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April 24, 2014

**VIA HAND DELIVERY**

Jeff DeRouen  
Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort, KY 40601

**RE: Jeff M. Short v. Kentucky Utilities Company**  
**Case No. 2013-00287**

Dear Mr. DeRouen:

Enclosed please find, for filing, the original and ten (10) copies of the Post-Hearing Brief of Kentucky Utilities Company in the above-referenced matter. Please confirm your receipt of this filing by placing the stamp of your Office with the date received on the enclosed additional copies and return them to me via our officer courier.

Sincerely,

W. Duncan Crosby III

WDC:ec  
Enclosures

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**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

**JEFF M. SHORT,**

**COMPLAINANT**

**v.**

**KENTUCKY UTILITIES COMPANY,**

**DEFENDANT**

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**CASE NO. 2013-00287**

**POST-HEARING BRIEF OF KENTUCKY UTILITIES COMPANY**

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## INTRODUCTION

The Complainant, Jeff Short, asks the Commission to rewrite Kentucky's Net Metering Statutes (KRS 278.465 *et seq.*) to suit his purposes. But the Commission lacks the authority to grant the relief Mr. Short seeks; as a creature of statute, the Commission has only the powers the General Assembly has granted it under the very statutes Mr. Short challenges. Moreover, Mr. Short can achieve all of his claimed policy goals using the rates and riders already available to him under the tariff of the Defendant, Kentucky Utilities Company ("KU"). As Staff Counsel's cross-examination of Mr. Short demonstrated, a personal financial goal Mr. Short cannot achieve under KU's existing rates is the complete elimination of his energy charges while consuming over 2,700 kWh of net energy. Requiring KU's other customers to pay for Mr. Short's annual net energy consumption of over 2,700 kWh of annual net energy consumption would necessitate rewriting the specific procedure prescribed in Kentucky's Net Metering Statutes, a rewriting only the General Assembly, not the Commission, has the authority to perform.<sup>1</sup> KU therefore respectfully asks the Commission to affirm the plain meaning of Kentucky's Net Metering Statutes by denying Mr. Short all the relief he requests.

## STATEMENT OF FACTS

The material facts in the record of this case are not in dispute. Mr. Short is a KU customer who currently takes service under KU's Low Emission Vehicle ("LEV") Service rate schedule,<sup>2</sup> which contains three seasonally differentiated time-of-use rate periods: peak, intermediate, and off-peak.<sup>3</sup> After he shifted much of his electric usage to the off-peak period to

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<sup>1</sup> *Union Light, Heat and Power Company v. Kentucky Public Service Commission*, Ky., 271 S.W.2d 361, 365 (1954) ("[W]here ... the statute in itself prescribes the exact procedure the administrative agency may not add to or subtract from such a provision.") See also *Public Service Commission v. Attorney General of Commonwealth*, 860 S.W.2d 296 (Ky. App. 1993).

<sup>2</sup> Complaint at 1.

<sup>3</sup> Rate LEV has the same Basic Service Charge as KU's standard residential rate, Rate RS, and lacks a demand charge, as does Rate RS. Only the energy rates differ between the two rate schedules; Rate RS has a flat energy rate

achieve the resulting savings,<sup>4</sup> Mr. Short investigated the practicability of installing a PV electric generating system at his residence, and inquired of KU concerning adding service under KU's Net Metering Service ("NMS") Standard Rate Rider.<sup>5</sup> KU informed Mr. Short that he could take service under Rate LEV and Rider NMS, but that any net-excess generation he produced in a particular time period could be credited only against later usage in the same time period, e.g., peak net-excess generation could be used to offset only subsequent peak net consumption.<sup>6</sup> Mr. Short desired full-retail-rate monetary credits instead, and he eventually sent a letter to the Commission seeking resolution of the disagreement.<sup>7</sup> The Commission deemed the letter to be a customer complaint and opened this proceeding.<sup>8</sup>

### ARGUMENT

#### **I. Kentucky's Net Metering Statutes Plainly Forbid the Rate Treatment Mr. Short Seeks.**

Kentucky's Net Metering Statutes are straightforward, unambiguous, and easy to understand. The statutory provision primarily at issue here is KRS 278.466(3), which prescribes how a utility must measure and calculate the amount of electricity it bills to net-metering customers, both those on time-of-use rates and those on standard, non-time-of-use rates:

The amount of electricity billed to the eligible customer-generator using net metering shall be calculated by taking the difference between the electricity supplied by the retail electric supplier to the customer and the electricity generated and fed back by the customer. If time-of-day or time-of-use metering is used, the electricity fed back to the electric grid by the eligible customer-generator shall be net-metered and accounted for at the specific

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of \$0.07744 per kWh, whereas the LEV peak rate is \$0.14297 per kWh, the intermediate rate is \$0.07763 per kWh, and the off-peak rate is \$0.05587 per kWh. Kentucky Utilities Company, P.S.C. No. 16, First Revision of Original Sheet Nos. 5 and 79.

<sup>4</sup> Complaint at 2.

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

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

<sup>7</sup> Complaint.

