# XV. Renewable Energy

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### A. INTRODUCTION

During the past year, public policies affecting new renewable energy development were at cross-purposes: at the same time that financial supports at the federal level continued to sunset, several states expanded their requirements for regulated power producers to utilize power from renewable sources. Although more renewable energy production was brought online during 2011, the economic climate for additional development grew more hostile as important federal subsidies began to expire.

This report updates the fifty-state survey of state renewable portfolio standards that we compiled in 2011.<sup>1</sup> Although much of the information in this report can be found in the Database of State Incentives for Renewables & Efficiency (DSIRE),<sup>2</sup> our intent is to provide a resource with more detailed legal source citations than available on the DSIRE website and to create a baseline for future reports.

The DSIRE website defines renewable portfolio standards (RPS) as "requiring utilities to use renewable energy or renewable energy credits (RECs) to account for a certain percentage of their retail electricity sales—or a certain amount of generating capacity—according to a specified schedule . . ."<sup>3</sup> The term "set-aside" or "carve-out" refers to a "provision within an RPS that requires utilities to use a specific renewable resource (usually solar energy) to account for a certain percentage of their retail electricity sales (or a certain amount of generating capacity)," again according to a set schedule.<sup>4</sup>

## B. SURVEY OF STATE RENEWABLE PORTFOLIO STANDARDS

The following table summarizes RPS requirements by state as of January 31, 2012, with additional detail in the text that follows for those states noted with a double asterisk.

<sup>1.</sup> Jonathan Wilson & Ann Umlauf, *Renewable Energy, in* RECENT DEVELOPMENTS IN PUBLIC UTI-LITY, COMMUNICATIONS, AND TRANSPORTATION INDUSTRIES (Peter V. Lacouture, ed. 2011).

<sup>2.</sup> See generally www.dsireusa.org/about/. DSIRE is an ongoing project of the North Carolina Solar Center and the Interstate Renewable Energy Council that is funded by the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy. The site is administered by the National Renewable Energy Laboratory, which the Alliance for Sustainable Energy, LLC operates for DOE.

<sup>3.</sup> www.dsireusa.org.

<sup>4.</sup> Id.

State	RPS	Summary	Change since January 31, 2011
Alabama	None		None
Alaska	None		**
Arizona	Ariz. Admin Code § 14-2-1804(b) (2011)	15 percent by 2025	**
Arkansas	None		None
California	CAL. PUB. UTIL. CODE § 399.11 (2011); Executive Order S-21-09	20 percent by 2013 and 33 percent by 2020	None
Colorado	Colo. Rev. Stat. Ann. § 40-2-124(1) (c)(I) (2010)	12 percent by 2011– 2014, increasing to 30 percent by 2020	None
Connecticut	CONN. GEN. STAT. §§ 16-243q and 16-245a	15 percent by 2011, increasing to 27 percent by 2020 (including Class I, II, and III sources)	**
Delaware	Del. Code Ann tit. 26, §§ 351 to 364	25 percent by 2025	**
Florida	None		None
Georgia	None		None
Hawaii	Haw. Rev. Stat. §§ 269-91 to 269-96	40 percent by 2030	None
Idaho	None		None
Illinois	20 Ill. Сомр. Stat. 3855/1-75 (2010)	2 percent in 2008, increasing to 25 percent by 2025	**

Table	1:	Sta	ate	R	en	ev	vable	Por	tfolio	Standard	s
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(updated January 31, 2012)

State	RPS	Summary	Change since January 31, 2011
Indiana	Cause No. 42693; IND. CODE ANN. § 8-1-37-5-b (2011)	2 percent by 2019	**
Iowa	Iowa Code §§ 476.41 to 476.48 (2009)	The state's two IOUs must produce at least 105 MWh of renewable power; voluntary goal set at 1,000 MWh in 2001	None
Kansas	Kan. Stat. Ann. §§ 66-1256 to 66-1262	20 percent by 2020	None
Kentucky	None		None
Louisiana	None		None
Maine	Me. Rev. Stat. Ann. tit. 35-A § 3210	30 percent by 1999; new additional generation required of 10 percent by 2017; additional wind generation capacity required in stages through 2030	**
Maryland	Md. Code Ann., Pub. Util. Cos. § § 7-701 to 7-713	3.5 percent in 2006, increasing to 20 percent by 2022	**
Massachusetts	225 Mass. Code Regs. §§ 14.01 to 14.13	Multiple standards	**
Michigan	Mich Comp. Laws §§ 460.1021 to 460.1053	10 percent by 2015	None

 Table 1: State Renewable Portfolio Standards (Continued)

