COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC JOINT APPLICATION OF	**)**	
KENTUCKY UTILITIES COMPANY AND	**)**	
LOUISVILLE GAS AND ELECTRIC	**)**	
COMPANY FOR CERTIFICATES OF	**)**	
PUBLIC CONVENIENCE AND NECESSITY	**)**	**CASE NO. 2022-00402**
AND SITE COMPATIBILITY	**)**	
CERTIFICATES AND APPROVAL OF A	**)**	
DEMAND SIDE MANAGEMENT PLAN AND	**)**	
APPROVAL OF FOSSIL FUEL-FIRED	**)**	
GENERATING UNIT RETIREMENTS	**)**	

REBUTTAL TESTIMONY OF
LANA ISAACSON
MANAGER, EMERGING BUSINESS PLANNING AND DEVELOPMENT
KENTUCKY UTILITIES COMPANY AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Filed: August 9, 2023

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I. BACKGROUND

Q. Please state your name, position, and business address.

A. My name is Lana Isaacson. I am the Manager of Emerging Business Planning and Development for Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E") (collectively, "Companies") and an employee of LG&E and KU Services Company, which provides services to KU and LG&E. My business address is 220 West Main Street, Louisville, Kentucky 40202.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to address Jim Grevatt's testimony on behalf of Metropolitan Housing Coalition, Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association (collectively, "Joint Intervenors") regarding the Companies' proposed 2024-2030 Demand-Side Management and Energy Efficiency Program Plan ("DSM-EE Plan"). I also respond to Andy McDonald's testimony on behalf of Joint Intervenors regarding battery demand response programs.

Q. Please summarize your testimony.

A. I first address the intervenors' criticism of the Companies' proposed DSM-EE Plan, including Mr. Grevatt's savings recommendation, the Companies' program selection process, specific criticism of the Companies' energy efficiency and demand response programs, and Mr. Grevatt's suggestion to require a mid-plan update. Next, I respond to Mr. Grevatt's concerns about the Companies' potential study and explain that it was informative to the process but had no impact on the cost-effectiveness of the programs the Companies considered for inclusion in the DSM-EE Plan. Finally, I address the Companies' fulsome analysis of a pay-as-you-save financing program and commitment to continued analysis.

II. COMPANIES' PROPOSED DSM-EE PLAN

Q. Please describe Mr. Grevatt's criticism of the Companies' DSM-EE Plan.

A. Broadly, Mr. Grevatt is concerned that the Companies have not proposed enough DSM-EE; however, Mr. Grevatt's criticism of the *specifics* of the DSM-EE Plan is fairly narrow. He critiques the following aspects of the proposed DSM-EE Plan: (1) perceived fewer opportunities for residential customers; (2) the increase to the eligibility threshold for Income-Qualified Solutions; (3) the Companies' strategy for promoting smart thermostats; and (4) perceived attrition in the historic direct load control program. Mr. Grevatt also takes issue with the Companies' program selection process, potential studies, and Pay-As-You-Save analysis.

A. <u>Mr. Grevatt's Savings Recommendation</u>

Q. Does Mr. Grevatt propose a "savings recommendation" for the Companies beyond the savings the Companies proposed in the DSM-EE Plan?

A. Yes. Mr. Grevatt uses a study titled "Pathways for Energy Efficiency in Virginia" ("Virginia Pathways study") to develop his "savings recommendation" for the Companies. He "generally assumed that the Companies should be expected to achieve the average level of savings [from the Virginia Pathways study] in several additional program areas that it could reasonably be expected to implement."[1]

Q. Do you have concerns with using the Virginia Pathways study to develop DSM-EE expectations for the Companies?

A. Yes, I have numerous concerns with this approach. First, the objective of the Virginia Pathways study is completely different than the Companies' objective to present cost-

[1] Grevatt Testimony at 36.

effective DSM-EE programs. Mr. Grevatt co-authored the Virginia Pathways study for a group of clean energy non-profits in Virginia "to explore whether, by effectively implementing a suite of energy efficiency programs similar to those currently implemented by other large utilities, Virginia Electric and Power Company . . . can meet or exceed the savings requirements of the Virginia Clean Economy Act."[2] I am not a lawyer, but I know that the Virginia Clean Economy Act does not dictate savings the Companies must achieve in Kentucky.

