

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE TARIFF FILING OF LOUISVILLE GAS AND )  
ELECTRIC COMPANY TO ADD PILOT NET ) CASE NO.  
METERING SERVICE ) 2001-00303

and

THE TARIFF FILING OF KENTUCKY UTILITIES ) CASE NO.  
COMPANY TO ADD PILOT NET METERING SERVICE ) 2001-00304

O R D E R

This matter comes before the Commission as a result of the September 14, 2001 tariff filings by Louisville Gas and Electric Company ( LG&E ) and Kentucky Utilities Company ( KU ) proposing to implement Pilot Net Metering Programs in their respective territories, with a proposed effective date of October 15, 2001. The Commission suspended the proposed tariffs by Order dated October 3, 2001 and established these dockets to further investigate LG&E s and KU s net metering proposals. Intervening in Case No. 2001-304 was Joshua Bills, a KU customer with an interest in participating in KU s pilot net metering program.

LG&E and KU responded to two data requests from the Commission Staff and Mr. Bills also filed responses to the Staff s initial data request to KU. The record is now complete and the matter stands submitted for decision.

BACKGROUND

Under the pilot programs, an eligible customer must have a generation system that uses as its total fuel source solar, hydro, or wind energy. The generation system

installed by a residential customer will be limited to a maximum capacity of 10 kilowatts, while the system for a non-residential customer will be limited to 25 kilowatts. The pilot net metering programs are proposed to be in effect for a period of 36 months. LG&E and KU indicated that net metering tariffs will not be offered on a permanent basis until the costs, benefits, and effects on system safety, and reliability of the pilot programs have been thoroughly reviewed. The tariffs will be totally voluntary with a limit of 25 customers to be served by LG&E and KU, respectively.

To be eligible for the net metering tariffs, customers will have installed a generation system that meets specific guidelines necessary to ensure against damage to the LG&E or KU electrical systems. During periods when the customer generates more electricity than needed, the excess will feed into the utility's electrical system through the customer's meter causing the meter to run backward. Consequently, the customer will receive a credit equal to the applicable retail rate for all excess energy fed into the utility's system. Should a customer generate more electricity during a billing period than is consumed, the customer's excess will be carried forward until the next billing period. Customers will not be paid for excess generation.

#### DISCUSSION

Generally, the Commission finds the LG&E and KU pilot net metering programs to be reasonable, and we conclude that the programs should be approved, as pilots, subject to certain conditions or modifications. While recognizing that the proposed pilot programs are very small and limited in scope, the Commission finds several issues of first impression to be addressed herein. These issues are discussed below.

### Purchase Power Contracts

The proposed tariffs include provisions whereby LG&E and KU could enter into purchase power contracts with program participants. When the details of such contracts were requested, LG&E and KU indicated that contracts would be used on a very limited basis and that the need for such contracts would be determined on a case-by-case basis.

The Commission does not seek to limit the flexibility of LG&E and KU to make such determinations. However, for purposes of keeping apprised of developments within the pilot programs and the prices that may be paid for purchased power, we will require that any purchase power contracts be submitted for our prior approval.

### Tariff Language

The cover letters accompanying the tariff filings state that the pilot programs will be in effect for 36 months, while the tariffs, under Availability of Service, indicate that they will be available on a pilot basis for a period of 2 years from their effective date. This may mean that a customer has to sign up within 2 years from the effective date to ensure participation in the pilot for a full 12 months during the 36-month pilot. However, the intent is unclear.

The Commission will require both LG&E and KU to add language in the Applicable portion of the tariffs that explicitly states that the pilot programs will be in effect for 36 months from the effective date established herein. In addition, we will require that the tariff be modified to clarify the intent of the 2-year provision as to whether it means that a customer must sign up by month 24 in order to participate for a minimum of 12 months during the pilot.

### Metering Equipment

One of the issues raised through the Staff's data requests concerns the ability of LG&E and KU to record the amount of power delivered to the customer, the amount of power received from the customer, and the time period during which the power was either delivered or received. The information provided by LG&E and KU indicate that a Form 2S, SENTINEL meter with bi-directional metering capability can perform all these functions. Since the time (on-peak or off-peak) during which the customer is providing power to the utility is of critical importance to the review of the pilot programs, the Commission finds that this metering equipment, or equipment with these same capabilities, should be installed, at the utility's cost, for any customer that participates in the net metering pilot program of either LG&E or KU.