State	RPS	Summary	Change since January 31, 2011
Minnesota	Minn. Stat. § 216B.1691 (2010)	Multiple standards; Xcel Energy required to generate 15 percent by 2010, increasing to 30 percent by 2020; other generators have different requirements	None
Mississippi	None		None
Missouri	Mo. Rev. Stat. § 393.1020 (2010)	2 percent by 2011, increasing to 15 percent by 2021	None
Montana	Mont. Code Ann. §§ 69-3-2001 to 69-3-2010 (2011)	10 percent by 2010, increasing to 15 percent by 2015	None
Nebraska	None		None
Nevada	Nev. Rev. Stat. § 704.7818 (2010)	15 percent in 2011, increasing to 25 percent by 2025	None
New Hampshire	N.H. REV. STAT. Ann. §§ 362-F:1 to 362-F:13	23.8 percent by 2025	**
New Jersey	N.J. Stat. Ann. § 48:3-49, et seq., N.J. Admin. Code § 14:8-1.1	22.5 percent by 2025	**
New Mexico	N. M. Admin. Code § 17.9.572.10(b) (2011)	IOUs to achieve 15 percent by 2015 and 20 percent by 2020; co-ops to achieve 5 percent by 2015 and 10 percent by 2020	**

 Table 1: State Renewable Portfolio Standards (Continued)

New York       Multiple orders of the New York Public Service Commission       30 percent by 2015       **         North Carolina       N.C. GEN. STAT.       12.5 percent by 2020       None § 62-133.8 (as amended)       for IOUs; lower requirements for municipal utilities and co-ops         North Dakota       N.D. CENT. CODE § 49-0-28 (2009)       Voluntary objective of 10 percent by 2015       None         Ohio       OHIO REV. CODE ANN. § 4928.64       25 percent by 2025       None         Oklahoma       OKLA. STAT. tit. 17, § 801.4       15 percent by 2015       None         Oregon       OR. REV. STAT. § 469A.075 (2011)       Multiple standards, of 10 percent by 2025 for the largest utilities and lower requirements for others       None         Pennsylvania       73 PA. STAT. ANN. § 1648-1 et seq. (West 2005)       18 percent by 2020       None         Rhode Island       R.I. GEN. LAWS § 39-24-4       Multiple standards and requirements       ** and requirements         South Carolina       None       Voluntary objective LAWS§ 49-34A- 101 et seq. (2010)       Voluntary objective of 10 percent by       None	State	RPS	Summary	Change since January 31, 2011
North CarolinaN.C. GEN. STAT. § 62-133.8 (as amended)12.5 percent by 2020None for IOUs; lower requirements for municipal utilities and co-opsNorth DakotaN.D. CENT. CODE § 49-0-28 (2009)Voluntary objective of 10 percent by 2015NoneOhioOHIO REV. CODE ANN. § 4928.6425 percent by 2025NoneOklahomaOKLA. STAT. tit. 17, § 801.415 percent by 2015NoneOregonOR. REV. STAT. § 469A.075 (2011)Multiple standards, vith a requirement of 10 percent by 2025 for the largest utilities and lower requirements for othersNonePennsylvania73 PA. STAT. ANN. § 1648-1 et seq. (West 2005)18 percent by 2020NoneRhode IslandR.I. GEN. LAWS § 39-24-4Multiple standards and requirements** and requirementsSouth CarolinaNoneVoluntary objective of 10 percent by 2025NoneSouth DakotaS.D. CODIFIED LAWS§ 49-34A- 101 et seq. (2010)Voluntary objective of 10 percent by 2015NoneTennesseeNoneVoluntary objective of 10 percent by 2015None	New York	Multiple orders of the New York Public Service Commission	30 percent by 2015	**
North DakotaN.D. CENT. CODE § 49-0-28 (2009)Voluntary objective of 10 percent by 2015NoneOhioOHIO REV. CODE ANN. § 4928.6425 percent by 2025NoneOklahomaOKLA. STAT. tit. 17, § 801.415 percent by 2015NoneOregonOR. REV. STAT. §§ 469A.055 to 469A.075 (2011)Multiple standards, vith a requirement of 10 percent by 2025 for the largest utilities and lower 	North Carolina	N.C. GEN. STAT. § 62-133.8 (as amended)	12.5 percent by 2020 for IOUs; lower requirements for municipal utilities and co-ops	None
OhioOHIO REV. CODE ANN. § 4928.6425 percent by 2025NoneOklahomaOKLA. STAT. tit. 17, § 801.415 percent by 2015NoneOregonOR. REV. STAT. § 469A.075 (2011)Multiple standards, with a requirement of 10 percent by 2025 for the largest utilities and lower requirements for othersNonePennsylvania73 PA. STAT. ANN. § 1648-1 et seq. (West 2005)18 percent by 2020NoneRhode IslandR.I. GEN. LAWS § 39-24-4Multiple standards and requirements** and requirementsSouth CarolinaNoneNoneNoneSouth DakotaS.D. CODIFIED LAWS§ 49-34A- 101 et seq. (2010)Voluntary objective 2015None	North Dakota	N.D. Cent. Code § 49-0-28 (2009)	Voluntary objective of 10 percent by 2015	None
OklahomaOKLA. STAT. tit. 17, § 801.415 percent by 2015NoneOregonOR. REV. STAT. §§ 469A.075 (2011)Multiple standards, with a requirement of 10 percent by 2025 for the largest utilities and lower requirements for othersNonePennsylvania73 PA. STAT. ANN. § 1648-1 et seq. (West 2005)18 percent by 2020NoneRhode IslandR.I. GEN. LAWS § 39-24-4Multiple standards 	Ohio	Ohio Rev. Code Ann. § 4928.64	25 percent by 2025	None
OregonOR. REV. STAT. §§ 469A.055 to 469A.075 (2011)Multiple standards, with a requirement of 10 percent by 	Oklahoma	Okla. Stat. tit. 17, § 801.4	15 percent by 2015	None
Pennsylvania73 PA. STAT. ANN. § 1648-1 et seq. (West 2005)18 percent by 2020NoneRhode IslandR.I. GEN. LAWS § 39-24-4Multiple standards and requirements**South CarolinaNoneNoneSouth DakotaS.D. CodiFIED 	Oregon	Or. Rev. Stat. §§ 469A.055 to 469A.075 (2011)	Multiple standards, with a requirement of 10 percent by 2025 for the largest utilities and lower requirements for others	None
Rhode Island       R.I. GEN. LAWS       Multiple standards       **         § 39-24-4       and requirements       **         South Carolina       None       None         South Dakota       S.D. Codified       Voluntary objective       None         LAWS§ 49-34A-       of 10 percent by       101 et seq. (2010)       2015         Tennessee       None       None	Pennsylvania	73 Pa. Stat. Ann. § 1648-1 et seq. (West 2005)	18 percent by 2020	None
South CarolinaNoneNoneSouth DakotaS.D. CodifiedVoluntary objectiveNoneLAWS§ 49-34A-of 10 percent by101 et seq. (2010)2015TennesseeNoneNone	Rhode Island	R.I. Gen. Laws § 39-24-4	Multiple standards and requirements	**
South DakotaS.D. Codified Laws§ 49-34A- 101 et seq. (2010)Voluntary objective of 10 percent by 2015NoneTennesseeNoneNone	South Carolina	None		None
Tennessee None None	South Dakota	S.D. CODIFIED Laws§ 49-34A- 101 et seq. (2010)	Voluntary objective of 10 percent by 2015	None
	Tennessee	None		None

