BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

In the Matter of a Proposed Rulemaking Regarding Electric Utility Renewable Energy Standard Requirements	)))	Case No. EX-2010-0169

APPLICATION FOR REHEARING AND REQUEST FOR STAY

COMES NOW the Office of the Public Counsel and for its Application for Rehearing states as follows:

1. On June 2, 2010 the Commission issued its final order of rulemaking on 4 CSR 240-20.100. That order is unjust, unreasonable, arbitrary and capricious, and unlawful for the following reasons.

Geographic Limitations

2. The Order of Rulemaking marries Renewable Energy Credits (RECs) and Solar Renewable Energy Credits (S-RECs) with the electricity from the associated renewable energy resource by requiring that not only the RECs but also the associated energy be sold to Missourians. This requirement is contrary to the enabling legislation.[1] Proposition C specifically contemplates that an electric utility "may comply" with its renewable energy portfolio requirements "in whole or in part by purchasing RECs." The option to buy RECs instead of energy was intended to "unbundle" the benefit of renewable energy production from the deliverability requirement. This concept of divorcing the renewable attributes of renewable

[1] Sections 393.1025 and 393.1030 (the "Renewable Energy Standard" or "Proposition C").

energy from the energy itself is well-established.[2] The legislation was intended to allow electric utilities to comply with RES requirements by purchasing tradable certificates instead of buying (or producing) energy from a renewable resource. The rule allows the use of RECs from an out-of-state generating facility only if the energy associated with those RECs is sold to Missouri customers.

3. The theory underlying RECs is that their use will allow the "renewable attributes" of energy to be divorced from the energy itself, and that there will be a liquid market for RECs that will encourage the development of renewable resources. By restricting the RECs that Missouri utilities can use to satisfy the portfolio requirements, the Commission has created a rule that is more restrictive than is necessary to carry out the purpose of the statute. In addition, by restricting the market, the Commission has virtually guaranteed that Missourians will pay more for the RECs used to comply with the portfolio requirements. Proposition C gives an explicit advantage to renewable energy generated in Missouri by providing that "Each kilowatt-hour of eligible energy generated in Missouri shall count as 1.25 kilowatt-hours for purposes of compliance." The Commission relies on this explicit statutory preference to add additional preferences. By adding its own restrictions to the RECs that can be used, the Commission has not only exceeded the scope of the statute but has also ensured that Missourians will pay more and get less.

4. The restriction on the geographic area within which electric utilities may secure renewable energy or RECs also impermissibly burdens interstate commerce and is a violation of

[2] See, *e.g.*, www.epa.gov/grnpower/gpmarket/rec.htm, a copy of which is attached hereto as Attachment 1. See also http://en.wikipedia.org/wiki/Renewable_Energy_Certificates#, a copy of which is attached hereto as Attachment 2. Both attachments have been formatted for readability.

the dormant Commerce Clause of the United States Constitution. U.S. Const. Art. I, § 8, cl. 3.

Mandatory Purchase of S-RECs

5. The rule requires that electric utilities extend to customers wanting to install solar energy systems a standard offer contract. The standard offer contract is not authorized by Proposition C and exceeds the Commission's statutory authority. Proposition C provides that electric utilities "may comply" with their renewable energy portfolio requirements by purchasing RECs. The Commission's rule requires utilities to purchase S-RECs from customer-generators with solar installations (and subsequently recover the costs of those purchases from all customers) The Commission has no authority to make mandatory an act or thing that is discretionary as set forth in a statute. There is no requirement in Proposition C (or in any other Missouri statute) mandating that electric utilities buy S-RECs from customers and, consequently, there can be no requirement in the implementing rule that they do so.

Retail Rate Impacts

6. The one percent cap was clearly included in Proposition C as a consumer protection designed to insure that customers face expressly limited and modest price hikes from the increased use of renewable energy. Missourians voted for Proposition C knowing that it would increase the use of renewable energy and encourage the development of renewable energy, and that their costs would not increase by more than one percent. But the PSC in its order of rulemaking has created a scheme in which costs can increase by almost one percent every year, which conflicts with the Renewable Energy Standard.

