PROPOSED RULEMAKING

DEPARTMENT OF AGRICULTURE

[7 PA. CODE CH. 49] Shellfish

The Department of Agriculture (Department) proposes to amend Chapter 49 (relating to shellfish) to read as set forth in Annex A.

Statutory Authority

The Food Act (act) (31 P. S. §§ 20.1—20.18) and section 1705(d) of The Administrative Code of 1929 (71 P. S. § 445(d)) provide the legal authority for this proposed rulemaking.

The act charges the Department with the responsibility to: (1) regulate, register and inspect "food establishments" in this Commonwealth under section 14(a) of the act (31 P. S. § 20.14(a)); (2) promulgate regulations and food safety standards necessary to the proper enforcement of the food safety requirements set forth in section 13(a) of the act (31 P. S. § 20.13(a)); and (3) construe the statute and its attendant regulations in a manner that is as consistent with Federal statutory and regulatory authority as practicable, and would not unduly burden interstate commerce under section 16 of the act (31 P. S. § 20.16).

Section 1705(d) of The Administrative Code of 1929 requires the Department to establish regulatory standards necessary to enforce food safety laws.

Purpose

The proposed rulemaking: (1) updates the Department's shellfish food safety standards to reflect the current state of food science knowledge; (2) brings these standards into greater conformity with those of other states by establishing standards and procedures recommended in the widely-adopted National Shellfish Sanitation Program (NSSP) Model Ordinance; (3) improves the Department's ability to trace-back foodborne illness outbreaks related to shellfish; and (4) facilitates interstate and intraState commerce in shellfish by promoting consistency in shell-fish standards among various jurisdictions.

Background

The NSSP Model Ordinance is the product of a collaborative effort among the Department, the Food and Drug Administration, various shellfish regulatory authorities in other states and nations, shellfish industry representatives, academia and consumers. The NSSP Model Ordinance represents the state-of-the-science with respect to shellfish safety, handling and processing and, in the event of a foodborne illness outbreak relating to shellfish, facilitates the trace-back of shellfish to its source harvest area. Food safety science is an evolving body of knowledge. It is the Department's intention to adopt regulatory food safety standards that reflect current recommended National standards and to amend these standards in the future as necessary to track with relevant revisions to these National standards. The NSSP Model Ordinance is reviewed and updated regularly, at meetings of the Interstate Shellfish Sanitation Conference.

As more states adopt the NSSP Model Ordinance as a basis for their respective shellfish regulations, the Commonwealth's current shellfish regulations become more out-of-step with shellfish industry practices and the state-of-the-science with respect to shellfish safety. This Commonwealth's shellfish industry is, in many respects, ahead of the Department in terms of sanitation and recordkeeping requirements to keep its products competitive in interstate commerce. The proposed rulemaking brings the Department current with widely-used and well-regarded industry standards for shellfish.

Need for the Proposed Rulemaking

The proposed rulemaking establishes uniform shellfish standards and tracks neighboring states, and thereby facilitates interstate commerce in shellfish. It also helps protect human health and facilitates the trace-back of shellfish to its harvest area in the event of a foodborne illness outbreak involving shellfish. The Department is satisfied there are no reasonable alternatives to proceeding with the proposed rulemaking.

Overview of the Major Provisions of the Proposed Rulemaking

Proposed Subchapter A (relating to general provisions) defines terms in the same language as presented in the NSSP Model Ordinance and also expands defined terms.

Proposed Subchapters B and C (relating to packing, storing and shipping of shellfish; and construction and maintenance of physical facilities) supplant the Department's current regulatory standards for shellfish with the standards prescribed in the current version of the NSSP Model Ordinance.

Affected Individuals and Organizations

The proposed rulemaking helps protect public health in the event of a foodborne illness outbreak involving shellfish. It also helps this Commonwealth's shellfish dealers by establishing regulatory standards that are consistent with those of other states and nations, thereby facilitating commerce.

Fiscal Impact

Commonwealth

The proposed rulemaking imposes no costs and has no fiscal impact on the Commonwealth.

Political subdivisions

The proposed rulemaking imposes no costs and has no fiscal impact upon political subdivisions.

Private sector

The proposed rulemaking imposes no costs and has no fiscal impact on the private sector. Since the NSSP Model Ordinance is the widely-accepted industry standard for shellfish sanitation, the private sector (approximately 95 shellfish dealers) is either already in compliance with this standard or can readily come into compliance with this standard without appreciable costs.

General public

The proposed rulemaking imposes no costs and has no fiscal impact on the general public. The proposed rulemaking enhances public health and safety.

Paperwork Requirements

The proposed rulemaking is not likely to impact upon the paperwork generated by the Department or shellfish facilities. Effective Date

The proposed rulemaking will be effective upon finalform publication in the *Pennsylvania Bulletin*.

Sunset Date

There is no sunset date for the proposed rulemaking. The Department will review the efficacy of this regulation on an ongoing basis.

Public Comment Period/Contact Person

Interested persons are invited to submit written comments regarding the proposed rulemaking within 30 days following publication in the *Pennsylvania Bulletin*. Comments are to be submitted to the Department of Agriculture, Bureau of Food Safety and Laboratory Services, 2301 North Cameron Street, Harrisburg, PA 17110-9408, Attention: Garry Orner.

Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on February 13, 2006, the Department submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Standing Committees on Agriculture and Rural Affairs. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections must specify the regulatory review criteria which have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Department, the General Assembly and the Governor of comments, recommendations or objections raised.

DENNIS C WOLFF,

Secretary

Fiscal Note: 2-151. No fiscal impact; (8) recommends adoption.

Annex A

TITLE 7. AGRICULTURE

PART III. BUREAU OF FOOD SAFETY AND LABORATORY SERVICES Subpart A. SOLID FOODS CHAPTER 49. SHELLFISH

Subchapter A. GENERAL PROVISIONS

§ 49.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless [the context clearly indicates otherwise] otherwise defined in the NSSP Model Ordinance:

[Adulterated or misbranded shellfish—The term includes shellfish which meet one of the following conditions:

- (i) Harvested from closed waters.
- (ii) Shucked, packed or otherwise processed in a plant which has not been certified by the Department under this chapter or not currently listed on the United States Food and Drug Administration's Interstate Certified Shellfish Shippers List, available from: Chief, Shellfish Sanitation Branch, HFF-

- **344**, Food and Drug Administration, 200 "C" Street, S. W., Washington, D. C. 20204, (202) 485-0149, Telex: **898488** PHS PKLN ROVE
- (iii) Contaminated as determined by bacteriological or other analysis.
- (iv) Consisting in whole or in part of filthy, putrid or decomposed substance, or if it is otherwise unfit for food.
- (v) Prepared, packed or held under or exposed to unsanitary conditions where it may become contaminated with filth, or whereby it may have been rendered injurious to health.
 - (vi) Not labeled in accordance with this chapter.

Backsiphonage—The flowing back of used, contaminated or polluted water from a plumbing fixture or vessel or other source into a potable water supply pipe due to negative pressure in the pipe.

Cross connection—A physical connection or arrangement between two otherwise separate piping systems, one of which contains potable water, and the other, water of unknown or questionable safety, or steam, gases or chemicals, whereby there may be a flow from one system to the other, the direction of flow depending on the pressure differential between the two systems.

Dealer—A shellstock shipper, shucker-packer, repacker, **reshipper** or depuration processor.

Department—The Department of Agriculture of the Commonwealth [or local department of health approved by the Department].

* * * * *

[Employe—A person employed by a shellfish processor, distributor, shipper or reshipper who does or may handle or come in contact with handling, storing, transporting or selling and distributing shell stock or shellfish.]

Facility—A structure.

Food Act—The Food Act (31 P. S. §§ 20.1—20.18).

Freight-forwarder—A person who transports shellfish for a third party owner by vehicle or vessel, or who stores shellfish at a location for a short period of time while the shellfish are in transit.

HACCP—Hazard Analysis Critical Control Point—A system developed by the National Advisory Committee on Microbiological Criteria for Foods that identifies and monitors specific foodborne hazards that can adversely affect the safety of the food products.

[Lot of shellfish—A collection of bulk shellstock or containers of shellstock of no more than one day's harvest from a single defined growing area harvested by one or more harvesters; or a collection of containers of no more than 1 day's shucked shellfish product produced under conditions as nearly uniform as possible, and designated by a common container code or marking.]

NSSP Model Ordinance or National Shellfish Sanitation Program Model Ordinance—As set forth in the Guide for the Control of Molluscan Shellfish under the purview of the Interstate Shellfish Sanitation Conference, and published by the United States Department of Health and Human Services; Public Health Services; Food and Drug Administration, or the most current successor document.

* * * * *

[Plant—An establishment where shellfish are processed or stored.

Processing—The act of depurating, shucking, packing or repacking of shellfish.]

* * * * *

[Retail sale—Sale to the ultimate consumer or to another person who will not resell the product.

Sanitize—To effectively treat equipment and utensils by a process that provides enough accumulative heat or concentration of chemicals for enough time to reduce the bacterial count, including pathogens, to a safe level on utensils and equipment.

Secretary—The Secretary of the Department.

[Shellfish—Edible species of oysters, clams and mussels, either shucked or in the shell, fresh or fresh frozen, whole or in part. The term does not include scallop species of the family Pectinidae.

Shellstock—Shellfish which remain intact in the original shells.

[Shucked shellfish—Shellfish which have been removed from their shells.]

Shucker-packer—A person who shucks and packs shellfish or who acts as a [shell stock] shellstock shipper or reshipper, or who repacks shellfish originating from other [certified sources] shellfish facilities that are certified in accordance with § 49.3 (relating to certification and compliance).

[Wholesale sale—A sale to anyone other than the ultimate purchasing consumer.]

§ 49.2. Scope.

A person who processes, distributes, ships, transports, stores, offers for sale or sells shellfish in this Commonwealth shall comply with this chapter **and the NSSP Model Ordinance**.

- § 49.3. **[Permits] Certification** and compliance.
- (a) A **[person] dealer** may not engage commercially in the wholesale sale, shipping, processing, purchasing or selling of shellfish without the following:
- (1) Compliance with this chapter, [except as stated in § 49.4(d) (relating to records and labeling)] the NSSP Model Ordinance and the Food Act.
- (2) Application for and receipt of a valid shellfish [plant permit] facility certificate from the Department.
- (b) A shellfish [plant permit will] facility certificate shall show the dealer's name, address and [permit] certification number. The activities of the [permitee] dealer shall be limited to activities covered by the [permit] certification. The [permit] certification number will indicate the type of shellfish [plant] facility the dealer is authorized to operate [as

follows:]. These types of shellfish facilities, and acceptable abbreviations, are as follows:

* * * * *

- (5) DP—Depuration processor.
- (c) The shellfish [plant permit] facility certificate shall be posted [on the plant premises] in the facility in a conspicuous place.
- (d) The **[permit]** certification requirements do not apply to **[**:
- **(1) The**] **the** sale of shellfish for consumption on the premises or by a retail food establishment that sells shellfish to ultimate consumers.
- [(2) A wholesale shellfish distributor or reshipper who does not break down for repacking any quantity of shellstock or break a unit container of shucked shellfish.
- (3) Anyone who provides for only the transportation of shellfish.]
- (e) The Department is empowered to revoke or suspend a shellfish [plant permit] facility certification held by a [proprietor] dealer who violates this chapter, or who violates any provision of the NSSP Model Ordinance.
- (f) Whenever the shellfish [plant permit] facility certification is revoked or suspended, the [permit holder] certificateholder will be notified in writing of the violations which caused the revocation or suspension. The Department will notify the United States Food and Drug Administration (FDA) of the action when interstate certified shellfish dealers are involved so that the dealer's business name and [permit] certification number may be removed from the FDA Interstate Certified Shell-fish Shippers List.
- (g) A person required to obtain [a permit] shellfish facility certification from the Department under this section shall apply annually for the [permit] certificate on forms provided by the Department. The [permit] certification expires automatically on October 31 following the date of issue.

