

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)	CASE NO.
CONTRACT AND TWO RENEWABLE POWER)	2020-00016
AGREEMENTS TO SATISFY CUSTOMER)	
REQUESTS FOR A RENEWABLE ENERGY)	
SOURCE UNDER GREEN TARIFF OPTION #3)	

ORDER

On January 23, 2020, Louisville Gas and Electric Company (LG&E) and Kentucky Utilities Company (KU), (jointly LG&E/KU) filed an application (Application), pursuant to KRS 278.300 and 807 KAR 5:001 seeking the Commission’s approval of a 20-year solar power purchase agreement (PPA), two 20-year renewable power agreements (RPA) with industrial customers, and a proposed amendment to LG&E/KU’s respective Green Tariff Standard Rate Rider GT (Green Tariff) to increase the maximum amount of renewable energy that may be purchased through RPAs.

LG&E/KU requested a decision no later than March 31, 2020. Finding that its investigation could not be completed by that date, by Order entered February 12, 2020, the Commission established a procedural schedule that balanced LG&E/KU’s need for a timely decision and the Commission’s statutory duty to conduct a thorough, robust review of facts and law. In the February 12, 2020 Order, the Commission continued its investigation of the PPA beyond the 60-day period specified in KRS 278.300(2) and committed to issue a decision on or before May 15, 2020. In a March 17, 2020 Order,

the Commission suspended the effective date of the proposed amended Green Tariff from March 31, 2020, to May 15, 2020.

The Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention (Attorney General) is the only intervenor in this case. A formal conference was held on February 6, 2020, for a general discussion of issues presented in the application. An informal conference was held on March 10, 2020, to discuss the applicable legal standard of review for the PPA. LG&E/KU responded to three rounds of discovery. Due to a public health state of emergency in Kentucky, the Commission canceled the hearing scheduled in this matter and established a briefing schedule. LG&E/KU and the Attorney General filed briefs pursuant to the brief schedule. This matter now stands submitted for a decision on the case record.

BACKGROUND

This matter arises from renewable power agreements entered into under LG&E/KU's recently approved Green Tariff and the need to obtain renewable energy to provide service under the Green Tariff in order to be responsive to large usage customers' sustainability goals and to develop renewable resource alternatives to promote economic development. In LG&E/KU's most recent rate cases, LG&E/KU requested, and the Commission approved, the Green Tariff that, among other things, included a new program for certain large customers to enter into renewable power agreements with LG&E/KU to purchase electrical output and all associated environmental attributes from a renewable energy generator (Option #3).¹ Green Tariff Option #3 requires LG&E/KU obtain

¹ Application at 7-8; Green Tariff Sheet No. 69 (Green Tariff); See Case No. 2018-00294, *Electronic Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates* (Ky. PSC Apr. 30, 2019); Case No. 2018-00295, *Electronic Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates* (Ky. PSC Apr. 30, 2019).

Commission approval for any and every renewable power agreement into which they enter, akin to the Commission's practice of approving special contracts. Additionally, if the renewable energy is obtained through a purchase power agreement, then the term of the renewable power agreement must be equivalent to the term of the power purchase agreement with the renewable energy provider.² LG&E/KU explained they included the provision for newly developed renewable generation in Green Tariff Option #3 because large corporations typically request that renewable energy be procured from a new renewable generation source that would not have been constructed but for the corporation's sustainability goals.³

Because LG&E/KU's current renewable resources would not qualify under Green Tariff Option #3, its tariff provision requires it to procure renewable energy from a new source.⁴ On February 4, 2019, while their most recent rate case was pending and prior to the approval of the tariffs proposed therein, LG&E/KU issued a request for proposal for 10 megawatts (MW) to 200 MW of renewable energy (Renewable RFP).⁵ LG&E/KU received proposals⁶ from 16 companies, with 94 initial and subsequent proposals, for

² Green Tariff Option #3; Direct Testimony of Robert M. Conroy (Conroy Testimony) at 6:11-14.

³ Direct Testimony of David S. Sinclair (Sinclair Testimony) at 6:15-21.

⁴ Application at 18; LG&E/KU Response to Commission Staff's First Request for Information (Response to Staff First Request), Item 2. LG&E/KU indicated that it may consider a self-build option for future renewable RFPs.

⁵ Sinclair Testimony at 5:7-8.

