COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC TARIFF FILING OF KENTUCKY UTILITIES COMPANY FOR APPROVAL OF AN ECONOMIC DEVELOPMENT RIDER SPECIAL CONTRACT WITH BITIKI-KY, LLC	**))))**	**CASE NO. 2022-00371**

RESPONSE OF
KENTUCKY UTILITIES COMPANY
TO
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
DATED NOVEMBER 17, 2022

FILED: DECEMBER 7, 2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **John Bevington**, being duly sworn, deposes and says that he is Director – Business and Economic Development for Kentucky Utilities Company, an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

John Bevington

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 6th day of December 2022.

Judy Schooler
Notary Public

Notary Public ID No. KYNP53381

My Commission Expires:

July 11, 2026

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Michael E. Hornung**, being duly sworn, deposes and says that he is Manager – Pricing/Tariffs for Kentucky Utilities Company, and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Michael E. Hornung

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 5th day of December 2022.

Notary Public

Notary Public ID No. KYNP53381

My Commission Expires:

July 11, 2026

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Stuart A. Wilson**, being duly sworn, deposes and says that he is Director – Energy Planning, Analysis & Forecasting for Kentucky Utilities Company, an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Stuart A. Wilson

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 6th day of December 2022.

Notary Public

Notary Public ID No. KYNP53381

My Commission Expires:

July 11, 2026

KENTUCKY UTILITIES COMPANY

Response to Commission Staff's First Request for Information
Dated November 17, 2022

Case No. 2022-00371

Question No. 1

Responding Witness: John Bevington / Michael E. Hornung

Q-1. Refer to the Application, Attachment 2, Special Contract Economic Development Rider, unnumbered page 2, unnumbered paragraph 5. This paragraph describes the amounts of discounted demand amounts that the customer must reimburse KU in the event of a Customer Termination Event (CTE).

a. Explain why the customer is not responsible for reimbursing KU the full amount of all demand discounts received prior to the CTE.

b. Assuming that the customer is mining cryptocurrencies, those currencies and the associated markets for those currencies are highly volatile and risky. Explain whether KU performs any sort of risk assessment regarding contract fulfillment and potential nonpayment of amounts owed on potential new customers and, if so, provide a copy of the assessment.

c. Explain whether KU has required any up-front guarantee such as a bond or letter of credit to backstop the risk of nonpayment of any potential future amounts owed.

d. Explain the repercussions for both KU and its ratepayers in the event that in year six of the contract, the cryptocurrencies and their associated markets crash and dissolve and, consequently, Bitiki-KY, LLC declares bankruptcy and walks away from its facilities and contract. Include in the response whether KU becomes one of possibly many other creditors standing in line for payment of debts.

A-1.

a. In all KU's Commission-accepted Economic Development Rider ("EDR") contracts prior to 2022, there are no EDR credit repayment requirements. KU implemented the phased EDR repayment requirement cited in this question beginning with 2022 EDR contracts, two of which the Commission has already accepted (Central Motor Wheel America and Danimer Scientific KY

Inc.).[1] The credit repayment requirement section now exists to reinforce that the EDR credits are meant incentivize the retention and expansion of existing, and attraction of new, long-term operations in Kentucky. The phased in repayment terms associated with this section help balance a company's commitment to long-term operations while also not burdening these growing companies with liabilities that could ultimately hinder long-term success.

By way of comparison, the Kentucky Business Investment program, which is a tax incentive program the Cabinet for Economic Development administers and the Kentucky Economic Development Finance Authority approves, is similarly performance based and does not require incentives to be repaid if a recipient ceases operations prior to the end of the term of agreement.[2] Therefore, KU's requirements are market competitive and in some ways more stringent than other programs offered by Kentucky for economic development purposes.

Notably, neither of the EDR contracts the Commission has recently approved for new cryptocurrency mining operations has required a full refund of EDR credits for termination of service prior to the end of the contract term regardless of when the customer terminates.[3] The Commission's most recent approval was for an EDR contract with EDR credit repayment terms similar to—but less stringent than—those included in the Bitiki EDR contract.[4]

[1] The Commission accepted the Central Motor Wheel America special contract and EDR contract effective April 30, 2022. It is available at: https://psc.ky.gov/tariffs/Electric/Kentucky%20Utilities%20Company/Contracts/Current/Central%20Motor%20Wheel%20America/2022-04-30_Contract%20for%20Electric%20Service.pdf.
The Commission accepted the Danimer Scientific KY Inc. special contract and EDR contract for new service effective August 17, 2022. It is available at: https://psc.ky.gov/tariffs/Electric/Kentucky%20Utilities%20Company/Contracts/Current/Danimer%20Scientific,%20Inc/2022-08-17_Contract%20for%20Electric%20Service%20with%20EDR%20(new%20service).pdf.

[2] *See* "Just the Facts: Kentucky Business Investment Program," (July 2022), available at https://cedky.com/cdn/1740_KBIFactSheet.pdf?43.

[3] *Electronic Tariff Filing of East Kentucky Power Cooperative, Inc. for Approval of a Special Contract pursuant to Its Interruptible Service Tariff and Economic Development Rider between It, Jackson Energy Cooperative Corporation, and UMine, LLC*, Case No. 2022-00355, Order (Ky. PSC Oct. 31, 2022); Case No. 2022-00355, EKPC Contract Filing, Industrial Power Agreement with Interruptible Service and Economic Development Rider at 11-12 (Sept. 30, 2022) (providing 75% EDR credit repayment for early termination in first five years and 50% repayment in second five years); *Electronic Tariff Filing of Big Rivers Electric Corporation and Jackson Purchase Energy Corporation for Approval and Confidential Treatment of a Special Contract and Cost Analysis Information and a Request for Deviation from the Commission's September 24, 1990 Order in Administrative Case No, 327*, Case No. 2021-00282, Order at 17-18 (Ky. PSC Oct. 14, 2021); Case No. 2021-00282, Application, Attachment 4, "Big Rivers Wholesale Agreement." Exhibit C Sections B and C at 2-4 (June 21, 2021).

[4] *See* Case No. 2022-00355, EKPC Contract Filing, Industrial Power Agreement with Interruptible Service and Economic Development Rider at 11-12 (Sept. 30, 2022) (providing 75% EDR credit repayment for early termination in first five years and 50% repayment in second five years).

b. Consistent with its tariff provisions regarding deposits, KU does consider whether an existing customer "fails to maintain a satisfactory payment or credit record, or otherwise becomes a new or greater credit risk …."[5] KU's tariff further provides, "If Customer fails to maintain a satisfactory payment or credit record, or otherwise become a new or greater credit risk, as determined by Company in its sole discretion, Company may require a new or additional deposit from Customer."[6] KU therefore has the right to require additional deposit amounts of Bitiki if the customer does not maintain a satisfactory payment or credit record.

c. Bitiki has provided a surety bond in the amount of $1,275,000, which is consistent with a deposit of 2/12 of projected annual billing Bitiki. See attached annual bill estimation and copy of Bitiki's surety bond.[7]

d. KU routinely has customers who enter bankruptcy, cease to operate, or for other reasons do not pay what they owe. It is not a risk unique to Bitiki-KY, LLC.

