2013 RPS Legislation:

Gauging the

Despite challenges in many states, 2013 has been a year of progress for renewable portfolio standards.

Renewable portfolio standards (RPSs) have long served as a key driver of state-level renewables markets. Lawrence Berkeley National Lab has projected that if full RPS policy compliance is achieved in all states with such policies currently on the books, 93,000 megawatts (MW) of new renewables will be added to U.S. grid by 2035.[1]

For several months in 2013, efforts to scrap or diminish RPS policies held the national spotlight, with numerous media forecasting a grim outlook for these policies. However, as of September, only seven states had enacted legislation to amend their RPS policies, and in our judgment, 2013 is yet another year of overall RPS policy advancement. For descriptions of RPS legislation introduced in 2013, see our April 2013 report.[2]

Our assertion requires some justification. This article profiles 11 bills enacted in seven states in 2013, with an emphasis on quantifying the changes made, including the amount of additional new renewables required and the amount of existing resources newly qualified for the standard. Because RPS policy implementation is rooted in supply and demand, we've grouped these bills into two general categories: those that primarily affect demand for renewables (e.g.,

SOLAR TODAY
NOVEMBER/DECEMBER 2013
VOL. 27, NO. 7

Impacts

SWEDISH WIND FARM BY TOMASZ SIENICKI

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Maryland's H.B. 226, with a carve-out for offshore wind power, could support up to 1.6 million megawatt-hours (MWh) of new wind generation in 2017 and beyond, equivalent to 450 to 500 MW. However, PSC analysis of cost limitations suggests a likely maximum of 725,000 MWh, equivalent to roughly 210 MW of new offshore wind.

establishment of new targets, reductions in targets), and those that primarily affect supply (e.g., resource or renewable energy credit eligibility).

Demand-Side Changes

The most significant impacts of demand-side legislative changes in 2013 involve new requirements in Colorado, Maryland and Minnesota, as indicated in table 1 on page 18. The collective new benchmarks appear likely to eventually support more than 1,000 MW of additional renewables, including more than 500 MW of additional solar. The actual figures will depend on several factors, such as load growth, resource mix (as it influences capacity estimates), the use of compliance multipliers and the triggering of cost caps. Moreover, these impacts will not be wholly state-specific. For instance, the impact of Maryland's offshore wind carve-out

1 http://www.cleanenergystates.org/assets/2012-Files/RPS/RPS-SummitDec2012Barbose.pdf
2 http://www.kfwlaw.com/wp-content/uploads/2013/09/RPS_Legislation_KFW_Apr2013_sm.pdf

ALEC's efforts to repeal state RPS laws flopped in 2013. It's now drafting two new model bills for the 2014 legislative session that aim to diminish RPS policies.

TABLE 1 **Demand-Side Changes to State RPS Policies in 2013**

Bill	Changes to Law	Potential Impacts
CO S.B. 252	• Effectively raises the RPS for co-ops from 10% to 20% by 2020. • Establishes a distributed generation (DG) carve-out of 1% for co-ops with 10,000 or more customers and 0.75% for smaller co-ops; 50% of the carve-out must come from customer-sited systems. • Allows coal-mine methane and certain municipal solid waste (MSW) pyrolysis to qualify for the RPS. • Expands cost cap from 1% to 2% for co-ops. • Eliminates in-state resource preferences. • A separate executive order establishes an advisory committee that will evaluate the effectiveness and feasibility of the new law.	**Overall RPS**: 1.3 million MWh of additional renewables generation required by 2020 (i.e., approximately 430 MW, assuming an average capacity factor of 35% for wind). Impact of coal-mine methane and MSW pyrolysis uncertain. **DG**: 150,000 MWh of DG generation required by 2020, including 75,000 MWh from customer-sited systems (i.e., approximately 120 MW for larger co-ops and approximately 60 MW for larger co-ops, assuming an average capacity factor of 15% for solar).
MD H.B. 226	• Creates an offshore wind carve-out of up to 2.5% by 2017, reducing the requirement for other Tier 1 resources by an equivalent amount. • Establishes various cost-containment measures and protocols for approval of qualified resources.	**Offshore Wind**: Could support up to 1.6 million MWh of new offshore wind generation in 2017 and beyond, equivalent to 450-500 MW. However, PSC analysis of cost limitations suggests a likely maximum of 725,000 MWh, equivalent to roughly 210 MW of new offshore wind. **Other Tier I Resources**: Reduction in MWh requirement equivalent to any offshore wind contribution.
MN H.B. 729; S.B. 1057	• Establishes PV carve-out of 1.5% by 2020 for IOUs, of which 10% is required from customer-sited systems up to 20 kW. • Establishes related PV incentives, including a general statewide performance-based incentive (PBI) for systems up to 20 kW; a separate rebate for systems using Minnesota-made components for systems up to 40 kW; and a Value-of-Solar Tariff (VOST). • Explicitly assigns REC ownership to the utility for the Minnesota-Made incentive and the VOST, but not for net metering or the statewide PBI.	**PV**: 450 MW of new PV generation, of which 45 MW would be required from systems up to 20 kW.
MT S.B. 164	• Exempts from the RPS utilities serving 50 or fewer customers.	**Overall RPS**: Exempts Avista and Black Hills Power from the RPS, reducing the amount of renewable generation needed under the standard by 0.7% (approximately 5,100 MWh out of a total requirement of approximately 714,000 MWh in 2012).
MT S.B. 327	• Exempts from the RPS competitive suppliers serving four or fewer customers.	**Overall RPS**: Exempts Conoco-Philips from the standard, reducing the amount of renewable generation needed under the standard by 1.7% (roughly 12,350 MWh out of a total requirement of 714,000 MWh in 2012).
WA H.B. 1222; S.B. 5297	• Creates an additional alternative compliance method for utilities that have purchased only coal transition power since Dec. 7, 2006.	**Overall RPS**: Potentially reduces the amount of renewables generation required by giving Puget Sound Energy and any new purchasers of Centralia Coal energy an alternative compliance method that does not involve additional purchases of renewables. The ultimate impact is uncertain.

