EAST KENTUCKY POWER COOPERATIVE, INC.

UPDATED INFORMATION TO BE FILED ANNUALLY AS SUPPLEMENT TO THE ANNUAL REPORT

AS ORDERED on October 7, 2005 in the CLOSED PSC ADMINISTRATIVE CASE 387

PUBLIC SERVICE COMMISSION'S REQUEST DATED 12/20/01

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM	**)) ADMINISTRATIVE) CASE NO. 387)**

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM	**)** **)** **)** **)**	**CASE NO. 2025-00044**

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Christopher Adams**,** being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission in the above-referenced case dated December 20, 2001, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Chris Adams

_____

Subscribed and sworn before me on this 25th day of March, 2025.

Notary Public

GWYN M. WILLOUGHBY
Notary Public
Commonwealth of Kentucky
Commission Number KYNP38003
My Commission Expires Nov 30, 2025

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM	**)** **)** **)** **)**	**CASE NO. 2025-00044**

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Darrin Adams, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission in the above-referenced case dated December 20, 2001, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Darrin Adams

Subscribed and sworn before me on this 25th day of March, 2025.

Notary Public

GWYN M. WILLOUGHBY
Notary Public
Commonwealth of Kentucky
Commission Number KYNP38003
My Commission Expires Nov 30, 2025

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC ADMINISTRATIVE CASE 387

PUBLIC SERVICE COMMISSION'S REQUEST DATED 12/20/01

East Kentucky Power Cooperative, Inc. (EKPC) hereby submits responses to the information requests contained in Appendix G to the Order of the Public Service Commission ("PSC") in this case dated December 20, 2001, as subsequently revised by Orders dated March 29, 2004 and October 7, 2005. Each response with its associated supportive reference materials is individually tabbed.

The requests listed below, which were originally contained in Appendix G of the Commission's Order dated December 20, 2001, are no longer required pursuant to the Commission's Order of March 29, 2004, amending the previous Order.

Request No. 1
Request No. 2
Request No. 5
Request No. 9
Request No. 10

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC ADMINISTRATIVE CASE NO. 387
ANNUAL RESOURCE ASSESSMENT FILING

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01
REQUEST 3
RESPONSIBLE PERSON: **Christopher E. Adams**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 3. Actual and weather-normalized coincident peak demands for the just completed calendar year. Demands should be disaggregated into (a) native load demand (firm and non-firm) and (b) off-system demand (firm and non-firm).

Response 3a. Refer to table below.

Monthly Native Load Peak Demands 2024		
	Actual (Firm and Non-Firm) (MW)	Weather-Normalized (Firm and Non-Firm) (MW)
January	3,754	3,956
February	2,745	3,262
March	2,341	2,780
April	1,926	2,204
May	2,217	2,283
June	2,432	2,383
July	2,581	2,545
August	2,576	2,631
September	2,226	2,316
October	1,943	2,169
November	2,368	2,311
December	3,093	3,410

Response 3b. EKPC had no off-system demand obligations during the calendar year EKPC had no off-system demand obligations during the calendar year 2024.

