EXHIBIT B

ATTACHED PRESENTATIONS PROVIDED

1. National Grid – RE Growth Enrollment and Tariff Overview – September 22, 2014

2. Sustainable Energy Advantage – Call for Data to Inform 2015 Ceiling Price Development – September 2014

3. National Grid – RE Growth Program Public Review Meeting – October 14, 2014

4. DG Board - 2015 REG Program Drafted 2015 Megawatt Allocation Plan – October 2014

5. Sustainable Energy Advantage – Calculation of Initial 2015 Ceiling Price Recommendations – October 20, 2014

6. Sustainable Energy Advantage – 1st Revision to Proposed 2015 Ceiling Price Recommendations – November 20, 2014

7. DG Board - Recommended 2015 Renewable Energy Growth Program – December 9, 2014

8. National Grid - RE Growth Program Public Review Meeting - December 9, 2014

9. Sustainable Energy Advantage – 2nd Revision to Proposed 2015 Ceiling Price Recommendations – December 9, 2014

10. Sustainable Energy Advantage - RI Renewable Energy Growth - 2015 Ceiling Price Data Request - FINAL

11. Sustainable Energy Advantage - Distributed Materials and Information - DG Board Memo - December 17, 2014

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RE Growth Enrollment and Tariff Overview

Presentation to the Rhode Island Distributed Generation Board

September 22, 2014

The RE Growth Program

- The Program is the result of legislation passed in July 2014 and signed by Gov. Chafee
- The law requires National Grid to seek and enroll 160 MW of nameplate capacity of qualified DG facilities over 5 years, plus any remaining DG Standard Contract capacity at the discretion of the DG Board
- The program is required to be implemented through a tariff rather than contracts
- Enrollees can be paid directly, or integrate their payments with net metering for the kWh value of their usage

Why a tariff?

- In the case of a regulated utility, a tariff is the approved set of rules and rates under which it offers and charges for its service, and has the force of law – it is the means by which utilities do business
- In this case, the RE Growth Program tariff will be an addition to the Narragansett Electric Co. filed tariff
- The RE Growth tariff section will provide a simple, level playing field to customers and other potential DG owners interested in selling DG output and/or RECs to the Company, per the law
- Contracts, by contrast, are often negotiated, and often involve outside legal counsel. By contrast, in a tariff offering, the PUC process pre-negotiates the terms for customers and ensures they are fair.

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Organization of RE Growth Program

Getting In:

Enrollment Rules and Application, Certificate Issuance

Rules of the Program:

Eligibility, Deposit, and Terms to Start Payment

Bringing Systems Online:

Construction, Output Test, Effective Date of Certificate

Overview of Filings and Process

Enrollment Rules

- Eligibility
- Selection Process
- Threshold Criteria: to require a completed Impact Study
- Deposit Requirement for >250kW solar and other technologies
- Ownership of Output is described
- Certificate Issuance by Company to small/med solar, by PUC to all others
- Metering requirements for interconnection design

Tariff Contents

- Terms of PG Deposit
- Interconnection and Metering Specifics
- Ownership of output defined
- Applicant to provide and control inputs, including transfers
- Anti-Segmentation language
- Indicates that Applicant gets PBI
- Terms of termination
- Terms to trigger PBI specified, and payment methods defined

Construction, Output Test and Effective Date

- Systems must meet statutory deadlines for completion
- Output test to be replaced with Output Certification by an professional engineer
- Net Metering credits are directed by Applicant to eligible customer prior to COD
- Trigger start of PBI payments when all conditions met: Effective Date

Customer view of RE Growth

- Applicants contact National Grid to start interconnection study process, receive Interconnection application number
  - Applicant may be an existing customer, or a project sponsor without an account
- National Grid completes Impact Studies as needed; Applicants for simplified applications (25 kW or less) enter enrollment first and apply for interconnection after grant of Certificate
- Applicants apply for REG tariff enrollment offered by National Grid
- National Grid selects Applicants per the Enrollment Rules; small/medium solar Certificates issued by Company, >250 kW solar and other technology is issued/approved by the PUC
- Applicants/Certificate holders complete installation of systems, and National Grid installs meters and completes all upgrades needed.
- Applicant must select if it will net meter, and indicate account to receive credits prior to Effective Date of the Certificate period
- Once Applicant meets all conditions for payment, the Certificate becomes effective and payments begin under the tariff
- National Grid pays the net PBI each billing period, with any kWh credits flowing to indicated net metering account (subject to eligibility under the Net Metering tariff)

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Transfers, Payments and Net Metering

- The Applicant will control the information that is captured by the Company and Commission on the Application and potential Certificate
- The Applicant determines where the PBI is sent, and what account, if any, would receive value for net metering.
- The Company will deduct those kWh-based bill credits from the total PBI, and credit them on the target account's bill.
- The Applicant may transfer the Application or Certificate to another entity by written notification to the Company (60 days notice), or other secure means, as available.

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Anticipated Timeline

- File preliminary package of Enrollment Rules and Tariff with the DG Board for review – Oct. 2
- Receive comments from the DG Board – Requesting comments by Oct. 28, with review lasting until Nov. 15
- File Rules and Tariff with the PUC – Nov. 15
- PUC vote on the filing – By March 31
- First enrollment – Late Spring 2015

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Rhode Island Distributed Generation Board

CALL FOR DATA TO INFORM 2015 CEILING PRICE DEVELOPMENT

DUE DATE* FOR SUBMISSION: *FRIDAY, OCTOBER 10, 2014

Submit electronically to: *jgifford@seadvantage.com*

All Data Request responses are voluntary and will be kept confidential in accordance with the State's Access to Public Record Act. Any information provided in a Data Request response will not be identified in relation to, or attributed to, an individual respondent in any public presentation or public document.

Dear Renewable Energy Growth Program Participants and All Interested Stakeholders:

The Distributed Generation Board (DG Board) and Office of Energy Resources (OER) have initiated the process to develop Ceiling Prices for the 2015 Renewable Energy Growth (REG) program. The Board and OER invite participants, and any other interested parties, to provide detailed cost, performance and financing data to inform the 2015 Ceiling Price development process. Detailed data from both proposed and operating projects in Rhode Island and the rest of the region are requested. As with the DG Standard Contracts Program, opportunities will exist for both written comments and participation in public meetings. **The purpose of this memo is to request your specific input on the modeling assumptions which will support the ceiling price analysis.** This is the first in a multi-step process. The DG Board and OER, with technical consultants Sustainable Energy Advantage, LLC and Meister Consultants Group, Inc. will:

(1) Collect **detailed** input data from program participants, stakeholders and other sources,
(2) Develop proposed Ceiling Prices and request stakeholder comments,
(3) Revise proposed Ceiling Prices, as appropriate, and participate in Public Meetings, and
(4) Submit recommended Ceiling Prices to the PUC.

The DG Board and OER will complete the initial research phase by October 10th. The DG Board will host a public meeting on October 20th to review the initial Ceiling Price analysis[1]. Ceiling Price recommendations will be finalized and submitted to the PUC in early December. **Your active participation** in developing the Ceiling Price inputs is critical to achieving a robust process, as well as a program which is able to achieve its objectives on schedule.

[1] Despite the compact schedule, the OER, Board and SEA will make every effort circulate public meeting materials in advance.

The SEA Team will use the National Renewable Energy Laboratory's Cost of Renewable Energy Spreadsheet Tool (CREST) to conduct analyses which will inform the DG Board's Ceiling Price recommendations to the Public Utilities Commission. The CREST models – and associated User Manual – are available to all stakeholders, without charge, on NREL's Renewable Energy Project Finance website.

2015 REG Program Recommendations – Ceiling Prices and Tariff Length Parameters

For the 2015 DG REG Program solicitations, the DG Board and OER have established the following Ceiling Price technology, system size and tariff length parameters. These program details take into account comments received from DG Board members, the OER, National Grid, and stakeholders, as well as the results of the 2012-2014 REF and DG Programs.

Eligible Technology	System Size for CP Development	Eligible System Size Range	Tariff Length
Small Solar I*	5 kW	1 to 10 kW	15 and 20 Years Options
Small Solar II	25 kW	11 to 25 kW	20 Years
Medium Solar	140 kW	26 to 250 kW	20 Years
Commercial Solar	500 kW	251 to 999 kW	20 Years
Large Solar	1.5 MW	1 to 5 MW	20 Years
Wind I	1.65 MW	1.5 to 2.99 MW	20 Years
Wind II	3.3 MW	3 to 5 MW	20 Years
Anaerobic Digestion I	325 kW	150 to 500 kW	20 Years
Anaerobic Digestion II	750 kW	501 kW to 1 MW	20 Years
Small Scale Hydropower I	150 kW	10 to 250 kW	20 Years
Small Scale Hydropower II	500 kW	251 to 1 MW	20 Years
* The Small Solar I (5 kW) category will be used to evaluate both residential and small business installations. Residential installations will be evaluated under both homeowner and third-party ownership.			

A list of the inputs sought is included in the tables below. All parties are asked to use this format for their response. Please enter the system size (in the header) associated with your response, and submit a separate form for each system size. **Please read each description carefully and be as detailed and thorough as possible in your response.** Survey respondents must state the sources for all data submitted; sources include, without limitation, personal experience or data gathered through development and financing of renewable energy projects, as well as proprietary business information.

Please **submit your recommended inputs no later than Friday October 10, 2014**. Please contact Jason Gifford at (802) 846-7627 or jgifford@seadvantage.com with any questions or clarifications that would help you fulfill this data request more easily and completely. The DG Board and OER value your input and appreciate your active participation in this process.

Data Request:

CREST is a levelized cost of energy (LCOE) model. It converts input for capital costs, fixed and variable maintenance, system performance characteristics, capital structure, cost of capital, and Federal and State incentives into the revenue stream required to provide a specified return to investors over a defined period of time. For the purpose of establishing Ceiling Prices, we assume the subject projects are owned by private sector investors – with the exception that Small Solar I will be evaluated under both homeowner and third-party ownership. The sensitivity to the availability of federal incentives will be also tested, as follows:

Technology	Federal Incentive Cases[2]
Solar	1. For all third-party owned solar projects: a. With Investment Tax Credit (ITC) @ 30%; b. With ITC @ 10% 2. For homeowner owned solar projects: a. With ITC @ 30%; b. With ITC @ 0%
Wind	1. With ITC 2. With Production Tax Credit[3] (PTC) 3. Without ITC or PTC
Anaerobic Digestion	1. With PTC 2. Without PTC
Hydropower	1. With PTC 2. Without PTC

The following tables represent the <u>key inputs for which we seek your specific feedback</u>. Please fill out the tables below <u>as completely, and in as much detail, as your expertise allows</u>. Short definitions of each of the inputs are provided before the tables. We ask that you **<u>read these definitions</u>** carefully before completing the tables, as it is important that we are able to consider recommended inputs on an apples-to-apples basis. (For example, parties may aggregate operations and maintenance (O&M) costs differently.) Please <u>conform your cost information to our line items</u> in order for the information you provide to be of greatest utility in calculating Ceiling Prices. Please provide sources (as previously described) for all recommended inputs.

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[2] Federal bonus depreciation was available to projects entering commercial operation on or before December 31, 2013. This analysis assumes that the bonus depreciation inventive is not renewed.

[3] In this case, the Federal PTC is assumed to have been renewed retroactively to January 1, 2014, but <u>without</u> the option to elect the ITC in lieu thereof. Both ITC and PTC CP options will be evaluated.

DEFINITIONS

Net capacity factor (NCF), Year 1 (%) - Capacity Factor is the % representation of the actual annual production vs. the theoretical maximum annual production of an energy project. This model requires the input of a Net Capacity Factor, meaning that the estimate of actual energy production should take into account all electricity losses (including those incurred between the generating facility and the contract delivery point), scheduled and unscheduled maintenance, shading, forced outages, and any other factors that could reduce production. For a solar facility, both capacity and capacity factor should be reported as DC. For a wind plant, this number should reflect the average annual P50 estimate.

Total installed cost: This includes the total expected all-in installed project cost, which should include all hardware, balance of plant, design, construction, permitting, development (including developer fee), interest during construction and financing costs. This figure should not account for any tax incentives, grants, or other cash incentives, which will be accounted for separately. It should also exclude the assumed interconnection cost, which is specified separately.

Interconnection cost: Please include your assumptions about the "typical" interconnection cost for a system in Rhode Island. Interconnection costs include costs relating to connecting to the grid, such as the construction of transmission lines, permitting costs with the utility, and start-up costs. This category will also include the cost of a new substation, if necessary.

O&M expenses: Operations and maintenance includes all fixed and variable expenses associated with project operations. Annual expenses for insurance, property taxes, land leases, royalties, and project management should be itemized separately.

Length of construction period: The # of months from construction start to commercial operation.

Source and cost of construction financing: This indicated whether construction is funded with debt, equity or a combination thereof, and at what interest rate or target IRR.

Permanent Debt-to-equity ratio: This specifies the ratio of the portion of funds borrowed (as a percentage of the total hard costs) to the portion of project funds supplied as equity. This is typically expressed as Debt / Equity – i.e. 70/30 or 50/50, etc.

Interest rate: The all-in interest rate is the financing rate provided by the bank or other debt investor.

Lender's Fee: The fee taken by the bank for originating the loan. It is expressed as a percentage of the total amount borrowed.

Avg . Debt Service Coverage Ratio: Denotes the requirement for cash flow available for debt service to be larger than the annual debt obligation itself. It is typically expressed as a ratio of EBITDA (operating income) to annual debt service obligation. This Input is the average DSCR required by the lender during the term of the loan.

Min. Debt Service Coverage Ratio: Denotes the requirement for cash flow available for debt service to be larger than the annual debt obligation itself. It is typically expressed as a ratio of EBITDA (operating income) to annual debt service obligation. This Input is the minimum DSCR required by the lender during each year of operation.

Return on equity: This is the minimum after-tax internal rate of return required to attract equity investment to a project of the indicated scale, with the indicated D/E ratio.

Decommissioning Reserve: Represents the potential need to encumber cash flows from operations in order to demonstrate the availability of funds sufficient to pay for the removal of equipment from the project site at the conclusion of the facility's useful life.

Capital Expenditures During Operations: Costs associated with the replacement of major equipment components, which are capitalized and depreciated (generally) rather than being included in operations and maintenance expenses.

Technology: Solar System Size for CP Development: 5___25___140___500___1,500___kW DC (Check One) Installation Type: Non-Residential ______ Residential ______ (Check One) If Residential Installation, specify ownership: Homeowner____ Third-Party____(Check One)			
Input category	**Recommended Input**	**Notes on Assumptions**	**Source**
Expected Annual Average Net capacity factor, (%)			
Annual Production Degradation (%)			
Total installed cost ($/kW$_{DC}$), **excluding** Interconnection Cost			
Typical Interconnection cost ($)			
O&M expenses ($/kW$_{DC}$-yr), Yr 1 (excluding those listed below)			
Insurance, Yr 1, (provide as % of total project cost, or in $/yr)			
Project Management, Yr 1 ($/yr)			
Land Lease, Yr 1 ($/yr)			
Annual average escalation rate for O&M expenses (%)			
Royalties (% of revenue, or $/yr)			
Property Taxes ($ in Yr 1 and annual adjustment factor, or as annual estimates with methodology clearly described[4])			
Decommissioning Reserve? If yes, how much?			
Capital Expenditures During Operations: E.G. Inverter Replacement (please denote the Project Yr {i.e. Yr 12} during which the expenditure takes place, the nominal $ cost, and the type of expenditure)[5]			
See request on next page for solar financing assumptions.			
Other Comments:			

[4] The methodology, assumptions and calculation of annual property tax estimates can be provided separately.
[5] If there are multiple expenditures, please list multiple inputs.

Technology: Solar **System Size for CP Development: 5___25___140___500___1,500___kW DC (Check One)** **Installation Type: Non-Residential ______ Residential ______ (Check One)** **If Residential Installation, specify ownership: Homeowner____ Third-Party____(Check One)**			
Financing Assumptions With 30%ITC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			
Financing Assumptions With 10% ITC (0% for Homeowner-Owned Systems)			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			

Technology: Wind System Size for Ceiling Price Development: 1.65___3.3___ MW (Check One)			
Input category	**Recommended Input**	**Notes on Assumptions**	**Source**
Expected Annual Average Net capacity factor, (%)			
Annual Production Degradation (%)			
Total installed cost ($/kW), **excl.** Interconnection Cost			
Typical Interconnection cost ($)			
O&M expenses ($/kW-yr), Yr 1 (excluding those listed below)			
Insurance, Yr 1, (provide as % of total project cost, or in $/yr)			
Project Management, Yr 1 ($/yr)			
Land Lease, Yr 1 ($/yr)			
Annual average escalation rate for O&M expenses (%)			
Royalties (% of revenue, or $/yr)			
Property Taxes ($ in Yr 1 and annual adjustment factor, or as annual estimates with methodology clearly described[6])			
Decommissioning Reserve? If yes, how much?			
Capital Expenditures During Operations: E.G. Gearbox/Blade Replacement (please denote the Project Yr {i.e. Yr 10} during which the expenditure takes place, the $ cost, and the type of expenditure)[7]			
See request on next page for wind financing assumptions <u>with and without</u> ITC/PTC.			
Other Comments:			

[6] The methodology, assumptions and calculation of annual property tax estimates can be provided separately.

[7] If there are multiple expenditures, please list multiple inputs.

Technology: Wind System Size for Ceiling Price Development: 1.65___3.3___ MW (Check One)			
Financing Assumptions With ITC in lieu of PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			
Financing Assumptions With PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			
Financing Assumptions Without ITC/PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			

Technology: Anaerobic Digestion System Size for Ceiling Price Development: 325___750___ kW (Check One)			
Input category	**Recommended Input**	**Notes on Assumptions**	**Source**
Biogas consumption/day (cubic ft/day)			
Energy content/cubic foot (BTU/cubic ft)			
Heat Rate (BTU/kWh)			
Availability Factor			
Station Service/Parasitic Load			
Annual Production Degradation (%)			
Total installed cost ($/kW), **excl.** Interconnection Cost			
Typical Interconnection cost ($)			
O&M expenses ($/kW-yr), Yr 1 (excluding those listed below)			
Variable O&M (¢/kWh), Yr 1 (excluding those listed below)			
Insurance, Yr 1, (provide as % of total project cost, or in $/yr)			
Project Management, Yr 1 ($/yr)			
Land Lease, Yr 1 ($/yr)			
Annual average escalation rate for O&M expenses (%)			
Royalties (% of revenue, or $/yr)			
Property Taxes ($ in Yr 1 and annual adjustment factor, or as annual estimates with methodology clearly described[8])			
Decommissioning Reserve? How much?			
Capital Expenditures During Operations: Capitalized and Depreciated (please denote the Project Yr {i.e. Yr 10} during which the expenditure takes place, the $ cost, and the type of expenditure)[9]			
Tipping Fees/Digestate Rev, if applicable: $/ton, and tons per year			
See request on next page for anaerobic digestion financing assumptions <u>with and without</u> PTC.			

[8] The methodology, assumptions and calculation of annual property tax estimates can be provided separately.

[9] If there are multiple expenditures, please list multiple inputs

Other Comments:			
Technology: Anaerobic Digestion **System Size for Ceiling Price Development: 325___750___ kW (Check One)**			
Financing Assumptions With PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			
Financing Assumptions Without PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			

Technology: Hydroelectric[10] System Size for Ceiling Price Development: 150___500___ kW (Check One)			
Input category	**Recommended Input**	**Notes on Assumptions**	**Source**
Expected Annual Average Net capacity factor, (%)			
Annual Production Degradation (%)			
Total installed cost ($/kW), **excl.** Interconnection Cost			
Typical Interconnection cost ($)			
O&M expenses ($/kW-yr), Yr 1 (excluding those listed below)			
Variable O&M (¢/kWh), Yr 1 (excluding those listed below)			
Insurance, Yr 1, (provide as % of total project cost, or in $/yr)			
Project Management, Yr 1 ($/yr)			
Land Lease, Yr 1 ($/yr)			
Annual average escalation rate for O&M expenses (%)			
Royalties (% of revenue, or $/yr)			
Property Taxes ($ in Yr 1 and annual adjustment factor, or as annual estimates with methodology clearly described[11])			
Length of construction period (mos)			
Source (D/E) and cost (e.g. interest rate) of construction financing			
Decommissioning Reserve? If yes, how much?			
Capital Expenditures During Operations (please denote the Project Yr {i.e. Yr 10} during which the expenditure takes place, the $ cost, and the type of expenditure)[12]			
See request on next page for hydroelectric financing assumptions with and without PTC.			

[10] To be eligible for s contract under this program, a hydro facility must meet the RI RES eligibility criteria established in CRIR 90-060-015 Rules and Regulations Governing the Implementation of a Renewable Energy Standard.

[11] The methodology, assumptions and calculation of annual property tax estimates can be provided separately.