That said, if Bitiki-KY, LLC ceased operations and declared bankruptcy in the sixth year of its EDR contract with KU, KU would use the customer's retained deposit to satisfy some or all of the customer's outstanding obligation and seek to collect the rest as one of the customer's creditors. Importantly, the customer's deposit should more than satisfy any then-current amounts owing; only a portion of the EDR credit repayment obligation might remain.

Regarding the EDR credit repayment, it is important to note that the entire premise of offering EDR credits is that any customer receiving them should pay at least the marginal costs of their service and make some contribution toward fixed costs even while receiving EDR credits. Therefore, other customers should be no worse off for the hypothetical bankruptcy than if the customer had never taken service at all.

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[5] Kentucky Utilities Company, P.S.C. No. 20, Original Sheet No. 102.1, "Other Service."
[6] *Id.*
[7] KU's attached bill estimator shows projected annual billing of $7,653,307. 2/12 of that amount is $1,275,551.16, just over the bond amount of $1,275,000.

Estimation Options	
Contract	
Rate Category	Retail Transmission Service (KUINE551DO)
Contract Capacity	13000
Franchise Contract	
Use History	No
Include Bill Factors	Yes
Include Taxes	Yes
State Sales Tax Percent	6.00
School Tax Percent	0.00

Bill Data

Billing Period	Days	kWh	Base Dem	Base PF	Int Dem	Int PF	Peak Dem	Peak PF
Aug	31	9,015,500	13,000	1	13,000	1	13,000	1
Sept	30	9,015,500	13,000	1	13,000	1	13,000	1
Oct	31	9,015,500	13,000	1	13,000	1	13,000	1
Nov	30	9,015,500	13,000	1	13,000	1	13,000	1
Dec	31	9,015,500	13,000	1	13,000	1	13,000	1
Jan	31	9,015,500	13,000	1	13,000	1	13,000	1
Feb	29	9,015,500	13,000	1	13,000	1	13,000	1
Mar	31	9,015,500	13,000	1	13,000	1	13,000	1
Apr	30	9,015,500	13,000	1	13,000	1	13,000	1
May	31	9,015,500	13,000	1	13,000	1	13,000	1
June	30	9,015,500	13,000	1	13,000	1	13,000	1
July	31	9,015,500	13,000	1	13,000	1	13,000	1
Total/Avg		**108,186,000**	**13,000.00**	**1.0000**	**13,000.00**	**1.0000**	**13,000.00**	**1.0000**

Electric Bill Estimation

Billing Period	Basic Service Chg	Basic Service Price	Energy Chg	Energy Price	Fuel Adj Chg	Fuel Adj Price	DSM Chg	DSM Price	TCJA Chg	TCJA Price	Base Dem Chg	Base Dem Price
Aug	$1,528	$49.28	$221,421	$0.02456	$131,716	$0.01461	$0	$0.00000	$0	$0.00000	$28,080	$2.16
Sept	$1,478	$49.28	$221,421	$0.02456	$131,716	$0.01461	$0	$0.00000	$0	$0.00000	$28,080	$2.16
Oct	$1,528	$49.28	$221,421	$0.02456	$131,716	$0.01461	$0	$0.00000	$0	$0.00000	$28,080	$2.16
Nov	$1,478	$49.28	$221,421	$0.02456	$131,716	$0.01461	$0	$0.00000	$0	$0.00000	$28,080	$2.16
Dec	$1,528	$49.28	$221,421	$0.02456	$131,716	$0.01461	$0	$0.00000	$0	$0.00000	$28,080	$2.16
Jan	$1,528	$49.28	$221,421	$0.02456	$131,716	$0.01461	$0	$0.00000	$0	$0.00000	$28,080	$2.16
Feb	$1,429	$49.28	$221,421	$0.02456	$131,716	$0.01461	$0	$0.00000	$0	$0.00000	$28,080	$2.16
Mar	$1,528	$49.28	$221,421	$0.02456	$131,716	$0.01461	$0	$0.00000	$0	$0.00000	$28,080	$2.16
Apr	$1,478	$49.28	$221,421	$0.02456	$131,716	$0.01461	$0	$0.00000	$0	$0.00000	$28,080	$2.16
May	$1,528	$49.28	$221,421	$0.02456	$131,716	$0.01461	$0	$0.00000	$0	$0.00000	$28,080	$2.16
June	$1,478	$49.28	$221,421	$0.02456	$131,716	$0.01461	$0	$0.00000	$0	$0.00000	$28,080	$2.16
July	$1,528	$49.28	$221,421	$0.02456	$131,716	$0.01461	$0	$0.00000	$0	$0.00000	$28,080	$2.16
Total	**$18,036**		**$2,657,048**		**$1,580,598**		**$0**		**$0**		**$336,960**	

Billing Period	Int Dem Chg	Int Dem Price	Peak Dem Chg	Peak Dem Price	Env Cost Rec	Env Cost Rec Pct	Franchise Fee	Franchise Fee Pct	State Tax	School Tax	Total Bill	Unit Cost
Aug	$93,470	$7.19	$116,350	$8.95	$9,136	3.73%	$0	0.00%	$36,102	$0	$637,803	$0.0707
Sept	$93,470	$7.19	$116,350	$8.95	$9,134	3.73%	$0	0.00%	$36,099	$0	$637,748	$0.0707
Oct	$93,470	$7.19	$116,350	$8.95	$9,136	3.73%	$0	0.00%	$36,102	$0	$637,803	$0.0707
Nov	$93,470	$7.19	$116,350	$8.95	$9,134	3.73%	$0	0.00%	$36,099	$0	$637,748	$0.0707
Dec	$93,470	$7.19	$116,350	$8.95	$9,136	3.73%	$0	0.00%	$36,102	$0	$637,803	$0.0707
Jan	$93,470	$7.19	$116,350	$8.95	$9,136	3.73%	$0	0.00%	$36,102	$0	$637,803	$0.0707
Feb	$93,470	$7.19	$116,350	$8.95	$9,132	3.73%	$0	0.00%	$36,096	$0	$637,694	$0.0707
Mar	$93,470	$7.19	$116,350	$8.95	$9,136	3.73%	$0	0.00%	$36,102	$0	$637,803	$0.0707
Apr	$93,470	$7.19	$116,350	$8.95	$9,134	3.73%	$0	0.00%	$36,099	$0	$637,748	$0.0707
May	$93,470	$7.19	$116,350	$8.95	$9,136	3.73%	$0	0.00%	$36,102	$0	$637,803	$0.0707
June	$93,470	$7.19	$116,350	$8.95	$9,134	3.73%	$0	0.00%	$36,099	$0	$637,748	$0.0707
July	$93,470	$7.19	$116,350	$8.95	$9,136	3.73%	$0	0.00%	$36,102	$0	$637,803	$0.0707
Total	**$1,121,640**		**$1,396,200**		**$109,618**		**$0**		**$433,206**	**$0**	**$7,653,307**	**$0.0707**