<sup>8</sup> Order (July 15, 2013).

time it is fed back to the electric grid in accordance with the time-of-day or time-of-use billing agreement currently in place.

After a utility measures and calculates a net-metering customer's net usage or consumption, KRS 278.466(5)(b) states that the utility shall bill the customer for net usage in accordance with KRS 278.466(3). Similarly, KRS 278.466(5)(c) states that the utility shall credit the customer "for the excess kilowatt hours" for net production in accordance with KRS 278.466(3), and that the resulting "electricity credit shall appear on the customer-generator's next bill" and "carry forward for the life of the customer-generator's account." The plain meaning of these statutes is that utilities must bill net-metering customers for their net consumption or provide them kWh-denominated "electricity credit[s]" for net production in each billing period. For non-time-of-use customers, this means a utility must net all of a customer's kilowatt-hours of production and consumption in a billing period, regardless of the time of consumption or production; for time-of-use customers, it means a utility must do the same netting in each time of use prescribed by the applicable rate schedule or billing agreement. That is the plain reading of the applicable statutory text.

Mr. Short, however, has attempted to inject ambiguity into a statute where none exists. His first and original attempt was to claim that the words "accounted for" in KRS 278.466(3) mean that a utility must monetize any kilowatt-hours of net energy production in each time-of-use period and then net that value against the value of the customer's net consumption in other time-of-use periods.<sup>9</sup> But no dictionary so defines "accounted for," and the only mention of any money-related word in any of Kentucky's Net Metering Statutes appears in a direct prohibition against paying customers money for their net production: "If a customer-generator closes his

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<sup>9</sup> Complaint at 1.

account, no cash refund for residual generation-related credits shall be paid[.]”<sup>10</sup> Therefore, there is no explicit allowance in Kentucky’s Net Metering Statutes for monetizing net energy production; indeed, there is at least one clear prohibition against it, as well as the statutes’ repeated use of plain language requiring utilities to use “electricity credit[s],” not monetary credits.

Moreover, the actions of lawmakers in other states show that when they intend to have monetary net-metering credits, they know how to do so.<sup>11</sup> For example, Vermont’s net-metering statute provides clearly for monetary credits: “The electric company *shall calculate a monetary credit to the customer by multiplying the excess kWh generated during the billing period by the kWh rate paid by the customer for the electricity supplied by the company* and shall apply the credit to any remaining charges on the customer’s bill for that period.”<sup>12</sup> Washington D.C.’s net-metering regulation is similarly clear: “[I]f the electricity generated during the billing period exceeds the customer-generators kWh usage during the billing period (excess generation), the customer-generator’s next bill *will be credited by the Electric Company for the excess generation at the full retail distribution rate*. The credit for excess generation *shall be expressed as a dollar value* on the customer-generator’s bill.”<sup>13</sup> That Kentucky’s Net Metering Statutes contain no such language shows that the General Assembly did not intend to monetize net-energy credits.

Another significant flaw in Mr. Short’s monetization argument is that it would create a two-track approach to net metering that is neither supported by statute, nor used by any other

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<sup>10</sup> KRS 278.466(5)(d).

<sup>11</sup> See, e.g., Alaska’s net metering regulation, 3 AAC 50.930(a)(2): “[I]f the consumer supplied more electric energy to the electric utility than the electric utility supplied to the consumer during the monthly billing period, *the electric utility shall credit the consumer’s account with an amount derived by multiplying the kilowatt-hours of net electric energy supplied by the consumer to the electric utility by the non-firm power rate contained in the electric utility’s currently effective tariff*, unless a different non-firm power rate has been established in a commission-approved contract” (emphasis added).

<sup>12</sup> 30 V.S.A. §219a (emphasis added).

<sup>13</sup> DCMR 15-902.3 (emphasis added).

state or the District of Columbia. In effect, Mr. Short argues that Kentucky's Net Metering Statutes create one means of crediting ordinary non-time-of-use net-metering customers using kWh-denominated electricity credits while using an entirely different means of crediting time-of-use net-metering customers, namely monetizing excess production at the applicable retail rate. There is no statutory support for such a two-track scheme; indeed, as shown above, there is no statutory support in KRS 278.443 for monetizing any net-energy credit. Moreover, KU's counsel's research of the net-metering statutes and regulations in the other 49 states and the District of Columbia shows that not one of those jurisdictions uses a two-track approach that provides kWh credits for some customers and monetary credits for others. Mr. Short's two-track approach is therefore unprecedented.

Apparently recognizing these flaws in his original monetization scheme and conceding at hearing that Kentucky's Net Metering Statutes require kWh-denominated credits,<sup>14</sup> Mr. Short pivoted to present an equally flawed position, namely that KRS 278.466(3) provides utilities an option concerning how to credit time-of-use customers: they may monetize net energy production, or they may take a ratio of applicable time-of-use rates and multiply the ratio by the net energy production in one time-of-use period to create grossed-up kilowatt-hours to offset net energy consumption in another time-of-use period.<sup>15</sup> This proposal has two fatal flaws. First, as Mr. Short admitted at hearing, there is no text in any of Kentucky's Net Metering Statutes to suggest the ratio approach. In particular, Mr. Short admitted that the text he cites in the Interstate Renewable Energy Council's ("IREC") 2009 Net Metering Model Rules that would create the ratio approach does not appear in Kentucky's Net Metering Statutes,<sup>16</sup> yet presumably IREC believed the text was necessary to create the ratio approach or they would not have included it in

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<sup>14</sup> Video transcript at 11:58:19-11:58:21 ("...accounting in kilowatt-hours, as our statutes require.").

