### **COMMONWEALTH OF KENTUCKY**

### **BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY	)	
UTILITIES COMPANY AND LOUISVILLE GAS	)	
AND ELECTRIC COMPANY FOR CERTIFICATES	)	CASE NO.
OF PUBLIC CONVENIENCE AND NECESSITY	)	2025-00045
AND SITE COMPATIBILITY CERTIFICATES	)	

### REBUTTAL TESTIMONY OF TIM A. JONES SENIOR MANAGER, SALES ANALYSIS AND FORECASTING ON BEHALF OF KENTUCKY UTILITIES COMPANY AND LOUISVILLE GAS AND ELECTRIC COMPANY

Filed: July 18, 2025

### TABLE OF CONTENTS

INTRODUCTION	1
THE COMPANIES' FORECAST OF DATA CENTER LOAD WAS AND IS REASONABLE	2
THE COMPANIES' LOAD FORECAST ASSUMPTIONS CONCERNING ENERGY EFFICIENCY SAVINGS AND DISTRIBUTED SOLAR WERE	
REASONABLE 1	0
CONCLUSION AND RECOMMENDATION 1	6

1		INTRODUCTION
2	Q.	Please state your name, position, and business address.
3	A.	My name is Tim A. Jones. I am the Senior Manager of Sales Analysis and Forecasting
4		for Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company
5		("LG&E") (collectively, "Companies") and an employee of LG&E and KU Services
6		Company, which provides services to KU and LG&E. My business address is 2701
7		Eastpoint Parkway, Louisville, Kentucky 40223.
8	Q.	What is the purpose of your rebuttal testimony?
9	A.	First, I demonstrate that, contrary to the assertions of a number of intervenor witnesses,
10		the Companies' forecast of data center load was and is reasonable. Second, I rebut the
11		assertions of Joint Intervenors witness Andy Eiden concerning the energy efficiency
12		and distributed solar values reflected in the Companies' 2025 CPCN Load Forecast.
13	Q.	Are you sponsoring any exhibits to your rebuttal testimony?
14	A.	Yes, I am sponsoring Rebuttal Exh. TAJ-1, which is attached to my testimony as a
15		separate Excel file. It provides expected value calculations for the Companies' most
16		recent economic development queue filed with the Commission as a supplemental
17		response to PSC 2-17(g). It shows the Companies' expected value of data center
18		economic development load is about 1,870 MW, and the Companies' expected value
19		of non-data-center economic development load from a variety of different commercial
20		and industrial sectors is over 580 MW.

1 2

### THE COMPANIES' FORECAST OF DATA CENTER LOAD WAS AND IS REASONABLE

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Q.

### A primary focus of the intervenor testimony is to attack the Companies' forecast of data center load.<sup>1</sup> Do you have any overarching responses to that testimony?

5 A. Yes. Before I address data center forecasting, I have two observations about the 6 Companies' load forecasting for existing customers. First, it is noteworthy that, with 7 the narrow exceptions of energy efficiency and distributed generation, there was no 8 criticism of the Companies' load forecast for existing customers. Second, no other 9 party to this proceeding has attempted to produce its own load forecast for the 10 Companies. I believe these facts speak well of the Companies' overall load forecasting 11 methodologies, which the Commission and Commission Staff have previously found to be generally reasonable.<sup>2</sup> 12

Turning to data center load forecasting, John Bevington's rebuttal testimony speaks to the particulars concerning the Companies' interactions with data center developers and hyperscalers and why they are likely to choose to locate in the Companies' service territories. I will speak to broader projections of data center load growth and the criticisms of how the Companies discounted the total queue of data center load potential for the 2025 CPCN Load Forecast. From that perspective, I

<sup>&</sup>lt;sup>1</sup> See, e.g., Wellborn at 6-11; Hotaling at 5-20; Fisher at 2-15; Stanton at 13-40; O'Leary at 11-18.