§ 49.4. Records and labeling.

- [(a)] A dealer shall maintain complete, accurate and legible transaction records which provide the information necessary to trace purchases and sales of shellfish back to their source. [The records shall include the growing area name; the name, address and permit number of the shipper; the amount and type of shellfish; the date of receipt; and the date of sale. Shellfish records shall be subject to inspection by the Department.] A dealer shall keep and retain records and maintain product labeling in compliance with the standards and requirements of this chapter and the NSSP Model Ordinance and the Food Act. Current HACCP plans for molluscan shellfish shall be readily available and easily identified for the Department.
- [(1) Records covering purchases and sales of fresh shellfish shall be retained for a minimum of 1 year.

- (2) Records covering purchases and sales of frozen shellfish shall be retained for at least 2 years or for a period that exceeds the shelf-life of the product, if that is longer than 2 years.
- (b) An individual package of shellstock, and each individual package of fresh or frozen shucked shell-fish, shall have permanently affixed on the package, an easily visible, durable, waterproof tag or label approved by the Department.
- (1) The tag or label on the shellstock container shall contain the following information: the dealer's name, address, shellfish permit number, growing area identification, the date of harvest, type and quantity of shellstock. When waxed cardboard boxes are used, the required information may be printed on the sides of the box.
- (2) An individual package of fresh or frozen shucked shellfish shall have permanently recorded on the principal display panel the dealer's or processor's shellfish plant permit number and sell by date. The sidewall is considered the principal display panel. Packages of shucked shellfish containing 1/2 gallon-64 ounces-or more, shall have the dealer's shellfish plant permit number and the packer's name printed or embossed on the sidewall of the package, and the date shucked marked on both the lid and also the side wall or bottom. The date shall consist of either the number of the day of the year or the abbreviation for the month and number of the day of the month. The year shall be added for frozen shellfish. Frozen shellfish shall be clearly labeled as frozen in a type size of equal prominence to the name of the shellfish and located immediately adjacent thereto.
- (c) Required label and product identification shall be provided in a legible and indelible form.
- (d) The fraudulent use of tags or the placing of fraudulent or misleading information on the tags is considered a violation of this chapter.
- (e) Public eating and drinking places licensed under the act of May 23, 1945 (P. L. 926, No. 369), known as the Public Eating and Drinking Place Law (35 P. S. §§ 655.1—655.13) and establishments authorized to conduct retail sales shall receive shellstock and fresh or frozen shucked shellfish labeled and identified according to subsections (b)—(d), and shall maintain for 90 days the tags and accurate records of the sources and quantity of all lots of shellfish.

§ 49.5. Inspection and sampling.

- (a) The Department may inspect [plants] facilities falling under this chapter to ascertain compliance or noncompliance with this chapter. [Plants involved in the interstate shipment of shellfish are subject to inspection by the Department and its employes and authorized agents at least four times per year. Other plants are subject to inspection by the Department and its employes and authorized agents at least once per year.]
- (b) [The Department and its employes and agents may conduct additional inspections, including the following:] After the Department's personnel present identification, the shellfish facility operator and its personnel shall allow the Department to determine if the shellfish facility is in compliance

with this chapter by allowing Department personnel access to the shellfish facility, allowing inspection and providing information and records to which the Department is entitled under the Food Act or this chapter, during the shellfish facility's hours of operation and other reasonable times if the facility is not open during normal business hours.

[(1) Follow-up inspections.

- (2) Inspections to determine compliance with environmental protection acts or regulations or requirements of an order issued by the Department.
- (c) The Department and its [employees] employees and agents may also conduct inspections whenever a person presents information to the Department giving the Department reason to believe that there exists a violation of this chapter, of a [permit] shellfish facility certification issued under this chapter, or of orders issued by the Department.
- (d) [Nothing in this section places duty or obligation upon the Department to conduct a minimum number of inspections per year, to conduct a minimum number of inspections during a certain period or to inspect for particular reasons.
- (e) The Department and its authorized agents may secure samples of shellfish and processed shellfish products for laboratory examination from any lot of shellfish and will be permitted to examine the records of the facility to obtain information pertaining to shellfish harvested, purchased, received, processed, sold, held, distributed or shipped, and to personnel employed.
- [(f)](e) The Department or its authorized agent is authorized to [embargo] detain a shellfish product if there is cause to believe it is adulterated or misbranded. It is unlawful to remove or dispose of [an embargoed] a detained product without [permission of one of the following:
- (1) The Department or its authorized agent who placed the embargo.
- (2) A court.] a determination of the Secretary, in accordance with section 6 of the Food Act (31 P. S. § 20.6), authorizing the removal or disposition.
- [(g)](f) Laboratory analyses to be performed shall be conducted in accordance with the **most current edition** of the following:
- (1) The American Public Health Association's Recommended Laboratory Procedures for the Examination of Seawater and Shellfish[, available from: American Public Health Association, 1015 15th Street, N. W., Washington, D.C. 20005, (202) 789-5600].
- (2) The United States Food and Drug Administration's Bacteriological Analytical Manual , available from: Association of Official Analytical Chemists, Inc., 1111 N. 19th Street, Suite 210, Arlington, VA 22209, (703) 522-3032].
- (3) Official Methods of Analysis of the Association of Official Analytical Chemists , available from: Association of Official Analytical Chemists, Inc., 1111 N. 19th Street, Suite 210, Arlington, VA 22209, (703) 522-3032].

- (4) Compendium of Methods for the Microbiological Examination of Foods, compiled by the American Public Health Association's Technical Committee on Microbiological Methods for Foods[, available from: American Public Health Association, 1015 15th Street, N. W., Washington, D.C. 20005, (202) 789-5600].
- (5) Standard Methods for the Examination of Water and Wastewater, prepared and published jointly by the American Public Health Association [, American Waterworks Association and the Water Pollution Control Federation, available from: American Public Health Association, 1015 15th Street, N. W., Washington, D.C. 20005, (202) 789-5600].

§ 49.6. Source.

- (a) A **[person] dealer** in this Commonwealth may not have in his possession for processing, offer for sale or sell shellfish unless the shellfish have been obtained from interstate dealers who are **[approved by the Department and are]** listed in the United States Food and Drug Administration's Interstate Certified Shellfish Shippers List, or **[intrastate]** intraState dealers **[permitted]** certified by the Department.
- (b) A [person] dealer who knowingly or willfully alters or damages or loans or transfers to another [person] dealer a shellfish [permit] facility certification number or shellfish tags, or a [person] dealer who uses the shellfish [permit] facility certification number or shellfish tags other than the [person] dealer to whom it was issued, is in violation of this chapter.

§ 49.7. Freight-forwarders.

A freight-forwarder shall maintain shellfish (other than frozen shellfish) at an ambient temperature of 45° Fahrenheit while being transported. A freight-forwarder shall maintain shellfish (other than frozen shellfish) at an ambient temperature of 45° Fahrenheit when maintained in a staging or layover area for more than 1 hour.

Subchapter B. (Reserved)

(*Editor's Note*: As part of this proposed rulemaking, the Department is proposing to delete the existing text of §§ 49.11—49.20, which appears in 7 Pa. Code pages 49-8—49-12, serial pages (217570)—(217574).)

§§ 49.11—49.20. (Reserved).

Subchapter C. CONSTRUCTION AND MAINTENANCE OF PHYSICAL FACILITIES

§ 49.31. Submission of plans.

- (a) Whenever a shellfish processing, depuration or controlled purification **[plant]** facility is constructed, remodeled or altered and whenever an existing structure is converted to use as a shellfish processing, depuration or controlled purification **[plant]** facility, properly prepared plans and specifications for the construction, remodeling or conversion shall be submitted to the Department for review and approval before construction, remodeling or conversion is begun.
- (b) The plans and specifications [shall] must indicate the proposed layout, arrangement, mechanical plans and construction materials of work areas and the type and model of proposed fixed equipment and facilities. A shellfish processing [plant] facility, depuration or con-

trolled purification plant may not be constructed, remodeled, altered or converted unless the plans and specifications are first approved by the Department. The approval will be based on compliance with this [subchapter, § 49.15 (relating to storage) and Subchapters D and E (relating to shellfish processing: sanitary facilities and controls; and shucking area and equipment) and the Department's Guidelines for Preparation of Plans—Food Service Facilities. Copies of the guidelines may be obtained from the Department of Agriculture, Bureau of Food Safety and Laboratory Services, 2301 N. Cameron St., Harrisburg, Pennsylvania 17110, (717) 772-8353] chapter and the NSSP Model Ordinance.

(*Editor's Note*: As part of this proposed rulemaking, the Department is proposing to delete the existing text of §§ 49.32—49.34, which appears in 7 Pa. Code pages 49-14—49-15, serial pages (217576)—(217577).)

§§ 49.32—49.34. (Reserved).

Subchapter D. SHELLFISH PROCESSING: SANITARY FACILITIES AND CONTROLS

§ 49.41. Water supply.

- (a) Potable water of sufficient quantity to meet the needs of the shellfish **[plant] facility** shall be provided from a source approved by the Department or be under permit from the Department of Environmental Protection. Water quality **[shall] must** meet the requirements of 25 Pa. Code Chapter 109 (relating to safe drinking water). Noncommunity water supplies shall be designed, constructed and operated in accordance with the Department of Environmental Protection's Bureau of Water Supply and Community Health Manual and 25 Pa. Code Chapter 109.
- (b) Hot and cold water under pressure shall be provided to each plumbing fixture used for cleaning, washing or sanitizing purposes in:

§ 49.42. Plumbing.

(a) Plumbing **[shall] must** be sized, installed and maintained in compliance with the provisions of the local plumbing code or, in the absence thereof, in a manner that prevents contamination of the water supply or the creation of an unsanitary condition.

§ 49.43. Toilet facilities.

(a) [Conveniently located, separate toilets shall be provided for each sex. When the plant has fewer than ten employes, toilet facilities shall be provided, but need not be separate for each sex.] At least one conveniently-located toilet facility shall be provided for employees. There need not be a separate toilet facility for each gender.

§ 49.44. [Lavatories] Hand wash sinks.

(a) [Lavatories] Hand wash sinks shall be provided, adequate in number and size for the number of [employees] employees, convenient to work areas and equipped with cold and hot running water. Hot water of at least [100°F] the minimum temperature required by the NSSP Model Ordinance shall be provided [either from a controlled temperature source with

a maximum temperature of 115°F, or] from a hot and cold mixing or combination faucet. [Lavatories] Hand wash sinks shall be located within or immediately adjacent to toilets and within processing areas.

- (b) [There shall be at least one lavatory for each 15 employes.
- (c) Hand cleansing soap or detergent and approved sanitary towels or other approved hand-drying devices shall be provided at [lavatories] hand wash sinks.
- [(d) Handwashing signs shall be posted at each lavatory location directing employes to wash their hands before starting work and after each interruption.

(e)] (c) * * *

§ 49.45. Sewage.

Sewage disposal systems shall be approved by the local authority and **[shall] must** comply with 25 Pa. Code Chapters 71, 73 and 243 (relating to the administration of sewage facilities planning program; standards for onlot sewage treatment facilities; and nuisances), and The Clean Streams Law (35 P. S. §§ 691.1—691.1001).

§ 49.47. [Arthropod] Insect and rodent control.

(a) Safe and effective measures shall be used to prevent the entry of insects, rodents and other vermin, and to kill and capture insects and vermin which enter the **[plant]** facility despite other control measures.

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(d) The storage and use of pesticides in [shellfish plants] a shellfish facility shall be prohibited unless used in full compliance with the manufacturer's label or used under the control of a certified pesticide applicator. Subchapter E. SHUCKING AREA AND EQUIPMENT § 49.51. Shucking.

