors	4	\$200,000.00	\$927,419.26	5
Oil Containment		\$80,000.00	\$90,040.70	4
Control House		\$280,000.00	\$324,596.74	5
Site Work		\$30,000.00	\$33,765.26	4
<b>Subtotal</b>			\$3,156,095.53	
Testing		\$50,000.00	\$57,963.70	5
<b>Subtotal</b>			\$3,214,059.23	
Engineering (7.4%)			\$237,840.38	
<b>Subtotal</b>			\$3,451,899.62	
Contingency (5%)			\$172,594.98	
<b>Total</b>			<b>\$3,658,259.86</b>	
<b>Total for Budget</b>			<b>\$3,660,000.00</b>	

## **RUS CODE 601**

### **New Transformers and Meters**

A total of 1,819 new transformers are anticipated – 466 of which are underground, 1,353 are overhead construction. The total projected cost for adding new transformers is \$5,059,548.

A total of 1,440 new meters are anticipated at an estimated cost of \$291,538.50.

An AMI system upgrade is planned during 2024 and 2025. The total number of replacement meters is approximately 30,360 at an estimated cost of \$5,588,920.

The total cost for anticipated new transformers and meters over the 2024-2027 CWP is estimated at \$10,940,007.

## **RUS CODE 608**

### **Replace Aging Conductor – RUS Code 608**

JPEC is planning to replace a significant amount of CWC conductor with new #2 ACSR. There are an estimated 94 miles of this wire on the system. JPEC is planning to replace approximately 20 miles of this wire over four years. Reconductor projects are also planned along the Cumberland, Pinckneyville Ckt. and the Grand Rivers, Averitt Ckt. to replace small conductor with #336 ACSR.

The projected cost of this conductor replacement is \$2,510,176.

## **RUS CODE 616**

### **Communications/New Fiber – RUS Code 616**

JPEC plans to add fiber between substations on existing overhead poles. This project will include approximately 105 miles of new fiber between existing substations. This is needed for redundant communication paths between substations and communication to down-line electric system devices. All work will be done within existing ROW and no tree clearing will be required.

## **RUS CODE 700**

### **Outdoor Lighting – RUS Code 701 and 702**

JPEC plans to replace 5,594 lights over the 2024-2027 CWP period. These replacements are due to failure of aging lights. All new lights installed will be LED fixtures.

Along with the replacements, 455 new lights are anticipated during this CWP.

The total projected cost of replacements and new installations is \$4,571,639.

## **Exhibit 7**

## BOARD RESOLUTION

### Increase in Maximum Debt Limit

**BE IT RESOLVED**, that Jackson Purchase Energy Corporation (the "Cooperative") increase its "Maximum Debt Limit" to \$250,000,000.00, solely for purposes of stating such amount in its various mortgage and security instruments as the maximum amount of debt to be secured thereunder, provided, however, that nothing in this resolution shall be construed as authorization for the Cooperative to issue additional secured indebtedness unless issued in accordance with existing authority or otherwise approved by this Board.

## CERTIFICATE OF SECRETARY

I, Wayne Elliott, Secretary of the Board of Directors of Jackson Purchase Energy Corporation do hereby certify that the above is a true and correct excerpt from the minutes of the meeting of the Board of Directors held on the 10<sup>th</sup> of February, 2026 at which meeting a quorum was present and that the above portion of the minutes has not been modified or rescinded.

IN WITNESS WHEREOF, I have set my hand this 10<sup>th</sup> day of February, 2026.

  
Signature of Secretary

**RESOLUTION OF THE BOARD OF DIRECTORS OF  
JACKSON PURCHASE ENERGY CORPORATION AUTHORIZING THE  
PREPERATION OF INCREASING THE MAXIMUM DEBT LIMIT, ENERTY INTO A  
LOAN, AMENDING THE LINE OF CREDIT, AND FILING AN APPLICATION  
PURSUANT TO KRS 278.020 WITH THE KENTUCKY PUBLIC SERVICE  
COMMISSION AND ALL OTHER NECESSARY FILINGS IN RELATION TO THE  
APPLICATION**

---

A meeting of the Board of Directors ("Board") of Jackson Purchase Energy Corporation (Jackson Purchase) was held on 2/10/26, after due and proper notice of such meeting was given, and after a quorum was declared, during which meeting the Board discussed and considered amending Jackson Purchase's Maximum Debt Limit ("MDL"), entering into a PowerVision Loan amending Jackson Purchase's Line of Credit ("LOC"), and filing an application pursuant to KRS 278.030 with the Kentucky Public Service Commission ("Commission") for approval of these items.

