RPS Collaborative Webinar

Implementing Expanded RPSs in Oregon and Rhode Island

Hosted by Warren Leon, Executive Director, CESA

January 25, 2017



Housekeeping



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RPS Collaborative

- With funding from the Energy Foundation and the US Department of Energy, CESA facilitates the **Collaborative**.
- Includes state RPS administrators, federal agency representatives, and other stakeholders.
- Advances dialogue and learning about RPS programs by examining the challenges and potential solutions for successful implementation of state RPS programs, including identification of best practices.
- To sign up for the Collaborative listserv to get the monthly newsletter and announcements of upcoming events, see: www.cesa.org/projects/state-federal-rps-collaborative



building a new energy future

ENERGY



Today's Guest Speakers

- Linda George, Senior Legal Counsel at the Rhode Island Public Utilities Commission
- **Rebecca Smith**, Senior Policy Analyst at the Oregon Department of Energy



RHODE ISLAND Renewable Energy Standard

Clean Energy States Alliance Collaborative Webinar Implementing Expanded RPSs in Oregon and Rhode Island

> Linda George, Sr. Legal Counsel RI Public Utilities Commission

> > January 25, 2016

RI Renewable Energy Standard

- RI was first to restructure retail electricity; mandate applies to all retail electrical energy suppliers
- National Grid is ~65% of load; competitive suppliers ~32%; ~2% attributed to two small, exempt utilities
- Enacted in 2004, beginning in 2007 at 3% of retail sales
- Original Standard increased incrementally to 16% in 2019, then maintained, subject to Public Utilities Commission (PUC) review
- No more than 2% can come from pre-1998 resources, annually
- Allows 2 years of banking of excess New RECs

RI Renewable Energy Standard

- Original Standard authorized PUC to delay the annual increase, or recommend a revised schedule to the General Assembly, if it determines that there is an actual or potential inadequate supply of renewable energy
- The PUC delayed the 1.5% increase for 2015, citing the availability and cost of renewable energy supplies (RECs), reducing the final target to 14.5% by 2019

2016 Legislative Amendments to the RES

- Increases the RES
 - Continue the current 1.5% annual increases in the renewable energy requirement an additional 15 years, from 2020 to 2035.
 - Final target is 38.5%
- Modified PUC Review
 - PUC to review the adequacy of supply every 5 years, maintains authority to delay annual increase or recommend a revised schedule to the General Assembly
 - Removes the consideration of potential inadequacy of supply

Financial Surety for Nonregulated Power Producers

- In 2013 and 2014, two competitive energy suppliers filed for bankruptcy and left combined outstanding obligation of 4,206 MW; effect will span into 2015
- Combined Alternative Compliance Value (ACP) of >\$278k
- Rhode Island did not meet its RES target for these years (e.g., 99.3% RES compliance in 2014)
- Legislation enacted in 2016, requires competitive suppliers to provide financial surety as a condition licensing

Alternative Compliance Payments

- An obligated entity may meet its RES obligation by retiring RECs or making Alternative Compliance Payments (ACP)
- ACP acts as a price cap for RECs
 - \$67.00 per MWh for Compliance Year 2016
 - Adjusted annually with Consumer Price Index
- ACPs paid to the RI Commerce Corp.'s Renewable Energy Fund, which supports the development of renewable energy projects

Compliance by Fuel Type (2014)



Compliance by Geographic Location (2014)



Laws and Policies that Support the RES

Long-Term Contracts

- requires the distribution company to procure 90 MW of renewable energy resources in annual solicitations over four years, beginning in 2010
- 90 MW including reduction for capacity factor—<u>not</u> 90 MW nameplate
- Power Purchase Agreements can (and typically do) include sale of all products generated, including energy, capacity, and RECs
- RI Landfill Gas Project
- Block Island Wind Farm
 - 5-turbine, 30 MW project off the coast of RI
 - First offshore wind project in the US
 - PPA includes the sale of RECs
- Others include facilities in New York; not all 90 MW are operational

Other RI Laws and Policies that Support the RES

- Fixed rate Feed in Tariff Renewable Energy Growth Program
- Renewable Energy Fund provides grants and loans to help develop renewable energy projects and is funded through a nominal surcharge on most customers' electricity bill and ACPs.
- Affordable Clean Energy Security Act: Allows National Grid to participate in regional purchasing of clean energy projects
- 30 MW statewide of community remote net metering and shared solar projects; no cap on remote net metering for public entities.
- Authorize 3rd party ownership of net metering projects
- Established a statewide tax rate for commercial renewable energy systems
- Exempts residential renewable energy systems and those used in manufacturing from taxation
- Interconnection PUC approves the interconnection tariff

Trends

- The number of facilities certified under the RI RES continues to increase
- The supply of and demand for new RECs were in near equilibrium for 2014.
- Load growth in the state and region is low in the near term
- There is potential for these trends to continue in the near term
- Electrical load growth expected to increase in the long term
- All states in the region now have Class I RPS; regional renewable demand will increase dramatically by 2025
- Supply growth should continue as renewable policy initiatives of each New England state takes hold.
- ISO-New England stakeholders, including states, are discussing ways to integrate public policy and wholesale markets in the long term