⁶ The Commission notes that LG&E/KU's supplemental response providing a copy of the responses to the Renewable RFP is overdue in Case No. 2018-00348, *Electronic 2018 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company* (filed Dec. 17, 2019) Response to Attorney General's Supplemental Request for Information at Item No. 1.

projects between 10 MW and 200 MW, and for terms between 10 and 30 years.⁷ Although the Renewable RFP allowed for generation from a variety of renewable sources, LG&E/KU received proposals primarily for solar energy, with a few for wind energy and battery storage options.⁸ LG&E/KU conducted a four-phase analysis in which a shortlist was developed from the lowest-cost proposals that were evaluated through a production cost analysis to estimate the proposal's impact to system energy costs.⁹ LG&E/KU stated that the primary factor in the evaluation was the "potential to lower customers' energy costs over the life of the contract with the least risk."¹⁰ LG&E/KU asked the shortlisted bidders to submit revised proposals for a standardized set of contract capacities, terms, and start dates; the top proposal was evaluated based on new fuel forecasts from LG&E/KU's 2020 Business Plan.¹¹ LG&E/KU entered into the PPA with the winning bidder, Rhudes Creek Solar, LLC (Rhudes Creek Solar), a wholly owned subsidiary of ibV Energy Partners (ibV).¹²

During the RFP process, LG&E/KU met with industrial customers who had expressed interest in procuring renewable energy pursuant to Green Tariff Option #3, including Toyota Motor Manufacturing, Kentucky, Inc. (Toyota) and Dow Silicones

⁷ Application at 10; Sinclair Testimony at 7:2-3; Sinclair Testimony, Exhibit DSS-2 at 3.

⁸ Sinclair Testimony at 7:2-5; Sinclair Testimony, Exhibit DSS-1 at 4 of 8. The eligible renewable sources included solar, wind, hydroelectric, geothermal, landfill gas, biomass, biodiesel, agricultural crops or waste, all animal and organic waste, and all energy crops.

⁹ Sinclair Testimony, Exhibit DSS-2 at 5.

¹⁰ Sinclair Testimony at 8:21-22.

¹¹ *Id.* at 8:8-9; Sinclair Testimony, Exhibit DSS-2 at 5.

¹² Sinclair Testimony at 9:6-11.

Corporation (Dow).¹³ LG&E/KU negotiated the RPAs with 50 percent allocated to Toyota and 25 percent allocated to Dow.¹⁴ The remaining 25 percent of the 100 MW PPA will be allocated to native load customers and, according to LG&E/KU, will displace higher-cost energy in the economic dispatch of their fossil fuel generation units.¹⁵

PROPOSED TRANSACTIONS

Proposed PPA

LG&E/KU requested approval of a 20-year contract to purchase the 100 MW of energy from a solar generation facility (Solar Facility) that Rhudes Creek Solar will construct in Hardin County, Kentucky, with a commercial operation target date of December 31, 2021.¹⁶ LG&E/KU and Rhudes Creek Solar executed the PPA on November 22, 2019, with amendments executed in January 2020.¹⁷ The PPA is contingent upon LG&E/KU obtaining Commission approval and Rhudes Creek Solar obtaining all regulatory and land use approvals for the Solar Facility and meeting the specified milestones.¹⁸

Of the 100 MW, 50 MW is allocated to Toyota, 25 MW is allocated to Dow, and 25 MW is allocated to serve native load.¹⁹ Of the 25 percent allocated to native load, 39

¹³ Sinclair Testimony, Exhibit DSS-2 at 3.

¹⁴ Application at 19.

¹⁵ *Id.*

¹⁶ *Id.* at 11(a)-(d); Sinclair Testimony at 9:5-15.

¹⁷ Application, Exhibit 1.

¹⁸ *Id.* at 11(d); Sinclair Testimony at 9:5-15, 22:2-9.

¹⁹ Application at 19.

percent is assigned to LG&E and 61 percent is assigned to KU.²⁰ All renewable energy credits (REC) associated with the solar energy purchased by LG&E/KU will be transferred to LG&E/KU. LG&E/KU will transfer the RECS to Toyota and Dow in proportion to their respective purchases of solar energy and RECs associated with LG&E/KU's 25 MW will remain with LG&E/KU.²¹ LG&E/KU proposed that the PPA costs for the 25 MW allocated to native load be treated as a purchase power expense and passed through LG&E/KU's fuel adjustment clause (FAC).²² In addition, any revenues derived from the sale of RECs associated with this energy will also flow through each company's FAC in the same manner as the RECs associated with the Brown Solar Facility.²³ LG&E/KU propose that the solar energy be placed at the bottom of the generation dispatch stack through LG&E/KU's After-the-Fact Billing (AFB) process, which will displace higher-cost energy²⁴ and contend that, coupled with the sale of RECs, native load customers will see a reduction in overall fuel costs.²⁵

LG&E/KU asserted that, based on their economic analysis, the purchase price for the solar energy compares favorably to fossil fuel-generated energy over the 20-year term

²⁰ Sinclair Testimony at Table 1.

²¹ Application at 11(a)-(b); Sinclair Testimony at 15:3-11.

²² Sinclair Testimony at 15:6-9; Conroy Testimony at 9:1-4; LG&E/KU Reply Brief at 8.