Upon motion by David Brown and seconded by Kevin Bell, and duly carried, the following RESOLUTION was unanimously adopted:

**WHEREAS**, Jackson Purchase is owned by the members it serves, and its purpose is to provide safe, efficient, and reliable electric service at rates and terms that are fair, just and reasonable; and,

**WHEREAS**, the leadership and management of Jackson Purchase have thoroughly reviewed the Cooperative's financial condition and it has become apparent that to maximize Jackson Purchase's financial condition require increasing the MDL, entering into the PowerVision loan, and amending the terms of the LOC are necessary; and,

**WHEREAS**, the Board understands the process and length of time necessary to prepare the documents for the stated financial transactions; and

**WHEREAS**, the Board understand that before any financial documents that required approval pursuant to KRS 278.030 must be approved by the Commission before the transactions can be finalized; and

**NOW, THEREFORE BE IT RESOLVED** by the Jackson Purchase Board of Directors that the Board of Directors hereby grants approval for the management of Jackson Purchase to take all necessary and advisable actions in connection with preparation of the financial transactions and the filing of an Application pursuant to KRS 278.030 with the Kentucky Public Service Commission.

DATE: 2/10/2026

ATTEST:

  
\_\_\_\_\_  
CHAIRMAN OF THE BOARD

  
\_\_\_\_\_  
SECRETARY

## **Exhibit 8**

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

In the Matter of:

ELECTRONIC APPLICATION OF JACKSON	)	
PURCHASE ENERGY CORPORATION FOR	)	CASE NO.
AUTHORITY TO EXTEND ITS DEBT LIMIT;	)	2026-00033
ESTABLISH A PERPETUAL LINE OF CREDIT;	)	
AND ENTER DEBT OBLIGATIONS	)	

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**DIRECT TESTIMONY OF MEREDITH KENDALL,**  
**CHIEF FINANCIAL OFFICER AND**  
**VICE PRESIDENT OF FINANCE AND ACCOUNTING**  
**ON BEHALF OF JACKSON PURCHASE ENERGY**  
**CORPORATION**

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**Filed:** February 12, 2026



1 **Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.**

2 A. My name is Meredith Kendall and I serve as the Chief Financial Officer and Vice President  
3 of Finance and Accounting for Jackson Purchase Energy Corporation (“Jackson Purchase”  
4 or the “Cooperative”). My business address is 6525 U.S. Highway 60 W., Paducah, KY  
5 42001.

6 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND PROFESSIONAL**  
7 **EXPERIENCE.**

8 A. I am a 2016 graduate of Western Kentucky University with a Bachelor of Science in  
9 Accounting and a Master of Accountancy. I am also a registered Certified Public  
10 Accountant in the state of Kentucky. I have been employed at Jackson Purchase for four  
11 (4) years, one (1) year as Accounting Manager and three (3) years in my current position.  
12 Before working at Jackson Purchase, I spent four (4) years as Accounting Manager at a  
13 telecommunication cooperative and two (2) years as an auditor at a public accounting firm.

14 **Q. PLEASE BRIEFLY DESCRIBE YOUR DUTIES AT THE COOPERATIVE.**

15 A. In my role as CFO at Jackson Purchase, I am responsible for finance, accounting, and  
16 regulatory activities for the Cooperative. This includes managing Jackson Purchase’s debt  
17 portfolio through regular communication with representatives of Rural Utilities Service  
18 (“RUS”), Cooperative Finance Corporation (“CFC”), CoBank, and Federal Financing  
19 Bank (“FFB”). I am also responsible for closely monitoring the Cooperative’s overall  
20 financial condition on a continuous basis to ensure that any financial concerns are identified  
21 early and addressed. I regularly interact with Jackson Purchase’s President and Chief  
22 Executive Officer, Greg Grissom, and its eight-member Board of Directors to provide  
23 financial analysis and summaries in order that they might also stay abreast of the