 Table 1: State Renewable Portfolio Standards (Continued)

State	RPS	Summary	Change since January 31, 2011
Texas	Tex. Util. Code Ann. § 39.904(a) (2009); 16 Tex. Admin. Code § 25.173(a)(1)	Renewable generation of 3,272 MWh required in 2009, increasing to 5,880 MWh by 2015	None
Utah	Utah Code Ann. § 10-19-201(1) et seq. (2010)	Voluntary goal of 20 percent by 2025	None
Vermont	VT. STAT. ANN. tit. 30, § 8001 et seq.	Nonmandatory goal of 20 percent by 2017 administered through Sustainably Priced Energy Enterprise Development (SPEED) program	**
Virginia	Va. Code § 56- 585.2	Voluntary goal of 15 percent by 2025	**
West Virginia	W.VA. CODE ANN. § 24-2F-1 et seq. (2009)	Voluntary goal of 25 percent by 2025	**
Washington	Wash. Rev. Code § 19.285.040 et seq.; Wash. Admin. Code § 480-109	3 percent by 2012, increasing to 15 percent by 2020	**
Wisconsin	WIS. STAT. ANN. § 196.378	15 percent by 2015	**
Wyoming	None		**

 Table 1: State Renewable Portfolio Standards (Continued)

## 1. Alaska

Alaska's legislature amended the state's uncodified law to include a goal outlining that Alaska receive 50 percent of its electric generation from renewable and alternative energy sources by 2025.

## 2. California

In 2011, Executive Order S-21-09 directed the California Air Resources Board, under its Assembly Bill 32 authority, to enact regulations necessary to achieve the goal of 33 percent renewable energy by 2020.<sup>5</sup> Electricity satisfying the RPS requirement must come from a facility using bio-mass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydro-electric generation of 30 MW or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current from a facility located within California or that delivers its electricity to an in-state location.<sup>6</sup>

To codify the ambitious 2020 goal, Senate Bill X1-2 was signed by Governor Edmund G. Brown, Jr. in April 2011. This new RPS applies to all electricity retailers in the state, including publicly owned utilities (POUs), investor-owned utilities (IOUs), electricity service providers, and community choice aggregators. All of these entities must adopt the new RPS goals of 20 percent of retail sales from renewables by the end of 2013 and 25 percent by the end of 2016 with the 33 percent requirement met by the end of 2020.

