COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC 2024 INTEGRATED RESOURCE PLAN OF DUKE ENERGY KENTUCKY, INC.	)))	**CASE No. 2024-00197**

COMMENTS OF JOINT INTERVENORS KENTUCKIANS FOR THE COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY, AND KENTUCKY RESOURCES COUNCIL ON DUKE ENERGY KENTUCKY'S 2024 INTEGRATED RESOURCE PLAN

Byron Gary
Ashley Wilmes
Kentucky Resources Council
P.O. Box 1070
Frankfort, KY 40602
(502) 875-2428
Byron@kyrc.org
Ashley@kyrc.org

Counsel for Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Kentucky Resources Council

Dated: November 6, 2024

Table of Contents

JOINT INTERVENORS' COMMENT ON
DUKE ENERGY KENTUCKY'S 2024 INTEGRATED RESOURCE PLAN

Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Kentucky Resources Council (collectively, "Joint Intervenors"), in accordance with the July 16, 2024 Order of the Kentucky Public Service Commission ("Commission"), herewith offer their comments on Duke Energy Kentucky, Inc.'s ("Duke" or "the Company") 2024 Integrated Resource Plan ("IRP").

I. INTRODUCTION

Joint Intervenors appreciate the Company's efforts to develop and report their long-range generation resource analysis and preferred plan, as well as the opportunity to contribute to Staff's review of that effort. These comments are offered in the spirit of collaboration, trained on the shared goal of ensuring that robust least-cost planning is undertaken routinely, with a seriousness proportionate to the investments and services at stake.

On that score, the Company's 2024 IRP falls short, and it does so in ways that reflect a piecemeal and siloed planning process. Beginning with the approach to demand-side management ("DSM") resources, the 2024 IRP did not attempt to integrate evaluation of potentially cost-effective demand-side savings in its evaluation of generation alternatives. Instead of being at the foundation of resource planning, demand-side resources were left to be evaluated in piecemeal fashion in DSM cases.

Continuing a piecemeal approach, and judging from contemporaneous filings in other proceedings, the 2024 IRP does a poor job of transparently reporting or evaluating serious resource-related decision points. To the extent that the Company never did evaluate those resource-related decision points in an integrated manner outside this IRP process, that is another

problem. Both shortcomings undermine the sort of transparency, planning, and regulatory oversight the IRP regulation attempts to ensure.

Further undermining the substantive analysis, when the Company took a look at generation options, it did not consider evaluation of East Bend Unit 2's economically optimal retirement. That was an especially unreasonable oversight in light of the unit's age and outlook.

Lastly, the 2024 IRP does not meaningfully evaluate transmission and distribution alternatives and efficiencies. With that approach, the 2024 IRP appears to have siloed an entire category of the infrastructure needed to serve customers. That cannot be a reasonable approach to integrated, long-range resource planning.

This comment does not attempt to comprehensively address the 2024 IRP, and Joint Intervenors' silence on any issue, analysis, or conclusion advanced in Duke Energy Kentucky's IRP should not be taken as support or agreement.

II. LEGAL STANDARDS

At the outset, it should be noted that meeting the public interest—i.e., the needs of ratepayers—is the basis of utility law and regulation.[1] The granting of monopolies to retail electric suppliers over geographic service territories is premised on "orderly development of retail electric service," avoidance of "wasteful duplication of distribution facilities," and "the public convenience and necessity."[2] Important, if often overlooked, aims also include avoiding "unnecessary encumbering of the landscape of the Commonwealth of Kentucky" as well as "waste of materials and natural resources."[3]

---

[1] *See*, *e.g.*, *Munn v. People of State of Illinois*, 94 U.S. 113, 129 (1876) ("when private property is affected with a public interest it ceases to be *juris privati* only…."); *see also*, Jim Lazar, *Electricity Regulation In the US: A Guide (Second Edition)*, Regulatory Assistance Project, at 3–7 (June 2016), https://www.raponline.org/knowledge-center/electricity-regulation-in-the-us-a-guide-2/.
[2] KRS 278.016.
[3] *Id.*

Also foundational is that in exchange for demanding "fair, just and reasonable rates," each utility is required to "furnish adequate, efficient and reasonable service…."[4]

The IRP process in Kentucky is governed by 807 KAR 5:058, which requires Duke Energy Kentucky to submit, every three years, a plan that discusses historical and projected demand, resource options for satisfying that demand, and the financial and operating performance of the utility's system.[5] Core elements of the filing include:

- A base load forecast that is "most likely to occur and, to the extent available, alternate forecasts representing lower and upper ranges of expected future growth of the load on its system;"[6]
- A "resource assessment and acquisition plan for providing an adequate and reliable supply of electricity to meet forecasted electricity requirements at the lowest possible cost," and that includes consideration of "key uncertainties" and an "assessment of potentially cost-effective resource options available to the utility;"[7]
- The revenue requirements and average system rates resulting from the plan set forth in the IRP;[8] and
- the "[s]teps to be taken during the next three (3) years to implement the plan."[9]

As the Commission Staff routinely note, the Commission's goal in establishing the IRP requirement:

> "was to ensure that all reasonable options for the future supply of electricity were being examined in order to provide ratepayers with a reliable supply of electricity at the lowest possible cost."[10]

---

[4] KRS 278.030(1)–(2).
[5] 807 KAR 5:058 Section 1(2).
[6] 807 KAR 5:058 Section 7(3).
[7] 807 KAR 5:058 Section 8(1).
[8] 807 KAR 5:058 Section 9.
[9] 807 KAR 5:058 Section 5(5).
[10] *E.g.*, Case No. 2021-00245, *Electronic 2021 Integrated Resource Plan of Duke Energy Kentucky, Inc.*, Commission Staff's Report on the 2021 Integrated Resource Plan of Duke Energy Kentucky, at 2 (Ky. P.S.C. May 10, 2022) ("Staff Report on Duke's 2021 IRP") (citing Admin. Case No. 308, *An Inquiry into Kentucky's Present and Future Electric Needs and the Alternatives for Meeting Those Needs*, Order at 1–3 (Ky. P.S.C. Aug. 8, 1990)); Case No. 2020-00299, *Electronic 2020 Integrated Resource Plan Of Big Rivers Electric Corporation*, Commission Staff's Report on the 2020 Integrated Resource Plan of Big Rivers Electric Corporation, at 2 (Ky. P.S.C. Nov. 22, 2021) ("Staff Report on Big Rivers' 2020 IRP").