1 Cooperative's overall financial condition. This interaction includes almost daily  
2 discussion with Mr. Grissom and at least monthly communication with the Board of  
3 Directors, and sometimes more. Mr. Grissom and the Board have also authorized me to  
4 consult with experts, accountants, auditors, attorneys, and other professionals as needed to  
5 assist with any important issues or questions I might have to assure that Jackson Purchase  
6 remains financially sound and able to withstand unanticipated events which could present  
7 challenges to the Cooperative's finances.

8 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

9 A. The purpose of my testimony is two-fold. First, I will provide a general overview of the  
10 Cooperative's financial portfolio. Second, I will summarize the financial transactions  
11 Jackson Purchase is requesting the Commission approve in this proceeding.

12 **Q. ARE YOU SPONSORING ANY EXHIBITS OR ATTACHMENTS?**

13 A. Yes. I am sponsoring all exhibits in this Application, and all the documents were created  
14 by me or at my direction. Additionally, as Attachment MK-1 to my testimony is Schedule  
15 1 – Part A to Jackson Purchase's mortgage.

16 **Q. PLEASE GENERALLY DESCRIBE JACKSON PURCHASE'S EXISTING DEBT**  
17 **PORTFOLIO.**

18 A. Jackson Purchase is currently a borrower from CFC, CoBank, and RUS, with 100% of  
19 Jackson Purchase's long-term debt at fixed interest rates. Since 2017, Jackson Purchase  
20 has only borrowed long term debt through RUS, which has historically offered significantly  
21 lower interest rates than other lenders. Jackson Purchase has three lines of credit, one  
22 through CFC and two through CoBank, which are only used on an as-needed basis due to  
23 higher interest rates typically associated with lines of credit. Jackson Purchase's Capital

1 Management Policy, reviewed and approved by its Board of Directors, states that the  
2 Cooperative should strive to maintain an equity-to-assets level between 30% and 50%.  
3 Management and the Board of Directors review this ratio monthly and before assuming  
4 additional long-term debt.

5 **Q. IS JACKSON PURCHASE’S MORTGAGE THE SAME AS A “TYPICAL”**  
6 **MORTGAGE?**

7 A. No. Jackson Purchase’s mortgage is used to finance utility infrastructure, such as power  
8 lines, substations, metering equipment, etc. The mortgage is secured by the utility’s assets.  
9 Jackson Purchase’s mortgage is financed through RUS, National CFC, and CoBank. All  
10 new loans or mortgages must be approved by Jackson Purchase’s Board of Directors, as  
11 well as the Commission if the loan requires approval pursuant to KRS 278.300. Jackson  
12 Purchase must adhere to strict financial and operational reporting requirements on at least  
13 an annual basis to its mortgagees.

14 **Q. PLEASE EXPLAIN WHY JACKSON PURCHASE HAS A MAXIMUM DEBT**  
15 **LIMIT ON ITS MORTGAGE?**

16 A. The maximum debt limit refers to the maximum amount of debt, at its original face value,  
17 that Jackson Purchase may have secured at any one point in time. The maximum debt limit  
18 is a form of governance set up by lenders to ensure a cooperative limits risk to its financial  
19 health and, in turn, its member-owners by requiring additional approval each time the debt  
20 limit is raised. Jackson Purchase’s maximum debt limit, which can be found in Schedule  
21 A, Part One of the mortgage, is currently set at \$200,000,000.00, and the original face value  
22 of Jackson Purchase’s current outstanding debt is \$197,447,918.33. However, the original  
23 face value does **not** consider any amounts not advanced on each loan, or the amount of

1 principal that the Cooperative has paid toward its debt principal since assuming each loan.  
2 As of November 30, 2025, Jackson Purchase's **actual** outstanding principal on long term  
3 debt was only \$95,364,089.11.