²³ Sinclair Testimony at 15.

²⁴ LG&E/KU's response to Staff's First Request, Item 10.

²⁵ *Id.* at 9. Also see LG&E/KU's Response to Staff's Second Request for Information (Response to Staff's Second Request), Item 5d(2). In 2019, the energy from the Brown Solar Facility resulted in \$422,923 in energy savings for customers, or about \$24.35/MWh. Selling the associated RECs generated an additional \$165,844 of revenue (\$9.55 per REC) and resulted in a total average savings of \$588,767 or \$33.90/MWh.

of the PPA.²⁶ Rhudes Creek Solar proposed both level and escalating pricing. LG&E/KU stated that they selected the level price option for four reasons: (1) so that PPA price in the future would not be out of line with potential new renewable generation should future solar generation costs decline; (2) to reduce the risk from long-term fuel price escalation; (3) to reduce risk from future REC price levels; and (4) because industrial customers seeking renewable energy under Green Tariff Option #3 prefer a stable price.²⁷

LG&E/KU explained that they evaluated the PPA under 48 different scenarios that included uncertainty in fuel prices, CO₂ emissions prices, REC prices, and different timing for the retirement of existing generating units.²⁸ LG&E/KU asserted that, based on their economic analysis, the PPA will likely reduce energy costs on a present value basis over the 20-year term, depending upon commodity prices.²⁹

LG&E/KU asserted that rating agencies, such as Moody's Investor Services (Moody's) and S&P Global Ratings (S&P), will not treat the proposed PPA as a debt obligation, and thus LG&E/KU do not expect the rating agencies will impute debt to LG&E/KU's balance sheet.³⁰ LG&E/KU explained that both Moody's published guidance distinguishing between power purchase agreements with capacity payments, which Moody's treats as debt obligations, and agreements, such as the proposed PPA, with pass-through costs, which Moody's treats as operating costs without long-term, debt-like

²⁶ Application at 13.

²⁷ Sinclair Testimony at 10:17-22.

²⁸ *Id.* at 15:14-16:1.

²⁹ *Id.* at 17:3-6.

³⁰ LG&E/KU's Response to Attorney General's Third Request for Information (Response to Attorney General's Third Request), Item 8.

attributes.³¹ Because the rating agencies do not treat agreements such as the PPA as an evidence of indebtedness, the PPA will not impact LG&E/KU's balance sheet.

Proposed RPA

LG&E/KU stated that most of the RPA terms mirror the PPA. In particular, LG&E/KU passes through to Toyota and Dow all commercial terms, benefits, and risks associated with the PPA.³² Both RPAs and the PPA are for a 20-year term, Toyota and Dow pay the same price to KU that KU pays to Rhudes Creek Solar for the energy output, and the RECs that KU receives from Rhudes Creek Solar for energy allocated to Toyota and Dow will be transferred to Toyota and Dow.³³

The energy will be transmitted from the Rhudes Creek Solar Facility, which is located in LG&E's service territory, to KU, who will deliver the energy to Toyota and Dow in 15-minute intervals based upon Toyota's and Dow's current tariffs.³⁴ Toyota and Dow will be billed under their applicable tariff rate and the solar energy charge per kWh.³⁵ Toyota and Dow will not be subject to two energy charges from the same kWh used because the allocated solar energy kWh will be offset against a kWh of their respective energy usage.³⁶ Although Toyota's and Dow's energy use from LG&E/KU's generating facilities will be reduced by the amount of its energy use under the RPA, Toyota and Dow

³¹ *Id.*

³² Sinclair Testimony at 25:8-12.

³³ *Id.*

³⁴ *Id.* at 26:12-16.

³⁵ Conroy Testimony at 10:3-6.

³⁶ *Id.* at 10:6-8.

will continue to pay the same Base Demand charge, which consists of transmission and distribution costs for providing service.³⁷ LG&E/KU propose that Toyota and Dow's peak and intermediate demands be reduced by the amount of delivered allocated energy during any 15-minute interval to the extent that delivered allocated energy coincides with their energy usage.³⁸

When the energy delivered is greater than Toyota or Dow's load, LG&E/KU will buy back the energy at the utilities' respective avoided energy costs pursuant to LG&E/KU's Large Capacity Cogeneration and Small Power Production Qualifying Facilities tariff rider with the excess energy used to serve native customer load.³⁹ LG&E/KU explained that the Commission approved this same methodology for LG&E/KU's Solar Share program.⁴⁰

Proposed Green Tariff Modification

Currently, the Green Tariff Option #3 caps the available output pursuant to renewable power agreements to a system cumulative 50 MW each for LG&E and KU. LG&E/KU requested to amend their respective tariffs to increase the limit to 125 MW.