### Fixed Cost Recovery

When a customer generates excess electricity that is flowed back to the utility, the meter creates a credit for each kilowatt-hour ( kwh ) of excess energy. This results in the customer paying for only the net energy consumed, plus any applicable demand and customer charges. For customers served under tariffs with demand rates, the utility is still able to recover its investment in fixed costs through the separate demand charge. For residential customers, and some classes of commercial customers, however, there is no separate demand charge, only an energy charge and a customer charge. Thus, some of the fixed costs are recovered through the energy charges for these customers. The net metering process then credits these customers for both the excess energy supplied and a portion of the fixed costs, even though the fixed costs are still incurred at the same level by the utility.

For residential customers, the energy charge is presently designed to recover a substantial portion of the utilities' customer-related costs, since both LG&E's and KU's residential customer charges do not fully recover these costs. Thus, a residential net metering customer may not be paying the proper level of customer-related costs incurred by the utility to provide service. Considering that these are pilot programs limited to 25 participants, the Commission does not find it necessary to revise LG&E's and KU's residential rates to ensure recovery of fixed costs and customer-related costs through their respective customer charges. However, the utilities' cost recovery should be one issue reviewed during the 3-year term of these pilots and addressed by LG&E and KU in their evaluations thereof.

#### Annual Filings

The Commission intends to monitor the level of participation in the pilot programs during the time they are in effect. Therefore, we will require that LG&E and KU make annual filings indicating the number of participants at approximate 12-month intervals during the term of the pilots. Such filings should reflect the following information either as of March 1, 2003 and March 1 of each of the 2 following years, or cumulatively for the 12 months ended February 28:

1. The number of customers, separately identifying residential and non-residential customers, as of March 1;
2. The amount of energy, in kilowatt-hours, delivered to and received from, each customer for the 12 months ended February 28;

3. A narrative, or listing, which identifies, for each customer, the periods of time (on-peak or off-peak) during each month of the 12-month period ended February 28 in which energy was received from the customer;

4. A listing by month, by customer, that shows any credit balances resulting from the customer generating more electricity than was consumed during the month.<sup>1</sup>

All such filings shall be submitted by May 1 following the 12-month period that is covered by the filings.

### SUMMARY

The Commission, having considered the evidence of record and being otherwise sufficiently advised, finds that the proposed net metering pilot programs should be approved for a period of 36 months from the date of this Order, subject to the changes, conditions, and reporting requirements discussed herein.

IT IS THEREFORE ORDERED that:

1. The proposed net metering tariffs as modified herein are approved for a period of 36 months from the effective date of this Order.

2. The Applicable section of the tariffs shall be revised to clearly state that the tariffs will be in effect for a period of 36 months from their effective dates.

3. The Availability of Service section of the tariffs shall be revised to clearly identify the purpose and intended use of the language indicating the programs will be available for a period ending 24 months from their effective dates.

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<sup>1</sup> Since customers will be credited at retail rates, it is possible that credit balances might be experienced. The information contained in the annual filings will be reviewed to evaluate whether reimbursement may be appropriate for customers that carry a credit balance for a period of 12 months or longer.

4. For purposes of these pilot programs LG&E and KU shall install Form 2S SENTINEL meters, or meters with similar capabilities, that will allow LG&E and KU to record not only the amount of power delivered to the customer and the amount of power received from the customer, but also identify whether the power was delivered or received during on-peak or off-peak periods.

5. All purchase power contracts entered with customers participating in the programs shall be submitted for Commission approval prior to being implemented.

6. LG&E and KU shall annually file an original and 10 copies of the information described in the findings above. The filings shall be submitted no later than May 1 during the next 3 calendar years with the first filings due May 1, 2003 and subsequent filings due by May 1 of the two succeeding years.

Done at Frankfort, Kentucky, this 14<sup>th</sup> day of March, 2002.

By the Commission

ATTEST:

  
Executive Director