EAST KENTUCKY POWER COOPERATIVE, INC.
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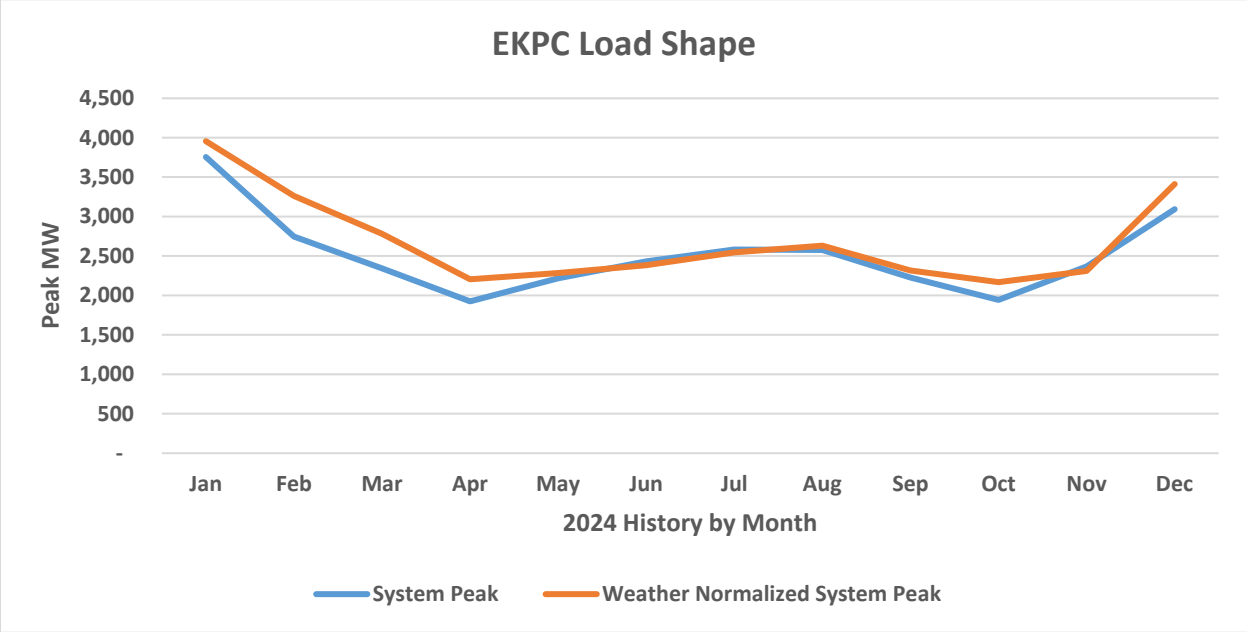
ANNUAL RESOURCE ASSESSMENT FILING

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01
REQUEST 4
RESPONSIBLE PERSON: **Christopher E. Adams**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 4. Load shape curves that show actual peak demands and weather-normalized peak demands (native load demand and total demand) on a monthly basis for the just completed calendar year.

Response 4.



EAST KENTUCKY POWER COOPERATIVE, INC.
PSC ADMINISTRATIVE CASE NO. 387
ANNUAL RESOURCE ASSESSMENT FILING

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01
REQUEST 6
RESPONSIBLE PERSON: **Christopher E. Adams**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 6. Based on the most recent demand forecast, the base case demand and energy forecasts and high case demand and energy forecasts for the current year and the following four years. The information should be disaggregated into (a) native load (firm and non-firm demand) and (b) off-system load (both firm and non-firm demand).

Response 6 EKPC prepares high and low scenarios to bracket its base case forecast. The ranges are shown in the tables below. All load is considered native load (EKPC is not projecting off-system load).

Net Total Energy Requirements (GWh)			
Year	**Low**	**Base**	**High**
2025	14,213	15,356	16,442
2026	14,531	16,033	17,493
2027	14,727	16,325	17,833
2028	14,871	16,535	18,130
2029	15,002	16,716	18,403

Winter Peak MW			
Year	**Low**	**Base**	**High**
2024 - 25	3,148	3,517	3,984
2025 - 26	3,197	3,627	4,155
2026 - 27	3,231	3,677	4,217
2027 - 28	3,258	3,712	4,272
2028 - 29	3,258	3,727	4,298

Summer Peak (MW)			
Year	**Low**	**Base**	**High**
2025	2,222	2,530	2,845
2026	2,223	2,588	2,960
2027	2,263	2,641	3,024
2028	2,269	2,664	3,054
2029	2,286	2,688	3,096

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC ADMINISTRATIVE CASE NO. 387
ANNUAL RESOURCE ASSESSMENT FILING

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01
REQUEST 7
RESPONSIBLE PERSON: **Christopher E. Adams**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 7. The target reserve margin currently used for planning purposes, stated as a percentage of demand. If changed from what was in use in 2001, include a detailed explanation of the change.

Response 7. EKPC's obligation to PJM for capacity is defined by the Resource Planning Model (RPM). PJM establishes a Variable Resource Requirement against which all supply resources clear, establishing the clearing price for committed capacity resources. The Variable Resource Requirement incorporates the reserve requirement established for the particular delivery year. Among other factors, the reserve requirement incorporates PJM's summer peak load forecast, forced outage rates of resources and, an expectation of resources the PJM region might receive from other regions during emergency conditions. The calculated reserve requirement for the delivery year June 1, 2025 through May 31, 2026 is 18.5% installed reserve margin, established in July 2024.