STANDARD OF REVIEW

Because there is a dispute regarding the applicable standard of review of the PPA under KRS 278.300, which requires Commission approval for evidences of indebtedness, and KRS 278.020(1), the certificate of public need and convenience statute, the

³⁷ Sinclair Testimony at 26:7-12.

³⁸ Conroy Testimony at 10.

³⁹ Sinclair Testimony at 25:19-26:3, 26:14-18.

⁴⁰ Conroy Testimony at 10.

Commission must first address the standard of review that we must apply in our evaluation of the PPA. In Administrative Case No. 350, the Commission encouraged, but did not require, utilities to file long-term power purchase agreements for pre-approval pursuant to KRS 278.300, stating:

In addition, these contracts may well require prior approval under KRS 278.300 if they constitute evidence of indebtedness. In particular, the inclusion in such contracts of minimum payment obligations or take/pay provisions may necessitate prior approval.⁴¹

In subsequent reviews of power purchase agreements, the Commission affirmed that the KRS 278.300 standard of review applied when the agreements included minimum obligation or take/pay provisions. For example, in Case No. 2014-00321, LG&E/KU requested a declaratory order whether approval under KRS 278.300 was required for a firm generation capacity purchase agreement that contained minimum payment obligations and minimum production requirements.⁴² The Commission explained that:

The minimum payment obligations in the form of fixed capacity and O&M charges and the requirement that [LG&E/KU] take a minimum amount of production over the term of the Agreement constitute long-term financial obligations that are appropriate for Commission review and approval under KRS 278.300.⁴³

⁴¹ Administrative Case No. 350, *The Consideration and Determination of the Appropriateness of Implementing a Ratemaking Standard Pertaining to the Purchase of Long-Term Wholesale Power by Electric Utilities as Required in Section 712 of the Energy Policy Act of 1992* (Ky PSC. Oct. 25, 1993), final Order at 8-9.

⁴² Case No. 2014-00321, *Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Declaratory Order and Approval Pursuant to KRS 278.300 for a Capacity Purchase and Tolling Agreement* (Ky. PSC Nov. 4, 2004), Order at 6-7.

⁴³ *Id.* at 7.

In addition to a review under KRS 278.300, the Commission will also review a purchase power agreement under the standards established in KRS 278.020(1) if the financial and operational impact of the agreement on ratepayers is the same as if new generation were being constructed.⁴⁴

LG&E/KU argued that the standard of review was whether the PPA was a reasonable and prudent means of providing a benefit to customers. LG&E/KU expressly rejected the applicability of KRS 278.020(1), arguing that the energy-only PPA would not have a financial and operational impact on ratepayers because there are no operating or maintenance obligations, no impact to rate base or LG&E/KU's balance sheets, and LG&E/KU does not have an obligation to pay unless the energy is delivered. Additionally, LG&E/KU argue that the 25 MW allocated to native load is analogous to economy energy, and therefore the costs and REC-sale revenue for the 25 MW segment will be passed through LG&E/KU's FACs.

The Attorney General argued that both KRS 278.300 and KRS 278.020(1) applied. The Attorney General asserted that, while the financial impact may not be the same as if new generation were constructed, there was a financial impact to customers that must be considered in the Commission's evaluation of the reasonableness of the PPA.

Based upon a review of the terms of the PPA, the case record, and applicable law, and being otherwise sufficiently advised, the Commission finds that neither KRS 278.300 nor KRS 278.020(1) apply to the facts of this PPA. Unlike the cases cited in

⁴⁴ Case No. 2009-00545, *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* (Ky. PSC June 28, 2010), final Order at 5-6; Case No. 2013-00144, *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 Grant of All Other Required Approvals and Relief* (Ky. PSC Oct. 10, 2013), final Order at 12-14.

Administrative Case No. 350 or Case No. 2014-00321, the proposed PPA does not include a minimum obligation or take/pay provision. Further, the instant PPA is for non-firm energy only, and includes no capacity. Here, LG&E/KU's contractual obligation to pay is based upon the actual receipt of output at a specified point of delivery and the payment amount is determined by the amount of output delivered. Additionally, the price that LG&E/KU pays for the output is the same price that LG&E/KU receives from Toyota and Dow, so LG&E/KU will recover the cost for 75 percent of output directly from Toyota and Dow under the RPAs. Regarding the 25 percent of energy from the Solar Facility allocated to native load, LG&E/KU proposed to pass any costs, offset by REC-sale revenue associated with that 25 percent of energy through LG&E/KU's FACs, which is subject to scrutiny in periodic reviews. Because the 75 percent of output allocated to Toyota and Dow will be recovered directly from the two industrial customers that the PPA was obtained to serve, and the costs of the 25 percent allocated to native load will be scrutinized through periodic FAC proceedings, the Commission finds that the obligations under the proposed PPA do not constitute evidences of indebtedness pursuant to the Commission's decision in Administrative Case No. 350. Therefore, we will not apply KRS 278.300 as a standard of review for the PPA.

