

From: Melnykovych, Andrew (PSC)
To: "[andrew mcdonald](#)"
Subject: Your comments in case 2016-00274 - KU-LG&E solar share facility
Date: Thursday, October 20, 2016 2:59:00 PM

Dear Mr. McDonald-

The Kentucky Public Service Commission has received your comments in the above-referenced case. They will be placed into the case file for the commission's consideration as it deliberates in this matter.

The case file may be viewed here: http://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2016-00274.

Thank you for your interest.

Andrew Melnykovych

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RECEIVED

By Kentucky PSC at 3:05 pm, Oct 20, 2016

From: andrew mcdonald [REDACTED]
Sent: Thursday, October 20, 2016 2:47 PM
To: PSC - Public Information Officer
Subject: KySES comments on Case 2016-00274

Please find attached my comments on behalf of the KY Solar Energy Society for Case No. 2016-00274. There should be two attachments. The main comments and Appendix A.

Thank you.

Andy McDonald
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Comments on LG&E/KU Solar Shares Proposal from the Kentucky Solar Energy Society. Kentucky PSC Case No. 2016-00274

Prepared by Andy McDonald for the Kentucky Solar Energy Society
October 20, 2016

Contact Information

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Andy McDonald is a customer of Kentucky Utilities and a member of the Kentucky Solar Energy Society, which has many members who are customers of LG&E and KU.

The Kentucky Solar Energy Society (KySES) offers the following comments with regards to LG&E/KU's application to create a 'Solar Shares' program. Overall, KySES supports LG&E/KU's intention to make solar energy more accessible to their customers. However, we have a number of serious concerns about the terms of the proposal which we believe should be addressed before the Solar Shares program is approved.

Questions about the LG&E/KU Solar Shares Proposal

1. What happens if after the solar array is built, subscribers drop out and the array becomes undersubscribed? How will the Utility recover their costs at that point? Will the general ratepayer be asked to cover those costs?
2. Who would own the Solar Renewable Energy Credits (SREC's) or other similar attributes produced by the solar array? Why was this not addressed in the application? Would LG&E/KU claim the value of the SREC's and pass them through to the Subscribers via their Solar Credit? Or would the utility keep the SREC's for themselves? Or would they allow the customers to claim the SREC's and leave it up to the individual customer to make their own arrangements for selling their SREC's? (Is this latter option even possible within the existing SREC markets?)
3. If incentives through the Clean Power Plan become available in the future that would apply to this project, who would profit from those incentives? Would the Utility pass those on to the Customer/subscriber, either by reducing the subscription fee or increasing the Solar Credit?
4. How is the cost for acquiring the land where the solar array will be located being paid for? How are property taxes for this land being paid for? Are these costs included in Exhibit 5?

Comments on the LG&E/KU Solar Shares Proposal

1. Monthly Charges & the Cost of Subscription

The monthly cost for the Solar Subscription is excessive and unreasonable. The Subscriber’s cost for the solar energy supplied each year amounts to at least \$0.21/kWh. This is greatly in excess of the current cost of installing solar PV. When factored over the first 25 years of operation, a PV system professionally installed on a customer’s property produces energy at a cost of about \$0.075/kWh for residential systems and approximately \$0.062/kWh for commercial scale systems.

Subscription Fee: \$6.29/ ¼ KW block/month, amounts to \$25.16/KW/month, amounts to \$301.92/KW/year.

LG&E/KU estimate for annual solar generation per KW = 1,405 kWh/KW/yr (see their Exhibit 3, p.8)

$$\frac{\$301.92/\text{KW}/\text{yr}}{1,405 \text{ kWh}/\text{KW}/\text{yr}} = \$0.21/\text{kWh}$$

For comparison, Tables 1 and 2 illustrate the financial analysis for typical residential and commercial scale PV systems, using pricing typical for central Kentucky. The Levelized Cost of Energy (LCOE) is calculated based on a project life of 25 years. These estimates assume a PV array located in full sun, facing due south will generate 1,250 kWh per year, a conservative estimate which is 11% less than the generation the utility expects to produce per KW. If we used the utility’s production estimate of 1,405 kWh per year, these LCOE estimates would be even lower. Both calculations incorporate the 30% Federal Tax Credit into the LCOE calculation. For commercial projects, an additional tax incentive called MACRS (Modified Accelerated Cost Recovery System) can also often be claimed, which can reduce net customer costs by an additional 25%. The MACRS incentive was not included in these estimates but if it were, it would reduce the LCOE for the commercial system.