Previously, the Energy Commission's responsibilities were limited to certifying renewable facilities as eligible for the RPS and designing and implementing a tracking and verification system to ensure that renewable energy output is counted once only for the purpose of the RPS and for verifying retail product claims in California or other states. Senate Bill X1-2 increased the Energy Commission's role with responsibilities specific to POUs as noted below:

- Directs the commission to adopt regulations specifying procedures for enforcement of the RPS for POUs.
- Requires the commission to certify and verify eligible renewable energy resources procured by POUs and to monitor their compliance with the RPS. The commission will continue to certify and verify RPS procurements by retail sellers.
- Requires the commission to refer the failure of a publicly owned utility to the Air Resources Board, which may impose penalties.

After an eight-month moratorium on tradable renewable energy certificate (TREC) transactions, the California Public Utilities Commission in January 2011 issued a decision allowing TRECs on the California market.<sup>7</sup> A TREC may only be traded for three years before it is retired.<sup>8</sup> However, after retirement, it may still be banked with the utility until used to satisfy the utility's RPS requirement.<sup>9</sup> In the short run—until 2014—load-serving entities (LSEs) can procure up to 25 percent of their obligation from TRECs; the rest must

<sup>5.</sup> CAL. PUB. UTIL. CODE § 399.11 (2011); Executive Order S-21-09.

<sup>6.</sup> Cal. Pub. Util. Code § 399.12(c) (2011); Cal. Pub. Util. Code § 25741(b) (2011).

<sup>7.</sup> Cal. Pub. Util. Comm'n D. 11-01-026 (2011).

<sup>8.</sup> Cal. Pub. Util. Comm'n D. 10-03-021 (2010).

<sup>9.</sup> Id.

come from bundled electricity sales from within their territory.<sup>10</sup> This cap will remain in place until 2014. There is also a \$50 price cap on TREC purchases until 2014.<sup>11</sup> TRECs are created only for RPS-eligible projects; distributed generation projects do not create TRECs. In addition to the 33 percent RPS requirement by 2020, Executive Order S-21-09 tasked the California Air Resources Board with responsibility for implementing this new target.<sup>12</sup> Previously, the California Energy Commission and the California Public Utilities Commission oversaw the RPS program.<sup>13</sup>

## 3. Connecticut

In July 2011, Governor Malloy signed into law a comprehensive energy bill,<sup>14</sup> creating the Department of Energy and Environmental Protection (DEEP), which consolidated the existing Departments of Public Utility Control (DPUC) and Environmental Protection (DEP). The DPUC, which was renamed the Public Utilities Regulatory Authority (PURA), is now part of the Energy Branch of DEEP.

Among numerous other responsibilities, DEEP has been tasked with analyzing the feasibility of increasing the RPS requirements in Connecticut.<sup>15</sup> The analysis will include the benefits, costs, and impacts of expanding Class I renewable sources to include hydropower and other technologies that do not use nuclear or fossil fuels.<sup>16</sup> As of February 2012, DEEP had not issued its report.<sup>17</sup>

The new energy bill also created several ways to reduce the Connecticut electric utilities' Class I RPS obligations. The Clean Energy Finance and Investment Authority (CEFIA) is required to develop a residential solar incentive program, resulting in a minimum of thirty MWs of new residential solar by the end of 2022.<sup>18</sup> Energy produced from systems funded by this program is to be used to reduce the utilities' RPS obligations.<sup>19</sup> In addition, a utility can submit a proposal to build, own, or operate one or more generation facilities up to an aggregate of ten MWs using Class I energy sources.<sup>20</sup> Energy produced from such a facility is to be used to reduce its RPS obligations.<sup>21</sup>

<sup>10.</sup> Id.

<sup>11.</sup> Id.

<sup>12.</sup> Exec. Order No. S-21-09.

<sup>13.</sup> See Cal. Pub. Util. Code § 399.13 (2011); Cal. Pub. Util. Comm'n D. 11-01-026 (2011).

<sup>14.</sup> An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future, Pub. Act 11-80 (2011) (new statutory sections are to be codified in the Connecticut General Statutes).

<sup>15.</sup> Id. § 129.

<sup>16.</sup> Currently, Class I hydropower only includes "a run-of-the-river hydropower facility provided such facility has a generating capacity of not more than five MWs, does not cause an appreciable change in the river flow, and began operation after July 1, 2003." CONN. GEN. STAT. § 16-1(a)(26).

<sup>17.</sup> Pub. Act 11-80  $\$  129 (requiring DEEP to issue a report to the governor and legislature by February 1, 2012).

<sup>18.</sup> Id. § 106(a).

<sup>19.</sup> Id. § 106(b).

<sup>20.</sup> Id. § 127(a). Each facility must be greater than one MW but not more than five MWs.

<sup>21.</sup> Id. § 127(c).