<sup>15</sup> Video transcript at 11:59:35-11:59:40.

<sup>16</sup> Video transcript at 11:49:46-11:50:09.



their Model Rules; indeed, the ratio approach does not appear in at least one previous version of IREC's Model Rules, attached hereto as Appendix A.<sup>17</sup>

The second fatal flaw in Mr. Short's newfound position is that the text of KRS 278.466(3) is unambiguously mandatory and devoid of options: "If time-of-day or time-of-use metering is used, the electricity fed back to the electric grid by the eligible customer-generator *shall* be net-metered and accounted for at the specific time it is fed back to the electric grid in accordance with the time-of-day or time-of-use billing agreement currently in place."<sup>18</sup> In Kentucky statutes, "shall" is always mandatory;<sup>19</sup> whatever KRS 278.466(3) says with respect to time-of-use net-metering customers, KU must do it. There is equally no doubt that KU has no options about how to credit such customers. When the General Assembly intends to present options in a statute, it knows how to do so, and has clearly demonstrated how it does so in another provision of Kentucky's Net Metering Statutes, namely KRS 278.465(2)(b): "'Eligible electric generating facility' means an electric generating facility that ... [g]enerates electricity using: 1. Solar energy; 2. Wind energy; 3. Biomass or biogas energy; or 4. Hydro energy[.]" No such language granting utilities crediting options appears in KRS 278.466(3). So Mr. Short's assertion that KU may use the ratio approach is incorrect, and his assertion that KU may choose how to credit time-of-use net-metering customers is incorrect; again, Kentucky's Net Metering Statutes plainly state that utilities must provide all time-of-use net-metering customers kWh-denominated electricity credits (or bill for net consumption) in each time-of-use period.<sup>20</sup>

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<sup>17</sup> Also available at: [http://www.irecusa.org/fileadmin/user\\_upload/ConnectDocs/NM\\_Model.pdf](http://www.irecusa.org/fileadmin/user_upload/ConnectDocs/NM_Model.pdf).

<sup>18</sup> Emphasis added.

<sup>19</sup> KRS 446.010(39) ("'Shall' is mandatory.").

<sup>20</sup> Moreover, KU's research of the net-metering statutes and regulations in the other 49 states and the District of Columbia shows that not one of those jurisdictions uses the ratio approach.

## **II. Joshua Bills' Testimony Provided No Reason to Construe Kentucky's Net Metering Statutes Contrary to their Plain Meaning.**

Mr. Short presented at hearing a witness, Joshua Bills,<sup>21</sup> who testified about his ten-year-old recollection of conversations with other activists who supported the enactment of Kentucky's Net Metering Statutes in 2004.<sup>22</sup> Mr. Bills failed to introduce any legislative record in his testimony. But any legitimate and objective analysis of legislative intent must be based only on written legislative records, not the hazy recollection of undocumented hearsay about conversations that allegedly occurred some ten years ago between lobbyists and activists.<sup>23</sup> The recollection of events years ago by any witness diminishes over time and is necessarily subjective.

But even if Mr. Bills' recollection of the conversations and thoughts he had in 2004 were clear and corroborated by public documents prepared contemporaneously with the events to create a public record, they would be utterly irrelevant: Mr. Bills did not claim to know the thoughts or intentions of the legislators who actually considered and voted on the statutes. But it is the legislature's intent—not the intent of activists and lobbyists—that is relevant to statutory interpretation where there is genuine ambiguity in a statute's text.<sup>24</sup> As shown in the previous section, no such ambiguity exists in Kentucky's Net Metering Statutes, making any resort to the legislative record in this case unnecessary and inappropriate.

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<sup>21</sup> See KU Motion in Limine. KU objected to the proposed testimony of Mr. Bills prior to the hearing by Motion in Limine, and during the hearing by oral objection. Mr. Bills is not an expert qualified to testify on the subject, lacks knowledge of facts of probative value, and offered speculative testimony at best.

<sup>22</sup> Video transcript at 12:47:15-12:47:25.

<sup>23</sup> See *Temperance League of Ky. v. Perry*, 74 S.W.3d 730, 735 (Ky. 2002) (“Where the language of a statute is doubtful or ambiguous, resort may be had to the journals or to the legislative records showing the legislative history of the act in question in order to ascertain the intention of the Legislature, but this rule does not apply where the language of the statute is plain and unambiguous.” (citing *City of Vanceburg v. Plummer*, 122 S.W.2d 772, 776 (Ky. 1938))).

<sup>24</sup> KRS 446.080(1) (“All statutes of this state shall be liberally construed with a view to promote their objects and carry out the intent of the legislature ...”).

