

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION OF)
AMENDMENTS TO THE PUBLIC UTILITY)
REGULATORY POLICIES ACT OF 1978) CASE NO. 2022-00370
AND DEMAND SIDE PRACTICES)

**COMMENTS OF KENTUCKIANS FOR THE COMMONWEALTH,
MOUNTAIN ASSOCIATION, METROPOLITAN HOUSING COALITION, AND
EARTH TOOLS. INC.**

Come now Kentuckians for the Commonwealth (KFTC), Mountain Association (MA), Metropolitan Housing Coalition (MHC) and Earth Tools, Inc. (ETI) (collectively “Joint Commenters”), who are Joint Movants for intervention in this case as full Joint Commenters, and tender these comments in response to the *Order* entered by the Public Service Commission (“Commission”) on November 7, 2022.

In that *Order*, the Commission opened this proceeding to permit consideration of the amendments to the Public Utility Regulatory Policies Act of 1978 (“PURPA”) effected by the enactment of the Infrastructure Investment and Jobs Act of 2021 (“IIJA”), which added this standard to PURPA:

(20) Demand-response practices

(A) In general

Each electric utility shall promote the use of demandresponse and demand flexibility practices by commercial, residential, and industrial consumers to reduce electricity consumption during periods of unusually high demand.

(B) Rate recovery

(i) In general

Each State regulatory authority shall consider establishing rate mechanisms allowing an electric utility with respect to which the State regulatory authority has ratemaking authority to timely recover the costs of promoting demand-response and demand flexibility practices in accordance with subparagraph (A).

The Commission has requested of each utility, and encouraged comment from interested stakeholders, on existing programs and on “Appropriate measures to promote greater the use of demand-response and demand flexibility practices by commercial, residential, and industrial consumers to reduce electricity consumption during periods of unusually high demand.” In accordance with the Commission’s *Order*, specific comments follow.

COMMENTS

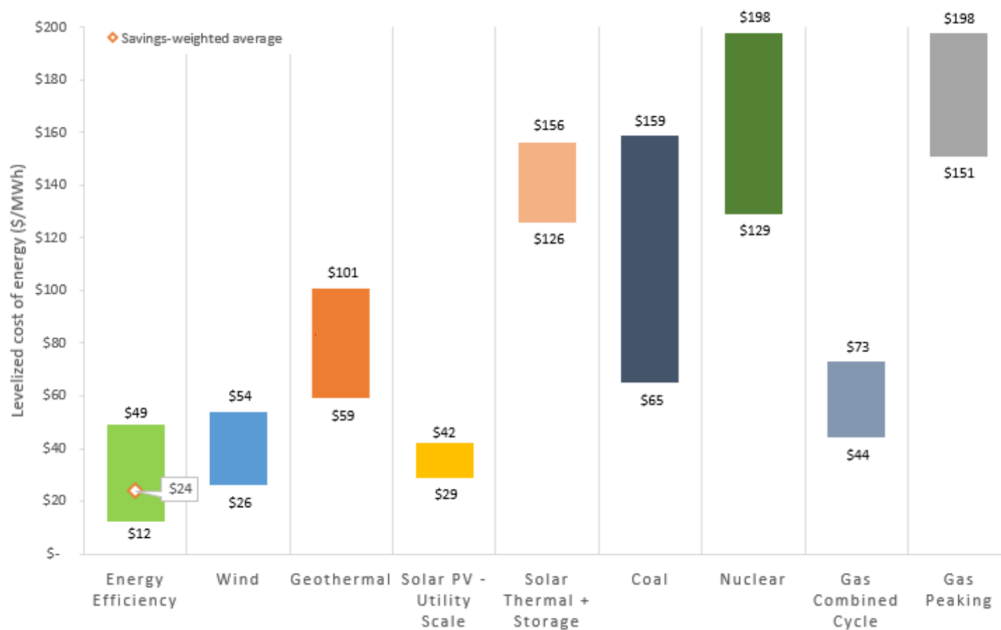
The Joint Commenters welcome this proceeding to consider demand-response (DR) practices. Our comments include discussion of DR and other demand-side management (DSM) practices. As discussed in the *National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources* (the “NSPM”), demand response is one category of demand-side management, with the other being energy efficiency.¹ As stated in the NSPM, “Some efficiency measures and programs can offer at least the potential to be DR measures in the future. Examples include controllable “smart thermostats,” variable speed drives on motors, and lighting controls. Such measures can both (1) enable customers’ loads to be controlled through dispatchable DR in the future; and (2) enhance customers’ ability to respond to price signals to lower demand during hours when energy is expensive and/or when there are capacity constraints on the system.”² As these practices are so closely related we believe it is important for this proceeding to consider the broader scope of DSM within its review of demand response and demand flexibility.

