

Rhode Island RE Growth

SolarWise and RE Growth Modifications Review and Discussion

Rhode Island Distributed Generation Board Meeting
October 19, 2015



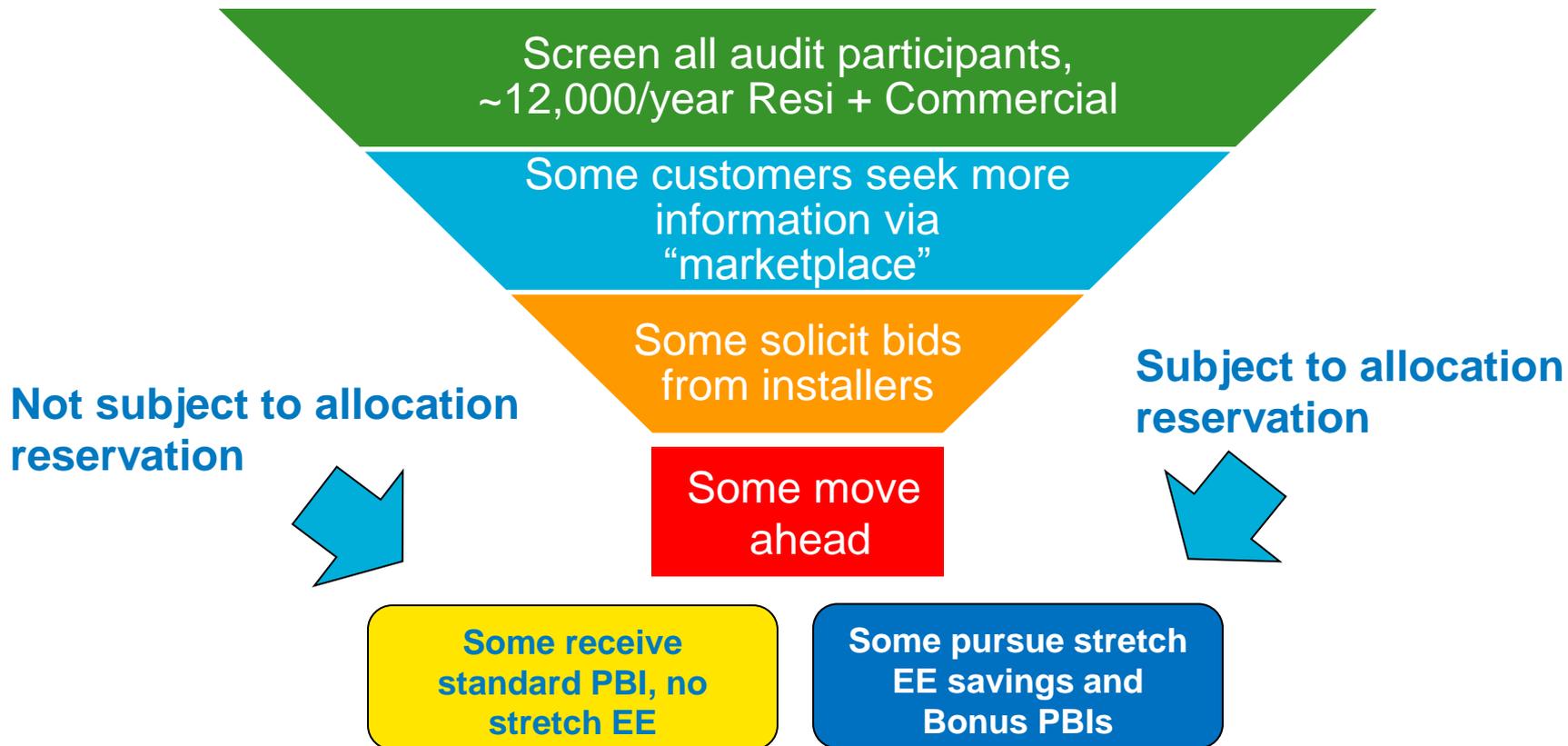
SolarWise: EE + RE Growth

- EE-driven solar PV promotion program to bring information and ease of access to customers
- Help customers manage their energy use and costs
- Incentive for customers that reach savings “stretch levels” compared to current or baseline usage
- Minor changes to the RE Growth Tariffs
 - Added SolarWise
 - Refined “segmentation”
 - Modified requirements to match the process for RES and NEPOOL GIS registration