BOND NUMBER ______500061__________

SURETY BOND

KNOW ALL MEN BY THESE PRESENTS, THAT Bitiki-KY, LLC as **PRINCIPAL,** and Evergreen Indemnity National Company a corporation organized and existing under the laws of the State of Ohio and duly authorized to conduct and carry on a general surety business in the State of Kentucky, as SURETY, are each held and firmly bound unto the Kentucky Utilities Company, One Quality St., Lexington, Ky, as OBLIGEE, in the full and just sum of $1,275,000.00 DOLLARS, lawful money of the United States of America, for the payment whereof well and truly to be made the said Principal and the said Surety hereby bind themselves, their respective heirs, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the **PRINCIPAL** has applied to the Kentucky Utilities Company for electric service, and

WHEREAS, under the rules and regulations of the Kentucky Utilities Company, it is necessary for the Principal to furnish security for the prompt payment of electric bills for electric service furnished and supplied to the Principal by the Obligee; and

NOW THEREFORE, the condition of this obligation is such that if the said Principal shall well and faithfully perform the obligation herein recited and shall promptly pay all bills rendered by the Kentucky Utilities Company to said Principal for electric service provided by this bond and the rules and regulations of the Kentucky Utilities Company, then the above obligations shall be null and void, otherwise to remain in full force and effect, all the Surety herein agrees to pay, within ten (10) days after written demand for payment by the Kentucky Utilities Company, and delinquent electric bills rendered by the Kentucky Utilities Company to the Principal herein if such bills are not paid by said Principal within thirty (30) days from the date of said bills.

THIS BOND IS ISSUED AND EXECUTED SUBJECT TO THE FOLLOWING CONDITIONS:

1. That the surety company reserves the right to cancel this bond by giving sixty (60) days written notice by certified mail to the Kentucky Utilities Company and on the effective date of such sixty (60) days cancellation notice, and the Surety is discharged and relieved of any liability, it being understood and agreed, however, that the said Principal and said Surety will be liable for any loss occurring up to the effective date of said sixty (60) day cancellation notice, in no event, however, in excess of the penal amount of this bond.

2. That it is expressly understood by the Principal and Surety herein that the Kentucky Utilities Company by giving thirty (30) days written notice, may cancel this bond or require an endorsement hereon increasing the penal amount provided in this bond so that said penal amount shall at least be equal to 2/12 estimated annual electric bill.

3. This bond shall be effective from and after the 28th day of August, 2022, and shall remain in force until cancelled as aforesaid, or until released in writing by the obligee.

IN WITNESS WHEREOF, the said Principal and the said Surety have duly executed or caused to be executed this bond the 28th day of August, 2022.

Bitiki-KY, LLC	Evergreen National Indemnity Company
(Name of Customer)	(Casualty & Surety Company)
	Park Center Plaza II 6150 Oak Tree Blvd., Suite 440
_______________ (Signature)	Street Address
	Independence, Ohio 44131
Title: _______________	City, State, Zip
	Janice H. Fennell
	Janice H. Fennell, Attorney In Fact

MUST BE NOTARIZED

Acknowledgment By PRINCIPAL

STATE of ________________ COUNTY of ______________

I, __________________________________ a Notary Public in and for county and state aforesaid, do hereby certify that _____________________________ who, as ________________, signed to the foregoing writing for Bitiki-KY, LLC a corporation, bearing the date of _______ day of ________, _____, has this day acknowledged the said writing to be the act and deed of the said corporation.

Given under my hand this ______ day of ___________, _____.

____
(Notary Public)

My Commission Expires on the _______ day of _____________, _____.

Acknowledgment By SURETY

STATE of Tennessee COUNTY of Blount

I, Joshua Jakubowski a Notary Public in and for county and state aforesaid, do hereby certify that Janice H. Fennell who, as Attorney-in-Fact, signed to the foregoing writing for Evergreen National Indemnity Company a corporation, bearing the date of 28th day of August, 2022, has this day acknowledged the said writing to be the act and deed of the said corporation.

Given under my hand this 28th day of August, 2022.

____
(Notary Public)

My Commission Expires on the 23rd day of April, 2025

JOSHUA JAKUBOWSKI
STATE OF TENNESSEE NOTARY PUBLIC
COUNTY OF BLOUNT

EVERGREEN NATIONAL INDEMNITY COMPANY

Independence, Ohio

POWER OF ATTORNEY

Bond No. **500061**

KNOW ALL MEN BY THESE PRESENTS: That the Evergreen National Indemnity Company, a corporation in the State of Ohio does hereby nominate, constitute and appoint:

JEFF EGGLESTON, JANICE H. FENNELL

its true and lawful Attorney(s)-In-Fact to make, execute, attest, seal and deliver for and on its behalf, as Surety, and as its act and deed, where required, any and all bonds, undertakings, recognizances and written obligations in the nature thereof, PROVIDED, however, that the obligation of the Company under this Power of Attorney shall not exceed TWENTY-FIVE MILLION AND 00/100 DOLLARS ($25,000,000.00)

This Power of Attorney is granted and is signed by facsimile pursuant to the following Resolution adopted by its Board of Directors on the 23rd day of July, 2004:

"RESOLVED, That any two officers of the Company have the authority to make, execute and deliver a Power of Attorney constituting as Attorney(s)-in-fact such persons, firms, or corporations as may be selected from time to time.
FURTHER RESOLVED, that the signatures of such officers and the Seal of the Company may be affixed to any such Power of Attorney or any certificate relating thereto by facsimile; and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company; and any such powers so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached."

IN WITNESS WHEREOF, the Evergreen National Indemnity Company has caused its corporate seal to be affixed hereunto, and these presents to be signed by its duly authorized officers this 1st day of April, 2022.

EVERGREEN NATIONAL INDEMNITY COMPANY

EVERGREEN NATIONAL INDEMNITY COMPANY CORPORATE SEAL 1939 OHIO

By: ______________________
Matthew T. Tucker , President

By: ______________________
David A. Canzone, CFO

Notary Public)
State of Ohio) SS:

On this 1st day of April, 2022, before the subscriber, a Notary for the State of Ohio, duly commissioned and qualified, personally came Matthew T. Tucker and David A. Canzone of the Evergreen National Indemnity Company, to me personally known to be the individuals and officers described herein, and who executed the preceding instrument and acknowledged the execution of the same and being by me duly sworn, deposed and said that they are the officers of said Company aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of said Company, and the said Corporate Seal and signatures as officers were duly affixed and subscribed to the said instrument by the authority and direction of said Corporation, and that the resolution of said Company, referred to in the preceding instrument, is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at Cleveland, Ohio, the day and year above written.

