

# Regulatory Analysis Form

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(1) Agency

Pennsylvania Public Utility Commission

(2) I.D. Number (Governor\*s Office Use)

L-00050174/57-244

IRRC Number:

2519

(3) Short Title

Final Rulemaking Re: Establishing 52 Pa. Code §§ 75.1-75.15 (Net Metering)

(4) PA Code Cite

52 Pa. Code §§ 75.1-75.15

(5) Agency Contacts & Telephone Numbers

Primary Contact: H. Kirk House 2-8495

Secondary Contact: Calvin Birge 3-1555

(6) Type of Rulemaking (check one)

- ☐ Proposed Rulemaking  
☒ Final Order Adopting Regulation  
☐ Final Order, Proposed Rulemaking Omitted

(7) Is a 120-Day Emergency Certification Attached?

- ☒ No  
☐ Yes: By the Attorney General  
☐ Yes: By the Governor

(8) Briefly explain the regulation in clear and nontechnical language.

The regulation establishes the definitions, standards and methods to be used in net metering applications pursuant to the Alternative Energy Portfolio Standards Act of 2004, 73 P.S. §§ 1648.1-1648.8.

(9) State the statutory authority for the regulation and any relevant state or federal court decisions.

Sections 501 and 1501 of the Public Utility Code, 66 Pa. C.S. §§501 and 1501; Section 5 of the Alternative Energy Portfolio Standards Act of 2004, 73 P.S. § 1648.5; Sections 201 and 202 of the Act of July 31, 1968, P.L. 769 No. 240, as amended, 45 P.S. §§1201 and 1202, and the associated regulations at 1 Pa. Code §§7.1, 7.2, and 7.5; Section 204(b) of the Commonwealth Attorneys Act, Act of October 15, 1980, P.L. 950, as amended, 71 P.S. 732.204(b); Section 745.5 of the Regulatory Review Act, Act of June 25, 1982, P.L. 633, as amended, 71 P.S. §745.5; Section 612 of the Administrative Code of April 9, 1929, P.L. 177, as amended, 71 P.S. §232, and the associated regulations at 4 Pa. Code §§7.231-7.234.

## Regulatory Analysis Form

(10) Is the regulation mandated by any federal or state law or court order, or federal regulation? If yes, cite the specific law, case or regulation, and any deadlines for action.

Yes. Section 5 of the Alternative Energy Portfolio Standards Act of 2004, 73 P.S. § 1648.5. The rulemaking process must be initiated on or before November 30, 2005.

(11) Explain the compelling public interest that justifies the regulation. What is the problem it addresses?

The Alternative Energy Portfolio Standards Act of 2004 requires the Commission to promulgate regulations governing net metering in the Commonwealth for customer-generators. The regulation establishes the framework which customer-generators and utilities will use to provide net metering of energy use and production by customer-generators. The regulation also governs interactions between customer-generators and electric generation suppliers to the extent electric generation suppliers offer net metering programs.

(12) State the public health, safety, environmental or general welfare risks associated with nonregulation.

Nonregulation is not an issue. The regulation is required by the Alternative Energy Portfolio Standards Act of 2004.

(13) Describe who will benefit from the regulation. (Quantify the benefits as completely as possible and approximate the number of people who will benefit.)

Customer-generators, utilities and the general public will benefit from having clear standards and procedures for net metering activities in the Commonwealth as required by the Alternative Energy Portfolio Standards Act of 2004. Specifically, customer-generators and utilities will have clear standards and guidelines for net-metering. The general public will benefit to the extent that net metering will promote the use of environmentally friendly energy production. Quantification of the benefits is not possible at this time.



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- (14) Describe who will be adversely affected by the regulation. (Quantify the adverse effects as completely as possible and approximate the number of people who will be adversely affected.)

No one will be adversely affected by the regulation.

- (15) List the persons, groups or entities that will be required to comply with the regulation. (Approximate the number of people who will be required to comply.)

All regulated electric utilities will be required to comply. All electric generation suppliers who offer net metering programs will be required to comply. Customer-generators who decide to net meter electric use and production will be required to comply.

- (16) Describe the communications with and input from the public in the development and drafting of the regulation. List the persons and/or groups who were involved, if applicable.

In accordance with the Alternative Energy Portfolio Standards Act of 2004, the Commission established a stakeholder group to develop the regulations. That group consisted of Commission staff, Department of Environmental Protection staff, the Energy Association of Pennsylvania, electric utilities, the Office of Consumer Advocate, the Small Business Advocate, members of the Pennsylvania Farm Bureau, vendors of alternative energy systems such as solar, wind and bio-digester equipment and trade groups representing alternative energy production interests. Several meetings were held in the spring of 2005. General comments were solicited to outline issues. Commission staff provided an initial proposal and sought specific comments to that proposal. A Notice of Proposed Rulemaking followed and comments were sought to the proposed rulemaking. The final regulation is the culmination of the foregoing efforts.

- (17) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures which may be required.

Cost studies have not been conducted. The proposed regulations provide for the installation of electric metering equipment with certain stated capabilities. The cost of such meters can range from \$250 per application to \$500 per application, depending on a variety of factors. In addition, certain billing functions performed by electric utilities will be affected. The cost of that aspect of the regulations is unknown and will be dependent in large part on the number of customer-generators who decide to implement net metering. The number of such customers is unknown at this time. Compared to the over-all rate base of the electric utilities in the Commonwealth, the costs imposed by the regulations are expected to be nominal.

## Regulatory Analysis Form

(18) Provide a specific estimate of the costs and/or savings to local governments associated with compliance, including any legal, accounting or consulting procedures which may be required.

Cost studies have not been conducted. Participation by local governments would most likely be as customer-generators and would be purely voluntary.

(19) Provide a specific estimate of the costs and/or savings to state government associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required.

Cost studies have not been conducted. The regulation may require additional Commission resources to be devoted to monitoring and reporting on net metering activities as required by the Alternative Energy Portfolio Standards Act of 2004. In addition, there may be additional Commission time required to the extent that dispute resolution will arise from utility/customer-generator interactions. These potential costs cannot be estimated at this time.



## Regulatory Analysis Form

(20) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

	Current FY Year	FY +1 Year	FY +2 Year	FY +3 Year	FY +4 Year	FY +5 Year
<b>SAVINGS:</b>	\$	\$	\$	\$	\$	\$
Regulated Community						
Local Government						
State Government						
Total Savings						
<b>COSTS:</b>						
Regulated Community						
Local Government						
State Government						
Total Costs						
<b>REVENUE LOSSES:</b>						
Regulated Community						
Local Government						
State Government						
Total Revenue Losses						

(20a) Explain how the cost estimates listed above were derived.

N/A

## Regulatory Analysis Form

(20b) Provide the past three year expenditure history for programs affected by the regulation.

Program	FY -3	FY -2	FY -1	Current FY

(21) Using the cost-benefit information provided above, explain how the benefits of the regulation outweigh the adverse effects and costs.

Net metering regulations as required by the Alternative Energy Portfolio Standards Act of 2004 establish a new program for the Commonwealth. No prior cost/benefit information is available.

(22) Describe the nonregulatory alternatives considered and the costs associated with those alternatives. Provide the reasons for their dismissal.

The Alternative Energy Portfolio Standards Act of 2004 requires the promulgation of regulations in this area. Nonregulatory alternatives would not have satisfied the legislative requirements.

(23) Describe alternative regulatory schemes considered and the costs associated with those schemes. Provide the reasons for their dismissal.

In the course of designing the regulation, the stakeholder group examined alternative net metering systems in New Jersey, New York and other jurisdictions. To the extent that existing practices were deemed "best practices," they were adopted. Any cost differences were not deemed significant.



## Regulatory Analysis Form

(24) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulation.

There are currently no federal standards that apply to the level of net metering governed by the proposed regulation.

(25) How does this regulation compare with those of other states? Will the regulation put Pennsylvania at a competitive disadvantage with other states?

The stakeholder group examined similar programs in other states, most significantly in New Jersey. The group adopted a "best practices" approach. As a result, it is anticipated that the regulations will not put Pennsylvania at a competitive disadvantage with other states.

(26) Will the regulation affect existing or proposed regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

The Commission has issued a companion regulation, also required by the Alternative Energy Portfolio Standards Act of 2004, on interconnection standards at Commission Docket No. L-00050175. The proposed Code citation is 52 Pa. Code §§ 75.21-75.51. The net metering regulation governs how energy use and production will be measured and compensated. The interconnection standards regulation governs how customer-generators will physically connect to electric distribution lines.

(27) Will any public hearings or informational meetings be scheduled? Please provide the dates, times, and locations, if available.

No.

## Regulatory Analysis Form

- (28) Will the regulation change existing reporting, record keeping, or other paperwork requirements? Describe the changes and attach copies of forms or reports which will be required as a result of implementation, if available.

There is a new reporting requirement that requires utilities and electric generation suppliers who offer net metering to provide an annual report indicating the total number of customers engaged in net metering and the total estimated rate generating capacity of those customers who net meter. Report forms have not been developed at this time.

- (29) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

Section 75.14 of the regulation provides for meter aggregation for customer-generators, including aggregation of meters on properties which may not be adjacent. This section was designed for general application, but it was revised from the proposed regulation to address concerns specific to the farming community.

- (30) What is the anticipated effective date of the regulation; the date by which compliance with the regulation will be required; and the date by which any required permits, licenses or other approvals must be obtained?

The effective date will be the date the regulation is published in the Pennsylvania Bulletin. That date will be dependent upon the regulatory review process. The Commission hopes to complete the process as quickly as possible.

- (31) Provide the schedule for continual review of the regulation.

The regulation will undergo continual review on no less than an annual basis. It is expected that the reporting requirements will aid in that review.



**FACE SHEET  
FOR FILING DOCUMENTS  
WITH THE LEGISLATIVE REFERENCE BUREAU**

**(Pursuant to Commonwealth Documents Law)**

2519

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INDEPENDENT REGULATORY  
REVIEW COMMISSION

DO NOT WRITE IN THIS SPACE

Copy below is hereby approved as to form and legality. Attorney General.

BY \_\_\_\_\_  
(DEPUTY ATTORNEY GENERAL)

DATE OF APPROVAL \_\_\_\_\_

☐ Check if applicable  
Copy not approved. Objections attached

Copy below is hereby certified to be true and correct copy of a document issued, prescribed or promulgated by:

Pennsylvania Public Utility Commission  
(AGENCY)

DOCUMENT/FISCAL NOTE NO. L-00050174/57-244

DATE OF ADOPTION June 22, 2006

BY James J. McNulty  
James J. McNulty

TITLE ( SECRETARY)

Copy below is hereby approved as to form and legality. Executive or independent Agencies.

BY Bohdan R. Pankiw  
Bohdan R. Pankiw  
Chief Counsel

6-22-06  
DATE OF APPROVAL

☐ Check if applicable. No Attorney General approval or objection within 30 days after submission.