<sup>&</sup>lt;sup>2</sup> See, e.g., Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates and Approval of a Demand Side Management Plan and Approval of Fossil Fuel-Fired Generation Unit Retirements, Case No. 2022-00402, Order at 61-66 (Ky. PSC Nov. 6, 2023); Electronic 2021 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company, Case No. 2021-00393, Order Appx. "Commission Staff's Report on the 2021 Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company" at 51 (Ky. PSC Sept. 16, 2022) ("LG&E/KU's assumptions and methodologies for load forecasting are generally reasonable.").

conclude the Companies' forecast of 1,750 MW of data center load by 2032 remains
 reasonable.

### 3 Q. Are credible third-party analysts continuing to project unprecedented growth in 4 data center load in the U.S.?<sup>3</sup>

5 Yes. On June 24, 2025, Deloitte released a new report that projected total U.S. data A. 6 center demand growing to 176 MW in 2035 from the 2024 total of 33 GW—an increase of 143 GW, of which 119 GW is AI data center demand growth.<sup>4</sup> The Deloitte report 7 further observed that "the constellation of data center markets is changing. AI 8 9 infrastructure development is spreading to more states and decentralizing as AI models are deployed closer to users to provide faster responses ...."<sup>5</sup> Importantly, Deloitte's 10 11 survey of U.S.-based power company and data center executives showed that, contrary 12 to the view expressed by Joint Intervenors witness Sean O'Leary, 79% of the 13 respondents believed AI would increase power demand through 2035 due to widespread adoption, 19% believed it would stabilize by 2035 due to AI efficiency 14 15 improvements, and only 2% believed AI efficiency improvements would decrease power demand.<sup>6</sup> 16

In addition, Sierra Club witness Jeremy Fisher cited a variety of sources to support his statement that "[e]xpert observers have projected that non-cryptocurrency mining data centers like those in the Companies' economic development queue (i.e. cloud compute, artificial intelligence, and enterprise) could grow to as much as 100

<sup>&</sup>lt;sup>3</sup> Contra O'Leary at 17.

<sup>&</sup>lt;sup>4</sup> Deloitte, "Can US infrastructure keep up with the AI economy?" (June 24, 2025), available at <u>https://www.deloitte.com/us/en/insights/industry/power-and-utilities/data-center-infrastructure-artificial-intelligence.html</u> (accessed June 29, 2025). <sup>5</sup> *Id.* 

 $<sup>^{6}</sup>$  Id.

1 GW nationally by around 2030."<sup>7</sup> Consistent with that view, S&P Global Market 2 Intelligence 451 Research forecasts 47 GW of incremental data center power demand 3 by 2028 and 70 GW of incremental data center power demand by 2030 (both relative 4 to 2024).<sup>8</sup> Even more recently, on July 7, 2025, the U.S. Department of Energy released 5 a report adopting an incremental data center load projection of 52 GW by 2030 based 6 on a variety of predictions ranging from 33 GW to 109 GW.<sup>9</sup>

In sum, credible forecasters and analysts are continuing to project enormous growth in U.S. data center demand driven primarily by new AI data centers through the mid-2030s. Moreover, as noted above, at least some analysts, including Deloitte, are indicating that data centers are looking beyond their initial markets for their next locations, which the recent history of hyperscale data center announcements also supports.

Q. How do you respond to Mr. Fisher's assertion that individual data centers must
be in more than one utility's queue, necessarily overstating the real potential load
in each utility's queue?<sup>10</sup>

A. According to Mr. Fisher, 17 parent utility companies claim to have a combined 409
GW of data center load in their economic development queues, and another six have

<sup>&</sup>lt;sup>7</sup> Fisher at 6.

<sup>&</sup>lt;sup>8</sup> Garrett Hering, "US datacenter power draw to double by 2028; states tackle cost, supply concerns," S&P Global (July 10, 2025), available at <u>https://www.capitaliq.spglobal.com/apisv3/spg-webplatform-core/news/article?id=91382267</u> (accessed July 10, 2025). *See also* Jared Anderson, "Datacenter companies, US utilities collaborating to address power demand growth," S&P Global (June 6, 2025), available at <u>https://www.capitaliq.spglobal.com/apisv3/spg-webplatform-core/news/article?id=90063924</u> (accessed June 29, 2025).

