Who Owns Renewable Energy Certificates: An Exploration of Policy Options and Practice

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Purpose and Methodology

**Purpose:** Provide information and insight to state policy-makers, utility regulators, and others about different approaches to clarifying the ownership of renewable energy certificates (RECs), focusing on the following areas in which REC ownership issues have arisen:

1. Qualifying Facilities (QFs) that sell their generation under the Public Utility Regulatory Policies Act (PURPA) of 1978
2. Customer-owned distributed generation that benefits from state net metering rules
3. Generation facilities that receive financial incentives from state or utility funds

**Methodology:** Review how federal government and multiple states have addressed REC ownership issues to date, and highlight arguments made on both sides; goal is not to provide policy recommendations, but to instead summarize debate
Outline of Report

- Introduction
- PURPA QF Contracts—Federal Perspective
- State Action on PURPA QF Contracts
- Net Metering and Distributed Generation
- State Incentives
- Conclusions
Introduction

- Under 1978 federal law (PURPA), utilities are required to purchase the output from certain Qualifying Facilities, including cogeneration and renewable energy generators.
- PURPA requires that utilities make avoided cost payments to QFs for energy and capacity, but does not mention RECs.
- RECs began to be recognized in the late 1990s, after many QF agreements were signed.
- With the introduction of renewables portfolio standards (RPS) in a number of states, those RECs may have significant value.
- Most pre-existing QF contracts are silent as to which party—the generator or the utility—owns the RECs.
- REC ownership is also often uncertain in net metering agreements (present in 40 states), and where renewable energy funds provide financial assistance to new renewable projects.
The FERC Case

- Disputes about REC ownership under QF contracts led to a FERC case in 2003

- FERC ruled that:
  - Avoided cost payments by utilities to QFs do not transfer the RECs to utilities, unless contract says otherwise
  - It is up to the states to decide REC ownership in such cases based on state law, but not based on avoided cost payments

- This ruling has caused confusion:
  - Both sides continue to cite the FERC decision in support of their positions
  - It has also led the antagonists into state regulatory forums for resolution
State QF Cases

• 16 states have adopted positions
• Most states have assigned RECs from pre-existing QF contracts to utilities
  - Especially where states include existing renewables in RPS
  - Regulators concerned that doing otherwise would raise the cost of RPS
• In several states, QFs retain the RECs in new contracts
• Two states determined that QFs must be compensated for RECs
• All but one state has addressed issue through regulation, as opposed to through legislation, though legislation has often informed regulatory decisions
# State Actions re: QF RECs

<table>
<thead>
<tr>
<th>RECs Conveyed to Power Purchaser</th>
<th>Proceeding in Process (←-leaning→)</th>
<th>RECs Retained by QF Unless Otherwise Stated in Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO (existing contracts)</td>
<td>AZ →</td>
<td>CO (new contracts)</td>
</tr>
<tr>
<td>CT (existing)</td>
<td>← CA (existing) * PA</td>
<td>NV (new)</td>
</tr>
<tr>
<td>ME (existing) *</td>
<td></td>
<td>OR (new)</td>
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<tr>
<td>MN (existing) **</td>
<td></td>
<td>RI (new)</td>
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<tr>
<td>ND (existing and new, with compensation)</td>
<td></td>
<td>TX (new)</td>
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<tr>
<td>NJ (existing)</td>
<td></td>
<td>UT (new)</td>
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<tr>
<td>NM (existing and new)</td>
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<td>NV (existing)</td>
<td></td>
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<tr>
<td>TX (existing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WI (existing) **</td>
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</tr>
</tbody>
</table>

* ME and CA currently count PURPA QF contracts towards RPS, without specifically requiring RECs to be transferred to the buyer.

** In MN and WI, renewable attributes appear to be conveyed with underlying energy deliveries, by default, for purpose of compliance with state RPS, but REC treatment is not stated explicitly.
Some Key Arguments

• **Point:** Renewable attributes are inextricably linked to energy and must be conveyed to utility; without them QF would not be eligible for PURPA contract

• **Counterpoint:** Avoided cost payments are for energy and capacity only; attributes are merely a qualifying characteristic that makes QF eligible for contract

• **Point:** Utilities are already paying above-market prices for QFs; payments were sufficient when contract was signed

• **Counterpoint:** Payments based on utility avoided cost, not QF economic need; price paid for energy and capacity is not relevant to REC ownership
More Key Arguments

- **Point:** Giving RECs to QFs would unfairly enrich QFs at the expense of ratepayers and would increase cost of RPS compliance

- **Counterpoint:** The sale of RECs separate from power is intended to compensate for development risk and encourage development of new resources

- **Point:** Utilities would be forced to pay QFs twice, once for energy and a second time for RECs, with no additional benefit to ratepayers