Julie K Bowers
Notary Public
In and For the State of Ohio
My Commission Expires
August 13, 2024

Julie K Bowers

Julie K. Bowers, Notary Public
My Commission Expires August 13, 2024

State of Ohio) SS:

I, the undersigned, Secretary of the Evergreen National Indemnity Company, a stock corporation of the State of Ohio, DO HEREBY CERTIFY that the foregoing Power of Attorney remains in full force and has not been revoked; and furthermore that the Resolution of the Board of Directors, set forth herein above, is now in force.

Signed and sealed in Independence, Ohio, this 28th day of August, 2022.

EVERGREEN NATIONAL INDEMNITY COMPANY CORPORATE SEAL 1939 OHIO

Wan C. Collier, Secretary

BOND NUMBER 500061

SURETY BOND

KNOW ALL MEN BY THESE PRESENTS, THAT Bitiki-KY, LLC as **PRINCIPAL,** and Evergreen Indemnity National Company a corporation organized and existing under the laws of the State of Ohio and duly authorized to conduct and carry on a general surety business in the State of Kentucky, as SURETY, are each held and firmly bound unto the Kentucky Utilities Company, One Quality St., Lexington, Ky, as OBLIGEE, in the full and just sum of $1,275,000.00 DOLLARS, lawful money of the United States of America, for the payment whereof well and truly to be made the said Principal and the said Surety hereby bind themselves, their respective heirs, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the **PRINCIPAL** has applied to the Kentucky Utilities Company for electric service, and

WHEREAS, under the rules and regulations of the Kentucky Utilities Company, it is necessary for the Principal to furnish security for the prompt payment of electric bills for electric service furnished and supplied to the Principal by the Obligee; and

NOW THEREFORE, the condition of this obligation is such that if the said Principal shall well and faithfully perform the obligation herein recited and shall promptly pay all bills rendered by the Kentucky Utilities Company to said Principal for electric service provided by this bond and the rules and regulations of the Kentucky Utilities Company, then the above obligations shall be null and void, otherwise to remain in full force and effect, all the Surety herein agrees to pay, within ten (10) days after written demand for payment by the Kentucky Utilities Company, and delinquent electric bills rendered by the Kentucky Utilities Company to the Principal herein if such bills are not paid by said Principal within thirty (30) days from the date of said bills.

THIS BOND IS ISSUED AND EXECUTED SUBJECT TO THE FOLLOWING CONDITIONS:

1. That the surety company reserves the right to cancel this bond by giving sixty (60) days written notice by certified mail to the Kentucky Utilities Company and on the effective date of such sixty (60) days cancellation notice, and the Surety is discharged and relieved of any liability, it being understood and agreed, however, that the said Principal and said Surety will be liable for any loss occurring up to the effective date of said sixty (60) day cancellation notice, in no event, however, in excess of the penal amount of this bond.

2. That it is expressly understood by the Principal and Surety herein that the Kentucky Utilities Company by giving thirty (30) days written notice, may cancel this bond or require an endorsement hereon increasing the penal amount provided in this bond so that said penal amount shall at least be equal to 2/12 estimated annual electric bill.

3. This bond shall be effective from and after the 28th day of August, 2022, and shall remain in force until cancelled as aforesaid, or until released in writing by the obligee.

IN WITNESS WHEREOF, the said Principal and the said Surety have duly executed or caused to be executed this bond the 28th day of August, 2022.

Bitiki-KY, LLC
(Name of Customer)

(Signature)

Title: G.M.

Evergreen National Indemnity Company
(Casualty & Surety Company)

Park Center Plaza II
6150 Oak Tree Blvd., Suite 440
Street Address

Independence, Ohio 44131
City, State, Zip

Janice H. Fennell
Janice H. Fennell, Attorney In Fact

MUST BE NOTARIZED

Acknowledgment By PRINCIPAL

STATE of KY COUNTY of Hopkins

I, Kimberly Dawn Harrison a Notary Public in and for county and state aforesaid, do hereby certify that Cliff Ford who, as GM, signed to the foregoing writing for Bitiki-KY, LLC a corporation, bearing the date of 28th day of August, 2022, has this day acknowledged the said writing to be the act and deed of the said corporation.

Given under my hand this 28th day of August, 2022

Kimberly D. Harrison
#KYNP31157

(Notary Public)

My Commission Expires on the 24th day of June, 2024.

Acknowledgment By SURETY

STATE of Tennessee COUNTY of Blount

I, Joshua Jakubowski a Notary Public in and for county and state aforesaid, do hereby certify that Janice H. Fennell who, as Attorney-in-Fact, signed to the foregoing writing for Evergreen National Indemnity Company a corporation, bearing the date of 28th day of August, 2022, has this day acknowledged the said writing to be the act and deed of the said corporation.

Given under my hand this 28th day of August, 2022.

(Notary Public)

My Commission Expires on the 23rd day of April, 2025

JOSHUA JAKUBOWSKI
STATE OF TENNESSEE NOTARY PUBLIC
COUNTY OF BLOUNT

EVERGREEN NATIONAL INDEMNITY COMPANY

Independence, Ohio

POWER OF ATTORNEY

Bond No. **500061**

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JEFF EGGLESTON, JANICE H. FENNELL

its true and lawful Attorney(s)-In-Fact to make, execute, attest, seal and deliver for and on its behalf, as Surety, and as its act and deed, where required, any and all bonds, undertakings, recognizances and written obligations in the nature thereof, PROVIDED, however, that the obligation of the Company under this Power of Attorney shall not exceed TWENTY-FIVE MILLION AND 00/100 DOLLARS ($25,000,000.00)

This Power of Attorney is granted and is signed by facsimile pursuant to the following Resolution adopted by its Board of Directors on the 23rd day of July, 2004:

> "RESOLVED, That any two officers of the Company have the authority to make, execute and deliver a Power of Attorney constituting as Attorney(s)-in-fact such persons, firms, or corporations as may be selected from time to time.
> FURTHER RESOLVED, that the signatures of such officers and the Seal of the Company may be affixed to any such Power of Attorney or any certificate relating thereto by facsimile; and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company; and any such powers so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached."

IN WITNESS WHEREOF, the Evergreen National Indemnity Company has caused its corporate seal to be affixed hereunto, and these presents to be signed by its duly authorized officers this 1st day of April, 2022.

EVERGREEN NATIONAL INDEMNITY COMPANY

EVERGREEN NATIONAL INDEMNITY COMPANY CORPORATE SEAL 1939 OHIO

By: Matthew T. Tucker
Matthew T. Tucker , President

By: David A. Canzone
David A. Canzone, CFO

Notary Public)
State of Ohio) SS:

On this 1st day of April, 2022, before the subscriber, a Notary for the State of Ohio, duly commissioned and qualified, personally came Matthew T. Tucker and David A. Canzone of the Evergreen National Indemnity Company, to me personally known to be the individuals and officers described herein, and who executed the preceding instrument and acknowledged the execution of the same and being by me duly sworn, deposed and said that they are the officers of said Company aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of said Company, and the said Corporate Seal and signatures as officers were duly affixed and subscribed to the said instrument by the authority and direction of said Corporation, and that the resolution of said Company, referred to in the preceding instrument, is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at Cleveland, Ohio, the day and year above written.