In service of that Commission goal, Staff's review asks whether an IRP adequately and fairly evaluates all resource options; adequately documents a reasonable set of critical data, assumptions, and methodology for all aspects of the plan; and notes significant changes since the previous IRP.[11]

Preparing an IRP is a hefty undertaking,[12] and in order for that effort to be useful, the IRP should reflect a utility's actual plan:

> In fact, while it may change as circumstances change and assumptions become more or less likely, an IRP is supposed to reflect a utility's actual plan for meeting projected load. If an IRP does not reflect a utility's actual plan at the time it is produced or is based on assumptions that are different than those used to develop a utility's actual plan, the IRP has limited use for assessing a utility's proposed actions for meeting future load.[13]

Further, Commission Staff has emphasized that "given the energy transition that is expected in the coming decades, [they] believe[] that the need to holistically review utilities' actual long-term resource acquisition plans is more important than ever."[14]

Evaluation of an IRP should also be guided by the overall requirement that utility rates are "fair, just, and reasonable,"[15] as utility ratepayers do not have "the right to price shop for the most affordable electric rates" and, therefore, "must rely on the Commission to protect them from unreasonable and unfair rates."[16] As the Commission has explained, it has long been recognized that "'least cost' is one of the fundamental principles utilized when setting rates that

[11] Staff Report on Duke's 2021 IRP at 3.
[12] Staff Report on Duke's 2021 IRP at 13.
[13] Case No. 2021-00393, *Electronic 2021 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company*, Commission Staff's Report on the 2021 Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company, at 60 (Ky. P.S.C. Sep. 16, 2022), ("Staff Report on LG&E-KU's 2021 IRP") (citing 807 KAR 5:058 Section 5(5)); *Id.* at 65–66 ("Commission Staff believes that resource acquisition plans in future IRPs should be developed as if they would actually be implemented to meet the utility's projected load with the idea that this actual plan will be updated and evolve as facts and circumstances change or become more clear.").
[14] Staff Report on LG&E-KU's 2021 IRP at 65.
[15] KRS 278.030(1); *Ky. Pub. Serv. Comm'n v. Commonwealth ex rel. Conway*, 324 S.W.3d 373, 377 (Ky. 2010).
[16] *Ky. Indus. Util. Customers, Inc. v. Ky. Pub. Serv. Comm'n*, 504 S.W.3d 695, 705 (Ky. Ct. App. 2016).

are fair, just, and reasonable."[17] A utility's rates will almost certainly not be fair, just, and reasonable if they do not result from planning processes that seek to identify a resource plan that is low-cost and low-risk for customers.

III. DUKE ENERGY KENTUCKY'S RATEPAYERS DESERVE A MORE COMPLETE EVALUATION OF OPTIONS TO AVOID UNNECESSARY DEMAND AND CONSUMPTION

Duke's IRP describes in detail existing approved programs, but doesn't offer any information to evaluate portfolio implications of any other levels of program savings. This is in direct contravention of the Commission's rules, and fundamentally undermines the ability of the Commission and the public to evaluate the rest of the planning presented in the IRP.

A. Commission statute, rules, and precedent clearly require an evaluation of demand-side potential.

Ratepayer demand is not only the reason for the existence of utilities, it is the basis of the entire planning process, as acknowledged by Duke.[18] Further, as noted above, establishment of utility monopolies in the Commonwealth is premised on avoiding "unnecessary encumbering of the landscape of the Commonwealth of Kentucky … waste of materials and natural resources, …[and] diminished efficiency and higher costs."[19]

Commission rules require consideration not only of current demand-side programs, but also potential programs. Specifically, 807 KAR 5:058 Section 8(2) states "[t]he utility shall describe and discuss all options considered for inclusion in the plan including … (b)

---

[17] Case No. 2009-00545, *In the Matter Of: Application Of Kentucky Power Company For Approval Of Renewable Energy Purchase Agreement For Wind Energy Resources Between Kentucky Power Company And FPL Illinois Wind, LLC*, Order at 5 (Ky. P.S.C. June 28, 2010).
[18] Duke 2024 IRP at 10 ("Customer demand provides the basis for the resources and plans chosen to supply the load."); *see also* KRS 278.016 (granting retail electric suppliers monopolies over geographic territories to promote the "orderly development of retail electric service," avoidance of "wasteful duplication of distribution facilities," and "the public convenience and necessity") and KRS 278.030(2) (requiring provision of "adequate, efficient and reasonable service").
[19] KRS 278.016.

Conservation and load management or other demand-side programs *not already in place*…."[20] Relatedly, in approving demand-side programs, the Commission is required to determine "[w]hether a utility's proposed demand-side management programs are consistent with its most recent long-range integrated resource plan…."[21]

Recent Commission Staff's Reports of IRPs for other Kentucky utilities emphasize the need for evaluation of demand-side options among "all potentially cost-effective resource options…."[22] For instance, the Commission found that "LG&E/KU's failure to assess any new DSM/EE opportunities against other resources prevented potentially lower cost options from being evaluated."[23]

B. As a matter of law, Duke's IRP falls short of what is required

Duke acknowledges that both supply *and demand*-side resources must be evaluated in determining a preferred resource plan.[24] Section 5 and Appendix C offer a comprehensive review of current demand-side program offerings from the Company. However, the IRP fails to review further demand-side options, in contravention of the law.

As stated above, the law is clear that utilities must "describe and discuss all options considered for inclusion in the plan including … (b) Conservation and load management or other demand-side programs *not already in place*…."[25]

In the IRP Duke states that "[t]he Company included supply and demand-side resource for consideration if they are technically feasible and commercially available in its service

[20] Emphasis added.
[21] KRS 278.285(1)(d).
[22] Staff Report on LG&E-KU's 2021 IRP at 56; *see also*, Case No. 2023-00310, *Electronic 2023 Integrated Resource Plan of Big Rivers Electric Corporation*, Order at 43 (Ky. P.S.C. Aug. 20, 2024).
[23] Staff Report on LG&E-KU's 2021 IRP at 53.
[24] Duke 2024 IRP at 9 ("In addition to constructing a Preferred Portfolio for the operating environment, it is necessary to assemble a full catalog of the resource options, both supply-side and demand-side, that will be considered for inclusion in the plan to meet future capacity needs.").
[25] KRS 278.016 (emphasis added).

territory during the planning window,"[26] and that some of the forecast load growth is "projected to be offset by the implementation of Demand-Side Management (DSM) programs including increased EE deployments."[27] However, in response to requests for information Duke confirmed that it did not evaluate any new or expanded DSM program options as part of the IRP.[28] With regard to the forecasting and modeling conducted, the Company developed each portfolio with the same energy efficiency ("EE") and demand response ("DR") forecasts and did not conduct any modeling to evaluate the impact of higher levels of energy savings from EE and DR programs, or allow EE programs as a selectable resource.[29] This clearly falls short of the requirements of the law, and undermines the IRP's ability to identify potentially least-cost portfolios.

C. Duke appears to take encouraging approaches to delivering DSM program benefits to low-income households and neighborhoods.

A somewhat brighter spot is the Company's current targeting of EE offerings to low-income neighborhoods. The Company says of its "Income Qualified Neighborhood Energy Saver Program" that it "has been well-received, and neighbors regularly share the benefits of their experience with others."[30] The Program is aimed at neighborhoods of about 900 ratepayers eachwith greater than 50% of households under 200% of the federal poverty level.[31] The Company does acknowledge, however, that participation in the program fell short in fiscal year 2022-23, serving only 414 homes out of a goal of 600.[32] The Company has previously enrolled at

[26] Duke 2024 IRP at 9.
[27] *Id.* at 26.
[28] Duke Response to Joint Intervenors Request No. 1-046(b).
[29] Duke Response to Joint Intervenors Request No. 1-044(a)–c).
[30] Duke 2024 IRP at 117.
[31] *Id.* at 116.
[32] *Id.* at 117.

least as many as 612 ratepayers, though,[33] and should be commended for its ongoing engagement with low-income neighborhoods.

