



New California Law Requires All Public Utilities to Raise Renewable Energy Production to 33% by 2020

Senate Bill X1-2 was signed by California Governor Edmund Brown Jr. in April 2011. This bill raises the Renewable Portfolio Standard (RPS) in CA to 33% by 2020. With the new RPS set for 33% by 2020, all California electricity retailers including publicly owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators must adopt the new RPS goals of 20% of retail sales from renewables by the end of 2013, 25% by the end of 2016, and 33% by the end of 2020. ¹

The bill originated with a 2008 Executive Order by California's former Governor Arnold Schwarzenegger. Schwarzenegger pronounced the necessity of increasing market appeal for renewables stating, "businesses need that stable foundation to be confident that these investments are in line with the long term direction of the state."

In addition to the new goal, Gov. Brown stated, "While reaching a 33% renewables portfolio standard will be an important milestone, it is really just a starting point – a floor, not a ceiling. Our state has enormous renewable resource potential. I would like to see us pursue even more far-reaching targets. With the amount of renewable resources coming on-line, and prices dropping, I think 40%, at reasonable cost, is well within our grasp in the near future." ²

This is the strongest renewable target in the U.S. As a result of the strong policies, California is currently installing 600 MW of wind power. When those turbines come online almost 1 million California homes will be powered by wind energy.

The preliminary implementation analysis results, prepared by the California Public Utilities Commission (CPUC), describe the goal of 33% RPS as "highly ambitious,

Continental's Revolution 400™ Wind Turbine is ideally sized to supply distributed energy to large power users on their own land. Studies show that distributed sources of renewable energy will play a significant role in meeting California's RPS goal of 33% by 2020.

The installation of midsized wind turbines is usually on land that has already been developed, easing the sometimes complex process of obtaining permits.

In many cases installing midsized turbines also costs less, in part by integrating into the existing distribution grid with no need for expensive new high voltage transmission lines.

¹<http://www.energy.ca.gov/portfolio/>

²http://apps1.eere.energy.gov/news/news_detail.cfm/news_id=16886

given the magnitude of the infrastructure buildout required." In order to meet these challenges of buildout, seven new transmission lines would be required, at a cost of \$12 billion.³ While these infrastructure buildouts are necessary for large renewable power plant installations, such as the wind farms in Palm Springs or Tehachapi, CA, the implementation of distributed generation, where sub-megawatt turbines are installed on large power users' own land, would not require such a buildout. In many cases installing midsized wind turbines would cost less by integrating into the existing distribution grid, and therefore curbing the need for new large high voltage transmission lines.

CPUC outlines the second major challenge to large wind installations: the permitting process. Getting final approval to build a renewable energy site can take years, with potentially formidable objections from local residents, environmental organizations or a number of regulatory agencies. However, this process is considerably simpler for distributed generation applications. The installation of midsized wind turbines is usually on already developed land, and provides electricity locally, easing the process of obtaining permits. The installation of large wind farms requires cooperation across a wider range of municipalities, regulatory entities, and sometimes even multiple states in order for the generated electricity to reach users in distant areas.

In order to aid the development of renewable energy projects, The California Energy Commission recently proposed the Renewable Planning and Permitting Program (RP3), which would provide grants for cities, counties and other local jurisdictions. This program would help these entities navigate the complex multi-agency planning and permitting process to make the efforts more efficient.

CPUC's 1st Quarter 2011 RPS Report of found that the state's cumulative current RPS is 12.5%. The three largest IOUs (investor-owned utilities) – PG&E, SCE and SDG&E – are currently at: 17.7%, 19.4% and 11.9% respectively. This is an increase of 3.6%, 2.6% and 1.7% over 2009.

Overall, 300 MW of new renewable capacity has come online in the first quarter of 2011 in California, with an additional 589 MW (wind and solar PV) forecast to come online by the end of the year.

The full 2011 1st Quarter RPS Quarterly Report can be found at: <http://www.cpuc.ca.gov/NR/rdonlyres/62B4B596-1CE1-47C9-AB53-2DEF1BF52770/0/Q12011RPSReporttotheLegislatureFINAL.pdf>

³ <http://www.cpuc.ca.gov/NR/rdonlyres/1865C207-FEB5-43CF-99EB-A212B78467F6/0/33PercentRPSImplementationAnalysisInterimReport.pdf>