* * * * *

- (d) [Shellfish shucking and packing operations shall be conducted in separate rooms and shall be protected from contamination by splash or by other means from adjacent areas. Packing rooms shall be of sufficient size to permit sanitary handling of the product and thorough cleaning of the equipment.
- (e) When shucking and packing operations occur in separate rooms, a delivery window or area shall be provided so that shuckers do not have direct access to the packing area.
- (f) A shellfish shucker may not go into or through the packing room for any purpose, except when he operates in a dual shucking packing capacity. If the shucker is operating in a dual capacity, [he] the shucker shall first change to clean clothing and thoroughly wash his hands and exposed portions of his arms.

[(g)](e) * * *

§ 49.53. Utensils and equipment construction.

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(b) The Shellfish Industry Equipment Construction Guides, developed for use with the Public Health Service-States-Industry Cooperative Program for the Certification of Interstate Shellfish Shippers, [published by the United States Department of Health and Human

Services, Appendix B of the 1988 NSSP Manual, and the uniform sanitation standards and criteria established by the National Sanitation Foundation, available from: National Sanitation Foundation, Post Office Box 1468, 3475 Plymouth Road, Ann Arbor, Michigan 48106, (313) 769-8010, are incorporated by reference.

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§ 49.54. Bactericidal treatment of utensils and equipment.

(a) Adequate cleaning facilities, including three-compartment sinks, or utensil washing machines, brushes, detergents, sanitizers, hot water and pressure hoses shall be available for use within the shellfish **[plant] facility** for proper cleaning and sanitizing of equipment and utensils.

* * * * *

(c) If there is a need for a slop sink or device to discard liquid waste, the sink or device shall be provided in addition to the three-compartment sink. Cleaning wastes may not be emptied into sinks used for **hand washing**, **or** the processing of shellfish or the cleaning and sanitizing of utensils.

* * * * *

- (e) Equipment too large or impractical to treat by the methods in subsection (c) or (d) may be [treated using one of the following methods] cleaned, followed by spraying or swabbing the equipment with a chemical sanitizing solution of at least twice the minimum strength required for the particular sanitizing solution when used for immersion sanitization. This may be accomplished by either of the following systems:
- (i) [With live steam from a hose, in the case of equipment in which steam can be confined] A clean-out-of-place system (C.O.P.) that allows the equipment to be moved (for cleaning purposes) from the position in which it is ordinarily used.
- (ii) [By rinsing with boiling water] A central cleaning system that pipes a supply of hot or cold water, with or without chemicals, to a number of cleaning stations placed throughout the shellfish processing area.
- [(iii) By spraying or swabbing with a chemical sanitizing solution of at least twice the minimum strength required for the particular sanitizing solution when used for immersion sanitization.]

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§ 49.55. Equipment and utensil handling and storage.

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(c) Unused equipment and materials not necessary to **[plant] facility** operation may not be stored in rooms used for **[shell stock] shellstock** storage, shucking, packing, repacking or in equipment and container store rooms.

§ 49.56. General maintenance.

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(b) Only authorized equipment and persons shall be permitted in the shellfish processing area. Dogs, cats, birds or other animals or unauthorized persons may not be allowed in areas of the shellfish **[plant] facility** that are used for processing, holding, storing or transporting of shellfish except that patrol dogs accompanying security or police officers are permitted.

Subchapter F. [EMPLOYE] EMPLOYEE HEALTH AND CLEANLINESS

§ 49.61. Health.

- (a) A person, while infected with a disease in a communicable form that can be transmitted by foods or who is a carrier of organisms that cause such a disease, or while afflicted with a boil, an infected wound or an acute respiratory infection, may not work in a shellfish **[plant] facility** in a capacity in which there is a likelihood of the person contaminating food or food-contact surfaces with pathogenic organisms or transmitting disease to other persons.
- (b) An owner or manager who has reason to suspect that an **[employe] employee** has contracted a communicable disease shall immediately notify the Department. Pending appropriate action by the health officials, the **[employe] employee** shall be excluded from the **[plant] facility**.

§ 49.62. Cleanliness.

- (a) [Employes] Employees and other persons who handle shellfish shall wash their hands and exposed portions of their arms with soap and warm water before beginning work, and during work as often as necessary following other activities, such as smoking, eating, cleaning or visits to the toilet. Hands, or rubber gloves when used, shall be washed and sanitized before manually handling shellfish.
- (c) **[Employes] Employees** shucking or handling shellfish meat shall wear clean aprons or coats and effective hair restraints. When manual handling of shellfish meat becomes necessary, sanitized rubber gloves or the equivalent shall be worn, or the hands shall be washed and **[disinfected] sanitized** immediately before the manual handling. Finger cots, gloves or shields, if worn by shuckers, shall be sanitized as often as necessary and shall be made of nonabsorbent material.

 $[Pa.B.\ Doc.\ No.\ 06\text{-}325.\ Filed\ for\ public\ inspection\ February\ 24,\ 2006,\ 9\text{:}00\ a.m.]$

PENNSYLVANIA PUBLIC UTILITY COMMISSION

[52 PA. CODE CH. 75]

Alternative Energy Portfolio Standards; Interconnection Standards for Customer-Generators

The Pennsylvania Public Utility Commission, on November 10, 2005, adopted a proposed rulemaking order which promotes onsite generation by customer-generators using renewable resources and eliminates barriers which may have previously existed regarding interconnection.

Executive Summary

Under section 5 of the Alternative Energy Portfolio Standards Act (73 P. S. § 1648.5), the Pennsylvania Public Utility Commission is required to develop regulations governing interconnection standards within this Commonwealth through a stakeholder process. This is the initial, formal proposed rulemaking resulting from the stakeholder process. The proposed regulations govern the process by which a customer-generator, as defined by the Alternative Energy Portfolio Standards Act, may interconnect onsite generation equipment to an electric utility's distribution lines. The proposed regulations set forth specific levels of review and review criteria depending on the rated generation capacity of the generation equipment. The proposed regulations also provide for a dispute resolution process to manage disputes which may arise during the interconnection process.

Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on February 9, 2006, the Commission submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Committees. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections must specify the regulatory review criteria which have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Commission, the General Assembly and the Governor of comments, recommendations or objections raised.

Public Meeting held November 10, 2005

Commissioners Present: Wendell F. Holland, Chairperson; James H. Cawley, Vice Chairperson; Bill Shane; Kim Pizzingrilli; Terrance J. Fitzpatrick

Proposed Rulemaking Re Interconnection Standards for Customer-generators pursuant to Section 5 of the Alternative Energy Portfolio Standards Act, 73 P. S. § 1648.5; L-00050175

Implementation of the Alternative Energy Portfolio Standards Act of 2004: Interconnection Standards; M-00051865

Proposed 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 setting forth interconnection standards for customer-generators. In accordance with section 5 of the Act, 73 P. S. § 1648.5, the Commission formally commences its rulemaking process to establish regulations governing interconnection for customer-generators. The Commission seeks comments from all interested parties on these proposed regulations, which are found at Annex A to this Order. Additionally, the Commission will close the Net Metering sub-group as that subgroup has reached its goal by way of this proposed rulemaking Order and the companion rulemaking Order proposing regulations which set forth net metering standards.

Background¹

Section 5 of the Act provides as follows:

The commission shall develop technical and net metering interconnection rules for customergenerators 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 customergenerators. The commission shall develop these rules within nine months of the effective date of this act.

73 P. S. § 1648.5.

On March 3, 2005, the Commission convened an Alternative Energy Portfolio Standards Working Group (AEPS WG). The AEPS WG was established to provide a forum for considering the technical standards, business rules and regulatory framework necessary for the Act'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 has met on several occasions since March 3 to discuss and develop a set of proposed regulations in two parts. First, the Net Metering sub-group focused on net metering. Second, the Net Metering sub-group focused on interconnection standards, which is the subject of this proposed rulemaking proceeding.

Participants in the Net Metering sub-group have included representatives from Commission Staff, the Department of Environmental Protection (DEP), the Energy Association of Pennsylvania (EAPA) and several of its member companies, the Pennsylvania Farm Bureau, the Office of Consumer Advocate (OCA), the Office of Small Business Advocate (OSBA), Citizens for Pennsylvania's Future (Penn Future), the Small Generator Coalition (SGC) with the Solar Energy Industries Association and several similar entities.

At the initial meeting, participants were requested to discuss various issues which any rulemaking involving interconnection standards would need to address. As the Net Metering sub-group moved forward with the interconnection standards stakeholder process, the Commission determined that the Mid-Atlantic Distributed Resource Initiative (MADRI) was also moving forward with a stakeholder process to develop model interconnection standards for small generators in the PJM Interconnection L.L.C. (PJM) footprint. MADRI is comprised of the public utility commissions of Pennsylvania, Delaware, the District of Columbia, New Jersey and Maryland, along with the United States Department of Energy and PJM. Similar to the Pennsylvania process, stakeholders from the utility industry, consumer organizations, distributed generation interest groups and vendors along with the MADRI members were invited to participate in developing model interconnection standards.

On May 15, 2005, the Commission notified the Net Metering sub-group that it would hold the Pennsylvania

interconnection standards process in abeyance, pending the development of a uniform model by the MADRI stakeholder process. Participants in Pennsylvania's Net Metering sub-group were strongly encouraged to participate in the MADRI interconnection process. Participants were advised that the Commission Staff would use the MADRI model as the basis for the Staff proposal which would lead to this Order proposing the interconnection standards rulemaking.

Following several meetings held in June, July and August of 2005, the MADRI stakeholder group advised Commission Staff that a draft model addressing interconnection standards was in sufficient form to merit consideration in the Pennsylvania process. Commission Staff received the MADRI model on or about August 19, 2005. On August 29, 2005, Staff issued its initial proposal (initial Staff proposal) to the Pennsylvania Net Metering sub-group and requested comments on or before September 19, 2005. The initial Staff proposal was based upon the MADRI model interconnection standards. In the notice for comments, Staff identified those areas where the initial Staff proposal modified the MADRI model and invited comments specifically directed to those modifications as well as any other areas participants wished to address.

Following the receipt of comments to the initial Staff proposal, Commission Staff developed the recommendation now before us. This Staff proposal was developed based upon the MADRI model interconnection standards as of August 19, 2005, the initial Staff proposal which modified that model, and comments submitted through the Net Metering sub-group process. The foregoing is consistent with the Act's mandate that these regulations be developed through a stakeholder process.

Discussion

The Act provides a great deal of flexibility to the Commission regarding net metering and interconnection, providing only that the regulations are to be developed through a stakeholder process and, to the extent possible, regulations promulgated here should be "consistent with rules defined in other states" within the transmission zones of regional transmission organizations serving Pennsylvania. As we have noted previously, the proposal now before us has been developed using the MADRI stakeholder process as well as the Pennsylvania specific Net Metering sub-group. Certainly, the MADRI process developed its model with a view to rules and circumstances existing in states within the PJM footprint. During the consideration of the MADRI model and its own modifications, Commission Staff has also continued to monitor other states and their efforts with regard to interconnection.

The proposed interconnection standards are consistent with the rules now in place in other jurisdictions within the transmission zones of regional transmission organizations serving Pennsylvania. In addition, the proposed regulations have been drafted with a view towards promoting onsite generation by customer-generators using renewable resources, consistent with the over-arching goal of the Act. Accordingly, the proposed regulations strive to eliminate barriers which may have previously existed with regard to interconnection while ensuring that interconnection by customer-generators will not pose unnecessary risks to the electric distribution systems in the Commonwealth nor unduly burden other customers on a particular electric distribution company's (EDC) system.

¹ In our Implementation Order entered March 25, 2005, at this docket, we stated that we would use the Advanced Notice of Proposed Rulemaking proceeding at L-00040168 (Order entered November 19, 2004) as a means to initiate this interconnection rulemaking process. However, with the enactment of the Energy Policy Act of 2005, we have decided to hold the November 19, 2004 Order in abeyance and issue a new docket number for this proceeding, specific to the interconnection standards rulemaking under the Act.

