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September 9, 2011

Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
2<sup>nd</sup> Floor, Room-N201  
Harrisburg, PA 17120

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SEP 9 2011

PA PUBLIC UTILITY COMMISSION  
SECRETARY'S BUREAU

Re: **Tentative Order: Net Metering—Use of  
Third Party Operators; Doc. No. M-2011-2249441**

Dear Secretary Chiavetta,

The Interstate Renewable Energy Council submits an original and three (3) copies of its comments via express overnight delivery, to be filed on Monday, September 12, 2011. IREC is also submitting an electronic copy to Kriss Brown, Assistant Counsel, Law Bureau, and Scott Gebhardt, Analyst, Bureau of Conservation, Economics and Energy Planning, on the date of filing via electronic mail to the addresses provided in the Tentative Order.

Very Truly Yours,



Joseph F. Wiedman by TBC

Enclosures

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BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Tentative Order- Net Metering—Use of Third-Party Operators  
Docket No. M-2011-2249441

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COMMENTS OF THE INTERSTATE RENEWABLE  
ENERGY COUNCIL ON THE TENTATIVE ORDER

PA PUBLIC UTILITY COMMISSION  
SECRETARY'S BUREAU

**I. Introduction**

In response to the Pennsylvania Public Utility Commission's ("Commission") Tentative Order on The Use of Third-Party Operators ("Tentative Order") noticed by the Pennsylvania Public Utility Commission on August 13, 2011 in the Pennsylvania Bulletin<sup>1</sup>, the The Interstate Renewable Energy Council ("IREC") submits these comments in support of the Tentative Order's directive to define the term "operator," as it is used in 73 Pa. Cons. Stat. § 1648.2, to include "customer-generators with distributed alternative energy systems that contract with a third-party to perform the operational functions of that system."<sup>2</sup>

IREC is a non-profit organization that has worked for nearly three decades to accelerate the sustainable utilization of renewable energy resources through the development of programs and policies that reduce barriers to renewable energy deployment. IREC has participated in workshops, proceedings and rulemakings before over thirty state public utility commissions during the past three years, addressing topics that directly impact the development of renewable energy resources, including net metering rules, interconnection standards and the permissibility of third-party ownership of renewable generation under state law.

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<sup>1</sup> See 41 Pa.B. 4515.

<sup>2</sup> Tentative Order ¶ 9.

IREC appreciates the opportunity to comment in support of the Tentative Order. IREC specifically commends the Tentative Order’s flexible interpretation of the term “operator” as consistent with best practices in the area of net metering, conducive to further expanding the market for distributed alternative energy resources in the Commonwealth, and as in line with the majority of other states that allow third-party owned systems to participate in state net metering programs. IREC supports Commission adoption of the Tentative Order.

**II. IREC Supports the Tentative Order’s Interpretation that a Customer Who Contracts with a Third-Party Owner to Facilitate On-Site Generation Operates a Net Metering System.**

The definition of an eligible customer-generator in Pennsylvania supports the principle that third-party-owned systems may participate in net metering. Pennsylvania defines customer-generator as a “nonutility *owner or operator* of a net metered distributed generation system.”<sup>5</sup> First and foremost, the statute is clear that ownership of a net metered system is not a requirement for a customer to net meter because the definition of customer-generator uses the disjunctive term “or” between owner and operator. Under commonly accepted rules of statutory construction, if the drafters intended to make ownership a prerequisite for net metering eligibility, the drafters should have included the conjunction “and” between the words “owner” and “operator” to signify that both conditions are required.

IREC agrees with the Tentative Order that a customer who contracts with a third-party to own a distributed, alternative energy system is the “operator” of that system and is, thus, a customer-generator within the meaning given in 73 Pa. Cons. Stat. § 1648.2.<sup>7</sup> Specifically, the Tentative Order proposes that the Commission interpret “operator” to include “customer-generators with distributed alternative energy systems that contract with a third-party to perform

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<sup>5</sup> 73 P.S. § 1648.2 [italics added].

<sup>7</sup> Tentative Order ¶ 9.

the operational functions of that system.”<sup>8</sup> IREC supports this interpretation of “operator” within the context of 73 Pa. Cons. Stat. § 1648.2. This interpretation adds needed certainty to the meaning of the term operator and IREC believes that this interpretation sends a clear signal to the market that third-party-ownership models are allowed in Pennsylvania and that third-party-owned systems are eligible to participate in net metering.