EKPC's allocated capacity obligation based upon the RPM clearings have resulted in EKPC carrying its stand-alone summer peak load requirement plus a seven percent addition. This represents a four percent increase over the previously assumed three percent reserve. The seven percent addition is due to load diversity throughout the PJM region and the increased variability in the load obligation requirement due to the new Effective Load Carrying Capability ("ELCC") construct. EKPC does not historically peak at the same time that the PJM system as a whole, peaks. Therefore, the reserve margin for the EKPC only load is less than the reserve margin that PJM carries on its entire load at the time of its coincident peak. All EKPC capacity resources that clear in the market are committed to the PJM region to ensure resource adequacy; all committed resources are responsible to perform when PJM needs them to ensure regional reliability. All also must offer into the Day Ahead Energy Market.

The commitment of capacity resources to be available to produce electricity in a future delivery year, however, does not lock in energy market prices for that future delivery year. The only way to guarantee a maximum cost on energy is to secure enough resources or energy contracts to hedge the prices that may result from the real time conditions and fuel prices in the energy market. EKPC takes measures to hedge its energy price exposure through the entire year. EKPC has increased its winter generation reserve margin to seven percent to help hedge its energy exposure to the market during peak load periods.

EAST KENTUCKY POWER COOPERATIVE, INC.
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ANNUAL RESOURCE ASSESSMENT FILING

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01
REQUEST 8
RESPONSIBLE PERSON: **Christopher E. Adams**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 8: Projected reserve margins stated in megawatts and as a percentage of demand for the current year and the following 4 years. Identify projected deficits and current plans for addressing these. For each year identify the level of firm capacity purchases projected to meet native load demand.

Response 8: The table below shows the projected summer and winter peak and reserve levels. Summer energy resources and reserves remain adequate through the 5-year horizon. Winter energy resources and reserves are based on EKPC's current fleet and executed purchases without any added resources. EKPC has filed for additional resources in PSC Case Nos. 2024-00310 and 2024-00370. In the interim, EKPC will evaluate seasonal purchases of physical energy.

Year	Summer Load (MW)	Summer Energy Resources (MW)	Reserves (%)	Winter Load (MW)	Winter Energy Resources (MW)	Reserves (%)
2025	2,530	3,452	36%	3,517	3,727	6%
2026	2,588	3,152	22%	3,627	3,427	-6%
2027	2,641	3,152	19%	3,677	3,427	-7%
2028	2,664	3,152	18%	3,712	3,427	-8%
2029	2,688	3,152	17%	3,727	3,427	-8%

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC ADMINISTRATIVE CASE NO. 387
ANNUAL RESOURCE ASSESSMENT FILING

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01
REQUEST 11
RESPONSIBLE PERSON: **Christopher E. Adams**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 11: A list that identifies scheduled outages or retirements of generating capacity during the current year and the following four years.

Response 11: Please see scheduled outage information in attachment *387 – Response 11 – 28JAN25.xlsx*.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC ADMINISTRATIVE CASE NO. 387
ANNUAL RESOURCE ASSESSMENT FILING

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01
REQUEST 12
RESPONSIBLE PERSON: **Christopher E. Adams**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 12. Identify all planned base load or peaking capacity additions to meet native load requirements over the next 10 years. Show the expected in-service date, size and site for all planned additions. Include additions planned by the utility, as well as those by affiliates, if constructed in Kentucky or intended to meet load in Kentucky.

Response 12. EKPC has filed Certificates of Public Convenience and Necessity ("CPCN") applications for additional base load, peaking and solar resources along with natural gas co-fire conversion projects for its existing base load generation resources. [1]

Additions	Type	Expected In-Service Date	Size (MW)	Site
Cooperative Solar 2 - Fayette	Solar	6/30/2027	40	Fayette County
Cooperative Solar 3 - Marion	Solar	6/15/2027	96	Marion County
Liberty RICE	Natural Gas RICE	12/1/2028	214	Casey County
Cooper CCGT	Natural Gas CCGT	12/31/2030	745	Pulaski County

[1] See PSC Case Nos. 2024-00129, 2024-00310, and 2024-00370.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC ADMINISTRATIVE CASE NO. 387
ANNUAL RESOURCE ASSESSMENT FILING

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01
REQUEST 13
RESPONSIBLE PERSON: **Darrin Adams**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request. The following transmission energy data for the just completed calendar year and the forecast for the current year and the following four years:

Request 13a. Total energy received from all interconnections and generation sources connected to the transmission system.

