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Traci Kirkpatrick, Administrative Law Judge  
Oregon Public Utility Commission  
Administrative Hearings Division  
P.O. Box 2148  
Salem Oregon 97308-2148

**RE: Net Metering Rules, Docket AR515**

Dear Ms Kirkpatrick:

I appreciate the opportunity to comment on the proposed Oregon PUC rules regulating net metering. I am writing for myself and two of my clients, **Portland Habilitation Center**, (PHC) and the **Stoller Wine Farm**, in Dayton. We all support net metering because it will encourage the construction of renewable energy generators. This, we believe, will be good for our state, country, our businesses and our families.

**Portland Habilitation Center** is located near the Portland International Airport at NE 148th and Marine Drive. It is a \$30 million a year self-supporting non-profit, with 1,000 employees, 800 of whom are workers with disabilities. PHC was founded in 1950 and has been housed in a 96,000 square foot building since 1996. It is now completing construction of a 114,000 square foot building that will host an 870 kW solar power plant on its roof. That PV system will supply about 125% of PHC's **existing** electrical power needs. PHC also owns 500 affordable housing units in Southeast Portland. **PHC** wishes to stabilize and reduce its energy costs so that it can more effectively compete for long term contracts and thus create more jobs for disabled workers.

**The Stoller Wine Farm** has been in their family since the 1940's. It is 373 acres and contains 4 homes, vineyards, a winery, a landscape maintenance business, and about a dozen agricultural buildings. A year and a half ago the Stollers built a winery and installed a 46 kW photovoltaic array, on its roof. That PV system is capable of supplying about 50% of the winery's power needs. The Stollers are now exploring the possibility of adding capacity to the PV system for the winery and other facilities on the farm. The farm's power needs would be satisfied by an array of about 460 kW. The **Stollers** are committed to creating a sustainable agricultural enterprise for future generations of their family.

I live in a Portland neighborhood, in a home constructed in 1936. It is a sound building but not easily adapted to solar generation. Consequently, I purchase all of our power from PGE. My firm designed the Stoller's home and winery, the PHC buildings and we have also worked on several of PHC's low income housing projects. My office is now designing two buildings on a single property for a new client in Dundee that we hope to equip with net metered solar arrays. The buildings will include 2 residences, a wine tasting room, offices and a storage area for agricultural equipment. Renewable energy and environmental design are important components of our projects.

All three of us believe that solar generation deserves a much larger role due to its ability to generate during peak periods and because it is free of the carbon emissions. Until now, solar generation and net metered facilities in Oregon have been viewed largely as boutique, residential scale installations. This is changing and we understand that ORS 757.300 is intended to encourage and give further incentives for urgently needed increases in sustainable power generation.

### **Limits on Net Metered Facilities and Annualization**

We support raising the limit on non-residential, net metered facilities from 25 kilowatts to 2 megawatts, and the annualization of net metered accounts. While the 2 megawatt limit will easily accommodate PHC's 870 kW solar array, and today it seems to be a reasonable compromise, we foresee much larger facilities to come, and this new limit may need to be reconsidered in the future.

We are less certain that the existing 25 kW limitation should remain for residential accounts, as it will limit net metered facilities for multifamily housing. Section 860-039-0010, states:

"(3) Nothing in these rules is intended to limit the number of net metering facilities per customer-generator so long as the net metering facilities in aggregate on the customer-generator's contiguous property do not exceed the applicable kilowatt/megawatt limit."

The highlighted language is a problem for both the **Stollers** and for **PHC**.

In the **Stollers'** case, the combined load of the four homes on their farm would exceed the 25 kW limit. As stated earlier, **PHC** owns 500 low-income housing units in Southeast Portland. The 25 kW limit would constrain efforts to reduce energy costs to the occupants through the implementation of net metered facilities. We judge that, in Portland, a 25 kW system would accommodate 4.3 studio apartments or 2 three bedroom apartments. Raising the limit for multi-family residential customer-generators could directly assist low-income customers with a substantial reduction in their power bills.

The proposed 25 kW residential limit will constrain net metered facilities for multifamily residential. This market has a large potential, and should be accommodated

in the rules. In Portland, a 1 megawatt system could satisfy roughly 90-110 multifamily units ranging in size from studios to 3 bedroom units, with common facilities included.