According to the most recent census data, only 7 of 106 tracts in Duke Kentucky's service territory, in only three distinct areas, meet the requirement of having a majority of households under 200% of the federal poverty level, as shown below. Each of these census tracts contains between 744 and 1,989 households, with a total of 7,538 households in these tracts. Duke, therefore, has a relatively defined target for these programs, and should aim to serve much greater than the approximately 5% served so far.

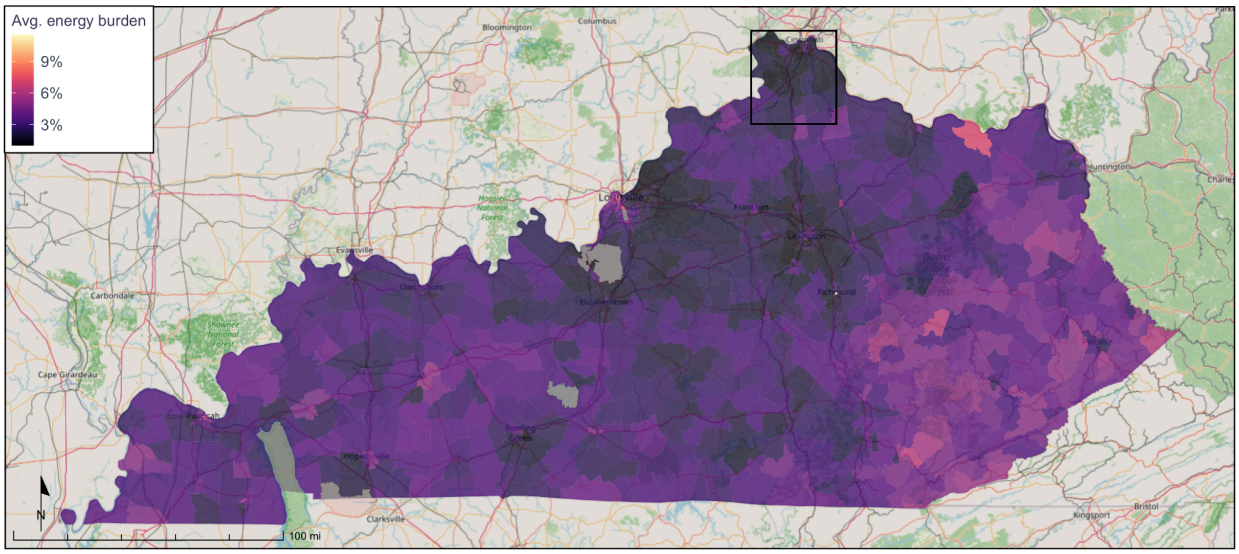


Figure 1. Duke Energy Kentucky service territory within Kentucky

[33] Attachment to Duke Response to Joint Intervenors Request No. 1-0047(b) at 1.

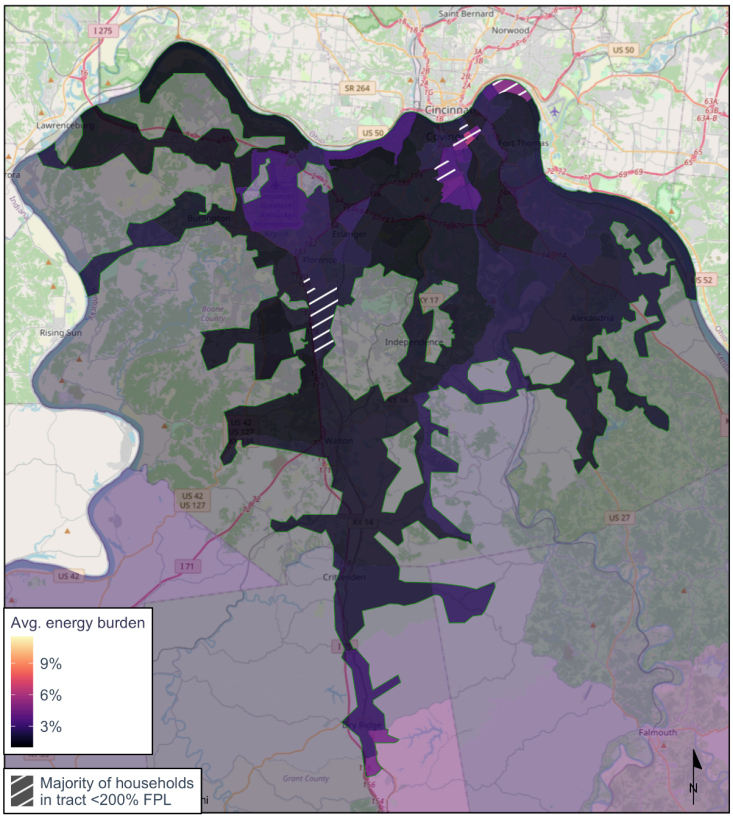


Figure 2. Energy Burden by census tract and tracts with majority of households over 200% federal poverty level within Duke Energy Kentucky service territory.

It is unclear what the difference between the "Income Qualified Neighborhood Energy Saver Program" and the "Income Qualified Services Program" is, but the latter may have served an additional 145 customers[34] in households falling below the 200% federal poverty level threshold across all of Duke's territory. As shown below, this may encompass a much greater number of households, as the vast majority of tracts contain 10% or greater households falling under 200% of the federal poverty level.

[34] *Id.* at 106-110.

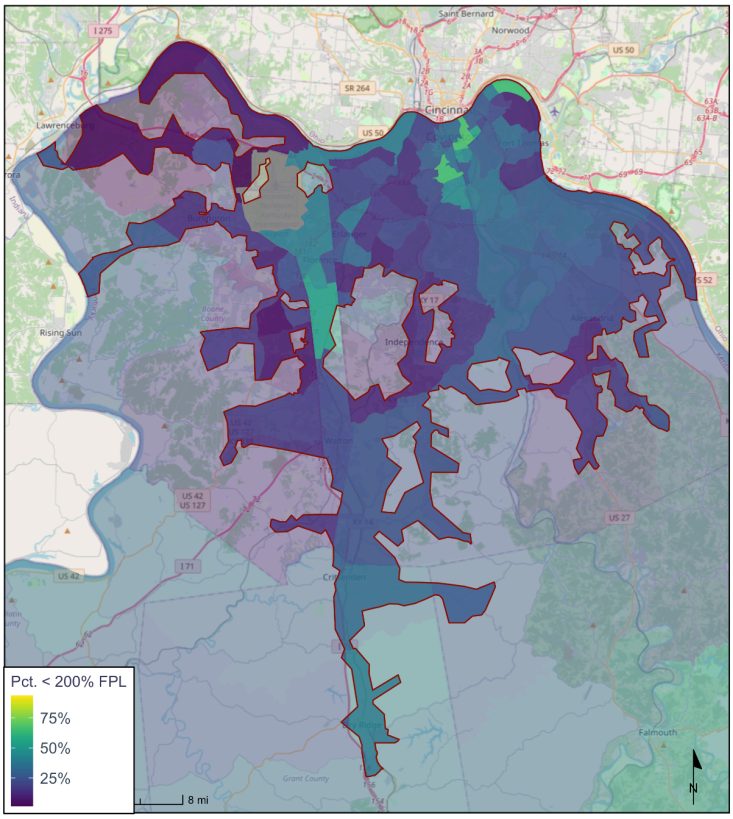


Figure 3. Percent of households under 200% federal poverty level by census tract within Duke Energy Kentucky service territory

All told, greater than 37,000 households meet the overall criteria of falling under 200% of the federal poverty level. Assuming the 414 homes served in the "Income Qualified Neighborhood Energy Saver Program" and the 145 ratepayers served in the "Income Qualified Services Program" are distinct, it would take Duke more than 66 years to serve all eligible households at this pace. Duke should therefore consider greatly expanding its offerings and target each year to meet that need. In response to a question specifically about evaluation of low-income DSM programs undertaken by the Company since its last IRP, however, the Company offered only an evaluation of the former program, the Neighborhood Energy Saver, evaluating program year 2018–19.[35]

[35] Duke Response to Joint Intervenors Request No. 1-047(b).