Table 1 – Residential PV System Financial Analysis	
Capacity of PV Array	2 KW
Annual generation	2500 kWh/yr
Installed Cost	\$ 6,000
Federal Tax Credit	\$ 1,800
Net Customer Cost	\$ 4,200
Lifecycle Generation in 25 years	56,247 kWh
LCOE before Tax Credit	\$ 0.107/kWh
LCOE after Tax Credit	\$ 0.075/kWh

Table 2 – Commercial PV System Financial Analysis	
Capacity of PV Array	500 KW
Annual generation	625,000 kWh/yr
Installed Cost	\$ 1,250,000
Federal Tax Credit	\$ 375,000
Net Customer Cost	\$ 875,000
Lifecycle Generation in 25 years	14,061,701 kWh
LCOE before Tax Credit	\$ 0.089/kWh
LCOE after Tax Credit	\$ 0.062/kWh

It is unreasonable for LG&E/KU to charge their solar subscribers three to four times the market rate for their Solar Shares Subscription.

2. Monthly Charges are Difficult to Understand

The pricing structure proposed by LG&E/KU does not clearly communicate to the customer what the cost for the solar energy would be, how that compares to their regular rates, or how that compares to the cost of installing PV on your own property. The utility proposes to define the subscription cost as “\$6.29/ ¼ KW per month.” This unit price bears no obvious relationship to the rates we pay on our utility bills, which are expressed as \$/kWh. A customer must have the necessary technical expertise to be able to convert this into a rate per kWh (as we have done in Comment #1), so that one could assess whether it’s a reasonable expense that makes sense for them.

It’s also difficult to know how the Solar Share price compares to the cost of installing solar on one’s own property. Installation costs are often expressed in terms of \$/KW or \$/Watt, or simply the final cost for the entire system. We believe that few customers will have the expertise to evaluate whether \$6.29/ ¼ KW per month is a good price compared to, say, \$12,000 for a 4 KW array installed on their roof.

Without a deliberate effort to make the Solar Shares price easily comparable to existing electric rates (price per kWh) and typical installation costs in the market, we expect that subscribers will be disappointed and angered when they receive their first bills. We also expect that marketing the program will be difficult without making the pricing clearly understandable to the average customer.

We fear that the pricing proposed by LG&E/KU will reinforce the notion that solar is too expensive, because this program’s pricing IS too expensive. But the cost of installing solar on one’s own property, as we demonstrated in Tables 1 and 2, actually represents a good investment for property-owners. KySES does not want to see LG&E/KU’s Solar Shares program become a high-profile example of why “solar is too expensive,” when the reality is very different.

3. Accessibility and Fairness

The high pricing and unclear fee structure raises social justice concerns, as well. A potential advantage of the Solar Shares proposal, as with other “Community Solar” type programs, is that it could make solar energy more accessible to low-income customers and renters. The current proposal will either not attract low-income customers, if they understand how expensive it really is; or take advantage of those who sign up for it, by charging them excessive prices for the solar energy. It would be very disappointing if LG&E/KU misses the opportunity to truly make solar energy more accessible to their lower-income customers and renters.

On the other hand, the Solar Shares program could be modified to make it an economical means for enabling low-income customers and renters to access solar electricity.

4. Projected Profits from the Solar Shares Project

Based on our financial analysis of the Solar Shares proposal we believe that LG&E/KU’s expected profits are excessive. Using the financial data provided by the utility in their application, our analysis indicates that they could earn a 246% return on investment over the 25 year life of the project, or an annualized ROI of 9.8%. This amounts to a \$2.6 million profit on a \$1 million investment for each 500 KW array. Our analysis assumes that the utility will claim the 30% Federal Tax Credit and the MACRS depreciation incentive. In light of the fact that the fees being charged to their Solar Subscribers are so high, we believe that a return on investment of this scale is inappropriate and unreasonable. Our financial analysis did not include the value of any Solar Renewable Energy Credits or other incentives which could become available to the utility via the Clean Power Plan. Appendix A provides the details of our financial analysis.