We advocate that the net metering limits for residential units be expanded from 25 kW to 2 megawatts **or**, the language in Section 860-039-0010 (3), be changed to read: "so long as the net metering facilities in aggregate on the customer-generator's contiguous property do not exceed **2 megawatts**."

### **Aggregation of Meters**

We support the PUC staff's proposed rule on the mandatory aggregation of meters for billing purposes under the conditions set in subsection 0065:

- "(a) The additional meter is located on the customer-generator's contiguous property;
- (b) The additional meter is used to measure only electricity used for the customer-generator's requirements;
- (c) The designated meter and the additional meter are subject to the same rate schedule; and
- (d) The designated meter and the additional meter are served by the same primary feeder."

This rule is important to the viability of the **PHC** project and the conservation of its financial resources. If the rule is not in place, **PHC** will be required to spend \$58,000 to physically interconnect the meter for their existing buildings to the net meter serving the new building and the photovoltaic array. This would be wasteful, when the problem could be solved by adding or subtracting two numbers. On the **Stoller** farm, the physical connection of the 14 meters measuring three different rate schedules would be prohibitively expensive.

Any fee charged by the utilities to add and/or subtract the output of aggregated meters should be nominal, and set by the PUC.

### **Excess Energy Generation**

ORS 757.300 (1), (d), (D) defines a net metered facility as a generator that: "Is intended primarily to offset part or all of the customer-generator's requirements for electricity." We emphasize the word "primarily" because the commission should not interpret that word to mean "exclusively", or "solely." We argue that, under the law, any facility that uses more than 51% of the on-site generated power should qualify as a net metered facility. Rules using that interpretation of the law would encourage greater on-site generation of renewable energy. Net metered installations providing excess renewable energy to the grid should be encouraged, not discouraged by directing excess energy away from the customer-generator.

Here the commission must recognize two things. **First**, individual residential demands are generally smaller and more predictable when compared to commercial demands.

For example: **PHC's** 870kW photovoltaic system will supply roughly 125% of its **existing** electrical energy needs. It may require a number of months or even years for their new facility to ramp up to the point where it and the existing building have sufficient demand to use all of the power generated from the array. **PHC's** array may be owned by another entity for the first six years. During that period, **PHC** may be required to purchase all power produced by the array. If **PHC** cannot sell excess power to the grid, the risk to the project is increased. The financing of large commercial projects without a pre-existing demand, would face an even greater risk. In addition, tenants in a typical commercial building may move out and a customer-generator may experience a temporary drop in demand for electrical energy.

**Second**, we think it is a mistake to confuse and integrate two laudable goals: The promotion of net metered renewable generators, and the provision of discounted power to low-income customers. Without an opportunity to sell excess energy to the utilities, there will be little investment in facilities that may generate excess energy. If the rules are adopted as proposed and excess energy is directed to the utility's low-income energy assistance program, two things will happen: 1) customer-generators will limit the sizes of their facilities, and 2) very little energy will flow to low-income customers.

**The commission should adopt rules that encourage excess generation by directing credit for excess energy back to the customer-generator, at an avoided cost rate.**

It becomes clearer as each day passes, that we must shift our ideas of how energy is generated, distributed and used. We believe that it is the intent of ORS 757.300 is to enable that shift by encouraging distributed and renewable generation, and the rules should reflect this.

As an owner of a 1936 home that is not readily adapted to solar generation, I would not object to paying more for the investments that **PHC**, and the **Stollers** have made to make their buildings solar ready and install photovoltaic arrays. We believe that the utility companies should be compensated for the transmission of that power by selling it to non-generating customers at retail rates.

The goal of assisting low income programs should be handled under a separate initiative, **and** by raising the limit on residential net metered generators to encourage multifamily installations. (See our earlier comments under "Limits on Net Metered Facilities and Annualization.")

## **Differentiation of Renewable Power Sources**

Since we have been involved in the discussion, the staff and working sessions have made little distinction between different power sources and technologies. We do

not understand why. We would support rules that would offer greater incentives to renewable sources that produce the least carbon emissions and will be most productive during peak periods. This would be in the best long-term interest of the consumer, utilities and the state.

### **Conclusion**

We thank you and the other participants in the workshops and hearings, for what has been accomplished to date. In particular we thank the PUC staff for their hard work on this complicated task.

We look forward to the Oregon PUC adopting rules that strongly support net metering.

Very truly yours,

Ernie Munch

cc: Bill Stoller, Stoller Wine Farm

John Murphy, President, Portland Habilitation Center