Joint Intervenors repeat their praise of Duke for engaging with neighborhoods that need help lowering their energy costs the most, and for its broad engagement practices. However, both generally and with regard to low-income households, much more can be done. Indeed, the law requires an analysis of the potential of DSM, and Joint Intervenors make recommendations for improvements below.

D. Recommendations

Joint Intervenors recommend that the Companies apply principles from the National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources ("NSPM-DER"),[36] which offers a comprehensive framework for cost-effectiveness analysis of distributed energy resources ("DERs"), including EE, DR, and distributed storage and generation. The NSPM-DER "provides objective, policy- and technology-neutral, and economically sound guidance for developing jurisdiction-specific approaches to benefit-cost analyses of distributed energy resources."[37] Recently, the Commission applied the following principles from the NSPM-DER to evaluation of Duke's net metering tariff, inter alia: treating benefits and costs symmetrically; conducting forward-looking longer-term and incremental analyses; avoiding double counting; and ensuring transparency.[38] It is logical to consider that if the Commission found them to be reasonable for the evaluation of one type of DER (net metering), they would be useful in the evaluation of other DERs, as well. The NSPM-DER was

[36] Synapse Energy Economics, *NPSM for Benefit-Cost Analysis of Distributed Energy Resources* (Aug. 2020), https://www.synapse-energy.com/national-standard-practice-manual-benefit-cost-analysis-distributed-energy-resources ("NSPM-DER").
[37] NSPM-DER at i.
[38] Case No. 2023-00413, *Electronic Application Of Duke Energy Kentucky, Inc. For An Adjustment To Rider NM Rates And For Tariff Approval*, Order at 33–34 (Ky. P.S.C. Oct. 11, 2024).

specifically written to provide best practices for evaluating a wide range of DERs,[39] and it would be reasonable for the Companies to consult such best practices within the IRP process.

Commission Staff further made extensive recommendations to East Kentucky Power Cooperatives, Inc. regarding demand-side programs, each of which is equally applicable here:

- [The utility] should continue to report, annually, on its DSM programs' energy savings and peak demand deductions.
- [The utility] should identify and assess all potential cost-effective DSM options.
- Any changes to the DSM portfolio should be discussed in full including a transparent analysis of the cost and benefits inputs.
- [The utility] should describe and discuss all new DSM programs that they considered, and if a program was considered but ultimately not included in any model or format, [the utility] should explain each basis for excluding the program.
- [The utility] should continue the stakeholder process through the [the utility] DSM Collaborative meetings and strive to include recommendations and inputs from the stakeholders in its DSM assessment.
- [The utility] should consider making AMI usage data that is more closely aligned to real-time data available to customers.
- [The utility] should consider pilot programs, peak time rebate programs, time-of-use rates, and prepay options for AMI customers.
- [The utility] should continue to define and improve procedures to evaluate, measure, and verify both actual costs and benefits of energy savings based on the actual dollar savings and energy savings.
- [The utility] should continue to report on updates to bidding its peak savings from DSM programs into the PJM capacity markets.
- [The utility] should thoroughly examine and fully discuss the cost-saving possibilities involved in the proliferation of C&I interruptible rate options.[40]

[39] NSPM-DER at i (explaining applicability to energy efficiency and demand response, among other DERs); Case No. 2020-00174, *In The Matter Of Electronic Application Of Kentucky Power Company For (1) A General Adjustment Of Its Rates For Electric Service; (2) Approval Of Tariffs And Riders; (3) Approval Of Accounting Practices To Establish Regulatory Assets And Liabilities; (4) Approval Of A Certificate Of Public Convenience And Necessity; And (5) All Other Required Approvals And Relief*, Order at 23–24 (Ky. P.S.C. May 14, 2021).

[40] Case No. 2022-00098, *Electronic 2022 Integrated Resource Plan of East Kentucky Power Cooperative, Inc.*, Order at 41–42 (Ky. P.S.C. Mar. 09, 2023).

In addition, while Joint Intervenors reiterate our praise for Duke for engaging with neighborhoods that need help lowering their energy costs the most, and for its broad engagement practices, much more could be done for those with the greatest need. Duke should set more ambitious targets based on the need in their service area, and aim to engage with low-income customers about offerings across their service territory. An aim of serving approximately 2,500 ratepayers each year would allow Duke to offer services to every qualifying household under 200% of the Federal Poverty Level in 15 years, the approximate lifetime of a residential heat pump.[41]

Finally, Joint Intervenors suggest the Commission order evaluation of innovative programs offered by Duke in other jurisdictions it serves, such as the Duke Carolinas Improve & Save Program, and Duke Carolinas and Duke Energy Progress PowerPair pilot program.

The Improve & Save Program is "a unique offering that lets customers pay for energy efficiency upgrades in their home or rental, over time, and as part of their energy bill. Duke Energy pays for the upgrades plus installation upfront and even handles ongoing maintenance on qualifying equipment for the life of the term. Also, generous money-saving incentives are automatically applied to further reduce project cost, and the remaining balance is repaid over 10 years on the property's electric bill. No loans, no credit checks."[42]

[41] *See*, *e.g.*, Eric J.H. Wilson et al., *Heat Pumps for All? Distributions of The Costs and Benefits of Residential Air-source Heat Pumps in the United States*, 8 Joule 1000, 1003 (Apr. 17, 2023), https://www.cell.com/joule/fulltext/S2542-4351(24)00049-7.

[42] Duke Energy, *Home Energy Upgrades*, https://www.duke-energy.com/home/products/improve-and-save (last accessed Nov. 5, 2024) (because the program is only available in the Carolinas, in order to view the page one must select a location in the Carolinas upon first visiting).

Duke's PowerPair programs "explore new ways to help manage low carbon grids of the future." Customers can receive up to $9,000 as a one-time incentive to help lower the cost of installing solar and battery storage.[43]

Both are innovative new programs with potential to temper load growth or even lower overall demand and provide benefits to both individual ratepayers and lower the Company's rate base overall. The Commission should at a minimum order evaluation of the potential of such programs in Duke's Kentucky territory, and encourage pilot programs to test their potential.

IV. DUKE'S 2024 IRP NEGLECTS TO IDENTIFY, OR REASONABLY EVALUATE, SIGNIFICANT SUPPLY-SIDE RESOURCE DECISIONS.

Duke's 2024 IRP fails to adequately describe the steps the Company expects to take in the next few years—or even the steps Duke is presently undertaking. This is unreasonable and falls short of what the IRP regulation requires, both with respect to reporting of near-term steps needed to implement the preferred plan as well as the regulation's overarching object and policy—ensuring that resource decisions are informed by IRP analyses.

