

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC JOINT APPLICATION)	
OF LOUISVILLE GAS AND ELECTRIC)	
COMPANY AND KENTUCKY)	
UTILITIES COMPANY FOR)	CASE NO. 2020-00016
APPROVAL OF A SOLAR POWER)	
CONTRACT AND TWO RENEWABLE)	
POWER AGREEMENTS TO SATISFY)	
CUSTOMER REQUESTS FOR A)	
RENEWABLE ENERGY SOURCE)	
UNDER GREEN TARIFF OPTION #3)	

SUPPLEMENTAL RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
AND
KENTUCKY UTILITIES COMPANY
TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION
DATED FEBRUARY 20, 2020

Filed: March 23, 2020

**Louisville Gas and Electric Company and Kentucky Utilities Company
Supplemental Response to Commission Staff's Second Request for Information
Dated February 20, 2020**

Case No. 2020-00016

Question No. 1

Witness: Robert M. Conroy / David S. Sinclair / Counsel

- Q-1. Refer to the application, paragraphs 17-21, and the Direct Testimony of Robert M. Conroy, page 3, line 14, through page 7, line 2, which address the legal standard for Commission review of a power purchase agreement (PPA) under KRS 278.020(1) and KRS 278.300 for the 75 percent of energy allocated to Toyota Motor Manufacturing Kentucky, Inc. (Toyota) and Dow Silicones Corporation (Dow), but not for the 25 percent of energy to be allocated to native load.
- a. Explain in specific detail how the 25 percent of energy to be allocated to native load satisfies the legal standard under KRS 278.020(1) regarding need for additional generation and the absence of wasteful duplication.
 - b. Explain in specific detail how the 25 percent of energy to be allocated to native load satisfies the legal standard(s) under KRS 278.300, regarding whether the proposal is for some lawful object within the utility's corporate purpose and is necessary and appropriate.
 - c. Provide the calculation of the estimated fuel cost savings (net and gross) for the 25 percent of energy allocated to native load that LG&E/KU assert will displace higher-cost energy in the economic dispatch of LG&E/KU's fossil fuel generation units. The calculation should be in Excel spreadsheet format with all formulas unprotected and all rows and columns fully accessible. In the discussion of the calculation results, include and highlight both the estimated fuel cost savings from displaced generation and the effects of any increased or reduced off system sales (OSS). All assumptions and parameters used in the cited economic dispatch should be fully explained in complete detail.
 - d. Provide a detailed comparison of the estimated fuel cost savings and the estimated cost to ratepayers of the 25 MW allocated to native load.

A-1. **Response (February 26, 2020)**

- a. The Companies have a legal obligation to furnish adequate, efficient and reasonable service. KRS 278.030(2). This obligation includes the procurement of energy at the lowest reasonable costs. The Commission has interpreted its fuel adjustment clause regulation (807 KAR 5:056) as imposing upon electric utilities the obligation to engage in fuel procurement practices that result in reasonable fuel costs for its ratepayers.

One method by which electric utilities meet their obligations is through economy energy purchases. “Economy energy is ‘energy produced and supplied from a more economical source in one system, substituted for that being produced or capable of being produced by a less economical source in another system. Economy energy sales occur when utilities purchase energy from other utilities that can generate the energy at lower cost.’” *East Kentucky Power Cooperative*, Case No. 2004-00430 (Ky. PSC Feb. 7, 2005) (citations omitted) (Nev. 1981)) at 4, fn. 2. Even though the utility has generation capacity to meet customer demand, it is more economical and more beneficial to its ratepayers if it purchases the energy rather than use its existing generation assets. The Commission has long recognized and approved the use of economy energy purchases. *See* 807 KAR 5:056, Section (1)(3).

The portion of the PPA energy allocated to native load customers is analogous to an economy energy purchase. The Companies expect, as evidenced by the direct testimony of Mr. Sinclair, the PPA is likely to result in lower energy costs (including the sale of RECs) on a present value basis over the term of the agreement than if the energy is generated from the Companies’ existing generation facilities.