L-00050174/57-244  
Final Rulemaking  
Net Metering for Customer-generators Pursuant  
To Section 5 of the Alternative Energy Portfolio  
Standards Act  
52 Pa. Code, Section 75

The Pennsylvania Public Utility Commission on June 22, 2006, adopted a final rulemaking order which promotes onsite generation by customer-generators using renewable resources and eliminates barriers which may have previously existed regarding net metering. The contact persons are Calvin Birge, Bureau of Conservation, Economics and Energy Planning, 783-1555 and H. Kirk House, Office of Special Assistants, 772-8495.

## EXECUTIVE SUMMARY

L-00050174/57-244

Final Rulemaking

Re: Regulation of Net Metering for Customer-Generators

52 Pa. Code Sections 75.1-75.15

Pursuant to 73 P.S. § 1648.5, the Public Utility Commission is required to develop regulations governing net metering within the Commonwealth through a stakeholder process. This rulemaking is the final regulation resulting from the stakeholder process and the notice of proposed rulemaking. The regulations govern the process by which a customer-generator, as defined by the Alternative Energy Portfolio Standards Act, can begin net metering electric usage and production from alternative energy resources. The regulation also provides for metering capabilities that will be required and a compensation mechanism which reimburses customer-generators for surplus energy supplied to the electric grid.

The contact persons are H. Kirk House, Office of Special Assistants (legal) 717-772-8495 and Calvin Birge, Conservation Economics and Energy Planning (technical) 717-783-1555.



**PENNSYLVANIA  
PUBLIC UTILITY COMMISSION  
Harrisburg, PA 17105-3265**

Public Meeting held June 22, 2006

**Commissioners Present:**

Wendell F. Holland, Chairman  
James H. Cawley, Vice Chairman  
Bill Shane  
Kim Pizzingrilli, Statement attached  
Terrance J. Fitzpatrick, Dissenting Statement attached

Final Rulemaking Re Net Metering for Customer-  
generators pursuant to Section 5 of the Alternative  
Energy Portfolio Standards Act, 73 P.S. § 1648.5.

L-00050174

Implementation of the Alternative Energy  
Portfolio Standards Act of 2004: Net Metering

M-00051865

**FINAL RULEMAKING ORDER**

**BY THE COMMISSION:**

The Alternative Energy Portfolio Standards Act of 2004, 73 P.S. §§ 1648.1-1648.8 (the Act), includes directives that the Commission develop regulations for net metering and interconnection for customer-generators. In accordance with Section 5 of the Act, 73 P.S. § 1648.5, the Commission formally commenced its rulemaking process to establish regulations governing net metering for customer-generators by issuing a Proposed Rulemaking Order at these Dockets by Order entered November 16, 2005

(Proposed Rulemaking Order). The Commission proposed regulations establishing protocols for net metering to be used by customer-generators under the Act and sought comments on those proposed regulations. Comments have been filed by the following parties: the Independent Regulatory Review Commission (IRRC); the Department of Agriculture, the Department of Environmental Protection (DEP); The Honorable Michael L. Waugh, Pennsylvania State Senator on behalf of the Chesapeake Bay Commission; The Honorable Gibson C. Armstrong, Pennsylvania State Representative; Office of Consumer Advocate (OCA); Office of Small Business Advocate (OSBA); The Pennsylvania Farm Bureau; the Pennsylvania State Grange; the Energy Association of Pennsylvania (EAP); PECO Energy Company (PECO); PPL Electric Utilities Corporation (PPL); Citizens for Pennsylvania's Future (PennFuture); the Industrial Energy Consumers of Pennsylvania, the Met-Ed Industrial Users Group, the PP&L Industrial Customer Alliance, and the West Penn Power Industrial Intervenors (collectively, IECPA, *et al.*); American Mushroom Institute; Brubaker Farms; Citizens' Electric Company (Citizens') and Wellsboro Electric Company (Wellsboro); Keech Farm Service; Laurel Valley Farms; Lowe's Dairy; Mowrey's Sprucelawn Farms; Native Energy; Pine Hurst Acres; PV Now; RCM Biothane; Red Knob Farm; and Schrack Farms.

## **BACKGROUND**

Section 5 of the Act, 73 P.S. § 1648.5, provides as follows:

The commission shall develop technical and net metering interconnection rules for customer-generators intending to operate renewable onsite generators in parallel with the electric utility grid, consistent with rules developed in other states within the service region of the regional transmission organization that manages the transmission system in any part of this Commonwealth. The commission shall convene a



stakeholder process to develop Statewide technical and net metering rules for customer-generators. The commission shall develop these rules within nine months of the effective date of this act.

On March 3, 2005, the Commission convened an Alternative Energy Portfolio Standards Working Group (AEPS WG). The AEPS WG was established in order to provide a forum for considering the technical standards, business rules and regulatory framework necessary for Act 213's implementation. The Net Metering sub-group was formed out of the AEPS WG and was specifically tasked with developing proposed regulations governing net metering and interconnection standards.

The Net Metering sub-group met on several occasions to discuss and develop a set of proposed regulations in two parts. First, the Net Metering sub-group focused on Net Metering, the purpose of this rulemaking proceeding. Second, the Net Metering sub-group focused on interconnection standards, which is the subject of a separate rulemaking proceeding.

Participants in the Net Metering sub-group included representatives from Commission Staff, DEP, EAP, the Pennsylvania Farm Bureau, OCA, OSBA, PennFuture, the Small Generator Coalition with the Solar Energy Industries Association and several similar entities. As a result, the Net Metering sub-group had the benefit of a wide array of interests and broad expertise as it went through the process of developing proposed regulations.

At the initial meeting, participants were requested to discuss various issues which any net metering rulemaking would need to address. Following that meeting, Commission Staff issued a proposed issues list to the sub-group and called for comments to add any issues not already included and propose solutions. That issues list and call for

comments was also posted on the Commission's web site. A second meeting was held to discuss the comments filed in response to the Staff generated issues list. On August 3, 2005, Commission Staff issued a proposed set of Net Metering regulations to the Net Metering sub-group and called for comments. The proposal was also posted on the Commission's web site.

Following the receipt of comments to the August 3, 2005 Staff proposal, the Commission adopted the Proposed Rulemaking Order. On February 4, 2006, the Proposed Rulemaking Order was published in the *Pennsylvania Bulletin*, 36 Pa. Bulletin 571. Comments were due sixty days from the date of publication. Comments have been received as set forth above.

## **DISCUSSION**

The Commission has reviewed each of the comments filed in this proceeding. We will address each of them as we go through the regulations *seriatim*.

### **Section 75.1. Definitions.**

Many of the definitions in the proposed regulations merely state that a particular term or phrase shall have the same meaning as that set forth in the Act. In the final form regulations, we will provide the complete definition rather than just a reference to the Act. This will eliminate the need for a person to go to the Act for the definition. Also, the IRRC noted that to the extent cross references are used, they should be used consistently throughout the definitional section.

## **Customer-generator**

### **Positions of the Parties**

The proposed definition of customer-generator adopts the definition of that term as used in the Act. That definition specifically provides that a customer-generator is a “nonutility.” DEP expresses the concern that the definition could be interpreted to exclude water utilities from participating in net metering. Accordingly, DEP requests that the Commission issue a clarifying statement that will remove barriers to non-electric utilities which desire to participate in net metering. Similarly, DEP requests that the Commission address the issue of net metering customers which do not meet the definition of “customer-generator,” but who still desire to net meter.

### **Disposition**

We will decline to adopt DEP’s suggestions in the context of this proceeding. As set forth in Section 75.11, the scope of these regulations pertains to net metering for customer-generators as mandated by Section 5 of the Act. To the extent that net metering issues exist outside of the scope of these regulations, they will be dealt with through general Commission processes and utility tariffs. We note that any utility customer, including another utility, is free to propose regulations or other Commission action to address their specific circumstances.

### **Section 75.11. Scope.**

### **Positions of the Parties**

PECO comments that the scope of the regulations should be clarified to state that a peak MW limitation exists so as to be consistent with the Act. In addition,



PECO states that net metering under the Act should be limited to Tier I resources because Section 5 of the Act provides that net metering should be provided for customer-generators intending to operate renewable onsite generators.

### **Disposition**

The framework of the regulations is built around the needs of customer-generators, as that term is defined in the Act. That definition is repeated in Section 75.1 of the regulations. Since the Act defines customer-generator with capacity limitations depending on the nature of the use (residential service, other service and service available during grid emergencies), there is no need to restate those limitations in Section 75.11. The limitations are inherent in the term customer-generator.

We will decline to adopt PECO's suggestion that net metering be offered only for Tier I resources. PECO is correct that Section 5 of the Act references renewable onsite generators; however we do not find that inclusion of Tier II resources is inconsistent with the Act or the provisions of the Code.

## Section 75.12. Definitions.

### Avoided Cost of Wholesale Power

#### Positions of the Parties

The term is defined in the proposed regulations as the average locational marginal price (LMP)<sup>1</sup> of energy, or its successor, over the annualized period in the applicable EDC's transmission zone. This term was taken directly from the New Jersey Model. LMP is commonly defined as the cost of providing the next MW to a specific location in the least-cost manner given transmission constraints.<sup>2</sup> In response to our Proposed Rulemaking Order, the IRRC requested that we clarify our definition of the Avoided Cost of Wholesale Power. The IRRC also requested that we address the issue of why an average of avoided costs over the one year reporting period is the most appropriate methodology as opposed to the actual avoided cost for the specific billing period.

In comments to the Proposed Rulemaking Order, Citizens' and Wellsboro recommend that the Commission expand the definition of Avoided Cost of Wholesale Power to include an option for an EDC to base compensation for surplus generation on the *actual* avoided cost of wholesale power in lieu of the *average annual* LMP. Additionally the Companies state that it is inappropriate for the regulations to employ a proxy for the avoided cost of wholesale power when the actual avoided cost can be identified.

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<sup>1</sup> LMP was instituted in PJM in April 1998. Before then, there had been a single system price, the market-clearing price (MCP).

<sup>2</sup> See, National Regulatory Research Institute, publication 04-16, Commissioner Primer, LMP, at p. 9.

PPL and the EAP commented on this definition by suggesting that the “annualized period” be changed to “billing period.”

### **Disposition**

We agree with the IRRC that the definition of Avoided Cost of Wholesale Power should be clarified. We also agree with the other Parties commenting on this issue regarding the use of an actual cost of wholesale power in lieu of an annual average LMP. Additionally, we agree with the suggestion that we change “annualized period” to “billing period.”

We support expanding the definition to allow an EDC to use the actual avoided cost of wholesale power when the EDC obtains the wholesale power supply to fulfill its POLR obligations through full-requirements, fixed rate contracts. Only currently effective binding contracts with identifiable negotiated rates may be relied upon to establish actual avoided cost.