A. The IRP should be more transparent and specific about "steps to be taken" in the first three years to implement the preferred plan.

Duke's 2024 IRP offers a three-paragraph "Three-Year Implementation Plan" as part of the IRP's Executive Summary.[44] However, that implementation is more rhetorical than actionable, and does not identify any specific "steps to be taken" to implement the preferred portfolio. Joint Intervenors submit that this abstract approach does not meet the regulatory

[43] Duke Energy, *Duke Energy to Implement New PowerPair Pilot Program for Pairing Home Solar Installations with Battery Energy Storage* (Apr. 4, 2024), https://news.duke-energy.com/releases/duke-energy-to-implement-new-powerpair-pilot-program-for-pairing-home-solar-installations-with-battery-energy-storage.

[44] Duke 2024 IRP, Appx. G: Response to Requirements Matrix (identifying subpart S1.C. of Executive Summary as satisfying requirements of 807 KAR 5:058 Section 5(5)).

standard, and steps to be taken within the next three years must be identified with a reasonable degree of specificity.

An IRP must include "[s]teps to be taken during the next three (3) years to implement the plan,"[45] and a "[d]iscussion of key issues or uncertainties that could affect successful implementation of the plan."[46] This requirement advances a key objective of the regulation: transparent utility planning and meaningful regulatory review.[47]

The Company's identification of steps to be taken in the next three years (2025-2027) would benefit greatly from additional specificity, akin to the year-to-year project lists for transmission and distribution provided in Appendix A.[48] Appendix A identifies projects' timelines, scope, and purposes with specificity. With that specificity, the Company provides a definite indication that there is a concrete and executable plan in place, subject to change.

A similar degree of reporting on next steps is needed. For example:

1. Some discussion of potential change in PJM capacity market participation, associated regulatory review timelines, and the timing of potential rate changes.
2. Some discussion of the uncertainty of East Bend Unit 2's ability to continue operating without new reagent supply or significant new capital investments, and anticipated timeline for addressing that risk.
3. In addition to stating that the Company "will seek regulatory approval of projects as needed to implement the 2024 IRP resource plan as part of its three-year implementation plan, the IRP should identify specific regulatory approvals that may need to be pursued. E.g., CPCN approval, and permit renewals and revisions related to East Bend 2's potential operation on natural gas; and CPCN approval for 50MW solar addition expected to come online by 2029.
4. Anticipated Demand-Side Management Program filings.
5. Anticipated Rate Case or Rider filings.

[45] 807 KAR 5:058 Section 5(5).
[46] 807 KAR 5:058 Section 5(6).
[47] *E.g.*, Staff Report on Duke's 2021 IRP (citing Admin. Case No. 308, *An Inquiry into Kentucky's Present and Future Electric Needs and the Alternatives for Meeting Those Needs*, Order at 1–3 (Ky. P.S.C. Aug. 8, 1990)); Staff Report on Big Rivers' 2020 IRP at 2.
[48] Duke 2024 IRP, Appx. A: Transmission and Distribution Forecast at 64–65.

This recommended specificity would better serve the goals and plain language of the IRP regulation, transparently informing the Commission and the general public about the work a utility provisionally expects to undertake in the near future. Specificity must not, however, be confused as requiring pursuit of exactly those steps, on exactly that timeline, or to the exclusion of additional activities arising out of reasonably unanticipated changes to needs.

B. The IRP should identify and evaluate major supply-side related projects and proceedings.

Along with lacking specificity regarding near-term actions, Duke's 2024 IRP neglects to adequately discuss or evaluate at least three major resource-related decision points, leaving those decisions to be "reviewed in piecemeal fashion."[49] During the pendency of this IRP review proceeding, Duke concurrently seeks Commission approval of (1) a $125 million capital investment in East Bend Unit 2,[50] (2) a change in PJM capacity market participation,[51] and (3) updated DSMt programs.[52] Each of these concurrent proposals has significant and long-term implications for the Company's resource portfolio, but none of them are explicitly addressed or evaluated as part of the 2024 IRP. That is unreasonable and inconsistent with the regulatory standard.

---

[49] Staff Report on LG&E-KU's 2021 IRP at 65 ("Further, Commission Staff believes that if a utility's actual plan is reviewed in piecemeal fashion as requests for CPCNs are made or modifications to DSM/EE programs are requested that mistakes are more likely to be made and proposed short term actions will be unavoidable as the only means to meet demand in time.").

[50] *See generally*, Case No. 2024-00152, *Elec. App. of Duke Energy Kentucky, Inc., for a Certificate of Public Convenience and Necessity to Convert its Wet Flue Gas Desulfurization System from a Quicklime Reagent Process to a Limestone Reagent Handling System at its East Bend Generating Station and for Approval to Amend its Environmental Compliance Plan for Recovery by Environmental Surcharge Mechanism* ("Case No. 2024-00152"), Application (Ky. P.S.C. July 25, 2024).

[51] *See generally*, Case No. 2024-00285, *Elec. App. of Duke Energy Kentucky, Inc., to Become a Full Participant in the PJM Interconnection LLC Base Residual and Incremental Auction Construct for the 2027/2028 Delivery Year and for Necessary Accounting and Tariff Changes* ("Case No. 2024-00285"), Application (Ky. P.S.C. Sept. 6, 2024) ("Duke PJM Participation Sept. 6 Application").

[52] Case No. 2024-00264, *Elec. App. of Duke Energy Kentucky, Inc., to Amend its Demand Side Management Programs*, Application (Ky. P.S.C. Aug. 15, 2024).

The Company certainly had adequate time and information to recognize that each of these decision points could be part of the 2024 IRP analysis. Duke has been aware of contracting supply and escalating prices for the reagent used at East Bend 2's wet flue gas desulfurization ("FGD") scrubber since at least early 2020,[53] but neither the 2021 nor 2024 IRP's evaluated operational alternatives to the existing wet FGD scrubber process.[54] Instead, the 2024 IRP *assumed* without analysis that a least-cost portfolio must include the FGD conversion and included those costs in every IRP modeling exercise.[55] As a result, there is no long-term integrated resource analysis supporting Duke's proposed $125 million FGD conversion at East Bend 2, and the project appears to have only ever been evaluated in piecemeal fashion—never as part of integrated resource planning.[56]

The Company's decision point regarding how to participate in PJM capacity markets was also ripe for analysis, but not evaluated as part of the Company's 2024 IRP. Since June 2016, the Company has had the ability to exit the Fixed Resource Requirement capacity plan in favor of participating in PJM's Base Residual and Incremental Auctions,[57] and the Company recently made the decision to do just that.[58] It was wasteful for the Company to miss the opportunity to consider this capacity market participation issue as part of long-term integrated portfolio planning.