Second, the Virginia Pathways study reviews "12 comparison utilities achieving at least one percent incremental annual savings."[3] None of the comparison utilities are in Kentucky. The savings Mr. Grevatt recommends for the Companies are thus derived only from the energy savings of utilities in other states. Energy efficiency targets or requirements in other states could influence the level of savings these utilities achieve. These savings are not representative of savings the Companies can achieve cost-effectively.

Third, the Virginia Pathways study does not discuss cost-effectiveness and presents no evidence that the programs the comparison utilities are offering have met any standard for cost-effectiveness, much less the standard for cost-effectiveness under Kentucky law. As Mr. Grevatt recognizes, states differ in how they value the inputs to cost-effectiveness tests.[4] Utility-specific avoided costs further impact cost-effectiveness results. For these reasons, the Virginia Pathways study provides no value in determining DSM-EE programs that the Companies can cost-effectively implement.

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[2] Exhibit JG-2 at 4.
[3] *Id.* at 15.
[4] Joint Intervenors' Response to Joint Data Requests of Kentucky Utilities Company and Louisville Gas and Electric Company Item No. 38.

Q. Does Mr. Grevatt show that the programs he proposes the Companies should implement are cost-effective?

A. No, he does not. He never calculates the cost-effectiveness of these programs using the four cost-benefit tests set out in the California Standard Practice Manual, which the Commission has required utilities to apply for more than 20 years.

Q. Does Mr. Grevatt acknowledge that he has not assessed cost-effectiveness?

A. He recognizes this omission, but states that he "based [his] recommendation on utility programs that all have a cost-effectiveness requirement."[5] He does not acknowledge that inputs to cost-effectiveness calculations vary widely by state. He provides no quantitative evidence to show that the programs he proposes are cost-effective under Kentucky regulation.

Q. Would you like to address any further errors in Mr. Grevatt's savings recommendation?

A. Yes. First, Tables 7 and 8 of Mr. Grevatt's testimony identify Residential HVAC as a program not currently proposed in the Companies' DSM-EE Plan. Mr. Grevatt overlooks that the Companies are offering Residential HVAC rebates as a part of the Online Audit program. In addition to my general concerns with Mr. Grevatt's extrapolation of the Virginia Pathways study, any savings Mr. Grevatt recommends the Companies should achieve for Residential HVAC are duplicative of the proposed DSM-EE Plan.

Second, Mr. Grevatt's testimony recommends the Companies implement an "Additional Residential Behavioral" program. Although Mr. Grevatt does not specify

[5] Grevatt Testimony at 47.

exactly what this program would include, the Companies expect there to be at least some overlap with the Companies' other offerings, including time-of-day rate tariffs and the "My Meter" program.

B. Selection of Programs

Q. Mr. Grevatt states that the "program selection process was conducted only by the Companies' staff and consultants."[6] Is this a fair characterization of the DSM-EE Advisory Group process?

A. No. As Mr. Bevington explained in his direct testimony and in Exhibit JB-1, the DSM-EE Advisory Group was a collaborative process that solicited input from participants throughout the program selection process. Working with input from the DSM-EE Advisory Group, the Companies began the program selection process by formulating a pool of 39 possible programs. Using a scoring rubric as a filtering mechanism, the Companies and their consultant, Cadmus, then evaluated and scored all 39 possible programs to determine which warranted further consideration and detailed analysis. The Companies discussed this scoring rubric and filtering process with the DSM-EE Advisory Group, specifically soliciting input from the members on which programs they would like to see move on to cost-effectiveness analysis. Based on interest from stakeholders in particular programs, the Companies advanced certain programs that did not score highly on the rubric to cost-effectiveness testing because of this interest. Joint Intervenors confirmed that representatives from Metropolitan Housing Coalition, Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain

[6] *Id.* at 5.

Association all participated in the DSM-EE Advisory Group.[7] The assertion that only the Companies and Cadmus participated in the program selection process is misguided; the record clearly reflects that the stakeholders in the DSM-EE Advisory Group had every opportunity to participate—and did participate—in the selection of the programs.

Q. Mr. Grevatt criticizes the Companies' program selection process because the Companies determined not to conduct cost-effectiveness testing on Midstream HVAC Rebates, Downstream Rebates, Home Energy Reports, New Home Construction Rebates, and Strategic Energy Management. Please explain why the Companies did not run cost-effectiveness testing on these programs.