5. Increasing Accessibility & Availability of Solar to All Customers

The high subscription fees and profits proposed by the utility are especially inappropriate considering that they are not operating in an open, competitive market. The customers for whom this program could be of interest – renters, commercial, industrial, institutional, schools, government agencies – have very limited options for investing in solar energy, due to the limitations of state law, regulations, and utility policy. LG&E/KU will be marketing the Solar Shares program to customers who have few other options if they wish to use solar energy. This creates a captive market for LG&E/KU, enabling them to propose exorbitant prices for their product. A more competitive market, providing greater options at lower costs for their customers, could be provided by the following measures:

- Raising the individual system cap on net metering above 30 kW would enable commercial, industrial, institutional, governmental, and educational customers to choose to invest in solar arrays on their own properties, at a lower long-term cost than the proposed Solar Shares project. LG&E/KU have lobbied against raising the net metering cap, thereby limiting their customers’ access to more competitive solar options.

- Enabling “virtual net metering” and development of community solar projects by third-party developers would allow true competition for the utility’s proposal, providing customers with a competitive market for “community solar” services. This would also enable non-profit community

organizations to become involved in offering solar options to their constituents. The result would almost certainly be lower-cost community solar options for customers.

- Explicitly allowing solar leases and third-party ownership would make solar PV available to many more customers by removing the barrier presented by the up-front capital cost required for installing new systems. Solar leases and third-party ownership are allowed in many states. In 2014 about 75% of all residential solar systems in the US were sold as leases.¹ The pricing for solar leases is usually guaranteed to be slightly lower than the utility's retail rate, guaranteeing the customer lower bills from the day the system is installed. The agreement is also directly tied to the kWh production of the solar array – the customer pays by the kWh produced. This gives the installer an incentive to install an efficient system and makes the cost clear and simple to understand for the customer. This contrasts with LG&E/KU's Solar Shares proposal, which guarantees the customer's bills will increase, yet uses a pricing structure that is not transparent, intuitive, or easily comparable to their existing rates.

LG&E/KU argued in their application that market surveys showed that 50% of their customers would like to have a solar option. The three policy changes described above would make more solar options available to their customers, at a lower cost to the customer, with greater benefits to the customer, and by enabling competition in an open market would encourage costs to continue declining into the future.

6. KWH Credit Calculation Method

The kWh credits proposed by LG&E/KU to compensate the Solar Shares Subscribers for their solar production fail to account for the full benefits solar provides to the utility and other customers. As stated on page 6 of their Application:

Subscribers will receive bill credits (Solar Energy Credits) based on the Companies' variable cost of production for the pro rata amount of energy produced by their subscribed portions of the Solar Share Facilities during the previous calendar month (initially a credit of approximately \$0.04 per kWh of AC energy produced for residential customers), as well as adjustments to their bills concerning the Fuel Adjustment Clause (the Solar FAC Adjustment) corresponding to the energy produced by their subscribed solar capacity.

Based on the "Residential Bill Sample" provided in Exhibit 8, the FAC Adjustment might be worth approximately \$0.002/kWh, bringing the total Solar Credit to \$0.042/kWh.

The Application provides no justification for this method or explanation for why this is a reasonable way to credit the customer's solar generation. There is a growing body of literature on the value of solar energy and distributed generation. Numerous states, utilities, and organizations have performed studies of this issue in recent years, and there are several reports that review and compare these studies. Among these are *A Review of Solar PV Benefit and Cost Studies* by the Rocky Mountain Institute (2013) and *Shining Rewards: The Value of Rooftop Solar Power for Consumers and Society* (2015) by Environment America and the Frontier Group.

¹ <http://www.greentechmedia.com/articles/read/72-of-us-residential-solar-installed-in-2014-was-third-party-owned>

LG&E/KU propose to use only the variable cost of production and the Fuel Adjustment Clause as the basis for calculating the Solar Credit, while many other sources recognize a wide range of benefits supplied by solar and distributed generation. Rabago and Keyes identify the following benefits that should be accounted when doing a cost-benefit analysis of distributed solar generation (from *A Regulator's Guidebook: Calculating the Benefits and Costs of Distributed Solar Generation*, 2013, Karl Rabago and Jason Keyes, Interstate Renewable Energy Council):

- Avoided energy costs
- Avoided transmission costs
- Avoided capital and capacity investment
- System losses
- Grid Support Services
- Financial Services (fuel price hedge)
- Financial Services (market price response)
- Security Services (reliability and resiliency)
- Environmental services – Avoided compliance costs
- Environmental services – Carbon emission reductions
- Public health & other environmental benefits
- Economic development

We believe that the value of the Solar Credit should be based on either (a) a careful, transparent evaluation of the value of the solar energy, accounting for the above factors, or (b) the net metering model .