Capacity market participation has implications for the relative value and risks of different resource choices, and warrants integrated analysis. Implications for supply-side resources are

[53] Case No. 2024-00152, Duke Response to Sierra Club Request No. 01-044(b) ("In Q1, 2020, Duke Energy Kentucky received notice from the supplier of the operational suspension of its MEL mining operation due to a lack of industry demand for the MEL product.").
[54] Case No. 2024-00152, Duke Response to Sierra Club Request No. 01-015 (Ky. P.S.C. Oct. 4, 2024).
[55] Duke Response to Joint Intervenors Request No. 2-014.
[56] Staff Report on LG&E-KU's 2021 IRP at 65 (*supra*, n. 23).
[57] Duke PJM Participation Sept. 6 Application at 4.
[58] *See generally*, Case No. 2024-00285.

more obvious, but capacity market participation terms also have implications for certain demand-side programs.[59]

According to the Company, its IRP modeling outcome would be no different under one PJM capacity construct or another.[60] It would be helpful for the Company to further explain what analysis supports that conclusion.

The Company also had a clear timeline for evaluation of demand-side resource potential, along with a requirement to evaluate potential for cost-effective demand-side energy and capacity savings. But again, the 2024 IRP falls short, punting demand-side potential into an exclusively piecemeal enterprise, in the silo of demand-side program filings.[61]

V. SUPPLY-SIDE MODELING INCLUDED UNREASONABLE ASSUMPTIONS AND CONSTRAINTS.

Beyond failing to evaluate increased investment in DSM as part of long-term resource planning, other aspects of the modeling methodology, input assumptions, and constraints fall short. Here, Joint Intervenors will discuss several concerns and recommended improvements. Joint Intervenors' silence on any aspect of the IRP modeling and analysis should not be taken as support, and Joint Intervenors look forward to the continuing development of the record.

C. The modeling unreasonably failed to evaluate East Bend's potentially optimal retirement timeline under any future scenario.

In a surprising omission, the modeling methodology never included analysis of East Bend's economically optimal retirement timeline. Instead, operational pathways for East Bend

[59] Case No. 2017-00427, *Electronic Annual Cost Recovery Filing For Demand Side Management By Duke Energy Kentucky, Inc.* Order at 10 (Ky. P.S.C. Sept. 13, 2018); *see also* Staff Report on Duke's 2021 IRP at 18 ("In the final Order of Case No. 2017-00427, the Commission recognized the importance and the need to continue certain DSM programs especially with regard to Duke Kentucky's participation in PJM to meet its Fixed Resource Requirement (FRR) obligation.").
[60] Duke Response to Staff Request No. 02-002.
[61] Staff Report on LG&E-KU's 2021 IRP at 65 ("Further, Commission Staff believes that if a utility's actual plan is reviewed in piecemeal fashion as requests for CPCNs are made or modifications to DSM/EE programs are requested that mistakes are more likely to be made and proposed short term actions will be unavoidable as the only means to meet demand in time.").

were fixed at the outset. That approach is unreasonable generally, and particularly so with respect to aging generating units.

Because East Bend 2's operational future was an input to the resource optimization modeling, that modeling did not test whether East Bend 2 might be economically retired on some other timeline.[62] In the first of two steps, the IRP scenario analysis evaluated each of three identified operational pathways for East Bend—DFO Conversion by 2030, Natural Gas Conversion by 2030, or Retirement by 2032.[63] Portfolios built around each East Bend alternative were modeled in each of two scenarios: one requiring compliance with the Clean Air Act Section 111 Update rules; and the second assuming non-enforcement of the Section 111 Updates, and no other law or costs associated with carbon emissions will arise over the planning period.[64]

Regrettably, the three operational pathways selected for analysis are not the only potentially reasonable alternatives for East Bend, and it was unreasonable for Duke not to explore retirement timelines in the modeling. Even in scenarios without Section 111 Update rules, the resource optimization modeling did not test whether East Bend 2 may be economically retired *before* 2032—a decision point that would not be contingent on the presence or absence of Section 111 Update rule enforcement.[65]

As should be the case in any IRP, the Company ought to have used modeling resources to evaluate East Bend's economically optimal retirement timeline. Particularly so in light of recent modeling indicating that it would be in customers' best interest to retire East Bend as early as 2027. In the 2021 IRP, scenarios with carbon regulation and a base or low gas rate retired East

[62] Duke Response to Joint Intervenors Request No. 1-028 ("The Company modeled three potential pathways (i-iii) for East Bend and let the model optimize around those predetermined pathways.").
[63] Duke 2024 IRP at 4.
[64] Duke 2024 IRP at 9.
[65] The inverse is also true: because the model was not free, in the scenario *without* enforcement of Section 111 Update Rules, to continue operating East Bend on coal beyond 2030, or at all beyond 2032, that scenario does not reasonably evaluate all East Bend's possible operational pathways.

Bend by 2027.[66] Intervenor modeling in the Company's 2022 electric rate case indicated that East Bend would be uneconomic on a going forward basis, with retirement before 2030 possibly best for customers.[67] It was unreasonable for the Company to not reevaluate East Bend's economically optimal retirement timeline as part of this IRP, especially with such recent and directionally consistent modeling indicating near term retirement may be appropriate.

Joint Intervenors ask Staff to recommend that future IRPs model economic retirement potential of existing units as a matter of course.

D. The modeling methodology fails to reasonably account for carbon emission risks.

As the Company agreed, if the Section 111 Update rules were stayed or eventually repealed, it is possible that a subsequent statutory, regulatory, and/or taxation change could impose new costs on carbon emitting resources.[68] Yet, the 2024 IRP modeling did not assume a new carbon emission tax or other carbon cost risk in its "without Section 111" scenario runs. Instead, carbon regulations are treated as a binary: either Section 111 Update rules are enforced as presently codified, resulting in added costs; or there are no carbon emission costs in any year of the planning period.

---

[66] Case No. 2021-00245, *Elec. 2021 Integrated Resource Plan of Duke Energy Kentucky, Inc.*, at 42–46 (Duke, Jun. 21, 2021) ("Duke Energy Kentucky 2021 IRP") ; *see also* Case No. 2024-00152, Duke Response to Sierra Club Request No. 1-013; Case No. 2022-00372, *Electronic Application Of Duke Energy Kentucky, Inc. For (1) An Adjustment Of Electric Rates; (2) Approval Of New Tariffs; (3) Approval Of Accounting Practices To Establish Regulatory Assets And Liabilities; And (4) All Other Required Approvals And Relief*, Corrected Dir. Testimony of Sarah Shenstone-Harris on behalf of the Sierra Club, at 8–9, 21, 26–27 (Ky. P.S.C. May 11, 2023) (finding the 2021 IRP modeling assuming too favorable costs and revenues for East Bend, resulting in a likelihood that the modeling *overestimates* how long it would be economic to retain the unit); Case No. 2022-00372, Hr. Video (Ky. P.S.C. May 9, 2023) at 7:09:00 (3:55 PM) (Duke witness Park, in response to questions from then-Chairman Chandler, likening East Bend to a car with 200,000 miles that my be "running great" but "unknowns become more likely" after that much wear).

[67] Case No. 2022-00372, Sierra Club's Post-Hearing Br., Section I.B.2, at 15–25 (Ky. P.S.C. June 19, 2023).

[68] Duke Response to Joint Intervenors Request No. 2-006.

According to Duke, this binary approach to carbon emission cost risk is reasonable because new legislation imposing carbon emission costs is not currently pending and its "without Section 111" scenario runs are "helpful in testing the sensitivity of the portfolios in the absence of any carbon regulation."[69] The second justification may be reasonable, as far as it goes. It falls short, however, in not recognizing that it would also be helpful to evaluate, in the "without Section 111" scenario runs, how the imposition of carbon emission costs in *later years* of the planning period could impact the costs of different portfolios.