On the issue of wasteful duplication, the Commission has stated:

“Wasteful duplication” is defined as “an excess of capacity over need” and “an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties.” To demonstrate that a proposed facility does not result in wasteful duplication, we have held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed. Selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication. All relevant factors must be balanced. The Commission has long recognized that the principle of least-cost is one of the fundamental foundations utilized when setting rates that are fair, just, and reasonable and that this principle is embedded in KRS 278.020(1).

Kentucky Power Company, Case No. 2012-00578 (Ky. PSC Oct. 7, 2013) at 27.

As it relates to the portion of the PPA energy allocated to native load customers, the PPA does not result in wasteful duplication of facilities. As demonstrated in Mr. Sinclair's testimony, the Companies thoroughly evaluated the PPA against other alternatives, including the use of the Companies' existing fossil fuel generation facilities, and found the PPA's energy costs combined with the sale of RECs over the term of the PPA will likely result in ratepayers achieving lower energy costs. No excessive investment will result from the PPA as the Companies are merely purchasing lower cost energy instead of fossil fuels and are not constructing or otherwise adding any facilities. The PPA does not increase the Companies' capital assets and will not increase their rate base upon which a return on investment is required.

The PPA will also produce some important, but difficult to quantify, benefits for the Companies and their ratepayers. It will allow the Company to work with solar facilities on a larger scale and will provide useful information for integrating additional cost-effective renewable generation on the Companies' system in the future.

- b. See the response to part a above.
- c. See attached. This information is confidential and is being produced under seal pursuant to a Joint Petition for Confidential Protection.

Attachment 1 contains the Companies' calculations of energy cost savings by scenario. The first section in the "Calculations" worksheet shows annual energy, price, and the resulting calculation of energy costs for the Solar Power Contract. The next section shows the calculation of REC credits at varying REC prices, based on the annual energy from the Solar Power Contract. The following section contains the same data as was provided in Table 15 of Exhibit DSS-2 – the average annual energy cost savings for the Solar Power Contract by scenario. The annual energy cost savings from displaced generation are then calculated from the annual Solar Power Contract energy and the average annual energy cost savings. Finally, the net revenue requirements for the portion of the Solar Power Contract allocated to all customers are calculated by scenario for each REC price based on each of the components calculated above – Solar Power Contract energy costs, REC credits, and energy cost savings from displaced generation – scaled by 25% to represent the portion allocated to all customers. The "Summary" worksheet contains a summary of the NPVRR for the portion of the Solar Power Contract allocated to all customers by scenario and REC price – the same data as was provided in Table 12 of Exhibit DSS-2.

As explained in Section 6.3 of Exhibit DSS-2, the Companies projected hourly energy cost savings for the Solar Power Contract in each of the scenarios by ranking the decremental costs of each MW of each unit committed in each hour, and then summing the highest decremental costs representative of the expected solar generation in that hour. Because of the high volume of data utilized in these

calculations, the Companies performed these calculations using SAS, a data processing software. Annual sums of the SAS results are shown in Attachment 1 as “Energy Cost Savings from Displaced Generation.” As an example of their process, the Companies have included Attachment 2, which shows the detailed hourly calculation of energy cost savings from displaced generation for one scenario (low fuel prices, zero CO₂ emissions prices, and 55-year unit life) in one year (2022). Attachment 2 shows for each hour the displaced units, decremental generation costs, rank of the displaced MWh by generation cost, solar generation, decremental energy, and resulting displaced energy costs. For each hour, the sum of decremental energy is equal to solar generation per hour. The sum of hourly displaced energy costs in Attachment 2 (shown in cell J224,368) equals the annual energy cost savings from displaced generation for the low fuel prices, zero CO₂ emissions prices, 55-year life scenario in year 2022, shown in cell F37 of Attachment 1. The average energy cost savings calculated in cell K224,368 of Attachment 2 equals the average annual energy cost savings for the low fuel prices, zero CO₂ emissions prices, 55-year life scenario in year 2022, shown in cell F21 of Attachment 1. The Companies repeated these calculations for each year and each scenario.