4 **Q. WHAT IS JACKSON PURCHASE'S REQUEST REGARDING ITS MAXIMUM**  
5 **DEBT LIMIT ON ITS MORTGAGE?**

6 A. Jackson Purchase is requesting to increase its Maximum Debt Limit on its mortgage from  
7 \$200,000,000.00 to \$250,000,000.00.

8 **Q. WHY IS JACKSON PURCHASE MAKING THIS REQUEST?**

9 A. As stated above, the mortgage is currently set at \$200,000,000.00, and the original face  
10 value of Jackson Purchase's current outstanding debt is \$197,447,918.33. However, the  
11 original face value does **not** take into account many things and Jackson Purchase's **actual**  
12 outstanding principal on long term debt was only \$95,364,089.11 as of November 30, 2025.  
13 When Jackson Purchase began considering the PowerVision Loan, which will be further  
14 discussed later in my testimony, it was made clear that Jackson Purchase did not have  
15 enough remaining original face value in the mortgage to apply for the loan. To enter into  
16 the PowerVision Loan and to give Jackson Purchase adequate capacity to secure long-term  
17 debt for future work plan projects, Jackson Purchase must raise its mortgage level to  
18 \$250,000,000 so that there is enough face value in the mortgage to be added to the  
19 \$197,447,918.33.

20 **Q. JACKSON PURCHASE IS ALSO REQUESTING APPROVAL OF A**  
21 **POWERSVISION LOAN. PLEASE EXPLAIN THE POWERSVISION LOAN.**

22 A. CFC offers PowerVision loans to cooperatives that are concurrent borrowers with CFC and  
23 RUS. The PowerVision loans act as a supplement to the participating Cooperative's

1 normal work plan loan. CFC goes through a formal, internal approval process before funds  
2 are made available. The PowerVision loan is long-term secured financing, in an aggregate  
3 amount that can be drawn down in increments over a five (5) year period. All approvals,  
4 administrative procedures, and loan documentation are completed at the time the credit  
5 facility is established. This allows the cooperative flexibility to determine the amount and  
6 maturity of each drawdown requested during the five (5) years.

7 **Q. WHY JACKSON PURCHASE IS SEEKING TO ENTER INTO THIS LOAN**  
8 **AGREEMENT.**

9 A. The Cooperative intends to use these funds for a proper purposes; such as supplemental  
10 funding in case of an emergency (i.e., unexpected weather-related event or natural  
11 catastrophe, etc.), if the Cooperative cannot access funds through RUS (i.e. federal  
12 government shutdown or other reasons), or in the case that the PowerVision Loan offers  
13 more competitive long-term interest rates than RUS or other lenders. There are no fees  
14 associated with the loan commitment or preparation of the loan (other than the cost of  
15 preparation of an Attorney's opinion), and there is no requirement to make an advance on  
16 the available outstanding funds from the PowerVision Loan.

17 A utility's work plan is funded by a RUS loan. However, this loan is not funded  
18 until the work plan is completed. While Jackson Purchase is completing its work plan, the  
19 PowerVision Loan will allow Jackson Purchase to take advantage of the most favorable  
20 interest rates. These lower interest rates will benefit the member-owners due to lower  
21 interest expense.

1 **Q. JACKSON PURCHASE IS ALSO REQUESTING TO AMEND ITS LINE OF**  
2 **CREDIT. CAN YOU PLEASE EXPLAIN THESE CHANGES AND THE**  
3 **REASONS THEY ARE NECESSARY?**

4 A. Jackson Purchase currently has one line of credit outstanding with CFC (\$5 million total)  
5 as well as two lines of credit outstanding with CoBank (\$10 million total). The lines of  
6 credit are used to fulfill short-term lending needs. One of the more common scenarios for  
7 short-term needs is paying the wholesale power bill at the end of each month until the  
8 member-owners' bill payments are received. Then, Jackson Purchase pays down the line  
9 of credit as much as possible to avoid incurring additional interest expense. The request  
10 to increase the CFC line of credit would provide more borrowing flexibility for Jackson  
11 Purchase, especially in months when the wholesale power bill is higher than average.  
12 Having a greater line of credit with CFC will allow Jackson Purchase to compare interest  
13 rates between CFC and CoBank and then decide to utilize the line of credit with the lower  
14 interest rate. The Cooperative also wishes to convert the line of credit agreement from a  
15 revolving agreement to a perpetual agreement to simplify recordkeeping and minimize  
16 administrative burden.