7. In its Proposed Rule, the PSC included language at 4 CSR 240-20.100(5) to implement the cap required by Section 393.1030.2(1). That language was confusing and unclear,

and appeared to allow retail rate increases of up to one percent per year. The proposed rule provided that:

> (A) The retail rate impact, as calculated in 5 (B), may not exceed one percent (1%) for prudent costs of renewable energy resources directly attributable to RES compliance. The rate impact shall be calculated on an incremental basis for each addition of renewable generation through procurement or development of renewable energy resources, averaged over a ten (10) year period, and shall exclude renewable energy resources under contract prior to the effective date of this rule and renewable energy resources previously determined not to exceed the one percent (1%) threshold.

The Commission did not adequately modify this language in its final order of rulemaking.

8. The language in both the proposed rule and the final rule exempts from the calculation of retail rate impacts any resources "previously determined" to be less than one percent, and thus appears to allow rate impacts in year one of .999%, additional impacts in year two of .999%, additional impacts in year three of .999%, and so on. The Commission also refers several times to the calculation being done on an "incremental" basis, a reference which means that the overall increase to retail rates can be much greater than one percent, so long as the increases are made in one-percent increments.

9. Thus the rule as adopted by the PSC appears to allow incremental increases in retail rates of up to one percent every year, rather than a maximum of one percent cumulatively over the period encompassed by the Renewable Energy Standard. The rule provisions permitting such increases conflict with and exceed the clear language of Section 393.1030.2(1).

WHEREFORE, Public Counsel respectfully requests that the Commission grant rehearing of its June 2, 2010 Final Order of Rulemaking.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, emailed or hand-delivered to the following this 1st day of July 2010:

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Renewable Energy Certificates (RECs) | Green Power Partnership

What is a REC?

A REC (pronounced: rĕk) represents the property rights to the environmental, social, and other nonpower qualities of renewable electricity generation. A REC, and its associated attributes and benefits, can be sold separately from the underlying physical electricity associated with a renewable-based generation source.

RECs provide buyers flexibility:

- In procuring green power across a diverse geographical area.
- In applying the renewable attributes to the electricity use at a facility of choice.

This flexibility allows organizations to support renewable energy development and protect the environment when green power products are not locally available.

How do RECs work?

All grid-tied renewable-based electricity generators produce two distinct products:

At the point of generation, both product components can be sold together or separately, as a bundled or unbundled product. In either case, the renewable generator feeds the physical electricity onto the electricity grid, where it mixes with electricity from other generation sources. Since electrons from all generation sources are indistinguishable, it is impossible to track the physical electrons from a specific point of generation to a specific point of use.

As renewable generators produce electricity, they create one REC for every 1000 kilowatt-hours (or 1 megawatt-hour) of electricity placed on the grid. If the physical electricity and the associated RECs are sold to separate buyers, the electricity is no longer considered "renewable" or "green." The REC product is what conveys the attributes and benefits of the renewable electricity, not the electricity itself.

RECs serve the role of laying claim to and accounting for the associated attributes of renewable-based generation. The REC and the associated underlying physical electricity take separate pathways to the point of end use (see diagram). As renewable generators produce electricity, they have a positive impact, reducing the need for fossil fuel-based generation sources to meet consumer demand. RECs embody these positive environmental impacts and convey these benefits to the REC owner. The following is a list of the inherent primary and derived attributes that a REC can convey to an owner:

Attachment 1

Primary REC Attributes

- Renewable fuel source
- Emissions of the renewable generation
- Geographic location of the generator
- Vintage of the generator
- Eligibility for certification or RPS

Derived REC Attributes

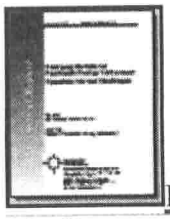
- Avoided emissions
- Eligibility for emission reduction credits or offsets
- Price stability

There are two approaches to verifying REC ownership and the right to make environmental claims:

Both of these approaches help buyers avoid double counting and double claims and ensure against fraud. Of the two, REC tracking systems provide greater transparency when tracking RECs from their point of creation to their point of final use.

