

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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

ORDER

This matter arises upon rehearing of a Commission Order. By Order entered June 18, 2020 (Rehearing Order), the Commission granted, in part, Louisville Gas and Electric Company (LG&E) and Kentucky Utilities Company’s (KU), (collectively, LG&E/KU) joint request for reconsideration and clarification of the certain issues in the May 8, 2020 Order (Final Order) in this matter. The Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention (Attorney General) is the only intervenor in this matter. An informal conference was held on August 25, 2020 and LG&E/KU subsequently filed written testimony. A formal hearing was held on October 27, 2020. LG&E/KU responded to post-hearing data requests and filed a post-hearing brief, requesting a decision by December 31, 2020. The Attorney General filed notice that he would not file a post-hearing brief. This matter now stands submitted for a decision.

BACKGROUND

Among other things, the Final Order (1) established a Fuel Cost Adjustment (FAC) cost-recovery methodology for the portion of a 20-year solar purchase power agreement

(PPA) allocated to serve native load; (2) approved two 20-year renewable power agreements (RPA) between KU and Toyota Motor Manufacturing, Kentucky, Inc. (Toyota) and Dow Silicones Corporation (Dow), subject to certain modifications; and (3) ordered certain amendments to LG&E/KU's respective Green Tariff Standard Rate Rider GT (Green Tariff) Option #3. LG&E/KU requested reconsideration of the Final Order's FAC cost-recovery methodology for the PPA, and reconsideration and clarification of the Green Tariff modifications.

In the Rehearing Order, the Commission granted rehearing on the FAC cost-recovery methodology; denied reconsideration of the modifications regarding cost-shifting; and clarified issues regarding aggregation of usage from multiple locations and that LG&E/KU, subject to Commission approval, have the ultimate authority to select the specific resource under Green Tariff Option #3. Thus, the only matter remaining to be decided upon rehearing is the FAC review methodology.

#### FAC METHODOLOGY

In the Final Order, the Commission found that cost recovery for the portion of the PPA assigned to native load should be reviewed as economy energy purchases, with LG&E/KU permitted to net the gains and losses under the PPA, net of renewable energy credit (REC) sales over the entire 2-year FAC review period.<sup>1</sup> The Commission also found that LG&E/KU should apply the After-the-Fact-Billing (AFB) process both with and without the energy purchases in the biennial FAC review.<sup>2</sup> In the AFB process, solar energy is placed at the bottom of the generation dispatch stack, displacing higher cost

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<sup>1</sup> Final Order at 19.

<sup>2</sup> *Id.*

energy. In the Rehearing Order, the Commission clarified that the PPA costs would not be considered economical, and thus not recoverable for that biennial review period, if the costs, net of REC sales, were greater than the cost of the energy it displaced.<sup>3</sup>

In their request for rehearing, LG&E/KU argued that the FAC methodology established in the Final Order was contrary to Commission precedent.<sup>4</sup> LG&E/KU asserted that the methodology for determining economic and noneconomic power purchases in the FAC mechanism was already established by the Commission under long-standing precedent, and that the Commission should continue to apply the “highest cost unit calculation” approach when reviewing electric utility fuel costs.<sup>5</sup> LG&E/KU disputed the Commission’s finding that LG&E/KU should apply AFB in its evaluation, explaining that AFB is an accounting methodology and not a tool that can be used to analyze the cost-effectiveness of the PPA.<sup>6</sup> For these reasons, LG&E/KU requested that the Final Order be revised to apply a highest cost unit calculation to determine the cost-effectiveness of the portion of the PPA allocated to all customers.<sup>7</sup>

In written and hearing testimony, LG&E/KU proposed to track and account for cumulative net costs across the entire 20-year term of the PPA, using the FAC and AFB processes. The net costs would be tracked using a new Solar PPA Adjustment Clause with related deferral accounting. In advocating for cumulative netting, LG&E/KU argued

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<sup>3</sup> Rehearing Order at 4–5.

<sup>4</sup> Petition for Rehearing (Petition) at 2–3.

