Steven L. Beshear

Robert D. Vance, Secretary Environmental and Public Protection Cabinet

Larry R. Bond Commissioner Department of Public Protection



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May 29, 2008

John W. Clay Vice Chairman

Caroline Pitt Clark Commissioner

Office of Energy Policy 500 Mero Street 12 Floor, Capital Plaza Tower Frankfort, KY 40601

Mr. Stephen A. Sanders Appalachian Citizens Law Center, Inc. 52 Broadway, Suite B Whitesburg, KY 41858

Appalachia – Science in the Public Interest 50 Lair Street Mt. Vernon, KY 40456

Re: Case No. 2008-00169

Mr. Thomas FitzGerald Kentucky Resources Council P.O. Box 1070 Frankfort, KY 40602

Mr. Andy McDonald Kentucky Solar Partnership 2235 Gregory Woods Road Frankfort, KY 40601

#### Gentlemen:

Enclosed please find a courtesy copy of the Commission's Order opening the above-referenced case to develop interconnection and net metering guidelines as directed by the Kentucky General Assembly. If your organization desires to formally participate as a party to this case, a motion to intervene should be filed within 20 days. Alternatively, you may submit written comments addressing the appropriate scope and content of guidelines for the interconnection and net metering of customer-owned generation. No deadline has yet been established for the filing of comments, but that will be one of the topics discussed at the June 25, 2008 conference. Once the Commission establishes a deadline for the filing of comments, that date will be posted on our Website. Should you have any questions, please contact the Commission's Director of Engineering, Jim Welch, at 502/564-3940, Extension 400.

RGR:v Enclosure

Kentucky<sup>®</sup>

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#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

INTERCONNECTION AND NET METERING	)	
GUIDELINES FOR RETAIL ELECTRIC	)	ADMINISTRATIVE
SUPPLIERS AND QUALIFYING	)	CASE NO. 2008-00169
CUSTOMER-OWNED GENERATORS	)	

### ORDER

The Commission, on its own motion, hereby initiates this case to establish interconnection and net metering guidelines in accordance with Senate Bill 83 ("SB 83"), which was enacted by the Kentucky General Assembly during the 2008 Regular Session and signed by Governor Steve Beshear on April 24, 2008. A copy of SB 83 is attached hereto as Appendix A. SB 83 amends the existing statutory requirements for the net metering of electricity, which are codified in KRS 278.465 to 278.467. The amendments are designed to increase the number of net metering customers by expanding the types and size of customer-owned generation that will qualify for net metering.

More specifically, SB 83 includes the following provisions:

- 1. The definition of an "eligible electric generating facility" is expanded from solar only to include wind energy, biomass or biogas energy, and hydro-energy;
- 2. The maximum size of eligible generators is increased from 15 kW to 30 kW;
- 3. The limit at which the Commission may restrict new net metering customers is increased from 0.1 percent to 1.0 percent of a retail supplier's single-hour peak load;

- 4. Bill credits for generation fed back to the retail supplier in excess of the electricity supplied during the billing period are carried forward for the life of the account;
- 5. The net metering customer is responsible for the cost of any upgrade to the interconnection that is required by an approved tariff;
- 6. Interconnection and net metering guidelines are to be developed by the Commission for all retail electric suppliers;
- 7. Retail electric suppliers are required to file net metering tariffs and application forms to comply with the Commission-established guidelines.

SB 83 requires that the interconnection and net metering guidelines be established by the Commission within 180 days of the bill's effective date, which is July 15, 2008.

According to the United States Environmental Protection Agency,<sup>1</sup> as of February 2008, thirty-one states had adopted standard interconnection rules for distributed generation, which is broader than, but typically encompasses, net metering. States near Kentucky which have adopted such rules include Indiana, Ohio, Virginia, North Carolina, and Missouri. Eleven states were reported to be in the process of developing rules, including West Virginia and Tennessee.

The key elements of a standard interconnection rule include an application process and technical interconnection requirements.<sup>2</sup> All of the jurisdictional electric utilities already have net metering tariffs on file with the Commission, but some of those tariffs set forth greater detail than others. The Commission believes that the guidelines we have been directed to develop should be comprehensive in nature so that potential

<sup>&</sup>lt;sup>1</sup> http://www.epa.gov/CHP/state-policy/interconnection.html.

<sup>&</sup>lt;sup>2</sup> http://www.epa.gov/CHP/state-policy/interconnection\_fs.html.

net metering customers will know in advance all of the rules and requirements. Further, the guidelines should also include a timeline for utility responses to ensure that net metering applications are addressed in a timely fashion.