For the same reasons set forth above, the PPA does not have the same financial and operational impact on LG&E/KU ratepayers as the construction of new generation and we will not apply KRS 278.020(1) as a standard of review for the PPA.

Pursuant to the terms of Green Tariff Option #3, Commission review and approval is required for the RPAs. Therefore, the Commission will apply the same scrutiny to the RPAs as it does any other special contract filed with the Commission.

PARTIES' ARGUMENTS

Summary of LG&E/KU's Argument

1. PPA

LG&E/KU asserted that they met their burden of proof because the PPA will financially benefit LG&E/KU's customers, and is reasonable and prudent.⁴⁵ LG&E/KU argued that the PPA is reasonable and necessary to carry out the purpose of the Commission-approved Green Tariff Option #3 because LG&E/KU does not have sufficient renewable energy sources without the PPA to meet Toyota's and Dow's requests for renewable energy under that tariff. LG&E/KU asserted that the PPA is a reasonable and prudent investment because both the 75 percent allocated to Toyota and Dow, and the 25 percent allocated to native load displace higher-cost fossil fuel generation in economic dispatch, and thus will reduce energy costs to all ratepayers.⁴⁶ LG&E/KU maintained that the PPA is consistent with and necessary for LG&E/KU's performance of their obligation to serve the public, that there is a documented need for renewable energy, the PPA is consistent with least cost principles, and will result in significant benefits for ratepayers through reduced fuel costs.⁴⁷

In light of the potential for the Commission to modify the PPA and approve only the 75 MW allocated for Toyota and Dow, LG&E/KU argued that the PPA is a single, unitary contract that the Commission should approve in its entirety. LG&E/KU contended that

⁴⁵ LG&E/KU Reply Brief at 1–7.

⁴⁶ Application at 19–20; Sinclair Testimony at 28:15–17; LG&E/KU Reply Brief at 14.

⁴⁷ Application at 19–21.

approving less than the entire 100 MW will entail substantial delays because Rhudes Creek Solar, Toyota, and Dow will request to renegotiate the respective PPA and RPAs.

2. RPAs

LG&E/KU stated that the RPAs were negotiated to be consistent with Green Tariff Option #3 and consistent with LG&E/KU's rights and responsibilities under the PPA, and therefore the Commission should approve the RPAs. LG&E/KU asserted that the RPAs meet Toyota's and Dow's respective needs for renewable energy in a cost-effective manner without any material impact on other ratepayers.⁴⁸ LG&E/KU maintained that they mitigated risks to themselves and their customers for the entirety of the 20-year term through performance and security agreements. For example, if Toyota or Dow ceased operations, a designated affiliate of each company would become financially responsible under the RPA terms.⁴⁹

3. Amendment to Green Tariff

LG&E/KU requested to increase the system cumulative output available under renewable power agreements to 125 MW each to LG&E and KU due to current interest and the potential that eligible customers will request more renewable power in the future.⁵⁰ LG&E/KU explained that the proposed increase from 50 MW to 125 MW, which represents a small fraction of their total generating capacity, can be integrated into LG&E/KU's system without material issues.⁵¹ LG&E/KU maintained that, while the 125

⁴⁸ Sinclair Testimony at 29:13-16; Conroy Testimony at 9:13-14.

⁴⁹ Sinclair Testimony at 28:19-29:6.

⁵⁰ Application at 28; Conroy Testimony at 11:19-24.

⁵¹ Response to Staff's First Request, Item 11(a)-(b).

MW is not the upper limit on the amount of renewables that can be integrated without material issues, they are taking an incremental approach to integrating renewables on their system.⁵²

Summary of Attorney General's Argument

1. PPA

The Attorney General encouraged the Commission to approve the 75 MW segment of the PPA, explaining that LG&E/KU satisfied its burden of proof because the 75 MW allocated to Toyota and Dow is offered pursuant to and consistent with Green Tariff Option #3.⁵³ The Attorney General acknowledged there is a need for the 75 MW allocated to Toyota and Dow to satisfy their respective corporate preference for energy from a renewable source.⁵⁴ The Attorney General maintained that the 75 MW allocated to Toyota and Dow will not result in wasteful duplication because, when solar energy is not being produced, their electricity will be generated from LG&E/KU's existing generation sources.⁵⁵

The Attorney General urged the Commission to modify the PPA and disallow the 25 MW allocated to native load because LG&E/KU failed to meet their burden of proof. First, the Attorney General claimed that LG&E/KU testified that the cost for the 25 MW allocated to native load would be recovered through base rates and questioned whether LG&E/KU provided sufficient details to support LG&E/KU's assertion that revenue from

⁵² *Id.* at Item 11(c).