Two Main Elements to SolarWise

1. Solar screening and easy access to solar installation quotes
 - Reduce soft costs and increase competition through an on-line marketplace with vendors
2. Bonus schedule on the standard Performance Based Incentives (PBIs) offered for reaching “stretch” levels of energy efficiency
 - Incentivize uptake of solar with deep energy savings that will decrease the maximum kW per customer
 - Create sense of urgency with limited time offer
 - Designed to be material but not create windfall profits

SolarWise Participation Funnel



SolarWise Screening

- Will consider shading, roof size, usage history, and EE savings
- Done remotely using GIS and LIDAR data
- Delivered by EE auditor during the assessment, or while in design review for new construction
- Screening and audit costs will be incremental costs to the RE Growth program

SolarWise Marketplace

- Customers invited to access the Marketplace to detail their estimate and seek quotes from enrolled installers
- Potential savings on installation cost from competition and volume from installers
- Customers are free to choose any offer or offers outside the “marketplace”
- Vendor to provide advisory support to help customers understand different offers
- Value analysis will integrate RE Growth PBI and bill credit values into comparison of all options provided, along with ownership options

SolarWise Bonus Incentives

- Bonus Awards for up to 2.5 MW of capacity: 1.5 MW from Small Solar, 1 MW from Medium Solar
- Offers available to all customers for both new construction and retrofit projects, in both residential and Commercial & Industrial (C&I) sectors
- Simplified Bonus Tiers compared to initial design: Easier administration and customer experience
- Awards based solely on achieved or committed (for C&I customers) EE savings compared to recent usage (12-month history)
- New construction needs to meet total energy savings levels that are better than code, based on building modeling/estimates

SolarWise Savings Thresholds - Residential

Table 1. Residential SolarWise Bonus Award Eligibility Criteria

	SolarWise Tier 1	SolarWise Tier 2
New Homes and Major Renovation/Rehabilitation	30% lower total energy use than RI reference home (Residential New Construction program Tier 2)	45% lower total energy use than RI reference home (Residential New Construction program Tier 3)
Existing Building Retrofit (lighting, weatherization, and individual appliances)	Implement electricity savings measures totaling at least 15% of last 12-months of usage, as identified through the No Cost Energy Assessment	Tier One threshold PLUS: All Weatherization recommendations from No Cost Energy Assessment, OR Other electric-specific measures that total at least 400 kWh per year