In addition to the net metering tariffs already on file, there are model interconnection rules that have been published by the National Association of Regulatory Utility Commissioners<sup>3</sup> and the Mid-Atlantic Demand Resources Initiative (MADRI).<sup>4</sup> Since these model rules encompass a broader range of generators than merely customer-owned net metering, many of their procedures are more complex than those necessary here. However, since these resources already exist and have been widely disseminated, the Commission finds that they should be used in conjunction with the utilities' existing tariffs as the starting point for developing Kentucky-specific guidelines.

The Commission further finds that all of the jurisdictional electric utilities should be made parties to this case. Those utilities are as follows:

Big Rivers Electric Corporation
Big Sandy Rural Electric Cooperative Corporation
Blue Grass Energy Cooperative Corporation
Clark Energy Cooperative, Inc.
Cumberland Valley Electric, Inc.
Duke Energy Kentucky, Inc.
East Kentucky Power Cooperative, Inc.
Farmers Rural Electric Cooperative Corporation
Fleming-Mason Energy Cooperative
Grayson Rural Electric Cooperative Corporation
Inter-County Energy Cooperative Corporation

<sup>&</sup>lt;sup>3</sup> Model Interconnection Procedures and Agreement for Small Distributed Generation Resources, October 2003: http://www.naruc.org/Publications/dgiaip\_oct03.pdf (last visited May 13, 2008).

<sup>&</sup>lt;sup>4</sup> MADRI Model Small Generator Interconnection Procedures: *http://www.energetics.com/madri/pdfs/inter\_modelsmallgen.pdf* (last visited May 13, 2008).

Jackson Energy Cooperative
Jackson Purchase Energy Cooperative
Kenergy Corp.
Kentucky Power Company/American Electric Power
Kentucky Utilities Company
Licking Valley Rural Electric Cooperative Corporation
Louisville Gas and Electric Company
Meade County Rural Electric Cooperative Corporation
Nolin Rural Electric Cooperative Corporation
Owen Electric Cooperative, Inc.
Salt River Electric Cooperative Corporation
Shelby Energy Cooperative, Inc.
South Kentucky Rural Electric Cooperative Corporation
Taylor County Rural Electric Cooperative Corporation

Since many of these utilities share common interests with respect to the issues of interconnections and net metering, one or more utilities may elect to participate as a group, with a designated leader, rather than participating individually. Utilities that choose to participate as a group should notify the Commission in writing of their intent to do so. The Commission also encourages any individuals or groups with a special interest in net metering to participate, either by intervening or filing suggested guidelines or comments. Any requests for intervention should be by motion filed within 20 days of the date of this Order.

The first step in the process of developing the requisite guidelines will be an informal conference to discuss and gauge the parties' willingness and ability to reach a consensus on interconnection and net metering guidelines, as well as to establish future procedural dates to conduct discovery, file proposed guidelines, and hold an evidentiary hearing. The informal conference will be held on June 25, 2008.

### IT IS THEREFORE ORDERED that:

- 1. This case is established to develop interconnection and net metering guidelines.
- 2. All Kentucky jurisdictional electric utilities as enumerated in the findings above shall be parties to this case.
- 3. An informal conference shall be held on June 25, 2008 at 1:30 p.m., Eastern Daylight Time, in Hearing Room 2 of the Commission's offices in Frankfort, Kentucky.

Done at Frankfort, Kentucky, this 30th day of May, 2008.

By the Commission

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# APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN ADMINISTRATIVE CASE NO. 2008-00169 DATED MAY 30, 2008

# FREE CONFERENCE COMMITTEE REPORT

The Free Conference Committee HB X SB 83 has met provided in the Rules of the House and Senate and hereby reports the following to be adopted:	as				
X GA SC HCS					
For the above-referenced bill, with these amendments (if applicable):					
Committee (list by chamber and number):	,				
Floor (list by chamber and number):	; and				
The following Free Conference Committee action:					
On page 1, after the enacting clause, by deleting all text and substituting the following therefor:					
"→Section 1. KRS 278.465 is amended to read as follows:					
As used in KRS 278.465 to 278.468:					
(1) "Eligible customer-generator" means a customer of a retail electric supplier who owns and					
operates an electric generating facility that is located on the customer's premises, for the					
primary purpose of supplying all or part of the customer's own electricity requirements.					
<ul> <li>"Eligible electric generating facility" means an electric generating facility that:</li> <li>(a) Is connected in parallel with the electric distribution system;</li> <li>(b) Generates electricity using:</li> </ul>					
<u>1.</u> Solar energy;					
2. Wind energy;					
3. Biomass or biogas energy: or					