By changing “annualized period” to “billing period” we are also addressing the concerns of the IRRC, the EAP and PPL. This change recognizes that compensation based upon billing cycle net deliveries will more closely reflect the avoided cost of wholesale power than an annualized average LMP. The same result occurs when we provide the option to an EDC to use actual costs when those costs are known from full-requirements, fixed rate supply contracts. Absent a known, fixed rate supply contract as described above, a billing period average LMP is an appropriate measure to determine compensation for billing period net deliveries into an EDC’s system. Therefore, the definition for the Avoided Cost of Wholesale Power is revised to read as follows:

*Avoided cost of wholesale power*--The actual cost of wholesale power avoided by the EDC, due to the operation of the customer-generator’s facility, pursuant to binding, full-requirements, fixed rate contracts, or, at the EDC’s option, the average locational marginal



price (LMP) of energy, or its successor, over the billing period in the applicable EDC's transmission zone.

### **Annualized Period**

#### **Positions of the Parties**

In our Proposed Rulemaking order we defined annualized period to mean the same as reporting period as contained in the Act. The IRRC recommended deletion of “annualized period” from Section 75.12, and replacing it with the term “reporting period” throughout the regulation where we had previously used annualized period.

#### **Disposition**

Since this term has the same definition as “reporting period” as contained in Section 2 of the Act, 73 P.S. § 1648.2, we shall adopt the IRRC’s recommendation.

### **Equipment Package**

#### **Position of the Parties**

The IRRC notes that equipment package is defined in the regulations but not used in the substantive provisions. The IRRC recommends that we delete this definition.

### **Disposition**

We will adopt the IRRC's suggestion.

### **Meter Aggregation**

Most of the Parties commented on the proposed definitions of "meter aggregation," "physical meter aggregation" and "virtual meter aggregation." We will address those comments in our discussion of Section 75.14.

### **Net metering**

### **Positions of the Parties**

The IRRC recommended that the three part definition presented within our Proposed Rulemaking Order at Section 75.12 be relegated to the body of the regulation. In support of this recommendation, the IRRC stated that the regulatory language includes substantive provisions regarding credits and costs, which are not appropriate for definitional sections. The IRRC recommended that the statutory definition of Net Metering at 73 P.S. § 1648.2 be used in Section 75.12. PECO also suggested similar treatment.

### **Disposition**

We agree with the IRRC and PECO and shall adopt the statutory definition found at Section 2 of the Act as the regulatory definition for Net Metering presented at § 75.12 of our regulations. The substantive provisions contained in the proposed Section 75.12 are already found in §§ 75.13(c) – (f).

## **Section 75.13. General Provisions.**

### **First Come, First Served**

Section 75.13(a) of the proposed regulations provides that EDCs shall offer net metering to customer-generators on a “first come, first served basis.” Several Parties expressed concerns regarding a perceived cap on the number of customer-generators that would be permitted to net meter.

### **Positions of the Parties**

The IRRC notes that the Act mandates certain minimum percentages of Tier I and Tier II alternative energy sources for EDCs and EGSs. The IRRC expresses the concern that if net metering is restricted by a first come, first served process, the EDCs and EGSs may not be able to obtain the required percentages of Tier I energy. The IRRC suggests that this section be amended to provide flexibility to the EDCs and EGSs in order to enable them to meet the required percentages.

Both PennFuture and PV Now commented that a first come, first served limitation could result in larger Tier II resources taking up allotted net metering capacity at the expense of Tier I resources such as solar. PennFuture and PV Now recommend that the Commission act to preserve some capacity for Tier I resources.

### **Disposition**

The use of a “first come, first served” process in the regulation establishes a queue for the processing of net metering requests. A secondary reason for the first come,



first served process is the recognition that the physical capacity of any given distribution system to manage net metering and the potential for surplus energy to flow onto a particular distribution circuit is finite. At this point in time, it is simply impossible to project whether or when any given distribution circuit will reach its maximum limit for net metering. Accordingly, we will not establish a reserve capacity for Tier I resources in this rulemaking. In the event that a situation arises which suggests a need for such a reservation, the Commission can take appropriate action at that time.

We will also respectfully decline to adopt the IRRC's suggestion. The Act does place certain requirements on EDCs and EGSs regarding alternative energy sources. However, the bulk of those requirements will be met in the market place outside of net metering activity by customer-generators. The size and nature of the projects subject to the Act's net metering requirements are such that they are not expected to provide sufficient amounts of generation to enable EDCs and EGSs to meet the Act's requirements from those sources alone. While it is hoped that net metering projects subject to these regulations will provide some surplus alternative energy, the principal objective of the Act's net metering provision is to provide incentives to small customer-generators to use alternative energy sources.

#### **EGS Net Metering - §§ 75.13(a) and (b)**

The proposed regulations expressly permit, but do not require, EGS's to offer net metering programs to their customers. Section 75.13(b) directs EDCs to develop net metering protocols which will enable EGSs to offer net metering programs over the EDCs' systems.

#### **Positions of the Parties**

DEP suggests that EDCs should be required to “encourage” EGSs to offer net metering. DEP also recommends setting a specific filing deadline for EDC tariffs. EAP comments that an EGS net metering program should not impact EDC distribution charges. In addition, EAP suggests that it be made clear that stranded cost treatment applies to EGS customers as well as EDC customers. Also, EAP requests that EGS programs must be consistent with the competitive metering rules of the applicable EDC territory. Finally, EAP requests that EGS net metering programs may only be offered under the two-bill, rate ready protocol. PECO suggests that Section 75.13(a) should clearly state that EGSs must coordinate their programs with EDCs. PPL offers comments similar to those presented by the EAP.

### **Disposition**

The proposed regulations purposely do not mandate specific provisions for EGS net metering programs. As set forth in the Proposed Rulemaking Order, we hope that EGSs will offer competing net metering products, but we decline to direct them to do so, leaving that type of decision to the market. Consistent with that position, we will not direct EDCs to encourage EGSs to offer net metering products. Also, once the regulations actually become effective, the Commission can direct that conforming tariffs be filed on or before a date certain by Order. We need not specify a time within the regulations.

The comments of the EAP, PECO and PPL are well founded. First, Section 2808(a) of the Code does not relieve a customer of its stranded cost obligation when the customer is served by an EGS. Nothing in this rulemaking conflicts with that provision or changes it in any way. Accordingly, while the comments on this issue are correct, we do not find a need to address it in this rulemaking.

Second, it will be necessary for any EGS offering a net metering product to coordinate its program with the EDC providing distribution services. To that end, we directed each EDC to establish protocols enabling EGSs to offer net metering. Issues such as the two-bill, rate ready protocol and compliance with competitive metering programs can be readily addressed in the net metering protocols directed in Section 75.13(b). Those types of issues will be better addressed by EGSs and EDCs as implementation occurs and the EDCs develop the necessary protocols in their tariffs. They do not readily lend themselves to regulatory treatment. Accordingly, we will not address them in these regulations. We note that those protocols must be approved by the Commission through the tariff process.

**Credit and Compensation -- §§ 75.13(c) and (d)** (proposed §§ 75.13(c), (d) and (e))

Several Parties, including the IRRC, raised concerns regarding the credit methodology and cash-out provisions of the proposed regulations. The concerns regarding credit issues are more fully discussed in relation to Sections 75.14(a) and (b) relating to metering. Concerns regarding the cash-out provisions for excess electricity supplied to the grid have already been addressed in our discussion of the definition of Avoided Cost of Wholesale Energy, above. As noted there, we have adopted the recommendation of the IRRC, the EAP and PPL and moved to a billing period payment rather than an annual reconciliation as originally proposed. We have changed former Section 75.13(c) to recognize the revised treatment of meter aggregation programs. We have revised Section 75.13(d) to provide for a monthly cash-out for excess generation supplied by customer-generators.



## **Insurance Requirements - § 75.13(j) (proposed § 75.13(k))**

### **Positions of the Parties**

Citizens and Wellsboro request that proposed Section 75.13(k) (now Section 75.13(j)) be amended to require insurance for certain projects above a stated generating capacity limit.

### **Disposition**

We will decline to adopt an insurance requirement at this time. EDCs and EGSs offering net metering programs may encourage customer-generators who decide to net meter to obtain insurance, but we will not mandate an insurance requirement. As the Commission developed the proposed regulations, an overwhelming majority of comments strongly recommended against such a requirement. Citizens and Wellsboro have added nothing to the discussion which convinces us that such a requirement is necessary.

## **§75.14. Meters and Metering**

### **Single Bi-Directional Meter & Dual Meter Arrangements -§ 75.14(a)(b)**

Under Section 75.14(a), the proposed regulations require that a customer-generator facility used for net metering be equipped with a single bi-directional meter that can measure and record the flow of electricity in both directions at the same rate. A dual meter arrangement may be substituted for a single bi-directional meter if the customer-generator agrees. Subsection (b) provides that if the customer-generator's

existing metering equipment does not meet these requirements, the EDC must install new metering equipment at the EDC's expense.

### **Positions of the Parties**

The EAP, Citizen's, Wellsboro, PPL, PECO and OSBA support a dual meter approach as opposed to the single bi-directional approach provided in Subsection (a) of the proposed regulations. Citizen's and Wellsboro note that nothing in the Act mandates that the Commission adopt a single meter approach to net metering. PECO adds that the customer-generator should not have the ultimate authority as to whether or not the dual meter arrangement is utilized.

As explained by PPL, under the dual meter approach, the customer is billed for delivery service in the same way that any other customer taking service on the same Rate Schedule is billed. The customer-generator is separately compensated for generation, Credits and any other attributes. The single-meter approach involves the netting of kilowatt-hours delivered to the customer and kilowatt-hours generated by the customer to produce a single bill calculated using delivery rates. EAP believes that the single meter approach results in all other ratepayers unreasonably subsidizing the distribution service for customer-generators. The OSBA adds that under the single meter approach, customer-generators would pay the CTC and ITC only on the difference between the kWh delivered to the customer-generator by the EDC and the kWh sent by the customer-generator over the EDC's distribution system. Since the customer-generator would pay the CTC or ITC on too few kWhs, the EDC would experience a shortfall. OSBA recommends that Subsection (a) be modified to ensure that the metering equipment must make a separate recording of the flow of electricity in each direction.

DEP recommends that the Commission establish a required meter accuracy standard in this rulemaking. DEP also recommends removing the phrase "and record"

from the metering requirements out of a concern that this could lead to a misinterpretation of the Section.

The IRRC suggests that the Commission should consider all of the possible metering alternatives in relation to the comments and explain why the metering approach selected is the best alternative.

### **Disposition**

In response to the IRRC recommendation, the Commission reviewed the metering approach provided in the proposed regulations recommending a single bi-directional meter. The approach in the proposed regulations is a one-for-one kWh credit generated from the customer-generator. This methodology lends itself to a single, bi-directional meter approach. We also note that due to the treatment of stranded costs in Section 75.15, the loss of any stranded costs would be minimal. In addition, certain minimum charges applicable to specific rate schedules will still be paid.