## 4. Delaware

In March 2011, the Delaware Public Service Commission (PSC) approved final rules implementing legislation signed into law during 2010.<sup>22</sup> Among the changes is a revised RPS goal of 25 percent renewable sources, including 3.5 percent photovoltaic, by 2025–26.<sup>23</sup> The new rules also permit the PSC to freeze the RPS targets for any year in which it determines that the cost of implementation would exceed 1 percent of the total retail cost of solar power for retail electricity suppliers, or 3 percent of the comparable cost of other renewable power.<sup>24</sup> Beginning in 2013, any rural electric cooperative may opt out of the regulatory scheme by giving notice to the PSC, provided that it implements a comparable program.<sup>25</sup>

In July 2011, the General Assembly enacted Senate Bill No. 124, which provided for additional changes to the RPS rules.<sup>26</sup> S.B. 124 allows energy produced by fuel cells from qualified providers, operated within the state, to be used to satisfy both solar and other renewable energy requirements. One MW hour of energy derived from such fuel cells would be equivalent to one renewable energy credit (REC) and may be used to satisfy solar REC (SREC) requirements at a rate of six to one. To qualify under this provision, a fuel cell provider must be certified by the Delaware Economic Development Office and the Delaware Department of Natural Resources and Environment. The fuel cells must be capable of operating on renewable fuels, but are not required to do so. The PSC has published rules implementing S.B. 124 for comment.<sup>27</sup>

#### 5. Illinois

The Illinois RPS requires a percentage of a covered utility's total supply to serve the load of its retail customers to come from renewable energy sources, starting at 2 percent in 2008 and increasing to 25 percent by 2025. The act creating the RPS was amended to change the definition of "renewable energy resources" to include energy from anaerobic digestion, i.e., the biological process for production of biogas. In addition, a distributed generation requirement for investor-owned electric utilities has been added. The requirement is set at 0.5 percent of the total RPS requirement by June 1, 2013. The requirement increases to 1 percent by June 1, 2015. To the extent available, one-half of that requirement should come from devices of less than 25 kilowatts in nameplate capacity.

<sup>22.</sup> Senate Substitute No. 1 for Senate Bill No. 119 (77 Del. Laws ch. 451).

<sup>23. 26</sup> Del. Admin. Code § 3008, Rule 3.2.1.

<sup>24. 26</sup> Del. Admin. Code § 3008, Rule 3.2.16.

<sup>25. 26</sup> Del. Admin. Code § 3008, Rule 2.4.

<sup>26. 78</sup> Del. Laws ch. 99.

<sup>27.</sup> DEPSC Order 8026, Sept. 6, 2011.

## 6. Indiana

Indiana has implemented a voluntary RPS, known as a clean portfolio standard goal (CPS goal), as defined in Indiana state law.<sup>28</sup> Enacted in May 2011, the Comprehensive Hoosier Option to Incentivize Cleaner Energy (CHOICE) program allows electricity suppliers to apply to the Indiana Utility Regulatory Commission (IURC) to participate in the program. The IURC has established rules for participation.

The CPS goal is divided into three periods, including the following benchmarks:

- a. Period I: For the six calendar years beginning January 1, 2013, and ending December 31, 2018, an average of at least 4 percent of the total electricity obtained by the participating electricity supplier to meet the energy requirements of its Indiana retail electric customers during the base year.
- b. Period II: For the six calendar years beginning January 1, 2019, and ending December 31, 2024, an average of at least 7 percent of the total electricity obtained by the participating electricity supplier to meet the energy requirements of its Indiana retail electric customers during the base year.
- c. Period III: By the calendar year ending December 31, 2025, at least 10 percent of the total electricity obtained by the participating electricity supplier to meet the energy requirements of its Indiana retail electric customers during the base year.<sup>29</sup>

Despite the fact that the program is voluntary, an electric utility must still submit its application to the IURC for approval. The IURC must determine a utility's application is in order and whether a utility may reasonably obtain clean energy to meet the energy requirements of the goal. In addition, to approve the application, the IURC must still determine that it "will not result in an increase to the retail rates and charges of the electricity supplier above what could reasonably be expected if the application were not approved."<sup>30</sup> The IURC is also responsible for promulgating rules governing the program, codified in Article 17 of the Indiana Administrative Code.

## 7. Maine

In June 2011, the Maine legislature passed an energy bill requiring the Maine Public Utilities Commission (PUC) to analyze the costs, benefits, and impacts of RPS requirements, RECs, and alternative compliance payments (ACP).<sup>31</sup> In August, the PUC opened Docket 2011-271 to start collecting comments from stakeholders and interested parties.<sup>32</sup> On January 31, 2012, the PUC issued a

32. Inquiry Into Maine's New Renewable Resource Portfolio Requirement, Docket No. 2011-271 (Me. P.U.C. 2011); see An Act To Reduce Energy Prices for Maine Consumers, ch. 413 § 6.

<sup>28.</sup> Ind. Code Ann. § 8-1-37-5.

<sup>29.</sup> Ind. Code Ann. § 8-1-37-12.

<sup>30.</sup> Ind. Code Ann. § 8-1-37-11.