SolarWise Savings Thresholds - Commercial

Table 2. Commercial SolarWise Bonus Award Eligibility Criteria

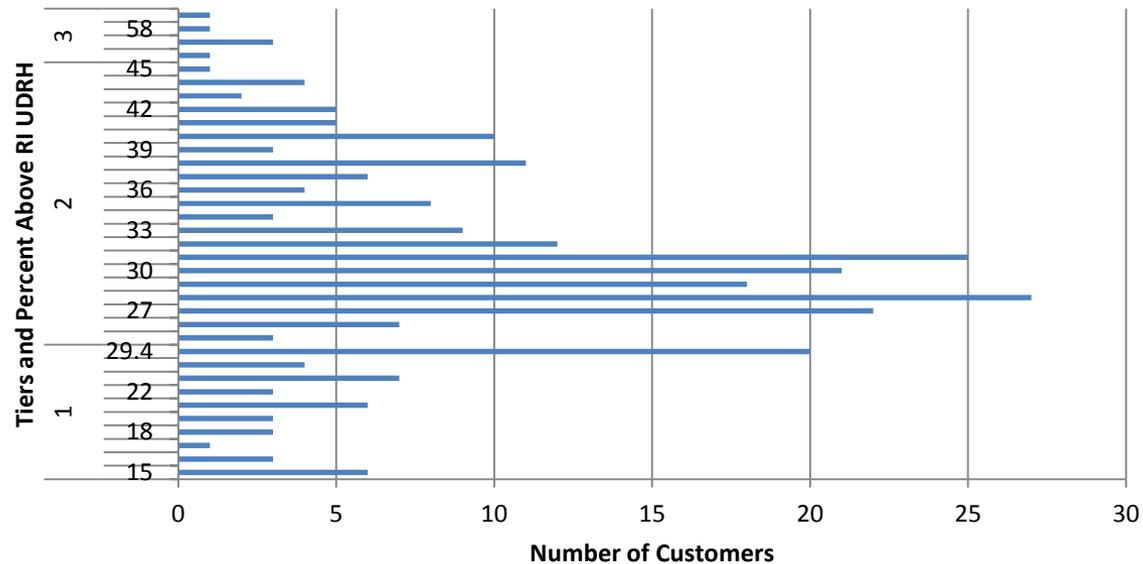
New Buildings and Major Renovation / Rehab	15% lower total energy use than current code (2012 IECC) modeled or engineering calculations	20% lower total energy use than current code (2012 IECC) modeled or engineering calculations
Existing Building Retrofit (lighting & controls, weatherization, water heating, HVAC & controls, other equipment) For customers served on rates C-06 or G-02	Implement electric savings measures totaling at least 20% of last 12 months of electric usage	Implement electric savings measures totaling at least 25% of last 12 months of electric usage
Existing Building Retrofit (lighting & controls, weatherization, water heating, HVAC & controls, other equipment) For customers served on Rates G-32 or G-62	Implement electric savings measures totaling at least 7% of last 12 months of electric usage	Implement electric savings measures totaling at least 12% of last 12 months of electric usage

SolarWise Bonus Levels

SolarWise Tier	Renewable Energy Growth Program Performance Based Incentive Percentage Increase
Tier One	5%
Tier Two	10%
Tier One – Small Solar TPO	2%
Tier Two – Small Solar TPO	4%