[12] If multiple expenditures, please list multiple inputs

Other Comments:			
Technology: Hydroelectric **System Size for Ceiling Price Development: 150___500___ kW (Check One)**			
Financing Assumptions With PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			
Financing Assumptions Without PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			

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RE Growth Program Public Review Meeting

Rhode Island Distributed Generation Board

October 14, 2014

RE Growth Program Highlights

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- Promotes distributed generation across Rhode Island
- Will create local energy, economic and environmental benefits
- Quadruples capacity available compared with DG Standard Contract Program, to 160 MW over five years
- Simple, always-open enrollment for Residential customers
- Easier application process for non-residential customers and “stand-alone” systems
- Integrates net metering option for customers, and allows for locational and other incentives

RE Growth Program Process

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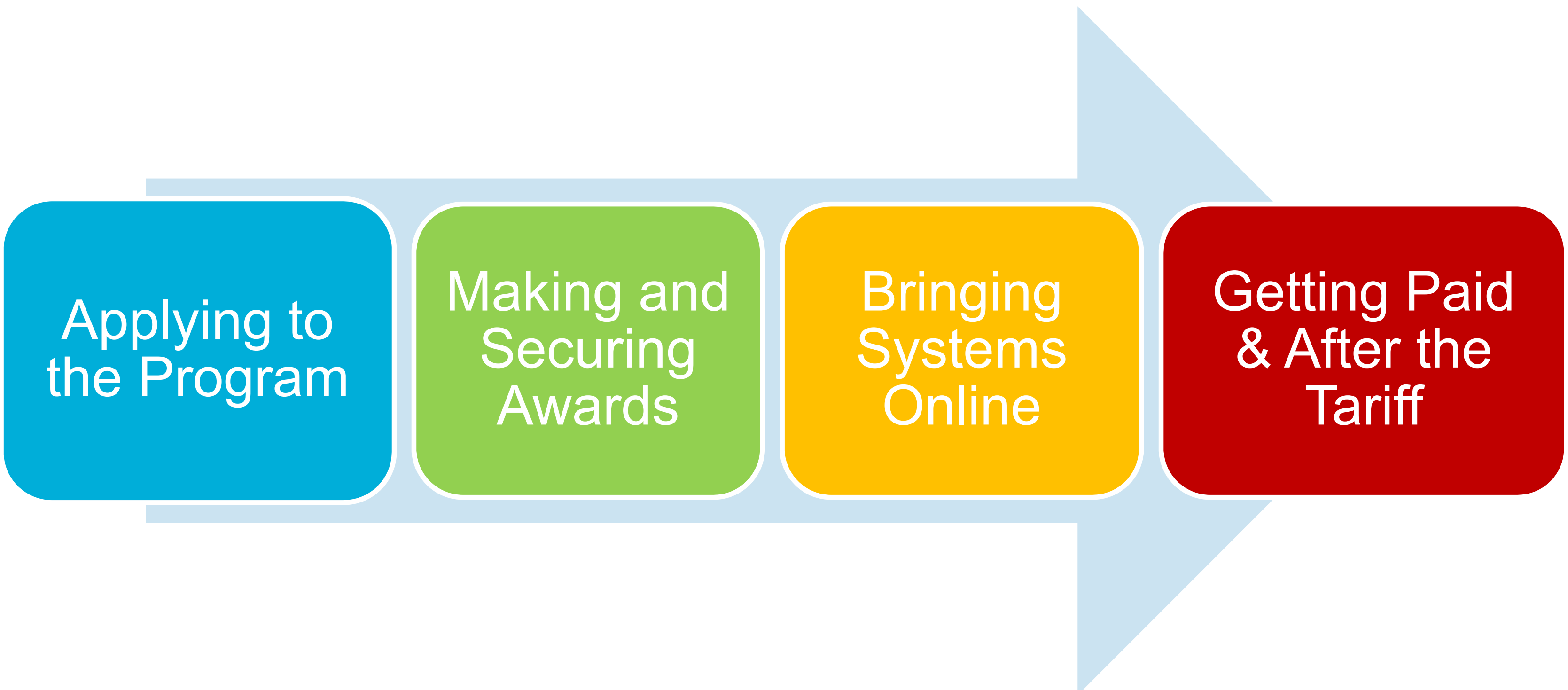

Residential Program

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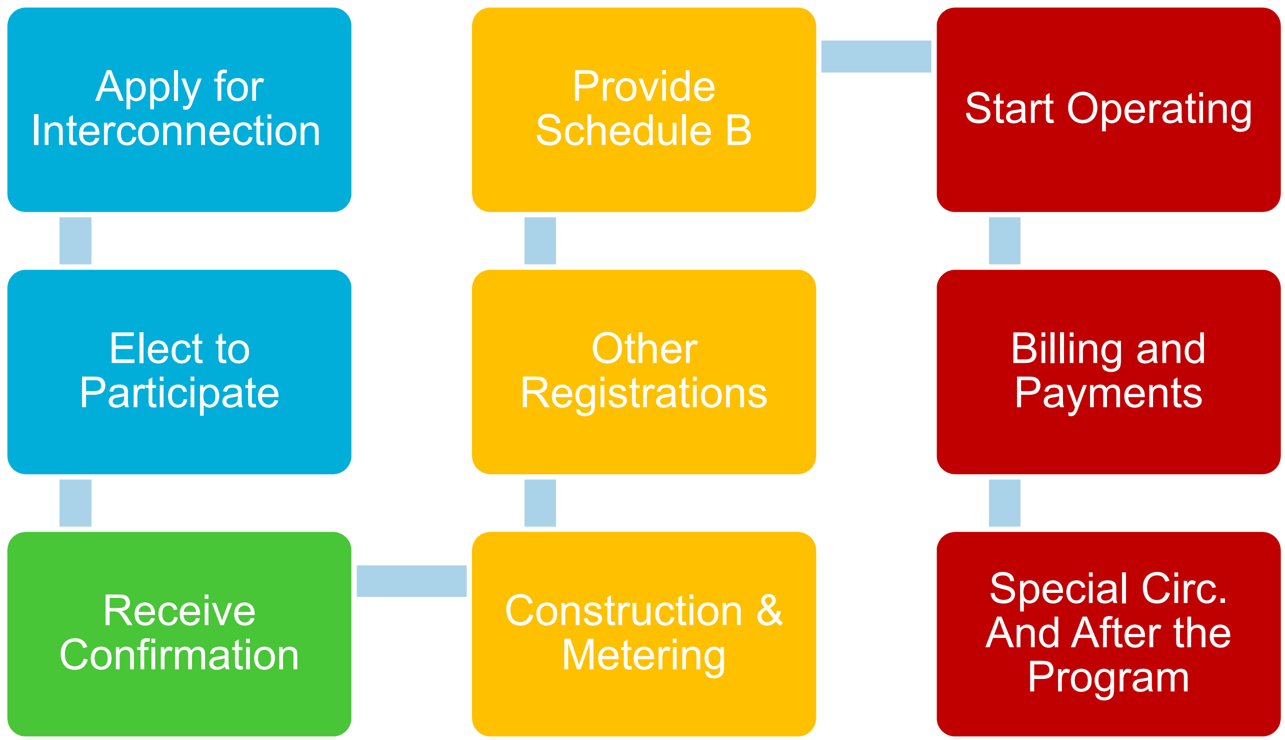

Non-residential Program Flow

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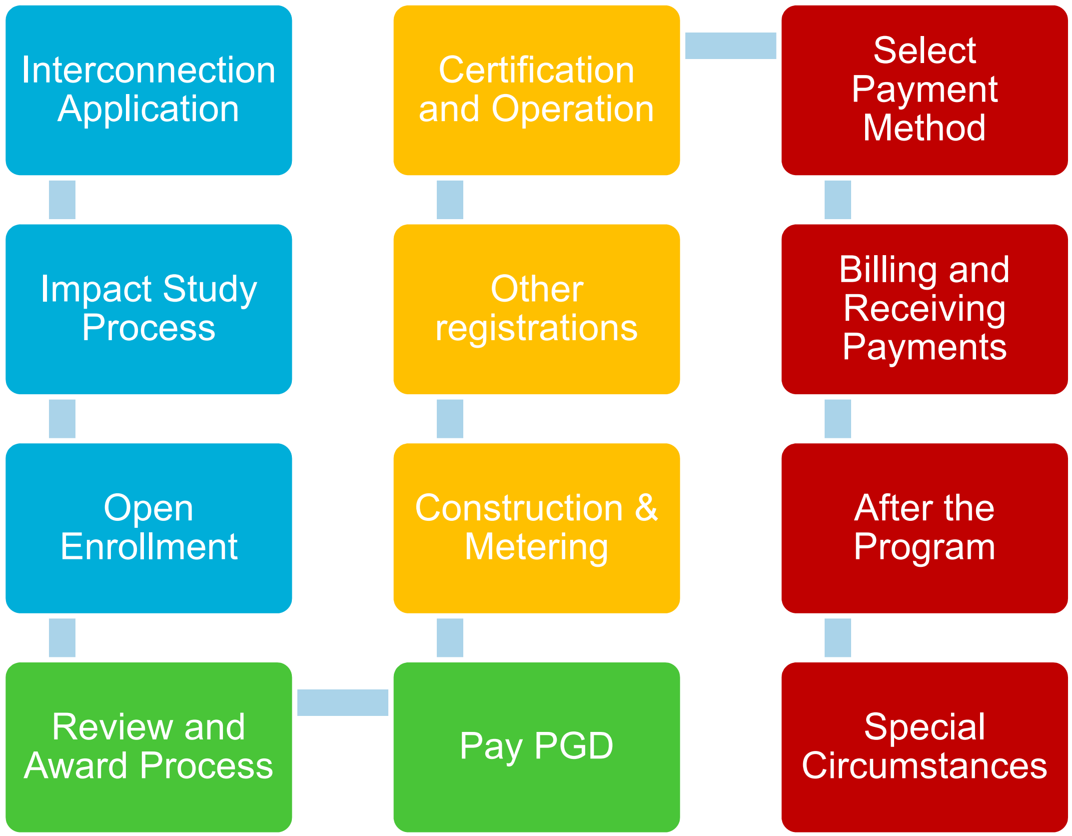

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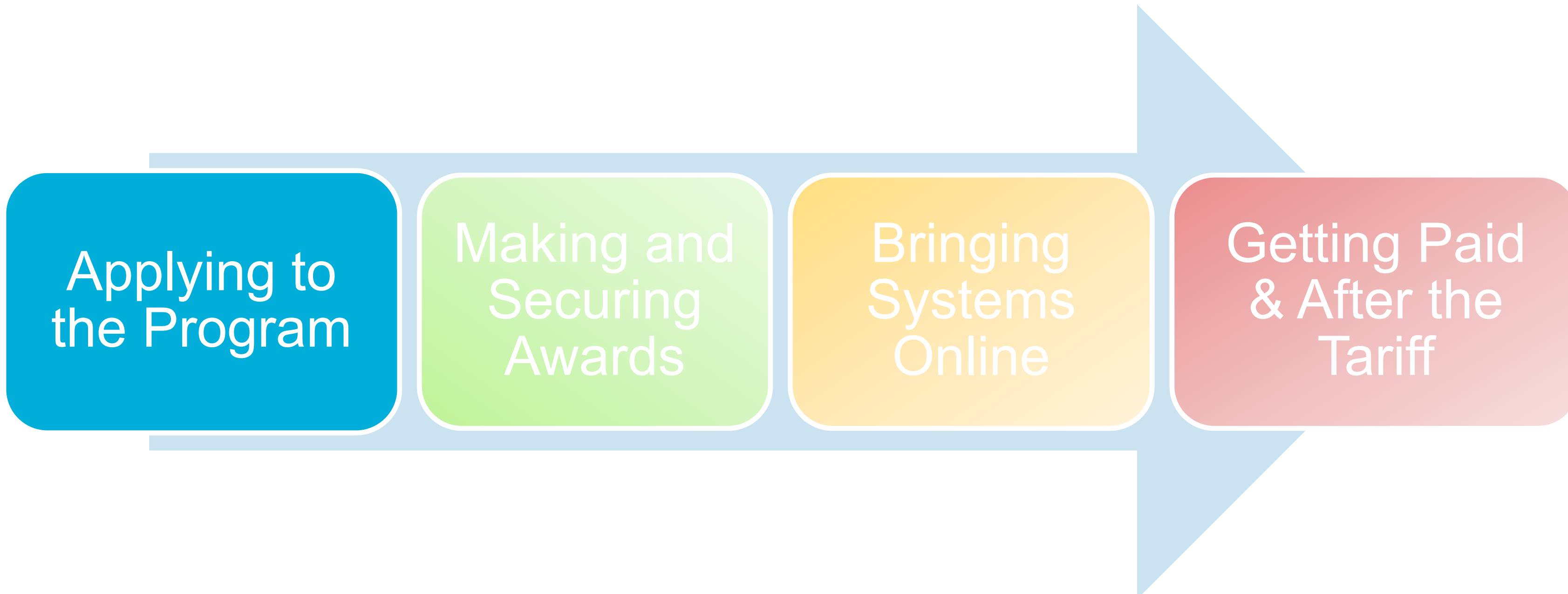

Residential Applicants: Process Overview

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Pre-Enrollment

- Eligible Facilities criteria
  - Small scale solar
  - ≤ 25 kW
  - Interconnection Application
  - Net metering
- Residential site and rate
- Not already operating
- Interconnection application

Annual Continuous Enrollment

- No separate Enrollment Application
- Elect to participate via Interconnection Application
- First come, first served

Award Certificate of Eligibility

- Award Certificate of Eligibility
- Construction
- Interconnection

Payment for RECs

- Renewable Energy Resources Eligibility Form - Commission approval
- NEPOOL GIS

Non-Residential Applicants: Process Overview

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Pre-Open Enrollment

- Eligible Facilities criteria
  - Eligible renewable energy resource
  - ≤ 5 MW
  - Interconnection to Narragansett Elec. Load zone
- Not already operating
- Renewable Energy Classes
- Interconnection Application
- ISRDG/ISA
- Site Control

Open Enrollment

- Two Week Period
- Short-form Application
- Application completeness and timeliness requirements

Project Selection

- Based on lowest priced bids at or below applicable ceiling price
- Performance Guarantee Deposit

Award Certificate of Eligibility

- Award Certificate of Eligibility
- Construction
- Interconnection

Payment for Output

- Output Certification
- Renewable Energy Resources Eligibility Form - Commission approval
- ISO-NE
- NEPOOL GIS

Program Eligibility Requirements

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- Eligible Renewable Energy Class as determined by the Board and approved by PUC
- Nameplate Capacity less than or equal to 5 MW
- Interconnect to Narragansett Electric Company distribution system and located in ISO-NE load zone
- Not Already Operating, excluding pre-existing hydro
- Not Under Construction, except for prep work <25% total project cost
- Not Fully Financed for construction, excluding small scale solar projects
- Prohibit Project Segmentation
- Submitted Interconnection Application and have a completed Impact Study for Renewable DG ("ISRDG") if required, or interconnection Service Agreement
- Site Control – Own, Lease, Ownership/Lease Options

Renewable Energy Classes

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- **Small Distributed Generation Projects**

Small Wind	Small Scale Solar	Medium Scale Solar	Other Technology
50 kW - 1,500 kW	Up to and including 25 kW	Greater than 25 kW, up to and including 250 kW	TBD by the Board, up to 1 MW.

- **Large Distributed Generation Projects**

Commercial Scale Solar	Large Scale Solar	Large Scale Wind	Other Technology
Greater than 250 kW, but less than 1 MW	1 MW, up to and including 5 MW	Greater than 1.5 MW, up to and including 5 MW	Greater than small DG, up to and including 5 MW

- **Each year, the Board will recommend the eligible renewable energy classes for RI Commission approval.**

Residential Program: Open Enrollment Process

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- **Eligible Facilities and Criteria:**
  - Small scale solar with a nameplate capacity up to 25 kW that is served by Basic Residential Rate A-16 or Low Income Rate A-60
  - Must be sized to annually produce electricity equal to or less than customer usage, per Net Metering Provisions
- **Enrollment continuously open** until the annual targets for Residential small scale solar class has been met
  - “First come, first served”
  - Additional capacity may become available under the annual MW target
- **Submit interconnection application and elect to participate in Program**
  - Applicant responsible for all interconnection costs

Non-Residential Program: Open Enrollment Process

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- **Typically conduct 3 tariff enrollments each year**
  - 2 open enrollments planned in 2015
- **Provide Applicants email communication one month prior to each enrollment**
- **Must complete and submit a short-form application during two week period.**
- **Application will request information on:**
  - Project ownership/site control;
  - Project Technical details;
  - Bid pricing;
  - Interconnection documentation;
  - Financing and development costs
- **Recommend Certificate of Eligibility for selected Applicants approximately 6 weeks after each enrollment ends to PUC, followed by PUC approval and Certificate issuance within 60 days**

Applying to the Program

Making and Securing Awards

Bringing Systems Online

Getting Paid & After the Tariff

Residential Applicants: Award Certificate of Eligibility

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- **Certificate of Eligibility and Project Schedule:**
  - National Grid selects projects and awards Certificates of Eligibility on a “first come, first served basis” until annual MW target met.
  - Residential Certificates will be awarded as applications are approved
    - A list of all recipients to be sent to PUC with other results
  - Certificate of Eligibility voided if project does not complete construction and become operational per the tariff requirements within 24 months.

Non-Residential Program: Evaluation & Selection Process

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- **Large Scale Solar, Commercial Scale Solar and DG projects for Other Eligible Technologies** required to **submit competitive priced bid** ($/kWh) for output of facility
- **Selection of projects based on ranking of pricing bids** at or below applicable ceiling price for given technology class
  - Projects awarded a Certificate of Eligibility (COE) will be paid Performance Based Incentive (PBI) equal to their respective bid price.
- **Non-residential Small Scale and Medium Scale Solar projects** will not be required to submit competitive priced bids - selected on **“first come, first served” basis** and paid applicable PBI
- Small and medium solar projects will be selected and awarded Certificates directly by National Grid without Commission review

Non-Residential Program: Performance Guarantee Deposit

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- **Certificate of Eligibility and Performance Guarantee Deposit:**
  - All projects, except Small & Medium Scale Solar, are **required to wire a Performance Guarantee Deposit within 5 business days of being selected and offered a COE**.
    - If payment is not received by required date, the Company will withdraw the offer and proceed with the next competitive bid in that enrollment
  - After confirmation of receipt of Performance Guarantee Deposit the Company will file with the Commission a list of all selected projects and Commission shall issue an order awarding COEs within 60 days

Non-Residential Program: Certificates of Eligibility

- Certificate contains the following information:
  - Renewable Technology and Renewable Class
  - Facility Size
  - Energy output (annual and max hourly)
  - Term Length
  - Price (PBI)
- Quarterly Reports required on project status


Applying to the Program
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Initiating Payment for Output

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Threshold Requirements to initiate performance based incentive payments for output:

- Output Certification by Licensed Professional Engineer (except small and medium solar)
- Registration of Asset in ISO-NE (except residential systems)
- NEPOOL GIS designation form
- Qualification as “Renewable Energy Resource” with PUC

Certificate of Eligibility

- Once DG Facility meets all conditions for payment under the Tariff, the COE becomes effective and payments begin

Non-Residential Program: Output Certification

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- **Output Certification by Licensed Professional Engineer:**
  - DG Facility has completed construction, interconnection, meter installation & testing.
  - DG Facility capable of producing at least 90% of energy output stated on Certificate of Eligibility.
  - Actual nameplate capacity and max hourly output as stated on Certificate of Eligibility.
- **Certificate of Eligibility voided and performance guarantee deposit is forfeited if output certification not provided within 24 months, except:**
  - 36 months for Anaerobic Digestion;
  - 48 months for small-scale Hydropower

Residential and Small C/I Interconnection

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- Small Residential and Small C/I (Most Small Scale Solar and those on Residential Tariff)
  - Under 10 kWs single phase or under 25 kWs three phase inverter based (PV)
    - Eligible for Simplified process (review and approval as little as 15 to 20 business days)
    - Enrollment Application will start the interconnection process for these smaller systems

Medium Size Interconnection

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- Larger Residential and Small C/I (Some Small Scale, Medium Scale Solar, Small DG, larger than 10 kWs single phase on the Residential Tariff)
  - Larger than 10 kWs single phase or larger than 25 kWs three phase inverter based (PV) up to 250 kWs
    - Will follow Expedited process (up to 30 business days for application review and approval). Larger projects could require ISRDG under Standard process
    - Enrollment Application requires executed interconnection service agreement (ISA) or completed ISRDG

Larger Size Interconnection

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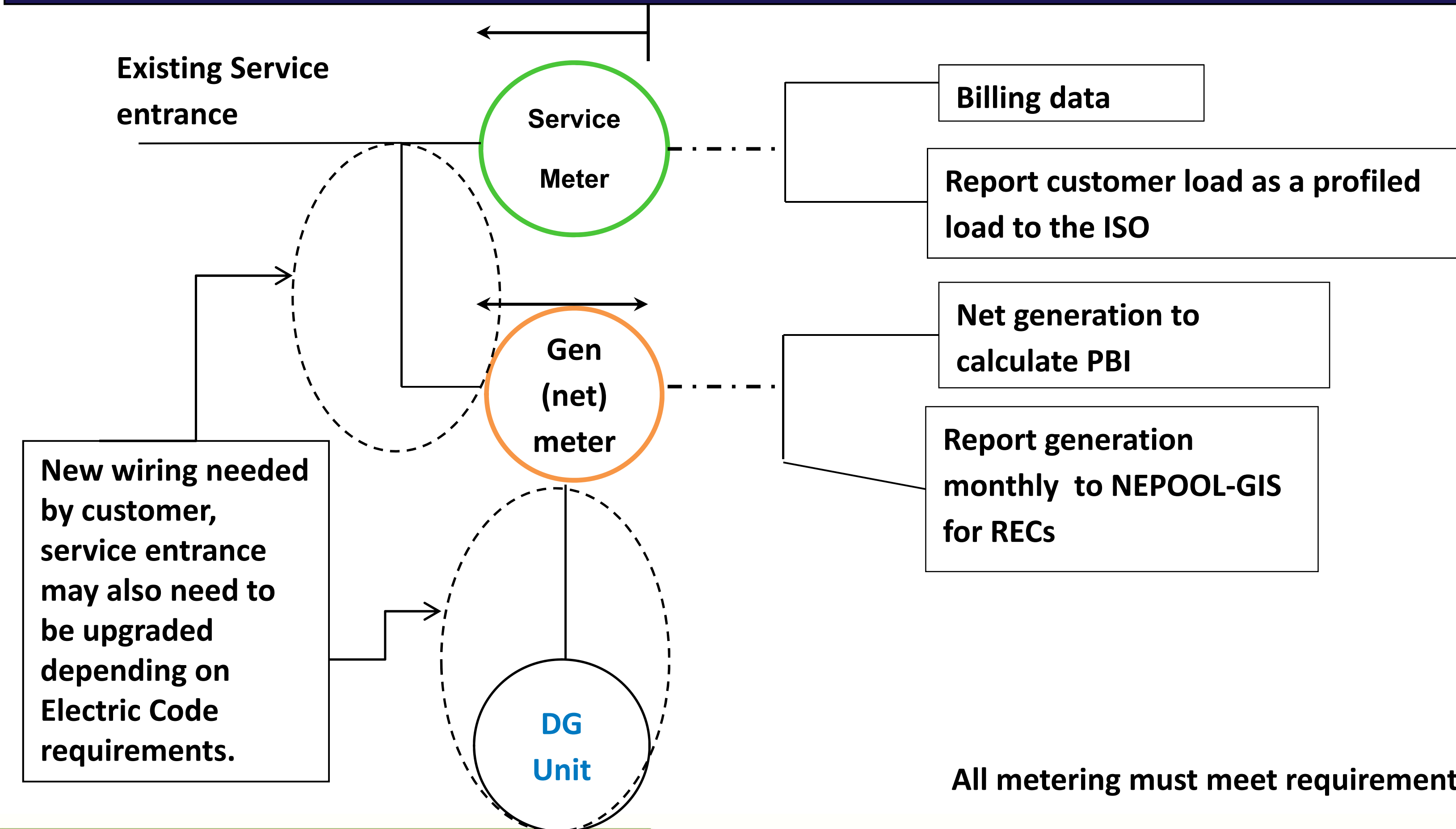
- Projects larger than 250 kWs (Medium, Commercial, Large Scale Solar and Large DG)
  - May be eligible for Expedited process
    - If aggregate DG in the area is higher than 15% of peak load, will likely go to the Standard process (ISRDG will take 55 business days, whole process can take approximately 120 business days)
  - Application for interconnection must take place prior to applying for a Certificate
    - Enrollment Application requires executed interconnection service agreement (ISA) or completed ISRDG