<sup>31.</sup> An Act To Reduce Energy Prices for Maine Consumers, ch. 413, sec. 6 (2011) (to be codified).

final report to the Joint Standing Committee on Energy, Utilities and Technology,<sup>33</sup> which contained key recommendations and findings regarding (1) the source and cost of RECs used to satisfy the RPS requirements; (2) the impact of Maine generated RECs on the regional market; (3) the impact of the RPS requirements on the viability of RPS eligible electricity generating facilities; (4) the impact of the RPS requirements on Maine electricity costs; (5) the impact of an increase in electricity costs due to the RPS requirements on economic development in Maine; (6) the cost associated with the use of the ACP mechanism and best practices for setting the ACP rate; and (7) the benefits resulting from the RPS requirements.<sup>34</sup>

#### 8. Maryland

In May 2011, Maryland passed two new pieces of RPS legislation impacting RPS standards that reclassified waste-to-energy facilities connected to the Maryland grid and those using refuse-derived fuel as Tier 1 resources. Waste-to-energy facilities previously were classified as Tier 2. These changes took effect October 1, 2011.<sup>35</sup> In addition, Maryland passed legislation in 2011, effective January 1, 2012, permitting solar water heating systems commissioned on or after June 1, 2011, to be eligible for solar RPS.<sup>36</sup>

### 9. Massachusetts

In May 2011, the Massachusetts Department of Energy Resources (DOER) issued revisions to its draft biomass regulation to establish criteria that woody biomass facilities must meet under the state's RPS.<sup>37</sup> The key provisions of the draft proposed regulation include: (1) a definition of eligible biomass woody fuel; (2) a requirement that biomass units provide lifecycle greenhouse gas analysis and demonstrate emissions reductions of at least 50 percent over twenty years; (3) a strict limitation that no more than 15 percent of the weight of harvested forest products can be removed as eligible biomass woody fuel; (4) establishment of a threshold requiring overall efficiency of biomass generation units to be at 40 percent in order to qualify for one-half REC credit per MWh of generation, with REC credit increasing linearly to a full credit at an overall efficiency of 60 percent or above; and (5) provisions for the treatment of existing biomass generation units already qualified for the RPS Class I program.

<sup>33.</sup> MPUC RPS REPORT 2011–REVIEW OF RPS REQUIREMENTS AND COMPLIANCE IN MAINE (Jan. 20, 2012), *available at* www.maine.gov/tools/whatsnew/attach.php?id=349454&an=1.

<sup>34.</sup> Id. at 9.

<sup>35.</sup> S.B. 690 (Md. 2011), available at http://mlis.state.md.us/2011rs/bills/sb/sb0690e.pdf.

<sup>36.</sup> S.B. 717 (Md. 2011), available at http://mlis.state.md.us/2011rs/bills/sb/sb0717e.pdf.

<sup>37.</sup> Renewable Energy Portfolio Standards–Class I (draft regulation proposed on May 29, 2009) (to be codified at 225 MASS. CODE REGS. 14.00), *available at* www.mass.gov/eea/docs/doer/renewables/ biomass/225-cmr-14-00-050311-biomass-draft-reg-with-tracked-changes.pdf.

In June 2011, the Joint Committee on Telecommunications, Utilities, and Energy provided comments on the draft regulation.<sup>38</sup> As of February 16, 2012, the DOER has not issued a final regulation.

#### **10. New Hampshire**

The New Hampshire Public Utilities Commission (PUC) is required to conduct reviews of the RPS program and report its findings to the legislature in 2011, 2018, and 2025.<sup>39</sup> In November 2011, the PUC issued its first report,<sup>40</sup> which, among other things, recommended (1) maintaining the existing class obligations; (2) studying the ramifications of including select micro-hydroelectric resources as eligible Class I resources; (3) studying implications of no longer requiring fish passage of certain Class IV hydropower resources; (4) studying expanding RPS to include thermal only renewable sources; and (5) considering combined heat and power (CHP) as an eligible Class I or III resource.<sup>41</sup> The PUC also has the authority to modify the Class III and IV requirements for calendar years, beginning in 2012,<sup>42</sup> but no modifications have been made as of February 2012.

#### 11. New Jersey

Several changes were made during 2011 to the rules governing New Jersey's RPS, principally to implement the requirements of the Solar Energy Advancement and Fair Competition Act (SEAFCA).<sup>43</sup>

New Jersey recognizes two classes of renewable energy and associated RECs. Class I renewable energy is produced from wind, solar, geothermal, wave, or tidal sources; from landfill or biomass fuel sources; or from fuel cells using renewable fuels. Class II renewable energy is produced at approved resource recovery or select hydroelectric facilities. Each supplier of electricity is expected to retire RECs at least equal to a stated percentage of its total sales to customers regulated by the Board of Public Utilities, with separate requirements for Class I and Class II RECs. Each supplier is required to use SREC to meet a specified portion of its Class I requirements.