Savings History Drives Thresholds

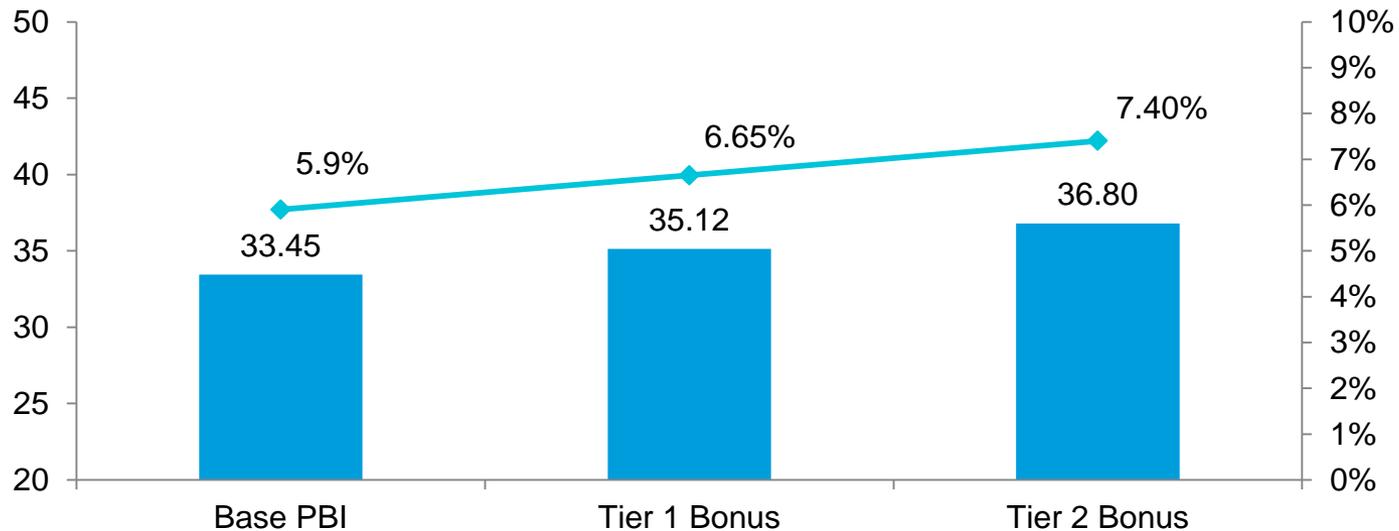
Residential New Construction 2014



C&I experience is similar for the thresholds chosen



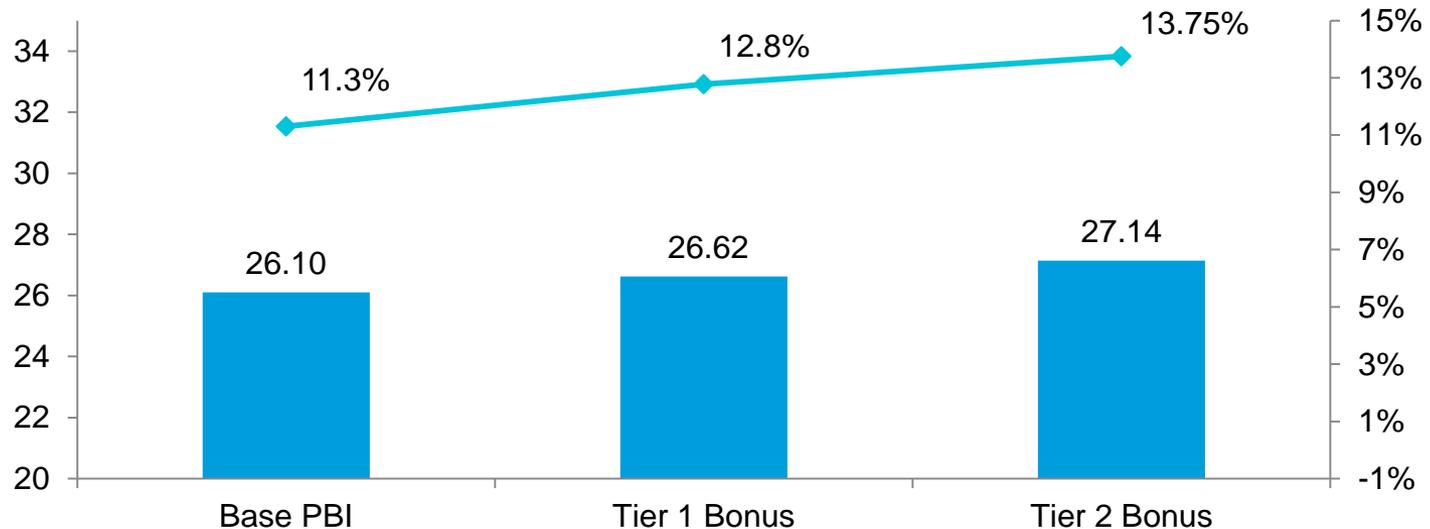
Award Levels Analysis – Resident Owned Example



Small Solar I, Resident Owned, 20 year Tariff



Awards Level Analysis – Third Party Owned Example



Small Solar I, Third Party Owned, 20 year Tariff

SolarWise Benefits – Select Stats

	Without SolarWise	Tier 1 Threshold	Tier 2 Threshold
<i>Smaller System Sizes – Example of Residential At 100% Usage</i>	8 kW	6.83 kW	6.5 kW
<i>Lower Cost per System – Example of Residential</i>	\$30,874	\$26,227	\$24,922
<i>Lower PBIs per Customer – Residential Yr. 1</i>	\$3,035	\$2,682	\$2,646
<i>More Participants Served –for 2.5 MW total</i>	161 (est.)	191 (est.)	

Other Changes to RE Growth

- In July, National Grid received approval of RES REC aggregation status for enrollment of small solar systems in the RI RES
- National Grid also arranged with NEPOOL-GIS to have all REC output assigned to it aggregated in one account
- Completing one form now allows small system owners to enroll and transfer RECs to the Company as required under the statute
- These changes are now reflected in the Residential and Non-Residential tariffs as requirements
- Also enhanced segmentation section language based on questions and submittals in enrollments so far