Added Reading

The following documents provides greater detail on issues related to this Web page.



Emerging Markets for Renewable Energy Certificates: Opportunities and Challenges – *National Renewable Energy Laboratory NREL/TP-620-37388, January 2005* (PDF) (69 pp, 1.5MB, About PDF). EXIT Disclaimer This report describes how RECs are marketed; examines RECs markets, including scope and prices; and identifies and describes the key challenges facing the growth and success of RECs markets.

Renewable Energy Certificates (PDF) (6 pp, 996K, About PDF). This white paper provides a brief overview of renewable energy certificates (RECs): what they are, how they work, and why they are an important option for individual and organizational buyers in renewable electricity and green power markets.

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Attachment 1

Renewable Energy Certificates - Wikipedia, the free encyclopedia

From Wikipedia, the free encyclopedia

Renewable Energy Certificates (RECs), also known as **Green tags**, **Renewable Energy Credits**, **Renewable Electricity Certificates**, or **Tradable Renewable Certificates (TRCs)**, are tradable, non-tangible energy commodities in the United States that represent proof that 1 megawatt-hour (MWh) of electricity was generated from an eligible renewable energy resource (renewable electricity).

These certificates can be sold and traded or bartered, and the owner of the REC can claim to have purchased renewable energy. According to the U.S. Department of Energy's Green Power Network [1], RECs represent the environmental attributes of the power produced from renewable energy projects and are sold separate from commodity electricity. While traditional carbon emissions trading programs promote low-carbon technologies by increasing the cost of emitting carbon, RECs can incentivize carbon-neutral renewable energy by providing a production subsidy to electricity generated from renewable sources. It is important to understand that the energy associated with a REC is sold separately and is used by another party. The consumer of a REC receives only a certificate.

In states that have a REC program, a green energy provider (such as a wind farm) is credited with one REC for every 1,000 kWh or 1 MWh of electricity it produces (for reference, an average residential customer consumes about 800 kWh in a month). A certifying agency gives each REC a unique identification number to make sure it doesn't get double-counted. The green energy is then fed into the electrical grid (by mandate), and the accompanying REC can then be sold on the open market.

[edit] Background

There are two main markets for renewable energy certificates in the United States - compliance markets and voluntary markets.

Compliance markets are created by a policy that exists in 29 U.S. states, plus the District of Columbia, called Renewable Portfolio Standard. In these states, the electric companies are required to supply a certain percent of their electricity from renewable generators by a specified year. For example, in California the law is 33% renewable by 2020, whereas New York has a 24% requirement by 2013.[2]. Electric utilities in these states demonstrate compliance with their requirements by purchasing RECs; in the California example, the electric companies would need to hold RECs equivalent to 33% of their electricity sales.

Voluntary markets are ones in which customers choose to buy renewable power out of a desire to use renewable energy. Most corporate and household purchases of renewable energy are voluntary purchases. Renewable energy generators located in states that do not have a Renewable Portfolio Standard can sell their RECs to voluntary buyers, usually at a cheaper price than compliance market RECs.

Critics point out, however, the flaw in this system is that it does not require any proof of displaced polluting power. Since some renewable energy sources, most notably wind power, are intermittent and variable, their production does not displace an equivalent amount of other sources per kW of

installed capacity.[citation needed]. They do, however, displace, on a per-kWh-basis, electricity from combustion sources, thus reducing greenhouse gas emissions and byproducts: nitrogen, sulfur, and other oxides and minerals.

[edit] Prices

Prices depend on many factors, such as the vintage year the RECs were generated, location of the facility, whether there is a tight supply/demand situation, whether the REC is used for RPS compliance, even the type of power created. Solar renewable energy certificates or SRECs, for example, tend to be more valuable in mid-atlantic markets.[3] Current spot prices for SRECs in most states with solar portfolio standards can be viewed at SRECTrade. For example, prices in Dec, 2009 were at $660/SREC for NJ SRECs.[4] In Canada, 2008-09 BCHydro offers $3 /MWh for "green attributes", for long-term contracts, 20 plus years. Many Independent Power Producers believe that this is much less than "fair market value", but have no alternative.