In addition to his irrelevant testimony concerning his legislative recollections, Mr. Bills argued that Kentucky's statutory approach to crediting time-of-use net-metering customers, which he and Mr. Short refer to as "time-binning,"<sup>25</sup> must be incorrect because "time-binning" would be impossible to apply to real-time pricing customers; therefore, the General Assembly must not have intended "time-binning."<sup>26</sup> This is a red herring: Real-time pricing is not a kind of time-of-use rate; rather, real-time pricing depends on load and available generation and transmission capacity, not the time of use. Conversely, time-of-use rates vary solely with the time of use, not electrical system conditions. Therefore, Kentucky's Net Metering Statutes simply do not contemplate a combination of net-metering and real-time pricing; indeed, the statutes contain no reference to real-time-pricing customers.

Finally, Mr. Bills contended at the hearing that Kentucky's Net Metering Statutes were initially restricted to solar energy; thus, the legislature could not have intended "time binning" because it would be detrimental to a renewable generator that only produces electricity during certain time-of-use periods.<sup>27</sup> But the opposite is true: Kentucky's statutory crediting policy for time-of-use rates aligns with the stated intent of net metering in KRS 278.465(1), namely to allow a customer-generator to offset some or all usage with customer-owned generation, by providing an incentive to align a customer's usage profile across times of use with a generator that has a similar generation profile. Indeed, as Mr. Short acknowledged at hearing, more than one kind of generator is eligible for net metering, so customers on time-of-use rates can select generators with production profiles that best fit their usage profiles.<sup>28</sup> Moreover, as KU showed in its Exhibit 7, Mr. Short will reduce his energy bill under Rate LEV and Rider NMS compared

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<sup>25</sup> Video transcript at 12:47:50-12:48:40 and 12:52:25-12:52:40.

<sup>26</sup> Video transcript at 12:48:50-12:49:48.

<sup>27</sup> Video transcript at 12:52:40-12:53:35.

<sup>28</sup> Video transcript at 12:01:20-12:02:20.

to a bill for the same usage under Rate LEV only, even if Mr. Short does not shift his usage between time-of-use periods. But KU further showed that Mr. Short could further reduce his bill by shifting his usage to align with his hypothetical production. These results are entirely consistent with the statutory statement of the purpose of net metering, as well as the plain meaning of the crediting provision, KRS 278.466(3). Mr. Bills therefore presented no credible reason for the Commission to exceed its authority by effectively rewriting Kentucky's Net Metering Statutes as Mr. Short has requested.

### **III. Only the General Assembly, Not the Commission, Can Grant the Relief Mr. Short Requests.**

The General Assembly has granted the Commission plenary authority over utility rates and services,<sup>29</sup> and the General Assembly may restrict, and indeed has restricted, that broad grant of authority.<sup>30</sup> Kentucky's Net Metering Statutes are just such an express curtailment of the Commission's rate authority by stating in clear and mandatory terms how utilities are to offer and administer net-metering rates.<sup>31</sup> And notwithstanding Mr. Short's request to do so, it is well established law that the Commission cannot add to or subtract from the express statutory language in KRS Chapter 278: "[W]here ... the statute in itself prescribes the exact procedure the administrative agency may not add to or subtract from such a provision."<sup>32</sup> In the face of the express and plain language in KRS 278.466, Mr. Short must advocate his disagreement with the limitations in KRS 278.466 before the General Assembly. KU may not deviate from statutorily prescribed requirements, and the Commission may not require KU to do so.<sup>33</sup> Only the General

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<sup>29</sup> See KRS 278.030; *Public Service Commission vs. Commonwealth ex rel Conway*, 324 S.W.3d 373 (Ky. 2010).

<sup>30</sup> *Public Service Commission vs. Commonwealth ex rel Conway*, 324 S.W.3d 373 (Ky. 2010).

<sup>31</sup> *Kentucky Industrial Utility Customers, Inc. v. Kentucky Utilities Co.*, 983 S.W.2d 493, 500 (Ky. 1998).

<sup>32</sup> *Union Light, Heat and Power Company v. Kentucky Public Service Commission*, Ky., 271 S.W.2d 361, 365 (1954). See also *Public Service Commission v. Attorney General of Commonwealth*, 860 S.W.2d 296 (Ky. App. 1993).

<sup>33</sup> *Public Service Commission v. Attorney General of Commonwealth*, 860 S.W.2d 296 (Ky. App. 1993); *South Central Bell Telephone Co. v. Util. Reg. Comm'n*, 637 S.W.2d 649 (Ky. 1982).