As noted in the companion net metering rulemaking, the Commission is proposing to add Chapter 75 to its regulations. Chapter 75 will contain many of the regulations needed to implement the Act. Proposed Subchapter A of Chapter 75 contains a set of definitions for terms that will be used throughout Chapter 75. Proposed Subchapter B contains the net metering regulations. In this Order, we propose to add Subchapter C, found in Annex A to this Order, to Chapter 75.

A. Scope

This section endeavors to set forth the scope of the interconnection standards adopted under the Act. In the initial Staff proposal, the Scope of the regulations was described as applying to residential and small commercial customers. In the net metering rulemaking, several participants commented that use of the phrase "residential and small commercial customers" had the potential of excluding some agricultural customers who otherwise would be considered "customer-generators" under the Act.

Specific comments were not received on the proposed scope in this rulemaking. However, we have modified the initial Staff proposal to be consistent with the scope provided in the net metering rulemaking. As we stated there, paraphrasing the Act is the best method of setting forth the scope of the regulations. The Act expressly provides that the net metering and interconnection regulations are to be developed for "customer-generators." That term is defined in the Act and has specific capacity limits in place. Accordingly, the proposed scope of the regulations provides that they apply to EDCs which have customer-generators who intend to pursue net metering and interconnection opportunities in accordance with the Act.

B. Interconnection definitions

Several new definitions are set forth in Subchapter C that were not in the initial Staff proposal. Definitions for "Adverse System Impact," "Area Network," "Interconnection Facilities," and "Queue Position" have been developed, among others. Several participants proposed ministerial edits to definitions which provided greater clarity and they have been adopted in this proposed rulemaking. For example, one of the participants suggested modification of the definition of "Small Generator Facility" to delete material that was not properly within a definition. In addition, we will eliminate several definitions from the Staff proposal since they have been included in proposed Subchapter A in the net metering rulemaking and need not be repeated here. We also point out that the definition of "Adverse System Impact" has been modified to provide that such an impact occurs when a negative effect compromises the safety and reliability of the electric distribution system. We have deleted the word "may" from the definition.

One of the comments suggested that the definition of "Certification of Completion" include the possibility of using forms used by local inspection authorities to signify completion of any required local inspections. We have modified that definition consistent with that comment. We have also eliminated the definition of PJM Interconnection L.L.C. and used the more encompassing "Regional Transmission Organization" or "RTO." That term is defined in proposed Subchapter A contained in the Net Metering rulemaking.

One issue has been raised by the EAPA. The EAPA recommends the addition of a definition for "Affected System." The EAPA suggests that there will be situations where interconnection of a customer-generator may have

an impact on a neighboring EDC, particularly for higher capacity installations. Accordingly, the EAPA recommends adding "Affected System" to the definitions and providing a mechanism for system study and accounting/cost allocation in these situations. The Commission requests comments specifically addressing this issue as presented by the EAPA in its comments to the initial Staff proposal. Comments in support of the EAPA position should also address the language to be used for the definition and its implementation in the review levels.

C. General Interconnection Provisions

This section describes the procedures for small generators with a nameplate capacity of up to two megawatts who wish to interconnect to an EDC's electric distribution system. The procedures divide the process into four distinct review screens, Levels 1, 2, 3, and 4, depending on the size and nature of the interconnection equipment involved. It should be noted that the initial Staff proposal provided for a Level 3A, but no level 4. Several comments suggested changing the Level 3A review to Level 4 for the sake of clarity. We have adopted that comment.

Level 1 projects are those which: a) have a nameplate capacity of 10 kW or less; and, b) are inverter based using customer interconnection equipment that is certified.

Level 2 projects are those which: a) have a nameplate capacity rating which is 2 MW or less; b) are inverter based; c) have received certification of the customer's interconnection equipment or review of the generator facility under Level 1 was not approved.

Level 3 projects are those which: a) have a nameplate capacity of 2 MW or less; b) do not qualify for either Level 1 or Level 2 review procedures or have been reviewed under Level 1 or Level 2 process but have not been approved for interconnection.

Interconnection customers who do not qualify for Level 1 or Level 2 review and do not export power to the grid may request to be evaluated under Level 4, which is an expedited review process.

West Penn Power raised the concern that the timelines for application review may need to be extended in emergencies when EDC employees that ordinarily review applications are temporarily assigned to emergency functions. Initially, it appears that these concerns can be addressed on a case-by-case basis through a waiver or some other method rather than providing specific regulatory treatment. However, the Commission specifically requests comments on this issue.

The Level 2 review process is limited to inverter based equipment. Penn Future and the SGC suggested that this restriction should be removed. The SGC noted that the limitation for inverter based equipment in a Level 2 review is not present in the Federal Energy Regulatory Commission's (FERC) proposed uniform interconnection standards (FERC Order 2006). Conversely, Staff has received comments that other types of equipment could present technical problems which a Level 2 review is not designed to address. The Commission requests comments on this issue. Please provide specific details in support of any comments filed.

The Staff proposal provides that an interconnection request for an increase in capacity is to be evaluated on the basis of the total nameplate capacity. Penn Future and the SGC suggested that the evaluation should be

 $^{^2\,\}mathrm{The}$ EAPA comments to the initial Staff proposal may be found at this Commission's website at www.puc.state.pa.us in the electricity/issues/Alternative Energy Portfolio Standards tabs.

based on the new incremental addition only. To ensure system reliability and to remain within the mandate of the Act, Staff believes that the review must be based on the total nameplate capacity of the interconnection facility. Any comments on this issue should specifically address the concern that any interconnection review must evaluate the total capacity which may flow onto an EDC's electric distribution system at a given point.

The EDC is required to maintain records for three years on interconnection requests received, time required to approve or disapprove, and justification for the action taken. Penn Future and SGC support this requirement and suggest that this record keeping be expanded into a report requirement. Penn Future also suggests that additional data should be collected on the total number of interconnection customer requests, the timeliness of processing, issues raised and their resolution. On the basis of these comments, we have expanded upon the reporting requirements that were originally presented in the initial Staff proposal. The report will be expanded to include: the total number of interconnection customer requests; the number of requests denied or moved to another review level; and, the number of requests that were not processed within established timelines. We believe that this provides adequate information for the Commission to monitor the process without imposing undue reporting burdens on the EDCs.

An EDC may propose to interconnect more than one small generator facility at a single point of interconnection to minimize cost. The OSBA commented that the regulation does not explicitly state that the EDC is to bear the cost of the single point interconnection. The Commission seeks comments on this issue.

The lack of a requirement for a readily accessible external AC disconnect switch was the subject of much discussion and comment. Many participants argued that the external switch was unnecessary if certified inverter equipment was used. They suggested that the running of cable and other equipment would make the external switch too costly with little or no additional benefit. The EDCs strongly advocated the need for a readily accessible disconnect switch for worker safety and system reliability. A compromise position was presented that proposed the use of a lock box to house a key that would allow the EDC to gain access to the interconnection equipment whether it was inside the structure or elsewhere on the property.

We believe the customer should be given the choice of installing an accessible external disconnect switch or a lockbox to hold a key to provide entry to the interconnection facility. The customer will allow the EDC to place a placard in a location of the EDC's choosing that gives instructions on how to gain access to the isolation device. We have modified the initial Staff proposal and specifically request comments on this issue.

For interconnection of a proposed small generator facility to the load side of spot network protectors, the proposed small generator facility must utilize an inverter-based equipment package, the interconnection equipment must be certified and the aggregated other generation on that spot network may not exceed 5% of the spot network's maximum load. The EAPA commented that a 50 kW cap in addition to the 5% requirement is necessary for system reliability and safety. The Commission requests additional comments on this issue. Comments should provide detailed technical information regarding why a specific kilowatt cap is necessary in addition to the percentage of load cap.

The review periods for customer generator applications follow the MADRI recommendations. Certain parties suggested that the review periods were too long. The projects at issue will normally have a 10 to 20 year useful life. On that basis, we believe that a review period of 25-35 days as opposed to 10-15 days will not significantly impact the feasibility of the project or create a barrier to entry. At the same time, the longer review periods will permit EDCs to review the applications without undue haste or require significant personnel additions. Any comments on these timelines should specifically explain why shorter time frames will provide substantial benefits to the applicant while not imposing substantial hardships on the EDCs.

The OCA suggested that under the Level 1 review we clarify that the EDC has 10 days to determine that the application is complete in addition to the 15 days that the EDC has to determine that the equipment can be interconnected safely and reliably. This is the correct interpretation. The EDC has a total of up to 25 days to determine that the application is complete and that the equipment can be interconnected safely.

The Staff proposal provides that distribution protective devices are not to be exposed to fault currents exceeding 85% of the short circuit interrupting capability. The SGC suggested that 85% was too low and wanted the level raised to at least 90%. Comments provided by an EDC suggested 82% was more appropriate. The EAPA argued that 80% is the appropriate limit. Commission Staff suggests that a 90% cap offers too little margin for error and an 80% cap is too conservative based on the EDC's own analysis. Therefore, the proposed regulation adopts an 85% fault current limit. We request specific comments on this issue. Again, please provide technical detail in support of the comments.

Section 75.39 describes the types of generator facilities that may be considered under a Level 3 review. This class permits applications not approved under Levels 2 and 4, to be submitted as new interconnection requests for consideration under Level 3 review. The generation facilities are described as facilities with a nameplate capacity of less than 2 MW that are not certified and are non-inverter based.

The EDC has 10 business days to complete its initial review of a Level 3 request, and if necessary, shall advise the applicant in writing of any additional information needed to satisfy the review. If the EDC requests additional information from the applicant, 10 business days shall be allowed for response. The request shall be deemed complete when the requested information is received and reviewed by the EDC. The interconnection customer may request additional time to respond to the EDC's request for additional information.

The Level 3 review process includes a Scoping Meeting, Interconnection Feasibility Study, an Interconnection Impact Study, an Interconnection Facilities Study and a Witness Test. The EDC and applicant may agree to waive some of the steps in appropriate circumstances. A non-binding good faith estimated cost of the required studies is to be developed by the EDC and shall be the responsibility of the applicant.

If, as a result of the studies conducted, the EDC determines that the application should be granted, a Standard Small Generator Interconnection Agreement shall be provided to the applicant from the EDC. Upon receipt of the agreement, the applicant shall have 30 days, or another mutually agreeable timeframe, to sign

and return the agreement to the EDC. Conversely, if upon the result of the studies conducted, the EDC determines that the interconnection request should be denied, the EDC shall provide a written explanation to the applicant.

A small generator facility that does not qualify for a Level 1 or Level 2 review may request to be evaluated under Level 4 procedures. Evaluation under Level 4 may also pertain to interconnection requests where there is no desire for export capability to the EDC's distribution system. A Level 4 review may also be used for requests for interconnection on the load side of an area network for facilities with a nameplate capacity up to 10 kW, utilizing certified inverter-based equipment, with customer-generator installed reverse power relays and where the aggregated other generation on the area network does not exceed 5% of that network's maximum load.

The SGC suggested eliminating the Level 4 review and addressing those applications under Level 2 reviews for non-exporting generators. The EAPA asserted in its comments that absent a 50 kW limitation, as incorporated into the FERC Order 2006 standards in addition to the 5% limitation, a portion of the system could fall out of balance and cause failures in network protectors, especially under light load conditions. The EAPA also commented that Level 4 reviews should be permissive rather than mandatory as provided in the Staff proposal. The EAPA commented that the permissive use of a Level 4 review was agreed to by the majority of the MADRI working group to allow the EDC the flexibility to permit an expedited interconnection review for an area network while preserving its ability to perform more detailed reviews when necessary. The EAPA believes the proposed regulations are inconsistent with EDCs' current practices in the design of area networks to meet reliability standards. The EAPA stated that such an approach would negatively impact the ability of EDCs to meet the Commission's reliability benchmarks and should, therefore, result in revision of the benchmarks.

We request additional comments on the EAPA issues presented previously to clarify the technical aspects of incorporating the 50 kW limitation as well as permissive versus mandatory use of Level 4 reviews in specific instances. As noted before, specific technical support for a stated position is crucial to the Commission's determination in these areas.