A. The Companies explained why they did not conduct cost-effectiveness testing on these programs in response to PSC 1-20, largely because all programs except New Home Construction Rebates are essentially alternatives to programs already included in the proposed DSM-EE Plan. Additionally, no participant in the DSM-EE Advisory Group requested the Companies run cost-effectiveness on these programs. If Joint Intervenors wished the Companies to initially assess the cost-effectiveness of these programs, the appropriate time to make that request would have been in the DSM-EE Advisory Group meetings, not in testimony long after the Companies developed the DSM-EE Plan.

Q. Regardless, did the Companies assess the cost-effectiveness of these five programs in response to a data request in this case?

A. Yes. Mr. Grevatt fails to mention in his testimony that the Companies *did* run cost-effectiveness tests on these five programs and presented the results in response to PSC 2-38. None of the five programs passed the TRC test.

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[7] Joint Intervenors' Response to Joint Data Requests of Kentucky Utilities Company and Louisville Gas and Electric Company Item No. 31.

Q. Does Mr. Grevatt include these five programs in his "savings recommendation"?

A. Yes. Although it is unclear the specific measures Mr. Grevatt proposes the Companies should implement to achieve his "savings recommendation," he does clarify that his savings recommendation includes "the [five] programs [he] mentioned above, that the Companies did not assess in its process."[8] I find this suggestion that the Companies can cost-effectively achieve additional energy savings by implementing these five programs particularly troubling for multiple reasons. First, Mr. Grevatt ignores that the Companies showed in discovery that the five programs Mr. Grevatt suggests the Companies should implement are not cost-effective. Mr. Grevatt does not take issue with the specifics of the Companies' process for determining cost-effectiveness, but instead simply ignores the results of these tests and suggests the Companies should be able to achieve savings from programs that are clearly not cost-effective. Second, it appears that Mr. Grevatt fails to account for any decline in participation in the Companies' proposed programs even when suggesting the implementation of numerous programs that are essentially alternatives to programs already included in the proposed DSM-EE Plan. His projections thus include many duplicative savings and savings from programs shown not to be cost-effective, and they are unreliable.

C. Energy Efficiency Programs

Q. Does Mr. Grevatt take issue with the specifics of the Companies' proposed energy efficiency programs?

A. No. Mr. Grevatt broadly criticizes that the Companies have not proposed enough energy efficiency programs, but he takes little issue with the energy efficiency

[8] Grevatt Testimony at 36.

programs the Companies propose. He addresses only the specifics of the Income Qualified Solutions program.

Q. Why did the Companies increase the eligibility threshold for Income Qualified Solutions to 300% of the federal poverty line?

A. By expanding WeCare, the Companies simply sought to make the program available to more customers. The Companies did so, in part, due to feedback from participants in various DSM-EE Advisory Group meetings, which indicated that continued support of low-income customers should be a focus of any future plans. The Companies' Plan not only increases the eligibility threshold, but also increases the number of participants and the budget per home.

Q. Is Mr. Grevatt's testimony about the number of customers that may be eligible for the Income-Qualified Solutions program relevant?

A. No. Mr. Grevatt spends much of his testimony on a self-described "back of the envelope" calculation to determine how many of the Companies' customers may qualify for Income Qualified Solutions at the current and proposed thresholds of 200% and 300% of the federal poverty line. I fail to see the relevance of this exercise. The change in eligibility criteria will allow the Companies to serve more low-income customers and with a higher budget per home.

Q. Please respond to Mr. Grevatt's recommendation that the Companies be required to conduct a low-income market characterization study.

A. The Companies included funding in the DSM-EE Plan for a low-income study. The Companies committed in Exhibit JB-1 to "invest in geotargeting to identify households with a high potential for whole-building retrofits" and "work with a third party to analyze publicly available Census data to identify households with a higher propensity for needing deeper retrofits such as HVAC and weatherization."[9] Mr. Grevatt's recommendation is duplicative to the study the Companies already proposed in the DSM-EE Plan.

Q. Do you agree that the Companies expect decreased savings from Income-Qualified Solutions even though the Companies are proposing to increase spending and the number of participants?