IREC also observes that the Tentative Order’s approval of third-party system net metering is consistent with the overwhelming majority of states that allow both practices in tandem. IREC has identified at least 21 states that allow the third-party model for on-site generation and related services.<sup>9</sup> To the best of IREC’s knowledge, every state that allows third-party ownership of distributed generation also allows those systems to net meter.<sup>10</sup>

**A. The Tentative Order’s Clarification of Third-Party Eligibility to Net Meter Will Support the Growth of the Distributed Generation Market in Pennsylvania and Provide Other Public Benefits.**

***1. Third-party ownership expands alternative energy markets by removing significant barriers to renewable energy development.***

Third-party ownership of renewable generation is emerging to become the dominant financing mechanism for distributed generation projects throughout the United States because it helps to overcome traditional barriers to customer adoption of renewable technology. A 2009 report issued by the Lawrence Berkeley National Laboratory identified four typical barriers to the adoption of solar PV by non-residential customers: (1) steep learning curves to utilize the technology; (2) high up-front system costs; (3) renewable system performance risks; and (4)

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<sup>8</sup> *Id.*

<sup>9</sup> See Database of State Incentives for Renewables & Efficiency (DSIRE), Summary Map of Third-Party Solar PPA Policies. Available at: <http://www.dsireusa.org/summarymaps/index.cfm?ee=1&RE=1>.

<sup>10</sup> Texas, however, is the exception to this rule. Although the legislature recently exempted distributed generation systems from public utility status, Texas does not have a statewide net metering policy.

inadequate tax “appetite” to make efficient use of tax benefits associated with investing in renewable energy resources.<sup>17</sup> The third-party-ownership model allows a customer to overcome each of these barriers.

First, the third-party model lessens the steep learning curve associated with understanding and adopting the appropriate resource to match customers’ needs. The third-party model does this by allowing the customer to benefit from the expertise of a third-party provider in installing, operating, and maintaining an appropriately sized and appropriately placed system. Second, the third-party financing model allows an on-site customer to substantially reduce or completely avoid any up-front costs to install a system because the customer often pays only for the output of the system or a fixed monthly leasing payment. Third, under the forms of third-party financing where the customer only pays for the output of the system, the operator of the system has a strong incentive to keep the system in optimal functioning condition. This aspect of third-party ownership not only provides a strong incentive to the system owner to keep the system running optimally so they are paid appropriately for their system, it ensures that ratepayer support for renewable energy systems results in systems that produce optimally. In other words, ratepayers get the most “bang for their buck.” This aspect of renewable energy programs is particularly important. The California Public Utilities Commission Energy Division Staff has estimated that for every \$1 of California Solar Initiative incentives provided by ratepayers, an additional \$6 of private funding is harnessed.<sup>18</sup> This leveraging of private funding has resulted in over \$5 billion in nonratepayer-funded support for clean, renewable energy. Fourth, many customers lack the

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<sup>17</sup> See, Bolinger, Mark, *Financing Non-Residential Photovoltaic Projects: Options and Implications*, Lawrence Berkeley National Laboratory, Jan. 2009, LBNL-1410E (“Bolinger Report”), at p. 13.

<sup>18</sup> See California Solar Initiative: Staff Progress Report, California Public Utilities Commission (Jan. 2009), at pp. 14-15.

tax “appetite” to fully benefit from available tax credits. A third-party provider typically partners with other investors or financial institutions that can fully capture these tax benefits. These tax savings, which might otherwise be unrealized by the customer, are then monetized into the customer’s system contract, further lowering the cost of a system for the host customer.

IREC is aware of significant growth in the use of the third-party model over the last several years in both the residential and non-residential sectors. The Bolinger Report projected that, by 2008, roughly 90% of the non-residential United States solar market would be funded through the use of power purchase agreements (PPAs) with third-party owners, up from just 10% of all non-residential systems in 2006.<sup>19</sup> A recent evaluation report on the California Solar Initiative—a state program that provides additional incentives or rebates to net metering customers—shows that the use of the third-party model has significantly increased in the residential sector over the past few years, moving from roughly 3% of the program’s residential sector installed capacity in 2007 to over 30% in 2009.<sup>20</sup> According to the Energy Trust of Oregon, more than 80% of commercial solar installations in Oregon involved third-party ownership arrangements in 2008, which represented \$35 million in private investment in clean energy resources.<sup>21</sup> The Tentative Order lays the groundwork for the third-party model to similarly thrive in Pennsylvania.

**2. *Third-party ownership is particularly beneficial to public sector and tax exempt entities who are unable to fully utilize federal incentives for investments in renewable energy.***

The ability to fully monetize the local, state and federal incentives available for renewable energy systems makes third-party ownership ideally suited for tax-exempt entities

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<sup>19</sup> See Bolinger Report at p. 18.

<sup>20</sup> See *California Solar Initiative Cost-Effectiveness Evaluation*, at p. 57 (April 2011) Energy & Environmental Economics (E3), Prepared for the California Public Utilities Commission.

<sup>21</sup> Energy Trust of Oregon, Inc., Opening Brief and Waiver of Paper Service of Energy Trust of Oregon, Inc., Docket No. DR 40, Public Utility Commission of Oregon (Jun. 20, 2008).

such as schools, churches, non-profit organizations, and local governments. These types of entities typically do not wish to be burdened with the operation and maintenance of a renewable energy system, do not want to assume the risks of operation or mobilize the initial outlay of capital required to install, and, most importantly, cannot capture the benefits of available tax benefits for investments in alternative energy. Because these entities do not have any tax liability, they are simply unable to take advantage of the tax incentives offered at the federal level. These incentives are not trivial – by combining federal investment tax credits with accelerated depreciation, the capital cost of a solar energy system can be reduced by up to 60 percent.<sup>22</sup> As a matter of basic economic principles, this reduction in cost through the use of third-party ownership spurs the growth of solar by allowing customers interested in investing in solar energy to do so at significantly less cost.

