

September 3, 2014

Pennsylvania Public Utility Commission
Attn: Rosemary Chiavetta, Secretary
Commonwealth Keystone Building
400 North Street
P.O. Box 3265
Harrisburg, PA 17105-3265

RE: Proposed Rulemaking - Implementation of the Alternative Energy Portfolio Standards Act of 2004 (Docket No. L-2014-2404361, Published in the July 5, 2014 Edition of the *Pennsylvania Bulletin*)

VIA ELECTRONIC AND FIRST CLASS MAIL

Dear Members of the Commission:

Pennsylvania Farm Bureau (PFB) is pleased to offer comments on the Commission's aforementioned proposed rulemaking to revise the governing regulatory standards for implementation of the Alternative Energy Portfolio Standards Act of 2004 (AEPS Act), 73 P.S. § 1648.1, et seq. PFB is a general farm organization, made up of more than 59,780 members. Since 1950, PFB has provided support, advocacy and informational and professional services for agriculture and farm families, including those operating Tier I energy generation systems on farms who may be affected by this proposed rulemaking. Our organization includes 54 local organizations (County Farm Bureaus) that actively operate in 64 of Pennsylvania's 67 counties.

Initially, PFB would like to recognize and thank the Commission for extending the comment deadline on this proposed rulemaking. The extension has allowed our members and others potentially affected by it a more reasonable time frame to review and understand its impacts on generation systems more commonly operated on farms, and offer substantive input to the Commission as the regulatory process moves forward.

It appears that one of the primary purposes behind the Commission's proposed rulemaking is to ensure that farmers and other Tier I generators receiving the benefits of "net metering" are truly local customers engaged in consumption of electricity in the system for which the generator is supplying electricity. The three systems most often developed and operated on farms eligible for net metering generate electricity through utilization of anaerobic methane digestion, solar energy and wind energy.

While opportunity for supplemental income through electrical generation may be part of the reason why Tier I energy systems are developed and operated on farms, it is hardly the primary incentive behind their development and operation. Farmers must incur high input and operation costs to viably engage their farms in agricultural production, and development and maintenance of alternative energy systems requires farmers to commit a serious amount of capital outlays and debt. Rarely, if ever, are

farmers using their farms as a façade for operation of the type or scale of intensive electrical generation system commonly operated by commercial electrical companies. Typically, the “income” from the electrical generation “enterprise” is merely part of the income and cost factors managed overall by the farmer in the viable management of the farm as a single business unit.

We are concerned that the Commission in its proposed rulemaking may not adequately appreciate and recognize the importance of non-economic reasons why many farmers have engaged in Tier I energy development. To sustain current and future viability in agriculture, many farm families will need to significantly increase levels of agricultural production on their farms. In order to accomplish increases in production yields, farm families will correspondingly engage in more concentrated and intensive agricultural production practices. Such engagement has a high potential for significant and adverse environmental impacts, which farmers must legally account for and manage.

Farmers who engage in more intensive animal agricultural production will be legally required by federal and state regulations to manage the increased levels of nitrogen and phosphorus that will result from the additional animal manure to be generated. At the same time, farmers engaged in production of field crops will need to engage in more aggressive and costly soil conservation measures and practices to obtain the yields they viably need without irreversibly harming the future fertility of their land. Operation of Tier I energy generation systems can and does play a critical role farmers’ ability to attain agricultural production yields necessary for the farm’s continued economic viability in a way that is more compatible with sustaining the environment.

The use of methane digesters on farms, for example, provides farmers with an expensive, but feasible, opportunity for farmers engaged in more intensive farming operations to manage adverse environmental effects and legally meet the increased water and air quality standards imposed on more intensive agricultural practices. Digesters provide improvements relative to traditional manure storage ponds and tanks in the areas of pathogen destruction, odor control, organic stability, greenhouse gas and hydrogen sulfide emission reductions, and some nutrient management benefits. They also offset the environmental impacts of fossil fuel generation and can provide rural electrical benefits, such as green power (production of renewable energy), distributed generation, and voltage support. Unlike other types of manure management processes, anaerobic digestion also offers farmers the opportunity to offset costs or generate revenue from the process, which is an important factor due to the high capital costs of the system. The U.S. Department of Agriculture, U.S. Environmental Protection Agency and the U.S. Department of Energy recognize the many benefits and opportunities offered by anaerobic digestion systems and strongly encourage animal agriculture operations (particularly those in the Chesapeake Bay Watershed) to increase implementation of these systems.

For many “larger scale” farms in the Commonwealth, a farmer’s decision to initially develop a methane digestion system or to install capital infrastructure to increase operational capacity of their current system is done more for environmental purposes than for purposes of additional income or increased access to electrical energy.

Relative to crop production, development of solar and wind energy systems provide farmers the opportunity to manage their farms in a more economically efficient and environmentally efficient

manner. Solar and wind systems can be located on marginally productive lands that are susceptible to high rates of soil erosion when used in field crop production. Use of these lands for development and operation of solar and wind energy systems provides both higher income potential and better management of soil erosion than use in agricultural production. Resources and inputs for increasing crop production yields can be more effectively and efficiently directed to fields with more fertile soil types and more optimum slope and land conditions.

Income from the generation of electricity is often the only revenue stream that will be factored into a project's "payback period" or "return on investment" by lenders and investors. For that reason, the ability of a project to recoup retail electricity prices (versus wholesale prices or avoided costs) through net metering is extremely important.