17 **Q. WILL RAISING THE MAXIMUM DEBT LIMIT ON JACKSON PURCHASE'S**  
18 **MORTGAGE, ENTERING INTO A POWERVISION LOAN, OR INCREASING**  
19 **THE LINE OF CREDIT NEGATIVELY AFFECT JACKSON PURCHASE OR ITS**  
20 **MEMBERS?**

21 A. No. Raising the maximum debt limit does not have a direct correlation to actual long-term  
22 debt on the Cooperative's balance sheet. Instead, if the limit is raised, Jackson Purchase  
23 will then be able to enter the PowerVision loan to utilize on an as needed basis. Increasing

1 the line of credit with CFC will also allow Jackson Purchase to draw on the line of credit  
2 that offers the most competitive rate (between CFC and CoBank), as well as offering the  
3 Cooperative funding in times of short-term lending need to ensure reliable service to its  
4 members.

5 **Q. DO YOU BELIVE THESE FINANCIAL TRANSACTIONS MEET THE**  
6 **REQUIREMENTS OF KRS 278.300?**

7 A. Yes. KRS 278.300(3) requires the Commission to determine if the evidence of  
8 indebtedness is for a lawful objective within the purpose of the utility, is necessary and  
9 appropriate for or consistent with the proper performance of the utility of its service to the  
10 public, and is reasonably necessary for such purpose. Jackson Purchase's requests in this  
11 Application is lawful, consistent with the proper performance of the utility, and is  
12 reasonably necessary. Jackson Purchase is obligated to complete its RUS Work Plan to  
13 maintain and improve distribution assets for the sake of providing reliable service to its  
14 members. Due to various factors, including maintaining the financial health of the  
15 Cooperative, Jackson Purchase needs to enter the PowerVision loan to have the ability to  
16 complete the Work Plan. Increasing the MDL in the mortgage is essential to finalizing the  
17 PowerVision Loan. Additionally, increasing and amending the LOC will allow Jackson  
18 Purchase to secure the most favorable short-term interest rates.

19 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

20 A. Yes.

# **ATTACHMENT MK-1**

**SCHEDULE A: Part One**

1. The Maximum Debt Limit referred to in Section 1.01 is \$200,000,000.00.
2. The state referred to in Section 1.04 is Kentucky.
3. The addresses of the parties referred to in Sections 1.05 and 6.05 are as follows:

As to the Mortgagor:

Jackson Purchase Energy Corporation  
6525 US Highway 60 West  
Paducah, Kentucky 42001-7498

As to the Mortgagees:

Rural Utilities Service  
United States Department of Agriculture  
Washington, DC 20250-1500

National Rural Utilities  
Cooperative Finance Corporation  
20701 Cooperative Way  
Dulles, Virginia 20166

CoBank, ACB  
6340 S. Fiddlers Green Circle  
Greenwood Village, Colorado 80111

4. The Original Mortgage as referred to in the first WHEREAS clause above is more particularly described as follows:

<u>Instrument Title</u>	<u>Instrument Date</u>
Restated Mortgage and Security Agreement	September 1, 2020

5. The outstanding secured obligations of the Mortgagor referred to in the fourth WHEREAS clause above are evidenced by the Original Notes described below:

<b>ORIGINAL NOTES issued to the Government<sup>1</sup></b>				
<u>Loan</u>	<u>Face Amount</u>	<u>Date</u>	<u>Final</u>	<u>% Rate<sup>2</sup></u>
<u>Designation</u>			<u>Maturity</u>	
AN8 <sup>3</sup>	\$18,590,000.00	01 May 2001	31 Dec 2035	V
AS8 <sup>4</sup>	\$26,753,000.00	01 Sep 2010	31 Dec 2044	V
AT8 <sup>5</sup>	\$61,543,000.00	01 Sep 2020	31 Dec 2054	V
AU45	\$57,000,000.00	03 Jun 2024	03 Jun 2059	V

<sup>1</sup>"Government" as used in this listing refers to the United States of America acting through the Administrator of the Rural Utilities Service (RUS) or its predecessor agency, the Rural Electrification Administration (REA). Any Notes which are payable to a third party and which either RUS or REA has guaranteed as to payment are also described in this listing as being issued to the Government. Such guaranteed Notes are typically issued to the Federal Financing Bank (FFB), an instrumentality of the United States Department of Treasury, and held by RUS, but may also be issued to non governmental entities.