6. A. Basing Solar Credits on the Net Metering Model

Using the net metering model to determine the value of the Solar Credits would be simple, straightforward, easily understandable for the customer, and consistent with existing laws and regulations. In the absence of a full analysis of the value of solar, net metering has served as a reasonable approximation of its value and has worked very effectively in Kentucky and many other states. There is precedent for using the net metering model to value the solar credits from a community solar array, as the first and only 'community solar' project in Kentucky (at Berea Municipal Utility) uses this method.

Under the net metering model, all of the solar generation from the Subscriber's share is credited to their account at the full retail rate. Any excess generation at the end of a billing cycle is carried forward to future billing cycles to offset future consumption, for the life of the customer's account.

6. B. Calculating the Value of Solar to Determine the Value of Solar Share Credits

If LG&E/KU or the PSC do not want to use the net metering model, the value of the solar credits should be determined using a transparent method that accounts for the full value of the solar energy. As there

are many factors that could be included in this calculation, and the choice of factors greatly affects the final value, we believe a new docket should be opened to specifically address this issue. The question of how to calculate the value of solar is of interest to all utilities in the Commonwealth, all ratepayers, the solar energy industry, and other stakeholders. In the past two years Senator Morgan McGarvey convened a series of meetings between stakeholders from the electric utilities, solar advocates, environmental groups, and government agencies, concerning net metering. The value of solar became one of the central points of discussion and it was clear that the utilities and solar/environmental advocates had very different views on how that value should be calculated. The issue of the value of solar was at the heart of the discussion over how to amend the state's net metering statute and our inability to agree on how to approach it led to an impasse and thus no changes were made to net metering.

One proposal that was discussed in these meetings was to delegate the PSC to determine the appropriate method for calculating the value of solar, through an administrative case that would be open to all stakeholders. There were objections that the PSC did not have the staff, time, money, or expertise to do this. It was suggested that they could hire a qualified consultant to assist with the process, but that raised questions about who would pay for the consultant.

The present case is not about net metering per se, but it does require an assessment of the value of solar. LG&E/KU have proposed a valuation method which is very narrow and excludes many legitimate sources of value. We do not want the PSC to accept their method and thereby create a precedent for the value of solar in Kentucky, which might then be used as a basis for undermining net metering or establishing unfair rates for solar in other contexts (e.g. for future community solar projects). The value of solar is an important question in the electricity sector and will only grow in importance as the solar industry expands. If the PSC is going to establish a new precedent for the value of solar in Kentucky, it should be done in a new Case that enables a full and open discussion of all relevant issues, with all concerned stakeholders at the table.

However, we recognize that opening up such a process would be costly and time-consuming for everyone involved, including the PSC and LG&E/KU, who wish to move ahead with the Solar Shares project. We therefore believe that using the net metering model would be a reasonable alternative for determining the value of the Solar Credits. It would resolve the issue without the need for a protracted analysis of the value of solar. The net metering model is a reasonable compromise among the interests of all stakeholders, considering that the outcome of a value of solar analysis could turn out greater or lower than the retail rate, and there is already precedent in Kentucky for net metering. Using this approach would place Solar Shares subscribers on the same footing as other customers who use solar with net metering agreements.

7. Another Limitation of the Credit Calculation Method

A solar PV array will produce varying amounts of energy throughout the year, with energy production peaking in the summer months. It is common for buildings with solar PV arrays to generate excess kWh (more than they have consumed) during certain months. Under net metering, the utility meters this excess generation and credits the customer's account. These credits can then be used during later billing cycles when consumption exceeds PV generation.