<sup>&</sup>lt;sup>9</sup> U.S. Department of Energy, "Resource Adequacy Report: Evaluating the Reliability and Security of the United States Electric Grid" at 16 (July 7, 2025), available at https://www.energy.gov/sites/default/files/2025-07/DOE Report %28FINAL JULY 7%29.pdf (accessed July Final EO 8. 2025); see also https://www.energy.gov/topics/reliability ("On July 7, 2025, the Department of Energy released its Report on Evaluating U.S. Grid Reliability and Security ...."). <sup>10</sup> Fisher at 6-7.

1 300 GW of total economic development load, which he assumes consists primarily of data centers.<sup>11</sup> Even assuming all 709 GW claimed by Mr. Fisher is truly data center 2 load in utilities' economic development queues, the Companies' projected data center 3 load of 1,750 MW is less than 1.25% of Deloitte's projected 143 GW data center load 4 growth, and it is less than the almost 1,870 MW expected value of data center load 5 currently in the Companies' economic development queue.<sup>12</sup> It is certainly plausible 6 that less than a 70<sup>th</sup> of incremental U.S. data center load growth could occur in the 7 Companies' service territories,<sup>13</sup> particularly when neighboring states like Indiana, 8 9 Tennessee, and Ohio, as well as states not renowned for their tech sectors like 10 Louisiana, either have announced or already have data centers by the likes of Amazon, Google, and Meta.<sup>14</sup> A recent article posted by large real estate firm CBRE further 11 12 supports the plausibility of 1,750 MW of data center load coming to the Companies' 13 service territories: "The power demand of artificial intelligence is a key influence on site selection as occupiers prioritize sites with power available in the next 18 to 24 14 15 months, a short timeframe in the current market. Sites with access to power are 16 attracting attention from developers and investors *regardless of location*, which is a shift from previous years."<sup>15</sup> 17

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Thus, though it appears there is some amount of potential data center load appearing in more than one utility's economic development queue, none of the 19 20 evidence presented by the intervenors in this case suggests the Companies' forecast of

<sup>11</sup> Id.

<sup>&</sup>lt;sup>12</sup> See Rebuttal Exh. TAJ-1.

<sup>&</sup>lt;sup>13</sup> Of the 1,870 MW total expected value, about 1,740 MW is in Kentucky.

<sup>&</sup>lt;sup>14</sup> See Companies' Response to JI 1-145(a); Bevington Direct at 9-10.

<sup>&</sup>lt;sup>15</sup> CBRE, "Atlanta Emerges as National Leader in Data Center Net Absorption" (Mar. 3, 2025) (emphasis added), https://www.cbre.com/press-releases/atlanta-emerges-as-national-leader-in-data-center-netavailable at absorption (accessed July 9, 2025).

1		data center load growth is implausible. Rather, it provides support for the Companies'
2		position that significant data center load growth is coming.
3	Q.	How do you respond to Joint Intervenors witness Elizabeth Stanton's argument
4		that the Companies have not properly discounted the data center load in their
5		economic development queue and that the Commission should adopt her 25-point
6		approach that predicts just 322 MW of data center load? <sup>16</sup>
7	A.	A few points suffice to show the flaws in her framework, which no regulatory authority
8		has accepted. <sup>17</sup>
9		First, her 25-point framework has the facial appearance of scientific rigor, but
10		closer inspection reveals it to be unconvincing at best. Her 25-point framework is
11		actually a collection of items she read about and assembled into a list; what some of
12		the items mean or how one would go about evaluating them is unclear. <sup>18</sup> Some of the
13		elements have no obvious connection to the likelihood of a data center project coming
14		to fruition at all, e.g., "Signed commitment to construct on-site backup generating or
15		storage facilities and allow the utility, after reasonable notice, to deploy the customer's
16		on-site backup systems." <sup>19</sup> Others make no sense in her true-false probability
17		framework, e.g., "Signed disclosure to the utility of whether the customer is pursuing
18		a duplicate request for electric service, inside or outside this state, the approval of which
19		would result in the customer materially changing or withdrawing the interconnection

<sup>&</sup>lt;sup>16</sup> Stanton at 40 and 45-50.
<sup>17</sup> Joint Intervenors' Response to Companies' DR 1-4(a).
<sup>18</sup> For example, several of the items are qualified by "high likelihood," e.g., "Demonstrate high likelihood that a cluster of future data center loads will likely develop near this facility." How high is high enough? As determined by whom and how?
<sup>19</sup> Stanton at 40, Table 7, Item 8.