A. The expected savings for Income-Qualified Solutions are based on concrete data. The Companies' third party contractor completed a billing analysis for the purposes of evaluation, measurement, and verification ("EM&V") on the existing WeCare program. The Companies used these savings values for the WeCare direct install measures in the proposed 2024-2030 DSM-EE Plan, which do show a reduction in savings from what the Companies used in the current DSM-EE Plan. As noted in the EM&V report, it is not uncommon for low-income program participants to see no overall savings or even increased usage after measures are installed due to participants adjusting set points to improve their comfort once they have properly working equipment. The Companies believe the WeCare savings in the proposed 2024-2030 DSM-EE Plan realistically represent what the Companies can actually achieve.

Q. Please respond to Mr. Grevatt's argument that the Companies' DSM-EE Plan favors energy efficiency savings from non-residential customers.

A. Mr. Grevatt argues that the DSM-EE Plan favors non-residential customers only by considering the energy efficiency portion of the Plan. The proposed DSM-EE Plan

[9] Exhibit JB-1 at 25-26.

offers programs for all customer types to participate in a variety of meaningful ways. This includes energy efficiency improvements and voluntary or controllable load reduction actions. Considering the entire DSM-EE Plan, the balance favors residential and small commercial customers. The proposed DSM-EE Plan allocates 69% of the program costs plus incentives to residential/small commercial customers and 25% to large commercial/industrial customers. The programs are forecasted to provide 11.5% of the total plan energy savings from residential/small commercial customers and 88.5% of the total plan savings from large commercial/industrial customers. The forecasted peak capacity reduction, in the max year, is 62% from residential/small commercial and 38% from large commercial/industrial.

Furthermore, as I previously discussed, the Companies have a behavioral program through My Meter. Although My Meter is not included in the Companies' DSM-EE Plan, it is another offering for residential customers by which data and behavioral changes can influence energy efficiency.

D. <u>Demand Response Programs</u>

Q. Mr. Grevatt states that the Companies' Plan fails to maintain the Direct Load Control program participants. Do you agree?

A. No. Mr. Grevatt compares the current DLC program participation only to Bring-Your-Own Device ("BYOD") program participation. He fails to account for DLC participants who will move to Peak Time Rebates ("PTR"). Considering both programs, the participation in BYOD and PTR will far outpace DLC participation and attrition levels. The decline in DLC participation over the seven-year Plan period is 83,960. The Companies forecast participation in 2030 at 255,139 for the combination of BYOD and PTR programs, which is slightly higher than Mr. Grevatt's recommendation to increase BYOD to 254,000 customers by 2030. Because Mr. Grevatt fails to consider PTR, the recommendations he proposes to ensure no DLC attrition are unnecessary.

Q. Please respond to Mr. Grevatt's criticism that the Companies have not articulated a strategy for promoting smart thermostats.

A. I disagree with this assertion. The Companies articulated the following strategy in the DSM-EE Plan:

> Offer integrated efficiency and demand response incentives and focused promotional campaigns for products, such as smart thermostats, that provide both energy savings and direct load management capabilities. For example, eligible customers who purchase a qualifying product from the Companies' Online Transactional Marketplace, a subcomponent of the Connected Solutions program, and receive an energy efficiency incentive in the form of an instant discount will also be able sign up for the Bring-Your-Own Device (BYOD) subcomponent of Connected Solutions at checkout.[10]

The Companies also explained that customers who purchase or receive smart thermostats from the Online Transactional Marketplace or Income-Qualified Solutions will be automatically asked to enroll in BYOD.[11]

Q. Does Mr. Grevatt otherwise take issue with the Companies' proposed demand response offerings?

A. No, it does not appear that he does. Other than his recommendations to BYOD, he recommends the Commission approve the Companies' DR programs with no changes.

Q. Please respond to Mr. McDonald's criticism that the Companies did not analyze the potential for battery DR programs.

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[10] *Id.* at 9.
[11] *Id.* at 14, 15, 42.

A. I disagree with this characterization. The Companies considered energy storage programs, but determined that they could not propose a cost-effective program at this time due to low levels of market saturation and high equipment cost. Instead, to accommodate battery DR programs in the future, the Companies intentionally deployed a Bring-Your-Own-Device program instead of a Bring-Your-Own-Thermostat program. The Companies intend to continue their evaluation of this technology for the potential inclusion into the BYOD program.