<sup>2</sup>V=variable interest rate calculated by RUS pursuant to title 7 of the Code of Federal Regulations or by the Secretary of Treasury. CFC=an interest rate which may be fixed or variable from time to time as provided in the CFC Loan Agreement pertaining to a loan which has been made by CFC and guaranteed by RUS. CoBank=an interest rate which may be fixed or variable from time to time as provided in the CoBank Loan Agreement pertaining to a loan which has been made by CoBank and guaranteed by RUS.

<sup>3</sup>In addition to this note which the Mortgagor has issued to FFB, the Mortgagor has also issued a corresponding promissory note to RUS designated as the certain "Reimbursement Note" bearing even date therewith. Such Reimbursement Note is payable to the Government on demand and evidences the Mortgagor's obligation immediately to repay RUS. Any payment which RUS may make pursuant to the RUS guarantee of such FFB note, together with interest, expenses and penalties (all as described in such Reimbursement Note). Such Reimbursement Note is an "Additional Note issued to the Government" for purposes of this Part One of Schedule A and this Mortgage and is entitled to all of the benefits and security of this Mortgage.

<sup>4</sup>See footnote 3 in this Schedule A.

<sup>5</sup>See footnote 3 in this Schedule A.

**SCHEDULE A: Part Two**

The outstanding secured obligations of the Mortgagor referred to in the fourth WHEREAS clause above are evidenced by the Original Notes described below:

**ORIGINAL NOTES issued to CFC**

<b><u>CFC Loan Designation</u></b>	<b><u>Face Amount of Note</u></b>	<b><u>Note Date</u></b>	<b><u>Maturity Date</u></b>
KY020-A-9003	\$18,844,470.00	12/22/2016	09/22/2042

**SCHEDULE A: Part Three**

**CoBank**

The outstanding secured obligations of the Mortgagor referred to in the fourth WHEREAS clause above are evidenced by the Original Notes described below:

**ORIGINAL NOTES issued to CoBank, ACB**

Payor: Jackson Purchase Energy Corporation

<u>CoBank Loan</u> <u>Designation</u>	<u>Face Amount of</u> <u>Note</u>	<u>Note Date</u>	<u>Maturity Date</u>	<u>% Rate</u>
14213340T02 <sup>1</sup>	\$1,115,378.08	August 1, 2017	February 20, 2029	Variable
14213340T03 <sup>2</sup>	\$739,237.00	August 1, 2017	August 20, 2026	Variable
14213340T07 <sup>3</sup>	\$2,666,154.87	August 1, 2017	October 20, 2026	Variable
14213340T08 <sup>4</sup>	\$2,405,196.01	August 1, 2017	December 20, 2028	Variable
14213340T09 <sup>5</sup>	\$7,791,482.37	August 1, 2017	September 20, 2034	Variable

<sup>1</sup> Amends, restates, replaces and supersedes Amended and Restated Promissory Note and Concurrent Loan Supplement No. RIML0731T2 dated as of June 19, 2003.

<sup>2</sup> Amends, restates, replaces and supersedes Amended and Restated Promissory Note and Concurrent Loan Supplement No. RIML0731T3 dated as of June 19, 2003.

<sup>3</sup> Amends, restates, replaces and supersedes Promissory Note and Supplement (RUS Refinance) No. RX0731T7 dated as of July 14, 2010.

<sup>4</sup> Amends, restates, replaces and supersedes Promissory Note and Supplement (RUS Refinance) No. RX0731T8 dated as of July 14, 2010.

<sup>5</sup> Amends, restates, replaces and supersedes Promissory Note and Single Advance Term Loan Supplement (RUS Refinance) No. RIML0731T9 dated as of January 3, 2012.