Julie K Bowers
Notary Public
In and For the State of Ohio
My Commission Expires
August 13, 2024

Julie K. Bowers
Julie K. Bowers, Notary Public
My Commission Expires August 13, 2024

State of Ohio) SS:

I, the undersigned, Secretary of the Evergreen National Indemnity Company, a stock corporation of the State of Ohio, DO HEREBY CERTIFY that the foregoing Power of Attorney remains in full force and has not been revoked; and furthermore that the Resolution of the Board of Directors, set forth herein above, is now in force.

Signed and sealed in Independence, Ohio, this 28th day of August, 2022.

EVERGREEN NATIONAL INDEMNITY COMPANY CORPORATE SEAL 1939 OHIO

Wan C. Collier
Wan C. Collier, Secretary

KENTUCKY UTILITIES COMPANY

Response to Commission Staff's First Request for Information
Dated November 17, 2022

Case No. 2022-00371

Question No. 2

Responding Witness: Michael E. Hornung / Stuart A. Wilson

Q-2. Refer to the Application, Attachment 4, Marginal Cost of Service Study (Marginal Cost Study), pages 2 and 7. KU's 2021 Integrated Resource Plan (IRP)[8] did not indicate that a natural gas combined cycle (NGCC) combustion turbine would be installed and online in 2028. The 2021 IRP called for simple cycle combustion turbines, not NGCC units. In addition, the analyses explicitly excluded the impact of the anticipated 320 MW load from the Ford battery plant.

a. Provide an updated integrated resource Base Case demand and supply analysis incorporating the most current load forecast including the Ford battery plant, any cryptocurrency mining, and any other known or anticipated load additions or subtractions; an explanation of what generation technologies are made available to the production cost model; a description of all demand-side management (DSM) current and anticipated programs in its next DSM filing, including demand response programs which are being factored into the analysis to offset load; and a presentation and discussion of the results, including the amounts of excess capacity and reserve margins, as was presented in the 2021 IRP. KU should allow the model to select which generation technology is added or retired (given unit age, cost or environmental constraints), if any, in each year of the 15-year forecast period. The model should be allowed to select the timing of new generation technology additions or retirements in order to implement any overarching corporate carbon emission or other environmental goals. If the Corporate environmental goals necessitate differences in the timing of generation additions or retirements from the initial model results, then a subsequent model run should be conducted with a comparison of the differences in modeling results. The response should also include an explanation of the Company's most current preferred plan.

b. There is no certificate of public convenience and necessity proceeding with the attendant rationale and cost support before the Commission for KU to construct a NGCC. Explain the marginal production cost of a NGCC being

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[8] Case No. 2021-00393, *Electronic 2021 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company* (filed Oct. 19, 2021).

advanced from 2028 to 2027 and the reasons for moving the hypothetical NGCC unit from 2028 to 2027. If KU relies on the overnight capital construction costs, explain the source of the cost estimates.

A-2. Regarding the premises of this request:

- It is correct that KU and LG&E's modeling reported in the 2021 IRP assumed that NGCC units would require carbon capture and sequestration ("CCS"), and the models selected simple-cycle combustion turbines ("SCCTs") rather than NGCC units based on that assumption.[9] But it is also true that when KU and LG&E's models did not assume NGCC required CCS, the model selected NGCC units rather than SCCTs.[10] That result held even when the model was permitted to select additional coal unit retirements and at carbon prices ranging from $0 to $25 per ton.[11] Indeed, KU and LG&E's model selected NGCC without CCS at carbon prices as high as $120 per ton, and it selected NGCC, with or without CCS, as a generation technology to deploy at carbon prices as high as $150 per ton (the price at which the Companies stopped modeling carbon).[12] It was therefore reasonable for The Prime Group to use NGCC to calculate marginal production demand costs.

- The capital cost used in the 2021 IRP for SCCT capacity was $885/kW.[13] The NGCC capital cost The Prime Group used in the Marginal Cost Study was $951/kW.[14] Thus, using NGCC as the marginal capacity in the Marginal Cost Study rather than SCCT *increased* the capital cost impact of advancing the marginal unit by one year.

- As KU and LG&E noted in their IRP, it was not possible to include the impact of Ford's BlueOval SK Battery Park, which was announced on September 27, 2021, after KU and LG&E had completed the load forecast for their 2021 IRP. KU and

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[9] *See, e.g., Electronic 2021 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company*, Case No. 2021-00393, IRP Vol. III, 2021 IRP Long-Term Resource Planning Analysis at 24 (Oct. 19, 2021).
[10] Case No. 2021-00393, Companies' Response to PSC 2-1 (Mar. 25, 2022).
[11] *Id.*
[12] Case No. 2021-00393, Companies' Response to PSC PHDR 1-1 (Aug. 8, 2022).
[13] Case No. 2021-00393, IRP Vol. III, 2021 IRP Long-Term Resource Planning Analysis at 11 (Oct. 19, 2021).
[14] Marginal Cost Study Attachment B at 2-4. Notably, the source of the NGCC overnight capital cost in the Marginal Cost Study is the 2020 NREL ATB (2028 cost of NGCC shown as $951/kW). The same ATB provided a 2028 overnight capital cost for SCCT of $869/kW. Data available at https://atb-archive.nrel.gov/electricity/2020/files/2020-ATB-Data.xlsm. The corrected version of the 2022 NREL ATB provides a 2028 NGCC overnight capital cost of $840/kW and a 2028 SCCT overnight capital cost of $722/kW. Data available at https://data.openei.org/files/5716/2022%20v2%20Annual%20Technology%20Baseline%20Workbook%20Corrected%207-21-2022.xlsx.

LG&E did note in the IRP that they did not anticipate that the new load would result in KU and LG&E needing additional generation prior to 2028.[15]

- BlueOval SK Battery Park's annual peak demand is now estimated to be 254 MW, not 320 MW.

a. KU cannot perform the requested analysis in the time provided for responding to these requests. KU notes that it and LG&E will file an application for certificates of public convenience and necessity for supply-side resources and approval of a new 2024-2030 DSM-EE Program Plan on December 15. KU believes the analyses supporting that application will largely, if not entirely, satisfy this request.

In addition, the capacity expansion plans conducted by an outside consultant, Guidehouse, Inc., as part of KU and LG&E's most recent RTO membership analysis indicated that adding NGCC capacity in 2028 was optimal in both the standalone and RTO membership scenarios with no carbon pricing.[16] The load forecast Guidehouse used in its analysis included an anticipated Ford BlueOval SK Battery Park peak load of 320 MW. With the more recent reduction in expected load for the battery park (annual peak load of 254 MW), there is strong reason to believe that adding 13 MW of Bitiki load would not advance the 2028 capacity need.

