

**Colorado's Renewable Portfolio Standard**  
**RPS State Collaborative Conference Call**  
Frank Shafer, Colorado Public Utilities Commission  
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The State of Colorado recently commenced its rulemaking to implement a renewable energy standard.

On November 2, 2004, the Colorado voters passed Amendment 37. This amendment requires all electric utilities in the State, which have more than 40,000 customers, to meet a renewable energy standard.

Renewable resources in the following percentages of their retail sales:

- 3% by 2007
- 7% by 2011
- 10% by 2015.

Of those percentages, 4% has to be solar resources and half of the solar resource goal must be derived from customer on-site resources.

A standard rebate program for solar installations:

- minimum standard rebate is set a \$2.00 per watt.
- limit on the size of the facilities eligible for a rebate -- applies up to 100 kilowatts.
- provides for net metering - netting consumption against generation.
- reimburses the generating customer for any excess over their consumption at the utilities average hourly incremental costs over the prior twelve-month period.

The utilities have the opportunity to earn an extra profit. The extra profit is *50% of the net economic benefit* derived from their investment in renewable energy technologies.

There is a cost cap which specifies that a residential customer monthly bill cannot increase by more than 50 cents per month.

Commission is charged with analyzing the effectiveness of utilizing any regional systems of RECs in existence at the time of the rulemaking.

Encourages renewable resource projects to locate in Colorado by counting each kWh generated in Colorado as 1.25 kWh for compliance with the standard.

Both Municipal Utilities and the Rural Electric Cooperatives, with over 40,000 customers in Colorado, are subject to the RPS. However, they can vote to exempt themselves or self-certify.

### Public workshops prior to rulemaking

Staff's estimate of the amount of solar resources Public Service Company of Colorado will need:

| <b>Year</b> | <b>CO Renewable MWhs</b> | <b>Solar Target</b> | <b>Total Solar MWhs</b> | <b>On-Site Solar MWhs</b> | <b>Solar Capacity Factor</b> | <b>Total MW</b> |
|-------------|--------------------------|---------------------|-------------------------|---------------------------|------------------------------|-----------------|
| 2007        | 679,608                  | 4%                  | 27,184                  | 13,592                    | 20%                          | <b>16</b>       |
| 2011        | 1,498,368                | 4%                  | 59,935                  | 29,967                    | 20%                          | <b>34</b>       |
| 2015        | 2,769,520                | 4%                  | 110,781                 | 55,390                    | 20%                          | <b>63</b>       |

Received many comments on why and how the Commission needs to act quickly because of the mandated level of solar resources which need to be on-line by 2007.

Nearly everyone agreed that the \$2.00 per watt standard rebate was too low.

Commenters raised concerns about the ownership of solar-related RECs associated with the electricity they produce.

A question was raised about whether or not two meters are needed for solar installations.

Another point concerned the rate cap and the definition of the benefits (reduced costs to the utilities) which renewable resources provide.

Proposal to use an Administrator to:

- 1) oversee the implementation.
- 2) conduct the resource bidding process.
- 3) measurement and verification of RECs.
- 4) oversee a central database which could be accessed by the public via the Internet.
- 5) have authority to establish an Advisory Board to assist with the implementation.
- 6) submit quarterly reports to the Commission.

We also discussed how prescriptive, or not, the rules should be.