1 2 request";<sup>20</sup> in her framework, receiving such a disclosure, irrespective of what it said, would earn a 4% probability increase, which is counterintuitive.

Second, in addition to those difficulties, Ms. Stanton then assigned each of the 3 25 elements exactly the same 4% probability to arrive at a total of 100%. This is 4 5 unscientific at best. For example, it is counterintuitive to suggest that satisfying the 6 criterion, "Demonstrate that project's description is based on market intelligence and 7 customer-supplied information" (it is unclear what that means), should have the same probability score as, "Signed a Contract for Electric Service," or, "Construction of the 8 facility has begun."<sup>21</sup> It is unclear precisely what it would mean to "[d]emonstrate high 9 10 likelihood that facility will locate in-state," though it would merit a 4% probability increase in Ms. Stanton's framework; if the Companies could "[d]emonstrate high 11 12 likelihood that facility will locate in LG&E-KU territory," presumably they would get to claim a total of an 8% probability increase. 13

14 Third, it is unclear there is any underlying substantive support for Ms. Stanton's 15 assertions regarding certain criteria. For example, Ms. Stanton dismisses developers 16 of "colocator" data centers with a *Field of Dreams* allusion: "Typically, colocators are 17 attempting to build a data center-appropriate landing spot, speculatively, in hopes that 18 having built it, they will come."<sup>22</sup> But according to recent research by the global real 19 estate company JLL, the data center colocation market is booming: "In a year where 20 data centers faced their toughest power challenges yet, the industry didn't just survive

<sup>&</sup>lt;sup>20</sup> *Id.* Item 10. *See also* Item 11, "Signed disclosure to the utility of developer's project-specific failure risk assessments, including outstanding zoning issues, lack of firm site plan from the customer, technical issues related to electric service, company maturity, customer commitments, and permits acquired." If the disclosure revealed enormous risks, why would a 4% probability increase be appropriate? Yet in Ms. Stanton's simplistic framework, merely receiving the disclosure suffices.

<sup>&</sup>lt;sup>21</sup> *Id.* Items 3, 12, and 19.

<sup>&</sup>lt;sup>22</sup> Stanton at 17 ln. 13-14.

1		- it thrived [C]olocation vacancy plummet[ed] to a record low of 2.6% and
2		absorption levels doubl[ed] in just two years." <sup>23</sup> JLL's research further notes that both
3		hyperscalers and colocators are "push[ing] into new territories searching for power and
4		land." <sup>24</sup> Thus, it is not obvious that colocation data center projects should be
5		discounted per se as Ms. Stanton's checklist would require.
6		In sum, although the idea of a 25-point checklist to arrive at a probability to
7		attach to a data center project is facially appealing, the reality of Ms. Stanton's proposal
8		is unconvincing at best.
9		In contrast, Mr. Bevington's and his team's actual experience with doing
10		economic development work over the course of decades in Kentucky informed the
11		discounting methodology the Companies used to confirm the reasonableness of their
12		data center load forecast. The Companies do not claim their discounting approach is
13		infallible, but it is reasonable and born of actual experience from working in economic
14		development in Kentucky. Thus, I believe the Companies' forecast of data center load
15		remains reasonable.
16	Q.	Do you have any updates to the Companies' data center load expectation due to
17		recent developments in Oldham County? <sup>25</sup>