SEAFCA dramatically increased New Jersey's targets for solar generation, which are now set to ramp up from 306 GW hours in the 2010–11 energy

<sup>38.</sup> *See* Letter from Benjamin Downing, Senate Chair of the Joint Comm'n on Telecomm., Util. and Energy, and John Keenan, House Chair of the Joint Comm'n on Telecomm., Util. and Energy, to Mark Sylvia, Comm'r at the Mass. Dep't of Energy Res. (June 10, 2011), *available at* www.mass. gov/eea/docs/doer/renewables/biomass/committee-biomass-rpt-jun10-2011.pdf.

<sup>39.</sup> N.H. Rev. Stat. Ann. § 362-F:5.

<sup>40. 2011</sup> RENEWABLE ENERGY PORTFOLIO STANDARD REVIEW REPORT TO THE NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION TO THE NEW HAMPSHIRE GENERAL COURT (Nov. 1, 2011), *available at* www.puc. nh.gov/Sustainable%20Energy/RPS%20Review%202011.pdf.

<sup>41.</sup> Id.

<sup>42.</sup> N.H. Rev. Stat. Ann. § 362-F:4(VI).

<sup>43.</sup> P.L. 2009, c. 289.

year to 5,316 GW hours in the 2025–2026 energy year.<sup>44</sup> Rather than being expressed as a required percentage of each supplier's total regulated sales, SREC requirements are allocated among all electricity providers based on their share of the regulated electricity market.

New rules were also established to implement the Offshore Wind Economic Development Act.<sup>45</sup> In anticipation of future offshore wind development, the rules now provide for offshore wind renewable energy certificates (ORECs). Statewide OREC targets will be determined by the BPU and allocated among electricity providers in proportion to their retail sales. Like SRECs, ORECs will count toward each provider's Class I requirements.<sup>46</sup>

### 12. New Mexico

New Mexico established an RPS goal of 20 percent for IOUs and 10 percent for rural electric cooperatives by 2020. By 2011, the RPS was 10 percent of retail sales in KW hours.

## 13. New York

The New York Public Service Commission (PSC) declined an opportunity to add regenerative elevator drive technology to the list of those eligible for the customer-sited tier of New York's RPS program.<sup>47</sup> Regenerative elevator drives capture the energy developed when a weight going down, whether elevator or counterweight, exceeds the weight going up, and uses that energy to generate electricity. The PSC ruled that such a device reduces the energy consumption of the integrated elevator system, but does not constitute renewable generation because "without consuming electricity from the grid, it cannot generate electricity, renewable or not."<sup>48</sup>

#### 14. Rhode Island

In July 2011, Rhode Island established a renewable energy coordinating board to draft and recommend a strategic renewable energy implementation plan.<sup>49</sup> The plan coordinates state agencies' implementation of renewable energy policies, including the renewable energy standard (RES).<sup>50</sup> The board is required to issue a report to the governor, legislature, and state agencies in March and September every other year.<sup>51</sup> The first report was due March 15, 2012.<sup>52</sup>

<sup>44.</sup> N.J. Admin. Code § 14:8-2.3, Table B (2011).

<sup>45.</sup> P.L. 2010, c. 57.

<sup>46.</sup> N.J. Admin. Code § 14:8-6.2 (2011).

<sup>47.</sup> N.Y. PSC Order, Case 03-E-0188, Aug. 19, 2011.

<sup>48.</sup> Id. at 7.

<sup>49.</sup> R.I. GEN. LAWS § 42-140.3-8.

<sup>50.</sup> R.I. Gen. Laws § 42-140.3-11(7).

<sup>51.</sup> R.I. Gen. Laws § 42-140.3-8(e).

<sup>52.</sup> R.I. GEN. LAWS § 42-140.3-8(e).

#### 15. Vermont

In May 2011, Governor Shumlin signed into law an energy bill, adding a base load renewable power portfolio requirement as a separate requirement from the Sustainably Priced Energy Enterprise Development (SPEED) program.<sup>53</sup> The new base load renewable power portfolio requires an annual average of 175,000 MWh base load renewable power from an in-state woody biomass plant with a nominal capacity of 20.5 MW.<sup>54</sup> The SPEED facilitator will purchase the power and allocate the electricity, any associated costs, and RECs to the utilities.<sup>55</sup> Separately, the Biomass Energy Development Working Group issued a final report to the state legislature in January 2012, providing recommendations in the areas of modeling, enhancement and development, and forest health.<sup>56</sup>

The Vermont Public Service Board (PSB) is required to consider changing Vermont's SPEED program goals to RPS requirements.<sup>57</sup> In October 2011, the PSB issued its report recommending to the Vermont legislature that it adopt an RPS rather than revise the SPEED program.<sup>58</sup> The PSB concluded that a renewable energy requirement in the form of the proposed RPS that mandates that each utility's load consist of 75 percent renewable electricity by 2033–34 is a reasonable goal.<sup>59</sup> As of February 16, 2012, the legislature has not amended the statutory language to reflect the PSB's recommendations.<sup>60</sup>

#### 16. Virginia

In 2011, the Virginia State Corporation Commission heard two cases of first impression involving the interpretation and implementation of the commonwealth's voluntary RPS program.<sup>61</sup> Dominion Virginia Power filed a petition for declaratory judgment asking the commission to find that it has the right to use the energy it purchases from a municipal waste energy generator toward

<sup>53.</sup> Vt. Stat. Ann. tit. 30, § 8009.