As explained in Sections 3.2 and 3.4 of Exhibit DSS-2, generation for off-system sales is very small compared to native load energy requirements and highly uncertain due to market factors that are beyond the Companies’ control. Therefore, consistent with the Companies’ prior practice for making resource-planning decisions, the potential impact to off-system sales was not considered in the analysis. Furthermore, given the intermittent nature of solar generation, it will be very difficult, except on the clearest of days, to assume that the generation will be available ahead of time in order to make off-system sales.

- d. See Mr. Sinclair’s testimony page 15, line 12 through page 18, line 3. Also see Section 3.4 and Section 4 in Exhibit DSS-2 to Mr. Sinclair’s testimony. See also response to part c above.

Supplemental Response (March 23, 2020)

- a. The portion of the Companies’ Application referenced in the Request for Information refers to the standard that the Commission applied to prior applications for authorization to enter purchase power agreements. No Kentucky court has expressly recognized or adopted the Commission’s position that purchase power agreements represent the functional equivalent of the construction of a generation facility and must be reviewed in accordance with the standards for the issuance of a certificate of public convenience and necessity (“CPCN”). Furthermore, the record in the present application differs significantly from those of earlier cases in which the Commission made such a finding. Unlike earlier cases in which applicants sought approval of uneconomical and more costly alternatives that provided no benefit to their ratepayers, the Companies’ proposed purchased power

agreement with Rhudes Creek Solar LLC (“PPA”) represents the least cost alternative and benefits ratepayers.

The Companies do not accept the assumption implicit in the Request that the standards for the issuance of a CPCN are applicable to the PPA in this case. For a purchase power agreement to be equivalent to the construction of new generation facilities, the purchased power must provide firm energy and capacity. In other words, the power purchase must be on a firm basis to function and have the financial and operating impact equivalent to constructing a new generation facility. The proposed PPA, however, is an agreement for the purchase of intermittent energy, not firm power, and thus does not have operational capacity or the financial impact of capacity power. The Companies have no assurances of the timing or quantity of power to be provided. The solar generation facility’s production of energy is dependent upon when the sun shines and is not controllable. The quantity of energy obtained through the PPA will vary with weather and the time of the year. Moreover, under the PPA, the Companies pay only for energy if and when it is delivered. They pay no capacity charges. The PPA results in no addition to the Companies’ rate base.

The proposed PPA will have no direct impact upon the Companies’ balance sheets and is not considered an asset or liability to the Companies for financial reporting purposes. The rating agencies are unlikely to treat the proposed PPA as a debt-like obligation or impute debt to the Companies. The PPA will not raise the Companies risk profile for purposes of determining a reasonable return on equity.

In published guidance on the treatment of purchased power agreements, the two leading rating agencies have indicated that purchase power agreements like the proposed PPA will not be treated as a form of debt. The first rating agency, Moody’s Investor Services (“Moody’s”), has stated that “[t]he most conservative treatment would be to treat a PPA as a debt obligation of the utility as, by paying the capacity charge, the utility is effectively providing the funds to service the debt associated with the power station.”¹ The proposed PPA, however, does not contain a capacity payment, but includes only an energy charge that is based upon the actual amount of intermittent energy the Rhudes Creek solar facility produces. Moreover, where, as here, if the purchased power energy costs are recovered via a pass-through mechanism such as a fuel adjustment clause, Moody’s regards such purchase power “obligations as operating costs with no long-term debt-like attributes.”² As to the 25 percent of the non-firm purchased energy that will be allocated to all customers, its cost will be recovered through the Companies’ existing fuel adjustment clauses. As to 75 percent of the non-firm energy allocated to the two Option 3 customers, the cost of that energy will be recovered directly from those customers via the Companies’ renewable power agreements with those

¹ Moody’s Investor Service, “Rating Methodology: Regulated Electric and Gas Utilities” at 42 (June 23, 2017).

² S&P Global, “Corporate Methodology: Ratios and Adjustments” at 32 (April 1, 2019).

customers. The second leading rating agency, S&P Global Ratings (“S&P”), determines a percentage of the present value of the purchase power to be a debt equivalent using an analytically determined risk factor.³ It calculates “the present value (“PV”) of the future stream of capacity payments under the contract.” In the case of the proposed PPA, however, the PV would be zero due to the absence of capacity payments.