Request 13b. Total energy delivered to all interconnections on the transmission system.

Response 13a & b. The total energy received from all interconnections and from generation sources connected to the EKPC transmission system for calendar year 2024 was 22,823,381 MWh. The total energy delivered to all interconnections on the EKPC system in 2024 was 8,677,686 MWh.

The forecasted total energy requirements for the EKPC system for 2025 through 2029 are as follows:

2025	15,356,328 MWh
2026	16,032,547 MWh
2027	16,324,831 MWh
2028	16,535,333 MWh
2029	16,716,466 MWh

Request 13c. Peak load capacity of the transmission system.

Response 13c. The transmission capacity of a grid system changes constantly based on factors like generation dispatch, ambient temperature, load characteristics, facility outages, power transfers, etc. EKPC's transmission system is planned and constructed to deliver all of its generation resources to its native load delivery points and to accommodate other contracted users (e.g., merchant generation facilities, customers taking Network Integration Transmission Service, etc.) of the EKPC transmission system during forecasted normal summer and winter peak load conditions. EKPC's transmission system is also designed to accommodate an outage of a single transmission facility and/or generating unit at these load levels. Also, EKPC designs its transmission system to reliably deliver its generation resources to its native load delivery points during "extreme" weather conditions (1-in-10 year temperatures) for summer and winter with all facilities in service. Other than simulation of imports into EKPC to replace an outage of a single generating unit, the transfers used in the EKPC transmission planning process are those modeled in the NERC MMWG models, which are typically the long-term firm transactions known at the time of the development of the models.

Transfer studies performed in regional assessments by both SERC and PJM have not identified any significant limitations within the EKPC system. Therefore, EKPC's system is expected to be capable of handling a reasonable level of overlaid transfers while also delivering energy to EKPC's native-load customers and other transmission customers using EKPC's transmission system to deliver energy to the PJM market (for instance, merchant generation facilities) or for their native-load customers (for instance, LG&E/KU).

Request 13d. Peak demand for summer and winter season on the transmission system.

Response 13d.

SUMMER	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Date	7/15/2024					
Hr.	1800					
Peak Demand (MW)	2581	2530	2588	2641	2664	2688

WINTER	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Date	1/17/2024	1/22/2025*				
Hr.	0800	0800				
Peak Demand (MW)	3754	3744	3627	3677	3712	3727

*Reflects January 2025 actual winter peak.

EAST KENTUCKY POWER COOPERATIVE, INC.
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ANNUAL RESOURCE ASSESSMENT FILING
PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01
REQUEST 14
RESPONSIBLE PERSON: **Darrin Adams**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 14. Identify all planned transmission capacity additions for the next 10 years. Include the expected in-service date, size and site for all planned additions and identify the transmission need each addition is intended to address.

Response 14. Pages 2 through 7 of this response include EKPC's 10-year transmission expansion plan for the 2025-2034 period. During this period, EKPC expects to make the following transmission improvements for replacement of aging transmission line and substation infrastructure, normal system development, and load growth to serve native load customers and other long-term contracted uses of the EKPC transmission system:

- 8.18 miles of new 161 kV transmission line
- 11.6 miles of new 138 kV transmission line
- 70.0 miles of new 69 kV transmission line
- 53.5 miles of 161 kV transmission line re-conductor/rebuild/MOT increase
- 29.1 miles of 138 kV transmission line re-conductor/rebuild
- 305.1 miles of 69 kV transmission line re-conductor/rebuild
- 2 new 161 kV transmission substations
- 1 new 138/69 kV transmission substation
- 1 transmission substation rebuild to 138 kV
- 5 new 69 kV transmission substations

- 115.5 MVAR of new transmission capacitor banks/increases of existing bank sizes
- 10 new distribution substations (220 MVA added capacity)
- 32 upgrades of existing distribution substations (186.8 MVA added capacity)
- 4 projects to add substation terminal facilities

In addition, EKPC has identified the need for the following transmission expansion projects due to generator interconnection requested projects with executed Interconnection Construction Service Agreements and that have been granted a Certificate of Construction by the Kentucky Electric Generation and Transmission Siting Board:

- 2 new 161 kV switching stations
- 2 new 69 kV switching stations
- 1 expansion of an existing 161 kV substation
- 1 expansion of an existing 138 kV substation
- 1 increase to the maximum operating temperature of an existing transmission line