D. Dispute Resolution

In this section, we outline the process the parties will use to resolve any disputes arising from the interconnection process. The proposed regulations direct aggrieved parties to the Commission's complaint procedures, but emphasize that informal alternative dispute resolution is preferred for the sake of expediency. The regulations propose that disputes related to the technical details of interconnection be referred to a Commission designated technical master. Any costs associated with dispute resolution will ultimately be determined by the Commission.

E. Insurance and Indemnification

The proposed regulations do not address indemnification or liability insurance. Commission Staff suggests that the appropriate vehicle for indemnification, and insurance requirements, if any, would be the interconnection agreement form. Some participants have suggested following the MADRI model with regard to insurance. MADRI's standard interconnection agreement does not require customer generators to provide general liability insurance, but does recommend that every customer

generator protect itself with insurance due to the risk of incurring damages. It should be noted that proposed § 75.13(k) in the proposed net metering regulations provides that insurance may not be required by an EDC. We invite comments on the issue of requiring customer generators to provide general liability insurance as a prerequisite for interconnection. Comments on this issue should discuss whether the issue of insurance and indemnification is different, depending on the nature of the interconnection equipment involved.

F. Forms and Fees

At several points in the proposed regulations, reference is made to the use of forms, agreements and fees as approved by the Commission. As we move further into the rulemaking process, the Commission will initiate a proceeding to establish uniform form agreements and fees for interconnection and net metering purposes. That process is expected to take the form of one or more tentative orders, followed by comments and a final order resulting in uniform forms and fees. The proposed regulations do require that standard forms be posted on the EDC websites.

Conclusion

The Commission welcomes the filing of comments by all interested parties on all aspects of these regulations. As we have previously noted, the Commission is particularly interested in comments regarding the following issues: definition of "affected system" and its impact on the applicable review level; the extension of timelines in emergency circumstances; whether Level 2 reviews should be restricted to inverter based equipment; whether review of an increase in capacity should be limited to the incremental addition or involve the total rated capacity of the generation equipment for which interconnection is sought; who bears the cost of a single point of interconnection for several customer-generators when recommended by the EDC; the external disconnect switch/lock box option; elimination of a set kilowatt limitation for spot networks in favor of a percentage limit only; the timelines for application review by the EDCs; the stated 85% limitation for fault currents; elimination of the 50 kW limitation for area network applications in favor of a percentage only cap; the mandated use of Level 4 reviews in certain circumstances; and, the issue of insurance requirements for customer-generators. Please bear in mind that specific, technical information has been requested to support positions taken on most of these issues.

To the extent that a participant believes any section of these proposed regulations needs modification, alternative language should be proposed together with the rationale for the modification. This is particularly important in the area of definitions. A comment period of 60 days has been provided.

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 and 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, we are considering adopting the proposed regulations set forth in Annex A; *Therefore*,

It Is Ordered That:

- 1. The proposed rulemaking will consider the regulations set forth in Annex A.
- 2. The Secretary shall submit this order and Annex A to the Office of Attorney General for review as to form and legality and to the Governor's Budget Office for review of fiscal impact.
- 3. The Secretary shall submit this order and Annex A for review and comments to IRRC and the Legislative Standing Committees.
- 4. The Secretary shall certify this order and Annex A and deposit them with the Legislative Reference Bureau to be published in the *Pennsylvania Bulletin*.
- 5. An original and 15 copies of any written comments referencing the docket number of the proposed regulations be submitted within 60 days of publication in the *Pennsylvania Bulletin* to the Pennsylvania Public Utility Commission, Attn.: Secretary, P. O. Box 3265, Harrisburg, PA 17105-3265.
- 6. A copy of this order and Annex A shall be served on the DEP, all jurisdictional electric distribution companies, all licensed electric generation suppliers, the Office of Trial Staff, the Office of Consumer Advocate, the Office of Small Business Advocate and all other participants in the Alternative Energy Portfolio Supply Working Group at M-00051865.
- 7. The contact persons for this proposed rulemaking are Greg Shawley, Bureau of Conservation, Economics and Energy Planning, (717) 787-5369 (technical); and H. Kirk House, Office of Special Assistants, (717) 772-8495 (legal).

JAMES J. MCNULTY, Secretary

Fiscal Note: 57-245. No fiscal impact; (8) recommends adoption.

Annex A

TITLE 52. PUBLIC UTILITIES PART I. PUBLIC UTILITY COMMISSION Subpart C. FIXED SERVICE UTILITIES CHAPTER 75. ALTERNATIVE ENERGY PORTFOLIO STANDARDS

Subchapter C. INTERCONNECTION STANDARDS GENERAL

75.21. Scope. 75.22. Definitions.

INTERCONNECTION PROVISIONS

75.31. Applicability.

75.32. Interconnection requests.

75.33. Fees and forms.

75.34. Review procedures

75.35. Technical standards.

75.36. Additional general requirements.

75.37. Level 1 interconnection review. 75.38. Level 2 interconnection review.

75.39. Level 3 interconnection review.

75.40. Level 4 interconnection review.

DISPUTE RESOLUTION

75.51. Disputes.

GENERAL

§ 75.21. Scope.

This subchapter sets forth the interconnection standards that apply to EDCs which have customer-

generators intending to pursue net metering opportunities in accordance with the act.

§ 75.22. Definitions.

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

Adverse system impact—A negative effect, due to technical or operational limits on conductors or equipment being exceeded, that compromises the safety and reliability of the electric distribution system.

Applicant—A person who has submitted an interconnection request to interconnect a small generator facility to an EDC's electric distribution system, also referred to as the interconnection customer.

Area network-

- (i) A type of electric distribution system served by multiple transformers interconnected in an electrical network circuit, which is generally used in large metropolitan areas that are densely populated.
- (ii) The term has the same meaning as the term "distribution secondary grid network" as stated in IEEE Standard 1547 Section 4.1.4 (published July 2003), as amended and supplemented.

Certificate of completion—A certificate in a form approved by the Commission containing information about the interconnection equipment to be used, its installation and local inspections. Completion of local inspections may be designated on inspection forms used by local inspecting authorities.

Certified—A designation that the interconnection equipment to be used by a customer-generator complies with the following standards, as applicable:

- (i) IEEE Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, as amended and supplemented.
- (ii) UL Standard 1741, "Inverters, Converters and Controllers for use in Independent Power Systems" (January 2001), as amended and supplemented.

Distribution upgrade—A required addition or modification to the EDC's electric distribution system at or beyond the point of interconnection. Distribution upgrades do not include interconnection facilities.

Electric distribution system—

- (i) The facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries from interchanges with higher voltage transmission networks that transport bulk power over longer distances. The voltage levels at which electric distribution systems operate differ among areas but generally carry less than 69 kilovolts of electricity.
- (ii) Electric distribution system has the same meaning as the term Area EPS, as defined in 3.1.6.1 of IEEE Standard 1547.

Electric nameplate capacity—The net maximum or net instantaneous peak electric output capability measured in volt-amps of a small generator facility as designated by the manufacturer.

Fault current—The electrical current that flows through a circuit during an electrical fault condition. A fault condition occurs when one or more electrical conductors contact ground or each other. Types of faults include phase to ground, double-phase to ground, three-phase to ground, phase-to-phase, and three-phase. Often, a fault

current is several times larger in magnitude than the current that normally flows through a circuit.

IEEE standard 1547—The most current official published version of the Institute of Electrical and Electronics Engineers, Inc. (IEEE) Standard 1547 (2003) "Standard for Interconnecting Distributed Resources with Electric Power Systems" at the time the interconnection request is submitted.

IEEE standard 1547.1—The most current official published version of IEEE Standard 1547.1 (2005) "Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems" at the time the interconnection request is submitted.

Interconnection agreement—An agreement between an interconnection customer and an EDC, which governs the connection of the small generator facility to the electric distribution system, as well as the ongoing operation of the small generator facility after it is connected to the system consistent with the requirements of this subchapter.

Interconnection customer—An entity, including an EDC, that proposes to interconnect a small generator facility to an electric distribution system.

Interconnection equipment—A group of components or integrated system connecting an electric generator with an electric distribution system that includes all interface equipment including switchgear, protective devices, inverters or other interface devices. Interconnection equipment may be installed as part of an integrated equipment package that includes a generator or other electric source.

Interconnection facilities—Facilities and equipment required by the EDC to interconnect the small generator facility and the interconnection customer's interconnection equipment. Collectively, interconnection facilities include all facilities and equipment between the small generator facility and the point of common coupling, including any modification, additions or distribution upgrades that are necessary to physically and electrically interconnect the small generator facility to the EDC's electric distribution system. Interconnection facilities are sole use facilities and do not include distribution upgrades.

Interconnection facilities study—A study conducted by the EDC or a third party consultant for the interconnection customer to determine a list of facilities (including EDC's interconnection facilities and required distribution upgrades to the electric distribution system as identified in the interconnection system impact study), the cost of those facilities, and the time required to interconnect the small generator facility with the EDC's electric distribution system.

Interconnection facilities study agreement—An agreement in a form approved by the Commission which details the terms and conditions under which an EDC will conduct an interconnection facilities study.

Interconnection feasibility study—A preliminary evaluation of the system impact and cost of interconnecting the small generator facility to the EDC's electric distribution system.

Interconnection feasibility study agreement—An agreement in a form approved by the Commission which details the terms and conditions under which an EDC will conduct an interconnection feasibility study.

Interconnection request—An interconnection customer's request, in a form approved by the Commission, requesting the interconnection of a new small generator facility, or to increase the capacity or operating characteristics of an existing small generator facility that is interconnected with the EDC's electric distribution system.

Interconnection study—Any of the following studies:

- (i) The Interconnection Feasibility Study.
- (ii) The Interconnection System Impact Study.
- (iii) The Interconnection Facilities Study.

Interconnection system impact study—An engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of an EDC's electric distribution system. The study must identify and detail the system impacts that would result if the small generator facility were interconnected without project modifications or system modifications, focusing on the adverse system impacts identified in the interconnection feasibility study, or to study potential impacts.

Interconnection system impact study agreement—An agreement in a form approved by the Commission which details the terms and conditions under which an EDC will conduct an interconnection system impact study.

Line section—That portion of an EDC's distribution system connected to an interconnection customer, bounded by automatic sectionalizing devices or the end of the distribution line.

Minor equipment modification—Changes to the proposed small generator facility that do not have a material impact on safety or reliability of the electric distribution system.

NRTL—Nationally recognized testing laboratory—A qualified private organization that meets the requirements of the Occupational Safety and Health Administration's (OSHA) regulations. NRTLs perform independent safety testing and product certification. Each NRTL must meet the requirements as set forth by OSHA in the NRTL program.

Parallel operation-parallel—The state of operation which occurs when a small generator facility is connected electrically to the electric distribution system and the potential exists for electricity to flow from the small generator facility to the electric distribution system.

Point of common coupling—The point where the customer's interconnection equipment connects to the electric distribution system at which harmonic limits or other operational characteristics (IEEE Standard 1547 requirements) are applied.

Point of interconnection—The point where the interconnection equipment connects to the EDC's electric distribution system.

Queue position—The order of a valid interconnection request, relative to all other pending valid interconnection requests, that is established based upon the date and time of receipt of the valid interconnection request by the EDC. An interconnection request may not be deemed invalid by virtue of its being finally evaluated under different procedures than those under which it was originally considered. For example, an interconnection request originally submitted as a Level 1 interconnection request but eventually evaluated under Level 2 procedures is still a valid interconnection request and is to be assigned a queue position based on the date of its original submission as a Level 1 interconnection request.

Scoping meeting—A meeting between representatives of the interconnection customer and EDC conducted for the purpose of discussing alternative interconnection options, exchanging information including any electric distribution system data and earlier study evaluations that would be reasonably expected to impact interconnection options, analyzing information, and determining the potential feasible points of interconnection.

