



STATE RPS COLLABORATIVE  
Call #1 Summary  
April 21, 2005

**Participants:** 29 participants joined the call representing 14 states and related state NGO representatives (see the attached participant list)

Participants identified the level of development of their respective state RPS: 1) just starting to think about it; 2) developing or finalizing regulations; or 3) already have experience with implementation of a program. Most of the states characterized themselves as being either at level 2 or 3 with about 5 states describing their efforts at level 1.

***RPS Collaborative Goals and Procedures -- Julie Rosenberg, EPA State and Local Capacity Building Branch; Catherine Morris, The Keystone Center***

---

This was the first of three Resource Portfolio Standard (RPS) Collaborative calls sponsored by the EPA Climate Partnership Division. The series is an outgrowth of the on-going State Energy Efficiency and Renewable Energy (EE/RE) Technical Forum monthly calls. The three calls will feature presentations and discussions by state utility commission, energy policy and environmental agency staff and will focus on implementation of state RPS policies. EPA will invite other experts, such as staff from the National Renewable Energy Lab (NREL), to share additional insights.

The purpose of the RPS Collaborative is to identify and begin to address the most pressing issues or barriers to advancing RPS development, including supply & transmission adequacy, lessons learned about best policy design, and implementation challenges. EPA is looking for input from states that are already engaged in RPS policy development to help identify the need for technical assistance that can be provided through these calls or through additional follow up. These calls also provide an opportunity to share knowledge on best practices among the states.

***RPS Overview: Design and Implementation - Blair Swezey, NREL*** (See: 1) Swezey RPS presentation, 2) UCS RPS Map; 3) RPS Resource List)

---

- Blair provided an **overview of existing state RPS programs** and the specific design features that must be considered when implementing the RPS policy.
- **19 states and Washington, DC** have an Resource Portfolio Standard policies, covering from 1.1% (State of Arizona) to 30% (State of Maine) of total electricity sales. The RPS may include new renewable resource requirements as well as existing renewable resources and some efficient fossil generation such as CHP.
- Originally RPS was adopted in restructured energy markets to encourage cleaner generation portfolios, but is now more common in regulated markets. The market structure has implications on which tools can be used to implement an RPS.

- The **definition of “renewable resources”** varies across states. Some states count different resources as renewable (e.g., existing hydro and biomass in Maine, advanced coal in Pennsylvania, energy efficiency counts in some states)
- **Two good references:**
  - o “Evaluating Experience with Renewables Portfolio Standards in the U.S.”, Lawrence Berkeley National Lab, and
  - o “RPS: A Practical Guide” NARUC.
- Blair outlined some of the **key design factors** states need to consider:
  - o RPS program costs and cost caps
  - o Cost recovery
  - o Incentives and penalties tied to targets
  - o Resource selection process
  - o Contracting
  - o Attributes and ownership of Renewable Energy Credits (RECs)
  - o Treatment of out-of-state generation
  - o Compliance bonus credits
  - o Banking credits
  - o Designing a solar RPS
- **Ability to meet targets** depends on ability of market to develop cost-effective projects and the total load growth. Some states have mechanisms to reconsider their target, others can waive the RPS if it can't be met in a cost-effective manner.

***Issues for States with Recently Established RPS -Frank Shafer, Colorado PUC***  
(See CO RPS\_Shafer.doc).

---

- The CO RPS was passed by public referendum last year. Colorado has issued a Notice of Proposed Rulemaking on implementation of its RPS; currently holding public hearings.
- **Targets:**
  - o The RPS requires 3% of electricity from renewables in 2007 increasing to 10% by 2015;
  - o 4% of the total RPS requirement must come from solar, and
  - o Half of the solar generation must be from on-site resources.
  - o Staff estimate of 8 MW of on-site solar needed to meet target is seen as challenging.
- Utilities recover actual costs and an **incentive payment** equal to 50% of “net economic benefit.” The PUC will determine the net economic benefits test.
- There is a **cost cap** increase in electricity costs attributable to the RPS, which was originally set at 50 cents total increase in a customer’s monthly bill; current there is a

proposal to change the cap to 1% of the electric bill, and extend the protection beyond residential customers to all customers.