<sup>5</sup> *Id.*

<sup>6</sup> *Id.* at 5.

<sup>7</sup> *Id.* at 6.

that there could be one or more two-year FAC review periods in which the PPA will be uneconomical.<sup>8</sup> Under the proposed methodology, LG&E/KU would make customers whole during any biennial FAC review period in which the cumulative economics of the PPA were net detrimental. LG&E/KU argued that this approach would place all the net downside risk on LG&E/KU while providing all net upside benefit to customers.<sup>9</sup> LG&E/KU asserted that, without cumulative netting across the 20-year term, LG&E/KU could be harmed financially, and thus the PPA and RPAs might not proceed.

### DISCUSSION AND FINDINGS

Pursuant to Commission regulation 807 KAR 5:056, Section 1(3), net energy costs for economy energy purchases, exclusive of capacity or demand charges, may be recovered in FAC proceedings when economy energy is purchased on an economic dispatch basis. In a 2002 decision, the Commission defined economy energy purchases recoverable through FAC review as “purchases that an electric utility makes to serve native load, that displace its higher cost of generation, and that have an energy cost less than the avoidable variable generation cost of the utility’s highest cost generating unit available to serve native load during that FAC expense month.”<sup>10</sup> In contrast, the Commission defined non-economy energy purchases as “purchases made to serve native load that have an energy cost greater than the avoided variable cost of the utility’s highest cost generating unit available to serve native load during that FAC expense

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<sup>8</sup> LG&E/KU Post-Hearing Brief (Post-Hearing Brief) at 7.

<sup>9</sup> Post-Hearing Brief at 8.

<sup>10</sup> Case No. 2000-00495-B, *An Examination by the Public Service Commission of the Application of the Fuel Adjustment Clause of American Electric Power Company from May 1, 2001 to October 31, 2001* (Ky. PSC May 2, 2002) at 4.

month.”<sup>11</sup> The Commission has consistently held that an electric utility can recover through the FAC review “only the lower of the actual energy cost of the non-economy purchased energy or the fuel cost of its highest cost generating unit available to be dispatched to serve native load during the reporting expense month.”<sup>12</sup>

Based upon the case record, the Commission is persuaded that LG&E/KU should use the existing FAC standard as they initially proposed in their joint petition for rehearing, applying “the well-established ‘highest cost unit calculation’ approach that [the Commission] has employed for the past two decades when reviewing electric utility fuel costs.”<sup>13</sup> As LG&E/KU noted in their petition, use of this FAC methodology is a “time-tested proven approach” that “avoids the unnecessary expenditure of time and resources necessary to develop, test and deploy an alternative approach.”<sup>14</sup> The Commission concurs with LG&E/KU that using the established FAC methodology avoids “the risk associated with contentious proceedings involving the application of a new and unknown method.” For the above reasons, the Commission finds that the Final Order should be amended and that LG&E/KU should use the existing FAC methodology in the biennial review of PPA costs allocated to serving native load. LG&E/KU will be allowed to recover the cost of the PPA energy as long as it is less than the avoidable variable generation

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<sup>11</sup> *Id.*

<sup>12</sup> *Id.* at 5. See also Case No. 2016-00003, *An Examination of the Application of the Fuel Adjustment Clause of Kentucky Utilities Company from May 1, 2015 through October 31, 2015* (Ky. PSC July 7, 2016) at 2; and Case No. 2016-00004, *An Examination of the Application of the Fuel Adjustment Clause of Louisville Gas & Electric Company from May 1, 2015 through October 31, 2015* (Ky. PSC July 7, 2016) at 2.

<sup>13</sup> Petition at 3.

<sup>14</sup> *Id.*

cost of LG&E/KU's highest cost generating unit available to serve native load during that FAC expense month.