Small generator facility—The equipment used by an interconnection customer to generate, or store electricity that operates in parallel with the electric distribution system. A small generator facility typically includes an electric generator, prime mover, and the interconnection equipment required to safely interconnect with the electric distribution system.

Spot network—The term has the same meaning as the term "spot network" under IEEE Standard 1547 Section 4.1.4, (published July 2003), as amended and supplemented. As of August, 2005, IEEE Standard 1547 defined "Spot Network" as "a type of electric distribution system that uses two or more inter-tied transformers to supply an electrical network circuit." A spot network is generally used to supply power to a single customer or a small group of customers.

Standard small generator interconnection agreement (SGIA)—A form of interconnection agreement approved by the Commission which is applicable to a Level 2, Level 3 or Level 4 interconnection request pertaining to a small generating facility.

UL Standard 1741—Means Underwriters Laboratories' standard titled "Inverters Converters, and Controllers for Use in Independent Power Systems."

Witness test—The EDC's interconnection installation evaluation required by IEEE Standard 1547 Section 5.3 and the EDC's witnessing of the commissioning test required by IEEE Standard 1547 Section 5.4. For interconnection equipment that has not been certified, the witness test shall also include the witnessing by the EDC of the on-site design tests as required by IEEE Standard 1547 Section 5.1 and witnessing by the EDC of production tests required by IEEE Standard 1547 Section 5.2. All tests witnessed by the EDC are to be performed in accordance with IEEE Standard 1547.1

INTERCONNECTION PROVISIONS

§ 75.31. Applicability.

The interconnection procedures apply to customergenerators with small generator facilities that satisfy the following criteria:

- (1) The electric nameplate capacity of the small generator facility is equal to or less than 2 MW.
- (2) The small generator facility is not subject to the interconnection requirements of an RTO.
- (3) The small generator facility is designed to operate in parallel with the electric distribution system.

§ 75.32. Interconnection requests.

Interconnection customers seeking to interconnect a small generator facility shall submit an interconnection request to the EDC that owns the electric distribution system to which interconnection is sought. EDCs shall establish processes for accepting interconnection requests electronically.

§ 75.33. Fees and forms.

The Commission will determine the appropriate interconnection fees for Levels 1, 2, 3 and 4. In circumstances when standard forms are used for the interconnection process, examples of those forms shall be posted on the EDCs' websites.

§ 75.34. Review procedures.

An EDC shall review interconnection requests using one or more of the following four review procedures:

- (1) An EDC shall use Level 1 procedures for evaluation of all interconnection requests to connect inverter-based small generation facilities when:
- (i) The small generator facility has an electric nameplate capacity of 10 kW or less.
- (ii) The customer interconnection equipment proposed for the small generator facility is certified.
- (2) An EDC shall use Level 2 procedures for evaluating interconnection requests to connect small generation facilities when:
- (i) The small generator facility uses an inverter for interconnection.
- (ii) The electric nameplate capacity rating is 2 MW or less.
- (iii) The customer interconnection equipment proposed for the small generator facility is certified.
- (iv) The proposed interconnection is to a radial distribution circuit, or a spot network limited to serving one customer.
- (v) The small generator facility was reviewed under Level 1 review procedures but not approved.
- (3) An EDC shall use Level 3 review procedures for evaluating interconnection requests to connect small generation facilities with an electric nameplate capacity of 2 MW or less which do not qualify under Level 1 or Level 2 interconnection review procedures or which have been reviewed under Level 1 or Level 2 review procedures, but have not been approved for interconnection.
- (4) Interconnection customers that do not qualify for Level 1 or Level 2 review and do not export power beyond the point of common coupling may request to be evaluated under Level 4 review procedures which provide for a potentially expedited review process.

§ 75.35. Technical standards.

The technical standards to be used in evaluating all interconnection requests under Level 1, Level 2, Level 3 and Level 4 reviews, unless otherwise provided for in these procedures, are IEEE 1547 and U. L. 1741, as they may be amended and modified.

§ 75.36. Additional general requirements.

Additional general requirements include:

- (1) When an interconnection request is for a small generator facility that includes multiple energy production devices at a site for which the interconnection customer seeks a single point of interconnection, the interconnection request shall be evaluated on the basis of the aggregate electric nameplate capacity of multiple devices.
- (2) When an interconnection request is for an increase in capacity for an existing small generator facility, the interconnection request shall be evaluated on the basis of the new total electric nameplate capacity of the small generator facility.

- (3) An EDC shall maintain records of:
- (i) The total interconnection requests received.
- (ii) The times required to complete interconnection request approvals and disapprovals.
- (iii) The number of interconnection requests denied or moved to another review level.
- (iv) The justifications for the actions taken on the interconnection requests.
- (v) The number of requests that were not processed within established timelines.
- (4) An EDC shall provide a report to the Commission containing the information required in paragraph (3) within 30 days of the close of each annualized period. The EDC shall keep the records on file for a minimum of 3 years.
- (5) An EDC shall designate a contact person from whom information on the interconnection request and the EDC's electric distribution system can be obtained through informal requests regarding a proposed project. The information must include studies and other materials useful to an understanding of the feasibility of interconnecting a small generator facility at a particular point on the EDC's electric distribution system, except to the extent providing the materials would violate security requirements or confidentiality agreements, or be contrary to law or State or Federal regulations. In appropriate circumstances, the EDC may require confidentiality prior to release of this information.
- (6) When an interconnection request is deemed complete, a modification other than a minor equipment modification to the proposed small generator facility or interconnection equipment, or minor equipment modification that would not affect the application of the screens in Levels 1, 2 or 4 that is not agreed to in writing by the EDC, shall require submission of a new interconnection request.
- (7) When an interconnection customer is not currently a customer of the EDC, upon request from the EDC, the interconnection customer shall provide proof of site control evidenced by a property tax bill, deed, lease agreement or other legally binding contract.
- (8) An EDC may propose to interconnect more than one small generator facility at a single point of interconnection to minimize costs to the customer generator, and may not unreasonably refuse a request to do so. An interconnection customer may elect to pay the entire cost of separate interconnection facilities.
- (9) Small generator facilities shall be capable of being isolated from the EDC by means of a lockable, visible-break isolation device accessible by the EDC. The isolation device shall be installed, owned and maintained by the owner of the small generation facility and located between the small generation facility and the point of interconnection. A draw-out type circuit breaker with a provision for padlocking at the draw-out position can be considered an isolation device for purposes of this requirement
- (10) An interconnection customer may elect to provide the EDC access to an isolation device that is contained in a building or area that may be unoccupied and locked or not otherwise readily accessible to the EDC, by providing a key in a lockbox installed by the EDC that shall provide ready access to the isolation device. The interconnection customer shall permit the EDC to install the lockbox in a location that is readily accessible by the EDC and the

interconnection customer shall permit the EDC to affix a placard in a location of its choosing that provides clear instructions to EDC operating personnel on access to the isolation device.

§ 75.37. Level 1 interconnection review.

- (a) An EDC shall use the Level 1 interconnection review procedure for an interconnection request that meets the criteria in § 75.34(1) (relating to review procedures). An EDC may not impose additional requirements for Level 1 reviews not specifically authorized under this subchapter.
 - (b) The Level 1 screening criteria must consist of:
- (1) For interconnection of a proposed small generator facility to a radial distribution circuit, the aggregated generation on the circuit, including the proposed small generator facility, may not exceed 15% of the line section annual peak load as most recently measured at the sub station.
- (2) For interconnection of a proposed small generator facility to the load side of spot network protectors, the proposed small generator facility shall utilize an inverter-based equipment package. The customer interconnection equipment proposed for the small generator facility must be certified, and when aggregated with other generation, may not exceed 5% of the spot network's maximum load.
- (3) When a proposed small generator facility is to be interconnected on a single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed small generator facility, may not exceed 20 kW.
- (4) When a proposed small generator facility is singlephase and is to be interconnected on a center tap neutral of a 240 volt service, its addition may not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.
- (5) Construction of facilities by the EDC on its own system is not required to accommodate the small generator facility.
- (c) The Level 1 interconnection review procedure must consist of: $\ \ \,$
- (1) An EDC shall, within 10 business days after receipt of the interconnection request, inform the applicant that the interconnection request is complete or incomplete and what materials are missing.
- (2) The EDC shall, within 15 business days after the end of the 10 business days noted in paragraph (1), verify that the small generator facility equipment can be interconnected safely and reliably using Level 1 screens. When an EDC does not have a record of receipt of the interconnection request, and the applicant can demonstrate that the original interconnection request was delivered, the EDC shall expedite its review to complete the evaluation of the interconnection request within 15 days of the applicant's resubmittal.
- (3) Upon notice, within 10 business days after receipt of the certificate of completion, an EDC may conduct a witness test at a mutually convenient time, which must be passed. If the EDC does not conduct the witness test within 10 business days or within the time otherwise mutually agreed to by the parties, the witness test is deemed waived.

- (4) Unless an EDC determines and demonstrates that a small generator facility cannot be interconnected safely and reliably, the EDC shall sign the interconnection request form subject to the following conditions:
- (i) The small generator facility has been approved by local or municipal electric code officials with jurisdiction over the interconnection.
- (ii) A certificate of completion has been returned to the $\ensuremath{\mathsf{EDC}}.$
- (iii) The witness test has been successfully completed or waived.
- (5) When a small generator facility is not approved under a Level 1 review, the interconnection customer may submit a new interconnection request for consideration under Level 2, Level 3 or Level 4 procedures specified in this chapter without sacrificing the applicant's original queue position.

§ 75.38. Level 2 interconnection review.

- (a) An EDC shall use the Level 2 interconnection review procedure for an interconnection request that meets the criteria in § 75.34(2) (relating to review procedures). An EDC may not impose additional requirements for Level 2 reviews not specifically authorized under this subchapter.
 - (b) The Level 2 screening criteria must consist of:
- (1) For interconnection of a proposed small generator facility to a radial distribution circuit, the aggregated generation on the circuit, including the proposed small generator facility, may not exceed 15% of the line section annual peak load as most recently measured at the sub station.
- (2) For interconnection of a proposed small generator facility to the load side of spot network protectors, the proposed small generator facility shall utilize an inverter-based equipment package. The customer interconnection equipment proposed for the small generator facility must be certified and, when aggregated with other generation, may not exceed 5% of a spot network's maximum load.
- (3) The proposed small generator facility, in aggregation with other generation on the distribution circuit, may not contribute more than 10~% to the distribution circuit's maximum fault current at the point on the primary voltage distribution line nearest the point of common coupling.
- (4) The proposed small generator facility, in aggregate with other generation on the distribution circuit, may not cause any distribution protective devices and equipment (including substation breakers, fuse cutouts, and line reclosers), or other customer equipment on the electric distribution system to be exposed to fault currents exceeding 85% of the short circuit interrupting capability. The interconnection request may not request interconnection on a circuit that already exceeds 85% of the short circuit interrupting capability.
- (5) The proposed small generator facility's point of interconnection may not be on a transmission line.
- (6) When a customer-generator facility is to be connected to 3 phase, 3 wire primary EDC distribution lines, a 3 phase or single-phase generator shall be connected phase-to-phase.
- (7) When a customer-generator facility is to be connected to 3 phase, 4 wire primary EDC distribution lines, a 3 phase or single phase generator will be connected line-to-neutral and will be effectively grounded.

