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States with In-State Resource RPS Requirements

Prepared by the North Carolina Clean Energy Technology Center

This research is based on information from the Database of State Incentives for Renewables and Efficiency (DSIRE – www.dsireusa.org). We have focused on requirements within state Renewable Portfolio Standards (RPSs) for in-state renewable energy procurement. Thus, this summary only represents requirements and targets for indigenous *renewable* energy resources.

This research also does not include states with a voluntary, non-enforceable renewable energy goal.[1]

Many RPS requirements are met with out-of-state power procurement or alternative compliance payments in lieu of local renewable generation, which can lower the cost of compliance with the RPS. A partial in-state requirement guarantees that a portion of economic, energy, and environmental benefits occur within the state that enacts the RPS.

Few states have explicit in-state resource requirements due to Constitutional concerns, as eligibility for the RPS based solely on state boundaries would risk violating the dormant Commerce Clause by discriminating against interstate commerce.[2] To address this issue, most states require the eligible resources to either be located within the state or be deliverable to the state.

Many states include carve-outs, or a minimum percentage or capacity, for distributed generation or certain types of renewable energy (e.g., solar photovoltaics (PV)). States in the Northeast often contain a "carve-out" for solar, and require the solar PV used toward RPS compliance to be installed within the state. Carve-outs for distributed generation are in essence requirements for in-state generation. Most of the states below categorized as having an in-state RPS requirement fall into these types of RPS provisions.

In total, **18 states** have an RPS provision that requires or encourages in-state generation. The following is a more specific break-down of how states favor or require in-state generation:

[1] Oklahoma, and Vermont have voluntary renewable energy goals that require the use or installation of in-state renewable energy resources, and South Carolina is on track to have a voluntary renewable energy goal with distributed generation specifications by late spring of 2015. Maine has a non-enforceable goal for wind energy installations within the state.

[2] Elefant, C. and E. Holt. March 2011. The Commerce Clause and Implications for State Renewable Portfolio Standard Programs. Clean Energy States Alliance. Available: http://www.cesa.org/assets/Uploads/CEG-Commerce-Clause-paper-031111-Final.pdf.

Table 1: Types of In-State Energy Requirements*

Requirement	States
Distributed Generation Carve-Out	**5** (AZ, CO, IL, MN, NM)
Solar must be in-state	**6** (DE, ** MA, MD, NH, ** NJ, NY)
Some form of in-state minimum	**4** (IA***, NY, MI ***, TX)
Extra credit for in-state	**6** (AZ, CO, DE, KS, MI, MO, NV)
By default	**1** (HI)

* Totals do not add to 18, as some states have more than one of these provisions.
**NH's in-state requirement applies to solar thermal resources only. DE's requirement applies only to community sited solar.
***MI and IA requires renewable energy to be generated within the state or within the service territory of affected utilities. MI also includes several additional exceptions for out of state resources.

Many additional states require eligible RPS resources to be located in-state, in adjoining states, or within the same regional grid (e.g., Illinois, Oregon, Washington, and others). Two states have recently removed in-state requirements.[3]

All of these states offer some additional incentive for renewable energy, including tax incentives, rebate programs, Property Assessed Clean Energy (PACE) or other low-interest financing, and net metering. An overview of the incentives offered by the states with in-state RPS requirements is in Table 2:

Table 2: Incentives Offered by States with In-State RPS Requirements

Incentive Type	States
Rebate or Up-Front Cash Incentive	**6** (DE, MD, MA, NH, NJ, NY)
Income or Franchise Tax Incentive	**6** (AZ, HI, MD, MA, NM, TX)
Property or Sales Tax Incentive	**15** (AZ, CO, IL, IA, KS, MD, MA, MI, MO, MN, NM, NJ, NY, NV, TX)
PACE or Low-Interest Financing	**11** (CO, HI, MA, MO, MN, NH, NM, NJ, NY, NV, TX)
Net Metering	**17** (all except TX*)

*Texas does not have statewide net metering; however, several retail electricity providers in its deregulated electricity market offer programs similar to net metering, as do multiple municipal utilities.