In the event that the EDC's meter would not be capable of operating in a bi-directional mode, then a dual meter application would be permitted at the EDC's expense. Bi-directional meters provide an immediate impact on the customer's bill while reducing administrative costs, an important factor in the successful implementation of net metering. The intent of the Act is to encourage the increased use of alternate energy and provide an immediate positive feedback to the customer-generator. Also, the intent of this Section is to provide some flexibility for the meter arrangement. However, the credit mechanism remains a kWh credit per kWh produced for the billing cycle. We note that this is consistent with the New Jersey credit mechanism.

With regard to DEP's comments regarding the phrase "and record," we do not share the concern that the phrase will lead to a misinterpretation of the Section. The Regulations specifically state that the credit mechanism is a kWh-for-kWh credit. Thus,

the ability to record energy produced and used will not affect the credit mechanism, but may become important in determining the production of renewable energy credits. We also note that the Commission's Regulations governing meter accuracy currently found at 52 Pa. Code §§ 57.20 and 57.21 remain in force. Accordingly, there is no need for an additional meter accuracy standard in this chapter.

#### **Alternative Energy Credit Ownership-§75.14(d)**

Under Section 75.14(d), the proposed regulations provide that in cases where a customer-generator expressly rejects ownership of the alternative energy credits, the EDC may secure ownership by supplying additional metering equipment if necessary.

#### **Positions of the Parties**

The OCA and the IRRC recommend that it must be made clear in the regulation that any solicitation from the EDC requesting that a customer give up title to credits can only be made in the context of a full and accurate description of the options open to the customer. The OCA and the IRRC suggest that the proposed regulations should be revised to incorporate a requirement that the EDC fully inform the customer of the value of the credits and other options for the credits.

PennFuture and PV Now comment that the regulations should clarify that the owner of the customer-generator facility, who invested in the technology, is the default owner of the alternative energy credits produced, unless the owner enters into a contract to do otherwise.

Citizens, Wellsboro, EAP, and PPL all suggest that any alternative energy credits produced by customer-generators should be owned by the customer-generator's



EDC. The Parties state that once a kWh for kWh credit methodology is established, ownership of alternative energy credits should inure to the benefit of the EDC and its ratepayers.

### **Disposition**

The OCA and the IRRC have raised legitimate concerns. We will add a provision to the regulations requiring EDCs, prior to gaining title to alternative energy credits, to fully inform customer-generators of the potential value of those credits and other options for disposing of those credits. The Commission will modify the regulations accordingly.

PennFuture and PV Now are correct that the regulations as proposed assume that the customer-generator is the owner of any renewable energy credits produced by the onsite generation. (Sections 75.13(h) and 75.14(c) and (d)). While those two Parties recommend a change in the regulations to provide that the owner of the generation facility owns the credits, we will decline to do so. The focus of these regulations is on customer-generators and how they may net meter pursuant to the Act. Nothing in the regulations or the Act precludes a customer-generator from divesting any ownership interest in renewable energy credits produced. In fact, Section 75.13(h) expressly provides for those situations. We would expect that in the circumstances described by PennFuture and PV Now, the parties to the transaction would have some form of written agreement governing credit ownership. Such an arrangement would be fully consistent with the Regulations as currently proposed.

We will also decline to provide that ownership of alternative energy credits will be vested in the customer-generator's EDC. Ownership of alternative energy credits produced by onsite generation properly rests with the customer-generator unless a different arrangement has been agreed to by the customer-generator.

### **Meter Aggregation- §75.14(e)**

In the Proposed Rulemaking Order we proposed a restrictive definition of meter aggregation, limiting aggregation to a single rate class and to adjacent and contiguous properties owned and operated by a customer- generator. (*See*, Sections 75.12 and 75.14(e)). The IRRC requested an explanation of the limits for meter aggregation regarding rate class and property locations as well as the necessity and appropriateness of the limitations.

### **Positions of Parties**

This section of the regulations also sparked the interest of seventeen commenters. The comments were in disagreement with the restrictive definition of meter aggregation and the meter location issue. We heard from farmers which operate anaerobic digesters such as Red Knob Farms, Mowrey's Sprucelawn Farms, Brubaker Farms, Laural Valley Farms, Keech Farm Services, LTD, Lowes Dairy, Pine Hurst Acres, Schrack Farm Partnership, and the American Mushroom Institute. Additional support for modifications were advanced by RCM Biothane, PV Now, Native Energy, PennFuture, DEP, the Pennsylvania Grange, the Pennsylvania Farm Bureau, the Chesapeake Bay Commission through Senator Waugh, Representative Armstrong and the Department of Agriculture.

Alternatively, EAP, Exelon, PPL and Citizens Electric, and Wellsboro recommended that the provision for virtual meter aggregation be deleted in its entirety and providing only for physical meter aggregation at the customer-generator's expense.

## **Disposition**

The fundamental intent of Act is the expansion and increased use of alternative energy systems and energy efficiency practices. Regulatory and economical barriers have been in place that prevented systems such as anaerobic digesters from being more economical or further developed. This rulemaking provides an opportunity to advance the use of these alternative energy systems in a way that will benefit the customer-generator, ratepayers and the environment by allowing exceptions for this important class of customers. Accordingly, we will permit virtual meter aggregation for customer-generators.

As pointed out by the Pennsylvania Farm Bureau, the proposed definition and application of virtual meter aggregation do not fit the reality of a typical Pennsylvania farm operation that has adequate animal units to produce required amounts of manure for anaerobic digesters to operate efficiently. The Pennsylvania Department of Agriculture recently surveyed 26 farms in the state that either have manure digesters operating, digesters under construction or in the planning stages. Out of the 21 farm operations that responded to the survey, there are 148 individual meters involved, which represents an average of seven meters per farm.

Additionally, a study completed by Dr. James Cobb from the University of Pittsburgh, in 2005, titled Anaerobic Digesters on Dairy Farms, indicates a potential of 50-60 digesters being developed on Pennsylvania dairy farms in the foreseeable future. The digesters will not be developed to this extent if the proposed metering aggregation restrictions remain in place. In addition, PennFuture directed our attention to other types of projects which could meet the requirements for customer-generator net metering, but would be unable to avail themselves of virtual meter aggregation under the regulations as proposed.

Penn Future's comments are well directed and provide language that will help alternative generation expand as envisioned by the Act. First, the definition of "meter aggregation" should be changed to allow aggregation regardless of rate class on properties owned and/or leased and operated by a customer-generator. We have changed the regulations accordingly. Second, the issue of multiple rate classes can be addressed by first applying onsite generation to the meter through which the system feeds. Any excess energy generated would be credited equally to the other service meters on the farm location, allowing each meter to maintain its current rate class. Additionally, we will modify the language in Section 75.14(e) from "contiguous and adjacent properties owned and operated by the customer-generator" to owned and /or leased parcels within two miles of the customer-generator's property lines to allow customer-generators to participate in net metering on a better economic footing. The customer-generator must be served by one EDC.

## **§ 75.15. Treatment of Stranded Costs**

### **Positions of the Parties**

In our Proposed Rulemaking Order we stated that if a net metering small commercial, commercial or industrial customer's annual self-generation resulted in a 10% or more reduction in distribution services and electricity purchases from the EDC when compared with the prior annual period, that net metering customer shall be responsible for its share of stranded costs, based upon the prior annual period, or base period if applicable. In its comments the IRRC questioned how the threshold of 10% or more was determined to be appropriate and would not compromise the utility's recovery



of costs. The OSBA commented that 10% was not a *de minimus* amount and would result in other customers subsidizing the customer-generators' stranded cost obligation. In addition, the OSBA commented that a customer-generator would only pay stranded costs on the difference between kWh delivered and kWh used. According to the OSBA, this would result in a shortfall to the EDC which would have to be recovered from other ratepayers.

Several Parties commented that the stranded cost obligation should be waived altogether or receive some type of credit tied to the alternative generation. These included the Department of Agriculture, Native Energy, the Pennsylvania Farm Bureau, Pine Hurst Acres, PV Now, RCM Biothane, and Schrack Farms.

### **Disposition**

As we set forth in the Proposed Rulemaking Order, when onsite generation results in "significantly" reduced purchases, a proportionate share of stranded cost recovery is mandated by Section 2808(a) of the Public Utility Code (Code), 66 Pa. C.S. § 2808(a). The OSBA's comments regarding a shortfall in stranded cost recovery completely ignores the operation of Section 2808(a) of the Code. Also, Section 2808(a) does not provide for a "*de minimus*" standard. The standard is a *significant* reduction in usage as a result of onsite generation. During the Commission's restructuring implementation, most of the EDCs issued tariff provisions which stated that a significant reduction in use for purposes of Section 2808(a) meant a reduction in use of 10% or more. Since the time those tariff provisions have been in effect, the Commission has received no complaints that such a threshold has operated to the detriment of any particular rate class or EDC. That is the basis for our use of the 10% threshold here.

Because of the requirements of Section 2808(a) of the Code we have no authority to adopt those comments which recommend a waiver or credit of stranded costs for customer-generators. Similarly, given our experience with the use of the 10% threshold, we decline to alter that threshold in this rulemaking.

### **Cost Recovery**

### **Positions of the Parties**

Several Parties have requested that to the extent that costs are incurred by EDCs for the provision of net metering, a section should be added to this Chapter which expressly provides that such costs are recoverable under Section 3(a)(3) of the Act, 73 P.S. § 1648.3(a)(3). These Parties include Citizens, Wellsboro, EAP and PPL.

### **Disposition**

We will not address this issue in the context of this rulemaking. Section 3(a)(3) of the Act provides a description of the categories of recoverable costs and the mechanism available to seek recovery. This proceeding is not the appropriate vehicle to address issues arising under that Section of the Act.

## **CONCLUSION**

The modifications discussed herein address the concerns of the Parties and are in the public interest. We have reviewed all of the comments and, to the extent a Party's position was not adopted, it was nonetheless carefully considered. We wish to compliment all those who filed comments on the quality of the comments. They were extraordinarily helpful in arriving at a final rulemaking that is consistent with the Act, the

Code and fulfills the Act's intent to remove barriers to net metering and provide appropriate treatment to customer-generators who wish to net meter.