In light of the critical benefits that development and operation of Tier I systems on farms can feasibly provide to the ability of Pennsylvania farmers to achieve environmental quality and legally meet environmental obligations of Chesapeake Bay TMDL and other requirements of federal and state law, we strongly recommend that any regulations finally adopted by the PUC ensure the broadest eligibility of all Tier I systems on farms engaged commercially by farm families in agricultural production to the benefits of net metering, both now and in the future.

Of the 6 states that have more than 10 anaerobic digesters on farms, all but one (Wisconsin) have significant net metering allowances. Among those states, according to the Database of State Incentives for Renewables & Efficiency (DSIRE), Pennsylvania ranks third with respect to the total number of digesters and second with respect to the number of digesters generating electricity. Anaerobic digestion systems in Pennsylvania range in capacity from 22 kW to 600 kW, with an average generation capacity of 166kW. Pennsylvania's average generation capacity ranks last among those 6 states, and it also has the second-smallest minimum capacity while tying for the smallest maximum capacity. At the same time, Pennsylvania ranks third with respect to the total number of digesters and second with respect to the number of digesters generating electricity.

The PUC's proposed rulemaking would essentially prohibit the ability of farmers to be eligible for net metering in development of on-farm systems whose capacity for electrical generation exceeds 110 percent of the farmer's annual consumption with a nameplate capacity of 3 MW. Producers would also have to provide energy for grid emergencies. Eligibility to be a customer-generator begins at 500 KW, with the Commission required to approve projects with capacities above that figure.

We find the 110 percent limitation to be arbitrary, and problematic for several reasons. The discussion above describes in detail why farmers participate in Tier I energy development. The stronger and more important reason for many farmers to develop and operate on-farm generation systems is environmental management rather than economic gain. Given the high costs and debt that farmers must incur in developing these systems, the 110 percent limitation will seriously disincentivize farm families' use of Tier I generation to achieve the level of environmental control or economic efficiency that they will need to viably sustain their farms in agricultural production.

While a capacity of 0-3 MW allows an operator to be treated as a customer-generator for the purposes of net metering, exceeding that capacity makes one a merchant-generator. A merchant-generator must sell electricity at the wholesale level, rather than at retail, if marketing that electricity to electrical companies.

The 110 percent limitation is also a problem with regard to the use of food waste by on-farm generation systems. The state's Solid Waste Management Act recognizes that farmers' use of and land application of food processing waste for soil enhancement is part of normal farming activity not subject to the Act's regulation as a waste disposal facility. Related DEP regulations were recently promulgated to authorize, through a General Permit (WMGM042), the use of food waste in on-farm generation systems. With the addition of food waste, most generators can produce more electricity than the 110 percent threshold. Many generators argue that a digester facility needs to be at least that big to make economic sense. The Commission's proposed 110 percent limitation would be a serious impediment to the continued use of food processing waste in on-farm generation systems, forcing both food waste managers and farmer-generators to pursue alternative and likely more costly measures for environmentally managing the waste and finding a replacement for fueling the generation system.

We understand the general purpose behind the Commission's proposed criterion of "110 percent of consumption" is to ensure utilities and other truly commercial generation enterprises are not able to masquerade as "customers" to obtain the benefits of net metering that they were not intended to receive. But use of this same criterion in the context of Tier I systems operated on legitimate farm operations is unreasonable and arbitrary, as described above.

We believe that the Commission needs to adopt a more specific and alternative measurement for determining legitimate farms to be treated as "customer generators" eligible to receive net metering treatment in operation of Tier I electrical generation systems than the "110 percent of consumption" criterion proposed.

Other Pennsylvania statutes have established what we consider to be reasonable measurements for determining operations that should be considered to be legitimate farming enterprises. Pennsylvania's Right to Farm Law (Act 133 of 1982 – 3 P.S. 951 et seq.) protects "normal farming operations" both from local ordinances that try to impose excessive restrictions of customary farming practices and from nuisance lawsuits that local governments or neighboring citizens attempt to bring to halt farmers from continuing to engage in those practices. The Right to Farm Law establishes a criterion of \$10,000 in anticipated income from agricultural production as the basis for determining agricultural enterprises considered to be truly legitimate farms for which the Law's protections from nuisance ordinances and nuisance suits should apply.

PFB believes that the Commission should use and apply a criterion similar to the one provided in the Right to Farm Law, which is based on anticipated annual income from farming, in determining farms to be treated as "customer generators" for eligibility of Tier I electrical generation systems to receive net metering treatment.

Finally, the Commission’s proposed rulemaking would change the “true-up” year to run from May to April, rather than from June through May. It is important to recognize that some customer-generators are net users from November to April, and net generators from May to October. It is better for the required true-up to remain on an annual basis, rather than a shorter interval, and the measurement should be on an actual usage basis, rather than on capacity.

It is our understanding that some electrical utilities and farmers receiving the benefits of net metering have by agreement voluntarily established a “true-up” period of less than one year. Those farmers have established a shorter period have economically benefited from the shorter “true-up” interval, relative to a one-year “true-up” period.

We do believe an annual interval is proper time period for required “true-up” and payment of net excess of electricity generated by the customer-generator, in absence of voluntary agreement to the contrary. But we also believe that any regulation to require an annual “true-up” period should not prohibit a farmer or other customer-generator from voluntarily agreeing to a shorter “true-up” period, when the customer-generator believes that the shorter interval would be more beneficial economically.

PFB again thanks the Commission for the opportunity to comment on the net metering proposal, and stands ready to work with the Commission to develop net metering regulations that encourage the continuing efforts of Pennsylvania farmers to implement projects that provide substantial environmental benefits while producing clean, renewable sources of electricity.

Sincerely,
Grant Gulibon
Director, Regulatory Affairs