So long as the Section 111 Update rules are in place—as they presently are—Congress and the IRS are unlikely to also be currently considering new carbon regulation or a carbon emission tax. Logically, the fact that such legislation is not currently pending says nothing about the plausibility of a scenario where the Section 111 Update rules are rendered unenforceable and no other action is taken to impose costs on continued carbon emissions.

Joint Intervenors submit that it would have been more reasonable for the 2024 IRP to test the sensitivity of portfolios, in the "without Section 111" scenarios, to different levels of carbon emission costs in later years of the planning period. This could be simply done by testing different cost proxies per ton of carbon emissions ($/ton) beginning in a certain year, much as the Company (and other utilities) have done in the past by modeling a "carbon tax."[70] By applying such a cost adder, the modeling can offer a clearer picture of carbon emission cost risks associated with different portfolios even without knowing specific regulatory or compliance details.

[69] Duke Response to Joint Intervenors Request No. 1-007.
[70] Duke Response to Joint Intervenors Request No. 2-006.

Although the Company agreed that it is possible for some statutory, regulatory, or taxation change to impose new costs on carbon emitting resources, the Company objected to the notion of sharing its view on when that might happen during the planning period:

> **Joint Intervenors Request 2-006(d):**
> For each of the three time periods specified below, please explain whether the Company believes that a scenario with no legislation, regulation, or taxation of carbon emissions is likely, and why?
> i. Over the next three years (2025-2027), does the Company believe that a scenario with no legislation or regulation of carbon emissions is likely? Please explain.
> ii. Four to seven years out (2028-2031), does the Company believe that a scenario with no legislation or regulation of carbon emissions is likely? Please explain.
> iii. Eight to fifteen years out (2032-2039),does the Company believe that a scenario with no legislation or regulation of carbon emissions is likely? Please explain.
>
> **Response:**
> Objection. Calls for speculation and guess work. Without waiving said objection, many factors could impact whether any new or potentially new legislation, regulation, or taxation of carbon emissions is implemented, and the Company cannot predict the likelihood of such legislation, regulation or taxation of carbon emissions over specific time periods.[71]

With due respect, that is a baffling response to a straightforward long-range resource planning question. Duke dedicated half of its modeling effort to testing scenarios assuming no legislation, no regulation, and no taxation of carbon emissions over fifteen years, 2025-2039; but cannot discuss whether or not the Company views such a scenario as likely?

Also baffling is Duke's unwillingness to take responsibility for the subjective exercise of judgment necessary to make major infrastructure investments in the face of unavoidable long-term uncertainty. It is difficult to predict the likelihood of a great many things, and that is precisely why robust and iterative long-range planning is necessary, followed by regulator review and feedback. Duke speculates with great confidence throughout its IRP on a wide-range

[71] Duke Response to Joint Intervenors Request No. 2-006(d).

of uncertainties, and its unwillingness to discuss its views of carbon risks over the planning period appears arbitrary and unreasonable.

E. The modeling unreasonably failed to consider potential for the Energy Infrastructure Reinvestment program to reduce costs of potential East Bend replacement resources.

The 2024 IRP considers potential impacts of tax credits created and extended by the Inflation Reduction Act ("IRA"), but overlooked another significant program created by the IRA: the Energy Infrastructure Reinvestment program ("EIR"). That was a missed opportunity, and one that frustrates least-cost planning by neglecting to even consider a financing resource that could mitigate the costs of retiring and replacing East Bend.

Through the EIR program, the Department of Energy's Loan Programs Office has authority to make up to $250 billion in loans to utilities for projects, at the site of a retiring asset, that add new clean energy resources and make grid improvements, among other qualifying projects. The loans can be highly leveraged (up to 80% of total costs) and structured to mitigate potential negative credit rating implications, with a relatively low interest rate and term of up to thirty years. The aim of the program is to enable reinvestment in sites with existing energy infrastructure (such as transmission interconnection and capacity) and retiring generating assets at lower costs. Now is the time to identify reinvestment projects that could qualify for an EIR program loan: qualifying projects must be able to complete construction by September 2031.

Unfortunately, the Company has not considered the EIR program.[72] "The Company has not evaluated the EIR program for any specific projects within Duke Energy Kentucky"[73] despite the immediate need to plan for the retirement and replacement of East Bend Unit 2. Duke recognized the potential IRA tax credit implications of modeling a resource as though it replaces

[72] Duke Response to Joint Intervenors Request No. 01-016(d).
[73] Duke Response to Joint Intervenors Request No. 01-016(d).

East Bend,[74] and similarly ought to have recognized EIR program implications of siting clean energy resources as East Bend's replacement.

By the time the Company's next IRP is filed in 2027, the EIR program opportunity may well be gone. Without intervening Congressional action, projects must be completed by September 2031, and it is exceedingly unlikely that a retirement and replacement plan for East Bend could be evaluated in the 2027 IRP and completed by 2031.[75] To meet its general service obligations, and in light of the considerable indications that East Bend 2 should be economically retired within this decade, the Company should immediately engage with the Department of Energy to identify and evaluate potential EIR program-eligible projects.

Joint Intervenors ask Commission Staff to require the Company to promptly evaluate potential implications of EIR program financing for eligible replacement resources, and implications for potentially least-cost resource portfolios.

VI. IT APPEARS THAT THE IRP DID NOT INCLUDE AN ANALYSIS OF OPTIMAL TRANSMISSION AND DISTRIBUTION PROJECTS.

As part of this IRP, it appears that the Company did not undertake much analysis of transmission, if any. Taking things a step further, the Company asserts that the resilience and reliability of their transmission and distribution infrastructure is irrelevant in integrated resource planning.[76] Joint Intervenors disagree, and posit that the IRP regulation requires more if the goal of transparent, least-cost planning is to be realized. The Staff Report should (1) recommend that future IRPs reflect meaningful evaluation of potential transmission and distribution efficiencies, and (2) clarify that the resilience and reliability of a utility's transmission and distribution system is relevant to resource planning.

[74] Duke Response to Joint Intervenors Request No. 01-016(e).
[75] *E.g.*, Duke Response to Staff Request 1-024(a) (estimating retirement, CPCN, and construction timelines).
[76] Duke Response to Joint Intervenors Request No. 02-012(c).

In Duke's 2024 IRP, Appendix A discusses transmission and distribution planning. According to the provided "Response to Requirements Matrix" in Appendix G, discussion of transmission planning can be found in three additional sections: Executive Summary subparts B and C, titled "Integrated Resource Plan" and "Three-Year Implementation Plan," respectively; and Section 4, subpart B, titled "Existing Resources." However, the word "transmission" does not appear in those additional sections, and "distribution" appears just once to explain that the Company's "solar assets are connected on the distribution level[.]"