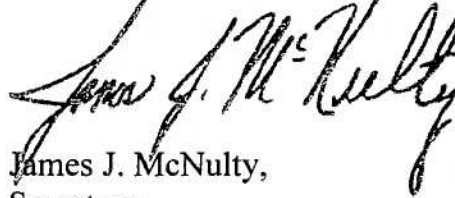
Accordingly, under section 501 of the Public Utility Code, 66 Pa. C.S. §§ 501; section 5 of the Alternative Energy Portfolio Supply Act of 2004, 73 P.S. § 1648.5; sections 201 and 202 of the Act of July 31, 1968, P.L. 769 No. 240, 45 P.S. §§ 1201-1202, and the regulations promulgated thereunder at 1 Pa. Code §§ 7.1, 7.2, and 7.5; section 204(b) of the Commonwealth Attorneys Act, 71 P.S. 732.204(b); section 745.5 of the Regulatory Review Act, 71 P.S. § 745.5; and section 612 of the Administrative Code of 1929, 71 P.S. § 232, and the regulations promulgated thereunder at 4 Pa. Code §§ 7.231-7.234, the Commission adopts the regulations at 52 Pa. Code §§ 75.1-75.15, as noted above and as set forth in Annex A, attached hereto; **THEREFORE,**

**IT IS ORDERED:**

1. That the regulations at 52 Pa. Code Chapter 75 are amended by adding Sections 75.1-75.15 as set forth in Annex A.
2. That the Secretary shall submit this order and Annex A for review by the designated standing committees of both houses of the General Assembly, and for review and approval by IRRC.
3. That the Secretary shall submit this order and Annex A to the Office of Attorney General for approval as to legality.
4. That the Secretary shall submit this order and Annex A to the Governor's Budget Office for review of fiscal impact.
5. That the Secretary shall duly certify this order and Annex A and deposit them with the Legislative Reference Bureau for publication in the *Pennsylvania Bulletin*.

6. That a copy of this order and Annex A be served upon the Department of Environmental Protection, all jurisdictional electric utility companies, licensed electric generation suppliers, the Office of Consumer Advocate, the Office of Small Business Advocate and all Parties filing comments in this proceeding.
7. That these regulations shall become effective upon publication in the *Pennsylvania Bulletin*.
8. That the contact persons for this rulemaking are Calvin Birge, Bureau of Conservation, Economics and Energy Planning, 717-783-1555 (technical), and H. Kirk House, Office of Special Assistants, 717-772-8495 (legal).

BY THE COMMISSION



James J. McNulty,  
Secretary

(SEAL)

ORDER ADOPTED: June 22, 2006

ORDER ENTERED: **JUN 23 2006**

## Annex A

### TITLE 52. PUBLIC UTILITIES

#### PART I. PUBLIC UTILITY COMMISSION

##### Subpart C. FIXED SERVICE UTILITIES

#### CHAPTER 75. ALTERNATIVE ENERGY PORTFOLIO STANDARDS

##### Subchapter A. GENERAL PROVISIONS

###### § 75.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings unless the context clearly indicates otherwise:

Act— THE Alternative Energy Portfolio Standards Act (73 P. S. §§ 1648.1--1648.8).

Alternative energy credit--The term has the same meaning as defined in section 2 of the act A TRADABLE INSTRUMENT THAT IS USED TO ESTABLISH, VERIFY AND MONITOR COMPLIANCE WITH THE ACT. A UNIT OF CREDIT MUST EQUAL 1 MEGAWATT HOUR OF ELECTRICITY FROM AN ALTERNATIVE ENERGY SOURCE. (73 P. S. § 1648.2).

Alternative energy sources--The term has the same meaning as defined in section 2 of the act. THE TERM INCLUDES THE FOLLOWING EXISTING AND NEW SOURCES FOR THE PRODUCTION OF ELECTRICITY:

(I) SOLAR PHOTOVOLTAIC OR OTHER SOLAR ELECTRIC ENERGY.

(II) SOLAR THERMAL ENERGY.

(III) WIND POWER.

(IV) LARGE-SCALE HYDROPOWER, WHICH MEANS THE PRODUCTION OF ELECTRIC POWER BY HARNESSING THE HYDROELECTRIC POTENTIAL OF MOVING WATER IMPOUNDMENTS, INCLUDING PUMPED STORAGE THAT DOES NOT MEET THE REQUIREMENTS OF LOW-IMPACT HYDROPOWER.

(V) LOW-IMPACT HYDROPOWER CONSISTING OF ANY TECHNOLOGY THAT PRODUCES ELECTRIC POWER AND THAT HARNESSES THE HYDROELECTRIC



POTENTIAL OF MOVING WATER IMPOUNDMENTS, PROVIDED THE INCREMENTAL HYDROELECTRIC DEVELOPMENT:

(A) DOES NOT ADVERSELY CHANGE EXISTING IMPACTS TO AQUATIC SYSTEMS.

(B) MEETS THE CERTIFICATION STANDARDS ESTABLISHED BY THE LOW IMPACT HYDROPOWER INSTITUTE AND AMERICAN RIVERS, INC., OR THEIR SUCCESSORS.

(C) PROVIDES AN ADEQUATE WATER FLOW FOR PROTECTION OF AQUATIC LIFE AND FOR SAFE AND EFFECTIVE FISH PASSAGE.

(D) PROTECTS AGAINST EROSION.

(E) PROTECTS CULTURAL AND HISTORIC RESOURCES.

(VI) GEOTHERMAL ENERGY, WHICH MEANS ELECTRICITY PRODUCED BY EXTRACTING HOT WATER OR STEAM FROM GEOTHERMAL RESERVES IN THE EARTH'S CRUST AND SUPPLIED TO STEAM TURBINES THAT DRIVE GENERATORS TO PRODUCE ELECTRICITY.

(VII) BIOMASS ENERGY, WHICH MEANS THE GENERATION OF ELECTRICITY UTILIZING THE FOLLOWING:

(A) ORGANIC MATERIAL FROM A PLANT THAT IS GROWN FOR THE PURPOSE OF BEING USED TO PRODUCE ELECTRICITY OR IS PROTECTED BY THE FEDERAL CONSERVATION RESERVE PROGRAM (CRP) AND PROVIDED FURTHER THAT CROP PRODUCTION ON CRP LANDS DOES NOT PREVENT THE ACHIEVEMENT OF THE WATER QUALITY PROTECTION, SOIL EROSION PREVENTION OR WILDLIFE ENHANCEMENT PURPOSES FOR WHICH THE LAND WAS PRIMARILY SET ASIDE.

(B) ANY SOLID NONHAZARDOUS, CELLULOSIC WASTE MATERIAL THAT IS SEGREGATED FROM OTHER WASTE MATERIALS, SUCH AS WASTE PALLETS, CRATES AND LANDSCAPE OR RIGHT-OF-WAY TREE TRIMMINGS OR AGRICULTURAL SOURCES, INCLUDING ORCHARD TREE CROPS, VINEYARDS, GRAIN, LEGUMES, SUGAR AND OTHER BYPRODUCTS OR RESIDUES.

(VIII) BIOLOGICALLY DERIVED METHANE GAS, WHICH INCLUDES METHANE FROM THE ANAEROBIC DIGESTION OF ORGANIC MATERIALS FROM YARD WASTE, SUCH AS GRASS CLIPPINGS AND LEAVES, FOOD WASTE, ANIMAL WASTE AND SEWAGE SLUDGE. THE TERM ALSO INCLUDES LANDFILL METHANE GAS.

(IX) FUEL CELLS, WHICH MEANS ANY ELECTROCHEMICAL DEVICE THAT CONVERTS CHEMICAL ENERGY IN A HYDROGEN-RICH FUEL DIRECTLY INTO ELECTRICITY, HEAT AND WATER WITHOUT COMBUSTION.

(X) WASTE COAL, WHICH INCLUDES THE COMBUSTION OF WASTE COAL IN FACILITIES IN WHICH THE WASTE COAL WAS DISPOSED OR ABANDONED PRIOR TO JULY 31, 1982, OR DISPOSED OF THEREAFTER IN A PERMITTED COAL REFUSE DISPOSAL SITE REGARDLESS OF WHEN DISPOSED OF, AND USED TO GENERATE ELECTRICITY, OR OTHER WASTE COAL COMBUSTION MEETING ALTERNATE ELIGIBILITY REQUIREMENTS ESTABLISHED BY REGULATION. FACILITIES COMBUSTING WASTE COAL SHALL USE AT A MINIMUM A COMBINED FLUIDIZED BED BOILER AND BE OUTFITTED WITH A LIMESTONE INJECTION SYSTEM AND A FABRIC FILTER PARTICULATE REMOVAL SYSTEM. ALTERNATIVE ENERGY CREDITS SHALL BE CALCULATED BASED UPON THE PROPORTION OF WASTE COAL UTILIZED TO PRODUCE ELECTRICITY AT THE FACILITY.

(XI) COAL MINE METHANE, WHICH MEANS METHANE GAS EMITTING FROM ABANDONED OR WORKING COAL MINES.

(XII) DEMAND-SIDE MANAGEMENT CONSISTING OF THE MANAGEMENT OF CUSTOMER CONSUMPTION OF ELECTRICITY OR THE DEMAND FOR ELECTRICITY THROUGH THE IMPLEMENTATION OF:

(A) ENERGY EFFICIENT TECHNOLOGIES, MANAGEMENT PRACTICES OR OTHER STRATEGIES IN RESIDENTIAL, COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND GOVERNMENT CUSTOMERS THAT SHIFT ELECTRIC LOAD FROM PERIODS OF HIGHER DEMAND TO PERIODS OF LOWER DEMAND.

(B) LOAD MANAGEMENT OR DEMAND RESPONSE TECHNOLOGIES, MANAGEMENT PRACTICES OR OTHER STRATEGIES IN RESIDENTIAL, COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND GOVERNMENT CUSTOMERS THAT SHIFT ELECTRIC LOAD FROM PERIODS OF HIGHER DEMAND TO PERIODS OF LOWER DEMAND.

(C) INDUSTRIAL BY-PRODUCT TECHNOLOGIES CONSISTING OF THE USE OF A BY-PRODUCT FROM AN INDUSTRIAL PROCESS, INCLUDING REUSE OF ENERGY FROM EXHAUST GASES OR OTHER MANUFACTURING BY-PRODUCTS THAT ARE USED IN THE DIRECT PRODUCTION OF ELECTRICITY AT THE FACILITY OF A CUSTOMER.

(XIII) DISTRIBUTED GENERATION SYSTEM, WHICH MEANS THE SMALL-SCALE POWER GENERATION OF ELECTRICITY AND USEFUL THERMAL ENERGY.

~~Alternative energy system--The term has the same meaning as defined in section 2 of the act.~~  
A FACILITY OR ENERGY SYSTEM THAT USES A FORM OF ALTERNATIVE ENERGY

SOURCE TO GENERATE ELECTRICITY AND DELIVERS THE ELECTRICITY IT GENERATES TO THE DISTRIBUTION SYSTEM OF AN EDC OR TO THE TRANSMISSION SYSTEM OPERATED BY A REGIONAL TRANSMISSION ORGANIZATION.

~~Competitive transition charge--The term has the same meaning as defined in 66 Pa.C.S. § 2803 (relating to definitions).~~ A NONBYPASSABLE CHARGE APPLIED TO THE BILL OF EVERY CUSTOMER ACCESSING THE TRANSMISSION OR DISTRIBUTION NETWORK WHICH CHARGE IS DESIGNED TO RECOVER AN ELECTRIC UTILITY'S TRANSITION OR STRANDED COSTS.

~~Cost recovery period--The term has the same meaning as defined in section 2 of the act.~~ THE LONGER OF:

(I) THE PERIOD DURING WHICH COMPETITIVE TRANSITION CHARGES UNDER 66 PA. C.S. § 2808 (RELATING TO COMPETITIVE TRANSITION CHARGE) OR INTANGIBLE TRANSITION CHARGES UNDER 66 PA. C.S. § 2812 (RELATING TO APPROVAL OF TRANSITION BONDS) ARE RECOVERED.