⁵³ Attorney General Brief at 1–2,

⁵⁴ *Id.* at 7.

⁵⁵ *Id.* at 7–8.

the sale of RECs would reduce energy costs to customers.⁵⁶ Next, the Attorney General pointed out that LG&E/KU acknowledged that they have sufficient resources to meet existing native load and that the entire 100 MW of solar energy is not needed for reliability or capacity.⁵⁷ Finally, the Attorney General asserted that disapproval of the 25 MW allocated to native load would not prevent Toyota or Dow, or any other eligible customer, from obtaining renewable energy.⁵⁸

The Attorney General contended that, if the Commission approved the 25 MW allocated to native load, that LG&E/KU should be required to file periodic reports with the Commission to demonstrate that ratepayers do not bear additional costs or subsidize Toyota and Dow by paying for unneeded energy.⁵⁹

2. RPA

The Attorney General encouraged the Commission to approve the RPAs with Toyota and Dow because both are offered pursuant to and consistent with Green Tariff Option #3.⁶⁰ The Attorney General noted that large corporations have adopted policies that promote renewable generation. The Attorney General asserted that Toyota's and Dow's decisions to spend money on a renewable energy source in conjunction with their respective corporate policies is a decision that is subject to their respective business

⁵⁶ *Id.* at 6–7.

⁵⁷ *Id.* at 8.

⁵⁸ *Id.* at 8.

⁵⁹ *Id.* at 8–9.

⁶⁰ *Id.* at 1–2, 4–5.

judgment, but any excess costs associated with that decision should be borne by Toyota and Dow, and not ratepayers.⁶¹

3. Amendment to Green Tariff

The Attorney General's brief was silent as to his position on the amendment to the Green Tariff.

DISCUSSION AND FINDINGS

As an initial matter, the Commission agrees that renewable energy resources should be available for corporations with sustainability goals as one of the economic development tools that convey that Kentucky is open for business. This position was a primary basis for our decision to approve LG&E/KU's Green Tariff provisions as presented and supported in LG&E/KU's 2018 rate cases. Nevertheless, the Commission adds the caveat that special contracts entered into to promote corporate sustainability goals should ensure that non-participating customers are no worse off than if the special contracts for renewable energy did not exist. Non-participating customers must not bear additional costs that arise from a jurisdictional utility's actions in attempting to meet a corporation's own self-imposed sustainability goal.

1. PPA

The evidence of record reflects that LG&E/KU do not have sufficient renewable resources to serve Toyota and Dow under Green Tariff Option #3 absent the PPA. Additionally, LG&E/KU will recover costs for the 75 percent of energy allocated to Toyota and Dow directly from those two customers. The evidence of record further supports the conclusion that LG&E/KU sufficiently mitigated the risk of Toyota's and Dow's respective

⁶¹ *Id.* at 2.

nonperformance or default through the RPA terms, which include, among other things, security agreements.

The Commission finds that the PPA is necessary to effectuate the RPAs. As noted before, based on the facts presented, the Commission finds its approval is not required for LG&E/KU to enter into the PPA as it relates to its allocation to native load. The Commission makes this determination based on a number of facts and elements unique to this matter. First, LG&E/KU note that “[t]he portion of the PPA energy allocated to native load customers is analogous to an economy energy purchase,” and that they intend to recover those costs through their FACs.⁶² Second, the proposed PPA includes no provision for capacity payments or obligations. As such, the Commission will treat the portion of energy allocated to native load from the PPA as economy energy purchases, and will review those purchases as they ordinarily would similar purchases through the FAC. As the costs and review will occur through the FAC, pre-approval of the PPA would be inappropriate, as the intended purpose of the PPA is to displace higher cost energy in the economic dispatch of LG&E/KU’s fossil fuel generation units.⁶³ In order to demonstrate actual savings and to track the benefits of the contract for native load customers, LG&E/KU should document the fuel cost savings and REC revenues in their respective monthly FAC filings. The Commission looks forward to reviewing the energy purchases arising from the PPA, net of REC sales, in subsequent FAC reviews.

On a related note, because LG&E/KU’s analyses show that the net benefit of the PPA for native load customers in the near-term depends heavily on a favorable sale price

⁶² Response to Staff’s Second Request, Item 1.

⁶³ Application at 19.

of RECs, there is the possibility that energy arising from the PPA may not necessarily be “economy” in every 15-minute interval for which it is purchased. Given the nature of the transaction, and the facts as presented, the Commission finds that the economics of the energy purchases under the PPA, net of REC sales, should be reviewed over the entirety of a 2-year FAC review. For instance, LG&E/KU should perform their AFB process both with and without the energy purchases from the instant PPA over the entire 2-year FAC review, net of REC sales, to determine the reasonableness of the incurrence and recovery of the costs expended. LG&E/KU will be permitted to net the gains and losses from their purchases under the instant PPA, net of REC sales, over the entirety of the 2-year review periods. This type of treatment, particularly over such a long-period of time, is reasonable given the relative complexities of integrating renewables, the levelized price of the energy resulting from the PPA, and the economics of the project as presented to the Commission. The Commission reserves its rights to review fuel and energy purchases and procedures of LG&E/KU during general rate cases and FAC proceedings.