<sup>&</sup>lt;sup>23</sup> Kimberly Steele, "Record-low data center vacancy fuels modern-day 'gold rush': JLL's new North America Data Center Year-End Report details how insatiable demand is pushing development into untapped markets," JLL (Mar. 10, 2025), available at https://www.jll.com/en-us/newsroom/record-low-data-center-vacancy-fuelsmodern-day-gold-rush (accessed July 9, 2025). See also CBRE, "Atlanta Emerges as National Leader in Data Center Net Absorption" (Mar. 3, 2025) ("Atlanta had its highest volume of colocation leasing activity ever in 2024. ... Last year, the eight primary North American data center markets saw a significant uptick in completed construction, with total supply reaching 6,922.6 MW-a 34% year-over-year increase. ... In 2024, the average vacancy rate in primary markets reached a record low of 1.9%. Vacancy rates decreased across all primary markets for the first time since CBRE started tracking the data center sector in 2013."), available at https://www.cbre.com/press-releases/atlanta-emerges-as-national-leader-in-data-center-net-absorption (accessed July 9, 2025). <sup>24</sup> *Id*.

<sup>&</sup>lt;sup>25</sup> See Companies' Response to PSC 5-11.

A. Yes. As shown in Rebuttal Exhibit TAJ-1, the Companies performed an updated
expected value calculation for the data center load in their most recent economic
development queue filed with the Commission as a supplemental response to PSC 217(g), which reflects the removal of the Oldham County Data Center and other changes.
That updated calculation results in an expected data center load value of almost 1,870
MW—still higher than the Companies' 1,750 MW data center load forecast.<sup>26</sup>

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### Q. Do you have any other comments in response to the intervenor testimony criticizing the Companies' data center load forecast?

9 A. Yes. As a load forecaster, after reviewing and considering the intervenors' criticisms 10 and critiques, I remain confident in the reasonableness of the Companies' 1,750 MW 11 data center load forecast, which remains below the current 1,870 MW mathematical 12 expected data center load value I discussed above. I believe there is a roughly equal 13 chance actual data center load could be lower or higher assuming generation is 14 available to serve any additional load. But absent sufficient generation, the forecast 15 would necessarily be too high because the Companies could not serve the load; without 16 the ability to obtain generation needed to serve load growth, assertions that the load 17 forecast is too high will become a self-fulfilling prophecy.

I would also observe that the Companies have been quite conservative in projecting non-data-center load growth. The 2025 CPCN Load Forecast includes slightly less than 40 MW of non-data-center, non-BlueOval SK economic development load growth. But in the Companies' most recent economic development queue filed

<sup>&</sup>lt;sup>26</sup> As shown in Rebuttal Exh. TAJ-1, this calculation excludes two of the three 500 MW inquiries made by different developers for the same site on Urton Lane. Although having three developers inquiring about the same site arguably should increase the probability above "suspect," the Companies have conservatively not increased it for the purpose of this calculation.

1	with the Commission as a supplemental response to PSC 2-17(g), there is over 2,800
2	MW of potential non-data-center, non-BlueOval SK economic development load. The
3	mathematical expected load value of that portion of the Companies' economic
4	development queue is over 580 MW, <sup>27</sup> as shown in Rebuttal Exhibit TAJ-1. This
5	suggests that the Companies' overall load forecast is reasonable, if not on the low side.
6	Finally, in addition to the responses I provided above, I would also note that the
7	Commission stated in its final order in the Companies' 2022 CPCN case, "[T]he
8	Commission, if anything, would prefer that utilities err on the high side to ensure that
9	they have sufficient reliability to serve load." <sup>28</sup> The Commission further stated:
10 11 12 13 14 15 16 17	As it relates to measuring generation and demand for purposes of resource planning, given the uncertainty around financing, environmental regulations and the ability to timely construct energy infrastructure, all-else-equal the Commission would rather err on the side of having too much energy, as opposed to not enough. With surrounding regions concerned about being energy inadequate, the Commission would rather the Commonwealth standout as a state with enough power to meet customers' needs. <sup>29</sup>
18	None of this is to suggest the Companies have attempted or desired to overstate their
19	load forecast in any way. But the Commission has clearly stated its preference to have
20	more energy than to come up short.
21 22	THE COMPANIES' LOAD FORECAST ASSUMPTIONS CONCERNING ENERGY EFFICIENCY SAVINGS AND DISTRIBUTED SOLAR WERE REASONABLE
23	Q. Joint Intervenors witness Andy Eiden asserts the Companies' load forecast does
24	not adequately account for the impact of energy efficiency, arguing that the
25	Companies' statistically adjusted end-use ("SAE") model does not sufficiently

<sup>&</sup>lt;sup>27</sup> Again, even this calculation is conservative because it excludes a 900 MW "suspect" project.
<sup>28</sup> Case No. 2022-00402, Order at 65 (Ky. PSC Nov. 6, 2023).
<sup>29</sup> Id. at 177-78.