Additional incentives offered by some of the states include grant programs, feed-in-tariffs, bond funding, and more. More detailed examples of these incentives can be found in the following descriptions of states with indigenous resource requirements, and even more detail on specific incentives is available on dsireusa.org.

[3] In June 2013, the governor of Colorado signed Senate Bill 252, which removed indigenous language from the existing RPS with respect to several of the requirements, carve-outs, and credit multipliers.
Until mid-2014, Ohio had an in-state requirement for half of RPS requirements to be fulfilled with in-state generation. However, in May of 2014, SB 310 removed the in-state requirement for renewable energy procurement, froze the multi-year renewable ramp-up schedule for 2 years, and pushed back the final renewable benchmark of 12.5% from 2024 to 2026.

Detailed State Descriptions

The following is a list of states that have an element in their RPS that requires the use of in-state renewable energy generation toward the RPS target. The description includes an overview of the RPS requirement and examples of incentives for renewable energy offered by each state.

Arizona

Arizona's RPS calls for utilities to procure 15% of their energy from renewable resources, with 30% of that requirement coming from distributed generation. Eligible resources must be deliverable to the state. Extra credit multipliers are available for in-state solar installations and systems manufactured in-state.

Renewable energy incentives the state offers include:

- Arizona offers multiple income tax incentives: a tax credit for non-residential wind and solar systems; a tax credit for residential solar and wind systems; a production tax credit for wind, biomass, and solar; and a tax credit for manufacturers producing their own renewable energy for use at their facilities.
- A property tax incentive for renewable energy equipment is also available.
- Utilities are required to offer net metering.

Colorado

Colorado's Renewable Energy Standard requires each qualifying retail utility to generate or cause to be generated electricity from eligible energy resources. Investor-owned utilities and cooperatives must procure a certain amount of their retail sales from distributed generation. In addition, there are credit multipliers for community-based projects, solar generation located within the territory of municipal utilities or cooperatives, and projects interconnected to the transmission and distribution network of municipal utilities and cooperatives.

Renewable energy incentives the state offers include:

- Colorado provides property tax and sales tax incentives for renewable energy.
- The state has PACE-enabling legislation and active PACE programs.
- Utilities are required to offer net metering.
- There are additional local and utility sponsored programs and incentives.

Delaware

Delaware's RPS includes an in-state requirement for customer-sited generation, as well as a carve-out for solar resources and fuel cells. There is no in-state requirement for other resources. The RPS includes a multiplier for solar PV and wind.

Renewable energy incentives offered by the state include:

- Rebate incentives from the Delmarva Green Energy Fund are available for solar PV, solar thermal, wind, geothermal heat pumps, and fuel cells.
- Net metering is available to residential customers.
- There are additional utility-sponsored incentives.

Hawaii

Hawaii's RPS mandates a percentage of electricity must be generated from renewable resources. Given Hawaii's geography and inability to interconnect with other states, by default renewable generation must be in-state. Hawaii does not use RECs for RPS compliance, so utilities may not purchase out-of-state RECs for compliance.

Renewable energy incentives offered by the state include:

- Hawaii offers a solar and wind income tax credit.
- A feed-in tariff is available for several renewable energy technologies.
- The state has PACE-enabling legislation.
- The state offers Green Infrastructure Bond funding for clean energy installations.
- Net metering is available to residential and small commercial customers.

Illinois

Illinois' RPS contains a requirement for distributed generation resources that increases over time to 0.25% of retail electricity sales by 2026. For investor-owned utilities, eligible renewable resources must be located in-state or from adjoining states. If these also fail the cost-effectiveness tests, resources can be procured from other regions of the country. A minimum of 75% of the renewable energy must come from wind power, and the remaining amount (25%) can come from other eligible renewables.