Thus, the analysis in *Kentucky Utilities Company v. Public Service Commission*, 252 S.W.2d 885 (Ky. 1952), which speaks of “need” and “absence of wasteful duplication,” has no application to the Companies’ application for approval of the assumption of the PPA’s obligations under KRS 278.300 because the proposed PPA does not have the financial and operating impact equivalent to constructing a new generation facility. Assuming, however, for the sake of a complete analysis that the *Kentucky Utilities Company* decision somehow applies to the Companies’ application, the record shows the proposed PPA is needed and is not a wasteful duplication under KRS 278.020 as interpreted in the *Kentucky Utilities Company* decision.

The PPA, as it relates to the 25 percent of the non-firm energy allocated to native load customers, satisfies the requirements set forth in KRS 278.020(1) as interpreted and applied in *Kentucky Utilities Company*. There the Kentucky Court of Appeals declared that an applicant for a certificate of public convenience and necessity must demonstrate a need for the new facilities and the absence of wasteful duplication. *Id.* at 890. To demonstrate need, an applicant must show a “substantial inadequacy” of existing facilities great enough “to make it economically feasible for the new system or facility to be constructed and operated.” *Id.* It must also show that the inadequacy is due to “a substantial deficiency of service facilities beyond what would be supplied by normal improvements in the ordinary course of business.” *Id.*

In the current proceeding, the Companies have demonstrated the existence of such a “substantial inadequacy” in their existing generation facilities. The Companies not only lack sufficient facilities to meet the specific existing customer demand for electricity generated from additive renewable resources for the 75 percent of the PPA, their existing fossil fuel generation is unable to generate energy with fossil fuel at costs less than the energy generated from with renewable generation (when combined with the sales of renewable energy credits (“RECs”)) for the 25 percent of the PPA. As shown in Mr. Sinclair’s testimony, the variable cost of energy produced by Companies’ fossil-fuel generation facilities is higher than that from renewable generation (when combined with the sales of RECs). The cause of the higher cost is the fossil fuel used for generation. This “deficiency” in those facilities cannot be remedied through normal improvements in the ordinary course of business. The disparity between the cost of fossil-fuel generation and solar

³ Standard & Poor’s Rating Services, “Utilities: Key Credit Factors for the Regulated Utilities Industry at 14 (Nov. 19, 2013).

generation makes the entry into the PPA economically feasible for the Companies **and produces economic savings for their native load ratepayers.** The PPA allows for a reduction of fuel costs and lower electric rates from sale of RECs. The Companies' efforts to identify various means to reduce costs for their customers is in complete accord with the Commission's longest-standing policy of operating at the least cost when reasonably possible.⁴

The PPA also does not result in wasteful duplication. Wasteful duplication is defined in the *Kentucky Utilities Company* as "an excessive investment in relation to productivity, and an unnecessary multiplicity of physical properties." *Id.* The Commission has previously found that an absence of wasteful duplication may only be demonstrated by showing that all reasonable alternatives were considered prior to the selection of a proposal and that the selected proposal is consistent with least cost principles.⁵ The Companies thoroughly evaluated the PPA against other reasonable alternatives, including the use of the Companies' existing fossil fuel generation facilities. In doing so, the Companies used the same sound methods and practices they used in previous analysis presented to and accepted by the Commission involving a variety of decisions.⁶ Using this analysis, the Companies