will depend on what can be achieved within the associated ratepayer impact limitations, and whatever is achieved will reduce demand for other Tier I resources in the state, which affects available supply on a regional level. Minnesota's new solar carve-out is unclear on whether existing and out-of-state resources qualify and how some other programs authorized in the legislation will operate within the context of RPS (i.e., renewable energy credit, REC, ownership). The outcomes, when determined, could have both state and regional implications for solar development. Legislation enacted that had the effect of reducing existing RPS policies was generally minimal in impact (e.g., in Montana), although the impact of Washington's legislation is difficult to predict.

Supply-Side Changes

Like demand-side RPS changes, supply-side RPS changes often have regional rather than state-specific impacts and in some cases involve an amount of uncertainty. Connecticut's RPS bill is probably the best example of both interstate connectedness and uncertainty; each individual provision has implications for regional supply and demand, and some important details (e.g., the strategy for a migration away from existing biomass and landfill gas dependence) are undetermined. The same could be said for RPS amendments enacted in Nevada, where it is uncertain whether utilities will be able to sell excess credits, and in Montana, where it is unknown to what extent the RPS amendments will stimulate hydropower expansions. Table 2 (facing page) outlines the changes and impacts of supply-side legislation enacted in 2013.

None of the enacted supply-side bills seems destined to have an immediate, significant or detrimental impact on renewables as a whole. On the contrary, the potential negative impacts likely will be small (e.g., the qualification of treated wood as biomass in Montana), while other changes have either generally positive implications, or represent accommodations that are not necessarily unreasonable or detrimental in the context of furthering renewables development. For solar specifically, we believe that the impacts are almost entirely positive, providing potential financing support for grid-supply projects in

New England, and at least slightly better opportunities for solar growth in Nevada.

2013-2014 Legislative Outlook for RPS Policies

Although most state legislatures have closed up shop for 2013, a few RPS bills could see action in the 10 state legislatures still in session. A total of six "weakening" bills are still in play in Ohio, Wisconsin, Pennsylvania and California; we consider Ohio's RPS repeal bill (S.B. 58) the most likely to see any real action. Ten "strengthening" bills remain in committee in Pennsylvania, New York, New Jersey, Michigan, Massachusetts and the District of Columbia (D.C.); the D.C. bill (B20-0418) to eliminate black liquor and other forms of biomass as eligible resources is the only such bill under active consideration.

Looking forward to 2014, it is almost certain that legislators will continue to debate and tinker with RPS policies. However, activity might be muted because in many states, even-year legislative sessions are less active than odd-year sessions, and some states (such as Montana and Texas) are not scheduled to convene at all in 2014. In addition, it is expected that many of the unresolved issues in 2013 will be carried forward for discussion in 2014, especially in the 25 states (and D.C.) that carry over legislation from odd-year sessions to even-year sessions.

