



RI Renewable Energy Standard (RES) – Program Overview

January 2015

Background – In June, 2004, Rhode Island became one of the first states to enact a so-called “Renewable Portfolio Standard” (or RPS). In Rhode Island, our RPS law is called the Renewable Energy Standard (RES). The RES Statute is R. I. Gen Laws § 39-24-1, et seq. RPS laws are arguably the most successful renewable energy laws ever enacted in the United States, because they have a track record of actually working to get small, medium, and large renewable energy projects financed and built. California enacted the first RPS in 2002 (with Rhode Island close behind in 2004). Today 29 states have mandatory RPS laws, including five of the six New England states (all except Vermont), as well as New York, Pennsylvania, Texas, Ohio, Illinois, Arizona, and New Mexico.

How the RES Works: Three Key Features – Rhode Island’s RES Statute is typical of the way RPS laws around the country work. There are three key components, as follows:

(1) Mandates – The RES Statute starts by creating a mandate, or obligation, that the electricity utility buy a certain percentage of its electricity from renewable energy sources such as wind and solar, with those obligations increasing over time. (The mandate appears at R. I. Gen. Laws § 39-26-4(a).) The Rhode Island RES started with an obligation to purchase 3% of electricity load from renewables in 2007 and ramps up to 16% of load in 2019. Of course, the figures vary state by state. For example, the current California RPS, the most ambitious in the nation, ramps up to 33% of electricity load by 2020.

(2) Renewable Energy Certificates (RECs) – The RES Statute recognizes so-called “Renewable Energy Certificates” (RECs). (RECs are defined at R. I. Gen. Laws § 39-26-2(13); and are described at R. I. Gen. Laws § 39-26-4(d).) Every renewable energy generator (say, the owner of a wind farm) creates one REC for every megawatt-hour of renewable energy she produces. In the RES Statute, RECs have two functions:

- RECs are the accounting system by which utilities demonstrate their compliance with these RPS mandates (including Rhode Island RES Statute). Each year, utilities with RPS mandates buy enough RECs to satisfy their RPS obligation for that year. To illustrate with a simple example: if National Grid sells 100 megawatt-hours of electricity in Rhode Island this year, and its RES obligation this year is 7%, Grid must purchase 7 RECs in order to satisfy its obligation. (If next year the RES obligation ramps up to 8% of load, and Grid sells 110 megawatt hours of

electricity, then next year Grid must buy 8.8 RECs, because 110 MW x 8% = 8.8 RECs.)

- RECs create a second stream of income for renewable energy generators. All electricity generators have one main source of revenue and income: they sell their electricity and get paid for it. If you produce electricity, whether it is from coal or from wind, you will get paid for selling that electricity. But renewable generators have a second commodity to sell: RECs; and RPS laws (including Rhode Island's RES Statute) have created a mandatory market for that second commodity because utilities must buy RECs in order to satisfy their annual RPS obligations. This is the way RPS laws create a financial incentive for renewable energy.

(3) Alternative Compliance Payments (ACPs) – What if a utility under an RPS mandate wants to comply with the law (that is, buy RECs), but there just are no RECs on the market? (In theory, this can happen if and when there are not enough local renewable energy generators producing RECs.) That's where Alternative Compliance Payments (ACPs) come in. (ACPs are defined at R. I. Gen. Laws § 39-26-2(1); and are described at R. I. Gen. Laws § 39-26-4(e).) RPS statutes allow utilities to satisfy their RPS obligations by making an Alternative Compliance Payment to a local Renewable Energy Fund. ACPs cost about \$60 per megawatt-hour each. Thus, ACPs play two crucial roles in the overall RPS arrangement:

- The Renewable Energy Fund uses its money to help fund new renewable energy projects. (Remember: ACPs get paid if there are not enough RECs on the market.) Thus, if there is ever a shortage of RECs on the market, the ACPs are used to build new renewable energy resources, so that the REC shortage disappears in future years. That is, ACPs are a self-correcting mechanism that fix REC shortages if such shortages ever occur.
- ACPs also set a ceiling price on RECs, so that the entire RPS program can never get too expensive. If market forces (that is, supply and demand) were ever to cause REC prices to rise above the ACP price (about \$60), utilities could simply make an Alternative Compliance Payment (instead of buying those too-expensive RECs).

Rhode Island's RES Statute is successful and works as intended – Rhode Island's 2004 RES statute was one of the first in the nation, and 29 states now have similar statutes. RPS laws have been crucial in putting the United States on an inexorable path away from dirty, old fossil fuels (like coal) and on a new path toward renewable energy (like wind and solar). In practice, the three parts of Rhode Island's RES statute work together in exactly the way that the General Assembly intended.