Metering for DG < 60 KWs for Residential and Small C/I



All metering must meet requirements of ESB 750

Metering for all DG > 60 kWs, and all interval metered customers

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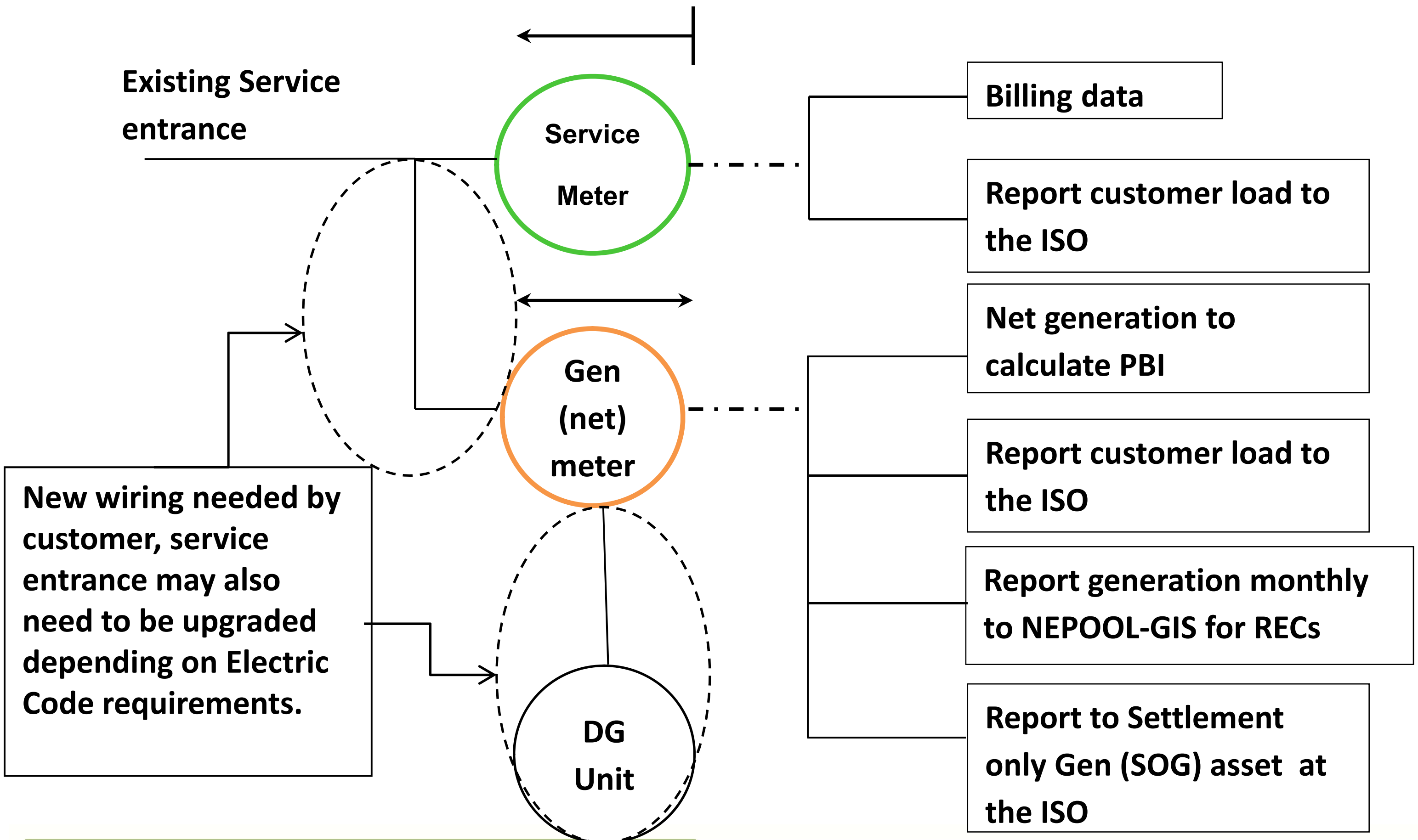
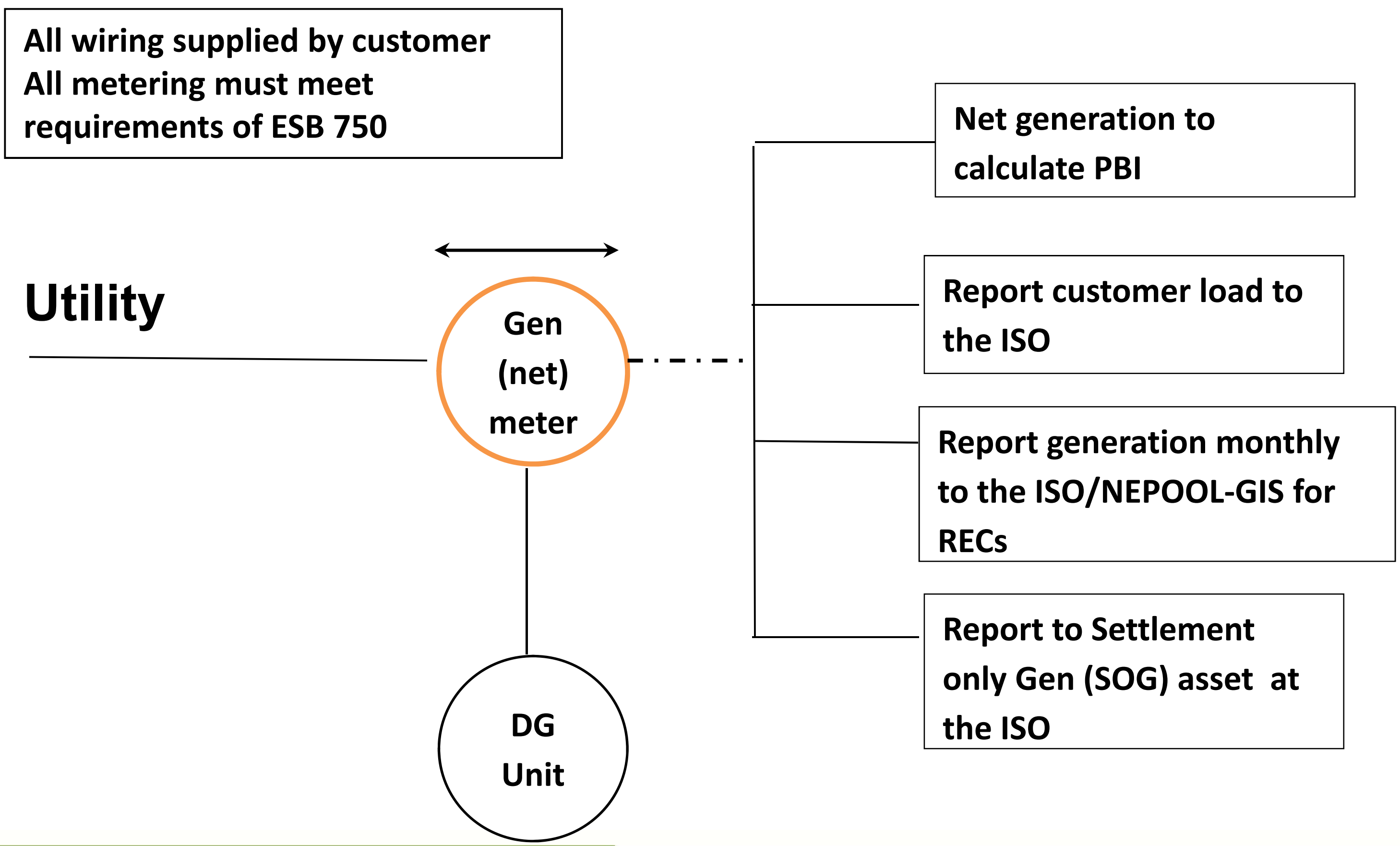
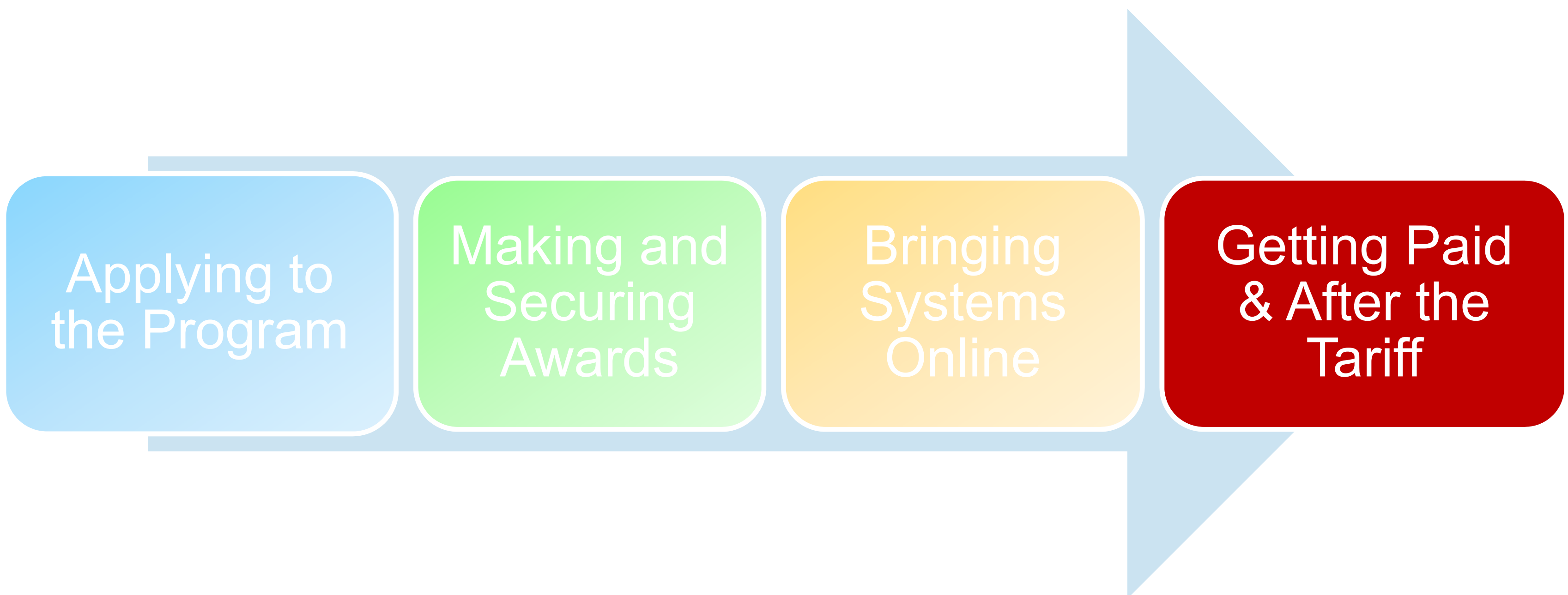


All metering must meet requirements of ESB 750

Stand alone DG projects

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Getting Paid & After the Tariff

RE Growth Tariffs

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- Tariffs provide guarantee of PBI payments for the term specified in the applicable tariff supplement
- Applicant/customer needs to abide by the terms of the tariff
- Once awarded a Certificate of Eligibility, applicant may not terminate without consent of Company
- Supplements will be filed following each round of enrollments and will include PBI, term, list of bid projects awarded COE, and other project details
- For non-residential customers, Company will own all output
  - Residential customers retain all energy and capacity for self-supply per the statute

Net-Metering Provision vs. RE Growth Program

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- RE Growth Customers who opt to receive RE Growth bill credits must meet the eligibility criteria specified in the Net Metering Provision (sizing of unit, etc.)
- Customers can receive RE Growth bill credits OR choose to receive compensation for eligible generation under the Net Metering Provision
  - If latter, they will not be eligible for participation in RE Growth Program for that system
- RE Growth Customers that are eligible can revert to receive compensation under the Net Metering Provision *at the conclusion* of the term specified in the applicable tariff supplement

Billing of Performance-Based Incentive Payments

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- Prior to receiving PBI Payments:
  - The Applicant must select payment method before the system is operational (Non-Residential only)
  - If a Customer account is to receive bill credits, that Customer must file a Schedule B for net metering
  - Customer must ensure that retail delivery service account is in good standing prior to receiving bill credits
  - Customer/Applicant must pay all outstanding charges, incl. interconnection

Residential Projects: Billing of PBI Payments

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- Applicants will receive the Standard PBI for the term specified in the tariff supplement applicable to each enrollment
- PBI will be paid through a combination of potential bill credit on customer’s electric service account and cash payment to designated recipient
- Customer’s monthly bill will reflect:
  - Billing of on-site usage at applicable retail delivery service and commodity charges
  - Bill credit based upon the lesser of the customer’s onsite usage or the resource generation
  - Calculation of cash payment to recipient which will be the full PBI payment less the Bill Credit

Illustrative Electric Bill – Residential Full Requirements Customer

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- Delivery Service
  - Customer Charge $ 5.00
  - Delivery Service Chgs $0.07131 x 700 kWh $ 49.92

- Supply Service (National Grid)
  - Energy Charges $0.08359 x 700 kWh $ 58.51

➢ Total Electric Service Charges $113.43

Illustrative (1) Electric Bill – Residential RE Growth Program

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- **Electric Service Bill**
  - *Delivery Service*

Customer Charge		$ 5.00
Delivery Service Charges	$0.07131 x 700 kWh	$ 49.92

  - *Supply Service (National Grid)*

Energy Charges	$0.08359 x 700 kWh	$ 58.51
	Current Charges	***$113.43***

- **Performance-Based Incentive Payment**
  - PBI Payment $0.2500 x 1000 kWh $250.00
  - *Bill Credit*

Delivery Service Charges	$0.07131 x 700 kWh	$ 49.92
Energy Charges	$0.08359 x 700 kWh	$ 58.51
	Total Bill Credit	$108.43

- Electric Service $113.43
- Bill Credit ($108.43)

Total due National Grid

$5.00

- PBI Payment $250.00
- Bill Credit ($108.43)

Recipient Cash Payment

$141.57

Illustrative (2) Electric Bill – Residential RE Growth Program

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- **Electric Service Bill**
  - *Delivery Service*

Customer Charge		$ 5.00
Delivery Service Charges	$0.07131 x 700 kWh	$ 49.92

  - *Supply Service (National Grid)*

Energy Charges	***$0.18000*** x 700 kWh	$126.00
	Current Charges	***$180.92***

- **Performance-Based Incentive Payment**

PBI Payment	$0.2500 x 700 kWh	$175.00

  - *Bill Credit*

Delivery Service Charges	$0.07131 x 700 kWh	$ 49.92
Energy Charges	***$0.18000*** x 700 kWh	$126.00
	Total Bill Credit	$175.92

- Electric Service $180.92
- Bill Credit ($175.92)

Total due National Grid

$5.00

- PBI Payment $175.00
- Bill Credit ($175.92)

Recipient Cash Payment

$0

Non-Residential Projects: Billing of PBI Payments

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- Billing Option 1
  - PBI may be paid in the form of a check or in some other form agreeable to the Company and the Applicant
  - If generation unit is “stand-alone”, Company will establish billing account and PBI payment will be based upon the net output
  - If on-site load is present, Customer will receive electric bill based upon on-site use, PBI payment Recipient will receive PBI payment based upon net output of generation
- Billing Option 2
  - Where on-site load is present, PBI payment may be a combination of Bill Credit to Customer and check to PBI payment Recipient
- Applicant may change billing option once during term of tariff

Illustrative Electric Bill – Non-Residential: Option 1

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- **Electric Service Bill**

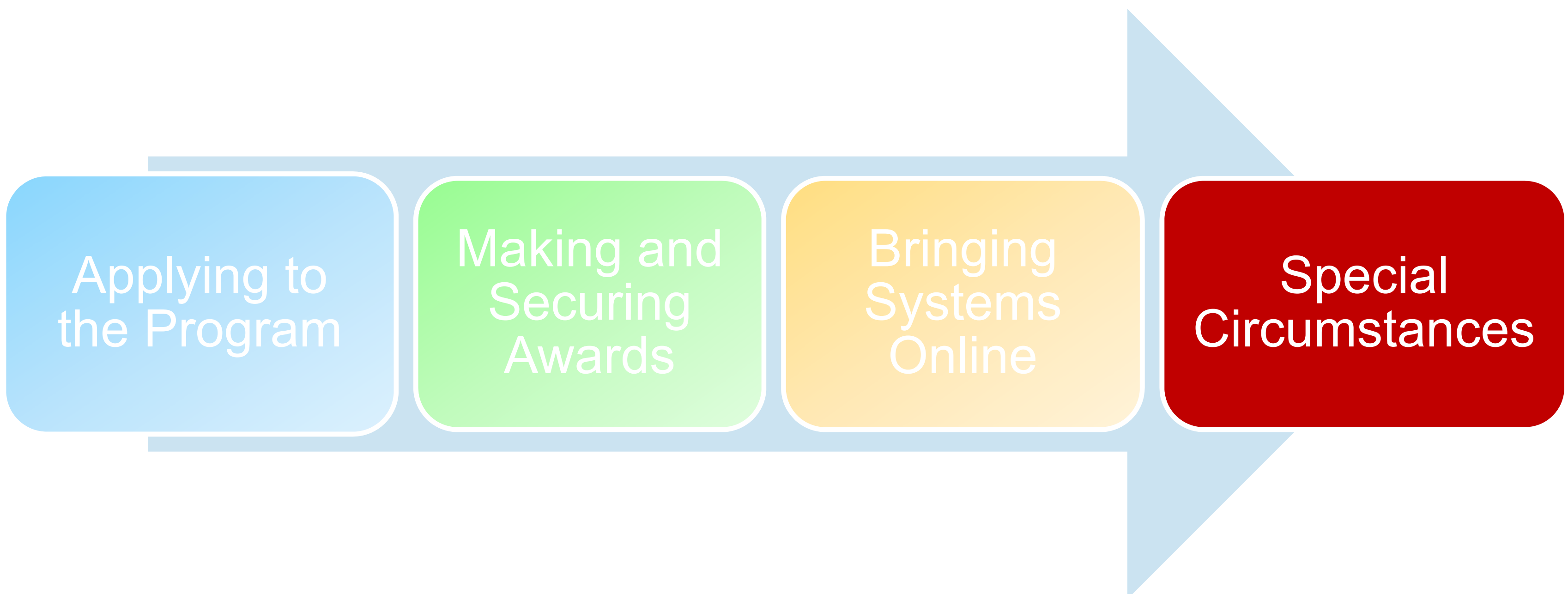
  Delivery Service

Customer Charge (Small C&I)	$ 10.00

- **Performance-Based Incentive Payment**

PBI Payment	$0.2500 x 1000	$250.00

  - Total Due Customer/Recipient $240.00


Applying to the Program
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Special Circumstances

Updates and Transfers

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- Applicants to the program are responsible to update National Grid on any changes in their contact details
- Applicants are responsible for completing the projects, and completing all of the steps, not the Customer receiving bill credits (unless the same person)
- Transfers of ownership of a Certificate are anticipated with sales of the systems themselves
- Such transfers must be made in writing and signed by the current Applicant, and provided to National Grid
- Will align with transfers of Interconnection Agreements

Segmentation and Expansion

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- To protect against abuses of the class and ceiling price definitions, the Program provides limitations on additional systems and expansions of existing systems
- Anti-segmentation Rules on same or contiguous parcels by same applicant apply, except for:
  - Different technology allowed (e.g., wind and solar on same site)
  - After 24 months allowed
  - Net metered only allowed
- Expansion of existing systems is not allowed: Generation consistently greater than certified maximum may result in loss of Certificate and tariff eligibility

Rollout and Communication

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- Once PUC order is received and program details are finalized, National Grid will provide communication to customers via web, social media and other means to promote the Program
- Clear FAQs and webpage guides to application process will be developed
- Notification of competitive solicitations will occur approximately four weeks ahead of enrollment period opening via email and other channels

Next Steps

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- Seeking DG Board and public feedback on the draft Program Enrollment Rules and Tariffs
- Public comments should be provided to the Board -- requested by Oct. 20 -- which will then forward them to National Grid
- National Grid hopes to receive all comments by Oct. 24 for best consideration
- National Grid will file proposed Enrollment Rules and Tariffs with RIPUC by Nov. 15

4

2015 REG Program – 25 Megawatt Allocation Plan

Eligible Technology	System Sizes for Ceiling Price Development	Eligible System Size Range	Tariff Length	25 Megawatt Allocation – First Proposal
Small Solar	5 kW	1 to 10 kW	15 and 20 years options	3 MW*
Small Solar	25 kW	11 kw to 25 kW	20 years	
Medium Solar	140 kW	26 to 250 kW	20 years	3.05 MW
Commercial Solar	500 kW	251 to 999 kW	20 years	5.65 MW
Large Solar	1.5 MW	1 to 5 MW	20 years	8 MW
Wind I	1.65 MW	1.5 – 2.99 MW	20 years	3.3 MW
Wind II	3.3 MW	3.0 - 5.0 MW	20 years	
Anaerobic Digestion I	325 kW	150 - 500 kw	20 years	1 MW
Anaerobic Digestion II	750kw	501kw - 1 MW	20 years	
Small Scale Hydropower I	150kW	10 – 250kw	20 years	1 MW
Small Scale Hydropower II	500 kW	25 1kW – 1 MW	20 years	

*Statutorily Required by the REG Law

5

Rhode Island
Renewable Energy Growth Program:

Calculation of Initial 2015 Ceiling Price Recommendations

October 20, 2014

Sustainable Energy Advantage, LLC
&
Meister Consultants Group, Inc.

OVERVIEW

Background: Changes from Standard Contract to REG Program

- The 2015 Renewable Energy Growth (REG) Program supports projects installed on either side of the customer meter.
- Residential Solar Photovoltaic Systems are eligible under the 2015 REG Program
- Tariff lengths have been increased from 15 years to 20 years
  - 15-year contract still offered to residential systems
- Solar and Hydro Power Systems with capacities less than 50 kW are eligible under the 2015 REG Program
- Rules related to Net Metering and sale of (net excess) generation to National Grid ,for residential and small commercial solar systems, have been amended.
- Ceiling Price categories have been materially changed; new categories are listed in the next slide.

