

## Rice, Robin (PUC)

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**From:** Ralph Jacobson <ralphj@ips-solar.com>  
**Sent:** Friday, February 07, 2014 4:11 PM  
**To:** #PUC\_Public Comments  
**Subject:** Comments on E999/CI-13-720  
**Attachments:** REC Ownership.doc

Please accept my comments into the public record.

Thanks!

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February 7, 2014

Dr. Burl W. Haar  
Executive Secretary  
Minnesota Public Utilities Commission  
121 Seventh Place East, Suite 350  
St. Paul, MN 55101-2147

**Re: In the Matter of a Commission Inquiry into Ownership of Renewable Energy Credits  
used to Meet Minnesota Requirements  
Minnesota Docket No. E999/CI-13-720  
COMMENTS**

Dear Dr. Haar:

Thank you for the opportunity to comment on the ownership of renewable energy credits (RECs) to meet Minnesota requirements. I have owned and operated a solar energy installation business in Minnesota for twenty-four years, served on the board of directors of the Minnesota Renewable Energy Society for twenty years, and currently serve on the board of directors of the Minnesota Solar Energy Industries Association, where I additionally serve as the board president. The challenge of how to bundle and market the more intangible attributes of solar energy IN MINNESOTA, apart from the value of the kilowatt-hours, has fascinated me for over a decade. I cannot claim to know all facets of what is meant by the modifier "to meet Minnesota requirements" and so I hope my comments will be helpful.

*1. What categories of RECs need clarity on ownership?*

There should be categories to reflect any attempts to segment the solar market, such as below 40 kW, 40-500 kW, and over 500 kW, since the utilities will need to report on that. Any power purchase contract should have an explicit treatment of RECs, such as an option to either keep ownership of the RECs (perhaps for a lower price per kwh) or to sell them along with the commodity electricity (perhaps for a higher price).

*2. Who owns the RECs from net metered customers? Does it matter whether the QF is being paid the average retail rate or avoided cost rate?*

Since the legislation is silent on ownership of RECs vis-à-vis net-metering, it could be considered that the ownership is up for grabs where it hasn't been specifically dealt with yet. A utility, a private aggregator, or some other interested party could make an offer to the owner of the RE system. Since the cost to get RECs to market is prohibitively high for an individual system owner, the question might become "who can get them to market most efficiently?" The utilities, however, might be the only ultimate market in Minnesota.

*3. Who owns the RECs if a third party owns the PV equipment and leases to the homeowner/business?*

The source of capital which bought the equipment ought to have ownership of the RECs generated by that equipment, until ownership passes to another entity as specified in any power purchase agreement or standard offer contract.

*4. Are there special considerations on REC ownership related to REC aggregators/marketers?*

No opinion at this time.



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5. *What factors should the Commission take into account when determining REC ownership?*

There is a concern which I will state here which is somewhat off topic, but germane to this question more than elsewhere. I will call it "truth in packaging." The concept of the REC was developed as a means of creating a separate market pathway for the intangible attributes of renewable power generation, so that interested parties could purchase said attributes and thereby create additional market value for renewable energy. I believe that one REC is defined as the intangible attributes of one megawatt-hour of electrical energy generated from a renewable energy source, apart from the actual usable energy itself, and that these said attributes can be packaged separately from the energy in order to market them to buyers who need them. This left the simpler market pathway for an actual kilowatt-hour of energy to be dealt with as commodity electricity.

What we have done with the Value of Solar approach in Minnesota, is that we have pulled many of those attributes out of the REC package and placed them as line items in legislation for the purpose of enriching the commodity value of the electricity. Therefore, a REC created in Minnesota will no longer be that marketable package of attributes, but rather a chit in a game called "the utility must have 1.5% of annual power sales sourced from solar by 2020." This is a specialized REC market, and only exists between those who purchase renewable energy systems, and the investor-owned utilities in Minnesota. There is a certain symbiosis: the RECs really aren't marketable elsewhere at this time and in their altered package, and the utilities need them to document attainment of the RES. In any case, once the utility has paid for those VOS attributes, any further attempt to sell them by marketing the package as a full package would be double-dipping, although some enterprising sorts may do it.

6. *Should the Commission make decisions on REC ownership?*

Inasmuch as REC ownership SHOULD be more explicitly dealt with in contracts in the future, decisions on REC ownership will fall into two categories: routine contract enforcement and goofy stuff that requires careful process. That's where I think the PUC will have to stay involved.

7. *If the Commission should issue decisions on REC ownership, for which utilities or parties to a transaction should the Commission's decision apply?*

The decision should be replicable and apply to all those who are parties to transactions in the future which fall into the category or situation about which the decision made.

Respectfully Submitted,

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