The state offers several incentives for renewable energy, including:

- Illinois offers Large Distributed Solar and Wind Grants.
- There are also property tax and sales tax incentives for renewable energy.
- All investor-owned utilities are required to offer net metering to customers.
- There are additional local and utility sponsored programs and incentives.

Iowa

Iowa's Alternative Energy Law requires its electric utilities to own alternative energy production facilities located in the state or contract to purchase energy from such facilities located within its service territory. *(Note: Iowa's mandatory capacity target - 105 MW - has been far surpassed with wind installations, which total over 5,100 MW.)*

The state offers several incentives for renewable energy, including:

- Iowa provides property tax and sales tax incentives for renewable energy.
- The state authorizes all investor-owned utilities to offer net metering to customers.
- There are additional local and utility-sponsored programs and incentives.

Kansas

Kansas's Renewable Energy Standards Act set requirements for the state's investor-owned utilities and electric cooperatives to generate or purchase a portion of its peak demand from eligible renewable resources. Each MW of eligible capacity installed in-state after January 1, 2000, counts as 1.1 MW for the purpose of compliance, meaning in-state generation is worth 10% more than out-of-state generation for the purposes of compliance.

The state offers several incentives for renewable energy, including:

- The state has a 100% property tax exemption on renewable energy equipment.
- Investor-owned utilities are required to offer net metering.

Maryland

Maryland's RPS includes an in-state requirement for Solar PV and a solar carve-out. Electricity generated from solar, poultry, and trash incineration must come from sources connected with the electric distribution grid serving Maryland. This requirement does not apply to wind, biomass, geothermal, fuel cells, and other systems.

Renewable energy incentives offered by the state include:

- Maryland offers the Clean Energy Grant program, which provides flat rebates for installations of PV, solar water heating, and geothermal heating & cooling systems.
- Maryland offers a production tax credit for electricity generated by wind, solar, hydropower, hydrokinetic, municipal solid waste and biomass resources.
- Maryland provides property and sales tax incentives available for renewable energy.
- Utilities are required to offer net metering.
- There are additional local and utility-sponsored programs and incentives.

Massachusetts

Massachusetts' RPS has an in-state solar PV requirement. There is no in-state requirement for other resources. RPS compliance can be met with RECs from the ISO-NE region. The RPS also includes a solar carve-out and Class II waste energy carve-out.

Renewable energy incentives offered by the state include:

- Massachusetts provides rebates for wind, solar PV, and solar hot water heating.
- Massachusetts provides an excise tax deduction or exemption for solar and wind systems, as well as a residential renewable energy tax credit.
- There are also property and sales tax exemptions for renewable energy systems.
- Massachusetts has PACE-enabling legislation.
- State grants for wind, organics-to-energy, and hydropower are available.
- Utilities are required to offer net metering.
- There are additional local and utility-sponsored incentives.

Michigan

Eligible renewable energy resources under the RPS must be located within the state or outside the state if within the service territory of a utility. Alternative electric suppliers are generally not permitted to meet the standard using out of state resources. However, a variety of exceptions exist to these general eligibility criteria, relating primarily to existing power purchase agreements with out of state facilities.

Renewable energy incentives offered by the state include:

- Michigan offers a property tax exemption for Biomass, thermal polyerization and anaerobic digestion technologies.
- Michigan offers a personal property tax incentive for single alternative energy systems.
- Utilities are required to offer net metering.

Minnesota

Minnesota's RPS has a 1.5% carve-out for solar for public utilities to meet by the end of 2020, 10% of which must be met with photovoltaic (PV) systems that are 20 kilowatt (kW) nameplate capacity or less.

Renewable energy incentives the state offers include:

- Minnesota offers property tax and sales tax incentives for renewable energy.
- The state has PACE-enabling legislation and many active PACE programs.
- All investor-owned utilities are required to offer net metering or a value of solar tariff to customers.
- Minnesota has the Community-Based Energy Development Tariff, where each public utility is required to create a 20-year power purchase agreement for community-owned renewable energy projects.
- There are additional local and utility-sponsored programs and incentives.