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### account for "dramatic changes in end use efficiency, and therefore cannot accurately reflect potential shifts in energy consumption which are often disruptive in their scale."<sup>30</sup> How do you respond?

4 A. There is no reason to adjust the Companies' load forecast based on Mr. Eiden's bare 5 assertion. Notably, Mr. Eiden provides no historical example of such an efficiency 6 "step-change" occurring; in particular, he provides no evidence of its having occurred 7 in the Companies' service territories. In practice, people and businesses tend to install new, higher-efficiency electric-consuming devices to replace existing electric-8 9 consuming devices as they fail, not the instant a new technology becomes commercially 10 available. This is a process that often takes a decade or more. For example, LED 11 lighting, which had considerable legislative, regulatory, and utility-programmatic 12 support, was as much a "step-change" as one could reasonably expect for energy efficiency (using 75% less energy and lasting many times longer than comparable 13 incandescent light),<sup>31</sup> yet it still took a decade to become the dominant lighting 14 15 technology (again, in part due to federal legislative requirements), notwithstanding that light bulbs-especially incandescent bulbs-are relatively high-turnover items.<sup>32</sup> 16

lighting#:~:text=Energy%20Savings%20LED%20is%20a%20highly%20energy%2Defficient,to%2025%20tim es%20longer%2C%20than%20incandescent%20lighting (accessed July 5, 2025).

<sup>&</sup>lt;sup>30</sup> Eiden at 35-45.

<sup>&</sup>lt;sup>31</sup> U.S. Department of Energy, "LED Lighting" ("Residential LEDs -- especially ENERGY STAR rated products -- use at least 75% less energy, and last up to 25 times longer, than incandescent lighting."), available at <u>https://www.energy.gov/energysaver/led-</u>

<sup>32</sup> Energy Star, "The Light Bulb See, e.g., Revolution" (Oct. 2017), available at https://www.energystar.gov/sites/default/files/asset/document/LBR 2017-LED-Takeover.pdf (accessed July 5, 2025); U.S. Department of Energy, "2020 U.S. Lighting Market Characterization" (Apr. 2024), available at https://www.energy.gov/sites/default/files/2024-08/ssl-lmc2020\_apr24.pdf (accessed July 5, 2025); U.S. Energy Information Administration, "Nearly half of U.S. households use LED bulbs for all or most of their indoor lighting" (Mar. 31, 2022), available at https://www.eia.gov/todayinenergy/detail.php?id=51858 (accessed July 5, 2025); Regency Supply, "New federal restrictions on lighting products" (Oct. 21, 2024), available at https://insights.regencysupply.com/new-federal-restrictions-on-lightingproducts#:~:text=What%20is%20EISA?,and%20improve%20vehicle%20fuel%20economy (accessed July 5, 2025).

1 Thus, even what was arguably the most "step-change" efficiency technology in decades 2 took about a decade to become the dominant installed technology because people and 3 businesses tended to install them over time as existing bulbs failed, which is *exactly* 4 the kind of change the Companies' SAE model reflects.

5 Lacking historical support for his "step-change" claims, Mr. Eiden asserts there 6 are two technologies that apparently would qualify as being of the "step-change" type, 7 but he provides no quantification of how his claimed "step-change nature of some emerging tech" would affect the Companies' load forecast or the need for the 8 9 Companies' proposed resources. In short, Mr. Eiden has asserted an unquantified 10 hypothetical risk to the load forecast and failed to specify any impact of this hypothetical risk. Therefore, I see no reason to modify the Companies' load forecast, 11 12 which, due to the Companies' use of SAE modeling, includes more energy efficiency 13 savings than the Companies project their DSM-EE programs will create.