Ceiling Price Categories

Eligible Technology	System Size for CP Development	Eligible System Size Range	Tariff Length
Small Solar I*	5 kW	1 to 10 kW	15 and 20 Years Options
Small Solar II	25 kW	11 to 25 kW	20 Years
Medium Solar	140 kW	26 to 250 kW	20 Years
Commercial Solar	500 kW	251 to 999 kW	20 Years
Large Solar	1.5 MW	1 to 5 MW	20 Years
Wind I	1.65 MW	1.5 to 2.99 MW	20 Years
Wind II	3.3 MW	3 to 5 MW	20 Years
Anaerobic Digestion I	325 kW	150 to 500 kW	20 Years
Anaerobic Digestion II	750 kW	501 kW to 1 MW	20 Years
Small Scale Hydropower I	150 kW	10 to 250 kW	20 Years
Small Scale Hydropower II	500 kW	251 to 1 MW	20 Years

* The Small Solar I (5 kW) category will be used to evaluate both residential and small business installations. Residential installations will be evaluated under both homeowner and third-party ownership.

Response to Data Request

- On September 26, 2014 SEA issued a Data Request to inform its effort in ceiling price development.
- Responses to this request were extremely limited, with SEA receiving only (4) completed Requests.
- **Solar**
  - SEA received (1) Response, which provided data for a 5 kW residential system
  - The response was only partially completed, with material financing data absent.
- **Wind**
  - SEA received (1) Response, for a 1.5 MW system.
- **Anaerobic Digestion**
  - SEA received (1) Response, for a 750 kW system.
- **Small Scale Hydropower**
  - SEA received (1) Response, but the response was largely qualitative.

Supplemental Research

- In parallel to the Data Request, SEA & MCG conducted supplementary research
- Numerous data sources were consulted, including:
  - Past (2013 & 2014) Distributed Generation Enrollment project data
  - Rhode Island Renewable Energy Fund project data
  - Production and project information contained in the Mass SREC database
  - Massachusetts DOER RPS Solar Carve Out project data
  - LBNL's "Tracking the Sun" data, for RI, MA, CT, NY NH, VT,NJ,MD
  - NYSERDA Project information
  - NREL PV Watts and NREL System Advisor Model
  - DOE production information and data
  - Other applicable Publications, Reports, and Studies

SUMMARY RESULTS

Historical Ceiling Prices, 2014 Program Year

Tech., class (kW)	2014 CP w/ITC/PTC, No Bonus	2014 CP No ITC/PTC, No Bonus
Solar, 501-3,000	23.50	N/A
Solar, 201-500	27.30	N/A
Solar, 50-200	27.10	N/A
Wind, 1,000-3,000	17.50	20.55
Wind, 50-999	16.20	19.95
AD, 50-3,000	18.55	19.55
Hydro, 50-1,000	17.90	18.85

Draft Proposed Ceiling Prices, 2015 REG Program (1)

Technology	System Size	**2015 Proposed** CP w/ ITC 15 year Tariff Duration	**2015 Proposed** CP w/o ITC (or 10% ITC) 15 year Tariff Duration	**2015 Proposed** CP w/ ITC 20 year Tariff Duration	**2015 Proposed** CP w/o ITC (or 10% ITC) 20 year Tariff Duration
Small Solar I, Resident Owned	1 to 10 kW	**39.70**	**55.70**	**36.50**	**50.55**
Small Solar I, Third Party Owned	1 to 10 kW	**34.05**	**43.40**	**29.35**	**37.25**

Technology	System Size	**2015 Proposed** CP w/ ITC 20 year Tariff Duration	**2015 Proposed** CP w 10% ITC 20 year Tariff Duration
Small Solar II,	10 to 25 kW	**31.95**	**39.55**
Medium Solar	26-250 kW	**28.05**	**34.70**
Commercial Solar	251 -999 kW	**21.95**	**25.55**
Large Solar	1-5 MW	**18.20**	**20.75**

Draft Proposed Ceiling Prices, 2015 REG Program (2)

Technology	System Size	**2015 Proposed** CP w/ ITC ILO PTC 20 year Tariff Duration	**2015 Proposed** CP w PTC 20 year Tariff Duration	**2015 Proposed** CP w/o PTC or ITC 20 year Tariff Duration
Wind I,	1.5 to 2.99 MW	**17.30**	**19.75**	**22.75**
Wind II	3-5 MW	**17.00**	**19.35**	**22.35**

Technology	System Size	**2015 Proposed** CP w/ PTC 20 year Tariff Duration	**2015 Proposed** CP w /o PTC 20 year Tariff Duration
Anaerobic Digestion I	150 to 500 kW	**18.65**	**20.15**
Anaerobic Digestion II	501 kW to 1 MW	**18.65**	**20.15**
Hydro I	10 -250 kW	**18.65**	**20.20**
Hydro II	251 kW -1 MW	**18.65**	**20.20**

SOLAR

Proposed Installed Cost*

Class	Small Solar I (1-10 kW)	Small Solar II (11-25 kW)	Medium Solar (26-250 kW)	Commercial Solar (251-1,000 kW)	Large Solar (1-5 MW)
Value	$4,281	$4,216	$3,566	$2,676	$2,151
Source	Average of REF Data	Average of REF Data	Average of REF and DG Pilot Bid Data	Average of DG Pilot Bid Data	Average of DG Pilot Bid Data

- Cost data is in $/kW of Installed Capacity, DC

*Including Interconnection Costs

Interconnection Cost Research (1)*

Massachusetts and Rhode Island Solar Interconnection Costs		
	Number of Projects	Average Cost ($/kW DC)
Small Solar I <=10	0	$0
Small Solar II <=25	0	$0
Medium Solar	20	$31
Commercial Solar	25	$86
Large Solar	32	$155

*Based on National Grid Data

Interconnection Cost Research (2)*

Rhode Island Solar Interconnection Costs		
	Number of Projects	Average Cost ($/kW DC)
Small Solar I <=10	0	$0
Small Solar II <=25	0	$0
Medium Solar	6	$58
Commercial Solar	11	$108
Large Solar	4	$137

*Based on National Grid Data

Production and Capital Costs Assumptions

Modeled Parameters

		Small Solar I Resi (1-10 kW)	Small Solar I Comm (1-10 kW)	Small Solar II (11-25 kW)	Medium Solar (26-250 kW)	Commercial Solar (251-1,000 kW)	Large Solar (1-5 MW)
Nameplate Capacity	kW	5		25	140	500	1500
Annual Degradation	%	0.5%					
Cost Excluding Interconnection	$/kW	$4,250		$4,185	$3,535	$2,590	$1,996
Interconnection	$/kW	$31				$86	$155

Capacity Factor Research & Assumptions

Modeled Parameters

Size Class	PV Watts CF	SAM	Proposed CF for 2015*
1-10	15.21%	10.5%	13.49%
11-25	15.21%	14.71%	13.79%
25-250	15.21%	15.19%	13.49%
251-1,000	15.21%	15.23%	13.59%
1,001-5,000	15.21%	15.25%	14.18%

**Based on Massachusetts system performance database multiplied by 1.0221 correction factor for RI insolation*

Operation & Maintenance Research

Total fixed overhead*: $/kW-Yr	Source
$30.00	DOE 2013
$19.93	DOE SETP 2012
$23.50	DOE SETP 2012
$32.80	DOE SETP 2012
$20.69	Mai et al., 2012
$23.27	Mai et al., 2012
$32.47	Mai et al., 2012
$26.00	DOE 2012
$30.00	DOE 2012

Initial CP Inputs sum to $25 - $30/kW-Year.

** Includes project and site maintenance, insurance and G&A. Excludes property taxes.*

Ongoing Cost Assumptions

Modeled Parameters

		Small Solar I Resi (1-10 kW)	Small Solar I Comm (1-10 kW)	Small Solar II (11-25 kW)	Medium Solar (26-250 kW)	Commercial Solar (251-1,000 kW)	Large Solar (1-5 MW)
Fixed O&M Expense, Yr 1	$/kW-yr	$10.00			$12.50	$15.00	$15.00
O&M Cost Inflation	%	2%					
Insurance, Yr 1 (% of Total Cost)	%	0.00%		0.25%			
Management Yr 1	$/yr	$0		$250	$500	$3,300	$10,000
Land Lease	$/yr	$0		$417	$1,500	$10,000	$30,000

Financing Assumptions

Modeled Parameters

<table>
<tr><th colspan="2"></th><th>Small Solar I Resi (1-10 kW)</th><th>Small Solar I Comm (1-10 kW)</th><th>Small Solar II (11-25 kW)</th><th>Medium Solar (26-250 kW)</th><th>Commercial Solar (251-1,000 kW)</th><th>Large Solar (1-5 MW)</th></tr>
<tr><td>% Debt</td><td>%</td><td>0%</td><td>50%</td><td>60%</td><td colspan="3">50%</td></tr>
<tr><td>Debt Term</td><td>yrs</td><td>N/A</td><td>13/18</td><td colspan="4">18</td></tr>
<tr><td>Interest Rate on Term Debt</td><td>%</td><td>N/A</td><td colspan="3">6.0%</td><td>5.5%</td><td>5.0%</td></tr>
<tr><td>Lender's Fee (% of total borrowing)</td><td>%</td><td>N/A</td><td colspan="5">2.25%</td></tr>
<tr><td>Required Minimum Annual DSCR</td><td></td><td>N/A</td><td colspan="5">1.00</td></tr>
<tr><td>Required Average DSCR</td><td></td><td>N/A</td><td colspan="5">1.35</td></tr>
<tr><td>Target After-Tax Equity IRR</td><td>%</td><td>8%</td><td colspan="3">10%</td><td>7%</td><td>7%</td></tr>
<tr><td>Reserve Requirement</td><td>$</td><td>$0</td><td>$0</td><td>$0</td><td>$0</td><td>$0</td><td>$200,000</td></tr>
</table>

Incentives

- Fed. Investment Tax Credit (ITC) assumed available:
  - At 30% for all solar projects operational on or before 12/31/2016.
  - At 10% for commercially-owned projects on-line beginning 1/1/2017
  - At 0% for homeowner-owned projects on-line beginning 1/1/2017
- ITC Monetization %:

Category	Res. 5 kW	Res./Com. 25 kW	140 kW	500 kW	1,500 kW
%	100%	100%	100%	90%	90%

- Ceiling prices evaluated without Bonus Depreciation
- Benefit of Net Operating Loss at state level assessed both "as generated" and "carried-forward". Proposed CPs are an average of these two results.
- No federal, state, local or other grants assumed.

Additional Assumptions

- COD achieved in 2015
- Project Useful Life: 25 years
- 0.5%/yr production degradation
- Debt Service Coverage Ratio Target: 1.35X
- Interconn. Costs depreciated on 15-year MACRS schedule
- All other project costs:
  - 96% depreciated on 5-year MACRS
  - 2% depreciated on 15-year MACRS
  - 2% not depreciable
- Fed. Income Tax rate 35%; State rate 9%
- *Assumed NEPOOL Membership costs either covered by NGRID as lead participant, or spread over many installations and therefore negligible*
- Market value of production (assumed revenue) post-contract = 90% of sum of ***solar-weighted*** energy and capacity price forecasts from 2013 Avoided Energy Supply Cost Study and $5/REC (next slide)

Additional Assumptions:
Forecast of Market Value of Production

Project Year	Calendar Year	Time-of-Production Weighted Market Value of Production (incl. energy, capacity & RECs) (cents/kWh)
16	2029	12.13
17	2030	12.53
18	2031	12.94
19	2032	13.36
20	2033	13.79
21	2034	14.24
22	2035	14.7
23	2036	15.18
24	2037	15.67
25	2038	16.17

WIND

Interconnection Cost Research (1)*

Massachusetts and Rhode Island Wind Interconnection Costs		
Ceiling Price Category	Number of Projects	Average Cost ($/kW DC)
N/A	4	$52
Wind I	3	$107
Wind II	3	$136

*Based on National Grid Data

Interconnection Cost Research (1)*

Rhode Island Wind Interconnection Costs		
Ceiling Price Category	Number of Projects	Average Cost ($/kW DC)
N/A	3	$61
Wind I	1	$120
Wind II	1	$117

*Based on National Grid Data

Production and Capital Cost Assumptions

Modeled Parameters

		Wind I	Wind II
Nameplate Capacity	kW	1,650	3,300
Annual Degradation	%	0.0%	
Generation Equipment	$/kW	$3,500	$3,400
Interconnection	$/kW	$107	$136

Capacity Factor Assumptions

Modeled Parameters

Size Class	Proposed CF for 2015
Wind I	23.00%
Wind II	23.00%

Ongoing Cost Assumptions

Modeled Parameters

		Wind I	Wind II
Fixed O&M Expense, Yr 1	$/kW-yr	$20.00	
O&M Cost Inflation	%	2%	
Insurance, Yr 1 (% of Total Cost)	%	0.60%	
Management Yr 1	$/yr	Included in fixed O&M	
Land Lease	$/yr	$30,000	$60,000

Financing Assumptions

Modeled Parameters

		Wind I	Wind II
% Debt	%	70%	
Debt Term	yrs	18	
Interest Rate on Term Debt	%	6.5%	
Lender's Fee (% of total borrowing)	%	2.25%	
Required Minimum Annual DSCR		1.00	
Required Average DSCR		1.45	
Target After-Tax Equity IRR	%	11%	
Reserve Requirement	$	$0	

Wind Comments & Observations

- Principle points of focus for Rhode Island wind projects are:
  1. **Wind Resource (Capacity Factor)**
     i. Coastal wind resources are greater, but have proven inaccessible thus far.
     ii. Inland sites have lesser wind resource, and are *still* challenging to permit.
     iii. Rhode Island inland topography may not correlate well to other New England states with greater elevation changes.
  2. **Interconnection Costs**
     i. Costs estimates change regularly and are difficult to predict
     ii. Issues not unique to wind
     iii. Desire to discuss the appropriate collection and payment for long-term system upgrade

Incentives

- Current Production Tax Credit (PTC) available to projects under construction as of 12/31/2013.
  - Qualifying projects may elect the PTC or ITC in lieu thereof
- Ceiling prices evaluated <u>without</u> Bonus Depreciation
- Ceiling prices evaluated assuming 70% monetization of ITC, or 100% monetization of PTC.
- Benefit of Net Operating Loss at state level assessed both "as generated" and "carried-forward." Proposed ceiling prices are an average of these two results.
- No federal, state, local or other grants assumed.

Additional Assumptions

- Commercial operation achieved in 2015
- Project Useful Life: 20 years
- Average Debt Service Coverage Ratio Target: 1.45X
- Interconnection Costs depreciated on 15-year MACRS schedule
- All other project costs:
  - 96% depreciated on 5-year MACRS
  - 2% depreciated on 15-year MACRS
  - 2% not depreciable
- Federal Income Tax rate 35%; State rate 9%

ANAEROBIC DIGESTION

PROJECT PERFORMANCE ASSUMPTIONS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
Generator Nameplate Capacity	*kW*	**325**	**725**
Biogas Consumption per Day	*cubic feet/day*	**120,066**	**267,840**
Energy Content per Cubic Foot	*BTU/cubic foot*	**600**	
Heat Rate	*BTU/kWh*	**8,928**	
Availability	*%*	**92%**	
Station Service (Parasitic Load)	*%*	**15%**	
Annual Production Degradation	*%*	**0%**	
Project Useful Life	*years*	**20**	

CAPITAL, INTERCONNECTION AND O&M COSTS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
Generation Equipment	*$/kW*	**$10,000**	
Interconnection Costs	*$/kW*	**$275**	
Fixed O&M Expense	*$/kW-yr*	**$550**	
Variable O&M Expense	*¢/kWh*	**2.00**	
O&M Cost Inflation	*%*	**2%**	

ONGOING EXPENSE ASSUMPTIONS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
Insurance, Yr 1 (% of Total Cost)	*%*	**1.0%**	
Project Management Yr 1	*$/yr*	**$33,621**	**$75,000**
Water & Sewer Expenses	*$/yr*	**$0**	
Digestate Disposal Cost (if handled as an expense)	*$/ton*	**$0.00**	
Land Lease	*$/yr*	**$15,690**	**$35,000**

FINANCING ASSUMPTIONS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
% Debt (% of hard costs) (mortgage-style amort.)	*%*	**60%**	
Debt Term	*years*	**18**	
Interest Rate on Term Debt	*%*	**7%**	
Lender's Fee (% of total borrowing)	*%*	**0%**	
Required Minimum Annual DSCR	*Ratio*	**1.00**	
Required Average DSCR	*Ratio*	**1.50**	
Target After-Tax Equity IRR	*%*	**11%**	
Other Closing Costs	*$*	**$0**	
Reserve Requirement	*$*	**$0**	

SUPPLEMENTAL REVENUE ASSUMPTIONS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
Tipping Fee	*$/ton*	**$25**	
Quantity Received Each Year	*tons per year*	**10,000**	**22,308**
Digestate (if merchantable for additional revenue)	*$/gallon*	**$0**	

Incentives

- Current Production Tax Credit (PTC) available to projects under construction as of 12/31/2013.
  - Anaerobic digesters eligible for 50% of face value
  - Ceiling prices calculated both with and without PTC extension.
- Ceiling prices evaluated without Bonus Depreciation
- Ceiling prices evaluated assuming full monetization of federal PTC
- Benefit of Net Operating Loss at state level assessed both “as generated” and “carried-forward.” Proposed ceiling prices are an average of these two results.
- No federal, state, local or other grants assumed.

Additional Assumptions

- Commercial operation achieved in 2015
- Project Useful Life: 20 years
- Average Debt Service Coverage Ratio Target: 1.50X
- Interconnection Costs depreciated on 15-year MACRS schedule
- All other project costs:
  - 96% depreciated on 5-year MACRS
  - 2% depreciated on 15-year MACRS
  - 2% not depreciable
- Federal Income Tax rate 35%; State rate 9%

HYDRO

Interconnection Cost Research (1)*

Massachusetts and Rhode Island Hydro Interconnection Costs		
Ceiling Price Category	Number of Projects	Average Cost ($/kW DC)
Hydro I	1	$22.59
Hydro II	0	0

*Based on National Grid Data

Interconnection Cost Research (2)*

Rhode Island Hydro Interconnection Costs		
Ceiling Price Category	Number of Projects	Average Cost ($/kW DC)
Hydro I	1	$22.59
Hydro II	0	0

*Based on National Grid Data

Production and Capital Cost Assumptions

Modeled Parameters

		Hydro I	Hydro II
Nameplate Capacity	kW	150	500
Annual Degradation	%	0.0%	
Cost Excluding Interconnection	$/kW	$4,000	
Interconnection	$/kW	$100	

Modeled Parameters

Size Class	Proposed CF for 2015*
Hydro I	40.00%
Hydro II	40.00%

Modeled Parameters

		Hydro I	Hydro II
Fixed O&M Expense, Yr 1	$/kW-yr	**$13.00**	
O&M Cost Inflation	%	**3%**	
Insurance, Yr 1 (% of Total Cost)	%	**0.50%**	
Management Yr 1	$/yr	**$5,000**	**$15,000**
Land Lease	$/yr	**$2,500**	**$10,000**

FINANCING ASSUMPTIONS

Modeled Parameters

		Hydro I	Hydro II
% Debt	%	**50%**	
Debt Term	yrs	**18**	
Interest Rate on Term Debt	%	**6.5%**	
Lender's Fee (% of total borrowing)	%	**2.25%**	
Required Minimum Annual DSCR		**1.00**	
Required Average DSCR		**1.45**	
Target After-Tax Equity IRR	%	**11%**	
Reserve Requirement	$	**$0**	

Hydro Comments & Observations

- **New hydro development potential is limited**
- **Efficiency development** – the increase of output/capacity at existing facilities through operating/capital improvements – is likely to be both faster and cheaper than new development
  - Conduit upgrades.
- **Hydro is extremely site specific**.
  - As a result, the costs can vary widely;
  - Attributable to civil works required, not turbine and generator package
- Substantially longer lead times than other technologies also increases costs due to time value of money.
  - However, hydro useful life is 30+ years.

Incentives

- Current Production Tax Credit (PTC) available to projects under construction as of 12/31/2013.
  - Hydro is eligible for 50% of face value
  - Ceiling prices calculated both with and without PTC extension.
- Ceiling prices evaluated without Bonus Depreciation
- Ceiling prices evaluated assuming full monetization of federal PTC
- Benefit of Net Operating Loss at state level assessed both “as generated” and “carried-forward.” Proposed ceiling prices are an average of these two results.
- No federal, state, local or other grants assumed.

Additional Assumptions

- Commercial operation achieved in 2016
- Project Useful Life: 30 years
- Interconnection Costs depreciated on 15-year MACRS schedule
- All other project costs:
  - 96% depreciated on 5-year MACRS
  - 2% depreciated on 15-year MACRS
  - 2% not depreciable
- Federal Income Tax rate 35%; State rate 9%
- Market value of production (assumed revenue) post-contract = 75% of sum of energy and capacity price forecasts from 2013 Avoided Energy Supply Cost Study and $5/REC (see next slide)

Additional Assumptions:
Forecast of Market Value of Production

Project Year	Calendar Year	Market Value of Production (incl. energy, capacity & RECs) (cents/kWh)
21	2034	13.28
22	2035	13.67
23	2036	14.07
24	2037	14.49
25	2038	14.91
26	2039	15.35
27	2040	15.80
28	2041	16.26
29	2042	16.74
30	2043	17.23

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Rhode Island
Renewable Energy Growth Program:

1st Revision to Proposed 2015 Ceiling Price Recommendations

November 20, 2014

Sustainable Energy Advantage, LLC

&

Meister Consultants Group, Inc.

SUMMARY RESULTS

Draft Proposed Ceiling Prices, 2015 REG Program (1)

Technology	System Size	2015 Proposed CP w/ ITC 15 year Tariff Duration	2015 Proposed CP w/o ITC (or 10% ITC) 15 year Tariff Duration	2015 Proposed CP w/ ITC 20 year Tariff Duration	2015 Proposed CP w/o ITC (or 10% ITC) 20 year Tariff Duration
Small Solar I, Host-Owned	1 to 10 kW	41.05 39.70	53.00 55.70	37.65 36.50	48.15 50.55
Small Solar I, Third-Party Owned	1 to 10 kW	N/A 34.05	N/A 43.40	30.75 29.35	36.00 37.25

Technology	System Size	2015 Proposed CP w/ ITC 20 year Tariff Duration	2015 Proposed CP w 10% ITC 20 year Tariff Duration
Small Solar II,	10 to 25 kW	33.55 31.95	38.65 39.55
Medium Solar	26-250 kW	26.75 28.05	32.05 34.70
Commercial Solar	251 -999 kW	21.45 21.95	25.15 25.55
Large Solar	1-5 MW	17.20 18.20	19.85 20.75

Initial CPs are shown in Blue.
Draft Revised CPs are in Red.