- **Counterpoint:** Utilities and ratepayers receive the benefits even without the RECs: increased fuel diversity, a local and secure fuel supply, increased efficiency of energy production, and a fixed price not subject to fluctuations

There are MANY more arguments that are summarized and categorized in the full report
Net Metering & Distributed Generation

- Net metering is required in 40 states – REC ownership not originally addressed in the rules and regulations establishing net metering
  - Not as many RECs at stake as with QFs, but lots of net-metered projects
  - Behind-the-meter generation is eligible to satisfy RPS in many states, and is especially important where solar or DG set-asides exist within state RPS policies
- Where REC ownership is not explicitly addressed, most people assume that the customers that own the DG facilities own the RECs
Net Metering & Distributed Generation

- 12 states and DC have looked (or are looking) at this:
  - 6 states currently award all RECs to customer-generator
  - 3 additional states award RECs associated with customer on-site use to customer and RECs from net excess generation to utility (2 of these require compensation to customer)
  - 1 state and DC share the RECs between utility and customer
  - 2 states are still in discussion
  - 1 utility claims all RECs from net-metered system

- No state has yet given all or even a majority of RECs from DG used on site to the utility as a result of net metering rules—only MD and DC contemplate giving any of these RECs to the LSE
# State Actions re: Net Metering & DG

<table>
<thead>
<tr>
<th>RECs Associated w/ Customer Load Conveyed to Utility</th>
<th>RECs Associated w/ Net Excess Generation Conveyed to Utility</th>
<th>Proceeding in Progress (←leaning→)</th>
<th>RECs Retained by Customer-Generator</th>
<th>RECs Shared between Utility and Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>NorthWestern Energy+</td>
<td>MN (with compensation)</td>
<td>AZ → PA →</td>
<td>CA *</td>
<td>MD ****</td>
</tr>
<tr>
<td></td>
<td>ND (w/comp)</td>
<td></td>
<td>CO</td>
<td>DC ****</td>
</tr>
<tr>
<td></td>
<td>NV</td>
<td></td>
<td>MI **</td>
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<td>MN ***</td>
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<td>NV ***</td>
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<td></td>
<td>OR</td>
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</tbody>
</table>

* CA may reconsider
** Although MI rejected a proposal for utility ownership, it did not affirmatively award RECs to the customer-generator
*** Customer retains only those RECs associated with customer load
**** Implementation details not yet available
+ Although not a state, NWE, a MT utility, was the only example found of all RECs going to the utility
Financial Incentives

• Many state renewable funds and utilities offer financial incentives to renewable projects

• Relatively few of these funds/utilities have addressed REC ownership, and most make no demands for RECs from projects they support financially
  - By their silence, most states do not condition incentives on the transfer of RECs

• A few other funds/utilities have addressed this issue:
  - Generator retains RECs explicitly in 3 states
  - 2 states, and several utilities, convey RECs to funding entity
  - Funder and generator share RECs in 1 state
  - 1 state still under review
# State Actions re: Incentives

<table>
<thead>
<tr>
<th>RECs Conveyed to Funding Entity</th>
<th>Proceeding in Progress (←leaning→)</th>
<th>RECs Shared between Funder and Customer</th>
<th>RECs Retained by Generator</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO*</td>
<td>← AZ*</td>
<td>OR</td>
<td>CA* (may reconsider)</td>
</tr>
<tr>
<td>NV*</td>
<td></td>
<td></td>
<td>CT*</td>
</tr>
<tr>
<td>Several utility programs*</td>
<td></td>
<td></td>
<td>WA</td>
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<td></td>
<td></td>
<td></td>
<td>WA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Most others</td>
</tr>
</tbody>
</table>

* RPS present in state. Note that RECs are given to funding entity most often when incentive is offered by a utility that is under an RPS obligation.

This list includes incentives in the form of grants, buy-downs, rebates or loans, that are tied to capital cost or capacity. The list does not include programs where payments are directly tied to output and whose primary purpose is to acquire RECs via long-term purchase contracts.
Conclusions

- RPS is forcing states to address REC ownership questions
- Uncertainty about ownership limits REC marketability
  - Critical for QF contracts – quantity and value of RECs is significant
  - Behind-the-meter projects are also eligible for RPS – fewer RECs but many projects, and RECs help pay for such systems
- State policy-makers are key to determining ownership
  - FERC ruling still subject to differing interpretations
  - Most state determinations made in regulatory proceedings, but some state rulings (CT, NJ) are under appeal to the courts
  - State legislative action may reduce appeals and uncertainty
- Longer term, the issue may diminish
  - Fewer QF contracts in future due to EPAct 2005 changes to PURPA
  - New contracts will likely specify who owns the RECs
For More Information...

Download the full report from:
http://eetd.lbl.gov/ea/ems/re-pubs.html

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