E. Mid-Plan Update

Q. Describe Mr. Grevatt's recommendation for a mid-plan update.

A. Based on the premise that the DSM-EE programs would have been out of date had the Companies not, of their own volition, proposed an update and expansion of DSM-EE programs, Mr. Grevatt "recommend[s] the Commission direct [the Companies] to file a [DSM-EE] Plan update early in 2026 to reflect a refreshed program plan that would begin in 2027."[12]

Q. Do you agree with this recommendation?

A. No. The Companies have a proven track record of constantly reviewing current programs, researching new programs, and seeking mid-plan program adjustments as needed. In fact, over the last 15 years, the Companies have filed five DSM-EE Plans and requested modifications to existing programs. Each time, the Companies have completed only approximately three years of a seven-year plan before requesting approval of a new plan because of changing circumstances. Requiring the Companies to present an update at the arbitrary deadline of 2026 when they have already shown

[12] Grevatt Testimony at 12.

that they continuously monitor DSM-EE would not be a good use of the Companies' and customers' resources.

III. POTENTIAL STUDIES

Q. Does Mr. Grevatt take issue with the Companies' update to their potential studies?

A. Yes. Mr. Grevatt devotes much of his testimony to what he describes as the Companies' "flawed approach to estimating potential."[13] He states that because the update "did not reflect appropriate avoided capacity costs," it rendered the update "of little use as a tool for estimating energy efficiency potential."[14]

Q. Did the Companies use the potential studies to develop the DSM-EE Plan?

A. Yes, the Companies used the potential studies as a tool to inform the DSM-EE Plan. As shown in Figure 1 of Exhibit JB-1, the potential studies were used develop program concepts. The potential studies did not dictate the amount of savings the Companies intended to achieve; instead, the Companies sought to maximize cost-effective DSM-EE offerings.

Q. Does Mr. Grevatt also recognize that potential studies are simply tools to create estimates of appropriate levels of DSM-EE?

A. Yes. He states: "The fact is that potential studies are tools used to create estimates and are not capable of determining <u>actual</u> limits to what is achievable."[15]

Q. Mr. Grevatt cites to a potential study from the Public Service Company of Colorado as evidence that a utility can achieve more than what a potential study

[13] *Id.* at 25.
[14] *Id.* at 4.
[15] *Id.* at 33 (emphasis on original).

identifies as achievable. Do you find this example to be inconsistent with Mr. Grevatt's criticism of the Companies' update?

A. I do. Mr. Grevatt faults the Companies for identifying potential that he believes is too low. However, he simultaneously applauds the Public Service Company of Colorado for achieving savings about 25 percent greater than the potential study identified as achievable. The difference in these two statements reiterates the need to view a potential study as simply a tool to inform the DSM-EE Plan.

Q. Do you agree with Mr. Grevatt that the alleged flaws to the potential study affected the proposed DSM-EE Plan?

A. No. The Companies' goal was to propose a plan that maximizes energy efficiency and demand response through offerings available to various customer classes cost-effectively. The potential study was informative to the process but had no impact on the cost-effectiveness of the programs the Companies considered for inclusion in the DSM-EE Plan.

IV. PAY-AS-YOU-SAVE FINANCING

Q. Did the Companies consider proposing a PAYS program in the DSM-EE Plan?

A. Yes. As Mr. Bevington explained in his testimony, the Companies agreed in their 2020 rate cases to engage in a stakeholder process through the DSM-EE Advisory Group to consider and evaluate an on-bill financing program for possible inclusion in their next DSM program plan. During the DSM-EE Advisory Group meetings, stakeholders expressed particular interest in a PAYS financing model and encouraged the Companies to specifically consider this model. The Companies thoroughly considered PAYS in the analysis attached to Mr. Bevington's testimony as Exhibit JB-3.

Q. Mr. Grevatt criticizes the PAYS analysis and suggests the Companies have "summarily conclude[d] that the IRA funding will fulfill customers' financing needs"? Do you agree with this characterization?