- (8) This Level 2 screen includes a review of the type of electrical service provided to the interconnection customer, including line configuration and the transformer connection to limit the potential for creating over voltages on the EDC's electric distribution system due to a loss of ground during the operating time of any anti-islanding function.
- (9) When the proposed small generator facility is to be interconnected on single-phase shared secondary line, the aggregate generation capacity on the shared secondary line, including the proposed small generator facility, will not exceed 20 kW.
- (10) When a proposed small generator facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition may not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.
- (11) A small generator facility, in aggregate with other generation interconnected to the distribution side of a substation transformer feeding the circuit where the small generator facility proposes to interconnect, may not exceed 2 MW in an area where there are known or posted transient stability limitations to generating units located in the general electrical vicinity (for example, three or four distribution busses from the point of interconnection).
- (12) Except as permitted by an additional review under the standard small generator interconnection agreement, no construction of facilities by an EDC on its own system will be required to accommodate the small generator facility.
- (c) The Level 2 interconnection procedure must consist of the following:
- (1) An EDC shall, within 10 business days after receipt of the interconnection request, inform the applicant that the interconnection request is complete or incomplete and what materials are missing.
- (2) When an EDC determines additional information is required to complete an evaluation, the EDC shall request the information. The time necessary to complete the evaluation may be extended, but only to the extent of the delay required for receipt of the additional information. The EDC may not revert to the start of the review process or alter the interconnection customer's queue position.
- (3) When an interconnection request is complete, the EDC shall assign a queue position. The queue position of the interconnection request shall be used to determine the potential adverse system impact of the small generator facility based on the relevant screening criteria. The EDC shall schedule a scoping meeting to notify the interconnection customer about other higher-queued interconnection customers on the same substation bus or spot network for which interconnection is sought.
- (4) Within 20 business days after the EDC notifies the interconnection customer it has received a completed interconnection request, the EDC shall:
- (i) Evaluate the interconnection request using the Level 2 screening criteria.
- (ii) Review the interconnection customer's analysis, if provided by interconnection customer, using the same criteria.

- (iii) Provide the interconnection customer with the EDC's evaluation, including a comparison of the results of its own analyses with those of interconnection customer, if applicable. When an EDC does not have a record of receipt of the interconnection request and the applicant can demonstrate that the original interconnection request was delivered, the EDC shall expedite its review to complete the evaluation of the interconnection request within 15 days of the applicant's resubmittal.
- (5) Upon notice within 10 business days after receipt of the certificate of completion, the EDC may conduct a witness test at a mutually convenient time. If the EDC does not conduct the witness test within 10 business days or within the time otherwise mutually agreed to by the parties, the witness test is deemed waived.
- (d) When an EDC determines that the interconnection request passes the Level 2 screening criteria, or fails one or more of the Level 2 screening criteria but determines that the small generator facility can be interconnected safely and reliably, it shall provide the interconnection customer a standard small generator interconnection agreement within 5 business days after the determination.
- (e) Additional review may be appropriate when a small generator facility has failed to meet one or more of the Level 2 screens. An EDC shall offer to perform additional review to determine whether minor modifications to the electric distribution system would enable the interconnection to be made consistent with safety, reliability and power quality criteria. The EDC shall provide the applicant with a nonbinding, good faith estimate of the costs of additional review and minor modifications. The EDC shall undertake the additional review or modifications only after the applicant consents to pay for the review and modifications.
- (f) An interconnection customer shall have 30 business days or another mutually agreeable time frame after receipt of the standard small generator interconnection agreement to sign and return the agreement. When an interconnection customer does not sign the agreement within 30 business days, the interconnection request will be deemed withdrawn unless the interconnection customer requests to have the deadline extended. The request for extension may not be unreasonably denied by the EDC. When construction is required, the interconnection of the small generator facility will proceed according to any milestones agreed to by the parties in the standard small generator interconnection agreement. The interconnection agreement may not become final until:
- (1) The milestones agreed to in the standard small generator interconnection agreement are satisfied.
- (2) The small generator facility is approved by electric code officials with jurisdiction over the interconnection.
- (3) The interconnection customer provides a certificate of completion to the EDC.
- (4) There is a successful completion of the witness test, unless waived.
- (g) If the small generator facility is not approved under a Level 2 review, the interconnection customer may submit a new interconnection request for consideration under a Level 3 or Level 4 interconnection review; however, the queue position assigned to the Level 2 interconnection request shall be retained.

§ 75.39. Level 3 interconnection review.

- (a) Each EDC shall adopt the Level 3 interconnection review procedure in this section. An EDC shall use the Level 3 review procedure to evaluate interconnection requests that meet the following criteria and for interconnection requests considered but not approved under a Level 2 or a Level 4 review if the interconnection customer submits a new interconnection request for consideration under Level 3:
- (1) The small generator facility has an electric nameplate capacity that is less than 2 MW.
- (2) The small generator facility is less than 2 MW and not Certified. $\,$
- (3) The small generator facility is less than 2 Mw and noninverter based.
- (b) The Level 3 interconnection review process shall consist of the following:
- (1) By mutual agreement of the parties, the scoping meeting, interconnection feasibility study, interconnection impact study, or interconnection facilities studies under Level 3 procedures may be waived.
- 2) Within 10 business days from receipt of an interconnection request, the EDC shall notify the interconnection customer whether the request is complete. When the interconnection request is not complete, the EDC shall provide the interconnection customer a written list detailing information that shall be provided to complete the interconnection request. The interconnection customer shall have 10 business days to provide appropriate data in order to complete the interconnection request or the interconnection request will be considered withdrawn. The parties may agree to extend the time for receipt of the additional information. The interconnection request shall be deemed complete when the required information has been provided by the interconnection customer, or the parties have agreed that the interconnection customer may provide additional information at a later time.
- (3) When an interconnection request is complete, the EDC shall assign a queue position. The queue position of an interconnection request shall be used to determine the cost responsibility necessary for the facilities to accommodate the interconnection. The EDC shall notify the interconnection customer at the scoping meeting about other higher-queued interconnection customers.
- (4) A scoping meeting will be held within 10 business days, or as agreed to by the parties, after the EDC has notified the interconnection customer that the interconnection request is deemed complete, or the interconnection customer has requested that its interconnection request proceed after failing the requirements of a Level 2 review or Level 4 review. The purpose of the meeting must be to review the interconnection request, existing studies relevant to the interconnection request, and the results of the Level 1, Level 2 or Level 4 screening criteria.
- (5) When the parties agree at a scoping meeting that an interconnection feasibility study shall be performed, the EDC shall provide to the interconnection customer, no later than 5 business days after the scoping meeting, an interconnection feasibility study agreement, including an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study.
- (6) When the parties agree at a scoping meeting that an interconnection feasibility study is not required, the EDC shall provide to the interconnection customer, no

later than 5 business days after the scoping meeting, an interconnection system impact study agreement, including an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study.

- (7) When the parties agree at the scoping meeting that an interconnection feasibility study and system impact study are not required, the EDC shall provide to the interconnection customer, no later than 5 business days after the scoping meeting, an interconnection facilities study agreement including an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study.
- (c) An interconnection feasibility study shall include the following analyses for the purpose of identifying a potential adverse system impact to the EDC's electric distribution system that would result from the interconnection:
- (1) Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection.
- (2) Initial identification of any thermal overload or voltage limit violations resulting from the interconnection.
- (3) Initial review of grounding requirements and system protection.
- (4) Description and nonbinding estimated cost of facilities required to interconnect the small generator facility to the EDC's electric distribution system in a safe and reliable manner.
- (5) When an interconnection customer requests that the interconnection feasibility study evaluate multiple potential points of interconnection, additional evaluations may be required. Additional evaluations shall be paid by the interconnection customer.
- (6) An interconnection system impact study is not required when the interconnection feasibility study concludes there is no adverse system impact, or when the study identifies an adverse system impact, but the EDC is able to identify a remedy without the need for an interconnection system impact study.
- (7) The parties shall use a form of interconnection feasibility study agreement approved by the Commission.
- (d) An interconnection system impact study must evaluate the impact of the proposed interconnection on the safety and reliability of the EDC's electric distribution system. The study must identify and detail the system impacts that result when a small generator facility is interconnected without project or system modifications, focusing on the adverse system impacts identified in the interconnection feasibility study; or potential impacts including those identified in the scoping meeting. The study must consider all generating facilities that, on the date the interconnection system impact study is commenced, are directly interconnected with the EDC's system, have a pending higher queue position to interconnect to the system, or have a signed interconnection agreement.
 - (1) An interconnection system impact study must:
 - (i) Consider the following criteria:
 - (A) A short circuit analysis.
 - (B) A stability analysis.
 - (C) Voltage drop and flicker studies.
 - (D) Protection and set point coordination studies.

- (E) Grounding reviews.
- (ii) State the underlying assumptions of the study.
- (iii) Show the results of the analyses.
- (iv) List any potential impediments to providing the requested interconnection service.
- (v) Indicate required distribution upgrades and provide a nonbinding good faith estimate of cost and time to construct the upgrades.
- (2) A distribution interconnection system impact study shall be performed when a potential distribution system adverse system impact is identified in the interconnection feasibility study. The EDC shall send the interconnection customer an interconnection system impact study agreement within 5 business days of transmittal of the interconnection feasibility study report. The agreement will include an outline of the scope of the study and a good faith estimate of the cost to perform the study. The study must include:
 - (i) A load flow study.
 - (ii) An analysis of equipment interrupting ratings.
 - (iii) A protection coordination study.
 - (iv) Voltage drop and flicker studies.
 - (v) Protection and set point coordination studies.
 - (vi) Grounding reviews.
 - (vii) Impact on system operation.
- (3) The parties shall use an interconnection impact study agreement or a distribution interconnection impact study as approved by the Commission.
- (e) The interconnection facilities study shall be conducted as follows:
- (1) Within 5 business days of completion of the interconnection system impact study, a report will be transmitted to the interconnection customer with an interconnection facilities study agreement, which includes an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study.
- (2) The interconnection facilities study shall estimate the cost of the equipment, engineering, procurement and construction work, including overheads, needed to implement the conclusions of the interconnection feasibility study and the interconnection system impact study to interconnect the small generator facility. The interconnection facilities study must identify:
- (i) The electrical switching configuration of the equipment, including transformer, switchgear, meters and other station equipment.
- (ii) The nature and estimated cost of the EDC's interconnection facilities and distribution upgrades necessary to accomplish the interconnection.
- (iii) An estimate of the time required to complete the construction and installation of the facilities.
- (3) The parties may agree to permit an interconnection customer to separately arrange for a third party to design and construct the required interconnection facilities. The EDC may review the design of the facilities under the interconnection facilities study agreement. When the parties agree to separately arrange for design and construction, and to comply with security and confidentiality requirements, the EDC shall make all relevant information and required specifications available to the interconnection customer

to obtain an independent design and cost estimate for the facilities, which must be built in accordance with the specifications.

- (4) Upon completion of the interconnection facilities study, and with the agreement of the interconnection customer to pay for the interconnection facilities and distribution upgrades identified in the interconnection facilities study, the EDC shall provide the interconnection customer with a standard small generator interconnection agreement within 5 business days.
- (5) The parties shall use an interconnection facility study agreement approved by the Commission.
- (f) When an EDC determines, as a result of the studies conducted under Level 3 review, that it is appropriate to interconnect the small generator facility, the EDC shall provide the interconnection customer with a standard small generator interconnection agreement. If the interconnection request is denied, the EDC shall provide a written explanation.
- (g) Upon providing notice within 10 business days after receipt of the certificate of completion, the EDC may conduct a witness test at a mutually convenient time. If the EDC does not conduct the witness test within 10 business days, or within the time otherwise mutually agreed to by the parties, the witness test is deemed waived.
- (h) An interconnection customer shall have 30 business days, or another mutually agreeable time frame after receipt of the standard small generator interconnection agreement to sign and return the agreement. When an interconnection customer does not sign the agreement within 30 business days, the interconnection request will be deemed withdrawn unless the interconnection customer requests to have the deadline extended. The request for extension may not be unreasonably denied by the EDC. When construction is required, the interconnection of the small generator facility shall proceed according to milestones agreed to by the parties in the standard small generator interconnection agreement. The interconnection agreement may not be final until:
- (1) The milestones agreed to in the standard small generator interconnection agreement are satisfied.
- (2) The small generator facility is approved by electric code officials with jurisdiction over the interconnection.
- (3) The interconnection customer provides a certificate of completion to the EDC.
- (4) There is a successful completion of the witness test, unless waived.