In addition, as discussed above, KU and LG&E's models in the 2021 IRP proceeding added NGCC rather than SCCT capacity when CCS was not a requirement for NGCC (and added NGCC, with and without CCS in varying combinations, at carbon prices ranging from $0 to $150 per ton).[17]

The point of these observations is that KU does not expect to have a capacity need prior to 2028, and its recent filings are consistent with this expectation. Those same filings have indicated that when NGCC *without* CCS is a resource option, multiple models have selected NGCC as an economically optimal resource to install in 2028. It is therefore entirely reasonable for the Marginal Cost Study to have assumed that the marginal capacity that might be affected by near-term load additions would be NGCC that would otherwise be installed in 2028.

Regarding the effects of DSM-EE programs, assuming increased DSM-EE would tend to *reduce* the marginal cost of adding load, not increase it.

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[15] Case No. 2021-00393, IRP Vol. I at 5-21 fn. 25 (Oct. 19, 2021).
[16] Case No. 2020-00349, LG&E-KU 2022 RTO Membership Analysis at 19-21 and Exhibit 2 at 3-35 – 3-38 (Nov. 14, 2022).
[17] Case No. 2021-00393, Companies' Response to PSC 2-1 (Mar. 25, 2022); Case No. 2021-00393, Companies' Response to PSC PHDR 1-1 (Aug. 8, 2022).

All of these factors suggest that the Marginal Cost Study is conservative, i.e., it likely overstates rather than understates marginal production demand costs for Bitiki. Indeed, it suggests that the appropriate marginal cost for Bitiki is zero.

But even if the marginal cost were somehow understated—even by as much as 100%—the proposed Bitiki EDR contract would still cover all marginal costs of service over the five-year term of the demand discounts.[18]

b. See the previous parts of this response. The Marginal Cost Study calculates the marginal production cost associated with advancing NGCC installation from 2028 to 2027 as described at pages 6-9 of the Marginal Cost Study, and the calculations are set out in Attachments A and B. The 2020 NREL Annual Technology Baseline is the source of the NGCC overnight capital cost used in the calculations.[19]

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[18] The Marginal Cost Study indicates Bitiki average monthly revenues with EDR demand discounts of $387,950.68 per month and marginal costs of service of $341,054.29, of which $30,160 is marginal production demand cost. Doubling that cost results in total marginal costs of service of $371,214.29, almost $17,000 less than the average monthly revenue during five years of EDR demand discounts.

[19] The source of the NGCC overnight capital cost in the Marginal Cost Study is the 2020 NREL ATB (2028 cost of NGCC shown as $951/kW). The same ATB provided a 2028 overnight capital cost for SCCT of $869/kW. Data available at https://atb-archive.nrel.gov/electricity/2020/files/2020-ATB-Data.xlsm. The corrected version of the 2022 NREL ATB provides a 2028 NGCC overnight capital cost of $840/kW and a 2028 SCCT overnight capital cost of $722/kW. Data available at https://data.openei.org/files/5716/2022%20v2%20Annual%20Technology%20Baseline%20Workbook%20Corrected%207-21-2022.xlsx.

KENTUCKY UTILITIES COMPANY

Response to Commission Staff's First Request for Information
Dated November 17, 2022

Case No. 2022-00371

Question No. 3

Responding Witness: Michael E. Hornung

Q-3. Refer to the Application, Attachment 4, Marginal Cost Study, page 3. Explain why the marginal transmission cost should not be evaluated on a system peak basis. Include in the response whether the customer will be interrupted when the system reaches a noncoincident peak demand level or when its specific transmission circuit becomes constrained and, if so, under what circumstances.

A-3. As shown in Attachment D to the Marginal Cost Study, the Marginal Cost Study *does* calculate marginal transmission cost on a coincident peak ("CP") basis, which for KU is $0.02/kW-month of CP demand. It further calculates the average coincidence factor for Time-of-Day and Retail Transmission Service customers (as described in the paragraph cited in the request), which is 61.26% for KU.[20] Thus, the non-coincident peak ("NCP") marginal transmission cost for NCP demand is 61.26% times $0.02/kW-month, which rounds to $0.01/kW-month. For most EDR applicants, KU believes the use of this NCP value is reasonable.

But KU agrees that for very high load factor customers like Bikiti who do not have an agreement for interruptible service it is reasonable to apply the CP marginal transmission cost rather than the NCP cost.[21]

Note that applying the CP rather than NCP marginal transmission cost has a negligible effect on the marginal cost of service in this case. Applying the CP value for marginal transmission cost ($0.02 per kW-month) rather than the NCP value ($0.01 per kW-month) to Bitiki's projected demand (13,000 kW) would not have a material effect on the analysis: a monthly marginal transmission cost of $260 rather than $130.[22]

[20] Marginal Cost Study Attachment D.
[21] Note that the document titled, "Comparison of KU Standard Retail Transmission Service Rate with Economic Development Rider to Marginal Cost," is not part of the Marginal Cost Study prepared by The PRIME Group; rather, it contains KU's calculations of Bitiki's marginal cost of service, which KU prepared using costs from the Marginal Cost Study.
[22] Marginal Cost Study Attachment D and "Comparison of KU Standard Retail Transmission Service Rate with Economic Development Rider to Marginal Cost."

KENTUCKY UTILITIES COMPANY

Response to Commission Staff's First Request for Information
Dated November 17, 2022

Case No. 2022-00371

Question No. 4

Responding Witness: Michael E. Hornung

Q-4. Refer to the Application, Attachment 4, Marginal Cost Study, pages 3 and 11.

a. Explain what KU distribution facilities are or were already present at the customers production site prior to the customer receiving service such that KU expended no effort or incurred no cost in order to provide service to the customer. Include in the response whether the customer is incurring all of the necessary costs for KU to provide service and, if so, provide a detailed explanation of those specific costs.

b. On page 11 of the Marginal Cost Study, KU indicates that because of the Line Extension Plan tariff, the need for calculating and including a marginal cost of distribution is moot "because any individual facility addition, and its particular costs, will be considered on an actual-cost and specific-customer basis." The fact that any specific-customer actual-costs are incurred with the addition of this particular customer represents an actual incremental distribution cost and should be included in the analysis. Explain and calculate the incremental distribution cost of adding this customer to the system.

A-4.

a. Bitiki will be a Retail Transmission Service customer and will not use distribution facilities other than metering, which is an expense recovered through the Basic Service Charge that is not subject to EDR discounts.

   Bitiki is locating at a former coal mine site with existing transmission facilities needed for its service. Other than the cost of the OATT-required interconnection study for which Bitiki has already paid in full, KU will incur no incremental transmission cost to serve the customer.

b. See the response to part a.