Assembly, not KU or the Commission, has the authority to rewrite the statute in accordance with Mr. Short's stated policy goals.<sup>34</sup>

**IV. Sound Public Policy Requires Denying Mr. Short's Requested Relief.**

**A. Mr. Short can achieve all of his stated policy goals using KU's existing rates and riders.**

Mr. Short testified that, in addition to achieving a lower energy bill, his goals were to reduce KU's peak demand and emissions by keeping his load shifted into Rate LEV's off-peak period.<sup>35</sup> As Mr. Short admitted under questioning by Staff Counsel, he can achieve these goals while taking service under KU's Residential Service Rate RS and Net Metering Service Rider NMS; nothing would preclude him from shifting his load to different times of day as a Rate RS customer. As KU showed in its Hearing Exhibit 7, Mr. Short would have a lower energy bill under Rate RS and Rider NMS (\$212.57 annually) than he would under Rate LEV and Rider NMS (\$268.34 annually) if he chooses not to shift his load to match his generation; if he did shift his load, his energy charges could be as low as \$153.36 annually. All of these energy charges compare favorably with energy charges of \$586.03 annually for his projected Rate LEV-only usage.

Mr. Short could also align his financial incentives with his policy goals by continuing to take service under Rate LEV and selling any energy production he might have to KU under KU's Small Capacity Cogeneration Qualifying Facilities Rider, Rider SQF. Under Rate LEV he would retain his current incentives to shift his load, and Rider SQF provides customers an option to sell at higher rates for peak periods than off-peak periods, providing Mr. Short a financial incentive to install a PV system or other generation that generates during peak periods. (Rider

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<sup>34</sup> *Clark v. Riehl*, 230 S.W.2d 626, 628-629 (Ky. 1950) ("Courts should be extremely careful to accord to the Legislature the power to exercise those matters of discretion which are preserved to it by the Constitution. Thus the wisdom or folly of Legislative enactments, within constitutional bounds, may not be weighed in judicial construction of a statute free of ambiguity.").

<sup>35</sup> Video transcript at 11:32:57-11:33:36.

SQF's peak periods are nearly all weekday sunlight hours for seven months each year.)<sup>36</sup> Mr. Short testified that he had not investigated Rider SQF;<sup>37</sup> KU stands ready to help him do so.

Finally, Mr. Short could also align his financial incentives with his policy goals by continuing to take service under Rate LEV and Rider NMS. Mr. Short's erroneous claims of conflicting incentives notwithstanding, as noted above Mr. Short would have a significantly lower energy bill under Rate LEV and Rider NMS (\$268.34 annually) than he would under Rate LEV alone (\$586.03 annually). Saving over \$300 annually—cutting his annual energy charges by over 54%—is a significant financial incentive to engage in net metering. Thus, Mr. Short has several options to achieve his policy goals while receiving a financial reward for doing so, none of which requires rewriting Kentucky's Net Metering Statutes through the subtraction from, and addition to, the express language of KRS 278.466.

**B. Mr. Short is incorrect in believing that shifting his usage from peak to off-peak periods helps reduce KU's emissions.**

Concerning one of his stated goals for shifting his usage to off-peak periods, Mr. Short is incorrect: Off-peak usage generally does not, in fact, have lower emissions than peak usage.<sup>38</sup> As explained by KU witness Robert Conroy at the hearing, emissions do not fluctuate by time of generation, but by method of generation.<sup>39</sup> KU's baseload units are coal fired, whereas KU's peaking units are generally gas fired.<sup>40</sup> Shifting consumption from peak to off-peak periods increases the percentage of KU electricity generated with coal, resulting in increased emissions

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<sup>36</sup> Rider SQF's summer peak hours for the billing months of June, July, August and September, are from 9:01 a.m. through 10:00 p.m. on weekdays excluding holidays. Rider SQF's winter peak hours for the billing months of December, January and February, are from 7:01 a.m. through 10:00 p.m.

<sup>37</sup> Video transcript at 11:04:36-11:05:00.

<sup>38</sup> Mr. Short admitted at hearing that he had no knowledge of KU's emissions and was not qualified to testify about them, notwithstanding that he went on to make multiple unsupported claims about KU's emissions. See video transcript at 11:08:25-11:08:48.

<sup>39</sup> Video transcript at 14:29:25-14:30:35.

<sup>40</sup> *Id.*

per kilowatt-hour of electricity consumed.<sup>41</sup> Mr. Short would therefore better serve his goals by installing a PV system and shifting his usage back to peak and intermediate periods to match his production. As noted above, this approach would not only serve to reduce relative emissions, it could also reduce his energy charges to as little as \$153.36 annually.<sup>42</sup>

**C. Mr. Short’s proposal would obligate other KU customers to pay him significantly more than his energy is worth.**

Mr. Short asks his fellow KU customers to pay him Rate LEV’s retail rates for his hypothetical PV production, whether that payment comes in the form of a monetized bill credit or a ratio-of-rates-times-kWh bill credit. Paying Mr. Short such rates for his production would cause his fellow KU customers to overpay dramatically for that energy. Rate LEV’s peak rate is \$0.14297 per kWh, and its intermediate-period rate is \$0.07763 per kWh. As Robert Conroy testified for KU, KU’s actual marginal costs for energy are better reflected by the rates for purchases from small qualifying facilities under Rider SQF;<sup>43</sup> the highest rate under Rider SQF is \$0.03636 per kWh. In other words, Mr. Short asks other KU customers to pay him either over double (intermediate) or nearly quadruple (peak) what they would pay for KU to produce or acquire the same energy from other sources. The ultimate result of this is that Mr. Short proposes to consume 2,745 kWh of net energy at no charge to him. Nothing in Kentucky’s Net Metering Statutes supports such a result.