<sup>54.</sup> VT. STAT. ANN. tit. 30, § 8009(2).

<sup>55.</sup> VT. STAT. ANN. tit. 30, § 8009(f)(1)-(2).

<sup>56.</sup> BIOMASS ENERGY DEVELOPMENT WORKING GROUP FINAL REPORT (Jan. 17, 2012), available at www.leg.state.vt.us/REPORTS/2012LegislativeReports/272678.pdf. The working group was established pursuant to Act No. 37, 2009 Sess., § 1 and includes representatives of related industry, state government, nonprofits, and education.

<sup>57.</sup> Act No. 159, 2010 Sess., § 13a(b); Act No. 49, 2011 Sess., § 20e(b)(1).

<sup>58.</sup> STUDY ON RENEWABLE ELECTRICITY REQUIREMENTS PREPARED BY THE VERMONT PUBLIC SERVICE BOARD PURSUANT TO SECTION 13A OF PUBLIC ACT 159, 2 (Oct. 3, 2011), *available at* http://psb. vermont.gov/sites/psb/files/publications/Reports%20to%20legislature/RPSreport2011/Study%20on %20Renewable%20Electricity%20Requirements%20-%20Final.pdf.

<sup>59.</sup> *Id.* at 32. The PSB proposal recommends beginning the RPS requirement in 2014 and increasing it incrementally over a twenty-year period.

<sup>60.</sup> On January 3, 2012, a bill was introduced into both the House (H. 468) and Senate (S. 170) to create an RPS and amend the SPEED program. As of February 16, 2012, both bills were in committee.

<sup>61.</sup> VA. CODE ANN., § 56-585.2. Sale of electricity from renewable sources through a renewable energy portfolio standard program, *available at* http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod +56-585.2.

its RPS goals. Dominion purchased the energy from Covanta, the owner of the generator, under a PPA that was silent regarding the ownership of RECs. Covanta argued that it owned the RECs and therefore had the right to sell the RECs into the market and thus Dominion could not count the related energy as renewable energy. On June 21, 2011, the commission found that Dominion could (and, indeed, was obligated to) count the renewable energy it purchases from Covanta towards its RPS goals, but that Covanta was not prohibited by statute from selling the RECs associated with that energy into the market, before or after Dominion applies the renewable energy towards meeting the RPS goals.<sup>62</sup>

In a second action, the commission approved the first application for recovery of costs associated with the RPS program and permitted Appalachian Power Company to recover its incremental costs for the two wind power purchase agreements through which the company meets the RPS goals. Commission staff argued that the company's recovery should have been reduced by an amount equal to an estimate of what the company could have received on the REC market for the sale of the RECs that were not necessary for compliance. Instead, the commission ordered the company to show in a subsequent proceeding that the decision to sell or not to sell RECs was prudent, noting that the company has an affirmative obligation to manage the treatment of RECs for the benefit of the customers.<sup>63</sup>

#### 17. West Virginia

In July 2011, West Virginia added "any component of raw natural gas" to the definition of natural gas in the state's list of alternative energy resources.<sup>64</sup>

### 18. Wisconsin

The Wisconsin RPS set an overall statewide renewable energy target of 15 percent by 2015. The RPS has been amended to allow electricity from large hydropower facilities (60 MW or more) to be counted toward the RPS requirement beginning December 31, 2015, if the facility is placed in service on or after December 31, 2010. Hydropower facilities located in Manitoba can qualify if specific conditions set forth in the amendment are satisfied. In addition, the Wisconsin Public Service Commission has adopted final rules that implement legislation permitting the creation of renewable resource credits from the displacement of conventional electricity by the use of nonelectric facilities under certain circumstances.<sup>65</sup>

<sup>62.</sup> Order on Petition, *Petition of Virginia Electric and Power Company for a declaratory judgment*, Case No. PUE-2010-00132 (June 17, 2011).

<sup>63.</sup> Order Approving Rate Adjustment Clause, *Petition of Appalachian Power Company*, Case No. PUE-2011-00034 (Nov. 3, 2011).

<sup>64.</sup> W. VA. CODE § 24-2F-3(3)(C).

<sup>65.</sup> Order Adopting Final Rules in Docket 1-AC-234, Wisconsin Public Service Commission, dated Oct. 6, 2011.