



AN UPDATE: COLORADO'S RENEWABLE ENERGY STANDARD

by Lauren Ris

Colorado became the first state in the nation to pass a citizen-sponsored initiative for a renewable energy standard (RES) when voters approved Amendment 37 in November 2004. A renewable energy standard, alternately called a renewable portfolio standard, is a policy that requires electricity providers to obtain a minimum percentage of their power from renewable energy resources by a certain date.

The types of generating technologies that qualify as "renewable" vary from state to state. In Colorado, eligible renewable energy resources include solar, wind, geothermal, biomass facilities that burn nontoxic materials, recycled energy, and hydrogen fuel cells.

Changes made to the RES in 2010 make Colorado's standard one of the highest in the nation. An update to a September 2010 issue brief, this issue brief explains the history and recent changes to Colorado's RES and discusses other RES efforts around the country.

RES Development in Colorado

Citizen-sponsored Amendment 37 required utilities serving 40,000 or more customers, like Xcel Energy, to generate or purchase enough renewable energy to supply 10 percent of their retail electric sales by 2015, with 4 percent of this amount to come from solar technologies.

Changes in 2007. In March 2007, the General Assembly passed House Bill 07-1281 to increase the RES. The bill also created a separate renewable energy requirement for smaller electric cooperatives, which were excluded from the requirements of Amendment 37. The bill required large investor-owned utilities to provide 20 percent of their electricity from renewable sources by 2020 and required municipal utilities and rural electric providers to achieve a renewable energy goal of 10 percent by 2020.

Changes in 2010. House Bill 10-1001, signed into law by the Governor in March 2010, further increased the RES for investor-owned utilities to 30 percent by 2020. Under the law, each investor-owned utility is required to provide specific percentages of renewable or recycled energy according to the following schedule:

- 5 percent of its retail electricity sales in Colorado for the years 2008-2010;
- 12 percent of its retail electricity sales in Colorado for the years 2011-2014;
- 20 percent of its retail electricity sales in Colorado for the years 2015-2019; and
- 30 percent of its retail electricity sales in Colorado for the year 2020 and thereafter.

House Bill 10-1001 also removed the requirement that a percentage of the RES be generated from solar technologies and instead requires utilities to provide a certain percentage of their retail sale from

distributed generation. There are two categories of distributed generation: retail and wholesale.

Retail distributed generation refers to a renewable resource technology, like solar panels, that is sited at a customer's premise, is interconnected on the customer's side of the utility meter, and provides power primarily to serve the customer's load.

Wholesale distributed generation is renewable energy (up to 30 megawatts or less) that is provided to an electric utility for use by multiple customers. The bill requires that distributed generation make up:

- 1 percent of retail electricity sales in the years 2011-2012;
- 1.25 percent of retail electricity sales in the years 2013-2014;
- 1.75 percent of retail electricity sales in the years 2015-2016;
- 2 percent of retail electricity sales in the years 2017-2019; and
- 3 percent of retail electricity sales in the years 2020 and thereafter.

Additionally, at least one-half of the above amounts must be from retail distributed generation. The bill also requires that municipal utilities that serve more than 40,000 customers and electric cooperatives provide 10 percent of their retail electricity sales from renewable sources by 2020 according to the following schedule:

- 3 percent of retail electricity sales in the years 2011-2014
- 6 percent of retail electricity sales in the years 2015-2019; and
- 10 percent of its retail electricity sales in the years 2020 and thereafter.

Beginning January 1, 2015, the Colorado Public Utility Commission (PUC) may reduce the distributed generation requirement if the PUC finds the requirement is no longer in the public interest.

Alternatively, if the PUC finds that public interest requires a higher distributed generation requirement, it must report its findings to the General Assembly for consideration.

Renewable Energy Standards in Other States

Twenty-nine other states and the District of Columbia have adopted RES policies, and five other states have nonbinding renewable energy goals. California has the most aggressive renewable energy mandate in the country, requiring 33 percent of its power to come from renewable energy sources by 2020.

Congressional Efforts

While there have been several efforts in Congress over the last several years to pass a national RES, a standard has not been approved by both chambers.

In 2009, the House passed a RES as part of the American Clean Energy and Security Act (H.R. 2454), referred to as the "cap and trade bill." The bill included a 20 percent RES by 2020, but it was not taken up by the Senate.

In July 2010, Senator Harry Reid (D-Nevada) introduced the Clean Energy Jobs and Oil Company Accountability Act of 2010 (S. 3663). Colorado Senator Mark Udall, along with 26 other Democrats, signed a letter urging Senator Reid to include a RES in the legislation, but a standard was not included in the introduced version.