Draft Proposed Ceiling Prices, 2015 REG Program (2)

Technology	System Size	2015 Proposed CP w/ ITC ILO PTC 20 year Tariff Duration	2015 Proposed CP w PTC 20 year Tariff Duration	2015 Proposed CP w/o PTC or ITC 20 year Tariff Duration
Wind I,	1.5 to 2.99 MW	18.00 17.30	22.10 19.75	24.85 22.75
Wind II	3-5 MW	17.50 17.00	21.50 19.35	24.15 22.35

Technology	System Size	2015 Proposed CP w/ PTC 20 year Tariff Duration	2015 Proposed CP w /o PTC 20 year Tariff Duration
Anaerobic Digestion I	150 to 500 kW	20.65 18.65	20.80 20.15
Anaerobic Digestion II	501 kW to 1 MW	20.65 18.65	20.80 20.15
Hydro I	10 -250 kW	20.55 18.65	22.00 20.20
Hydro II	251 kW -1 MW	19.25 18.65	20.70 20.20

Initial CPs are shown in Blue.
Draft Revised CPs are in Red.

Historical Ceiling Prices, 2014 Program Year

Tech., class (kW)	2014 CP w/ITC/PTC, No Bonus	2014 CP No ITC/PTC, No Bonus
Solar, 501-3,000	23.50	N/A
Solar, 201-500	27.30	N/A
Solar, 50-200	27.10	N/A
Wind, 1,000-3,000	17.50	20.55
Wind, 50-999	16.20	19.95
AD, 50-3,000	18.55	19.55
Hydro, 50-1,000	17.90	18.85

PROPERTY TAX ASSUMPTIONS

PROPERTY TAX ASSUMPTIONS (1)

• Property Tax Data from the 39 cities and towns in Rhode Island was reviewed by SEA

a) Outlier data from three cities and towns (North Kingston, Smithfield and Westerly), was removed at the request of the DG Board.

• Using this data, SEA determined an Average Mill Rate for the different ceiling price classes:

a) The "**<u>Private Property</u>**" Mill Rate was used for all classes.

b) For Small Solar I & II, as well as Hydropower, a **<u>straight average</u>** of the Mill Rates was used to determine ceiling prices.

c) For all other classes, a **<u>weighted average</u>** was used, with weighting based on total MW of past DG projects installed in each municipality.

PROPERTY TAX ASSUMPTIONS (2)

- Using the Average Mill Rate determined above, total annual Property Tax payments were determined for each class of projects

- The Tax Basis for each class was assumed to be:
  a) For Small Solar I & II, **50%** of the system's Installed Cost (excluding Interconnection Cost).
  b) For all other classes, **80%** of the system's Installed Cost (excluding Interconnection Cost).
  c) *<u>Note:</u>* For Ceiling Prices presented on 10/20/2014, the Basis was assumed to be **95%** of the system's Installed Cost.

- Tax Basis was assumed to decline for all projects by 5% annually, to a floor of 30%.

SOLAR CEILING PRICE ASSUMPTIONS

Proposed Installed Cost*

Class	Small Solar I (1-10 kW)	Small Solar II (11-25 kW)	Medium Solar (26-250 kW)	Commercial Solar (251-1,000 kW)	Large Solar (1-5 MW)
Value	$4,281	$4,216	**$3,305** ~~$3,566~~	$2,676	$2,151
Source	Average of REF Data	Average of REF Data	Average of ~~REF and~~ DG Pilot Bid Data	Average of DG Pilot Bid Data	Average of DG Pilot Bid Data

- Cost data is in $/kW of Installed Capacity, DC

*Including Interconnection Costs

Production and Capital Costs Assumptions

Modeled Parameters

		Small Solar I, Host (1-10 kW)	Small Solar I TPO (1-10 kW)	Small Solar II (11-25 kW)	Medium Solar (26-250 kW)	Commercial Solar (251-1,000 kW)	Large Solar (1-5 MW)
Nameplate Capacity	kW	5		25	140	500	1500
Annual Degradation	%	0.5%					
Cost Excluding Interconnection	$/kW	$4,250		$4,185	**$3,274** $3,535	$2,590	$1,996
Interconnection	$/kW	$31				$86	$155

Ongoing Cost Assumptions

Modeled Parameters

<table>
<tr><th colspan="2"></th><th>Small Solar I, Host (1-10 kW)</th><th>Small Solar I TPO (1-10 kW)</th><th>Small Solar II (11-25 kW)</th><th>Medium Solar (26-250 kW)</th><th>Commercial Solar (251-1,000 kW)</th><th>Large Solar (1-5 MW)</th></tr>
<tr><td>Fixed O&M Expense, Yr 1</td><td>$/kW-yr</td><td colspan="3">$15.00
$10.00</td><td>$15.00
$12.50</td><td>$15.00</td><td>$15.00</td></tr>
<tr><td>O&M Cost Inflation</td><td>%</td><td colspan="6">2%</td></tr>
<tr><td>Insurance, Yr 1 (% of Total Cost)</td><td>%</td><td colspan="2">0.00%</td><td colspan="4">0.25%</td></tr>
<tr><td>Management Yr 1</td><td>$/yr</td><td colspan="2">$0</td><td>$250</td><td>$500</td><td>$3,300</td><td>$10,000</td></tr>
<tr><td>Land Lease</td><td>$/yr</td><td colspan="2">$0</td><td>$417</td><td>$1,500</td><td>$6,000* w/ 2% esc.
$10,000</td><td>$18,000* w/ 2% esc.
$30,000</td></tr>
</table>

* $1,5000/acre; ~8 acres per MW (NREL)

Financing Assumptions

Modeled Parameters

		Small Solar I Host (1-10 kW)	Small Solar I TPO (1-10 kW)	Small Solar II (11-25 kW)	Medium Solar (26-250 kW)	Commercial Solar (251-1,000 kW)	Large Solar (1-5 MW)
% Debt	%	0%	50% / 60%*				
Debt Term	yrs	N/A	18				
Interest Rate on Term Debt	%	N/A	6.0%			**6.0%** 5.5%	**6.0%** 5.0%
Lender's Fee (% of total borrowing)	%	N/A	2.25%				
Required Minimum Annual DSCR		N/A	1.00				
Required Average DSCR		N/A	1.35				
Target After-Tax Equity IRR	%	8%	10%			**8% / 7.5%*** 7%	
Decommissioning	$	Assumed funded through salvage value of materials.					

*** with/without ITC**

Incentives

- Fed. Investment Tax Credit (ITC) assumed available:
  - At 30% for all solar projects operational on or before 12/31/2016.
  - At 10% for commercially-owned projects on-line beginning 1/1/2017
  - At 0% for homeowner-owned projects on-line beginning 1/1/2017
- ITC Monetization %:

Category	Res. 5 kW	Res./Com. 25 kW	140 kW	500 kW	1,500 kW
%	**75%** 100%	**75%** 100%	**90%** 100%	90%	90%

- Ceiling prices evaluated without Bonus Depreciation
- Benefit of Net Operating Loss at state level assessed both "as generated" and "carried-forward". Proposed CPs are an average of these two results.
- No federal, state, local or other grants assumed.

Additional Assumptions

- COD achieved in 2015
- Project Useful Life: 25 years
- 0.5%/yr production degradation
- Debt Service Coverage Ratio Target: 1.35X
- Interconn. Costs depreciated on 15-year MACRS schedule
- All other project costs:
  - 96% depreciated on 5-year MACRS
  - 2% depreciated on 15-year MACRS
  - 2% not depreciable
- Income Tax rates*:
  - Federal: Commercial 35%;
  - State: Commercial 9%

- *Assumed NEPOOL Membership costs either covered by NGRID as lead participant, or spread over many installations and therefore negligible*
- Market value of production (assumed revenue) post-contract = 90% of sum of ***solar-weighted*** energy and capacity price forecasts from 2013 Avoided Energy Supply Cost Study and $5/REC (next slide)

*** Commercial tax rates applied to small solar systems so as not to disadvantage 3rd-party ownership or small commercial host-owned systems.**

WIND

Capacity Factor Assumptions

Modeled Parameters

Size Class	Proposed CF for 2015
Wind I	**21.00%** 23.00%
Wind II	**21.00%** 23.00%

Ongoing Cost Assumptions

Modeled Parameters

		Wind I	Wind II
Fixed O&M Expense, Yr 1	$/kW-yr	$20.00	
O&M Cost Inflation	%	2%	
Insurance, Yr 1 (% of Total Cost)	%	0.60%	
Management Yr 1	$/yr	**$15,000** Included in fixed O&M	
Land Lease	$/yr	**$45,000* w/ 2% esc.** $30,000	**$90,000* w/ 2% esc.** $60,000

*** $1,5000/acre; 30 acres per turbine. More land may be required, but parallel use may also be possible.**

Incentives

- Current Production Tax Credit (PTC) available to projects under construction as of 12/31/2013.
  - Qualifying projects may elect the PTC or ITC in lieu thereof
- Ceiling prices evaluated without Bonus Depreciation
- Ceiling prices evaluated assuming **80%** ~~70%~~ monetization of ITC, or **90%** ~~100%~~ monetization of PTC.
- Benefit of Net Operating Loss at state level assessed both “as generated” and “carried-forward.” Proposed ceiling prices are an average of these two results.
- No federal, state, local or other grants assumed.

WIND CF SENSITIVITY ANALYSIS

Effect of Changes to CF on Ceiling Prices

Technology	System Size	2015 **Proposed** CP w/ ITC ILO PTC 20 year Tariff Duration	2015 **Proposed** CP w PTC 20 year Tariff Duration	2015 **Proposed** CP w/o PTC or ITC 20 year Tariff Duration
Wind I, 21%	1.5 to 2.99 MW	**18.00**	**22.10**	**24.85**
Wind I, 20%	1.5 to 2.99 MW	**18.90 (+5.00%)**	**23.40 (+5.88%)**	**26.05 (+4.83%)**
Wind I, 23%	1.5 to 2.99 MW	**16.45 (-8.6%)**	**20,00 (-9.5%)**	**22.7 (-8.7%)**
Wind II, 21%	3-5 MW	**17.50**	**21.50**	**24.15**
Wind II, 20%	3-5 MW	**18.40 (+5.14%)**	**22.65 (+5.35%)**	**25.35 (+4.97%)**
Wind II, 23%	3-5 MW	**16.00 (-8.6%)**	**19.35 (-10.00%)**	**22.05 (-8.7%)**

ANAEROBIC DIGESTION

FINANCING ASSUMPTIONS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
% Debt (% of hard costs) (mortgage-style amort.)	*%*	**60% / 70%***	
Debt Term	*years*	**18**	
Interest Rate on Term Debt	*%*	**6.5%** **7%**	
Lender's Fee (% of total borrowing)	*%*	**0%**	
Required Minimum Annual DSCR	*Ratio*	**1.00**	
Required Average DSCR	*Ratio*	**1.50**	
Target After-Tax Equity IRR	*%*	**11%**	
Other Closing Costs	*$*	**Included in total cost.**	
Reserve Requirement	*$*	**$0**	

*** with/without ITC**

SUPPLEMENTAL REVENUE ASSUMPTIONS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
Tipping Fee	*$/ton*	**$20** **$25**	
Quantity Received Each Year	*tons per year*	**10,000**	**22,308**
Digestate (if merchantable for additional revenue)	*$/gallon*	**$0**	

Incentives

- Current Production Tax Credit (PTC) available to projects under construction as of 12/31/2013.
  - Anaerobic digesters eligible for 50% of face value
  - Ceiling prices calculated both with and without PTC extension.
- Ceiling prices evaluated without Bonus Depreciation
- Ceiling prices evaluated assuming **90%** ~~full~~ monetization of federal PTC
- Benefit of Net Operating Loss at state level assessed both "as generated" and "carried-forward." Proposed ceiling prices are an average of these two results.
- No federal, state, local or other grants assumed.

HYDRO

Production and Capital Cost Assumptions

Modeled Parameters

		Hydro I	Hydro II
Nameplate Capacity	kW	150	500
Annual Degradation	%	0.0%	
Cost Excluding Interconnection	$/kW	**$4,500** $4,000	**$4,200** $4,000
Interconnection	$/kW	$100	

ONGOING EXPENSES

Modeled Parameters

		Hydro I	Hydro II
Fixed O&M Expense, Yr 1	$/kW-yr	**$13.00**	
Variable O&M	₵/kWh	**2.00**	
O&M Cost Inflation	%	**3%**	
Insurance, Yr 1 (% of Total Cost)	%	**0.50%**	
Management Yr 1	$/yr	**$5,000**	**$15,000**
Land Lease	$/yr	**$3,000 w/ 2% esc.** **$2,500**	**$10,000** **w/ 2% esc.**
Royalties	%	**3.5%**	

Incentives

- Current Production Tax Credit (PTC) available to projects under construction as of 12/31/2013.
  - Hydro is eligible for 50% of face value
  - Ceiling prices calculated both with and without PTC extension.
- Ceiling prices evaluated without Bonus Depreciation
- Ceiling prices evaluated assuming **90%** ~~full~~ monetization of federal PTC
- Benefit of Net Operating Loss at state level assessed both "as generated" and "carried-forward." Proposed ceiling prices are an average of these two results.
- No federal, state, local or other grants assumed.

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APPENDIX

Ceiling Price Categories

Eligible Technology	System Size for CP Development	Eligible System Size Range	Tariff Length
Small Solar I*	5 kW	1 to 10 kW	15 and 20 Years Options
Small Solar II	25 kW	11 to 25 kW	20 Years
Medium Solar	140 kW	26 to 250 kW	20 Years
Commercial Solar	500 kW	251 to 999 kW	20 Years
Large Solar	1.5 MW	1 to 5 MW	20 Years
Wind I	1.65 MW	1.5 to 2.99 MW	20 Years
Wind II	3.3 MW	3 to 5 MW	20 Years
Anaerobic Digestion I	325 kW	150 to 500 kW	20 Years
Anaerobic Digestion II	750 kW	501 kW to 1 MW	20 Years
Small Scale Hydropower I	150 kW	10 to 250 kW	20 Years
Small Scale Hydropower II	500 kW	251 to 1 MW	20 Years

* The Small Solar I (5 kW) category will be used to evaluate both residential and small business installations. Residential installations will be evaluated under both homeowner and third-party ownership.

ADDITIONAL ASSUMPTIONS, SOLAR

Capacity Factor Research & Assumptions

Modeled Parameters

Size Class	PV Watts CF	SAM	Proposed CF for 2015*
1-10	15.21%	10.5%	13.49%
11-25	15.21%	14.71%	13.79%
25-250	15.21%	15.19%	13.49%
251-1,000	15.21%	15.23%	13.59%
1,001-5,000	15.21%	15.25%	14.18%

**Based on Massachusetts system performance database multiplied by 1.0221 correction factor for RI insolation*

No Change

Additional Assumptions:
Forecast of Market Value of Production

Project Year	Calendar Year	Time-of-Production Weighted Market Value of Production (incl. energy, capacity & RECs) (cents/kWh)
16	2029	12.13
17	2030	12.53
18	2031	12.94
19	2032	13.36
20	2033	13.79
21	2034	14.24
22	2035	14.7
23	2036	15.18
24	2037	15.67
25	2038	16.17

No Change

ADDITIONAL ASSUMPTIONS, WIND

Production and Capital Cost Assumptions

Modeled Parameters

		Wind I	Wind II
Nameplate Capacity	kW	1,650	3,300
Annual Degradation	%	0.0%	
Generation Equipment	$/kW	$3,500	$3,400
Interconnection	$/kW	$107	$136

No Change

Financing Assumptions

Modeled Parameters

		Wind I	Wind II
% Debt	%	70%	
Debt Term	yrs	18	
Interest Rate on Term Debt	%	6.5%	
Lender's Fee (% of total borrowing)	%	2.25%	
Required Minimum Annual DSCR		1.00	
Required Average DSCR		1.45	
Target After-Tax Equity IRR	%	11%	
Decommissioning	$	Assumed funded through salvage value of materials.	

No Change

Additional Assumptions

- Commercial operation achieved in 2015
- Project Useful Life: 20 years
- Average Debt Service Coverage Ratio Target: 1.45X
- Interconnection Costs depreciated on 15-year MACRS schedule
- All other project costs:
  - 96% depreciated on 5-year MACRS
  - 2% depreciated on 15-year MACRS
  - 2% not depreciable
- Federal Income Tax rate 35%; State rate 9%

No Change

Additional Cost Data From MassCEC

Project Name	COD	Capacity (kW)	Total Cost ($)	Total Cost ($/kW)
DOC Gardner	4/1/2013	3,300	9,000,000	$2,727
Varian Semiconductor	12/6/2012	2,500	7,763,615.18	$3,105
Camelot Wind	12/1/2012	1,500	4,351,547	$2,901
Kingston Community Wind	5/18/2012	2,000	Not Reported	N/A
Fairhaven	5/2/2012	3,000	Not Reported	N/A
Lightolier	4/20/2012	2,000	4,478,500	$2,239

ADDITIONAL ASSUMPTIONS, ANAEROBIC DIGESTION

PROJECT PERFORMANCE ASSUMPTIONS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
Generator Nameplate Capacity	*kW*	**325**	**725**
Biogas Consumption per Day	*cubic feet/day*	**120,066**	**267,840**
Energy Content per Cubic Foot	*BTU/cubic foot*	**600**	
Heat Rate	*BTU/kWh*	**8,928**	
Availability	*%*	**92%**	
Station Service (Parasitic Load)	*%*	**15%**	
Annual Production Degradation	*%*	**0%**	
Project Useful Life	*years*	**20**	

No Change

CAPITAL, INTERCONNECTION AND O&M COSTS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
Generation Equipment	*$/kW*	**$10,000**	
Interconnection Costs	*$/kW*	**$275**	
Fixed O&M Expense	*$/kW-yr*	**$550**	
Variable O&M Expense	*¢/kWh*	**2.00**	
O&M Cost Inflation	*%*	**2%**	

No Change

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
Insurance, Yr 1 (% of Total Cost)	*%*	**1.0%**	
Project Management Yr 1	*$/yr*	**$33,621**	**$75,000**
Water & Sewer Expenses	*$/yr*	**$0**	
Digestate Disposal Cost (if handled as an expense)	*$/ton*	**$0.00**	
Land Lease	*$/yr*	**$15,690**	**$35,000**

No Change

Additional Assumptions

- Commercial operation achieved in 2015
- Project Useful Life: 20 years
- Average Debt Service Coverage Ratio Target: 1.50X
- Interconnection Costs depreciated on 15-year MACRS schedule
- All other project costs:
  - 96% depreciated on 5-year MACRS
  - 2% depreciated on 15-year MACRS
  - 2% not depreciable
- Federal Income Tax rate 35%; State rate 9%

No Change

ADDITIONAL ASSUMPTIONS, HYDRO

Production and Capital Cost Assumptions

Modeled Parameters

Size Class	Proposed CF for 2015
Hydro I	40.00%
Hydro II	40.00%

No Change

FINANCING ASSUMPTIONS

Modeled Parameters

		Hydro I	Hydro II
% Debt	%	**50%**	
Debt Term	yrs	**18**	
Interest Rate on Term Debt	%	**6.5%**	
Lender's Fee (% of total borrowing)	%	**2.25%**	
Required Minimum Annual DSCR		**1.00**	
Required Average DSCR		**1.45**	
Target After-Tax Equity IRR	%	**11%**	
Reserve Requirement	$	**$0**	

No Change

Additional Assumptions

- Commercial operation achieved in 2016
- Project Useful Life: 30 years
- Interconnection Costs depreciated on 15-year MACRS schedule
- All other project costs:
  - 96% depreciated on 5-year MACRS
  - 2% depreciated on 15-year MACRS
  - 2% not depreciable
- Federal Income Tax rate 35%; State rate 9%
- Market value of production (assumed revenue) post-contract = 75% of sum of energy and capacity price forecasts from 2013 Avoided Energy Supply Cost Study and $5/REC (see next slide)

No Change

Additional Assumptions:
Forecast of Market Value of Production

Project Year	Calendar Year	Market Value of Production (incl. energy, capacity & RECs) (cents/kWh)
21	2034	13.28
22	2035	13.67
23	2036	14.07
24	2037	14.49
25	2038	14.91
26	2039	15.35
27	2040	15.80
28	2041	16.26
29	2042	16.74
30	2043	17.23

No Change

COST SENSITIVITY ANALYSIS

Explanation of Sensitivity Analysis

- Somewhat comparable to a step-wise regression, which models the correlation of one variable to the result

- Specific Cost Inputs are "**Zeroed Out**" (i.e. set at $0.00, 0%, etc.)

- Ceiling Prices are then recalculated, with all other inputs held constant

- The "Zeroed Out" Ceiling Price is then compared to the Original Ceiling price, to determine how much of the ceiling price is affected by that input

- ***Note***: This is not a pure regression, as the result is somewhat based on the magnitude of the original cost. These results only relate to the specific ceiling prices discussed in this presentation, not CREST generally. However, the results are useful to understand the relative importance of certain inputs.

Solar Cost Sensitivity Analysis*

Decrease in Ceiling Price, as a % of Original

"Zeroed Out" Input:	Interconnection Cost	Property Tax	O&M Cost	Land Lease**
Small Solar I, Host-Owned, 15	0.97%	11.08% (12.06%)	4.75%	0.00%
Small Solar I, Host-Owned, 20	0.93%	10.62% (11.55%)	4.52%	0.00%
Small Solar I, Third-Party Owned - 20	1.14%	12.85% (13.82%)	5.37%	0.00%
Small Solar II	0.89%	11.33% (12.22%)	4.77%	5.37%
Medium Solar	1.12%	19.25% (20.56%)	6.17%	4.30%
Commercial Solar	3.73%	18.41 (22.14%)	7.69%	6.29%
Large Solar	8.43%	17.44% (25.29%)	9.59%	7.56%

* Versus ITC @ 30% price; Red = Change Versus Presentation on 11/20/2014 due to methodology refinement
**No Land Lease expense for Small Solar I & II, hence 0% Sensitivity

Wind & Hydro, Cost Sensitivity Analysis*

Decrease in Ceiling Price, as a % of Original

"Zeroed Out" Input:	Interconnection Cost	Property Tax	O&M Cost	Land Lease
Wind I	3.89%	11.11% (15.00%)	6.67%	9.44%
Wind II	4.86%	11.14% (16.00%)	6.86%	9.43%
Hydro I	1.70%	10.22% (12.17%)	2.43%	3.41%
Hydro II	2.08%	10.22% (12.47%)	2.60%	3.64%

*Using Wind-ITC price, Hydro-PTC Price

AD, Cost Sensitivity Analysis*

Decrease in Ceiling Price, as a % of Original

"Zeroed Out" Input:	Interconnection	Fixed O&M	Variable O&M	Project Management	Property Tax
AD I	2.42%	42.86%	19.13%	7.99%	14.77%
AD II	2.42%	42.86%	19.13%	7.99%	14.77%

*Using AD-PTC price

Recommended 2015 Renewable Energy Growth Program

Eligible Technology	System Sizes for Ceiling Price Development	Eligible System Size Range	Revised Tariff Lengths – Per DG Board Discussion	Sustainable Energy Advantage – Recommended Ceiling Prices	25 Megawatt Recommended Allocation Plan
Small Solar I – Owner/Host Financed	5 kW	1 to 10 kW	15 and 20 year options	*15 Year Tariff – 41.35 20 Year Tariff – 37.75	3 MW**
Small Solar I – 3rd Party Financed	5 kW	1 to 10 kW	20 years	32.95	
Small Solar II	25 kW	11 kw to 25 kW	20 years	29.80	
Medium Solar	140 kW	26 to 250 kW	20 years	24.40	4 MW
Commercial Solar	500 kW	251 to 999 kW	20 years	20.95	5.5 MW
Large Solar	1.5 MW	1 to 5 MW	20 years	16.70	6 MW
Wind I	1.65 MW	1.5 – 2.99 MW	20 years	22.75	5 MW
Wind II	3.3 MW	3.0 - 5.0 MW	20 years	22.35	
Anaerobic Digestion I	325 kW	150 - 500 kW	20 years	20.60	1.5 MW
Anaerobic Digestion II	750 kW	501 kw - 1 MW	20 years	20.60	
Small Scale Hydropower I	150 kW	10 – 250 kW	20 years	21.35	
Small Scale Hydropower II	500 kW	251 kW – 1 MW	20 years	20.10	

* The Board determined that small solar for host owned would have a 15 and 20 year tariff option for the 2015 program.