2. RPA

Regarding the 75 percent of the energy resulting from the PPA allocated to Toyota and Dow, the evidence of record supports the conclusion that there is a need for renewable energy to provide service under Green Tariff Option #3, primarily because LG&E/KU do not have sufficient renewable energy resources to meet Toyota’s and Dow’s respective requests.

LG&E/KU maintain that the PPA is not a purchase of capacity, but of non-firm economy energy only.⁶⁴ The Commission notes that in 2019 LG&E/KU’s summer reserve

⁶⁴ Conroy Testimony at 8:17. *Also, see* Response to Attorney General’s Third Request, Item 5. A “capacity” value may be assigned to a solar energy resources based upon the statistical likelihood of the

margin was 1,556 MW or about 25 percent, compared to a targeted reserve margin of between 17 and 25 percent.⁶⁵ In addition, LG&E/KU's forecasted reserve margin through 2033 hovers between 24 and 26 percent.⁶⁶

LG&E/KU explain that under the proposed RPAs, Dow and Toyota will pay a renewable energy charge per kWh for allocated solar energy in 15-minute intervals, which will offset each customer's energy usage so that the customer is not subjected to two energy charges for the same kWh used.⁶⁷ LG&E/KU propose that Dow's and Toyota's peak and intermediate demands be reduced by the amount of delivered allocated energy during any 15-minute interval to the extent that delivered allocated energy coincides with their energy usage.⁶⁸ There will be no offset for these customers' base demand charge because the base demand charge is designed to recover costs associated with the distribution and transmission systems.⁶⁹ LG&E/KU maintain that there would be no re-allocation of demand costs to their remaining native load customers between base rate cases; however, in future rate case proceedings, it is likely that the costs associated with intermediate and peak-demand charges will be allocated to other customers.⁷⁰

energy produced will occur at the time of system peak. However, the date, time, and weather conditions aligning with system peak, any capacity value shown in the forecasted resource plan is not the same as with a dispatchable resource.”

⁶⁵ Response to Staff's First Request, Item 5.

⁶⁶ See Case No. 2018-00348, *Louisville Gas and Electric Company and Kentucky Utilities Company* (filed October 19, 2018) Table 8-14 at 8-23 and Response to Staff's First Request, Item 5.

⁶⁷ Conroy Testimony at 10.

⁶⁸ *Id.*

⁶⁹ *Id.*; Application, Exhibit 2 Section 2.7(e) at 5 of 12 and Exhibit 3 Section 2.7(e) at 5 of 11.

⁷⁰ See LG&E/KU's Response to the Attorney General's First Request for Information, Item 5.

The Commission agrees with the provision of the RPAs not to reduce base demand charges because the RPA customers continue to utilize distribution and transmission systems that are associated with and recovered through the base demand charge. However, the Commission disagrees with the provision that intermediate and peak demand charges should be reduced by coincident solar energy production because intermediate and peak demand costs should not be re-allocated to other customers in a future rate proceeding. The Commission notes that in addition to the distribution and transmission systems, LG&E/KU's generation capacity and assets were constructed in order to serve existing customer needs. Toyota and Dow continue to be all-requirements customers of KU, and LG&E/KU's generating assets will continue to be available to serve Dow and Toyota's demands. The RPAs with Dow and Toyota do not relieve LG&E/KU's obligation to plan for the provision of all customers' energy needs, including Dow and Toyota. Therefore, the RPA customers, as all other customers, should bear their fair share of the costs to provide reliable energy. The Commission will not allow for utilities under its jurisdiction to provide special contracts to customers that satisfies tariff provisions that were proposed and approved to fulfill corporate goals that ultimately result in significant cost shifts. The proposed RPAs are further unreasonable due to the fact that Green Tariff Option #3 is limited to only a few of the utilities' customers, but as proposed, the RPAs will likely shift costs to customers within and amongst LG&E/KU's customer classes. The Commission therefore finds that Section 2.7(e), Peak and Intermediate Demand Charge Offsets of the RPAs are not reasonable and should not be approved. In its next rate proceeding, KU should demonstrate that no re-allocation costs, particularly production costs, have occurred or will occur as a result of these and any

RPA's under Green Tariff Option #3. This will be a continuing requirement for all rate cases as long as LG&E/KU's Green Tariff Option #3 is in effect.