The Commission further finds that, based upon the case record, it is unnecessary to apply a cumulative netting approach to the established biennial FAC review methodology, and therefore the Commission denies the proposed methodology contained in LG&E/KU's written rehearing testimony filed on September 18, 2020, that revised the methodology LG&E/KU proposed in its petition for rehearing. The Commission notes that the economy energy highest unit cost is based on the generation available in a given month, and not necessarily available each hour coincident with the purchase of PPA energy. The generation unit dispatched may have a lesser cost of generation than the highest cost generation unit available for the same time period. At the October 27, 2020 hearing, LG&E/KU witnesses testified that, under the highest cost unit available calculation approved in this order, it is unlikely that the highest cost unit will be less than the approximately \$28/MWh cost of the PPA.<sup>15</sup> This is consistent with the most recent publicly available calculation that determined KU's highest cost unit available ranged between \$123.25 to \$158.75 and LG&E's highest cost unit available ranged from \$104.39 to \$117.69.<sup>16</sup> LG&E/KU further testified that they expect that the highest cost unit available each hour, and the overall hourly incremental cost of generation, including variable operation and maintenance costs, and variable fuel costs, will all likely increase

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<sup>15</sup> Hearing Video Transcript (HVT) of the Oct. 27, 2020 Hearing at 11:22:23–11:25:13.

<sup>16</sup> Case No. 2016-00003, *An Examination of the Application of the Fuel Adjustment Clause of Kentucky Utilities Company from May 1, 2015 through October 31, 2015* (Ky. PSC July 7, 2016) at 2; Case No. 2016-00004, *An Examination of the Application of the Fuel Adjustment Clause of Louisville Gas and Electric Company from May 1, 2015 through October 31, 2015* (Ky. PSC July 7, 2016) at 2.

over the 20-year term of the PPA.<sup>17</sup> Based on the above information, the PPA would almost certainly always be an economy energy purchase under the current definition of economy energy purchase. Therefore, there is no need to introduce risk by applying an unduly complicated alternative that nets cost recovery over the 20-year term of the PPA.

Finally, while the Commission is concerned regarding the potential proliferation of similar energy-only PPAs, the Commission notes that certain characteristics inherent in this proposal provide a curb against substantial duplication of electric utilities' assets. As a non-firm energy-only purchase agreement, the PPA cannot be relied upon for generating capacity used to meet the statutory requirement that electric utilities provide adequate, efficient and reasonable service. Utilities operating in the Commonwealth are well aware that one of the Commission's "most important roles" in administering KRS Chapter 278, "is to provide the lowest possible cost to the rate payer."<sup>18</sup> Electric utilities' generation and energy decisions play a fundamental role in ensuring service is provided to customers at "the lowest possible cost." As part of an electric utility's planning to ensure compliance with that requirement, they must ensure their actions do not lead to wasteful duplication, or procuring resources or assets in "excess of capacity over need."<sup>19</sup> As such, the Commission believes that electric utilities cognizant of the law's least-cost principles will carefully consider whether these types of agreements, individually or in the aggregate, result in fair, just and reasonable rates for service. Further, an electric utility does not receive a return on an energy-only power purchase agreement. These

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<sup>17</sup> HVT of the Oct. 27, 2020 Hearing at 11:24:16 and 11:25:12.

<sup>18</sup> *Public Service Comm'n v. Dewitt Water District*, 720 S.W.2d 725 (Ky. 1986).

<sup>19</sup> *Kentucky Utilities Co. v. Public Service Comm'n*, 252 S.W.2d 885 (Ky. 1952).

limitations serve as a curb against unreasonable over procurement or reliance on agreements with characteristics similar to the proposal at hand.

IT IS HEREBY ORDERED that:

1. The May 8, 2020 Order, as modified by our June 18, 2020 Order, is amended to reflect the modifications discussed in this Order.
2. All other provisions of the May 8, 2020 Order, as modified by the June 18, 2020 Order, shall remain in full force and effect.
3. This case is closed and removed from the Commission's docket.

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By the Commission

ENTERED  
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KENTUCKY PUBLIC  
SERVICE COMMISSION

ATTEST:

  
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Executive Director

Case No. 2020-00016

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