EKPC 10-YEAR TRANSMISSION EXPANSION SCHEDULE (2025 – 2034)	
A. New Transmission Lines Project Description	**Needed In-Service Date**
Construct a new Marion Co Industrial Tap 161 kV parallel line using 795 ACSR (2.28 miles)	Dec-25
Construct a new Madison County 69 kV Tap using 795 ACSR (1.3 miles)	Dec-26
Construct a new Coburg-EKPC Campbellsville 69 kV line using 556 ACSR (13 miles)	Jun-27
Construct a new Thunder Ridge-AEP Dewey Dam 69 kV line using 795 ACSR (5 miles)	Dec-28
Construct a new Cooper-Alcalde 161 kV line using 954 ACSS conductor (5 miles)	Dec-30
Construct a new Hunt Farm Junction-Shelby City 69 kV line using 556 ACSR (8.8 miles)	Dec-30
Construct a new Nelson County-Balltown 69 kV line using 556 ACSR (7.5 miles)	Jun-32

EKPC 10-YEAR TRANSMISSION EXPANSION SCHEDULE (2025 – 2034)	
B. Transmission Station Rebuilds Project Description	**Needed In-Service Date**
Rebuild the Dale Switching Station as 138 kV and retire the 69 kV equipment	Jun-29

EKPC 10-YEAR TRANSMISSION EXPANSION SCHEDULE (2025 – 2034)	
C. Transmission Line Rebuilds **Project Description**	**Needed In-Service Date**
Rebuild the 1/0 Clay Village-New Castle 69 kV line section using 556 ACSR (14.29 miles)	Apr-25
Rebuild the 3/0 Liberty Junction-Peyton's Store 69 kV line section using 556 ACSR (14.2 miles)	Jun-25
Rebuild the 4/0 North Springfield-Loretto line section using 556 ACSR (14.11 miles)	Aug-25
Rebuild the 3/0 Fall Rock-Manchester 69 kV line section using 556 ACSR (5.83 miles)	Nov-25
Rebuild the 4/0 KU Carrollton-Milton 69 kV line section using 556 ACSR (13.39 miles)	Dec-25
Rebuild the 4/0 Norwood Junction-Shopville 69 kV line section using 556 ACSR (6.3 miles)	May-26
Replace the structures on the 556 ACSR Cynthiana-Renaker 69 kV line section (8.59 miles)	Jun-26
Rebuild the 4/0 Snow-North Albany 69 kV line section using 556 ACSR (4.4 miles)	Jun-26
Rebuild the 556 ACSR Baker Lane double circuit 69 kV line section as two separate circuits using 556 ACSR (0.37 miles)	Jun-26
Rebuild the 266 ACSR Bekaert #3-Switch N51-615 69 kV line section using 795 ACSR (0.03 miles)	Dec-26
Rebuild the 4/0 Bonnieville-Stephensburg 69 kV line section using 556 ACSR (16.42 miles)	Mar-27
Rebuild the 3/0 Headquarters-Murphysville 69 kV line section using 556 ACSR (19.9 miles)	Jul-27
Replace structures on the 556 ACSR Elizabethtown-Vine Grove 69 kV line section (7.45 miles)	Aug-27
Rebuild the 556 ACSR Duncannon Lane-West Berea 69 kV line sections using 795 ACSR (9.63 miles)	Aug-27
Rebuild the 2/0 Penn-Renaker 69 kV line section using 556 ACSR (20.79 miles)	Nov-27
Replace the structures on the 556 ACSR Windsor-Somerset 69 kV line section (18.66 miles)	Dec-27
Rebuild the 3/0 KU Wofford-McCreary Co. Junction 69 kV line section using 556 ACSR (20.7 miles)	May-28
Replace the structures on the 556 ACSR Elizabethtown-Stephensburg 69 kV line section (11.71 miles)	Aug-28
Rebuild the 4/0 Maytown-West Liberty 69 kV line section using 556 ACSR (12.3 miles)	Nov-28
Rebuild the 266 ACSR Davis-Fayette 69 kV line section using 556 ACSR (3.15 miles)	Dec-28
Rebuild the 636 ACSR Liberty RICE Substation-Liberty Junction 161 kV line using 795 ACSR (7.4 miles)	Dec-28
Rebuild the 636 ACSR Marion County-LG&E/KU Lebanon 138 kV line using 795 ACSR (0.1 miles)	Dec-28
Rebuild the 266.8 Bekaert-Budd 69 kV line section using 795 ACSR (0.8 miles)	May-29
Rebuild the 266.8 Dale-Newby 69 kV Double-Circuit line section as a Single-Circuit 138 kV line section using 795 ACSR (11.1 miles)	Jun-29
Rebuild the 3/0 South Fork-Tyner 69 kV line section using 556 ACSR (14.9 miles)	Dec-29
Replace the structures on the 266 and 556 ACSR Powell Co-Zachariah line sections (16.14 miles)	Dec-29
Rebuild the 556 ACSR Nicholasville-Holloway Junction line sections using 556 ACSR (3.13 miles)	Dec-29