⁴ See, e.g., *General Adjustment of Electric Rates of Kentucky Utilities Company*, Case No. 8624 (Ky.PSC Mar. 18, 1983) at 54 (finding that an electric utility "has an obligation to pursue, for Kentuckians, an energy strategy that represents least cost consistent with appropriate reliability"); *The Application of East Kentucky Power Cooperative, Inc. for A Certificate of Public Convenience and Necessity, and a Certificate of Environmental Compatibility for the Construction of 300 MW (Nominal) of Combustion Turbine Peaking Capacity and Related Transmission Facilities in Clark and Madison Counties In Kentucky*, Case No. 92-112 (Ky.PSC Mar. 11, 1993) (finding that construction of construction of combustion turbines without purchasing additional capacity from other sources is the least cost alternative available); *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company For the Construction of Transmission Facilities In Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky*, Case No. 2005-00467 (Ky.PSC May 26, 2006) at 18 ("The Commission has long encouraged consideration of least-cost alternatives for meeting projected needs, without explicit consideration of rate impact. Thus, while total project cost should not be the sole factor in transmission route selection, it is nevertheless one of the important factors to consider"); *Application of Cumberland Valley Electric, Inc. For Commission Approval For A Certificate of Public Convenience And Necessity To Install An Advanced Metering Infrastructure (AMI) System Pursuant To KRS 807 KAR 5:001 and KRS 278.020*, Case No. 2018-00056 (Ky.PSC July 9, 2018) (finding proposed AMI system is the least-cost alternative to addressing electric utility's metering needs); *Application of East Kentucky Power Cooperative, Inc. For A Certificate of Public Convenience And Necessity For The Construction of Backup Fuel Facilities At Its Bluegrass Generating Station*, Case No. 2018-00292 (Ky.PSC Feb. 28, 2019) (finding proposed fuel oil project is the most reasonable least-cost alternative for complying with PJM's Capacity Performance requirements); *Electronic Application of Jackson Purchase Energy Corporation For A Certificate of Public Convenience and Necessity To Construct A New Headquarters Facility*, Case No. 2019-00326 (Ky.PSC Jan. 14, 2020) (finding that proposed facility was the least cost alternative). See also 807 KAR 5:058, Section 8(1) (requiring all electric generation utilities to develop 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.").

⁵ *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*, Case No. 2009-00545 (Ky.PSC Jun. 28, 2010) at 5-6.

⁶ See, e.g., *Joint Application of Louisville Gas And Electric Company and Kentucky Utilities Company For A Certificate of Public Convenience And Necessity And Site Compatibility Certificate For The Construction Of A Combined Cycle Combustion Turbine At The Cane Run Generating Station and The Purchase of Existing Simple Cycle Combustion Turbine Facilities From Bluegrass Generation Company, LLC In LaGrange, Kentucky*, Case No.

found the PPA's energy costs combined with the sale of RECs over the term of the PPA are expected to result in ratepayers achieving lower energy costs over the term of the contract. No "unnecessary multiplicity of physical properties" will result from the Companies' entry into the PPA as the Companies are not constructing or otherwise adding any facilities.

The additional energy that will result from the PPA is not *per se* wasteful or uneconomical merely because it adds to the Companies' present energy supply or the Companies' existing fossil-fuel generation capacity is sufficient to meet the demands of native customers. The Court in *Kentucky Utilities Company* cautions against applying such a simplistic approach to ascertaining whether the construction of utility facilities results in a wasteful duplication of facilities:

An inadequacy of service might be such as to require construction of an additional service facility to supplement an inadequate existing facility, yet the public interest would be better served by substitution one large facility, adequate to serve all the consumers, in place of the inadequate existing facility, rather than constructing a new small facility to supplement the existing small facility. **A supplementary small facility might be constructed that would not create duplication from the standpoint of an excess of capacity, but would result in duplication from the standpoint of an excessive investment in relation to efficiency and a multiplicity of physical properties.**

Id. (emphasis added). The Court instead identifies East Kentucky Power Cooperative's proposed generation facilities' cost to deliver energy as the determinative factor. It notes that the Commission's finding that the proposed facilities would deliver energy at a cost at least as low cost as the cost to currently purchase energy touches "upon the question of duplication from the standpoint of an excessive investment in relation to efficiency." *Id.* at 891. The Court's opinion in *Kentucky Utilities Company*, like the Commission's order subject to the appeal, in rejecting the simplistic duplication arguments of the opponents, makes an extensive review of the evidence demonstrating East Kentucky's proposed generation was expected to create an estimated \$3.2 million savings to customers over the life of the project. In doing so, the Court noted "cost ... [is] embraced in the question of duplication." *Id.* at 892. More than 50 years later, in accord with the *Kentucky Utilities Company* decision, the Commission again rejected the simplistic duplication argument when granting a certificate of public convenience and