## 4. Hydro energy; and

- (c) Has a rated capacity of not greater than thirty (30)[fifteen (15)] kilowatts.
- (3) "Kilowatt hour" means a measure of electricity defined as a unit of work of energy, measured as one (1) kilowatt of power expended for one (1) hour.
- (4) "Net metering" means measuring the difference between the electricity supplied by the electric grid and the electricity generated by an eligible customer-generator that is fed back to the electric grid over a billing period.
  - → Section 2. KRS 278.466 is amended to read as follows:
- (1) Each retail electric supplier shall make net metering available to any eligible customer-generator that the supplier currently serves or solicits for service. If the cumulative generating capacity of net metering systems reaches one tenth of one percent (1%)[(0.1%)] of a supplier's single hour peak load during the previous year, the obligation of the supplier to offer net metering to a new customer-generator may be limited by the commission.
- (2) Each retail electric supplier serving a customer with eligible electric generating facilities shall use a standard kilowatt-hour meter capable of registering the flow of electricity in two (2) directions. Any additional meter, meters, or distribution upgrades needed to monitor the flow in each direction shall be installed at the customer-generator's expense. If additional meters are installed, the net metering calculation shall yield the same result as when a single meter is used.
- (3) 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 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.

- (4) Each net metering contract or tariff shall be identical, with respect to energy rates, rate structure, and monthly charges, to the contract or tariff to which the same customer would be assigned if the customer were not an eligible customer-generator.
- (5) The following rules shall apply to the billing of net electricity:
- (a) The net electricity produced or consumed during a billing period shall be read, recorded, and measured in accordance with metering practices prescribed by the commission;
- (b) If the electricity supplied by the retail electric supplier exceeds the electricity generated and fed back to the supplier during the billing period, the customer-generator shall be billed for the net electricity supplied in accordance with subsections (3) and (4) of this section;
- (c) If the electricity fed back to the retail electric supplier by the customer-generator exceeds the electricity supplied by the supplier during a billing period, the customer-generator shall be credited for the excess kilowatt hours in accordance with subsections (3) and (4) of this section. This electricity credit shall appear on the customer-generator's next bill. Credits shall carry forward for the life of the customer-generator's account:
- (d) If a customer-generator closes his account, no cash refund for residual generation-related credits shall be paid; and
- (e) Excess electricity credits are not transferable between customers or locations.
- (6) Electric generating systems and interconnecting equipment used by eligible customergenerators shall meet all applicable safety and power quality standards established by the National Electrical Code (NEC), Institute of Electrical and Electronics Engineers (*IEEE*), and accredited testing laboratories such as Underwriters Laboratories.
- (7) An eligible customer-generator installation is transferable to other persons or service locations upon notification to the retail electric supplier and verification that the installation is in compliance with the applicable safety and power quality standards in **Section 3 of this Act and in** subsection (6) of this section.
- (8) Any upgrade of the interconnection between the retail electric supplier and the customer-generator that is required by commission-approved tariffs for the purpose of allowing net metering shall be made at the expense of the customer-generator.
  - → Section 3. KRS 278.467 is amended to read as follows:
- (1) The commission shall have original jurisdiction over any dispute between a retail electric

- supplier and an eligible customer-generator, regarding net metering rates, service, standards, performance of contracts, and testing of net meters.
- (2) No later than one hundred eighty (180) days from the effective date of this Act[July 13, 2004], the Public Service Commission shall develop interconnection and net metering guidelines for all retail electric suppliers operating in the Commonwealth. The guidelines shall meet the requirements of subsection (6) of Section 2 of this Act[each retail electric supplier shall file with the commission a net metering tariff that includes all terms and conditions of its net metering program, including interconnection standards meeting the requirements of subsection (6) of KRS 278.466(6)].
- (3) No later than ninety (90) days from the issuance by the Public Service Commission of the guidelines required under subsection (2) of this section, each retail electric supplier shall file with the commission a net metering tariff and application forms, to comply with those guidelines. All retail electric suppliers shall make their net metering tariff and interconnection practices easily available to the public, by posting the tariff and practices on their Web sites."

Senate Members			House Members
Ernie Harris, Chair			Tanya Pullin, Chair
Brandon Smith			Harry Moberly, Jr.
David E. Boswell			Lonnie Napier
Tom Jensen			
The above-named r this report.	members, in separate votes by h	ouse, all concu April 14, 2008 DATE	
For Clerk's Use:	Adopted:Repassage Vote:		