Missouri

Missouri has an RPS that applies only to investor-owned utilities. In-state generation is credited 25% more than out-of-state generation for compliance purposes. The RPS also contains a solar carve-out in the amount of 2% of the RPS requirement (i.e., 0.3% of total electricity sales in 2021).

Renewable energy incentives the state offers include:

- Missouri offers property tax and sales tax incentives for renewable energy.
- The state has PACE-enabling legislation and many active PACE programs.
- The state requires all electric utilities to offer net metering to customers.
- There are additional local and utility-sponsored programs and incentives.

New Hampshire

New Hampshire's RPS has an in-state requirement for renewable thermal energy and customer-sited resources. There is no in-state requirement for other renewables, though they must be connected to ISO-NE.

Renewable energy incentives the state offers include:

- New Hampshire offers state grants for non-residential renewable energy installations.
- There are solar rebates for residential, commercial, and industrial installations.
- The state has passed PACE-enabling legislation.
- Utilities are required to offer net metering.
- There are additional utility-sponsored incentives.

New Mexico

New Mexico's RPS has a carve-out for distributed renewable energy technologies.

Renewable energy incentives the state offers include:

- The state offers several tax incentives, including: an advanced energy tax credit for businesses; a renewable energy production tax credit; a solar market development tax credit available to individuals, sole proprietorships, and agricultural enterprises; and tax credits specific to geothermal and agricultural biomass energy systems.
- There are also property tax and sales tax incentives for renewable energy.
- The state has PACE-enabling legislation and a PACE program in development.
- Utilities are required to offer net metering.

New Jersey

New Jersey's RPS has an in-state requirement for Solar PV, which includes a solar carve-out. Net-metered solar projects must be registered with the PUC to generate SRECs. There is no in-state requirement for other resources. Resources outside of New Jersey must be approved by the BPU.

Renewable energy incentives offered by the state include:

- New Jersey offers rebates for biomass energy systems.
- There are property and sales tax exemptions for renewable energy.
- The state has PACE-enabling legislation and active PACE programs.
- Utilities are required to offer net metering.
- There are additional utility-sponsored incentives and programs.

New York

Renewable energy that counts toward the RPS must be procured through NYSERDA, either through the Main Tier or Customer-Sited Tier program. Eligible resources include only electricity generated and consumed within the state. Eligible resources include biogas, biomass, biofuel, fuel cells, small hydro, PV, solar thermal, ocean tidal, and wind.

Renewable energy incentives offered by the state include:

- New York offers rebates for solar PV, solar thermal, and small wind generation facilities.
- New York provides property tax and sales tax incentives for renewable energy.
- The state has PACE-enabling legislation and active PACE programs.
- Investor-owned utilities are required to offer net metering.
- There are also local and utility-sponsored programs and incentives.

Nevada

Nevada's RPS includes a multiplier for solar PV systems, with an additional multiplier if the system is deemed to be customer-maintained distributed generation.

Renewable energy incentives offered by the state include:

- Nevada offers property tax and sales tax incentives for renewable energy.
- The state has PACE-enabling legislation.
- Utilities must offer net metering.
- There are additional utility-sponsored incentives and programs.

Texas

The state's *Goal for Renewable Energy* mandates that 5,880 MW of new renewable energy be installed in Texas by 2015, with a goal of 10,000 MW by 2025. *(Note: This goal has already been achieved.)*

Renewable energy incentives the state offers include:

- Texas offers franchise tax deductions or exemptions for certain wind and solar projects.

- There is a property tax exemption for renewable energy systems.
- The state has PACE-enabling legislation and a PACE program in development.
- There are additional local and utility sponsored programs and incentives.
- While there are no statewide net metering regulations, customers may choose an electricity service provider that does offer net metering.