2011-00375 (Ky.PSC May 3, 2012); *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for Certificates of Public Convenience and Necessity for the Construction of a Combined Cycle Combustion Turbine at the Green River Generating Station and A Solar Photovoltaic Facility at the E.W. Brown Generating Station*, Case No. 2014-00002 (Ky.PSC Dec. 19, 2014);

necessity to construct a water pipeline facility, noting the presence of excess capacity does not render a utility's proposed facilities as wasteful investment.⁷

Notwithstanding their currently available energy, the Companies' acquisition of intermittent energy for their native load customers' use is an economical and efficient investment. It will result in lower fuel costs than using fossil fuel to generate energy in the Companies' existing fossil fuel generation facilities. Accordingly, it is not wasteful duplication.

In this regard, the PPA is readily distinguishable from those Commission decisions that involved purchased power agreements for firm energy and capacity and in which the Commission applied the criteria set forth in KRS 278.020(1). In Case No. 2009-00545, the Commission denied Kentucky Power Company authorization to enter an agreement for the purchase of wind generated power in large measure because the agreement had "not been shown to be least-cost compared to Kentucky Power's available energy sources."⁸ The Commission noted that the cost of the wind energy was substantially above Kentucky Power's cost of generation.⁹ In the present case, the cost of the energy acquired under the PPA is expected to be significantly less than the Companies' currently available energy from their existing fossil fuel generation facilities and should be the least cost source over the PPA's term.¹⁰

Similarly, in Case No. 2018-00050,¹¹ the Commission denied South Kentucky RECC's request to enter into a purchase power agreement because of the lack of evidence that the agreement would produce savings. South Kentucky RECC had proposed to enter an agreement to purchase 58 MW 7 x24 firm energy for 20 years and a financial capacity hedge of 68 MW for 18 years. It asserted that the proposed agreement would result in an estimated net present value savings of between \$89.7 million and \$122.8 million in wholesale power costs. In its decision, the Commission found South Kentucky RECC has underestimated significant costs "which creates questions about the actuality of the projected cost savings" and was unable to establish that the proposed agreement would not result in wasteful duplication.¹² In the present case, in contrast, the Companies have conducted a rigorous analysis of the existing and reasonably expected market conditions and have shown that the PPA, including revenue from the sale of RECs, will produce

⁷ *The Application of Kentucky-American Water Company For A Certificate of Convenience and Necessity Authorizing The Construction of Kentucky River Station II, Associated Facilities And Transmission Main*, Case No. 2007-00134 (Ky.PSC Apr. 25, 2008) at 41 (stating the presence of excess capacity does not necessarily render a utility's proposed facilities as wasteful investment).

⁸ *Kentucky Power Company*, Case No. 2009-00545 (Jun. 28, 2010) at 6.

⁹ *Id.* The Commission found the cost of wind energy to be approximately \$43/MWh and Kentucky Power's existing cost of generation to be \$34/MWh.

¹⁰ 2019 Resource Assessment: Renewable RFP at 23 – 26 (Dec. 2019).

¹¹ *Electronic Application of South Kentucky Rural Electric Cooperative Corporation For Approval of Master Power Purchase and Sale Agreement and Transactions Thereunder*, Case No. 2018-00050 (Ky.PSC Sep. 27, 2019)

¹² *Id.* at 30-31.

savings and is the least cost alternative to other energy generated by burning fossil fuel at their existing generation facilities over the PPA's term.