A. No. The PAYS analysis concluded that the PAYS program model would not generate cost-effective savings *at this time*. Particularly due to the results of the analysis, but also because of the Companies' concern that any PAYS program could be duplicative after the details of any financing program through the Inflation Reduction Act become available, the Companies concluded that they should not propose a PAYS program now. But the Companies did not summarily dismiss a potential PAYS program in the future. As Mr. Bevington stated in his direct testimony: "[T]he Companies concluded they should monitor these possible future financing programs, engage with the DSM-EE Advisory group to determine whether gaps may exist, and then potentially offer only programs that help fill gaps versus those that might be duplicative."[16]

Q. Please respond to Mr. Grevatt's characterization of the Companies' inputs to the PAYS analysis as "selective."

A. The Companies adjusted the capacity savings per project to 0.47 kW to better reflect the actual capacity savings per project the Companies expected to achieve. The Companies calculated 0.47 kW using an extrapolation of WeCare demand and energy savings, Mountain Association PAYS kWh savings, and solving for PAYS kW. Because the Companies adjusted the capacity savings, the Companies should have also adjusted energy savings *downward*, but inadvertently did not do so.

[16] Bevington Testimony at 14.

Regardless, this did not change the overall results of the PAYS analysis. First, the Companies updated the benefits value in the TRC calculation using 1.25 kW as the capacity savings value; the TRC value in the best case KU scenario is 0.56. All other scenarios using 1.25 kW as the capacity savings value resulted in a lower TRC than 0.56. Second, the Companies updated the benefits value in the TRC calculation using 0.47 kW as the capacity savings value and 2,643 kWh as the correct corresponding energy savings value; the TRC value in the best-case KU scenario is 0.24. All other scenarios using 1.25 kW as the capacity savings value resulted in a lower TRC than 0.24.

The following table shows the TRC results for both Companies under all scenarios. The first column reflects the inputs the Companies used in the PAYS analysis filed as Exhibit JB-3. The second column shows the TRC results using the Mountain Association savings inputs. The third columns shows the TRC results using Companies' the capacity and energy savings values the Companies intended to use.

TRC Cost Effectiveness Results	Nov 2022 Original PAYS Memo Savings Inputs (0.47 kW, 5,514 kWh/year)		Mountain Association Savings Inputs (1.25 kW, 5,514 kWh/year)		Updated Savings Inputs (0.47 kW, 2,643 kWh/year)	
PAYS Scenarios	**LG&E**	**KU**	**LG&E**	**KU**	**LG&E**	**KU**
Scenario 1	0.180	0.170	0.267	0.255	0.119	0.108
Scenario 2	0.250	0.240	0.377	0.361	0.169	0.152
Scenario 3	0.180	0.170	0.267	0.255	0.119	0.108
Scenario 4	0.250	0.240	0.377	0.361	0.169	0.152
Scenario 5	0.240	0.220	0.356	0.341	0.159	0.144
Scenario 6	0.390	0.370	0.584	0.559	0.261	0.236
Scenario 7	0.240	0.220	0.356	0.341	0.159	0.144
Scenario 8	0.390	0.370	0.584	0.559	0.261	0.236

The workpapers for these calculations are attached as Rebuttal Exhibit LI-1. Thus, while using the Mountain Association capacity value improves the cost-effectiveness of the hypothetical program, it remains significantly below the cost-effective threshold of 1.0.

Q. Will the Companies continue to analyze PAYS?

A. Absolutely, and the Companies committed to do so in Mr. Bevington's direct testimony. The Companies' clear message on PAYS is "not now," not "never."

V. CONCLUSION

Q. What is your recommendation to the Commission?

A. I recommend the Commission approve the Companies' DSM-EE Plan as proposed. The Companies have presented a robust and comprehensive suite of programs that will provide significant and necessary demand-side resources.

Q. Does this conclude your testimony?

A. Yes, it does.

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Lana Isaacson**, being duly sworn, deposes and says that she is Manager - Emerging Business Planning and Development for Louisville Gas and Electric Company and Kentucky Utilities Company, an employee of LG&E and KU Services Company, and that she 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 her information, knowledge, and belief.

Lana Isaacson
____
Lana Isaacson

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 3rd day of August 2023.

Caroline J. Davison
____
Notary Public

Notary Public ID No. KYNP63286_____

My Commission Expires:

January 22, 2027_____

CAROLINE J. DAVISON
COMM EXPIRES 01/22/2027
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