RI RES Links

- RES Webpage: http://www.ripuc.org/utilityinfo/res.html
- 2014 Compliance Year Annual Report: http://www.ripuc.org/utilityinfo/RES-2014-AnnualReport.pdf
- RES Statute: <u>http://webserver.rilin.state.ri.us/Statutes/TITLE39/39-26/INDEX.HTM</u>
- Feed-In Tariff Program <u>http://webserver.rilin.state.ri.us/Statutes/TITLE39/39-26.6/INDEX.HTM</u>
- Financial Surety Nonregulated Power Producers
 <u>http://webserver.rilin.state.ri.us/Statutes/TITLE39/39-1/39-1-27.1.HTM</u>
- RI Renewable Energy Fund:
 http://commerceri.com/finance-business/renewable-energy-fund/
- Long-Term Contracts Statute <u>http://webserver.rilin.state.ri.us/Statutes/TITLE39/39-26.1/INDEX.HTM</u>
- Community Remote Net Metering
 <u>http://webserver.rilin.state.ri.us/Statutes/TITLE39/39-26.4/INDEX.HTM</u>
- Interconnection <u>http://webserver.rilin.state.ri.us/Statutes/TITLE39/39-26.3/INDEX.HTM</u>
- Statewide Solar Permitting <u>http://webserver.rilin.state.ri.us/Statutes/TITLE42/42-64.13/42-64.13-11.HTM</u>
- Statewide Tax Rate for Commercial Renewable Energy Systems <u>http://webserver.rilin.state.ri.us/Statutes/TITLE44/44-5/44-5-3.HTM</u>
- ISO-New England Public Policy & Wholesale Market Integration Study <u>http://nepool.com/IMAPP.php</u>

Questions?

Linda George Sr. Legal Counsel 401-780-2179 Linda.george@puc.ri.gov

Todd Bianco Principal Policy Associate 401-780-2106 Todd.bianco@puc.ri.gov

The Oregon Renewable Portfolio Standard:

New Targets, New Challenges



Outline

- 1. The Oregon RPS background
- 2. The new RPS targets and related legislation
- 3. Meeting the RPS targets then and now
- 4. Looking forward



Oregon's RPS: Established 2007

- 25% by 2025 for large utilities
- Eligible COD of Jan 1, 1995 or later
- RECs tracked through WREGIS

RPS Targets in Percent of Retail Electricity Sales





Flexibility Mechanisms

Cost Limitation	A utility is not required to comply with the RPS in a given year to extent the incremental cost exceeds 4% of its annual revenue requirement.
Alternative Compliance Payments	Utilities may use alternative compliance payments to meet RPS requirements in any year.
Unlimited Banking of RECs	Utilities can bank renewable energy credits for compliance in future years.
Unbundled Certificates	Large utilities can use unbundled RECs to meet up to 20% of RPS requirements in any year. Before 2020, a large consumer-owned utility can use 50% unbundled credits. There is no limit on the amount small utilities and ESSs can use.
Delayed Requirements for Utilities That Grow	Small utilities whose loads grow to >3% of statewide load after 2007 have an extended timeline to meet the standard.



Oregon RPS Administration





RPS Compliance in 2015

• Both of Oregon's IOUs met their 15 percent RPS target

	Portland General Electric	PacifiCorp
Cost of compliance (4% cost cap)	2.2%	0.27%
Percent unbundled RECs used (20% unbundled cap)	19.64%	10.97%



SB 1547 (2016) Changes to RPS

- RPS targets increased
- REC banking rules
- Thermal RECs added
- Flexibility mechanisms
- Cost cap calculations
- Coal phase out
- EV infrastructure





Old + New Oregon RPS Targets (%)

	Original Targets for Large Utilities	New Targets for Large COUs	New Targets for Large IOUs
2011 - 2014	5	5	5
2015 - 2019	15	15	15
2020 - 2024	20	20	20
2025 - Forward	25	25	
2025 - 2029			27
2030 - 2034			35
2035 - 2039			45
2040 -			50



New REC Banking Rules

Original Rules

- Unlimited REC banking for all!
- RECs must be retired according to First In, First Out (FIFO)

New Rules

- Pre-SB 1547 RECs are "golden RECs"
- Only COUs have unlimited banking
- 5 REC freshness categories based on COD
- Removes FIFO (for IOUs and ESSes)



Meeting the New Targets: Option 1

Business as Usual

- Utilities conduct RPS compliance planning as part of their overall integrated resource planning (IRP)
 - Utilities determine when to add resources versus when to meet targets with bundled and unbundled RECs
 - PUC and stakeholders evaluate these plans and their underlying assumptions



Barriers, Opportunities, Trends

- Cost of compliance
- Grid reliability
- Load balancing
- Intermittent generation
- Energy storage
- Demand response
- Transportation electrification

- Related policies (i.e. GHGs)
- Interconnection costs
- Emerging markets for clean fuels, pipeline renewable natural gas
- Smart grid technologies
- Federal funding and tax credits
- Emerging renewable energy technologies



Meeting the New Targets: Option 2

A New Framework

- PUC, ODOE, utilities, stakeholders, neighboring states, collaborate to develop a systems approach:
 - Identify barriers and opportunities to RPS attainment
 - Determine short- and medium-term goals
 - Identify overlapping policy imperatives, potential policy tradeoffs
 - Conduct scenarios analyses



Business as Usual or a New Framework?

- In reality, probably a bit of both
- Oregon on track to meet goals in the short-term
- Medium- and long-term goal attainment will benefit from collaboration and innovative approaches

Rebecca Smith Senior Policy Analyst Oregon Department of Energy

rebecca.smith@oregon.gov or (503) 373-7955



Thank you for attending our webinar

Warren Leon RPS Project Director, CESA Executive Director wleon@cleanegroup.org

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