In Case No. 2013-00144, the Commission discussed but did not expressly apply the criteria of KRS 278.020(1) to approve Kentucky Power Company's purchased power agreement with a biomass-fired electric generation facility.¹³ Instead the Commission focused almost exclusively upon the policy objectives contained in KRS 154.27-020(2). Finding that the record contained no evidence of the need for the additional capacity and that the applicant had failed to conduct any economic or cost-benefit analyses to support the proposition that the proposed agreement would be economical in the long term, the Kentucky Court of Appeals reversed this Order. *Kentucky Industrial Utility Customers v. Kentucky Public Service Commission*, 504 S.W.3d 695 (Ky. App. 2016). In its decision, the Kentucky Court of Appeals noted that the Commission "was still required to consider other factors **such as the reasonableness of the costs in comparison with other alternatives.**" *Id.* at 709 (emphasis added). Simply put, in that proceeding as in the current proceeding, the Commission cannot disregard the cost of the acquired energy or how it compares to other available sources. Any review that focuses erroneously upon the simplistic contention of whether the PPA only results in excess energy and overlooks the PPA's effect upon lowering fuel costs is in conflict with the *Kentucky Utilities Company* decision and Commission's longstanding approach to regulation. The Commission has previously recognized that "'least cost' is one of the fundamental principles utilized when setting rates that are fair, just and reasonable."¹⁴ It has noted that the principle of least cost is "embedded in KRS 278.020(1)."¹⁵ It has firmly declared that it "is responsible for ensuring that utilities provide safe and reliable electric service at **the least cost.**"¹⁶ And it has directed all electric generation utilities to develop on a regular ongoing basis 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."¹⁷ Kentucky's highest court has noted that one of the Commission's most important objectives is "providing **the lowest possible cost** to the ratepayers."¹⁸ The

¹³ *Application of Kentucky Power Company for Approval of the Terms and Conditions of the Renewable Energy Purchase Agreement for Biomass Energy Resources Between the Company and Ecopower Generation-Hazard LLC: Authorization to Enter into the Agreement; Grant of Certain Declaratory Relief; and Approvals and Relief*, Case No. 2013-00144 (Ky.PSC Oct. 10, 2013).

¹⁴ *Kentucky Power Company*, *supra* note 3, at 5.

¹⁵ *Id.* at 30-31.

¹⁶ *Application of Kentucky Power Company For: (1) A General Adjustment of Its Rates For Electric Service; (2) An Order Approving Its 2014 Environmental Compliance Plan; (3) An Order Approving Its Tariffs And Riders; and (4) An Order Granting All Other Required Approvals and Relief*, Case No. 2014-00396 (Ky.PSC Jun. 22, 2015) at 34 (emphasis added).

¹⁷ 807 KAR 5:058, Section 8(1) (requiring all electric generation utilities to develop 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.").

¹⁸ *Public Service Commission v. Continental Telephone Company*, 692 S.W.2d 794, 799 (Ky. 1985) (emphasis added).

proposed PPA is in complete accord with the Commission's cornerstone least cost policy because it lowers fuel costs.

Similarly, the simplistic focus on excess energy without considering all of the economic implications of the proposed facility or additional capacity is likely to produce unintended and difficult consequences. For example, consider a water utility that proposes to replace its existing meters with a more accurate and precise meter. While the current meters register within the required accuracy limits and have a considerable portion of their useful life remaining, the proposed meters would better detect customer usage, produce significantly more revenue (enough to quickly recover the cost of the meters) and reduce the water utility's unaccounted-for water. Emphasis only on the water utility's existing metering capacity – it has sufficient metering capacity and purchasing additional meters would result in excess capacity – would require the Commission to reject the proposed purchase and prevent the water utility from more accurately billing its customers. Rejecting such a simplistic approach, the Commission has noted that “[t]he existence of excess capacity cannot be considered in isolation but must be carefully weighed with other relevant factors.”¹⁹ The Commission has charged utilities filing for base rate changes to demonstrate as part of their applications “the existing programs to achieve improvements in efficiency and productivity, including an explanation of the purpose of the program.”²⁰ Adopting a simplistic approach to evaluating proposed improvements with no consideration of whether the proposal reduces costs and thus rates to customers will only encourage utilities to maintain the status quo without regard to whether lower costs can be achieved.

¹⁹ *The Application of Kentucky-American Water Company For A Certificate of Convenience and Necessity Authorizing The Construction of Kentucky River Station II, Associated Facilities And Transmission Main*, Case No. 2007-00134 (Ky.PSC Apr. 25, 2008) at 41. See also *South Kentucky RECC*, *supra* note 10, at 29-30.

²⁰ 807 KAR 5:001 Section 16(7)(a).