¹ *National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources*, August 2020, National Energy Screening Project, attached hereto as Exhibit A (“NSPM”)

² *Ibid*, p.117 of pdf.

A. DSM, including demand response and energy efficiency, should be recognized as essential resources in utility planning and should play a much more significant role for Kentucky’s utilities and their customers.

(1) Energy efficiency has been widely demonstrated to be the least-cost energy resource available. The cheapest kilowatt hour is the one that does not need to be generated. The industrywide levelized cost of energy savings from utility efficiency investments has been calculated as roughly \$0.0240 to \$0.0280 per kilowatt hour saved (or \$24 to \$28 per megawatt hour saved).³ The levelized cost of savings from utility efficiency investments compares favorably to all the resources in Lazard’s levelized cost of energy comparison, as shown in Figure 1 below.⁴ *See Figure 1, Levelized cost of energy resources.*



³ Maggie Molina, The Best Value for America’s Energy Dollar: A National Review of the Cost of Utility Energy Efficiency Programs, ACEEE, 18–19 (Table 3 showing \$0.0280/kWh) (Mar.2014), <https://www.aceee.org/sites/default/files/publications/researchreports/u1402.pdf>; Charlotte Cohn, The Cost of Saving Electricity for the Largest U.S. Utilities: Ratepayer-Funded Efficiency Programs in 2018, ACEEE: Policy Brief, 1 (June 2021), https://www.aceee.org/sites/default/files/pdfs/cost_of_saving_electricity_final_6-22-21.pdf. (showing \$0.0240/kWh).

⁴ Charlotte Cohn, The Cost of Saving Electricity for the Largest U.S. Utilities: Ratepayer-Funded Efficiency Programs in 2018, ACEEE: Policy Brief, 9 (June 2021), https://www.aceee.org/sites/default/files/pdfs/cost_of_saving_electricity_final_6-22-21.pdf.

(2) DSM and DR provide numerous benefits to utilities, their customers, and the society in which we live. These include reduced generation, transmission, and distribution costs; lower customer bills; reduced air emissions and improved public health; resilience; and many others.⁵

(3) Advances in technology provide increasing opportunities to use DSM and DR to offer critical utility services, such as load-shifting and peak load shaving.

(4) Utility costs are a major burden for many families throughout Kentucky and contribute to the hardships of poverty. DSM programs can directly reduce these burdens by improving the energy efficiency of homes, reducing utility bills, making homes healthier and more comfortable, and reducing the risk of disconnection due to non-payment. Effective DSM programs, deployed at scale, can play an essential role in reducing these burdens and improving the well-being of families and communities.

(5) The energy transition to zero carbon emissions, which will include the electrification of transportation and other services, is creating new and increasing demands on the electricity system. DSM and DR can and should play critical roles in meeting these needs, reducing the need for new and costlier generation resources, and reducing the costs of the transition while improving reliability and resilience.

B. To access the full value that DSM can offer, the Commission and Kentucky’s utilities must put in place systematic policies and programs to build the necessary infrastructure for a sustainable energy efficiency industry.