KENTUCKY UTILITIES COMPANY

Response to Commission Staff's First Request for Information
Dated November 17, 2022

Case No. 2022-00371

Question No. 5

Responding Witness: Michael E. Hornung

Q-5. Refer to the Application, Attachment 4, Marginal Cost Study, page 3. In its Order dated November 4, 2021 in Case No. 2020-00349,[23] the Commission set incremental system cost savings associated with net metering. In the instance of this new customer placing additional demands on the electric system, there would be incremental costs incurred. Reconcile the costs derived in the Marginal Cost Study with the incremental cost based rates set in Case No. 2020-00349 and explain why the incremental net metering cost based rates are not applicable for this analysis.

A-5. There are at least two reasons not to use the avoided costs the Commission used to prescribe KU's NMS-2 rates as the marginal costs to serve Bitiki-KY, LLC.

First, setting aside KU's other reservations of record about the approach the Commission adopted in Case No. 2020-00349 to set NMS-2 rates, the information used to calculate those rates is now stale. The more current data used in the marginal cost study is more appropriate to use to estimate marginal costs of service today and for the next five years.

Second, using the avoided costs the Commission prescribed in Case No. 2020-00349 produces implausible results. The Commission's September 24, 2021 Order in Case No. 2020-00349 set out the following avoided cost components to arrive at the NMS-2 rate prescribed for KU:[24]

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[23] Case No. 2020-00349, *Electronic Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates, A Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit* (Ky. PSC Nov. 4, 2021), Appendix.
[24] Case No. 2020-00349, Order at 58 (Ky. PSC Sept. 24, 2021).

KU NMS 2 Export Rate

Energy*	$	0.02526
Ancillary Services	$	0.00084
Generation Capacity*	$	0.02106
Transmission Capacity	$	0.00732
Distribution Capacity	$	0.00185
Carbon cost	$	0.01338
Environmental Compliance Cost	$	0.00397
Jobs Benefit	$	-
NMS 2 Price for Excess Gen	**$**	**0.07366**
*With losses		

Applying the full NMS-2 avoided cost rate to Bitki's assumed average monthly energy consumption (9,015,500 kWh) results in a monthly marginal cost of service of over $664,000.[25] As shown in KU's bill estimator attached to KU's response to Question 1(c), the full estimated annual retail bill for Bitiki at current rates—at 13 MW of billing demand for all demand charges and energy charges calculated at a 95% load factor—would be $7,653,307 including all riders and adjustment clauses (i.e., FAC and ECR) and taxes. That results in an estimated average monthly bill at full retail rates of $637,775.58. In other words, the full estimated monthly retail bill for Bitiki—*including* taxes of over $36,000 per month—would be about $26,300 *less* than the marginal cost of service calculated using the NMS-2 rate. Excluding taxes, the estimated average monthly bill for Bitiki would be over $62,000 *less* than the marginal cost of service calculated using the NMS-2 rate.

A similar result obtains when considering only the avoided capacity components of the NMS-2 rate (avoided generation, transmission, and distribution capacity, totaling $0.03/kWh). Applying those avoided costs to Bitiki's assumed average monthly usage (9,015,500 kWh) results in $272,538.57 per month, which exceeds the estimated full monthly retail demand charges (Base, Intermediate, and Peak) under Rate RTS ($237,900) by about $35,000 per month.

Treating such results as remotely indicative of the marginal costs to serve Bitiki is implausible, particularly for a customer who would not cause KU to accelerate its capacity expansion plans, and who will locate on a site with existing transmission facilities sufficient to meet the customer's needs. Thus, it would be unreasonable to use the NMS-2 rate and its avoided cost components prescribed in Case No. 2020-00349 to calculate the marginal cost to serve Bitiki beginning in 2023.

[25] 9,015,500 kWh * $0.07366/kWh = $664,081.73. The number of billing units (9,015,500 kWh) is the product of 730 hours/month * 95% capacity factor * 13,000 kW demand. *See* Marginal Cost Study's "Comparison of KU Standard Retail Transmission Service Rate with Economic Development Rider to Marginal Cost."

KENTUCKY UTILITIES COMPANY

Response to Commission Staff's First Request for Information
Dated November 17, 2022

Case No. 2022-00371

Question No. 6

Responding Witness: Michael E. Hornung

Q-6. Refer to the Application, Attachment 4, Marginal Cost Study, Figure 1, page 3. From the Figure, it appears that as output increases, the marginal cost becomes smaller and smaller. Explain this counter intuitive result both in theory and in KU's actual experience.

A-6. Figure 1 is purely illustrative, has no effect on the marginal cost analysis, and does not purport to be either a complete marginal cost curve or the marginal cost curve of any particular technology, generating fleet or unit, or anything else.

That notwithstanding, decreasing marginal costs are reasonably common in certain aspects of the utility industry. For example, there are often, though not always, decreasing marginal costs associated with increasing capacity for particular generating technologies. NGCC units, for instance, can have decreasing marginal overnight capital costs as capacity increases.[26] Solar installations also tend to have decreasing marginal overnight capital costs, though there appear to be decreasing economies of scale at certain levels, and beyond certain capacities marginal overnight capital costs, at least in the current economic environment, do appear to rebound.[27] The generally decreasing marginal overnight capital cost of generating capacity observed nationally is consistent with KU's experience.

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[26] *See, e.g.*, U.S. Department of Energy's Energy Information Administration, *Cost and Performance Characteristics of New Generating Technologies, Annual Energy Outlook 2022* at 2 (March 2022) (showing 418 MW NGCC unit with $1,201/kW overnight capital cost and 1,083 MW NGCC unit with $1,062/kW overnight capital cost), available at https://www.eia.gov/outlooks/aeo/assumptions/pdf/table_8.2.pdf.

[27] *See, e.g.*, U.S. Department of Energy's National Renewable Energy Laboratory, *Summer 2022 Solar Industry Update* at 30 (July 12, 2022) (showing consistently decreasing solar PV capital costs per kW from 2.5 kW through 5 MW), available at https://www.nrel.gov/docs/fy22osti/83718.pdf; U.S. Department of Energy's Lawrence Berkeley National Laboratory, *Utility-Scale Solar, 2022 Edition* at 20 (showing decreasing median installed costs in 2021 dollars per W AV for utility-scale solar installations from 5 MW through 100 MW, with a slight rebound for installations in the 100 MW to 300 MW range, though those levels are still below the 20-50 MW range), available at https://emp.lbl.gov/sites/default/files/utility_scale_solar_2022_edition_slides.pdf.

KENTUCKY UTILITIES COMPANY

Response to Commission Staff's First Request for Information
Dated November 17, 2022

Case No. 2022-00371

Question No. 7

Responding Witness: Michael E. Hornung

Q-7. Refer to Administrative Case No. 327,[28] finding paragraph 12, which states in relevant part, "For new industrial customers, an EDR should apply only to load which exceeds a minimum base level." Explain whether the proposed contract complies with this requirement. If not, explain why not.

