

# RPS Solar Carve Out Arizona

### **Renewable Portfolio Standard (RPS)**

Renewable Portfolio Standards (RPSs) are a policy tool enacted by many states to stimulate growth of the renewable energy industry. They require utilities to generate or purchase a certain amount of their electricity from renewable energy within a specified time frame. If a utility does not meet this goal, they are often subject to a penalty known as an Alternative Compliance Payment (ACP). Renewable Energy Credits (RECs) are tradable credits which represent the electricity generated from a renewable resource that utilities can purchase to meet their RPS goal. Solar Renewable Energy Credits (SRECs) are a form of RECS that represent electricity generated from a solar system. RECs are subject to market dynamics with the set ACP effectively functioning as a price floor. RPSs are different in every state.

Solar carve outs and credit multipliers are included in most RPSs because the programs tend to favor lower cost renewable technologies, and these programs provide incentives for the deployment of more costly technologies. Solar carve outs require a certain percentage of the RPS be met with solar energy, while credit multipliers offer additional credit toward compliance for energy derived from solar sources. From 2005-2009, 65-81% of the total grid connected PV in the United States(excluding California) occurred in states with active or forthcoming solar carve outs. The types of solar technology eligible under these incentives vary depending on a state's RPS goals.

### Solar Installation across the US

- The United States has over 5,700 MW of installed solar electric capacity<sup>3</sup>
- In the Mid-Atlantic states and New York about 23% of solar installations were attributed to RPSs<sup>4</sup>
- 16 States and the District of Columbia have unique solar or direct generation (DG) carve outs in their RPS<sup>5</sup>
- If full RPS compliance is achieved there will be 93 GW of new renewable energy online in the United States by 2035<sup>6</sup>

#### **Arizona RPS**

Arizona's RPS, the Renewable Energy Standard (RES) was established as a result of regulatory action adopted by the Arizona Corporate Commission in 2006, and reaffirmed by the state's Attorney General in 2007. The state's renewable standard is set at 15% by 2025, with percentages increasing on an annual basis. Arizona offers credit multipliers for in-state solar installations, and renewable sources installed before 2006. Additionally, utilities are required to meet 15% of their electricity load by 2025 from RECs. A portion of this 15% requirement, 30% (4.5% of total retail sales) must be sourced from distributed generation. One half of the DG requirement must come from residential sources and the other half must come from non-residential, non-utility sources. Solar technologies recognized by Arizona's RES include, solar water heating, solar space heat, solar thermal electric, solar thermal process heat and photovoltaics.

# **Americans Support Solar...**

- 9 out of 10 Americans approve of renewables<sup>11</sup>
- The solar industry employs 119,000 Americans<sup>12</sup>
- In order to reduce costs for the rate payer, many states have cost caps of 10% or less for their RPS<sup>13</sup>

**Solar Prices Declining:** Nationally, the average solar installation price declined by 19.3% and the price of residential systems fell by 15.3% year-over-year. Installation prices fell in every major residential market with Arizona reaching installed costs as low as \$4.00/watt.<sup>14</sup>

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<sup>1</sup> DSIRE. SOLAR, Solar Set-Asides in Renewable Portfolio Standards. http://www.dsireusa.org/solar/solarpolicyguide/?id=21

<sup>3</sup> SEIA. Solar Industry Data. http://www.seia.org/research-resources/solar-industry-data

<sup>5</sup> Id.

<sup>6</sup> Id.

8 Id.

<sup>9</sup> Id.

The Solar Foundation (November 2012). National Solar Census, p.5.

http://thesolarfoundation.org/sites/thesolarfoundation.org/files/TSF%20Solar%20Jobs%20Census%202012%20Final.pdf

## **About the Solar Energy Industries Association®**

Established in 1974, the Solar Energy Industries Association is the national trade association of the U.S. solar energy industry. Through advocacy and education, SEIA® and its 1,100 member companies are building a strong solar industry to power America. As the voice of the industry, SEIA works to make solar a mainstream and significant energy source by expanding markets, removing market barriers, strengthening the industry and educating the public on the benefits of solar energy.

For more information, please visit www.seia.org.

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<sup>&</sup>lt;sup>2</sup> Wiser, Ryan, Barbose, Galen & Holt, Edward. (October 2012). Supporting Solar in Renewable Portfolio Standards: Experience from the United States, p. 25. http://eetd.lbl.gov/ea/ems/reports/lbnl-3984e.pdf

<sup>&</sup>lt;sup>4</sup> Barbose, Galen (November 1, 2012). Renewable Portfolio Standards: A Status Update (Power Point Presentation), p. 15. *Lawrence Berkley National Lab* 

<sup>&</sup>lt;sup>7</sup> DSIRE. Arizona: Renewable Energy Standard. http://dsireusa.org/incentives/incentive.cfm?Incentive\_Code=AZ03R&re=1&ee=1

<sup>&</sup>lt;sup>10</sup> DSIRE. Arizona: Renewable Energy Standard. http://dsireusa.org/incentives/incentive.cfm?Incentive\_Code=AZ03R&re=1&ee=1

<sup>&</sup>lt;sup>11</sup> SCHOTT Solar Barometer/SEIA (2011). New Poll: 9 Out of 10 Americans Support Solar, Across Political Spectrum. http://www.seia.org/news/new-poll-9-out-10-americans-support-solar-across-political-spectrum

<sup>&</sup>lt;sup>13</sup> Barbose, Galen (November 1, 2012). Renewable Portfolio Standards: A Status Update (Power Point Presentation), p. 29. *Lawrence Berkley National Lab*.

<sup>&</sup>lt;sup>14</sup>SEIA/GTM (2012). U.S. Solar Market Insight Report: Q3 2012, *Executive Summary*, p.10. http://www.seia.org/research-resources/solar-market-insight-report-2012-q3