



## **RI Renewable Energy Standard (RES) – Fact Sheet**

January 2015

### **Key Takeaways:**

- The proposed 1.5% annual increase from 2020 to 2035 is in line with the analysis and recommendations of the draft State Energy Plan.
- The RES provides a long-term stable market for renewable energy by signaling to developers that Rhode Island is committed to renewable energy for the long term.
- New England's increasing reliability on natural gas exposes the region to significant price volatility. The RES can mitigate this price volatility by diversifying the state's energy mix with renewable energy whose fuel is always free.
- The RES supports indigenous resources that bring economic development to Rhode Island, including projects authorized in the Renewable Energy Growth program.

### **What is the RES?**

Rhode Island's RES annually increases the percentage of new renewables utilities are required to purchase with a target of 16% by 2019. The RES provides a long-term stable market for renewable energy by signaling to developers that Rhode Island is committed to renewable energy for the long term. Recent action by the PUC has resulted in that target being reduced to 14.5%, thereby discouraging investment that would benefit Rhode Island energy consumers.

### **What is the proposed expansion?**

The legislation reaffirms Rhode Island's commitment to renewable and clean energy by extending the current 1.5% annual increase from 2019 to 2035. This is in line with the analysis and subsequent recommendation found in the draft State Energy Plan.

### **Why is the RES important for RI?**

Between 2000 and 2013, natural gas grew from 15% of New England's electricity fuel mix to 46% in 2013, exposing Rhode Island ratepayers to significant price volatility.<sup>1</sup> To mitigate this risk, diversifying Rhode Island's energy mix is a high priority. Renewable energy can mitigate price volatility in two ways:

- The "fuel" for renewable energy such as wind and solar are always free and not susceptible to the price volatility that has been seen with natural gas and other fossil fuels.
- Renewable energy contracts and tariffs, like the Renewable Energy Growth (REG) program, provide a long-term guarantee for a steady, predictable cost-effective price for customers.

### **Why is it important to expand the RES now?**

Renewable energy developers are making decisions today that will affect the ability to provide lower cost renewable energy several years down the road. Rhode Island needs to signal to the

market that there will continue to be a demand for new renewable energy beyond 2019. Any delay could indicate market uncertainty discouraging developers from initiating and building projects that would benefit Rhode Island energy customers.

**How does RI's RES compare to other states?** Rhode Island falls in the middle of the pack in regards to targets for new renewables among the New England states. Connecticut is the leader with a target of 20% new renewables by 2020.

New/Class I RES Targets in New England States <sup>2</sup>			
Year	2020 Target	Annual rate increase	Expiration Date
CT	20%	1.5%	2020
DE	20%	1%	2025
MA	15%	1%	In perpetuity
RI	12.5%	1.5%	2019
ME	10%	1%	2017
NH	11%	.9%	2025

**How does the REG program relate to the RES program?**

While the RES program creates *demand* for renewable energy, the Renewable Energy Growth program helps to *supply* the renewable energy with 160 MW of in-state projects. The program is poised to provide nearly all of the additional RECs needed to meet the RES through 2019. An extension of the RES beyond 2019 would support renewables in general, including projects built in Rhode Island such as those authorized in the Renewable Energy Growth program.

**What are the economic benefits of renewable energy to Rhode Island?**

Renewable energy brings important job creation and other economic benefits to Rhode Island. In May 2014, the Rhode Island Office of Energy Resources (OER) released a study on the potential economic benefits of the REG program. Overall, the study found the REG program “will result in net positive economic output, job gains, criteria pollutant emissions reductions, carbon emissions reductions, and positive state revenues over the period 2014-2038.” More specifically the report estimates the following:

- Rhode Island economic output increases by \$30.65 million per year for 25 years, or a total of \$556 million over the 25-year life of the program.
- The program will create an average of 246 jobs in Rhode Island – and these jobs will last the 25-year life of the program, not just go away in a year or two.
- Increase state tax revenue by over \$1 million per annum, or \$13 million over the life of the program.

In addition, over the last decade, RES targets have provided a long-term stable market for renewable energy, a significant contributing factor in the fall of renewable energy prices over the last decade. According to the New York Times<sup>3</sup>:

- The price of electricity from utility-scale solar projects dropped by 70% since 2008.
- The price of utility-scale wind projects has dropped by over 50% in recent years.
- The price to install residential-scale solar dropped by nearly 15% between 2012 and 2013.

### **How much has the RES impacted residential rates?**

According to a report by Lawrence Berkeley National Lab, in 2012, the average annual RES charge in Rhode Island was estimated to be .00182¢/kWh, resulting in a rate impact of \$1.08/month for residential consumers. In contrast, the newly approved 12% rate increase due to natural gas prices will increase residential bills by approximately \$10/month.

### **What happens if there is not enough renewable energy to meet the RES?**

If there is a shortage of renewable energy credits (RECs), where one credit is created for each Mwh of renewable energy produced, an alternative compliance payment (ACP) may be made. Between 2007 and 2012, National Grid has only made an ACP one time in 2011 for \$4.5M. The ACP acts as insurance to protect customers from paying too much for RECs. Moreover, those funds were paid to the Renewable Energy Fund managed by CommerceRI, which provides funding for renewable energy projects that produce RECs and in turn help meet future RES targets. According to testimony before the PUC in September 2013, National Grid does not anticipate making ACP payments between 2015 and 2020.<sup>4</sup>

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<sup>1</sup> ISO New England, *Regional Electricity Outlook*, January 2014, [http://www.iso-ne.com/aboutiso/fin/annl\\_reports/2000/2014\\_reo.pdf](http://www.iso-ne.com/aboutiso/fin/annl_reports/2000/2014_reo.pdf)

<sup>2</sup> Overall targets may be higher depending on eligibility requirements. In an effort to make an “apples to apples” comparison, this table focuses on targets for “new renewables.” For example, Rhode Island’s overall RES target is 14.5%, but 2% of that can come from “existing” renewables therefore 12.5% comes from “new renewables.”

<sup>3</sup> Diane Cardwell, “Solar and Wind Energy Start to Win on Price vs. Conventional Fuels,” *New York Times*, 23 November 2014, [http://www.nytimes.com/2014/11/24/business/energy-environment/solar-and-wind-energy-start-to-win-on-price-vs-conventional-fuels.html?\\_r=0](http://www.nytimes.com/2014/11/24/business/energy-environment/solar-and-wind-energy-start-to-win-on-price-vs-conventional-fuels.html?_r=0)

<sup>4</sup> National Grid, “Docket 4404 – Commission Review into the Adequacy of Renewable Energy Supplies Pursuant to R.I. General Laws §39-26-6,” PUC Testimony, 25 September 2013, page 9.