EKPC 10-YEAR TRANSMISSION EXPANSION SCHEDULE (2025 – 2034)	
C. Transmission Line Rebuilds (continued) **Project Description**	**Needed In-Service Date**
Rebuild the 266.8 Budd-Logan Tap 69 kV line section using 795 ACSR (0.48 miles)	May-30
Rebuild the 266 ACSR Nicholasville-Davis 69 kV line section using 556 ACSR (3.91 miles)	May-30
Rebuild the 795 ACSR Cooper-Elihu 161 kV line using bundled 954 ACSR (4.2 Miles)	Dec-30
Rebuild the 1/0 Renaker-Williamstown 69 kV line section using 556 ACSR (18.5 miles)	Dec-30
Rebuild the 266 ACSR South Lancaster-Garrard County 69 kV line using 556 ACSR (1.8 miles)	Dec-30
Replace the structures on the 556 ACSR Hope-Frenchburg line section (10.94 miles)	Aug-31
Rebuild the 795 ACSR Boone-Gallatin 138 kV line section using 795 ACSR (29.0 miles)	Dec-33
Rebuild the 556 ACSR Logan-Shelby County 69 kV line section using 795 ACSR (0.1 miles)	May-34
Rebuild the 556 ACSR West Shelby-Bekaert 69 kV line section using 795 ACSR (1.85 miles)	May-34

EKPC 10-YEAR TRANSMISSION EXPANSION SCHEDULE (2025 – 2034)	
D. New Transmission Substations **Project Description**	**Needed In-Service Date**
Build a new Madison County 69 kV Switching Station	Dec-26
Build a new Joyes Station 69 kV Switching Station	Dec-26
Build a new Coburg Junction 69 kV Switching Station	Jun-27
Build a new Liberty RICE 161 kV Switching Station	Dec-28
Build a new Thunder Ridge 69 kV Switching Station	Dec-28
Build a new Newby 138/69 kV Switching Station	Jun-29
Build a new Cooper 161 kV Switching Station	Dec-30
Build a new Munk Junction 69 kV Switching Station	Dec-30

EKPC 10-YEAR TRANSMISSION EXPANSION SCHEDULE (2025 – 2034)	
E. Capacitor Bank Additions **Project Description**	**Needed In-Service Date**
Install a new 40.8 MVAR, 69 kV Capacitor Bank at Cooper Station	Jun-26
Install a new 38 MVAR, 69 kV Capacitor Bank at the new Joyes Station Road	May-30
Increase the size of the Coburg 69 kV Capacitor Bank from 7.1 to 17 MVARs	Dec-30
Increase the size of the Green River Plaza 69 kV Capacitor Bank from 20.4 to 27 MVARs	Dec-30
Increase the size of the Tyner 69 kV Capacitor Bank from 16.33 to 24.49 MVARs	Dec-30
Install a new 12 MVAR, 69 kV Capacitor Bank at Bullitt County	Dec-34