**Statutorily Required

2015 REG Program – Recommended Enrollment Rules and Process

- There will be a two open enrollments for the commercial scale renewable energy classes.
- The small solar classes will be open year round for applicants to submit proposals.
- If there is under subscription in any of the medium, commercial and large solar classes during an enrollment, then National Grid shall have the ability to redirect those kW or MW to technologies/classes where there is the greatest demand during that enrollment.
- The redirecting of kW or MW capacity shall not apply to the small solar class category, due to the statutory requirement that 3 MW of the annually program capacity be used solely for small solar.
- Due to engineering, environmental permitting and project development being longer for wind, anaerobic digestion and small-scale hydropower projects, National Grid will only have the ability to redirect any unused kW or MW capacity from those specific renewable energy classes during the final enrollment.

8

RE Growth Program Public Review Meeting

Rhode Island Distributed Generation Board

December 9, 2014

RE Growth Program Changes

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- Initial submittal of draft documents on Oct. 2 to DG Board
- Public comments, board questions and comments, and internal discussions yielded a number of changes to initial draft submittal
- Filed proposed Rules and Tariffs with PUC on Nov. 14
- Highlights of changes to four major documents follows

Small System Program: Open Enrollment Process

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- Applicable to Residential and Non-Residential systems
- Made major change to allow all Small Solar to be part of the Rolling Open Enrollment process, rather than just “Residential” Small Solar
- Added “good account standing” language to eligibility requirements
- Clarified that the Performance Based Incentive (net of bill credits) for residential customer is just for RECs, but PBI for non-residential accounts includes energy and capacity, which may be netted for bill credits
- Added eligibility requirement of site control and defined the representation that will be required
- Added location of energy delivery requirement for non-residential customers

Small System Program: Segmentation and Sizing Criteria

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- Clarified that the anti-segmentation rules does not apply to contiguous properties with distinct customers who both net meter
- Want to avoid conflicts arising from similar offers to neighboring customers from the same developer
- Added clear reference to the eligibility requirements in the net metering tariff
  - The sizing requirement is the three-year average energy usage of the prior three years at the Eligible Net Metering Site
  - Same for residential and non-residential customers wanting bill credit (Option 2) eligibility

Non-Residential Program: Open Enrollment Process

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- Changed title to “Solar (>25kw), Wind, Hydro and AD Projects” to be more accurate
- Added the anti-segmentation exception for contiguous properties with separate Option 2 customers, same as Small System clarification
- Clarifying language that small and medium scale solar does not need to provide output certification, but still has a 24 month deadline to be operational

RE Growth Residential Tariff

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- Clarified the potential identity of the applicant, eligible customer accounts, and applicant responsibilities
- Clarified that the Company is only buying RECs and environmental attributes from residential customers
- Added that applicants have responsibility to get projects certified as RES eligible facilities in Rhode Island through the PUC certification process
- Added Project Segmentation Section 3 with “neighbor” exception
- Added Termination Section 9 making clear the allowable termination circumstances by customer request, a ban on project expansion, and included language on violation of other tariffs, rules or laws as grounds for potential revocation of the CE
- Note: Not a change, but second meter for residential systems will be paid for by the Company as a program expense

RE Growth Non-Residential Tariff

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- Added term in Performance Guarantee Deposit Section 3 stating small and medium solar projects do not need to provide the output certification, but still only have 24 months to achieve operation
- Added exception to the project segmentation rule for projects on contiguous parcels that serve separate customers
  - This means each customer must opt to receive bill credits under Option 2 from their separate, respective systems
- In market products Section 7.a, added that non-residential customers may need to register as RPS eligible in other states at their cost, if the Company directs them to

RE Growth Non-Residential Tariff

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- Clarified what “market products” means in the purchased commodities Section 7.c – just energy and environmental regulation related products or services, not any non-energy physical products or non-energy services
- Revised the Termination Section 9 clauses to be more clear, and provide guidance on when the Company would not withhold permission to terminate
- Removed the damages language in the Termination section
- Added violation of other tariffs, rules or laws as grounds for CE termination in Section 9
- Created separate Dispute Resolution Section 10

Illustrative Electric Bill – Residential Full Requirements Customer

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- Delivery Service
  - Customer Charge — $ 5.00
  - Delivery Service Chgs — $0.07131 x 700 kWh — $ 49.92
- Supply Service (National Grid)
  - Energy Charges — $0.08359 x 700 kWh — $ 58.51

➢ Total Electric Service Charges — $113.43

Illustrative (1) Electric Bill – Residential RE Growth Program

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- **Electric Service Bill**
  - *Delivery Service*

Customer Charge		$ 5.00
Delivery Service Charges	$0.07131 x 700 kWh	$ 49.92

  - *Supply Service (National Grid)*

Energy Charges	$0.08359 x 700 kWh	$ 58.51
	Current Charges	***$113.43***

- **Performance-Based Incentive Payment**

PBI Payment	$0.2500 x 1000 kWh	$250.00

  - *Bill Credit*

Delivery Service Charges	$0.07131 x 700 kWh	$ 49.92
Energy Charges	$0.08359 x 700 kWh	$ 58.51
	Total Bill Credit	$108.43

- Electric Service $113.43
- Bill Credit ($108.43)

Total due National Grid

$5.00

- PBI Payment $250.00
- Bill Credit ($108.43)

Recipient Cash Payment

$141.57

Illustrative (2) Electric Bill – Residential RE Growth Program

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- **Electric Service Bill**
  - *Delivery Service*

Customer Charge		$ 5.00
Delivery Service Charges	$0.07131 x 700 kWh	$ 49.92

  - *Supply Service (National Grid)*

Energy Charges	***$0.18000*** x 700 kWh	$126.00
	Current Charges	***$180.92***

- **Performance-Based Incentive Payment**
  - PBI Payment $0.2500 x 700 kWh $175.00
  - *Bill Credit*

Delivery Service Charges	$0.07131 x 700 kWh	$ 49.92
Energy Charges	***$0.18000*** x 700 kWh	$126.00
	Total Bill Credit	$175.92

- Electric Service $180.92
- Bill Credit ($175.92)

Total due National Grid

$5.00

- PBI Payment $175.00
- Bill Credit ($175.92)

Recipient Cash Payment

$0

Non-Residential Projects: Billing of PBI Payments

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- Billing Option 1
  - PBI may be paid in the form of a check or in some other form agreeable to the Company and the Applicant
  - If applicant selects this option, Company will establish billing account and PBI payment will be based upon the net output
  - If on-site load is present, the customer will receive electric bill based upon on-site use, PBI payment Recipient will receive PBI payment based upon net output of generation
- Billing Option 2
  - Where on-site load is present, PBI payment may be a combination of Bill Credit to the customer and a check to PBI payment Recipient
- Applicant may change billing option once during the term of tariff

Illustrative Electric Bill – Non- Residential: Option 1

- **Electric Service Bill**

  Delivery Service

Customer Charge (Small C&I)	$ 10.00

- **Performance-Based Incentive Payment**

PBI Payment	$0.2500 x 1000	$250.00

- Total Due Customer/Recipient $240.00

Interconnection Progress Requirements and Differences

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- The new program will require all applicants <u>except for those proposing small scale solar projects</u> to be substantially advanced in the interconnection process
- A project must have either a signed Interconnection Services Agreement (along with payments for any upgrades), or a completed Impact Study for Renewable Distributed Generation (ISRDG) as part of its application
- Small Scale solar projects will apply to the RE Growth program while applying for interconnection
  - Small program interconnection application to include RE Growth application section

Rhode Island
Renewable Energy Growth Program:

2nd Revision to Proposed
2015 Ceiling Price Recommendations

December 9, 2014

Sustainable Energy Advantage, LLC

SUMMARY RESULTS

2015 Ceiling Prices, Draft Recommendations to PUC

Technology	System Size	**Proposed** CP w/ ITC 15-yr Tariff	**Proposed** CP w/ ITC/PTC 20-yr Tariff	**Proposed** CP w/o ITC/PTC 20-yr Tariff
Sm. Solar I, Host-Owned	1 to 10 kW	**41.35**	**37.75**	
Small Solar I, TPO	1 to 10 kW		**32.95**	
Small Solar II,	10 to 25 kW		**29.80**	
Medium Solar	26-250 kW		**24.40**	
Commercial Solar	251 -999 kW		**20.95**	
Large Solar	1-5 MW		**16.70**	
Wind I	1.5 to 2.99 MW			**22.75**
Wind II	3-5 MW			**22.35**
Anaerobic Digestion I	150 to 500 kW			**20.60**
Anaerobic Digestion II	501 kW to 1 MW			**20.60**
Hydro I	10 -250 kW			**21.35**
Hydro II	251 kW -1 MW			**20.10**

Draft 2015 Ceiling Prices, Solar

Technology	System Size	**2015 Proposed** CP w/ ITC 15 year Tariff Duration	**2015 Proposed** CP w/ ITC 20 year Tariff Duration
Small Solar I, **Host**-Owned	1 to 10 kW	**41.35 (+4%)** **39.70**	**37.75 (+3%)** **36.50**
Small Solar I, Third-Party Owned	1 to 10 kW	**N/A** **34.05**	**32.95 (+12%)** **29.35**

Technology	System Size	**2015 Proposed** CP w/ ITC 20 year Tariff Duration
Small Solar II,	10 to 25 kW	**29.80 (-7%)** **31.95**
Medium Solar	26-250 kW	**24.40 (-13%)** **28.05**
Commercial Solar	251 -999 kW	**20.95 (-5%)** **21.95**
Large Solar	1-5 MW	**16.70 (-8%)** **18.20**

Initial CPs are shown in Blue. Revised CPs are in Red.

Draft 2015 Ceiling Prices, Wind – AD – Hydro

Technology	System Size	2015 Proposed CP w/ ITC ILO PTC 20 year Tariff Duration	2015 Proposed CP w PTC 20 year Tariff Duration	2015 Proposed CP w/o PTC or ITC 20 year Tariff Duration
Wind I,	1.5 to 2.99 MW	18.40 (+6%) 17.30	19.85 (+1%) 19.75	22.75 22.75
Wind II	3-5 MW	18.20 (+7%) 17.00	19.45% (+1%) 19.35	22.35 22.35

Technology	System Size	2015 Proposed CP w/ PTC 20 year Tariff Duration	2015 Proposed CP w /o PTC 20 year Tariff Duration
Anaerobic Digestion I	150 to 500 kW	20.20 (+8%) 18.65	20.60 (+2%) 20.15
Anaerobic Digestion II	501 kW to 1 MW	20.20 (+8%) 18.65	20.60 (+2%) 20.15
Hydro I	10 -250 kW	19.80 (+6%) 18.65	21.35 (+6%) 20.20
Hydro II	251 kW -1 MW	18.55 (-1%) 18.65	20.10 (-0.5%) 20.20

Initial CPs are shown in Blue.
Revised CPs are in Red.

Federal Incentives' Impact on Ceiling Prices

- Renewable energy investing is tax-driven
- Incentive program assumptions are important
  - ITC
  - PTC
  - MACRS Deprecation
- The leverage afforded by Federal incentives should inure to the benefit of RI ratepayers to the maximum extent possible
- Recommendation:
  - Each project should certify and validate its eligibility, or ineligibility, for Federal incentives as part of its bid/tariff application.

HISTORICAL CEILING PRICE COMPARISON

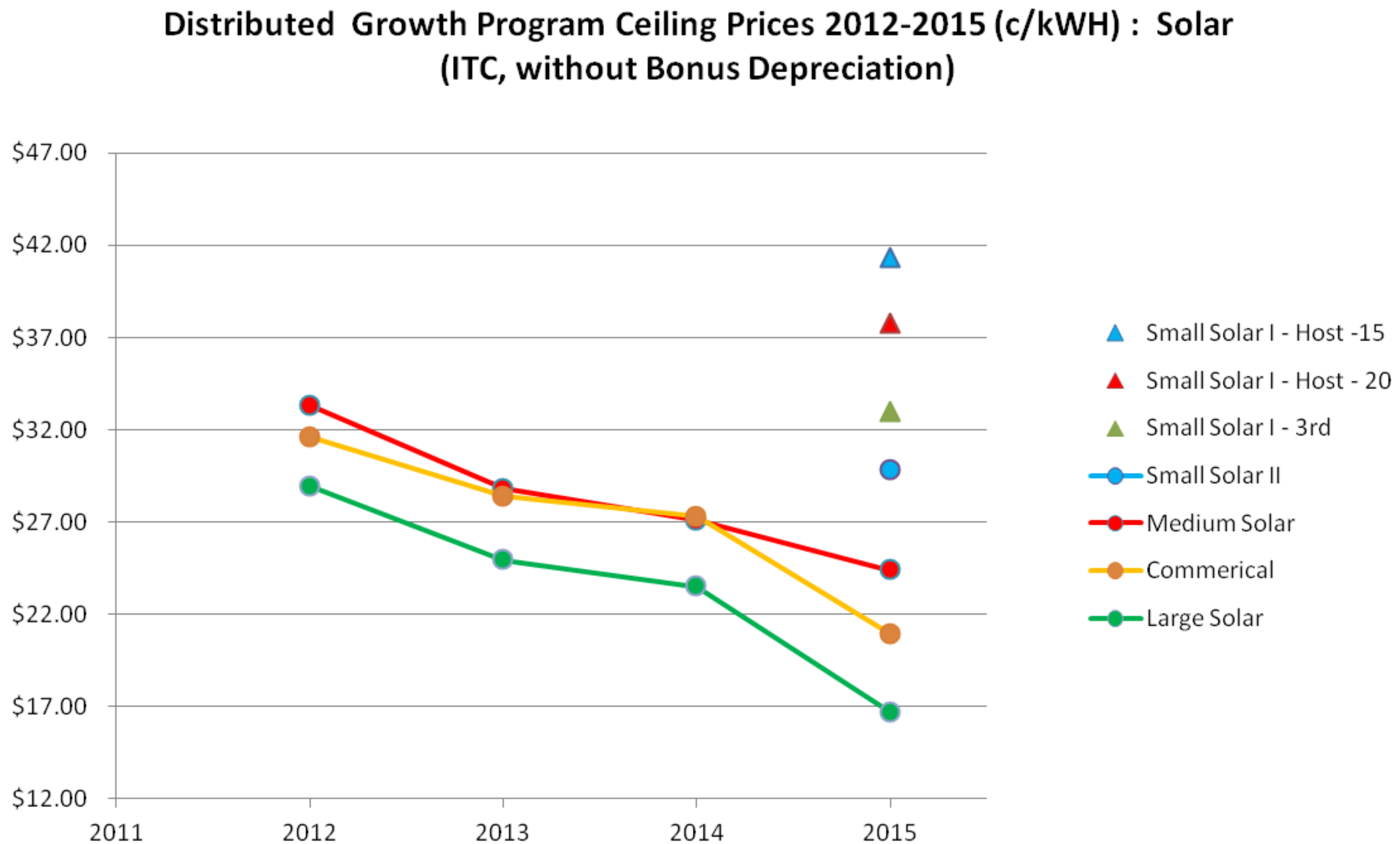
Ceiling Prices, 2011-2015 Comparison

Distributed Growth Program Ceiling Prices 2012-2015 (c/kWH) [ITC (Solar, Wind) or PTC (Hydro, AD), without Bonus Depreciation]

2015 Technology Class	2015*		2014		2013		2012	
	Size	Price (c/kWh)	Size	Price (c/kWh)	Size	Price (c/kWh)	Size	Price (c/kWh)
Small Solar I - Host -15	1 - 10 kW	$ 41.35						
Small Solar I - Host - 20	1 - 10 kW	$ 37.75						
Small Solar I - 3rd	1 - 10 kW	$ 32.95						
Small Solar II	10 - 25 kW	$ 29.80						
Medium Solar	26 - 250 kW	$ 24.40	50 - 200 kW	$ 27.10	101 - 250 kW	$ 28.80	10 - 150 kW	$ 33.35
Commerical	251 - 999 kW	$ 20.95	201 - 500 kW	$ 27.30	251 - 499 kW	$ 28.40	151 - 500 kW	$ 31.60
Large Solar	1 - 5 MW	$ 16.70	501 - 3000 kW	$ 23.50	> 500 kW	$ 24.95	501 - 1000 kW	$ 28.95
Wind I	1500 - 2999 kW	$ 18.40	1.0 - 1.5 MW	$ 17.50	1.0 - 1.5 MW	$ 14.80	N/A	$ 13.35
Wind II	3000 - 5000 kW	$ 18.20						
Hydro I*	10 - 250 kW	$ 19.80	50 kW - 1.0 MW	$ 17.90				
Hydro II*	250 - 1000 MW	$ 18.55	50 kW - 1.0 MW	$ 17.90	400-500kW	$ 17.90		
AD I*	150 - 500 kW	$ 20.20	50 kW - 1.0 MW	$ 18.55				
AD II*	501 - 1000 MW	$ 20.20	50 kW - 1.0 MW	$ 18.55	0.5-1.0 MW	$ 18.55		

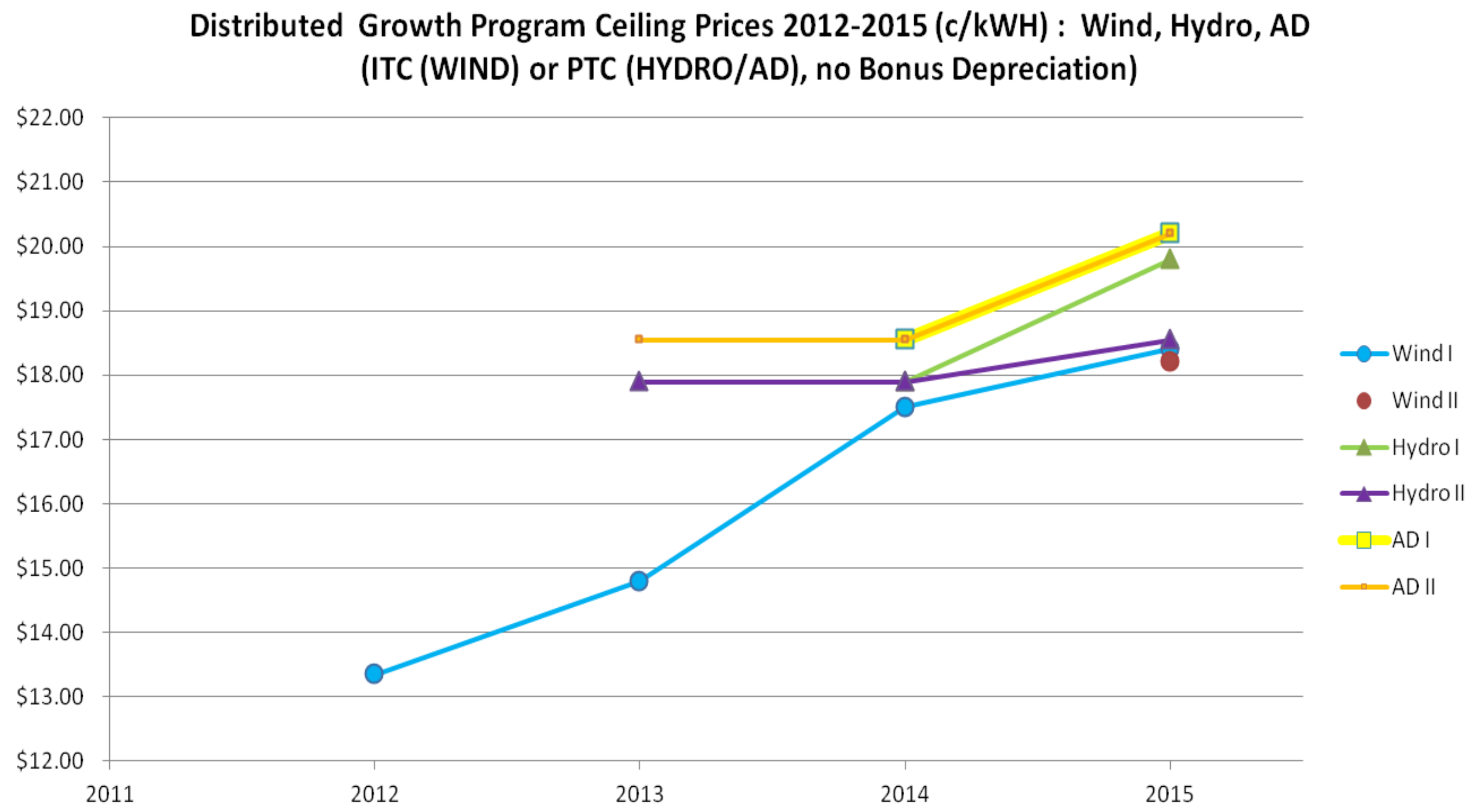
* Recommended

Ceiling Prices, 2011-2015 Comparison



Graph for Demonstration Purposes only. Ceiling Price Classes have changed over time, making cross-comparison across enrollments tenuous.

Ceiling Prices, 2011-2015 Comparison



Graph for Demonstration Purposes only. Ceiling Price Classes have changed over time, making cross-comparison across enrollments tenuous.