- **Municipal utilities and Rural Electric Coops** can opt-out of the RPS or can self-certify. If they self-certify, they can meet their percentage requirement in any way – there is speculation that they might not have to meet the solar target. They must provide compliance reports for informational purposes only.
- **RECs:** Working with Colorado to determine the viability of a regional RECs market (WREGIS).
- Comments received at the public workshops on the proposed regulations included:
  - The target of \$2.00 per watt rebate for solar is too low to make project economic. Some suggested it should be \$4.25 per watt to stimulate market to meet target.
  - One side affect is that potential solar customers are holding off purchases until the rebate language is finalized.
  - REC ownership for on-site solar is currently in dispute between customers and utility.
- **Penalties for non-compliance:** If the utility has not met the target and has not reached the cost cap, there is an enforcement mechanism. If they reach the cost cap before the reach the target, the utility is not liable.
- **Cost Recovery:** Utilities can pass through costs to ratepayers but the mechanism – a rider on the bill or through a rate case – has not been decided. Participant from Wisconsin noted that pass through of costs has led to some high cost projects.

### ***Issues for States with Mature RPS - Karlynn Cory, Massachusetts Technology Collaborative (MTC)*** (See MA RPS\_Cory 4-21-05.ppt)

---

- The MTC has responsibility for managing the **Massachusetts Renewable Energy Trust** funding by the system benefits fund; the MA Energy Office administers the RPS program. Agencies are working together to help achieve targets.
- Massachusetts has **both mandatory and voluntary** renewable energy programs.
- **RPS Target:** 4% renewable generation by 2009.
- Overcoming project financing barriers is the key issue in trying to meet the targets. Projects need reliable long-term contract and REC revenue streams. Karlynn reviewed the sources of risk that discourage investors.
- Massachusetts is trying to minimize investor risk through the **Massachusetts Green Power Partnership (MGPP)**.
  - Goal: Get renewable projects financed by providing developers long-term REC contracts

- MTC takes risk on long-term contracts and escrows funds, since many projects are not creditworthy.
- The trust is not adequate to fund large projects, and so is trying to find additional solutions.
- Connecticut also having difficulty meeting RPS target. CT amended the RPS legislation to require distribution companies to enter into long-term contracts with renewable generators.
- NY uses a central procurement approach for state RPS requirement, which eliminates competition between the utilities for limited projects and improves ratepayer equity.

### ***Potential Ideas for Future Calls:***

---

The group suggested and discussed several ideas for topics to be covered on the subsequent two calls, including:

#### **1. How to implement the solar component of RPS and understanding industry trends**

- a. Can the PV industry provide enough product to meet collective state (and global) demands?
- b. How quickly is the industry expanding its production capability?
- c. What are the competing product demands?
- d. What are the product cost trends?
- e. Need to look at global production and markets
- f. How does a utility comply? (with RECs? long-term contracts? etc.)
- g. How do you design, sell and implement an appropriate net metering policy for solar?

#### **2. RECs attributes and ownership and how to address pre-existing projects**

Successful RPS implementation requires that suppliers have clear title to the renewable energy generation or attributes being used for compliance. Issues of attributes ownership arise when it is not specified in power purchase contracts. The advent of RECs is a relatively new phenomenon and thus older contracts are usually silent on the matter. There are also issues around RECs ownership (and measurement) for customer-owned and net metered systems. Also, what types of issues arise if RECs attributes are disaggregated?

#### **3. How to measure RPS costs and benefits both to determine the appropriate target and evaluate actual program impact.**

Many RPS regulations contain waivers or other exemptions from compliance if the RPS cannot be met in a cost-effective manner. Other regulations employ cost caps. And gaining support for prospective RPS policies relies on RPS cost estimates for policy adoption justification. How are the costs and benefits of an RPS calculated? What are the important methodological issues? Is there any empirical evidence that the costs and benefits are close to estimates?

#### **4. Cost recovery issues**

How is RPS cost recovery achieved (through riders, rate cases, etc.)? What are the pros and cons of each approach? Is there a preferred mechanism? What is the experience in the states?

**5. What are the challenges and benefits of requiring that the RPS be met with in-state vs. out-of-state resources?**

Many state RPS policies require in-state generation or physical delivery of the electricity to an in-state utility or to the power pool. Issues have also arisen around reciprocity clauses with some state RPS policies. What are the issues for RPS compliance, costs, and benefits? Should we be working collectively toward a national REC system? (While this latter question was raised and might be the ultimate solution, it is beyond the scope of this group to address in any meaningful way.)