EKPC 10-YEAR TRANSMISSION EXPANSION SCHEDULE (2025 – 2034)	
F. New Distribution Substations and associated Tap Lines Project Description	**Needed In-Service Date**
Construct a new Logistics Drive Distribution Substation 69-26.4kV 18/24/30 MVA & Tap (1.4 miles)	Jul-25
Construct a new Big Hill Distribution Substation 69-13.2 kV 12/16/20 MVA & associated tap line from the Three Links-Sand Gap 69 kV line section (8.6 miles)	Dec-25
Construct a new Metts Drive Distribution Substation 161-25 kV 12/16/20 MVA & Tap Line (0.9 miles)	Dec-25
Construct a new Mineola Pike Distribution Substation 69-12.5 kV 12/16/20 MVA and associated 69 kV tap line to the Hebron 69 kV substation (7.5 miles)	Dec-25
Construct a new Autumn Leaf Distribution Substation 69-13.2 kV 12/16/20 MVA & Tap Line (3.9 miles)	May-26
Construct a new Clay Village #2 Distribution Substation 69-13.2kV 12/16/20 MVA	Aug-26
Construct a new Cub Run Distribution Substation 69-25 kV 12/16/20 MVA and Tap Line (11.4 miles)	Dec-26
Construct a new Joyes Station Distribution Substation 69-25 kV 18/24/30 MVA by looping it into the existing Bekaert-Budd 69 kV line section (1.1 miles)	Dec-26
Construct a new Stonewall Distribution Substation 138-25 kV 12/16/20 MVA & Tap Line (0.5 miles)	Dec-28
Construct a new Thunder Ridge Distribution Substation 69-13.2kV 12/16/20 MVA & Tap Line (0.5 miles)	Dec-28

EKPC 10-YEAR TRANSMISSION EXPANSION SCHEDULE (2025 – 2034)	
G. Distribution Substation Upgrades and associated Tap Lines Project Description	**Needed In-Service Date**
Rebuild and upgrade the Salt Lick Distribution Substation to 138-13.2 kV 12/16/20 MVA	Dec-25
Upgrade the Asahi #1 tap and transformer to 69-13.2 kV 12/16/20 MVA (0.47 miles)	Dec-25
Rebuild and upgrade the Bullittsville Distribution Substation to 69-13.2 kV 12/16/20 MVA (Rebuild on EKPC Owned Adjacent Property) (0.02 miles)	Dec-25
Rebuild and upgrade the Elizabethtown #1 Distribution Substation to 69-13.2 kV 12/16/20 MVA (0.19 miles)	Dec-25
Rebuild and upgrade the North Springfield Distribution Substation to 69-13.2 kV 12/16/20 MVA (Adjacent property) (0.75 miles)	Dec-25
Rebuild the Homestead Lane Distribution Substation as 69-13.2 kV 18/24/30 MVA (0.03 miles)	Dec-26
Rebuild and upgrade the Murphysville Distribution Substation to 69-26.4 kV 12/16/20 MVA & Control Building Replacement (0.25 miles)	Dec-26
Upgrade the Mariba transformer to 69-13.2 kV 12/16/20 MVA	Jul-27
Rebuild and upgrade the Russell Springs #2 Distribution Substation to 69-13.2 kV 12/16/20 MVA	Dec-27
Rebuild and upgrade the Bass Distribution Substation to 12/16/20 MVA (0.04 miles)	Dec-27
Rebuild and upgrade the Campbellsburg Distribution Substation to 69-13.2 kV 12/16/20 MVA	Dec-27