As explained in the two pages of Appendix A, "[t]here currently are no transmission system projects planned or in progress affecting any Duke Energy Kentucky transmission facilities that are intended to provide or are associated with the provision of additional resources."[77] Transmission investments may be necessary as part of the Company's preferred portfolio, but the transmission implications of modeled portfolios—including the preferred portfolio—was not done as part of this IRP analysis.[78] As a result, the revenue requirement and PVRR values reported for the preferred portfolio exclude the costs of future investments in transmission or distribution.[79]

The IRP does not appear to have evaluated transmission any further, or in any context beyond "the provision of additional resources"—not even evaluation of potential reliability and resilience projects. Objecting to a request regarding Duke's "Concept Papers & Applications," related to the Grid Resilience and Innovation Partnership ("GRIP") program,[80] the Company asserted that because the GRIP program relates to "transmission and distribution resilience and reliability," the requested records are "not relevant to or reflected in the IRP[.]"[81]

[77] Duke 2024 IRP at 64.
[78] Duke Response to Joint Intervenors Request No. 01-036.
[79] Duke 2024 IRP, Tbl. 3.3, at 31; Attachment to Duke Response to Joint Intervenors Request No. 02-022.
[80] Duke Response to Joint Intervenors Request No. 02-012(c).
[81] Duke Response to Joint Intervenors Request No. 02-012(c).

The 2024 IRP's analysis of transmission falls short, and not only for neglecting the relevance of resilience and reliability. An IRP must include an evaluation of more than just supply-side generation options, with transmission to be planned for later in a more piecemeal fashion.[82] The regulation requires some analysis of transmission and distribution resource needs and options, evaluated in an *integrated* manner with supply-side and demand-side options. Indeed, if an analysis requires only generation planning, it is not integrated resource planning.[83] Integrated resource planning is characterized by a comprehensive analysis of generation resource options and portfolio options that combine potential generation, DSM, and transmission and distribution investments in search of a relatively low-cost and low-risk plan.[84]

That makes sense: Transmission projects are long-term investments with knock-on effects for generation options and costs,[85] particularly so now, with high capacity market prices encouraging the construction of both generation and transmission resources.[86] "Improvements to and more efficient utilization of" transmission and distribution facilities can yield customer

[82] 807 KAR 5:058 Section 5(4), 8(2)(a) and (3)(a).
[83] Rachel Wilson & Bruce Biewald, *Best Practices in Electric Utility Integrated Resource Planning*, Regulatory Assistance Project, at 5 (June 21, 2013) https://www.raponline.org/knowledge-center/best-practices-in-electric-utility-integrated-resource-planning/ ("Alternatives examined by system planners in an IRP setting include adding generating capacity…, adding transmission and distribution lines, and implementing energy efficiency (EE) and demand response programs.").
[84] *Id.*
[85] Duke Response to Joint Intervenors Request No. 01-017(b)–(d) (explaining preference to site new renewable resources in Energy Community areas qualified for added tax credit benefits, but noting "constraints exist in development, including available transmission," *inter alia*); *see also* Duke Response to Attorney General Request No. 01-012 (confirming that there would be transmission costs for generation outside Company's service territory, but those costs are not included in IRP analysis); *e.g.*, Case No. 2022-00402, *In re LG&E/KU Application 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 Generating Unit Retirements*, Final Order at 77–78 (Ky. P.S.C. Nov. 6, 2023) (summarizing transmission cost implications on timing of certain resource additions).
[86] Duke Response to Staff Request No. 01-025(d).

benefits, as can the strategic development of new transmission and distribution infrastructure, and evaluation of both is expected as part of integrated resource planning.[87]

As recently as last year, the Commission lamented that, in some past IRPs, "serious consideration or discussion of transmission has been notably absent," and cautioned Louisville Gas & Electric and Kentucky Utilities that continued "failure to discuss these options in future proceedings may result in the Commission's own investigation into LG&E/KU's processes in this regard."[88]

In order to achieve least-cost planning, the Company's next integrated resource analysis must include serious consideration and discussion of transmission planning. Even as a member of a Regional Transmission Operator, reporting transmission information to the Commission is still needed. After all, the Commission retains a regulatory role vis-a-vis transmission, as reflected in the Joint Federal-State Task Force on Electric Transmission established by FERC in 2021.[89] The IRP regulation calls for transmission analysis, and transmission has implications for the Company's ability to efficiently and cost-effectively serve customers.

The Company has the ability to evaluate transmission in its IRPs, and should be applying more rigorous analysis to this Commission and Kentucky customers.[90] To the extent needed, additional guidance on planning processes that allow for comprehensive resource planning is

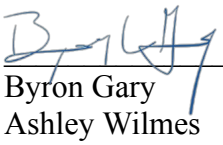
[87] 807 KAR 5:058 Section 8(2) (requiring IRP to "describe and discuss all options considered for inclusion in the plan including: … improvements to and more efficient utilization of existing … transmission and distribution facilities"); *id.* at Section 5(4) (requiring summary of "planned resource acquisitions" including "transmission improvements … and interconnections with other utilities").
[88] Case No. 2022-00402, *In re LG&E/KU Application 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 Generating Unit Retirements*, Final Order at 95, (Ky. P.S.C. Nov. 6, 2023).
[89] Fed. Energy Regul. Comm'n, *Joint Federal-State Task Force on Electric Transmission*, https://www.ferc.gov/TFSOET (last accessed November 4, 2024).
[90] *Compare* Duke Energy Indiana 2024 IRP, Appx. I: Transmission Planning, at 480–497 (providing detailed discussion of T&D planning and analysis, including at RTO planning level), *and* Duke Energy Indiana 2024 IRP, Appx. A: Stakeholder Engagement at 64–65 https://www.duke-energy.com/-/media/pdfs/for-your-home/dei-irp/2024-plan-and-attachments/vol-i-complete-2024-dei-irp-plan.pdf?rev=93f4e009ddfc44b0baa3f94f3e195b4a.

available from the National Association of Regulation Utility Commissioners ("NARUC"),[91] among others. Commission Staff should strongly recommend that the next IRP discusses PJM's regional transmission planning process and the Company's engagement with PJM stakeholders on the same subject; analyzes local transmission and distribution projects that could economically enable resource additions; and assesses and plans to improve the resilience and reliability of its transmission and distribution systems.

VII. CONCLUSION

Joint Intervenors appreciate this opportunity to provide initial comments and recommendations related to Duke Energy Kentucky's 2024 Integrated Resource Plan and look forward to further development of the record and constructive dialogue concerning that planning effort.

Respectfully submitted,



Byron Gary
Ashley Wilmes
Kentucky Resources Council
P.O. Box 1070
Frankfort, KY 40602
(502) 875-2428
Byron@kyrc.org
Ashley@kyrc.org

Counsel for Joint Intervenors
Kentuckians for the Commonwealth,
Kentucky Solar Energy Society, and
Kentucky Resources Council

[91] *E.g.*, National Association of Regulation Utility Commissioners, *Task Force: Resources for Action*, https://www.naruc.org/committees/task-forces-working-groups/retired-task-forces/task-force-on-comprehensive-electricity-planning/resources-for-action/ (last accessed Nov. 4, 2024) (collecting resources from NARUC and NASEO's Task Force on Comprehensive Electricity Planning).

CERTIFICATE OF SERVICE

In accordance with the Commission's July 22, 2021 Order in Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID*-19, this is to certify that the electronic filing was submitted to the Commission on November 6, 2024; that the documents in this electronic filing are a true representation of the materials prepared for the filing; and that the Commission has not excused any party from electronic filing procedures for this case at this time.

Byron Gary