**D. Mr. Short is attempting to use Rate LEV—a voluntary pilot rate—for purposes beyond its original intent.**

KU established Rate LEV as a pilot program to assess the effect of electric vehicles on the grid.<sup>44</sup> KU was not required to offer Rate LEV, and Kentucky’s Net Metering Statutes do not

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<sup>41</sup> *Id.*

<sup>42</sup> See KU Hearing Exhibit 7.

<sup>43</sup> Video transcript at 14:16:32-14:16:44.

<sup>44</sup> Video transcript at 14:07:28-14:08:20.

require utilities to offer net-metering customers, or any customers, the option of time-of-use or time-of-day rates.<sup>45</sup> Rate LEV was designed with the same customer charge as KU's standard residential rate, Rate RS, and lacks a demand charge, as does Rate RS; only the energy charges differ.<sup>46</sup> KU allows customers to shift additional consumption and take advantage of off-peak and intermediate rates because the additional costs to the utility and consumer of separately metering a vehicle were not justified in a pilot program.<sup>47</sup> Further, the minimal customer charge, lack of demand charge, and use of single meter prevents barriers to customer participation in the pilot program.<sup>48</sup> In sum, KU never intended Rate LEV to be a permanent or all-purpose residential time-of-use rate; if it were designing such a rate, KU might well create a very different rate.

So Mr. Short's attempt to use Rate LEV to attack Kentucky's Net Metering Statutes ignores the history and intent of the rate. KU could have implemented Rate LEV to apply only to low-emission vehicles, not a customer's entire residence. To do so would have required an additional meter and an additional customer charge to cover that cost. Certainly separating the vehicle from the residence would have reduced Mr. Short's potential net-metering savings while increasing his fixed customer costs. Instead, KU carefully crafted a pilot rate schedule to eliminate barriers to participation by allowing whole residences to take service under Rate LEV using a single meter. Mr. Short now seeks to exploit the use of the single meter under Rate LEV to ask for the rewriting of the crediting policy in Kentucky's Net Metering Statutes. The

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<sup>45</sup> KRS 278.466(3) ("*If* TOD or TOU metering is used ...")(emphasis added).

<sup>46</sup> Rate RS has a flat energy rate of \$0.07744 per kWh, whereas the LEV peak rate is \$0.14297 per kWh, the intermediate rate is \$0.07763 per kWh, and the off-peak rate is \$0.05587 per kWh. *See* Kentucky Utilities Company, P.S.C. No. 16, First Revision of Original Sheet No. 79.

<sup>47</sup> *In the Matter of: Application of Kentucky Utilities Co. for an Adjustment of Its Electric Base Rates*, Case No. 2009-00548, Testimony of John Wolfram (Jan. 29, 2010).

<sup>48</sup> *Id.*



Commission should refuse Mr. Short's invitation to misuse both Rate LEV and Kentucky's Net Metering Statutes by denying all the relief he seeks.

**E. Mr. Short's approach to crediting would undermine, not enhance, incentives to achieve net-zero energy consumption using time-of-use rates and net metering.**

Mr. Short's second witness, Mr. McDonald,<sup>49</sup> claimed at hearing that KU's statutorily-required accounting treatment prevents time-of-use customers from achieving net-zero energy consumption.<sup>50</sup> As previously discussed, Kentucky's Net Metering Statutes allow customers to generate renewable electricity to offset some or all of their own electricity requirements. Thus, the goal of some net-metering customers may be to achieve net-zero energy consumption. But the combination of Rider NMS and Rate LEV—including using the statutorily prescribed time-of-use energy crediting policy—does not discourage net-zero energy consumption; rather, it encourages net-zero energy consumption within each time-of-use period, and therefore across all time periods. Conversely, Mr. Short's proposal effectively discourages net-zero energy consumption by allowing customers to consume net energy while eliminating their energy charges. Under Mr. Short's proposal, when a customer reaches net-zero energy *charges* by selling electricity to KU at peak rates to offset consumption at off-peak rates, the customer has no financial incentive to generate additional electricity to offset remaining consumption. Indeed, Mr. Short's proposed PV-facility sizing concedes this very point: on his own calculations, he would consume over 2,700 kilowatt-hours of net energy while offsetting all of his energy

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<sup>49</sup> KU objected to the proposed testimony of Mr. McDonald prior to the hearing by Motion in Limine, and during the hearing by oral objection. Mr. McDonald is not an expert qualified to testify on the subject, lacks knowledge of facts of probative value, and offered speculative testimony at best.

<sup>50</sup> Video transcript at 12:22:18-12:23:32.

charges.<sup>51</sup> That would undermine, not enhance, incentives to achieve net-zero energy consumption, a result inconsistent with the stated purpose of Kentucky's Net Metering Statutes.