To make the most of the opportunities offered by DSM, Kentucky needs a systemic, statewide, long-term, predictable, and consistent commitment to DSM, for all customer classes. The historic approach of piecemeal DSM planning by individual utilities has not created a robust energy efficiency sector in Kentucky. For example, the Kentucky Energy and Environment

⁵ *National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources*, p.117-120 and p.131-134 of pdf.

Cabinet held a meeting in December 2022 to discuss recently passed Federal legislation, the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA), and the resources available to support energy efficiency. These bills offer enormous opportunities for investment in energy efficiency in Kentucky, but as was discussed at the meeting, our ability to deploy those resources is hindered by the lack of energy efficiency infrastructure - contractors, trained professionals, and the workforce required to deliver DSM services at a large scale.

To expand access to energy efficiency and the reach of DSM programs, Kentucky needs to develop its DSM/energy efficiency industry. To create a skilled workforce requires well-paying jobs with capable businesses, and to survive those businesses require a predictable, long-term, growing market. Utilities are in a prime position to drive this demand, but DSM planning in Kentucky has not been organized to support this end. Instead, DSM planning has been piecemeal, one utility at a time. Some utilities offer DSM programs for commercial and industrial customers, but not general residential customers. Other utilities do the opposite. The fact that there are so many retail utilities in Kentucky creates a mixed bag of markets for DSM/EE companies to navigate.

A more holistic approach to DSM planning is needed. The Joint Commenters therefore urge the Commission to consider the following policies:

(1) Establish measurable objectives for utility DSM programs, based on policy goals including affordability, carbon emission reductions, equity, and supporting lower-income customers to reduce utility costs. Relevant metrics would include:

(a) Amount of capacity to be avoided annually and by specified dates. Goals determined based on utilities' load forecasts and portfolio mix.

(b) Amount of carbon emission reductions achieved through DSM, by specified dates.

(c) Target annual efficiency savings for each utility as a percent of total annual energy sales. Utilities across the country have succeeded in developing energy efficiency programs achieving annual energy savings above 1% of retail sales, with some utilities achieving net energy savings above 2% of annual sales.⁶

(d) Percent of low-income customers participating in DSM programs.

(2) Establish minimum percentage of DSM spending, over three-year periods, to be allocated to programs that serve low-income customers.

C. Scale-up investments in DSM programs using Pay As You Save or Inclusive Utility Investment Programs.

Pay As You Save (PAYS) programs reduce barriers to customer adoption of energy efficiency measures and barriers to participation in utility-sponsored DSM programs by providing customer access to low-cost capital.⁷ This access to capital can be especially critical to low- and fixed-income customers, enabling broader participation in DSM programs and reducing system energy and demand needs.⁸ PAYS Program investments in excess of \$50 million have been made across ten states, including being offered by every investor-owned utility in the state of Missouri and several rural electric cooperatives in Kentucky.⁹

PAYS programs could play a pivotal role in creating the systemic DSM infrastructure that Kentucky needs, by reducing multiple barriers that inhibit so many people from participating in DSM programs.

⁶ American Council for an Energy-Efficient Economy, 2020 Utility Energy Efficiency Scorecard at Tbl. 8 (Feb. 2020) (reporting scores for net savings as a percentage of retail sales in 2018 among selected utilities).

⁷ James Owen, Exhibit 2, Supporting Comment on PAYS Programs, Joint Intervenors' Initial Comments On Louisville Gas And Electric Company And Kentucky Utilities Company's Joint 2021 Integrated Resource Plan, April 22, 2022

⁸ Ibid, p.5-7.

⁹ Ibid, p.6-8.

D. Re-evaluate the cost-effectiveness tests used for DSM programs, to ensure ratepayers receive the full potential that DSM has to offer.

Joint Commenters recommend that the Commission and utilities apply principles from the aforementioned NSPM, which offers a comprehensive framework for cost-effectiveness analysis of distributed energy resources, including energy efficiency, demand response, and distributed storage and generation. The NSPM “provides objective, policy- and technology-neutral, and economically sound guidance for developing jurisdiction-specific approaches to benefit-cost analyses of distributed energy resources.”¹⁰ In 2020, the Commission applied the following principles from the NSPM-DER to evaluation of Kentucky Power Company’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.¹¹

E. Other Considerations Regarding Customer Participation in DSM programs

(1) Many low income homes are in too poor condition to be weatherized. Therefore, programs to improve these homes may be an essential first step, and cost-effective.