LG&E/KU's Solar Shares proposal would not work this way. According to their application, "the number of kWh produced by a customer's subscribed capacity for which the customer may receive Solar Energy Credits and the corresponding Solar FAC Adjustment is limited to the number of net kWh the customer consumes each month" (Solar Shares Application, p. 6, emphasis added). This means Subscribers would not be able to roll over excess kWh credits into future months, which substantially reduces the value of a subscription to the customer and further increases their cost to participate. All excess generation would still be available to LG&E/KU, however, which means they could earn additional revenue by (a) not compensating the customer for the excess generation; (b) potentially being able to sell the "unused" solar energy on the market; and (c) potentially earning SREC's or other attributes for the excess solar generation. Such an arrangement is clearly unfair to the Subscriber.

This proposed procedure for handling credits would be a disincentive for customers attempting to achieve "net-zero" energy use through the Solar Shares program. Achieving "net-zero energy" almost always necessitates generating excess energy in some months and utilizing the kWh credits in other months. It is a simple process to size a PV system to be "net-zero" on an annual basis under net metering, when kWh credits carry over indefinitely. Under the Solar Shares proposal, there would be a strong disincentive to design for net-zero energy.

We recommend that all excess kWh credits generated each month by a Subscriber's share of the solar array carry forward for the life of their account. Excess kWh credits should carry forward beyond the termination of the subscription, because those credits would have already been paid for.

8. The Solar Shares Proposal Fails to Share the Benefits of Solar

The "community solar" model was developed to make solar energy more accessible to a larger part of the population, while being of mutual benefit to the utility/developer, participating customers, and the community. In many project designs, the customer becomes an investor in the community solar project and reaps long-term financial benefits from that investment. LG&E/KU's model excludes this by giving the community no ownership or investor's stake (e.g., 25-year ownership).

When homeowners or businesses invest in solar they typically expect that after the initial "payback" period, during which they recover their initial purchase cost, they will receive ongoing financial gains via the energy savings on their utility bill. The lifetime return-on-investment can be substantial and is increased for those who can access the 30% Federal tax credit.

The LG&E/KU model does not provide the customer with any return-on-investment, ever. It simply increases the customer's cost of energy for as long as they remain a subscriber. This makes the Solar Shares proposal look more like a hostile corporate model for community solar that minimizes their risk and maximizes utility/shareholder gain, while giving insufficient consideration to also yielding benefits to customers and the community.

Community solar is being adopted widely throughout the country as a way to advance solar energy while benefitting utilities, customers, and communities. It is in this sense that we believe the LG&E/KU plan is not a true community solar model. Their model would unnecessarily slow community solar adoption and substantially reduce the potential benefits to customers and the community.

Conclusion

The Solar Shares proposal presented by LG&E/KU has the potential to be an innovative means to making solar energy more accessible and affordable to their customers. We are excited about the possibility of up to 4 megawatts of solar PV becoming available through a "community solar" type of project. We believe that the community solar model, which has many different forms and potential project designs, has great potential to make solar more accessible, affordable, and commonplace in Kentucky.

However, we do not support the fundamental design features of their Solar Shares proposal. The pricing structure is too costly for participants and out of line with market prices for solar PV; it would generate unreasonably high profits for the utility; the pricing and payment structure is obscure and non-transparent; the proposal fails to accurately account for the full value of the solar power, unfairly benefiting the utility to the detriment of the customer-subscriber; and it fails to make solar more accessible, especially for lower-income customers.

There are other designs for community solar projects in use within Kentucky and in other states which provide real benefits to both the customer-subscriber and the utility. We urge the PSC to direct LG&E/KU to re-design their Solar Shares proposal, to make it an affordable, truly accessible option for their customers. As one of the first community solar-type projects in Kentucky, the Solar Shares project offers a great opportunity to demonstrate an innovative project design that truly makes solar energy more accessible for customers, in a way that is economically beneficial to the customer and the utility.

Appendix A – Financial Analysis of LG&E/KU Solar Shares Proposal

Exhibit A - LG&E/KU Solar Shares Proposal Financial Analysis

Prepared by Andy McDonald for the Kentucky Solar Energy Society, October 18, 2016.