For the above reasons and with the above modifications, the Commission finds that the provisions of the RPA regarding the 50 MW to serve Toyota and 25 MW to serve Dow satisfy the standard of review pursuant to KRS 278.300. The RPA's are for a lawful object within the corporate purposes of LG&E/KU because, with the above modification, they effectuate the terms and conditions of service contained in Green Tariff Option #3 without shifting costs to nonparticipants, and Toyota and Dow will continue to pay for legacy assets; are necessary or appropriate for or consistent with the proper performance by LG&E/KU because, with the above modification, they effectuate the terms and conditions of service contained in Green Tariff Option #3 without shifting costs to nonparticipants, and Toyota and Dow will continue to pay for legacy assets, and are reasonably necessary and appropriate for such purpose.

3. Green Tariff Modifications

Based upon the voluntary nature of the tariff and evidence that the additional megawatts of renewable energy can be integrated into LG&E/KU's system without material impact, the Commission finds that the proposed amendment to increase the amount of output available under renewable power agreements to 125 MW each for LG&E and KU is reasonable and should be granted.

The Commission is concerned that Green Tariff Option #3 does not contain sufficient parameters and clarity to provide industrial customers with regulatory certainty that the Commission will approve the RPA's. The Commission finds that additional terms should be added to Green Tariff Option #3 so that industrial customers have regulatory

certainty regarding the terms of renewable power agreements that the Commission will consider when reviewing renewable power agreements. LG&E/KU should further amend their tariffs to establish clear guidelines, including but not limited to:

- Methodology that will ensure that participants do not shift costs to nonparticipants and participants will continue to pay for legacy assets through fixed and variable charges;

- Multiple facilities can aggregate consumption;
- Set forth the credits for the avoided cost of base fuel per MWh, the FAC equal to the renewable energy delivered, and the avoided cost of variable environmental surcharge equal to the delivered renewable energy for each participating agreement and state that credits cannot exceed marginal cost of energy delivered; and

- State and explain whether participating customer can choose the type of renewable energy source, while limiting participants' ability to request or designate any particular generating facility.

4. Other Legal Issues

In the Application, LG&E/KU requested to deviate from the notice requirements of 807 KAR 5:011, Section 8, which requires public notice of the proposed revision to the Green Tariff to increase the amount of energy eligible customers can obtain through a renewable power agreement. As a basis for the request, LG&E/KU asserted that the tariff is voluntary, the proposed amendment would not impact the rates of any customer, and that the benefits from publication are relatively small in comparison to the cost of publication.⁷¹ LG&E/KU cited to previous orders in which the Commission found good

⁷¹ Application at 30.

cause to deviate from notice requirements when the cost of providing notice would outweigh the benefit.⁷² Although disputing that the notice regulation was applicable to the proposed amendment, LG&E/KU stated that they would post a copy of notice of the amendment on their websites with a hyperlink to the application on the Commission's website.⁷³ The Commission finds that public notice is required because the proposed change in the quantity of output changes the delivery or rendering of a customer's service. The Commission, however, also finds that the facts of this case establish good cause to deviate from 807 KAR 5:011, Section 8. Considering the voluntary nature of the proposed tariff, publishing notice on LG&E/KU's website is sufficient to inform eligible customers and allow for written comments to be filed with the Commission.

IT IS THEREFORE ORDERED that:

1. The PPA, as set forth in the Application, is necessary to effectuate the RPAs.
2. The RPA with Toyota, subject to the modifications set forth above, is approved.
3. The RPA with Dow, subject to the modifications set forth above, is approved.
4. LG&E/KU's request to modify their respective tariffs to increase the amount of output available under renewable power agreements to 125 MW each is approved.

⁷² *Id.* at 30.

⁷³ *Id.* at 29. We note that in one sentence, LG&E/KU refer only to "KU" publishing notice, but elsewhere refer to "the Companies," meaning LG&E and KU.

5. LG&E/KU shall amend their respective Green Tariff Option #3 to set forth specific terms and conditions for service on or before October 1, 2020, or in their next rate case, whichever occurs first.

6. Within 20 days from the date of entry of this order, LG&E shall file with the Commission using the Commission's electronic tariff filing system, its revised tariff sheets as approved in this Order and reflecting that they were approved pursuant to this Order.

7. Within 20 days from the date of entry of this order, KU shall file with the Commission using the Commission's electronic tariff filing system, its revised tariff sheets as approved in this Order and reflecting that they were approved pursuant to this Order.

8. Within 20 days from the date of entry of this order, KU shall file with the Commission using the Commission's electronic tariff filing system, the Toyota and Dow RPAs as approved and modified herein.

9. This case is closed and removed from the Commission's docket.

By the Commission

ENTERED
MAY 08 2020 rcs
KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:



Executive Director

Case No. 2020-00016

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