(2) Pay As You Save programs like the Kentucky Energy Retrofit Rider tariff offered by Big Sandy RECC, Farmers RECC, Fleming-Mason Energy Cooperative, Grayson RECC, Jackson Energy Cooperative and Licking Valley RECC are whole-house customer energy efficiency services, in which the utility invests in energy efficiency improvements in the customer’s home, with the investment being repaid through the customer’s monthly utility bill. This can significantly increase participation in DSM programs by eliminating the upfront cost to participate by the customer.

¹⁰ National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources at i.

¹¹ Order at 21–24, *In the Matter of Elec. Application of Ky. Power Co. for a Gen. Adjustment of Its Rates for Elec. Serv.*, Case No. 2020-00174 (May 14, 2021).

(3) Programs supporting energy-efficient retrofits should also be considered. For example, Louisville Metro Government’s Office of Advanced Planning & Sustainability offers multiple programs supporting energy-efficient retrofits, including the Energy Project Assessment District (EPAD) program, which allows repayment for energy-efficient upgrades through a voluntary assessment and finances up to 100% of eligible projects costs; the Cool Roof Incentive Program, which supports the installation of cool roofing materials, prioritizing high heat island locations; the Solar Over Louisville program, which provides bulk purchasing power for households to invest in solar installation; and the Weatherization Assistance Program, which provides financial assistance to low-income residents for energy conservation improvements to their homes. LHOME, a community development financial institution, offers a low-interest Home Repair and Energy Efficiency Loan. *See 2022 State of Metropolitan Housing Report.*¹²

(4) Finally, customer-owned distributed solar generation and storage, electric vehicles, and the Internet of Things with smart appliances should be included as DR measures. Customer-owned distributed energy resources represent a very large potential DR resource for utilities, a resource expected to grow exponentially in coming years. A critically important feature of these resources is that so much of the investment is made by the customer, not the utility, providing a very low-cost DR resource.

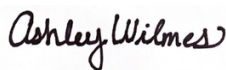
E. Investigate establishing a statewide energy efficiency utility to run DSM programs for all utilities, relieving utilities from running DSM programs directly.

At least two states have successfully established “energy efficiency utilities” to provide statewide DSM services, taking responsibility for DSM away from the electric and gas utilities. Efficiency Vermont was the nation’s first energy efficiency utility, established in 1999. Since

¹² https://metropolitanhousing.org/wp-content/uploads/2022/06/2022-SMHR_FINAL.pdf

that time, Efficiency Vermont has saved Vermonters over \$3 billion in energy costs.¹³ In Kentucky, a state with so many electric utilities, a single state-wide energy efficiency utility could provide a level of consistency and singular focus to support the scale-up of DSM in Kentucky.

Respectfully submitted,



Ashley Wilmes, Esq.
Tom FitzGerald, Esq.
Kentucky Resources Council, Inc.
P.O. Box 1070
Frankfort, KY 40602
(859)312-4162
Ashley@kyrc.org
FitzKRC@aol.com

Counsel for Joint Movants for Intervention,
Kentuckians for the Commonwealth
Mountain Association, Metropolitan
Housing Coalition, and Earth Tools, Inc.

CERTIFICATE OF SERVICE

This is to certify that electronic version of the *Comments of Kentuckians For The Commonwealth, Mountain Association, Metropolitan Housing Coalition, and Earth Tools, Inc.* is being electronically transmitted to the Commission on December 16, 2022, and that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding.



Ashley Wilmes

¹³ <https://www.encyvermont.com/>. Delaware also has a Sustainable Energy Utility, known as Energize Delaware. <https://www.energizedelaware.org/>