**F. Mr. Short's claim that Kentucky's statutory net-metering crediting policy makes net metering "impractical" for him strains credibility.**

As shown above, based on his own projections about his annual energy production and consumption, Mr. Short could have energy charges under Rate RS and Rider NMS of just \$212.57 *per year*.<sup>52</sup> Yet Mr. Short claimed at hearing that KU's application of Kentucky's statutory net-metering crediting policy makes net metering "impractical" for him.<sup>53</sup> Bluntly, this claim is incredible. Mr. Short is proposing to invest in a PV facility that, based on PV Watts assumptions, will cost between \$15,000 and \$20,000.<sup>54</sup> It is dubious at best to claim that energy charges of less than \$20 per month would keep him from making an investment of that magnitude.

### **CONCLUSION**

Kentucky's Net Metering Statutes are not confusing or ambiguous: Utilities must provide time-of-use net-metering customers kilowatt-hour-denominated energy credits for net energy production (or bill for net consumption) in each time-of-use period. Contrary to Mr. Short's assertions, the statutes do not provide options for such crediting, and they are mandatory. If Mr. Short believes the statutes should say things other than they currently say, he must petition the General Assembly for relief, because this Commission, like KU, must follow, not rewrite, Kentucky's Net Metering Statutes. KU therefore respectfully asks the Commission to affirm the plain meaning of Kentucky's Net Metering Statutes by denying Mr. Short all the relief he requests.

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<sup>51</sup> Complaint at 7.

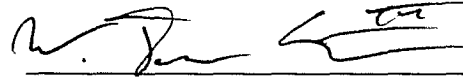
<sup>52</sup> See KU Hearing Exhibit 7.

<sup>53</sup> Video transcript at 10:45:30-10:45:49.

<sup>54</sup> See Appendix B attached hereto.

Dated: April 24, 2014

Respectfully submitted,



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**CERTIFICATE OF SERVICE**

I hereby certify that a copy of the above and foregoing Post-Hearing Brief of Kentucky Utilities Company was served upon the following person by first class, United States mail, postage prepaid, on the 24th day of April 2014:

Jeff M. Short  
9180 KY Highway 78  
Stanford, KY 40484



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*Counsel for Defendant,  
Kentucky Utilities Company*

*IREC MR-NM2005: IREC Model Net-Metering Rules*



## **IREC Model Net-Metering Rules**

[www.irecusa.org/connect/netmeteringrules.pdf](http://www.irecusa.org/connect/netmeteringrules.pdf)

### **Net Metering**

#### 1.000 Definitions

*[[insert appropriate definitions here]]*

#### 2.000 Net metering general provisions

- 2.100 All electricity providers shall offer net metering to customers with solar, wind and other eligible generators defined at 2.114 that generate electricity on the customer's side of the meter and are interconnected with the electricity provider pursuant to the interconnection rules in Section *[[reference state interconnection rules here]]*, provided that the generating capacity of the customer-generator's facility meets both of the following criteria:
- (a) The rated capacity of the generator does not exceed two megawatts (MW); and
  - (b) The rated capacity of the generator does not exceed the customer's service entrance capacity.
- 2.101 The electricity provider shall develop a net-metering tariff that provides for customer-generators to be credited in kilowatt-hours (kWh) at a ratio of 1:1 for any excess production of their generating facility that exceeds the customer-generator's on-site consumption of kWh in the billing period following the billing period of excess production. However, any excess kWh credits shall not reduce any fixed monthly customer charges imposed by the electricity provider.
- 2.102 The electricity provider shall carry over any excess kWh credits earned under 2.101 and apply those credits to subsequent billing periods to offset any customer-generator consumption in those billing periods until all credits are used or until the end of the calendar year. An electricity provider that uses cycle bills may use the December billing month as the end of the calendar year.
- 2.103 At the end of each calendar year, the electricity provider shall either carry forward any excess kWh credits for use against consumption in future months, or shall compensate the customer-generator for any excess kWh credits at the electricity provider's average hourly incremental cost of electricity supply over the same calendar-year period.
- 2.104 If a customer-generator terminates its service with the electricity provider *[[or switches electric providers]]*, the electricity provider shall compensate the customer-generator for any excess kWh credits at the electricity provider's average hourly incremental cost of electricity supply over the calendar-year period immediately prior to termination of service.