PROPERTY TAX ASSUMPTIONS

PROPERTY TAX ASSUMPTIONS (1)

- Property Tax Data from the 39 cities and towns in Rhode Island was reviewed by SEA
  a) Outlier data from three cities and towns (North Kingston, Smithfield and Westerly), was removed at the request of the DG Board.

- Using this data, SEA determined an Average Mill Rate for the different ceiling price classes:
  a) The "**Private Property**" Mill Rate was used for all classes.

  b) For Small Solar I & II, as well as Hydropower, a **straight average** of the Mill Rates was used to determine ceiling prices.

  c) For all other classes, a **weighted average** was used, with weighting based on total MW of past DG projects installed in each municipality.

PROPERTY TAX ASSUMPTIONS (2)

- Using the Average Mill Rate determined above, total annual Property Tax payments were determined for each class of projects

- The Tax Basis for each class was assumed to be:
  a) For Small Solar I & II, **60%** of the system's Installed Cost (excluding Interconnection Cost).
  b) For all other classes, **80%** of the system's Installed Cost (excluding Interconnection Cost).
  c) The different between (a) and (b) reveals the expectation that small (particularly residential) systems will receive more favorable tax treatment.

  Note: For Ceiling Prices presented on 10/20/2014, the Basis was assumed to be **95%** of the system's Installed Cost.

- Tax Basis was assumed to decline for all projects by 5% annually, to a floor of 30%.

SOLAR CEILING PRICE ASSUMPTIONS (CHANGES V. INITIAL INPUTS)

Initial Inputs are shown in Black.

Revised Inputs are in Red.

All Inputs that were not changed are listed in the Appendix, if not listed in the proceeding tables.

Small Solar I – Host Owned

Category:	Depreciation:	Federal Income Tax Rate:	State Income Tax Rate:	Target After Tax Equity IRR:	Fixed O&M	Project Management Yr-1:
Input:	Unavailable MACRS	0% 35%	0% 9%	7.5% 8.0%	$15.00 $10.00	$150 $0

Small Solar I – Host Owned (Brief Discussion)

- **Depreciation:**
  - Analysis originally included MACRS type depreciation for Host-Owned Systems.
  - Residents, however, cannot take advantage of depreciation under the IRC.
  - CREST analysis no longer includes depreciation tax benefits for Host-Owned systems.

- **Income Tax:**
  - NMC offsets & PBI payments are not considered income, currently.
  - National Grid does not issue 1099's with NMC/PBI payments to residents.
  - As such, it is assumed 'Hosts' are not taxed on NMC/PBI Benefits.

- **Target IRR:**
  - Decreased from 8% to 7.5%, to reflect lower associated risk.
  - Decision made not to reduce further, to keep Host-Owned IRR at par with Third Party-Owned IRR.

Small Solar I – 3rd Party

Category:	Target After Tax Equity IRR:	Fixed O&M	Project Management Yr-1:
Input:	**7.5%** **10.0%**	**$15.00** **$10.00**	**$150** **$0**

Small Solar II

Category:	Capacity Factor:	Target After Tax Equity IRR:	Fixed O&M	Project Management Yr-1:	Land Lease:	Insurance Yr-1:
Input:	13.49% 13.79%	7.5% 10.0%	$15.00 $10.00	$150 $0	$0 $417	0.00% 0.25%

Medium Solar

Category:	Capacity Factor:	Installed Cost ($/kW)**:	Target After Tax Equity IRR:	Fixed O&M:	Project Management Yr-1:	Land Lease:
Input:	***13.45%**** ***13.49%***	**$3,305** **$3,566**	**7.5%** **10.0%**	**$15.00** **$10.00**	**$150** **$250**	**$0** **$1500**

** Typo in initial presentation. 13.45% is the rate that has been used in CREST consistently throughout the process.*

** Includes Interconnection

Commercial Solar

Category:	Target After Tax Equity IRR (%):	Interest Rate on Term Debt (%):	Land Lease:
Input:	7.0% 7.0%	6.0% 5.5%	$6,000* w/ 2% Escalation $10,000

* $1,500/acre; ~8 acres per MW (NREL)

Large Solar

Category:	Target After Tax Equity IRR (%):	Interest Rate on Term Debt (%):	Land Lease:
Input:	7.0% 7.0%	6.0% 5.0%	$18,000* w/ 2% Escalation $10,000

* $1,500/acre; ~8 acres per MW (NREL)

Incentives

- Fed. Investment Tax Credit (ITC) assumed available:
  - At 30% for all solar projects operational on or before 12/31/2016.
  - At 10% for commercially-owned projects on-line beginning 1/1/2017
  - At 0% for homeowner-owned projects on-line beginning 1/1/2017
- ITC Monetization %:

Category	Res. 5 kW	Res./Com. 25 kW	140 kW	500 kW	1,500 kW
%	75% 100%	75% 100%	90% 100%	90%	90%

- Ceiling prices evaluated without Bonus Depreciation
- Benefit of Net Operating Loss at state level assessed both "as generated" and "carried-forward". Proposed CPs are an average of these two results.
- No federal, state, local or other grants assumed.

Target IRR Comparison, Across Classes

Class:	Small Solar I – Host Owned	Small Solar I – 3rd Party Owned	Small Solar II	Medium Solar	Commercial Solar	Large Solar
Target IRR:	7.5% 8.0%	7.5% 10.0%	7.5% 10.0%	7.5% 10.0%	7.0% 7.0%	7.0% 7.0%

WIND (CHANGES V. INITIAL INPUTS)

Initial Inputs are shown in Black.

Revised Inputs are in Red.

All Inputs that were not changed are listed in the Appendix, if not listed in the proceeding tables.

Wind I

Category:	Generation Equipment:	Capacity Factor (%):	Target After Tax Equity IRR:	Fixed O&M:	Land Lease:	% Debt
Input:	$3,200 $3,500	21.00% 23.00%	10.0% 11.0%	$25.00 $20.00	$52,000** w/ 2% Escalation $30,00	70%/60%/70%* 70%

*$1,500/acre; ~35 acres per turbine. More land may be required, but parallel use may also be possible.

** Based on whether PTC / ITC / No ITC

Wind II

Category:	Generation Equipment:	Capacity Factor (%):	Target After Tax Equity IRR:	Fixed O&M:	Land Lease:	% Debt
Input:	$3,100 $3,400	21.00% 23.00%	10.0% 11.0%	$25.00 $20.00	$105,000** w/ 2% Escalation $60,00	70%/60%/70%* 70%

*$1,500/acre; ~35 acres per turbine. More land may be required, but parallel use may also be possible.

** Based on whether PTC / ITC / No ITC

Incentives

- Current Production Tax Credit (PTC) available to projects under construction as of 12/31/2013.
  - Qualifying projects may elect the PTC or ITC in lieu thereof
- Ceiling prices evaluated <u>without</u> Bonus Depreciation
- Ceiling prices evaluated assuming **75%** ~~70%~~ monetization of ITC, or **100%** monetization of PTC.
- Benefit of Net Operating Loss at state level assessed both "as generated" and "carried-forward." Proposed ceiling prices are an average of these two results.
- No federal, state, local or other grants assumed.

Effect of Changes to CF on Ceiling Prices

Technology, CF	System Size	2015 **Proposed** CP w/ ITC ILO PTC 20 year Tariff Duration	2015 **Proposed** CP w PTC 20 year Tariff Duration	2015 **Proposed** CP w/o PTC or ITC 20 year Tariff Duration
Wind I, 21%	1.5 to 2.99 MW	**18.40**	**19.85**	**22.75**
Wind I, 20%	1.5 to 2.99 MW	**19.35 (+5.16%)**	**20.95 (+5.54%)**	**23.90 (+5.05%)**
Wind I, 23%	1.5 to 2.99 MW	**16.80 (-8.7%)**	**17.85 (-10.08%)**	**20.75 (-8.79%)**
Wind II, 21%	3-5 MW	**18.20**	**19.45**	**22.35**
Wind II, 20%	3-5 MW	**19.10 (+4.95%)**	**20.55 (+5.66%)**	**23.50 (+5.15%)**
Wind II, 23%	3-5 MW	**16.55 (-9.07%)**	**17.50 (-10.03%)**	**20.04 (-8.72%)**

ANAEROBIC DIGESTION (CHANGES V. INITIAL INPUTS)

Initial Inputs are shown in **Black.**

Revised Inputs are in **Red.**

All Inputs that were not changed are listed in the Appendix, if not listed in the proceeding tables.

Anaerobic Digestion I & II

Category:	Tipping Fee ($/ton):	Interest Rate on Debt Term (%):	Target After Tax Equity IRR:	% Debt (% of hard costs)
Input:	$20 $25	6.5% 7.0%	10.0% 11.0%	60% / 70%* 60%

* with/without PTC

Incentives

- Current Production Tax Credit (PTC) available to projects under construction as of 12/31/2013.
  - Anaerobic digesters eligible for 50% of face value
  - Ceiling prices calculated both with and without PTC extension.
- Ceiling prices evaluated without Bonus Depreciation
- Ceiling prices evaluated assuming full monetization of federal PTC
- Benefit of Net Operating Loss at state level assessed both “as generated” and “carried-forward.” Proposed ceiling prices are an average of these two results.
- No federal, state, local or other grants assumed.

HYDRO (CHANGES V. INITIAL INPUTS)

Initial Inputs are shown in Black.

Revised Inputs are in Red.

All Inputs that were not changed are listed in the Appendix, if not listed in the proceeding tables.

Hydro I

Category:	Generation Equipment:	O&M Cost Inflation (%):	Target After Tax Equity IRR:	Land Lease:
Input:	**$4,500** **$4,000**	**3.0%** **2.0%**	**10.0%** **11.0%**	**$3,000 w/ 2% Escalation** **$2,500**

Hydro II

Category:	Generation Equipment:	O&M Cost Inflation (%):	Target After Tax Equity IRR:	Land Lease:
Input:	$4,200 $4,000	3.0% 2.0%	10.0% 11.0%	$10,000 w/ 2% Escalation

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COST SENSITIVITY ANALYSIS

Explanation of Sensitivity Analysis

• Somewhat comparable to a step-wise regression, which models the correlation of one variable to the result

• Specific Cost Inputs are "**Zeroed Out**" (i.e. set at $0.00, 0%, etc.)

• Ceiling Prices are then recalculated, with all other inputs held constant

•The "Zeroed Out" Ceiling Price is then compared to the Original Ceiling price, to determine how much of the ceiling price is affected by that input

• ***Note***: This is not a pure regression, as the result is somewhat based on the magnitude of the original cost. These results only relate to the specific ceiling prices discussed in this presentation, not CREST generally. However, the results are useful to understand the relative importance of certain inputs.

Solar Cost Sensitivity Analysis

Decrease in Ceiling Price, as a % of Original

"Zeroed Out" Input:	Interconnection Cost	Property Tax	Fixed O&M Cost	Land Lease*
Small Solar I, Host-Owned, 15	0.73 %	12.09 %	4.59 %	0%
Small Solar I, Host-Owned, 20	0.79 %	11.66 %	4.50 %	0%
Small Solar I, Third-Party Owned - 20	0.76 %	13.51 %	5.16 %	0%
Small Solar II	1.01 %	14.77 %	5.70 %	0%
Medium Solar	1.23 %	20.49 %	6.97 %	0%
Commercial Solar	3.58 %	18.85 %	8.11 %	6.44%
Large Solar	7.78 %	17.37 %	9.58 %	7.78%

*No Land Lease expense for Small Solar I, II and Medium Solar, hence 0% Sensitivity

Wind Cost Sensitivity Analysis*

Decrease in Ceiling Price, as a % of Original

"Zeroed Out" Input:	Interconnection Cost	Property Tax	O&M Cost	Land Lease
Wind I	3.80 %	9.78 %	8.15 %	10.60 %
Wind II	4.95 %	9.89 %	8.79 %	10.99 %

*Using Wind-ITC price

AD Cost Sensitivity Analysis*

Decrease in Ceiling Price, as a % of Original

"Zeroed Out" Input:	Interconnection	Fixed O&M	Variable O&M	Project Management	Tipping Fee
AD I	2.48 %	44.06%	11.39 %	8.42 %	+42.57%**
AD II	2.48 %	44.06%	11.39 %	8.42 %	+42.57%**

* Using AD-PTC price

** As Tipping Fee is supplemental Revenue, "Zeroing-Out" Tipping Fee increases Ceiling Prices

Hydro Cost Sensitivity Analysis

Decrease in Ceiling Price, as a % of Original

“Zeroed Out” Input:	Interconnection Cost	Property Tax	O&M Cost	Land Lease
Wind I	3.80 %	9.78 %	8.15 %	10.60 %
Wind II	4.95 %	9.89 %	8.79 %	10.99 %
Hydro I	1.77 %	10.86 %	2.78 %	3.79 %
Hydro II	2.16 %	10.78 %	3.23 %	4.31 %

* Hydro-PTC Price

APPENDICES

Ceiling Price Categories

Eligible Technology	System Size for CP Development	Eligible System Size Range	Tariff Length
Small Solar I*	5 kW	1 to 10 kW	15 and 20 Years Options
Small Solar II	25 kW	11 to 25 kW	20 Years
Medium Solar	140 kW	26 to 250 kW	20 Years
Commercial Solar	500 kW	251 to 999 kW	20 Years
Large Solar	1.5 MW	1 to 5 MW	20 Years
Wind I	1.65 MW	1.5 to 2.99 MW	20 Years
Wind II	3.3 MW	3 to 5 MW	20 Years
Anaerobic Digestion I	325 kW	150 to 500 kW	20 Years
Anaerobic Digestion II	750 kW	501 kW to 1 MW	20 Years
Small Scale Hydropower I	150 kW	10 to 250 kW	20 Years
Small Scale Hydropower II	500 kW	251 to 1 MW	20 Years

* The Small Solar I (5 kW) category will be used to evaluate both residential and small business installations. Residential installations will be evaluated under both homeowner and third-party ownership.

ASSUMPTIONS APPENDIX, SOLAR

Proposed Installed Cost*

Class	Small Solar I (1-10 kW)	Small Solar II (11-25 kW)	Medium Solar (26-250 kW)	Commercial Solar (251-1,000 kW)	Large Solar (1-5 MW)
Value	$4,281	$4,216	**$3,305** $3,566	$2,676	$2,151
Source	Average of REF Data	Average of REF Data	Average of ~~REF and~~ DG Pilot Bid Data	Average of DG Pilot Bid Data	Average of DG Pilot Bid Data

- Cost data is in $/kW of Installed Capacity, DC

*Including Interconnection Costs

Capacity Factor Research & Assumptions

Modeled Parameters

Size Class	PV Watts CF	SAM	Proposed CF for 2015*
1-10	15.21%	10.5%	13.49%
11-25	15.21%	14.71%	**13.49%** 13.79%
25-250	15.21%	15.19%	**13.45%** 13.49% *(typo in initial presentation)*
251-1,000	15.21%	15.23%	13.59%
1,001-5,000	15.21%	15.25%	14.18%

**Based on Massachusetts system performance database multiplied by 1.0221 correction factor for RI insolation*

Modeled Parameters

		Small Solar I, Host (1-10 kW)	Small Solar I TPO (1-10 kW)	Small Solar II (11-25 kW)	Medium Solar (26-250 kW)	Commercial Solar (251-1,000 kW)	Large Solar (1-5 MW)
Nameplate Capacity	kW	5		25	140	500	1500
Annual Degradation	%	0.5%					
Cost Excluding Interconnection	$/kW	$4,250		$4,185	**$3,274** $3,535	$2,590	$1,996
Interconnection	$/kW	$31				$86	$155

Ongoing Cost Assumptions

Modeled Parameters

		Small Solar I, Host (1-10 kW)	Small Solar I TPO (1-10 kW)	Small Solar II (11-25 kW)	Medium Solar (26-250 kW)	Commercial Solar (251-1,000 kW)	Large Solar (1-5 MW)
Fixed O&M Expense, Yr 1	$/kW-yr	**$15.00** $10.00			**$15.00** $12.50	$15.00	$15.00
O&M Cost Inflation	%	2%					
Insurance, Yr 1 (% of Total Cost)	%	0.00%		0.00% 0.25%	0.25%		
Management Yr 1	$/yr	$150 $0		$150 $250	$500	$3,300	$10,000
Land Lease	$/yr	$0		$0 $417	$0 $1,500	**$6,000* w/ 2% esc.** $10,000	**$18,000* w/ 2% esc.** $30,000

*** $1,500/acre; ~8 acres per MW (NREL)**

Financing Assumptions

Modeled Parameters

		Small Solar I Host (1-10 kW)	Small Solar I TPO (1-10 kW)	Small Solar II (11-25 kW)	Medium Solar (26-250 kW)	Commercial Solar (251-1,000 kW)	Large Solar (1-5 MW)
% Debt	%	0%	50% / 60%*				
Debt Term	yrs	N/A	18				
Interest Rate on Term Debt	%	N/A	6.0%			**6.0%** 5.5%	**6.0%** 5.0%
Lender's Fee (% of total borrowing)	%	N/A	2.25%				
Required Minimum Annual DSCR		N/A	1.00				
Required Average DSCR		N/A	1.35				
Target After-Tax Equity IRR	%	6% 8%	7.5% 10%			**7.0% / 6.5%*** 7%	
Decommissioning	$	Assumed funded through salvage value of materials.					

*** with/without ITC**

Additional Assumptions

- COD achieved in 2015
- Project Useful Life: 25 years
- 0.5%/yr production degradation
- Debt Service Coverage Ratio Target: 1.35X
- Interconn. Costs depreciated on 15-year MACRS schedule
- All other project costs:
  - 96% depreciated on 5-year MACRS
  - 2% depreciated on 15-year MACRS
  - 2% not depreciable
- Income Tax rates*:
  - Federal: Commercial 35%;
  - State: Commercial 9%
- *Assumed NEPOOL Membership costs either covered by NGRID as lead participant, or spread over many installations and therefore negligible*
- Market value of production (assumed revenue) post-contract = 90% of sum of ***solar-weighted*** energy and capacity price forecasts from 2013 Avoided Energy Supply Cost Study and $5/REC (next slide)

*** Small Solar I, Host-Owned, assumes no income tax (state or federal) for system owner.**

Additional Assumptions:
Forecast of Market Value of Production

Project Year	Calendar Year	Time-of-Production Weighted Market Value of Production (incl. energy, capacity & RECs) (cents/kWh)
16	2029	12.13
17	2030	12.53
18	2031	12.94
19	2032	13.36
20	2033	13.79
21	2034	14.24
22	2035	14.7
23	2036	15.18
24	2037	15.67
25	2038	16.17

No Change

ASSUMPTIONS APPENDIX, WIND

Modeled Parameters

		Wind I	Wind II
Nameplate Capacity	kW	1,650	3,300
Annual Degradation	%	0.0%	
Generation Equipment	$/kW	$3,200 $3,500	$3,100 $3,400
Interconnection	$/kW	$107	$136

Capacity Factor Assumptions

Modeled Parameters

Size Class	Proposed CF for 2015
Wind I	**21.00%** 23.00%
Wind II	**21.00%** 23.00%

Ongoing Cost Assumptions

Modeled Parameters

		Wind I	Wind II
Fixed O&M Expense, Yr 1	$/kW-yr	$25.00 $20.00	
O&M Cost Inflation	%	2%	
Insurance, Yr 1 (% of Total Cost)	%	0.60%	
Management Yr 1	$/yr	Included in fixed O&M	
Land Lease	$/yr	**$52,000* w/ 2% esc.** $30,000	**$105,000* w/ 2% esc.** $60,000

*** $1,500/acre; ~35 acres per turbine. More land may be required, but parallel use may also be possible.**

Financing Assumptions

Modeled Parameters

		Wind I	Wind II
% Debt	%	70%/60%/70%* 70%	
Debt Term	yrs	18	
Interest Rate on Term Debt	%	6.5%	
Lender's Fee (% of total borrowing)	%	2.25%	
Required Minimum Annual DSCR		1.00	
Required Average DSCR		1.45	
Target After-Tax Equity IRR	%	10% 11%	
Reserve Requirement	$	$0	

*Based on whether PTC / ITC / No ITC

Additional Assumptions

- Commercial operation achieved in 2015
- Project Useful Life: 20 years
- Average Debt Service Coverage Ratio Target: 1.45X
- Interconnection Costs depreciated on 15-year MACRS schedule
- All other project costs:
  - 96% depreciated on 5-year MACRS
  - 2% depreciated on 15-year MACRS
  - 2% not depreciable
- Federal Income Tax rate 35%; State rate 9%

No Change

Additional Cost Data From MassCEC

Project Name	COD	Capacity (kW)	Total Cost ($)	Total Cost ($/kW)
DOC Gardner	4/1/2013	3,300	9,000,000	$2,727
Varian Semiconductor	12/6/2012	2,500	7,763,615.18	$3,105
Camelot Wind	12/1/2012	1,500	4,351,547	$2,901
Kingston Community Wind	5/18/2012	2,000	Not Reported	N/A
Fairhaven	5/2/2012	3,000	Not Reported	N/A
Lightolier	4/20/2012	2,000	4,478,500	$2,239

ASSUMPTIONS APPENDIX, ANAEROBIC DIGESTION

FINANCING ASSUMPTIONS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
% Debt (% of hard costs) (mortgage-style amort.)	*%*	**60% / 70%*** **60%**	
Debt Term	*years*	**18**	
Interest Rate on Term Debt	*%*	**6.5%** **7%**	
Lender's Fee (% of total borrowing)	*%*	**0%**	
Required Minimum Annual DSCR	*Ratio*	**1.00**	
Required Average DSCR	*Ratio*	**1.50**	
Target After-Tax Equity IRR	*%*	**10%** **11%**	
Other Closing Costs	*$*	**Included in total cost.**	
Reserve Requirement	*$*	**$0**	

*** with/without PTC**

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
Tipping Fee	*$/ton*	**$20** **$25**	
Quantity Received Each Year	*tons per year*	**10,000**	**22,308**
Digestate (if merchantable for additional revenue)	*$/gallon*	**$0**	

PROJECT PERFORMANCE ASSUMPTIONS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
Generator Nameplate Capacity	*kW*	**325**	**725**
Biogas Consumption per Day	*cubic feet/day*	**120,066**	**267,840**
Energy Content per Cubic Foot	*BTU/cubic foot*	**600**	
Heat Rate	*BTU/kWh*	**8,928**	
Availability	*%*	**92%**	
Station Service (Parasitic Load)	*%*	**15%**	
Annual Production Degradation	*%*	**0%**	
Project Useful Life	*years*	**20**	

No Change

CAPITAL, INTERCONNECTION AND O&M COSTS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
Generation Equipment	$/kW	**$10,000**	
Interconnection Costs	$/kW	**$275**	
Fixed O&M Expense	$/kW-yr	**$550**	
Variable O&M Expense	¢/kWh	**2.00**	
O&M Cost Inflation	%	**2%**	

No Change

ONGOING EXPENSE ASSUMPTIONS

Modeled Parameters

		Anaerobic Digestion I	Anaerobic Digestion II
Insurance, Yr 1 (% of Total Cost)	*%*	**1.0%**	
Project Management Yr 1	*$/yr*	**$33,621**	**$75,000**
Water & Sewer Expenses	*$/yr*	**$0**	
Digestate Disposal Cost (if handled as an expense)	*$/ton*	**$0.00**	
Land Lease	*$/yr*	**$15,690**	**$35,000**

No Change

Additional Assumptions

- Commercial operation achieved in 2015
- Project Useful Life: 20 years
- Average Debt Service Coverage Ratio Target: 1.50X
- Interconnection Costs depreciated on 15-year MACRS schedule
- All other project costs:
  - 96% depreciated on 5-year MACRS
  - 2% depreciated on 15-year MACRS
  - 2% not depreciable
- Federal Income Tax rate 35%; State rate 9%

No Change

ASSUMPTIONS APPENDIX, HYDRO

Production and Capital Cost Assumptions

Modeled Parameters

		Hydro I	Hydro II
Nameplate Capacity	kW	150	500
Annual Degradation	%	0.0%	
Cost Excluding Interconnection	$/kW	**$4,500** $4,000	**$4,200** $4,000
Interconnection	$/kW	$100	

Production and Capital Cost Assumptions

Modeled Parameters

Size Class	Proposed CF for 2015
Hydro I	40.00%
Hydro II	40.00%

No Change

ONGOING EXPENSES

Modeled Parameters

		Hydro I	Hydro II
Fixed O&M Expense, Yr 1	$/kW-yr	**$13.00**	
Variable O&M	₵/kWh	**2.00**	
O&M Cost Inflation	%	**3%** **2%**	
Insurance, Yr 1 (% of Total Cost)	%	**0.50%**	
Management Yr 1	$/yr	**$5,000**	**$15,000**
Land Lease	$/yr	**$3,000 w/ 2% esc.** **$2,500**	**$10,000** **w/ 2% esc.**
Royalties	%	**3.5%**	

Modeled Parameters

		Hydro I	Hydro II
% Debt	%	**50%**	
Debt Term	yrs	**18**	
Interest Rate on Term Debt	%	**6.5%**	
Lender's Fee (% of total borrowing)	%	**2.25%**	
Required Minimum Annual DSCR		**1.00**	
Required Average DSCR		**1.45**	
Target After-Tax Equity IRR	%	**10%** **11%**	
Reserve Requirement	$	**$0**	

Incentives

- Current Production Tax Credit (PTC) available to projects under construction as of 12/31/2013.
  - Hydro is eligible for 50% of face value
  - Ceiling prices calculated both with and without PTC extension.
- Ceiling prices evaluated without Bonus Depreciation
- Ceiling prices evaluated assuming full monetization of federal PTC
- Benefit of Net Operating Loss at state level assessed both “as generated” and “carried-forward.” Proposed ceiling prices are an average of these two results.
- No federal, state, local or other grants assumed.