(II) THE PERIOD DURING WHICH AN EDC OPERATES UNDER A COMMISSION-APPROVED GENERATION RATE PLAN THAT HAS BEEN APPROVED PRIOR TO OR WITHIN 1 YEAR OF FEBRUARY 28, 2005, BUT THE COST-RECOVERY PERIOD UNDER THE ACT MAY NOT EXTEND BEYOND DECEMBER 31, 2010.

~~Customer-generator--The term has the same meaning as defined in section 2 of the act.~~ A NONUTILITY OWNER OR OPERATOR OF A NET METERED DISTRIBUTED GENERATION SYSTEM WITH A NAMEPLATE CAPACITY OF NOT GREATER THAN 50 KILOWATTS IF INSTALLED AT A RESIDENTIAL SERVICE OR NOT LARGER THAN 1,000 KILOWATTS AT OTHER CUSTOMER SERVICE LOCATIONS, EXCEPT FOR CUSTOMERS WHOSE SYSTEMS ARE ABOVE 1 MEGAWATT AND UP TO 2 MEGAWATTS WHO MAKE THEIR SYSTEMS AVAILABLE TO OPERATE IN PARALLEL WITH THE ELECTRIC UTILITY DURING GRID EMERGENCIES AS DEFINED BY THE REGIONAL TRANSMISSION ORGANIZATION OR WHERE A MICROGRID IS IN PLACE FOR THE PURPOSE OF MAINTAINING CRITICAL INFRASTRUCTURE, SUCH AS HOMELAND SECURITY ASSIGNMENTS, EMERGENCY SERVICES FACILITIES, HOSPITALS, TRAFFIC SIGNALS, WASTEWATER TREATMENT PLANTS OR TELECOMMUNICATIONS FACILITIES, PROVIDED THAT TECHNICAL RULES FOR OPERATING GENERATORS INTERCONNECTED WITH FACILITIES OF AN EDC, ELECTRIC COOPERATIVE OR MUNICIPAL ELECTRIC SYSTEM HAVE BEEN PROMULGATED BY THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS AND THE COMMISSION.

~~Department--The Department of Environmental Protection of the Commonwealth.~~

~~EDC--Electric distribution company--This term has the same meaning as defined in 66 Pa.C.S. § 2803.~~ THE PUBLIC UTILITY PROVIDING FACILITIES FOR THE JURISDICTIONAL TRANSMISSION AND DISTRIBUTION OF ELECTRICITY TO RETAIL CUSTOMERS, EXCEPT BUILDING OR FACILITY OWNERS/OPERATORS THAT MANAGE THE INTERNAL DISTRIBUTION SYSTEM SERVING THE BUILDING OR FACILITY AND THAT SUPPLY ELECTRIC POWER AND OTHER RELATED ELECTRIC POWER SERVICES TO OCCUPANTS OF THE BUILDING OR FACILITY.

~~EGS--Electric generation supplier--This term has the same meaning as defined in 66 Pa.C.S. § 2803.~~

(I) A PERSON OR CORPORATION, INCLUDING MUNICIPAL CORPORATIONS WHICH CHOOSE TO PROVIDE SERVICE OUTSIDE THEIR MUNICIPAL LIMITS EXCEPT TO THE EXTENT PROVIDED PRIOR TO \_\_\_\_\_ (Editor's Note: The blank refers to the date of adoption of this chapter), BROKERS AND MARKETERS, AGGREGATORS OR ANY OTHER ENTITIES, THAT SELLS TO END-USE CUSTOMERS ELECTRICITY OR RELATED SERVICES UTILIZING THE JURISDICTIONAL TRANSMISSION AND DISTRIBUTION FACILITIES OF AN EDC OR THAT PURCHASES, BROKERS, ARRANGES OR MARKETS ELECTRICITY OR RELATED SERVICES FOR SALE TO END-USE CUSTOMERS UTILIZING THE JURISDICTIONAL TRANSMISSION AND DISTRIBUTION FACILITIES OF AN EDC.

(II) THE TERM EXCLUDES BUILDING OR FACILITY OWNER/OPERATORS THAT MANAGE THE INTERNAL DISTRIBUTION SYSTEM SERVING THE BUILDING OR FACILITY AND THAT SUPPLY ELECTRIC POWER AND OTHER RELATED POWER SERVICES TO OCCUPANTS OF THE BUILDING OR FACILITY.

(III) THE TERM EXCLUDES ELECTRIC COOPERATIVE CORPORATIONS EXCEPT AS PROVIDED IN 15 PA. C.S. CHAPTER 74 (RELATING TO GENERATION CHOICE FOR CUSTOMERS OF ELECTRIC COOPERATIVES).

~~Force majeure--The term has the same meaning as defined in section 2 of the act.~~ UPON ITS OWN INITIATIVE OR UPON A REQUEST OF AN EDC OR AN EGS, THE COMMISSION, WITHIN 60 DAYS, WILL DETERMINE IF ALTERNATIVE ENERGY RESOURCES ARE REASONABLY AVAILABLE IN THE MARKETPLACE IN SUFFICIENT QUANTITIES FOR THE EDCS AND THE EGSS TO MEET THEIR OBLIGATIONS FOR THAT REPORTING PERIOD UNDER THE ACT. IF THE COMMISSION DETERMINES THAT ALTERNATIVE ENERGY RESOURCES ARE NOT REASONABLY AVAILABLE IN SUFFICIENT QUANTITIES IN THE MARKETPLACE FOR THE EDCS AND EGSS TO MEET THEIR OBLIGATIONS UNDER THE ACT, THE COMMISSION WILL MODIFY THE UNDERLYING OBLIGATION OF THE EDC OR EGS OR RECOMMEND TO THE GENERAL ASSEMBLY THAT THE UNDERLYING OBLIGATION BE ELIMINATED.

~~kW--Kilowatt--A unit of power representing 1,000 watts. A kW equals 1/1000 of a MW.~~



MW--Megawatt--A unit of power representing 1,000,000 watts. A MW equals 1,000 kW.

Municipal solid waste--The term has the same meaning as defined in section 2 of the act. THE TERM INCLUDES ENERGY FROM EXISTING WASTE TO ENERGY FACILITIES WHICH THE DEPARTMENT HAS DETERMINED ARE IN COMPLIANCE WITH CURRENT ENVIRONMENTAL STANDARDS, INCLUDING THE APPLICABLE REQUIREMENTS OF THE CLEAN AIR ACT (§§ 7401-7671Q) AND ASSOCIATED PERMIT RESTRICTIONS AND THE APPLICABLE REQUIREMENTS OF THE SOLID WASTE MANAGEMENT ACT (35 P.S. §§ 6018.101-6018.1003).

RTO--Regional transmission organization--The term has the same meaning as defined in section 2 of the act. AN ENTITY APPROVED BY THE FEDERAL ENERGY REGULATORY COMMISSION (FERC) THAT IS CREATED TO OPERATE AND MANAGE THE ELECTRICAL TRANSMISSION GRIDS OF THE MEMBER ELECTRIC TRANSMISSION UTILITIES AS REQUIRED UNDER FERC ORDER 2000, DOCKET NO. RM99-2-000, FERC CHAPTER 31.089 (1999) OR ANY SUCCESSOR ORGANIZATION APPROVED BY THE FERC.

Reporting period--The term has the same meaning as defined in section 2 of the act. THE 12-MONTH PERIOD FROM JUNE 1 THROUGH MAY 31. A REPORTING YEAR SHALL BE NUMBERED ACCORDING TO THE CALENDAR YEAR IN WHICH IT BEGINS AND ENDS.

Retail electric customer--The term has the same meaning as defined in section 2 of the act.

(I) A DIRECT PURCHASER OF ELECTRIC POWER.

(II) THE TERM EXCLUDES AN OCCUPANT OF A BUILDING OR FACILITY WHERE THE FOLLOWING APPLY:

(A) THE OWNERS/OPERATORS MANAGE THE INTERNAL DISTRIBUTION SYSTEM SERVING THE BUILDING OR FACILITY AND SUPPLY ELECTRIC POWER AND OTHER RELATED POWER SERVICES TO OCCUPANTS OF THE BUILDING OR FACILITY.

(B) THE OWNERS/OPERATORS ARE DIRECT PURCHASERS OF ELECTRIC POWER.

(C) THE OCCUPANTS ARE NOT DIRECT PURCHASERS.

Stranded costs--This term has the same meaning as defined in 66 Pa.C.S. § 2803. AN ELECTRIC UTILITY'S KNOWN AND MEASURABLE NET ELECTRIC GENERATION-RELATED COSTS, DETERMINED ON A NET PRESENT VALUE BASIS OVER THE LIFE OF THE ASSET OR LIABILITY AS PART OF ITS RESTRUCTURING PLAN, WHICH TRADITIONALLY WOULD BE RECOVERABLE UNDER A REGULATED



ENVIRONMENT BUT WHICH MAY NOT BE RECOVERABLE IN A COMPETITIVE ELECTRIC GENERATION MARKET AND WHICH THE COMMISSION DETERMINES WILL REMAIN FOLLOWING MITIGATION BY THE ELECTRIC UTILITY.

~~Tier I alternative energy source--The term has the same meaning as defined in section 2 of the act.~~ ENERGY DERIVED FROM:

- (I) SOLAR PHOTOVOLTAIC ENERGY.
- (II) WIND POWER.
- (III) LOW-IMPACT HYDROPOWER.
- (IV) GEOTHERMAL ENERGY.
- (V) BIOLOGICALLY DERIVED METHANE GAS.
- (VI) FUEL CELLS.
- (VII) BIOMASS ENERGY.
- (VIII) COAL MINE METHANE.

~~Tier II alternative energy source--The term has the same meaning as defined in section 2 of the act.~~ ENERGY DERIVED FROM:

- (I) WASTE COAL.
- (II) DISTRIBUTED GENERATION SYSTEMS.
- (III) DEMAND-SIDE MANAGEMENT.
- (IV) LARGE-SCALE HYDROPOWER.
- (V) MUNICIPAL SOLID WASTE.
- (VI) GENERATION OF ELECTRICITY UTILIZING BY-PRODUCTS OF THE PULPING PROCESS AND WOOD MANUFACTURING PROCESS, INCLUDING BARK, WOOD CHIPS, SAWDUST AND LIGNIN IN SPENT PULPING LIQUORS.
- (VII) INTEGRATED COMBINED COAL GASIFICATION TECHNOLOGY.

~~True-up period--The term has the same meaning as defined in section 2 of the act. THE PERIOD EACH YEAR FROM THE END OF THE REPORTING YEAR UNTIL SEPTEMBER 1.~~

## **Subchapter B. NET METERING**

### **§ 75.11. Scope.**

This subchapter sets forth net metering requirements that apply to EGSs and EDCs which have customer-generators intending to pursue net metering opportunities in accordance with the act.