*IREC MR-NM2005: IREC Model Net-Metering Rules*

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- 2.105 A customer-generator facility used for net metering shall be equipped with metering equipment that can measure the flow of electricity in both directions at the same rate. For customer-generator facilities less than 10 kilowatts (kW) in rated capacity, this shall be accomplished through the use of a single, bi-directional electric revenue meter that has only a single register for billing purposes.
- 2.106 A customer-generator may choose to use an existing electric revenue meter if the following criteria are met:
- (a) The meter is capable of measuring the flow of electricity both into and out of the customer-generator's facility at the same rate and ratio; and
  - (b) The meter is accurate to within plus or minus five percent when measuring electricity flowing from the customer-generator facility to the electric distribution system.
- 2.107 If the customer-generator's existing electric revenue meter does not meet the requirements at 2.106 above, the electricity provider shall install and maintain a new revenue meter for the customer-generator, at the electricity provider's expense. Any subsequent revenue meter change necessitated by the customer-generator, whether because of a decision to stop net metering or for any other reason, shall be paid for by the customer-generator.
- 2.108 The electricity provider shall not require more than one meter per customer-generator. However, an additional meter may be installed under either of the following circumstances:
- (a) The electricity provider may install an additional meter at its own expense if the customer-generator consents; or
  - (b) The customer-generator may request that the electricity provider install a meter, in addition to the revenue meter addressed in 2.106 above, at the customer-generator's expense. In such a case, the electricity provider shall charge the customer-generator no more than the actual cost of the meter and its installation.
- 2.109 A customer-generator owns the renewable energy credits (RECs) of the electricity it generates, and may apply to the state regulatory commission or its authorized designee for issuance of renewable-energy credits (RECs) or solar renewable-energy credits (S-RECs) as appropriate and based on actual on-site electric generation, or the calculated estimate for customer-generators less than 10 kW in rated capacity and as further defined in Section *[[reference any state renewable portfolio standard (RPS) requirements here]]*.
- 2.110 An electricity provider shall provide to net-metered customer-generators electric service at non-discriminatory rates that are identical, with respect to rate structure, retail rate components and any monthly charges, to the rates that a customer-generator would be charged if not a customer-generator.
- 2.111 An electricity provider shall not charge a customer-generator any fee or charge; or require additional equipment, insurance or any other requirement not specifically authorized under this sub-section or the interconnection rules in Section *[[reference state interconnection rules here]]*, unless the fee, charge or other requirement would apply to other similarly situated customers who are not customer-generators.

*IREC MR-NM2005: IREC Model Net-Metering Rules*

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- 2.112 Each electricity provider shall make net metering available to eligible customer-generators in a timely manner and on a first-come, first-served basis up to five percent of the electricity provider's most recently measured annual peak load.
- 2.113 *[[optional]]* Each electricity provider shall submit an annual net-metering report to the state regulatory commission. The report shall be submitted by *[[insert date]]* of each year, and shall include the following information for the previous compliance year:
- (a) The total number of customer-generator facilities;
  - (b) The total estimated rated generating capacity of its net-metered customer-generators;
  - (c) The total estimated net kilowatt-hours received from customer-generators; and
  - (d) The total estimated amount of energy produced by customer-generators.

2.114 Eligible Generators

*[[insert definitions of appropriate eligible generators here]]*

3.000 General Provisions

- 3.001 If a customer-generator has been approved under the interconnection rules in Section *[[reference state interconnection rules here]]*, the electricity provider shall not require a customer-generator to test or perform maintenance on the customer-generator's facility except in the case of any testing or maintenance recommended by the system manufacturer.
- 3.002 An electricity provider shall have the right to inspect a customer-generator's facility during reasonable hours and with reasonable prior notice to the customer-generator. If the electricity provider finds that the customer-generator's facility is not in compliance with the requirements of the interconnection rules in Section *[[reference state interconnection rules here]]* and the requirements of IEEE Standard 1547, and non-compliance adversely affects the safety or reliability of the electricity provider's facilities or of other customers' facilities, the electricity provider may require the customer-generator to disconnect the facility until compliance is achieved.



Caution: This worksheet contains performance predictions calculated by PVWatts. Predictions are based on weather assumptions and assumptions and are not intended to constitute a warranty. PVWatts is provided as a free service. The user assumes all responsibility for the use of the information. For example, PVWatts does not take into account shading, so the user should consider shading in their performance predictions. The user should also consider the performance of the system in their area. The user should also consider the performance of the system in their area. The user should also consider the performance of the system in their area.

Disclaimer: The PVWatts model is provided for informational purposes only. It is not intended to be used as a basis for any financial or other decision. The user assumes all responsibility for the use of the information. The user should also consider the performance of the system in their area.

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## RESULTS

# 6,379 kWh per Year

Month	Solar Radiation ( kWh / m <sup>2</sup> / day )	AC Energy ( kWh )	Energy Value ( \$ )
January	3.35	433	26
February	4.02	460	28
March	5.20	636	38
April	5.05	580	35
May	5.43	615	37
June	6.36	691	42
July	5.28	595	36
August	5.54	628	38
September	4.67	519	31
October	5.10	622	38
November	2.96	345	21
December	2.17	256	15
<b>Annual</b>	<b>4.59</b>	<b>6,379</b>	<b>\$ 385</b>

### Location and Station Identification

Requested Location	40484
Weather Data Source	SOMERSET(AWOS), KY (TMY3)
Latitude	38° N
Longitude	84.6° W

### PV System Specifications (Residential)

DC Rating	5.5 kW
DC to AC Derate Factor	0.77
Array Type	Fixed (open rack)
Array Tilt	37.5°
Array Azimuth	180°

### Initial Economic Comparison

Average Cost of Electricity Purchased from Utility	0.06 \$/kWh
Cost of Electricity Generated by System	0.26 \$/kWh

These values can be compared to get an idea of the cost-effectiveness of this system. However, system costs, system financing options (including 3rd party ownership) and complex utility rates can significantly change the relative value of the PV system.





are unfortunately only able to make minimal updates to the DSIRE website at this time. We apologize for any inconvenience and thank you for using DSIRE.