No Change

Additional Assumptions

- Commercial operation achieved in 2016
- Project Useful Life: 30 years
- Interconnection Costs depreciated on 15-year MACRS schedule
- All other project costs:
  - 96% depreciated on 5-year MACRS
  - 2% depreciated on 15-year MACRS
  - 2% not depreciable
- Federal Income Tax rate 35%; State rate 9%
- Market value of production (assumed revenue) post-contract = 75% of sum of energy and capacity price forecasts from 2013 Avoided Energy Supply Cost Study and $5/REC (see next slide)

No Change

Additional Assumptions:
Forecast of Market Value of Production

Project Year	Calendar Year	Market Value of Production (incl. energy, capacity & RECs) (cents/kWh)
21	2034	13.28
22	2035	13.67
23	2036	14.07
24	2037	14.49
25	2038	14.91
26	2039	15.35
27	2040	15.80
28	2041	16.26
29	2042	16.74
30	2043	17.23

No Change

DATA REQUEST (please also consult the MS Word Request)

CREST is a levelized cost of energy (LCOE) model. It converts input for capital costs, fixed and variable maintenance, system performance characteristics, capital structure, cost of capital, and Federal and State incentives into the revenue stream required to provide a specified return to investors over a defined period of time. For the purpose of establishing Ceiling Prices, we assume the subject projects are owned by private sector investors – with the exception that Small Solar I will be evaluated under both homeowner and third-party ownership. The sensitivity to the availability of federal incentives will be also tested, as follows:

Technology	Federal Incentive Cases[1]
Solar	1. For all third-party owned solar projects: a. With Investment Tax Credit (ITC) @ 30%; b. With ITC @ 10% 2. For homeowner owned solar projects: a. With ITC @ 30%; b. With ITC @ 0%
Wind	1. With ITC 2. With Production Tax Credit (PTC)[2] 3. Without ITC or PTC
Anaerobic Digestion	1. With PTC 2. Without PTC
Hydropower	1. With PTC 2. Without PTC

The following tables represent the key inputs for which we seek your specific feedback. Please fill out the tables below as completely, and in as much detail, as your expertise allows. Short definitions of each of the inputs are provided before the tables. We ask that you read these definitions carefully before completing the tables, as it is important that we are able to consider recommended inputs on an apples-to-apples basis. (For example, parties may aggregate operations and maintenance (O&M) costs differently.) Please conform your cost information to our line items in order for the information you provide to be of greatest utility in calculating Ceiling Prices. Please provide sources (as previously described) for all recommended inputs.

[1] Federal bonus depreciation was available to projects entering commercial operation on or before December 31, 2013. This analysis assumes that the bonus depreciation inventive is not renewed.
[2] In this case, the Federal PTC is assumed to have been renewed retroactively to January 1, 2014, but without the option to elect the ITC in lieu thereof. Both ITC and PTC CP options will be evaluated

DEFINITIONS

Net capacity factor (NCF), Year 1 (%) - Capacity Factor is the % representation of the actual annual production vs. the theoretical maximum annual production of an energy project. This model requires the input of a Net Capacity Factor, meaning that the estimate of actual energy production should take into account all electricity losses (including those incurred between the generating facility and the contract delivery point), scheduled and unscheduled maintenance, shading, forced outages, and any other factors that could reduce production.   For a solar facility, both capacity and capacity factor should be reported as DC. For a wind plant, this number should reflect the average annual P50 estimate.

Total installed cost: This includes the total expected all-in installed project cost, which should include all hardware, balance of plant, design, construction, permitting, development (including developer fee), interest during construction and financing costs. This figure should not account for any tax incentives, grants, or other cash incentives, which will be accounted for separately. It should also exclude the assumed interconnection cost, which is specified separately.

Interconnection cost: Please include your assumptions about the “typical” interconnection cost for a system in Rhode Island. Interconne

O&M expenses: Operations and maintenance includes all fixed and variable expenses associated with project operations. Annual expe

Length of construction period: The # of months from construction start to commercial operation.

Source and cost of construction financing: This indicated whether construction is funded with debt, equity or a combination thereof, an

Permanent Debt-to-equity ratio: This specifies the ratio of the portion of funds borrowed (as a percentage of the total hard costs) to the

Interest rate: The all-in interest rate is the financing rate provided by the bank or other debt investor.

Lender’s Fee: The fee taken by the bank for originating the loan. It is expressed as a percentage of the total amount borrowed.

Avg . Debt Service Coverage Ratio: Denotes the requirement for cash flow available for debt service to be larger than the annual debt o

Min. Debt Service Coverage Ratio: Denotes the requirement for cash flow available for debt service to be larger than the annual debt ob

Return on equity: This is the minimum after-tax internal rate of return required to attract equity investment to a project of the indicate

Decommissioning Reserve: Represents the potential need to encumber cash flows from operations in order to demonstrate the availabi

Capital Expenditures During Operations: Costs associated with the replacement of major equipment components, which are capitalized

TECHNOLOGY:	SOLAR		Other Comments, not addressed below
SYSTEM SIZE, DC (Check One):	X	**5 kW**	
		25 kwW	
		140 kW	
		500 kW	
		1500 kW	
Installation Type (Check One):	X	**Residential**	
		Non-Residential	
If Residential, Specify Ownership Type	X	**Homeowner**	
		Third Party	

MODELING INPUTS

Input category	Recommended Input	Source	Notes on Assumptions
Expected Annual Average Net capacity factor, (%)			
Annual Production Degradation (%)			
Total installed cost ($\$/kW_{DC}$), **excluding** Interconnection Cost			
Typical Interconnection cost ($)			
O&M expenses ($\$/kW_{DC}$-yr), Yr 1 (excluding those listed below)			
Insurance, Yr 1, (provide as % of total project cost, or in $/yr)			
Project Management, Yr 1 ($/yr)			
Land Lease, Yr 1 ($/yr)			
Annual average escalation rate for O&M expenses (%)			
Royalties (% of revenue, or $/yr)			

TECHNOLOGY:	SOLAR		Other Comments, not addressed below
Property Taxes ($ in Yr 1 and annual adjustment factor, or as annual estimates with methodology clearly described[1])			
Decommissioning Reserve? If yes, how much?			
Capital Expenditures During Operations: E.G. Inverter Replacement (please denote the Project Yr {i.e. Yr 12} during which the expenditure takes place, the nominal $ cost, and the type of expenditure)[2]			
Financing Assumptions With 30% ITC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			
Financing Assumptions With 10% ITC (0% for Homeowner-Owned Systems)			

TECHNOLOGY:	**SOLAR**		**Other Comments, not addressed below**
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			

[1] The methodology, assumptions and calculation of annual property tax estimates can be provided separately.

[2] If there are multiple expenditures, please list multiple inputs.

TECHNOLOGY:	WIND		Other Comments, not addressed below
SYSTEM SIZE, DC (Check One):	X	**1.65 MW**	
		3.3 MW	

MODELING INPUTS

Input category	**Recommended Input**	**Source**	**Notes on Assumptions**
Expected Annual Average Net capacity factor, (%)			
Annual Production Degradation (%)			
Total installed cost ($/kW$_{DC}$), **excluding** Interconnection Cost			
Typical Interconnection cost ($)			
O&M expenses ($/kW$_{DC}$-yr), Yr 1 (excluding those listed below)			
Insurance, Yr 1, (provide as % of total project cost, or in $/yr)			
Project Management, Yr 1 ($/yr)			
Land Lease, Yr 1 ($/yr)			
Annual average escalation rate for O&M expenses (%)			
Royalties (% of revenue, or $/yr)			

TECHNOLOGY:	WIND		Other Comments, not addressed below
Property Taxes ($ in Yr 1 and annual adjustment factor, or as annual estimates with methodology clearly described[1])			
Decommissioning Reserve? If yes, how much?			
Capital Expenditures During Operations: E.G. Inverter Replacement (please denote the Project Yr {i.e. Yr 12} during which the expenditure takes place, the nominal $ cost, and the type of expenditure)[2]			
Financing Assumptions With ITC in Lieu of PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender’s fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			
Financing Assumptions With PTC			

TECHNOLOGY:	WIND		Other Comments, not addressed below
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			
Financing Assumptions Without ITC/PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			

[1] The methodology, assumptions and calculation of annual property tax estimates can be provided separately.

[2] If there are multiple expenditures, please list multiple inputs.

TECHNOLOGY:	**Anaerobic Digestion**		**Other Comments, not addressed below**
SYSTEM SIZE, DC (Check One):	X	**325 kW**	
		725 kW	

MODELING INPUTS

Input category	Recommended Input	Source	Notes on Assumptions
Biogas Consumption/Day (cubic ft/day)			
Energy content/cubic foot (BTU/cubic ft)			
Heat Rate (BTU/kWh)			
Availability Factor			
Station Service/Parasitic Load			
Annual Production Degradation (%)			
Total installed cost ($/kW$_{DC}$), **excluding** Interconnection Cost			
Typical Interconnection cost ($)			
O&M expenses ($/kW$_{DC}$-yr), Yr 1 (excluding those listed below)			
Variable O&M (¢/kWh), Yr 1 (excluding those listed below)			
Insurance, Yr 1, (provide as % of total project cost, or in $/yr)			
Project Management, Yr 1 ($/yr)			

TECHNOLOGY:	Anaerobic Digestion		Other Comments, not addressed below
Land Lease, Yr 1 ($/yr)			
Annual average escalation rate for O&M expenses (%)			
Royalties (% of revenue, or $/yr)			
Property Taxes ($ in Yr 1 and annual adjustment factor, or as annual estimates with methodology clearly described[1])			
Decommissioning Reserve? If yes, how much?			
Capital Expenditures During Operations: E.G. Inverter Replacement (please denote the Project Yr {i.e. Yr 12} during which the expenditure takes place, the nominal $ cost, and the type of expenditure)[2]			
Tipping Fees/Digestate Rev, if applicable: $/ton, and tons per year			
Financing Assumptions With PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			

TECHNOLOGY:	Anaerobic Digestion		Other Comments, not addressed below
Interest rate on debt (%)			
Lender’s fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			
Financing Assumptions Without PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender’s fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			

[1] The methodology, assumptions and calculation of annual property tax estimates can be provided separately.

[2] If there are multiple expenditures, please list multiple inputs.

TECHNOLOGY:	Hydroelectric*		Other Comments, not addressed below
SYSTEM SIZE, DC (Check One):	X	150 kW	
		500 kW	

*To be eligible for a contract under this program, a hydro facility must meet the RI RES eligibility criteria established in CRIR 90-060-015 Rules and Regulations Governing the Implementation of a Renewable Energy Standard.

MODELING INPUTS

Input category	Recommended Input	Source	Notes on Assumptions
Expected Annual Average Net capacity factor, (%)			
Annual Production Degradation (%)			
Total installed cost ($\$/kW_{DC}$), **excluding** Interconnection Cost			
Typical Interconnection cost ($)			
O&M expenses ($\$/kW_{DC}$-yr), Yr 1 (excluding those listed below)			
Variable O&M (¢/kWh), Yr 1 (excluding those listed below)			
Insurance, Yr 1, (provide as % of total project cost, or in $/yr)			
Project Management, Yr 1 ($/yr)			
Land Lease, Yr 1 ($/yr)			
Annual average escalation rate for O&M expenses (%)			
Royalties (% of revenue, or $/yr)			

TECHNOLOGY:	**Hydroelectric***		**Other Comments, not addressed below**
Property Taxes ($ in Yr 1 and annual adjustment factor, or as annual estimates with methodology clearly described[1])			
Length of construction period (mos)			
Source (D/E) and cost (e.g. interest rate) of construction financing			
Decommissioning Reserve? If yes, how much?			
Capital Expenditures During Operations: E.G. Inverter Replacement (please denote the Project Yr {i.e. Yr 12} during which the expenditure takes place, the nominal $ cost, and the type of expenditure)[2]			
Financing Assumptions With PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			

TECHNOLOGY:	Hydroelectric*		Other Comments, not addressed below
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			
Financing Assumptions Without PTC			
Permanent debt/equity (D/E) ratio			
Permanent debt term (years)			
Interest rate on debt (%)			
Lender's fee (% of loan amt)			
Avg. Debt Service Coverage Ratio			
Min. Debt Service Coverage Ratio			
After-tax target equity IRR (%)			

[1] The methodology, assumptions and calculation of annual property tax estimates can be provided separately.

[2] If there are multiple expenditures, please list multiple inputs.

Sustainable Energy Advantage, LLC

10 Speen Street, 3rd Floor, Framingham, MA 01701 • Tel: 508.665.5850 • Fax: 508.665.5858 • bgrace@seadvantage.com • www.seadvantage.com

Memo

To: RI DG Board

From: Sustainable Energy Advantage, LLC

Date: 12.17.2014

Re: SEA Requests for Information, Surveys and Distributed Presentations

From September 2014 to the present, Sustainable Energy Advantage LLC (SEA) has provided consulting services to the DG Board in support of Ceiling Price (CP) development for the 2015 Renewable Energy Growth Program. During this process. SEA's work in determining these prices was informed by DG Board guidance and independent research, as well as stakeholder outreach – which included a survey, numerous requests for written comments, discussions with stakeholders at three public meetings, and informal feedback throughout the process.

Below is a list of the documents sent by SEA to stakeholders throughout the ceiling price development process:

Document #	Document Type	Date Distributed
1	Stakeholder Data Request Survey (Word File)	September 26, 2014
2	Stakeholder Data Request (Excel File)	September 26, 2014
4	Draft Ceiling Price Presentation given on October 20, 2014.	October 21, 2014
6	Revised Ceiling Price Presentation given on November 20, 2014.	November 24, 2014
7	Final Ceiling Price Presentation given on December 9, 2014.	December 10, 2014

In addition, SEA made numerous information requests and outreach efforts to stakeholders when distributing the above materials, as well as independent of such distributions. Below is the verbatim text of the emails sent accompanying the above documents, as well as additional information requests:

<u>September 26, 2014</u> – *SEA initial request stakeholder data request, survey.*

Good Morning,

The Rhode Island Distributed Generation Board and Office of Energy Resources have commenced work to assess and recommend Ceiling Prices for the 2015 Renewable Energy Growth Program.

Attached please find their ***Call for Ceiling Price Data***. Your timely and detailed response to this data request is critical to achieving a robust process and result, and submitting ceiling price recommendations to the PUC on schedule.

Please review the background and instructions in the MS Word document and then **populate the MS Excel file with your cost, performance and financing data**.

Please complete this data request in as much detail as your experience and expertise will allow, and **submit to jgifford@seadvantage.com no later than COB on Friday October 10, 2014.**

Please contact Jason Gifford at (802) 846-7627 or jgifford@seadvantage.com with any questions or clarifications that would help you fulfill this data request more easily and completely.

Kind Regards,
Jason

Jason S. Gifford, Director
Sustainable Energy Advantage, LLC

Direct: (802) 846-7627
Mobile: (802) 343-3210

jgifford@seadvantage.com

[Documents #1 & #2 Attached to this Email]

<u>October 17, 2014</u> - *SEA Dissemination of Executive Summary of Ceiling Price Presentation to be given on October 20, 2014.*

Dear Colleagues,

Attached please find an Executive Summary of the Draft Ceiling Price Presentation that will serve as a discussion tool for Monday's REG Program Public Meeting.

We look forward to your participation.

Kind Regards,
Jason

Jason S. Gifford, Director
Sustainable Energy Advantage, LLC

Direct: (802) 846-7627
Mobile: (802) 343-3210

jgifford@seadvantage.com

[Document #3 Attached to this Email]

<u>October 21, 2014</u> - *SEA Dissemination of Ceiling Price Presentation Given on October 20, 2014, and Request for Comments.*

REG Program Participants,

Attached please find the draft ceiling price presentation from yesterday's Public Meeting.

The DG Board, OER and SEA request your <u>written comments no later than close of business on Tuesday November 4, 2014</u>. Please submit your comments to both jgifford@seadvantage.com and christopher.kearns@energy.ri.gov

The next ceiling price public meeting will be held on Thursday November 20th from 3:30 – 5:30pm at DOA.

Thank you for your continued participation.

Kind Regards,
Jason

Jason S. Gifford, Director
Sustainable Energy Advantage, LLC

Direct: (802) 846-7627
Mobile: (802) 343-3210

jgifford@seadvantage.com

[Document #4 Attached to this Email]

<u>October 29, 2014</u> - *SEA Request for Comments Related to First CP Presentation (given October 20, 2014).*

REG Program Participants,

This is a reminder that t he DG Board, OER and SEA request your <u>written comments no later than close of business on Tuesday November 4, 2014</u>.

Please submit your comments to both jgifford@seadvantage.com and christopher.kearns@energy.ri.gov

Kind Regards,
Jason

Jason S. Gifford, Director
Sustainable Energy Advantage, LLC

Direct: (802) 846-7627
Mobile: (802) 343-3210

jgifford@seadvantage.com

[No Document Attached to this Email]

<u>November 5, 2014</u> - *SEA Request for Comments related to Property Taxation, via RIOER.*

Good Afternoon,

SEA has the following questions as they are working on the 2nd draft of the 2015 REG ceiling prices. Your feedback would be greatly appreciated.

1. How is the personal property tax <u>cost basis</u> calculated for renewable energy projects? For example, is the cost basis equal to the price of the generating equipment alone (i.e. panels, wind turbine generator, etc) or does the property tax cost basis also include other components, or even the labor cost to install the system. At the extreme, the cost basis would be equal to the total project cost/total market value of the whole project.

2. Once the cost basis is determined, does it decline over time? For example, last year we assumed that the amount taxed started at 95% of the total cost basis and declined at 5% per year to a floor of 20% of the original cost basis.

3. Does the calculation (or other treatment) differ by technology?

If you have answers to the questions below, please send them directly to Jason and this group ASAP.

Thanks,

Chris

[No Document Attached to this Email]

<u>November 19, 2014</u> – *SEA Dissemination of Executive Summary of Ceiling Price Presentation Given on November 20, 2014, and Request for Comments*.

DG REG Stakeholders,

Attached please find a summary of the draft revised ceiling prices for 2015.

We apologize for the short period of time between this release and tomorrow's (Thursday's) public meeting (scheduled for 3:30 @ OER Conference Room A).

Tomorrow's meeting will provide time for an explanation of the changes and for discussion. There will also be a **<u>two week</u>** period for follow-up comments prior to the development of the final draft recommended ceiling prices.

Kind Regards,
Jason

Jason S. Gifford, Director
Sustainable Energy Advantage, LLC

Direct: (802) 846-7627
Mobile: (802) 343-3210

jgifford@seadvantage.com

[Document #5 Attached to this Email]

November 24, 2014 – *SEA Dissemination of Ceiling Price Presentation Given on November 20, 2014, and Request for Comments*

Good Afternoon,

Please find attached a copy of the 2nd draft of the 2015 Renewable Energy Growth Ceiling Prices that were presented on Thursday by Sustainable Energy Advantage at the DG Board Public Workshop.

There will be a **2 week public comment period** to submit comments on the 2nd draft of the 2015 ceiling prices. Please submit your comments to Jason Gifford at jgifford@seadvantage.com

The deadline for comments to be submitted is Thursday, December 4th at 1:00 p.m.

Thanks,

[Document #6 Attached to this Email]

December 10, 2014 – *RIOER Distribution of Final SEA Ceiling Price Presentation*

Good Morning,

Please find attached the final documents that were presented at the DG Board Public Workshop on Tuesday.

Thanks,

Chris

[Document #7 Attached to this Email]