§ 75.40. Level 4 interconnection review.

- (a) Interconnection customers desiring to interconnect a small generator facility that does not qualify for a Level 1 or Level 2 review may request to be evaluated under Level 4 procedures.
- (b) When an interconnection request is complete, the EDC shall assign a queue position. The queue position of each interconnection request will be used to determine the potential adverse system impact of the small generator facility based on the relevant screening criteria. The EDC shall schedule a scoping meeting to notify the interconnection customer about other higher-queued interconnection customers on the same substation bus or area network to which the interconnection customer seeks interconnection.

- (c) When an interconnection customer submits an interconnection request to be interconnected to the load side of an area network, the EDC, notwithstanding any conflicting requirements in IEEE Standard 1547, shall use the following procedures:
- (1) When a small generator facility is less than or equal to 10 kW, the EDC shall use the review procedures for a Level 4 review, when the small generator facility meets the following criteria:
- (i) The electric nameplate capacity of the small generator facility is equal to or less than $10\ kW$.
- (ii) The proposed small generator facility utilizes a certified inverter-based equipment package for interconnection.
- (iii) The customer-generator installs reverse power relays or other protection functions, or both, that prevent power flow beyond the point of interconnection.
- (iv) The aggregated other generation on the area network does not exceed 5% of an area network's maximum load
- (2) Construction of facilities by the EDC on its own system is not required to accommodate the small generator facility.
- (3) The proposed small generator facility meeting the criteria under paragraph (1) shall be presumed appropriate for interconnecting to an area network and shall be further evaluated by the EDC based on the following procedures:
- (i) The EDC shall evaluate an interconnection request under Level 1 interconnection review procedures. The EDC shall have 20 business days to conduct an area network impact study to determine potential adverse impacts of interconnecting to the EDC's area network.
- (ii) When an area network impact study identifies potential adverse system impacts, the EDC may determine that it is inappropriate for the small generator facility to interconnect to the area network and the interconnection request shall be denied. The interconnection customer may elect to submit a new interconnection request for consideration under Level 3 procedures. The queue position assigned to the Level 4 interconnection request shall be retained.
- (iii) An EDC shall conduct the area network impact study at its own expense.
- (4) When an EDC denies an interconnection request, the EDC shall provide the interconnection customer with a copy of the area network impact study and a written justification for denying the interconnection request.
- (5) When a small generator facility is greater than 10 kW and equal to or less than 50 kW, an EDC shall use the review procedures set forth for a Level 4 application to interconnect a small generator facility that meets the following criteria: $\frac{1000}{1000}$
- (i) The electric nameplate capacity of the small generator facility is greater than $10\ kW$ and equal to or less than $50\ kW$.
- (ii) The proposed small generator facility utilizes a Certified inverter-based equipment package for interconnection.
- (iii) The customer-generator installs reverse power relays or other protection functions that prevent power flow beyond the point of interconnection.

- (iv) The aggregated other generation on the area network does not exceed 5% of an area network's maximum load.
- (6) Construction of facilities by the EDC on its own system is not required to accommodate the small generator facility.
- (7) The proposed small generator facility meeting the criteria under paragraph (5) shall be presumed to be appropriate for interconnecting to an area network and shall be further evaluated by an EDC using the following procedures:
- (i) An EDC shall evaluate the interconnection request under Level 2 interconnection review procedures. The EDC shall have 25 days to conduct an area network impact study to determine any potential adverse impacts of interconnecting to the EDC's area network.
- (ii) When an area network impact study identifies potential adverse system impacts, an EDC may determine that it is inappropriate for the small generator facility to interconnect to the area network and the interconnection request shall be denied. The interconnection customer may elect to submit a new interconnection request for consideration under Level 3 procedures. The queue position assigned to the Level 4 interconnection request shall be retained.
- (iii) An EDC shall conduct the area network impact study at its own expense.
- (iv) When an EDC denies an interconnection request, the EDC shall provide the interconnection customer with a copy of its area network impact study and a written justification for denying the interconnection request.
- (d) When interconnection to circuits that are not networked is requested, upon the mutual agreement of the EDC and the interconnection customer, the EDC may use the Level 4 review procedure for an interconnection request to interconnect a small generator facility that meets the following criteria:
- (1) The small generator facility has an electric nameplate capacity of 2 MW or less.
- (2) The aggregated total of the electric nameplate capacity of all of the generators on the circuit, including the proposed small generator facility, is 2 MW or less.
- (3) The small generator facility uses reverse power relays or other protection functions that prevent power flow onto the utility grid.
- (4) The small generator facility will be interconnected with a radial distribution circuit.
- (5) The small generator facility is not served by a shared transformer.
- (6) Construction of facilities by the EDC on its own system is not required to accommodate the small generator facility.
- (e) When a small generator facility meets the criteria under subsection (d), an EDC shall interconnect under the Level 4 review if it meets the following requirements:
- (1) A proposed small generator facility, in aggregation with other generation on the distribution circuit, may not contribute more than 10% to the distribution circuit's maximum fault current at the point on the primary voltage distribution line nearest the point of common coupling.
- (2) The aggregate generation capacity on the distribution circuit to which the small generator facility shall

- interconnect, including its capacity, may not cause any distribution protective equipment, or customer equipment on the distribution system, to exceed 85% of the short-circuit interrupting capability of the equipment. A small generator facility may not be connected to a circuit that already exceeds 85% of the short circuit interrupting capability.
- (3) When there are known or posted transient stability limits to generating units located in the general electrical vicinity of the proposed point of common coupling, the proposed customer-generator shall be subject to a Level 3 review.
- (4) When a customer-generator facility is to be connected to 3-phase, 3 wire primary EDC distribution lines, a 3-phase or single-phase generator shall be connected phase-to-phase. When a customer-generator facility is to be connected to 3-phase, 4 wire primary EDC distribution lines, a 3-phase or single phase generator shall be connected line-to-neutral and shall be effectively grounded. This review must include examination of the type of electrical service provided to the interconnection customer, including line configuration and the transformer connection, to limit the potential for over voltages on the EDC's electric distribution system due to a loss of ground during the operating time of any anti-islanding function.
- (f) When a small generator facility fails to meet the criteria under subsection (e), an EDC shall use the Level 3 interconnection procedures. The queue position assigned to the Level 4 interconnection request shall be retained.
- (g) When a small generator facility satisfies the criteria under subsection (e), an EDC may, upon providing reasonable notice, within 10 business days after receipt of the Certificate of Completion, conduct a witness test at a mutually convenient time. If the EDC does not conduct the witness test within 10 business days or within the time otherwise mutually agreed to by the parties, the witness test is deemed waived.
- (h) When a small generator facility satisfies the criteria for a Level 4 Interconnection, an EDC shall approve the interconnection request and provide a standard interconnection agreement to the interconnection customer for signature.
- (i) The interconnection customer shall have 30 business days, or another mutually agreeable time frame after receipt of the standard small generator interconnection agreement to sign and return the agreement. If the interconnection customer does not sign the agreement within 30 business days, the interconnection request shall be deemed withdrawn unless the parties mutually agree to extend the time period for executing the agreement. After the agreement is signed by the parties, interconnection of the small generator facility will proceed according to milestones agreed to by the parties in the agreement. The agreement may not be final until:
- (1) The milestones agreed to in the standard small generator interconnection agreement are satisfied.
- (2) The small generator facility is approved by electric code officials with jurisdiction over the interconnection.
- (3) The interconnection customer provides a certificate of completion to the EDC.
- (4) There is a successful completion of the witness test, unless waived.

DISPUTE RESOLUTION

§ 75.51. Disputes.

- (a) A party shall attempt to resolve all disputes regarding interconnection as provided in this chapter promptly, equitably, and in a good faith manner.
- (b) When a dispute arises, a party may seek immediate resolution through complaint procedures available through the Commission, or an alternative dispute resolution process approved by the Commission, by providing written notice to the Commission and the other party stating the issues in dispute. Dispute resolution will be conducted in an informal, expeditious manner to reach resolution with minimal costs and delay. When available, dispute resolution may be conducted by phone.
- (c) When disputes relate to the technical application of this chapter, the Commission may designate a technical master to resolve the dispute. The Commission may designate a Department of Energy National laboratory, PJM Interconnection L.L.C., or a college or university with distribution system engineering expertise as the technical master. When the Federal Energy Regulatory Commission identifies a National technical dispute resolution team, the Commission may designate the team as its technical master. Upon Commission designation, the parties shall use the technical master to resolve disputes related to interconnection. Costs for dispute resolution conducted by the technical master shall be determined by the technical master subject to review by the Commission.
- (d) Pursuit of dispute resolution may not affect an interconnection applicant with regard to consideration of an interconnection request or an interconnection applicant's position in the EDC's interconnection queue.

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[52 PA. CODE CHS. 54 AND 57]

Provision of Default Service; Reopening of the Comment Period

February 8, 2006

Implementation of the Alternative Energy Portfolio Standards Act of 2004; Doc. No. M-00051865

Rulemaking Re Electric Distribution Companies' Obligation to Serve Retail Customers at the Conclusion of the Transition Period Pursuant to 66 Pa.C.S. § 2807(e)(2); Doc. No. L-00040169

The Alternative Energy Portfolio Standards Act of 2004 (Act 213) (73 P. S. §§ 1648.1—1648.8) provides for the full recovery of compliance costs by electric distribution companies. The Pennsylvania Public Utility Commission (Commission) announced through an Order entered at the previously referenced dockets on November 18, 2005, that it would be reopening the comment period for its default service rulemaking to consider this issue. The proposed rulemaking was published at 35 Pa.B. 1421 (February 26, 2005).

As the first step in this process, the Commission requests that all interested parties provide written comments to the following issues list. The issues list includes those questions and issues identified in the order of November 18, 2005. Parties may offer comments on other Act 213 cost-recovery issues not included in this list.

Comments should be submitted to the Commission by e-mail by March 8, 2006, to Carrie Beale, cbeale@state.pa.us. Reply comments may be submitted by April 7, 2006. Comments will be posted to the Commission's public internet domain.

After it has reviewed the comments, the Commission will consider whether additional opportunities for discussion are needed. This may include convening a meeting of the Alternative Energy Portfolio Standards Working Group.

Issues List

- 1. Should Act 213 cost recovery be addressed in the Default Service regulations as opposed to a separate rulemaking? Is it necessary to consider Act 213 cost recovery regulations on a different time frame in order to encourage development of alternative energy resources during the "cost recovery period"?
- 2. Do the prevailing market conditions require long-term contracts to initiate development of alternative energy resources? May Default Service Providers employ long-term fixed price contracts to acquire alternative energy resources? What competitive procurement process may be employed if the Default Services Provider acquires alternative energy resources through a long-term fixed price contract?
- 3. Should the force majeure provisions of Act 213 be integrated into the Default Service procurement process? Should Default Service Providers be required to make force majeure claims in their Default Service implementation filing? What criteria should the Commission consider in evaluating a force majeure claim? How may the Commission resolve a claim of force majeure by an electric generation supplier?
- 4. Given that Act 213 includes a minimum solar photovoltaic requirement as part of Tier I, should these resources be treated differently from other alternative energy resources in terms of procurement and cost recovery?
- 5. Should the Commission integrate the costs determined through a § 1307 process for alternative energy resources with the energy costs identified through the Default Service Provider regulations? How could these costs be blended into the Default Service Providers Tariff rate schedules?
- 6. May a Default Service Provider enter into a long-term fixed price contract for the energy supplies produced by coal gasification based generation if the resulting energy costs reflected in the tariff rate schedules are limited to the prevailing market prices determined through a competitive procurement process approved by the Commission?
- 7. Should the Commission delay the promulgation of default service regulations until a time nearer the end of the transition period, as suggested by the Independent Regulatory Review Commission in its comments on the proposed regulations?
- 8. Does the Commission need to make any revisions to its proposed default service regulations to reflect the mandates of the Energy Policy Act of 2005?

JAMES J. MCNULTY, Secretary

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