## 14 Q. Mr. Eiden also has three specific criticisms of the Companies' modeling of 15 distributed solar in the 2025 CPCN Load Forecast.<sup>33</sup> What are your responses to 16 his criticisms?

# A. Before turning to Mr. Eiden's specific criticisms, it is helpful to note two overarching issues that strongly suggest the Companies' distributed solar forecast is too *high*, not too low. First, the enactment of the One Big Beautiful Bill Act will significantly increase the effective cost of distributed solar, placing downward pressure on its

<sup>&</sup>lt;sup>33</sup> Eiden at 70-78.

adoption.<sup>34</sup> Second, as I further discuss below, the Companies' models were already overestimating adoption relative to actual adoption in recent months.

In addition to those overarching points, the responses I provide below to Mr. Eiden's criticisms further rebut his assertion that the Companies' load forecast underestimates distributed solar growth.

6 First, Mr. Eiden incorrectly asserts the Companies erred in converting real dollars to nominal dollars.<sup>35</sup> This was not an error in calculation, but an adjustment 7 based upon actual recent solar prices. The Companies noted that RFP responses for 8 9 utility-scale solar were coming in at prices significantly higher than what the 2024 10 NREL ATB (National Renewable Energy Laboratory's Annual Technology Baseline) suggested. With this data and the significant upward price revisions in the Companies' 11 solar PPAs with price reopeners,<sup>36</sup> the Companies used real-to-nominal factors that 12 13 more appropriately reflected market prices at the time the forecasts were completed. The increases in prices could explain why incremental distributed solar adoption has 14 15 slowed in the last two years, as shown in IRP Volume I at Figure 7-8. Thus, the 16 Companies may not have adjusted nominal prices upward enough.

17 Second, Mr. Eiden asserts that merely because the Companies' model 18 predictions are highly correlated to the historical data used to train the model does not 19 mean it will be a good predictor future solar adoption, and the Companies should have 20 verified the accuracy of their model by testing it using only a portion of the historical

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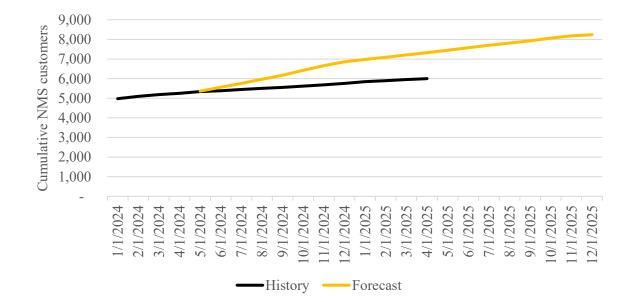
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<sup>&</sup>lt;sup>34</sup> See, e.g., Emily Walker, "Congress just killed the solar tax credit—here's what it means for homeowners," Energy Sage (July 3, 2025), available at <u>https://www.energysage.com/news/congress-passes-bill-ending-residential-solar-tax-credit/</u> (accessed July 5, 2025).

<sup>&</sup>lt;sup>35</sup> Eiden at 70-73.

<sup>&</sup>lt;sup>36</sup> See, e.g., Schram Direct at 9; Case No. 2024-00326, Companies' Response to JI 1-15.

data to see how well it would predict known adoption.<sup>37</sup> Following Mr. Eiden's recommendation and reviewing how well the base forecast models have predicted distributed solar adoption in Kentucky, the figure below shows that the models are missing too <u>high</u>, not too low; the actual numbers of customers adopting solar since the Companies completed their forecast have been consistently lower than forecast values:



Notably, these recent decreases in solar adoption relative to the Companies' forecasts occurred before any impacts from the removal of tax incentives on distributed solar adoption resulting from the recently enacted One Big Beautiful Bill Act and the anticipated end of offering new net metering service after reaching the 1% level described in KRS 278.466(1). Therefore, contrary to Mr. Eiden's assertions, the distributed solar forecasts used in this proceeding should be *lower*, not higher, based on the most recent variances to the forecast.