A-7. The proposed contract complies with the cited requirement as interpreted and applied by the Commission consistently for more than a decade, including on multiple occasions in the last few years.

The applicable minimum load provision of KU's Economic Development Rider ("EDR Rider") tariff sheets states:

> <u>Economic Development</u>
>
> 3. Service under EDR for Economic Development is available to:
>
> a. new Customers contracting for a minimum monthly billing load of 1,000 kVA, and at least a 50% load factor[.][29]

In all material respects, the minimum load provision of KU's EDR Rider has not changed since the Commission first approved it in a proceeding dedicated exclusively to considering KU's and LG&E's then-new EDR Riders in Case No. 2011-00103.[30]

In approving KU's and LGE's EDR Riders in Case No. 2011-00103, the Commission explicitly noted the minimum load requirement and clearly stated its

[28] Administrative Case No. 327 (Docket No. 19000327), *An Investigation Into the Implementation of Economic Development Rates by Electric and Gas Utilities* (Ky. PSC Sept. 24, 1990), Order at 26–27, finding paragraph 12

[29] Kentucky Utilities Company, P.S.C. No. 20, Original Sheet No. 71.

[30] *Application of Louisville Gas and Electric Company and Kentucky Utilities Company to Modify and Rename the Brownfield Development Rider as the Economic Development Rider*, Case No. 2011-00103, Order (Ky. PSC Aug. 11, 2011). In the tariff provisions the Commission approved in that case, the relevant text stated, "Service under EDR for Economic Development is available to: 1) new customers contracting for a minimum annual average of monthly billing load of 1,000 kVA[.]"

view that the EDR Rider's requirements comported with the guidelines the Commission issued in Administrative Case No. 327:

> The proposed EDRs make reasonable classifications of the Applicants' rates. Similar to the current BDRs, the proposed EDRs have specific, measurable guidelines which must be met in order to be applied. The new EDR for economic development is available to those customers locating at least 1,000 kW (or kVa) of new load in the Applicants' service territories, provided that any such customer has been qualified by the Commonwealth of Kentucky for benefits under the Kentucky Business Investment Program. Customers who qualify for the EDR are eligible to receive a declining reduction in their demand charge for a period of five years and they must enter into a service agreement which obligates them to continue taking service for five years following the incentive period. …
>
> …
>
> The Commission further finds that the terms of the Applicants' proposed EDR tariffs are consistent with the guidelines set forth in Administrative Case No. 327 ("Admin. 327").[31]

Notably, the Commission did *not* state or require that EDR demand discounts apply only to load for new customers above a certain minimum or base level of load. For example, the Commission's order did *not* state, "Customers who qualify for the EDR are eligible to receive a declining reduction in their demand charge *applied to new load minus the 1,000 kW new load minimum level* for a period of five years …." Instead, the Commission approved making EDR Rider demand discounts available to any and all new or additional load of at least 1,000 kW.

The Commission has approved the EDR Rider minimum load provision as part of KU's tariff at least five times since the Commission initially approved it in Case No. 2011-00103, including minor textual changes to that very provision.[32] At no point has the Commission stated or implied that the provision was inconsistent with the guidelines issued in Administrative Case No. 327. Indeed,

[31] *Id.* at 5-6.
[32] *Electronic Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit*, Case No. 2020-00349, Order (Ky. PSC June 30, 2021); *Electronic Application of Kentucky Utilities Company For an Adjustment of Its Electric Rates*, Case No. 2018-00294, Order (Ky. PSC Apr. 30, 2019); *Application of Kentucky Utilities Company For an Adjustment of Its Electric Rates and For Certificates of Public Convenience and Necessity*, Case No. 2016-00370, Order (Ky. PSC June 22, 2017); *Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates*, Case No. 2014-00371, Order (Ky. PSC June 30, 2015); *Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates*, Case No. 2012-00221, Order (Ky. PSC Dec. 20, 2012).

in recent years the Commission has explicitly approved at least two EDR special contracts for other electric utilities with an EDR Rider minimum or base load approach similar to KU's, including one approved this year for another cryptocurrency mining customer.[33]

The Commission also recently approved another EDR contract for a new cryptocurrency mining customer for another utility that included a five-year, 90% demand charge discount for load above an initial level that was redacted in the public record plus 1 MW.[34] For comparison, applying KU's declining 50% to 10% demand charge discount over five years (average 30%) to a full 13 MW load is equivalent to applying a 90% demand charge discount for a full five years to just 4.3 MW of the total 13 MW load.[35]

KU would further observe that the Commission has accepted two EDR contracts filed by KU in 2022 alone, both of which apply the same minimum load and demand credit approach as KU proposes in the Bitiki-KU, LLC EDR contract.[36]

In this case, Bitiki-KY, LLC is contracting for 13,000 kVA with a 95% load factor, far exceeding the minimum base level of demand required for Rider EDR. Therefore, the contract complies with the guideline this request cites.

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[33] *Electronic Tariff Filing of East Kentucky Power Cooperative, Inc. for Approval of a Special Contract pursuant to Its Interruptible Service Tariff and Economic Development Rider between It, Jackson Energy Cooperative Corporation, and UMine, LLC*, Case No. 2022-00355, Order (Ky. PSC Oct. 31, 2022) (approving EDR demand charge credits for new cryptocurrency mine's entire load); *Electronic Application of Kentucky Power Company for Approval of a Contract for Electric Service under Tariff E.D.R.*, Case No. 2018-00378, Order (Ky. PSC July 9, 2019) (approving EDR demand credits to apply to full demand of customer with 3.6 MW load).

[34] *Electronic Tariff Filing of Big Rivers Electric Corporation and Jackson Purchase Energy Corporation for Approval and Confidential Treatment of a Special Contract and Cost Analysis Information and a Request for Deviation from the Commission's September 24, 1990 Order in Administrative Case No, 327*, Case No. 2021-00282, Order at 17-18 (Ky. PSC Oct. 14, 2021); Case No. 2021-00282, Application, Attachment 4, "Big Rivers Wholesale Agreement." Exhibit C Sections B and C at 2-4 (June 21, 2021).

[35] 30% of 13 MW is 3.9 MW. Dividing that amount by 90% results in 4.33 MW.

[36] The Commission accepted the Central Motor Wheel America special contract and EDR contract effective April 30, 2022. It is available at:
https://psc.ky.gov/tariffs/Electric/Kentucky%20Utilities%20Company/Contracts/Current/Central%20Motor%20Wheel%20America/2022-04-30_Contract%20for%20Electric%20Service.pdf.
The Commission accepted the Danimer Scientific KY Inc. special contract and EDR contract for new service effective August 17, 2022. It is available at:
https://psc.ky.gov/tariffs/Electric/Kentucky%20Utilities%20Company/Contracts/Current/Danimer%20Scientific,%20Inc/2022-08-17_Contract%20for%20Electric%20Service%20with%20EDR%20(new%20service).pdf.