While the value of RECs fluctuate, most sellers[5] are legally obligated to "deliver" RECs to their customers within a few months of their generation date. Other organizations will sell[6] as many RECs as possible and then use the funds to guarantee a specific fixed price per MWh generated by a future wind farm, for example, making the building of the wind farm a financially viable prospect. The income provided by RECs, and a long-term stabilized market for tags can generate the additional incentive needed to build renewable energy plants.[7]

[edit] REC certification

RECs are known under functionally equivalent names such as Green Tags or Tradable Renewable Certificates (TRCs), depending on the market. The U.S. currently does not have a national registry of RECs issued. Several certification and accounting organizations attempt to ensure that RECs are correctly tracked and verified and are not double-counted. Increasingly RECs are being assigned unique ID numbers for each 1,000 kWh produced. RECs are certified by Green-e, and Environmental Resources Trust's EcoPower Program. REC markets are increasingly overseen through regional tracking systems such as WREGIS, NEPOOL, GATS, ERCOT, and M-RETS.

[edit] Qualifying technologies

The following generation technologies qualify as producers of RECs:[8][9]

[edit] RECs and additionality

"Additionality" is the idea that an individual's purchase of a renewable energy certificate forces new renewable energy onto the electricity grid. Another test for additionality is whether or not the project is financially "business as usual". RECs have come under scrutiny in the past with questions of whether or not they provide additionality, or are merely a payment to a project that would have existed even in the absence of the REC sale.

When voluntary REC purchases are made from generators that are not in compliance markets - for example, in a state that does not have a Renewable Portfolio Standard - funds from the sale of RECs are provided to the generators, but don't necessarily cause any additional renewable power to be built.

Attachment 2

It is difficult to prove that purchases of these RECs provide additionality. But if the following strategy is adopted, additionality works.

This alternative strategy combines REC compliance markets and voluntary markets. In states that have a Renewable Portfolio Standard, if the RECs are required to come from within the compliance market, a voluntary purchase effectively increases the utilities' minimum renewable electricity percentage by purchasing RECs that the utilities would otherwise have purchased to meet their RPS (if there is not a surplus of RECs. When this occurs utilities must find additional sources of renewable electricity. If the RECs can be purchased from outside the relevant compliance market, as is often the case, additionality is not guaranteed. This site provides a useful flowchart for how voluntary purchases from compliance markets provide additionality.[10]

A popular incentive for buying RECs is to make the claim that your energy use is carbon neutral and hence does not contribute to global warming. However, "off-setting" results in the same amount of pollution (if you buy RECs to cover your usage of electricity and you live in, say, the Southeast United States, Utah, Nevada, Colorado, the Midwest, etc.) you may still be using electricity produced mostly from coal-fired power plants. Others argue that as power from renewable sources enters the market, prices will drop and production from sources that don't enjoy the additional income from RECs will be reduced. Also, as larger and larger numbers of RECs come into demand, renewable energy will become more and more cost effective per kWh in comparison to nonrenewable energy.[11] [12] It can be argued that purchasing RECs is similar to voting. In reality, one single vote has rarely made a difference in the outcome of thousands of elections according to the famous book, Freakonomics. But, if everyone thinks that and stops voting, the voter turnout will fall and the seemingly meaningless behavior of one individual, in aggregate becomes meaningful. RECs are similar. Some think that every single purchase of REC just like every vote cast, counts.

The United States Environmental Protection Agency claims to have the highest percentage use of green power of any federal agency. In 2007, it offset the electricity use of 100% of its offices. The Air Force is the largest purchaser in the US government in absolute terms, purchasing 899,142 MWH worth of RECs. Among colleges and universities, the University of Pennsylvania in Philadelphia is the largest purchaser of RECs, buying 192,727 MWH of RECs from wind power. The corporate leader is Intel, with 1,302,040 MWH purchased in 2007, and the largest purchaser among retailers is Whole Foods, which purchased 509,104 MWH, or enough RECs to offset 100% of its electricity needs.

[edit] References

[edit] See also

[edit] External links

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