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<sup>&</sup>lt;sup>37</sup> Eiden at 73-75.

1 Third, Mr. Eiden criticizes the Companies for not addressing "market diffusion" 2 or "S-curve" modeling in their customer adoption models, yet he did not run such a model.<sup>38</sup> Mr. Eiden's criticisms are misplaced because this approach assumes adoption 3 will continue to occur regardless of changes in market conditions, including those 4 5 resulting from the recently enacted One Big Beautiful Bill Act and the anticipated end of offering new net metering service after reaching the 1% level described in KRS 6 7 278.466(1). The Companies' forecasting approach is to model customer behaviors based upon the economics of end-use technologies given available incentives. If the 8 9 economics change, adoption should change as well. On the topic of incentives, Mr. 10 Eiden claims the Companies did not consider local incentives, but the Companies did 11 add more distributed solar capacity to the forecast because of the Solar for All program 12 incentives that were expected to be provided to citizens of Kentucky, so his claims are 13 unfounded. And as I discussed above, it is noteworthy that the base distributed solar forecast is still missing too high on capacity predictions even after removing this Solar 14 15 for All on-top adjustment to the forecast.

16To summarize, considering the likely effects of the One Big Beautiful Bill Act17in addition to the other points above, there is no plausible justification for adjusting the18distributed solar forecast in the Companies' 2025 CPCN Load Forecast as Mr. Eiden19recommends, i.e., using the "NM Cumulative Capacity - High" distributed solar20capacity values shown in the Companies' response to JI 1-76(b) in Case No. 2024-2100326.<sup>39</sup> Indeed, in view of his criticisms of the Companies' distributed solar modeling22assumptions and methods, it is curious that *Mr. Eiden still recommends using a forecast* 

<sup>&</sup>lt;sup>38</sup> Eiden at 75-77.

<sup>&</sup>lt;sup>39</sup> Eiden at 78.

*produced by those same assumptions and methods.* It would thus appear he prefers the
IRP High Solar model simply because it results in more solar adoption. However, if
anything, for all the reasons given above, the 2025 CPCN Load Forecast's assumed
levels of distributed solar should be *lower*, not higher. Moreover, even if there were
any merit to Mr. Eiden's arguments—and there is not—he provides no argument or
quantitative support for his recommendation; he simply asserts it should be done.
Therefore, the Commission should disregard his recommendation as baseless.

### 8

#### **CONCLUSION AND RECOMMENDATION**

### 9 Q. What is your conclusion and recommendation to the Commission?

10 I conclude the Companies' 2025 CPCN Load Forecast remains reasonable and reliable A. 11 for resource planning purposes. As I demonstrated above, the intervenors, who provide 12 no complete load forecast of their own, have not shown the Companies' load forecast is unreasonable or unreliable; rather, in view of expected load values of 1,870 MW of 13 14 data center load and 580 MW of non-data center load, the Companies' 2025 CPCN 15 Load Forecast's inclusion of 1,750 MW of data center load and slightly less than 40 16 MW of non-data-center, non-BlueOval SK load remains entirely reasonable and 17 supportive of the Companies' requests in this proceeding. Moreover, the intervenors 18 have failed to demonstrate the Companies' load forecast undercounts the plausible 19 contributions of energy efficiency and distributed generation. Therefore, I recommend the Commission accept the 2025 CPCN Load Forecast as reasonable and reliable for 20 21 resource planning purposes in this case.

22 Q. Does this conclude your testimony?

A. Yes, it does.

#### VERIFICATION

### COMMONWEALTH OF KENTUCKY ) ) COUNTY OF JEFFERSON )

The undersigned, **Tim A. Jones**, being duly sworn, deposes and says that he is Senior Manager – Sales Analysis and Forecasting for LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the foregoing testimony, and that the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Tim A. Jones

Subscribed and sworn to before me, a Notary Public in and before said County and

State, this <u>S</u><sup>44</sup>\_day of \_\_\_\_\_ July 2025. Notary Public

Notary Public ID No. KINP63286

My Commission Expires:

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