



AMENDMENT 37 APPROACHES ITS SECOND BIRTHDAY

By Rick Gilliam

On the heels of three consecutive efforts to enact renewable energy standard legislation, the citizens of Colorado passed Amendment 37, the first voter initiated renewable energy standard in the nation, in the 2004 election. The campaign to pass this new standard occurred at a time when national and global energy issues such as the war in Iraq, high gasoline prices, a proposed large new coal-fired power plant, and climate change seemed to be in the media nearly continuously. Sound familiar? These and other energy issues continue to dominate the news today – perhaps to an even greater degree – increasing interest in renewable energy. Indeed, for a time last winter, energy purchased under Xcel’s Windsource program was cheaper than “traditional” fossil fuel derived energy.

Colorado has some of the best renewable energy resources in the country— being ranked 11th for wind potential and in the top five for solar potential. Thus, Amendment 37, or A37, was designed to support the ongoing development of cost-effective wind resources with an overall requirement of 10% by 2015, while carving out a 4% solar component. While the initiative is applicable to all utilities with more than 40,000 customers, municipal and cooperative utilities were allowed to implement their own 10% standards without the solar component provided they offer an optional pricing program for emerging renewable technologies. It should be noted however that the City of Colorado Springs municipal utility chose to develop a customer-sited solar pilot program to encourage this local resource through rebates.

Subsequent to voter approval, proponents and opponents worked together to clarify certain elements of the initiative and establish rules to implement the standard. It took nearly 16 months and much debate at the Public Utilities Commission and, while there remain certain elements of the rules that continue to be challenged, the basic rules for implementing the 4% solar standard are in place and seem to be working thus far.

The bottom line for the standard is projects, jobs and energy. The projected total solar requirement for the investor-owned utilities works out to the following over the implementation period:

Total Solar Requirement	2007	2011	2015
Xcel Energy	18.1 MW	40.0 MW	73.9 MW
Aquila	1.2 MW	2.5 MW	4.5 MW
Projected IOU¹ Total	19.3 MW	42.5 MW	78.4 MW

These figures assume that all solar resources will be located in Colorado. It’s also important to keep in mind that A37 requires a minimum of one-half of these amounts be located on customer premises. Thus the following represents the minimum amount of solar that will be located on Colorado homes and businesses.

On-site Solar Requirement	2007	2011	2015
Xcel Energy	9.1 MW	20.0 MW	37.0 MW
Aquila	.6 MW	1.3 MW	2.3 MW
Projected IOU Total	9.7 MW	21.3 MW	39.3 MW

We anticipate that more than 5,000 systems will be installed on homes over the next 10 years, and perhaps as many as 1,500 systems on businesses. To achieve these minimums, both (Investor Owned Utilities) IOUs have launched solar rebate programs this year. Xcel Energy, the state's largest utility, began its rebate program for small systems (10 kW or less) on March 1. By the end of the fifth month, it had paid out about \$1 million in rebates providing financial incentives for over 220 kW of solar energy systems on homes and businesses in its territory. The average size of these small solar systems is approximately 3 to 3.5 kW. The pace of the rebates (40kW per month) appears to be continuing. Xcel will review bids for larger systems up to 2,000 kW in early August and issue contracts for such systems by the end of the month. Together with a planned central solar project in the San Luis Valley, Xcel appears to be on track for compliance with the solar standards. See www.xcelenergy.com/solar for details on Xcel Energy's programs.

Aquila is an IOU that serves about 93,000 customers in communities along the Arkansas River from Canon City to La Junta. Its solar rebate program was launched July 3. For 2006, it sought 40 kW of small systems with a \$6/watt rebate and 70 kW of systems larger than 10 kW with a \$4/watt rebate plus payments of 3¢/kWh generated. It accepted 7 small and 3 large systems, including one 50 kW system, to reach this goal. Information on Aquila's program can be found at <http://pv.aquilaprograms.com/>

Colorado Springs has a municipal utility that launched its own solar rebate pilot program in early 2006. Offering a \$4/watt rebate, it allocated some \$220,000 to the effort, and was sold out in three months. It has added funding to the program for 2006 and promises to expand the program in 2007. See http://www.csu.org/residential/rebates/renew_rebate/index.html

Ft Collins municipal utility was the first in Colorado to establish a renewable energy standard. The Ft. Collins standard does not emphasize any particular renewable resource. It provides no financial incentive for solar electric systems other than traditional net metering that allows excess generation to be valued at retail energy rates. Unfortunately, the program is limited to 25 participants. See <http://www.fcgov.com/utilities/parallel-generation.php>



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Holy Cross Electric Association pays up to \$2.00/watt of installed capacity for renewable electricity generation using wind, hydroelectric, photovoltaic, biomass or geothermal technology up to 25 kW per installation. Payments will not exceed 50% of actual installed cost. As a side note, Holy Cross recently agreed to acquire renewable energy credits for 10 years from a geothermal project in Idaho to help meet its A37 obligations. See <http://www.holycross.com/>

Amendment 37 was written with two goals in mind – to capture the economic and environmental benefits of renewables, and to keep economic impacts on consumers small. It will take time to determine if the standards embodied in A37 are achieved, however Colorado is already experiencing a higher public consciousness regarding the resource choices we, as a State, face to meet our growing energy needs and reaping the benefits of new, large companies seeking to do business here, alongside our smaller, but no less important, local solar and other clean energy businesses. We believe this to be an excellent and very satisfying outcome. 