Third-party ownership allows these tax-exempt entities, thus, to take advantage of otherwise unavailable tax benefits. The third-party model does this by pairing the available tax credits from alternative energy projects with investment partners who have sufficient tax appetite. These monetized benefits are then passed through to the host customer “in the form of a lower [contract] price.”<sup>23</sup> The monetization of benefits into a lower contract price means that host customers see increased benefit when using that output to offset purchases through net metering.

Governmental entities in Pennsylvania would likely benefit from the monetization of tax credits and net metering under the third-party model because they are often large energy consumers and are already allowed to net meter under Pennsylvania law. The third-party model

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<sup>22</sup> See Solar Energy Industry Association, Guide to Federal Tax Incentives for Solar Energy, Version 1.2, Executive Summary.

<sup>23</sup> Bolinger Report at p. 17.

allows net metering customers the opportunity to cut energy costs and lower monthly utility bills. For a governmental entity, this means that it might realize budget savings from an on-site generator without having to seek additional appropriations or authorizations for capital upgrades. This fact is particularly relevant in 2011 given the budget constraints facing states, local governments, and public schools.

The Tentative Order’s interpretation of the term “operator” will allow a wide range of customers, including school districts and cash-strapped local governments, to realize energy savings through this model. The benefit of energy savings from these groups in many cases will likely inure to the general public through the reduced costs of operating public institutions.

***3. The Tentative Order Is Consistent with Pennsylvania’s Policy to Increase the Use of Alternative Energy Sources of Generation.***

IREC believes that the Tentative Order advances the Commonwealth’s energy goals by encouraging investment in customer-sited generation, maximizing available incentives, and encouraging a wide range of customer types to adopt alternative on-site generation to reduce demand and grid impacts. When enacting the Alternative Energy Portfolio Standards Act (“AEPS”), Pennsylvania’s legislature declared that increasing the use of alternative energy is in the public interest. The Commonwealth’s commitment to developing a robust market for alternative energy sources is reflected in its strong supporting policies.

IREC notes that Pennsylvania features one of the nation’s strongest net metering programs. Pennsylvania scores an “A” letter grade for its net metering policies according to criteria established in the annual publication *Freeing the Grid*, to which IREC contributes.<sup>24</sup> The strength of Pennsylvania’s existing net metering rules—coupled with the Tentative Order’s clarification that third-party-owned systems may participate in net metering—should only bolster

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<sup>24</sup> See *Freeing the Grid*, Appendix A, pp. 104-05 (Net Metering Grades).

investment in Pennsylvania distributed generation projects. Thus, the Tentative Order will advance the use of alternative energy sources and further the public's interest by improving upon the strength of this existing policy.

Lastly, in addition to creating cost-effective clean energy from renewable sources such as the sun and wind, it should not be overlooked that distributed generation projects have a positive economic impact on the Commonwealth's economy. Third-party-owned net metering systems are distributed generation resources by definition; these are projects that must be located to serve on-site load. Because the Tentative Order encourages the expansion of these systems, it also encourages the expansion of the workforce and increases opportunities for third-party service providers to locate operations in Pennsylvania.

### **III. IREC Does Not Oppose the Tentative Order's System Size Limit on Third-Party-Owned Net Metering Systems.**

IREC believes the Tentative Order's size limitation on third-party-owned net metering systems achieves a reasonable balancing of interests and remains consistent with the underlying purpose of promoting greater utilization of net metering. The Tentative Order suggests that a third-party-owned system should be limited to 110% of a customer-generator's prior year electricity consumption. IREC is sensitive to the concern expressed in the Tentative Order that net metering should not be abused to disguise the true purpose of a generator. IREC believes that net metering customers should be encouraged to choose system sizes appropriate to a given customer's load. Generally, customers receive the most value from a net metering system by offsetting usage, not from generating excess generation. This fact alone tends to discourage customers from spending extra money to install a system that exceeds on-site needs.

Accordingly, IREC believes that the condition that a third-party-owned net metering system not exceed 110% of a customer's prior year of consumption is a reasonable one. IREC does suggest,

however, that the Commission apply this limit with flexibility, to allow customers' without historic usage data a fair amount of leeway to estimate projected consumption.

**IV. Conclusion**

IREC supports the Tentative Order interpreting the definition of "customer-generator" to permit customer-sited, third-party-owned systems to net meter. This interpretation is consistent with the Commonwealth's energy policy goals, the public interest, and with the prevailing practices among states allowing third-party ownership. IREC urges the Commission to adopt the Tentative Order.

Dated September 9, 2011.

Respectfully Submitted,

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