### **§ 75.12. Definitions.**

The following words and terms, when used in this subchapter, have the following meanings unless the context clearly indicates otherwise:

~~Avoided cost of wholesale power--The average locational marginal price of energy, or its successor, over the annualized period in the applicable EDC's transmission zone. THE ACTUAL COST OF WHOLESALE POWER AVOIDED BY THE EDC, DUE TO THE OPERATION OF THE CUSTOMER-GENERATOR'S FACILITY, PURSUANT TO BINDING, FULL-REQUIREMENTS, FIXED RATE CONTRACTS, OR, AT THE EDC'S OPTION, THE AVERAGE LOCATIONAL MARGINAL PRICE (LMP) OF ENERGY, OR ITS SUCCESSOR, OVER THE BILLING PERIOD IN THE APPLICABLE EDC'S TRANSMISSION ZONE.~~

~~Annualized period--The term has the same meaning as "reporting period" as that term is defined in section 2 of the act.~~

~~Base year--For customer-generators who initiated self generation on or after January 1, 1999, the base year will be the immediate prior calendar year; for all other customer generators, the base year will be 1996.~~

~~Billing month--The term has the same meaning as set forth in § 56.2 (relating to definitions).~~

~~Customer-generator facility--The equipment used by a customer-generator to generate, manage, monitor and deliver electricity to the EDC.~~

~~Electric distribution system--That portion of an electric system which delivers electricity from transformation points on the transmission system to points of connection at a customer's premises.~~

~~Equipment package--A group of components connecting an electric generator with an electric delivery system, and includes all interface equipment including switchgear, inverters, or other interface devices. An equipment package may include an integrated generator or electric source.~~

Meter aggregation--The combination of readings from and billing for all meters within a particular REGARDLESS OF rate class on contiguous and adjacent properties owned OR LEASED and operated by a customer-generator FOR PROPERTIES LOCATED WITHIN THE SERVICE TERRITORY OF A SINGLE EDC. Meter aggregation may be completed through physical or virtual meter aggregation.

Net metering--A system of metering electricity in which:

(i) The EDC credits a customer generator at the full retail rate for each kilowatt-hour produced by a Tier I or Tier II resource installed on the customer-generator's side of the electric revenue meter, up to the total amount of electricity used by that customer during an annualized period.

(ii) The EDC compensates the customer-generator at the end of the annualized period for any remaining kilowatt-hour credits, at a rate equal to the supplier/provider's avoided cost of wholesale power.

(iii) The credit or compensation mechanism between an EGS and a net metered customer-generator of an EGS shall be determined by the particular service agreement between the EGS and the customer-generator. THE MEANS OF MEASURING THE DIFFERENCE BETWEEN THE ELECTRICITY SUPPLIED BY AN ELECTRIC UTILITY OR EGS AND THE ELECTRICITY GENERATED BY A CUSTOMER-GENERATOR WHEN THE ALTERNATIVE ENERGY GENERATING SYSTEM IS INTENDED PRIMARILY TO OFFSET PART OR ALL OF THE CUSTOMER-GENERATOR'S REQUIREMENTS FOR ELECTRICITY.

Physical meter aggregation--The physical rewiring of all meters within a particular REGARDLESS OF rate class on contiguous and adjacent properties owned OR LEASED and operated by a customer-generator to provide a single point of contact for a single meter to measure electric service for that customer-generator.

Virtual meter aggregation--The combination of readings and billing for all meters in a particular REGARDLESS OF rate class on contiguous and adjacent properties owned OR LEASED and operated by a customer-generator by means of the EDC's billing process, rather than through physical rewiring of the customer-generator's property for a physical, single point of contact.

### **§ 75.13. General provisions.**

(a) EDCs shall offer net metering to customer-generators that generate electricity on the customer-generator's side of the meter using Tier I or Tier II alternative energy sources, on a first come, first served basis. EGSs may offer net metering to customer-generators, on a first come, first served basis, under the terms and conditions as are set forth in agreements between EGSs and customer-generators taking service from EGSs.

(b) An EDC shall file a tariff with the Commission that provides for net metering consistent with this chapter. An EDC shall file a tariff providing net metering protocols that enable EGSs to offer net metering to customer-generators taking service from EGSs. To the extent that an EGS offers net metering service, the EGS shall prepare information about net metering consistent with this chapter and provide that information with the disclosure information required in § 54.5 (relating to disclosure statement for residential and small business customers).

(C) THE EDC SHALL CREDIT A CUSTOMER-GENERATOR AT THE FULL RETAIL RATE FOR EACH KILOWATT-HOUR PRODUCED BY A TIER I OR TIER II RESOURCE INSTALLED ON THE CUSTOMER-GENERATOR'S SIDE OF THE ELECTRIC REVENUE METER, UP TO THE TOTAL AMOUNT OF ELECTRICITY USED BY THAT CUSTOMER DURING THE BILLING PERIOD. FOR CUSTOMER-GENERATORS INVOLVED IN VIRTUAL METER AGGREGATION PROGRAMS, A CREDIT SHALL BE APPLIED FIRST TO THE METER THROUGH WHICH THE GENERATING FACILITY SUPPLIES ELECTRICITY TO THE DISTRIBUTION SYSTEM, THEN THROUGH THE REMAINING METERS FOR THE CUSTOMER-GENERATOR'S ACCOUNT EQUALLY AT EACH METER'S DESIGNATED RATE.

~~(c) If a customer-generator is a generation customer of an EDC and supplies more electricity to the electric distribution system than the EDC delivers to the customer-generator in a given billing month, the EDC shall credit the customer-generator for the excess on a kilowatt-hour for kilowatt-hour basis. The EDC shall reduce the customer-generator's bill for the next billing month to compensate for the excess electricity produced by the customer-generator in the previous billing period.~~

~~(d) An EDC shall carry over credits earned by a customer-generator from a billing month to successive billing months. Any unused credits shall accumulate until the end of the annualized period.~~

~~(e) (D) At the end of each annualized BILLING period, the EDC shall compensate the customer-generator for excess kilowatt-hours generated BY THE CUSTOMER-GENERATOR OVER THE AMOUNT OF KILOWATT HOURS DELIVERED BY THE EDC DURING THE BILLING PERIOD at the EDC's avoided cost of wholesale power.~~

~~(f) (E) The credit or compensation terms for excess electricity produced by customer-generators who are customers of EGSs shall be stated in the service agreement between the customer-generator and the EGS.~~

~~(g) (F) If a customer-generator switches electricity suppliers, the EDC shall treat the end of the service period as if it were the end of the annualized BILLING period.~~

~~(h) (G) An EDC and EGS which offer net metering shall submit an annual net metering report to the Commission. The report shall be submitted by July 30 of each year, and shall include the following information for the annualized REPORTING period ending May 31 of that year:~~

(1) The total number of customer-generator facilities.

(2) The total estimated rated generating capacity of its net metering customer-generators.

(i) (H) A customer-generator that is eligible for net metering owns the alternative energy credits of the electricity it generates, unless there is a contract with an express provision that assigns ownership of the alternative energy credits to another entity or the customer-generator expressly rejects any ownership interest in alternative energy credits under § 75.14(d) (relating to meters and metering).

(i) (I) An EDC shall provide net metering at nondiscriminatory rates identical with respect to rate structure, retail rate components and any monthly charges to the rates charged to other customers that are not customer-generators. An EDC may use a special load profile for the customer-generator which incorporates the customer-generator's real time generation if the special load profile is approved by the Commission.

(i) (J) An EDC may not charge a customer-generator a fee or other type of charge unless the fee or charge would apply to other customers that are not customer-generators. The EDC may not require additional equipment or insurance or impose any other requirement unless the additional equipment, insurance or other requirement is specifically authorized under this chapter or by order of the Commission.

(i) (K) Nothing in this subchapter abrogates a person's obligation to comply with other applicable law.

#### **§ 75.14. Meters and metering.**

(a) A customer-generator facility used for net metering shall be equipped with a single bi-directional meter that can measure and record the flow of electricity in both directions at the same rate. If the customer-generator agrees, a dual meter arrangement may be substituted for a single bi-directional meter.

(b) If the customer-generator's existing electric metering equipment does not meet the requirements in subsection (a), the EDC shall install new metering equipment for the customer-generator at the EDC's expense. Any subsequent metering equipment change necessitated by the customer-generator shall be paid for by the customer-generator.

(c) When the customer-generator intends to take title or transfer title to any alternative energy credits which may be produced by the customer-generator's facility, the customer-generator shall bear the cost of additional net metering equipment required to qualify the alternative energy credits in accordance with the act.

(d) When the customer-generator expressly rejects ownership of alternative energy credits produced by the customer-generator's facility, the EDC may supply additional metering



equipment required to qualify the alternative energy credit at the EDC's expense. In those circumstances, the EDC shall take title to any alternative energy credit produced. AN EDC SHALL, PRIOR TO TAKING TITLE TO ANY ALTERNATIVE ENERGY CREDITS PRODUCED BY A CUSTOMER-GENERATOR, FULLY INFORM THE CUSTOMER-GENERATOR OF THE POTENTIAL VALUE OF THE ALTERNATIVE ENERGY CREDITS AND OTHER OPTIONS AVAILABLE TO THE CUSTOMER-GENERATOR FOR THE DISPOSITION OF THOSE CREDITS. A customer-generator is not prohibited from having a qualified meter service provider install metering equipment for the measurement of generation, or from selling alternative energy credits to a third party other than an EDC.

(e) Meter aggregation ~~within a particular rate class on contiguous and adjacent~~ properties owned OR LEASED and operated by a customer-generator shall be allowed for purposes of net metering. METER AGGREGATION SHALL BE LIMITED TO METERS LOCATED ON PROPERTIES WITHIN 2 MILES OF THE BOUNDARIES OF THE CUSTOMER-GENERATOR'S PROPERTY. METER AGGREGATION SHALL ONLY BE AVAILABLE FOR PROPERTIES LOCATED WITHIN A SINGLE EDC'S SERVICE TERRITORY. Physical meter aggregation shall be at the customer-generator's expense. The EDC shall provide the necessary equipment to complete physical aggregation. If the customer-generator requests virtual meter aggregation, it shall be provided by the EDC at the customer-generator's expense. The customer-generator shall be responsible only for any incremental expense entailed in processing his account on a virtual meter aggregation basis.

#### **§ 75.15. Treatment of stranded costs.**

If a net metering small commercial, commercial or industrial customer's self-generation results in a 10% or more reduction in the customer's purchase of electricity through the EDC's transmission and distribution network for an annualized period when compared to the prior annualized period, the net metering small commercial, commercial or industrial customer shall be responsible for its share of stranded costs to prevent interclass or intraclass cost shifting under 66 Pa.C.S. § 2808(a) (relating to competitive transition charge). The net metering small commercial, commercial or industrial customer's stranded cost obligation shall be calculated based upon the applicable "base year" as defined in this chapter.