EKPC 10-YEAR TRANSMISSION EXPANSION SCHEDULE (2025 – 2034)	
G. Distribution Substation Upgrades and associated Tap Lines (continued) **Project Description**	**Needed In-Service Date**
Rebuild the Oven Fork Distribution Substation to 69-13.2 kV 12/16/20 MVA	Dec-27
Rebuild and upgrade the Vertrees Distribution Substation to 69-13.2 kV 12/16/20 MVA (0.04 miles)	Dec-27
Rebuild and upgrade the Oakdale Distribution Substation to 69-13.2 kV 12/16/20 MVA (New Location) (0.75 miles)	Dec-28
Rebuild and upgrade the Cumberland Falls Distribution Substation to 12/16/20 MVA (0.1 miles)	Dec-28
Rebuild the Phil Distribution Substation to 69-13.2kV 12/16/20 MVA (Adjacent Property)	Dec-28
Rebuild and upgrade the Greensburg Distribution Substation to 69-13.2 kV 12/16/20 MVA (0.19 miles)	Dec-28
Rebuild and upgrade the Whitley City Distribution Substation to 69-26.4 kV 12/16/20 MVA (0.04 miles)	Dec-28
Rebuild the Four Oaks Distribution Substation to 69-13.2kV 12/16/20 MVA (New Location)	Dec-28
Rebuild and upgrade the Columbia Distribution Substation to 69-13.2 kV 12/16/20 (New Location) (0.05 miles)	Jun-29
Rebuild and upgrade the Newby Distribution Substation to 69-12.5 kV 12/16/20 MVA (New Location)	Jun-29
Rebuild the Mt Washington #1 Distribution Substation to 69-13.2 kV 12/16/20 MVA	Dec-29
Rebuild and upgrade the Mt Olive Distribution Substation to 69-13.2 kV 12/16/20 MVA	Dec-29
Rebuild and upgrade the Zula Distribution Substation to 69-13.2 kV 12/16/20 MVA	Dec-29
Rebuild and upgrade the Russell Springs #1 Distribution Substation to 69-13.2 kV 12/16/20 MVA	Dec-30
Rebuild and upgrade the Holloway Distribution Substation to 69-13.2kV 12/16/20 MVA (Adjacent Property) & Tap (2.2 miles)	Dec-30
Rebuild and upgrade the Brooks Distribution Substation to 69-13.2 kV 18/24/30 MVA	Apr-30
Rebuild and upgrade the Hebron Distribution Substation to 69-13.2 kV 18/24/30 MVA	Apr-32
Rebuild and upgrade the Bardstown Shopping Center Distribution Substation to 69-13.2 kV 12/16/20 MVA	Apr-33
Rebuild and upgrade the Woosley Distribution Substation to 69-13.2 kV 12/16/20 MVA	Apr-33
Rebuild and upgrade the Salem Distribution Substation to 69-13.2 kV 12/16/20 MVA	Apr-34
Rebuild and upgrade the Tommy Gooch Distribution Substation to 69-26.4 kV 18/24/30 MVA	Sep-34

EKPC 10-YEAR TRANSMISSION EXPANSION SCHEDULE (2025 – 2034)	
H. Terminal Facility Upgrades & Additions Project Description	**Needed In-Service Date**
Rowan County Breaker Addition	Dec-28
Replace the Cooper 161 kV Breakers (9)	Dec-30
Upgrade the Cooper 161/69 kV transformer with a 200 MVA unit	Dec-30
Upgrade the Marion County 161/138 kV transformer with a 300 MVA unit	Dec-30

EKPC 10-YEAR TRANSMISSION EXPANSION SCHEDULE (2025 – 2034)	
I. Solar Generation Interconnection Request with executed Interconnection construction service agreements and certificates to construct Project Description	**Needed In-Service Date**
Construct a new 69 kV switching station to facilitate the connection of the AD2-048 solar generation project to the existing Cynthiana-Headquarters 69 kV line section	Jun-26
Construct a new 161 kV switching station to facilitate the connection of the AF1-083 solar generation project to the existing Taylor County Junction-Saloma 161 kV line section	Dec-26
Construct a new 161 kV switching station to facilitate the connection of the AF1-050 solar generation project to the existing Green County-Summer Shade 161 kV line section	Nov-26
Upgrade the maximum conductor operating temperature of the 795 MCM ACSR Cooper-Elihu 161 kV line section to 275°F (4.2 miles) to facilitate the connection of the AF1-050 solar generation project	Nov-26
Construct a new 69 kV switching station to facilitate the connection of the AF1-038 solar generation project to the existing Sewellton Junction-Webbs Crossroads 69 kV line section	Sept-26
Construct new 161 kV infrastructure to facilitate the connection of the AE1-143 solar generation project to the existing Marion County 161 kV substation	Jun-27
Construct new 138 kV infrastructure to facilitate the connection of the AE2-339 solar generation project to the existing Avon 138 kV substation	Jun-27

EKPC 10-YEAR TRANSMISSION EXPANSION SCHEDULE (2025 – 2034)	
J. TRANSMISSION LINE MAXIMUM OPERATING TEMPERATURE INCREASE PROJECT DESCRIPTION	**Needed In-Service Date**
Increase the maximum operating temperature of the Liberty RICE Substation-Casey County 161 kV line conductor to 212° F (6.6 miles)	Dec-28
Increase the maximum operating temperature of the Marion County-Marion County Industrial Park Tap 161 kV line conductor to 212° F (4 miles)	Dec-28
Increase the maximum operating temperature of the Laurel Dam-Laurel County 161 kV line conductor to 212° F (13.5 miles)	Dec-30
Increase the maximum conductor operating temperature of the Casey County-Marion County 161 kV line conductor to 212° F (17.8 miles)	Dec-30