Array Size		500 KW	
Annual Generation per KW		1405 kWh/yr	This is high estimate
Annual Generation Total		701,136 kWh/yr/500 KW array	
Solar Capacity Charge/KW/month	\$	25.16	per month/KW
Solar Capacity Charge, total/month	\$	12,580	per month/500 KW array
Project Total Cost	\$	1,055,417	cost from Exhibit 5
Miscellaneous company charges	\$	51,706	cost from Exhibit 5
Eligible Project Cost for tax credits¹	\$	1,003,711	
Federal Tax Credit	\$	301,113	
Net Total Cost	\$	754,304	
REVENUE			
Annual Solar Capacity Charge	\$	150,960	per year/500 KW array
EXPENSE			
Customer Credit Rate ²	\$	0.04	per kWh, average among classes
Customer Credit Payments, Annual Total	\$	28,045	
Net Annual Income	\$	122,915	
Simple Payback Time		6.1	years
Total Lifetime Net Income (25 yrs)	\$	2,591,570	
Return On Investment (ROI)		246%	
Annualized ROI		9.8%	

1 - We assume the "Misc. Company charges" are annual costs like O&M which would not be eligible for depreciation, so these were subtracted from the total project cost.

2 - Customer credit payments under the Fuel Adjustment Clause are not accounted here because we assume they net to zero for the utility (each solar kWh reduces the utility's Fuel Adjustment Cost and they pass through this savings to the Solar Shares customer).

MACRS Depreciation Calculation - From Appendix A, Table A1 - IRS Publication 946					
Eligible Project Cost (basis for depreciation)			\$ 1,003,711		
* Annual tax savings based on income tax rate of 32% and net project cost of \$1,003,711					
3-, 5-, 7-, 10-, 15- and 20- Year Property, Half Year Convention					
	Year	Depreciation Rate for Recovery Period			
		Base Rate	Adjusted Rate w/ Tax Credit	Annual Depreciation	Annual Tax Savings*
	1	0.2	0.17	\$ 170,631	\$ 54,602
	2	0.32	0.272	\$ 273,009	\$ 87,363
	3	0.192	0.1632	\$ 163,806	\$ 52,418
	4	0.1152	0.09792	\$ 98,283	\$ 31,451
	5	0.1152	0.09792	\$ 98,283	\$ 31,451
	6	0.0576	0.04896	\$ 49,142	\$ 15,725
TOTAL			0.85	\$ 853,154	\$ 273,009

Formula: Multiply Base Depreciation rate for the year times 85% (discount for claiming Federal Tax Credit) times 32% (the income tax rate) times the net project cost.

Example for Year 1: Annual Depreciation Value = 0.2 * 0.85 * 0.32 * \$1,003,711 = \$54,602

Annual & Cumulative Financial Summary - LG&E/KU Solar Shares Proposal

	Expenses		Revenue				
Year	Customer Credits	Install, O&M Cost ¹	Fed. Tax Credit	Tax Savings of Depreciation ²	Solar Capacity Charge	Annual Balance	Cumulative Income
1	\$ (28,045)	\$ (1,055,417)	\$ 301,113	\$ 54,602	\$ 150,960	\$ (576,787)	\$ (576,787)
2	\$ (28,045)			\$ 87,363	\$ 150,960	\$ 210,278	\$ (366,510)
3	\$ (28,045)			\$ 52,418	\$ 150,960	\$ 175,332	\$ (191,177)
4	\$ (28,045)			\$ 31,451	\$ 150,960	\$ 154,365	\$ (36,812)
5	\$ (28,045)			\$ 31,451	\$ 150,960	\$ 154,365	\$ 117,553
6	\$ (28,045)			\$ 15,725	\$ 150,960	\$ 138,640	\$ 256,193
7	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 379,108
8	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 502,022
9	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 624,937
10	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 747,851
11	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 870,766
12	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 993,680
13	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 1,116,595
14	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 1,239,510
15	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 1,362,424
16	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 1,485,339
17	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 1,608,253
18	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 1,731,168
19	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 1,854,082
20	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 1,976,997
21	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 2,099,911
22	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 2,222,826
23	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 2,345,741
24	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 2,468,655
25	\$ (28,045)				\$ 150,960	\$ 122,915	\$ 2,591,570
TOTAL				Total Cumulative Income			\$ 2,591,570

1 - Exhibit 5 from LGE/KU's Application itemizes the Solar Share Program Cost Detail. We assume that annual O&M costs are incorporated in this Exhibit, possibly under "Miscellaneous Company Charges."

2 - Depreciation calculation detailed in table on page 2.

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