The American Legislative Exchange Council (ALEC), which has been credited with (and discredited for) stirring up several RPS repeal efforts in 2013, has been busy drafting two new model bills for the 2014 legislative session that aim to diminish state RPS policies. Although ALEC's efforts to repeal state RPS laws flopped in 2013, it appears that the organization is converting its strategy for 2014 to an approach that sounds (at least superficially) less "anti-renewables." Together, the two new model bills — the Market-Power Renewables Act and Renewable Energy Credit Act — would phase out RPS requirements, replace them with voluntary markets, expand the types of energy that would qualify as renewable, remove caps on the amount of RECs that may be used for compliance, and allow bulk purchases of RECs to be used for compliance in advance of future requirements. Thus, the new model bills amount to a change in branding and design, but with the same underlying intent.

It is very likely that further legislative efforts to repeal, freeze or otherwise dismantle RPS policies will continue in 2014, and that at least some of these efforts will contain provisions inspired by ALEC's model bills. For instance, we consider it very likely that bills seeking to expand resource definitions to include large or existing hydropower will crop up in states such as Maine and others that saw similar efforts during 2013. However, while predictions of legislative outcomes are always speculative, we do not see any compelling reasons suggesting that 2014 outcomes will be much different than 2013 outcomes. We expect states to continue making measured revisions that generally portend positive impacts on renewables development. **ST**

TABLE 2 **Supply-Side Changes to State RPS Policies in 2013**

Bill	Changes to Law	Potential Impacts
CT S.B. 1138	• Increases size limit of small hydro from 5 MW to 30 MW for Class I resources and removes river-flow impact limitation. • Gradually reduces REC values for biomass and landfill gas. • Prohibits REC double-counting for out-of-state resources. • Sets conditions and limits for large hydro qualification as a Class I resource. • Establishes long-term contracting programs for new and existing Class I resources (up to 4% of retail load each).	**Small Hydropower**: Qualifies an estimated 70 MW of existing hydropower in New England as a Class I resource. **Out-of State Resources**: Disqualifies an estimated 21.6 MW of existing resources in NY and prevents qualification of more than 20 MW of resources in VT. **Biomass/Landfill Gas**: Reduction strategy hasn't been determined, but could affect approximately 350 MW of existing facilities currently qualified as Class I resources. **New Class I Contracting**: Per a July 2013 RFP, 174 MW (525 MW of wind capacity) under long-term electricity and/or REC contracts, limited to facilities 20 MW or larger in aggregate.
MT S.B. 325	• Revises the definition of eligible biomass to allow chemically-treated wood to qualify as a renewable resource.	**Non-Biomass Renewables**: Could experience reduced opportunities under the standard, but the actual impact is unknown. Currently, no utilities are using biomass to comply with the RPS, and no biomass facilities exist in MT.
MT S.B. 45	• Allows incremental generation from expansions of existing hydropower facilities that commence construction after Oct. 1, 2013, to qualify for the standard.	**Non-Hydro Resources**: Could experience reduced opportunities under the standard, but the impact is unknown. Montana has more than 2,700 MW of hydro capacity; a large base exists for potential expansions, although much of it is federally owned.
NV S.B. 252	• Eliminates the current 2.4-multiplier for PV for facilities constructed after 2015. • Limits energy efficiency to 25% of standard in 2013 and 2014; 20% for 2015-19; 10% for 2020-24; and none thereafter. • Establishes separate protocols for utilities to sell excess RECs where the surplus exceeds 10% and 25% of the subsequent year's compliance requirement.	**Energy-Efficiency Phase-Out:** Results in approximately 8 million to 9.5 million MWh of additional renewables generation required through 2025. Coupled with compliance requirement increases, could impact solar by forcing utilities to use solar credits to meet the general renewables requirement. **Excess Credit Sales:** If credit sales take place, they will likely be most impactful for the solar tier, which has a larger expected surplus in relation to compliance requirements than the general renewables tier. Sales are unlikely to impact utility use of efficiency for compliance because excess credits may be difficult to sell and utilities will unlikely need to utilize past surpluses under the reduced allowances for efficiency under the standard.
WA S.B. 5400	• Allows utilities that serve retail customers in other states to use owned or contracted generation from renewables facilities (except hydropower) in those states to meet the WA RPS.	**Overall RPS:** Effectively increases the renewables supply available to PacifiCorp. In practice, it will allow 1,133 MW of PacifiCorp's wind resources in eastern Wyoming to qualify for the RPS. Previously, these resources would have qualified only if the electricity was delivered into WA on a real-time basis.