**PENNSYLVANIA PUBLIC UTILITY COMMISSION  
HARRISBURG, PENNSYLVANIA 17105**

**IMPLEMENTATION OF THE  
ALTERNATIVE ENERGY  
PORTFOLIO STANDARDS ACT  
OF 2004**

**Public Meeting June 22, 2006  
JUN-2006-OSA-0174\*  
M-00051865  
L-00050174**

**DISSENTING STATEMENT OF  
COMMISSIONER TERRANCE J. FITZPATRICK**

This matter involves a Final Rulemaking Order that adopts regulations governing net metering pursuant to the Alternative Energy Portfolio Standards Act, ("Act") 73 P.S. §1648.1 et seq. Because I disagree with the resolution of three issues in the regulations, I respectfully dissent.

**Single Meter versus Dual Meter**

The regulations adopted by the majority endorse a single meter approach to net metering, under which a customer-generator's bill is credited on a kWh-for-kWh basis. The important point here is not so much the mechanics of how the metering works, but the impact on the customer-generator's bill. Under this single meter approach, the customer-generator's bill is credited not just for the energy it sells back to the utility, but also for the volumetric charges for the customer's use of the distribution system when the customer-generator takes electricity from the grid. This credit to distribution charges may properly be characterized as a subsidy—the customer-generator avoids paying for its use of the grid and that burden falls on the utility's shareholders, and, in the longer term, on the utility's general body of customers.

The definition of "net metering" in the Act describes it simply as the "means of measuring" the difference between the electricity supplied by the utility and the electricity generated by a customer-generator. 73 P.S. §1648.2 (definition of "net metering"). Nothing in this definition suggests that customer-generators should be excused from paying for their use of the grid.

The Final Rulemaking Order (p. 17) states that the single meter policy is consistent with the net metering policy adopted in New Jersey. That fact is relevant in that the Act provides, among other things, that the Commission should look to be consistent with rules adopted by other states in the region. 73 P.S. §1648.5. The Act does not, however, mandate that we march in lockstep with any other particular state, so the policies we adopt still must make sense in light of the language of the Act. In my view, nothing in the Act suggests that the use of the distribution system by customer-generators should be subsidized by others.

I agree with the comments of those parties who argue for a dual meter approach to net metering, under which a customer-generator's usage of electricity taken from the utility's grid would be measured separately from the electricity generated by the customer-generator. This would allow the utility to collect distribution charges on electricity supplied to the customer-generator, while still crediting the customer-generator for the electricity it generates. This approach has the added benefit of measuring the actual amount generated by the customer-generator for purposes of establishing the value of tradable alternative energy credits.

#### Virtual Meter Aggregation

The issue here is how to determine the number of accounts under which a customer-generator will be billed by the utility. This is important because, under rate schedules approved by this Commission, utilities recover some of their costs by charges on each account. Thus, if the Commission now adopts a policy that reduces the number of accounts, this impairs the ability of utilities to collect their costs. The governing principle in this area has been that each physical point of service is a separate account, unless usage on an established circuit grows to the point that the utility, for its own convenience, establishes an additional point of service to relieve the circuit. In addition, the settled practice is that a customer can only consolidate its number of accounts if it bears the expense of physically rewiring circuits to establish a single point of service.

The final regulations adopted by the Majority waive these principles for customer-generators. Under the "virtual meter aggregation" policy in these regulations, customer-generators will be permitted to establish a single account for parcels of land owned or leased by the customer-generator within two miles of the customer-generator's property lines. This extends the virtual aggregation policy set out in the proposed regulations, under which operations on contiguous parcels owned by the customer-generator would have been permitted to establish a single account.

The Final Rulemaking Order (p. 21) describes its action on this issue as removing "regulatory and economic barriers" that have prevented development of customer-generation. That is true only in the sense that withholding preferential treatment can be characterized as a "regulatory or economic barrier." The established principles governing meter aggregation are designed to allow utilities to recover costs and to apportion these costs equitably among customers. The Final Rulemaking Order fails to acknowledge that the benefits it bestows on customer-generators result in additional burdens placed on others—utility shareholders and, in the long run, on the general body of customers. Nothing in the Act suggests that established meter aggregation principles should be waived to provide additional subsidies for customer-generators.

### Ownership of Alternative Energy Credits

The final regulations assume that ownership of the alternative energy credits arising from net-metered generation rests with the customer-generators, unless otherwise agreed to by the customer-generator and the utility. This is assumed despite the statutorily-compelled purchase of this energy by the utility, and the subsidies and preferential treatment granted to customer-generators in the final regulations.

Under all of the circumstances, I believe that the utilities should be deemed to own the credits for the benefit of the general body of customers. Placing ownership of the credits with the utility would offset, to some extent, the burdens placed on other customers by the subsidies and preferences described above in the final regulations.

### Conclusion

The General Assembly has determined in the Act that alternative forms of electric generation should be encouraged. In order to do so, it required that retail suppliers of electricity (utilities and competitive electric suppliers) purchase increasing percentages of alternative energy as part of their portfolio of supplies used to serve end-use customers. This assures that there will be a demand for alternative energy, even though alternative energy is generally more expensive than energy from conventional sources. Further, the General Assembly has required electric utilities to provide interconnection and net metering to customer-generators of alternative energy. While these measures can be expected to raise electricity prices, the General Assembly has determined that this price is justified in order to encourage development of alternative energy.

The final regulations regarding net metering adopted by the Commission grant subsidies and preferences for customer-generators beyond those established in the Act. The burden of paying for these policies will ultimately fall upon other customers during a period when rising fuel prices and more stringent environmental controls are already reversing a two-decade long trend of static electricity prices. For these reasons, I respectfully dissent.

DATE: June 22, 2006

  
TERRANCE J. FITZPATRICK  
COMMISSIONER

**PENNSYLVANIA PUBLIC UTILITY COMMISSION  
HARRISBURG, PENNSYLVANIA 17105-3265**

**Implementation of the Alternative Energy Portfolio  
Standards Act of 2004 - Net Metering**

**PUBLIC MEETING  
June 22, 2006**

**JUNE-2006-OSA-0174\*  
Docket Nos. M-00051865  
L-00050174**

**STATEMENT OF COMMISSIONER KIM PIZZINGRILLI**

Today the Commission issues a final rulemaking relating to net metering for customer-generators intending to operate renewable onsite generators in parallel with electric distribution utilities' distribution systems. This rulemaking is another important component of the Commission's mission to successfully implement the Alternative Energy Portfolio Standards Act (AEPS). The regulations are the culmination of an extensive proceeding, which included an AEPS working group focused on net metering as well as significant input on proposals prior to the initiation of the formal proposed rulemaking.

When promulgating any set of new regulations, particularly ones of a highly technical nature such as these, it is imperative that we attempt to strike a balance on the competing perspectives on contentious issues. Here, in large part, we have successfully struck the necessary balance and I commend our staff and the parties to this proceeding for their efforts.

However, as is sometimes the case, the Commission was not able to find common ground on all issues raised by the parties. Here, in my opinion, the issue of one single bi-directional meter versus the use of dual meters is such an issue. Despite the existence of valid arguments on both sides of this matter, ultimately the Commission has determined to require the use of a single meter. While I will vote in support of these regulations, I share the concerns raised by Commissioner Fitzpatrick on this matter particularly relative to the single meter approach resulting in a subsidy provided to customer-generators by the electric distribution companies' other ratepayers.

In accordance with the Regulatory Review Act, the final regulations now require approval of the House and Senate Standing Committees, the Independent Regulatory Review Commission and the Attorney General prior to final publication.

**Date: JUNE 22, 2006**

  
**KIM PIZZINGRILLI, COMMISSIONER**





PENNSYLVANIA PUBLIC UTILITY COMMISSION  
COMMONWEALTH OF PENNSYLVANIA  
HARRISBURG, PENNSYLVANIA

WENDELL F. HOLLAND  
CHAIRMAN

September 28, 2006

The Honorable John R. McGinley, Jr.  
Chairman  
Independent Regulatory Review Commission  
14th Floor, Harristown II  
333 Market Street  
Harrisburg, PA 17101

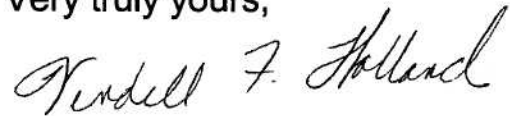
Re: L-00050174/57-244  
Final Rulemaking  
Net Metering for Customer-generators Pursuant  
To Section 5 of the Alternative Energy  
Portfolio Standards Act  
52 Pa. Code Chapter 75

Dear Chairman McGinley:

Enclosed please find one (1) copy of the regulatory documents concerning the above-captioned rulemaking. Under Section 745.5(a) of the Regulatory Review Act, the Act of June 30, 1989 (P.L. 73, No. 19) (71 P.S. §§745.1-745.15) the Commission, on January 19, 2006, submitted a copy of the Notice of Proposed Rulemaking to the House Committee on Consumer Affairs, the Senate Committee on Consumer Protection and Professional Licensure and to the Independent Regulatory Review Commission (IRRC). This notice was published at 36 *Pa.B.* 571, on February 4, 2006. In compliance with Section 745.5(b.1) copies of all comments received were provided to your Commission and the Committees.

In preparing this final form rulemaking, the Public Utility Commission has considered all comments received from the Committees, IRRC and the public.

Very truly yours,

A handwritten signature in cursive script that reads "Wendell F. Holland".

Wendell F. Holland  
Chairman

Enclosures

cc: The Honorable Robert M. Tomlinson  
The Honorable Lisa Boscola  
The Honorable Robert J. Flick  
The Honorable Joseph Preston, Jr.  
Legislative Affairs Director Perry  
Chief Counsel Pankiw  
Regulatory Coordinator DelBiondo  
Assistant Counsel House  
Mr. Birge  
Ms. Bailets

TRANSMITTAL SHEET FOR REGULATIONS SUBJECT  
TO THE REGULATORY REVIEW ACT

ID Number: L-00050174/57-244

Subject: Net Metering for Customer-generators Pursuant to  
Section 5 of the Alternative Energy Portfolio  
Standards Act

Pennsylvania Public Utility Commission

TYPE OF REGULATION

- ☐ Proposed Regulation
- ☐ Final Regulation with Notice of Proposed Rulemaking  
Omitted.
- ☒ Final Regulation
- ☐ 120-day Emergency Certification of the Attorney  
General
- ☐ 120-day Emergency Certification of the Governor

FILING OF REPORT

<u>Date</u>	<u>Signature</u>	<u>Designation</u>
9/28/06	Linda Lacourgne	HOUSE COMMITTEE Consumer Affairs
9/28/06	Mary Walmer	SENATE COMMITTEE Consumer Protection and Professional Licensure
9/28/06	Kathy Cooper	Independent Regulatory Review Commission
		Attorney General
		Legislative Reference Bureau

INDEPENDENT REGULATORY  
REVIEW COMMISSION

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