## STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS



**Department of Administration** DIVISION OF LEGAL SERVICES One Capitol Hill, 4<sup>th</sup> Floor Providence, RI 02908-5890

Tel: (401) 222-8880 Fax: (401) 222-8244

December 16, 2013

## VIA HAND DELIVERY AND ELECTRONIC MAIL:

Luly E. Massaro Commission Clerk Rhode Island Public Utilities Commission 89 Jefferson Boulevard Warwick, Rhode Island 02888

RE: Rhode Island Office of Energy Resources' Report and Recommendation Regarding 2014 Distributed Generation Classes, Ceiling Prices and Targets (Docket No. 4288)

Dear Ms. Massaro:

Enclosed for filing on behalf of the Rhode Island Distributed Generation Standard Contract Board ("Board") is an original and ten (10) copies of the Board's Report and Recommendations regarding 2014 distributed generation classes, ceiling prices and targets.

Electronic copies to all persons named on the attached Service List and the Board will provide a hard copy to anyone who requests it. Thank you for your assistance.

Sincerely,

W. Mayche

Daniel W. Majcher, Esq.

DWM/njr

Enclosure

c. Leo Wold, Esq. Thomas R. Teehan, Esq. Docket 4288 Service List

## STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS PUBLIC UTILITIES COMMISSION

IN RE: RHODE ISLAND OFFICE OF ENERGY RESOURCES' REPORT AND RECOMMENDATION REGARDING 2014 DISTRIBUTED GENERATION CLASSES, CEILING PRICES AND TARGETS

DOCKET NO. 4288

#### **Entry of Appearance**

On behalf of the Rhode Island Office of Energy Resources' and the Distributed Generation Standard Contract Board ("Board"), I, Daniel W. Majcher, Esq., hereby enter my appearance for the above mentioned docket.

Respectfully Submitted,

W Mosch

Daniel W. Majcher, Esq.(Bar ID #7265) Rhode Island Department of Administration Division of Legal Services One Capitol Hill, 4<sup>th</sup> FL. Providence RI, 02908 PHONE: (401) 222-8880 FAX: (401) 222-8244 EMAIL: <u>daniel.majcher@doa.ri.gov</u>

# 12/16/13

Date

#### **CERTIFICATE OF MAILING**

I hereby certify that on the <u>16</u> day of <u>December</u> 20 <u>13</u>, I mailed a true copy of this Entry of Appearance by regular mail, postage prepaid to the Rhode Island Public Utilities Commission.

Signature of Person Certifying Mailing

Docket No. 4288 – Office of Energy Resources Filings: 1) Proposed Distributed Generation (DG) Standard Contract Act Classes and Ceiling Prices; and 2) Proposed DG Standard Contract; and

Docket No. 4277 – National Grid National Grid – Distributed Generation Enrollment Application & Enrollment Process Rules

Service Lists updated 11/18/13

Name/Address of Parties in Docket	E-mail	Phone
Peter Lacouture, Esq.	placouture@rc.com	401-709-3314
Robinson & Cole LLP		
One Financial Plaza, Suite 1430		а Т
Providence, RI 02903-2485		
Marion S. Gold, Administrator	Marion.Gold@energy.ri.gov	401-574-9119
RI Office of Energy Resources		
One Capitol Hill	Joyce.discuillo@energy.ri.gov	
Providence, RI 02908-5850		
Christopher Kearns, Program Service Officer	Christopher.Kearns@energy.ri.gov	6
RI Office of Energy Resources		
Daniel W. Majcher, Esq.	Daniel.majcher@doa.ri.gov	401-222-8880
Dept. of Administration	й. р	
Division of Legal Services		
One Capitol Hill, 4 <sup>th</sup> Floor		
Providence, RI 02908		
Thomas R. Teehan, Esq.	Thomas.teehan@nationalgrid.com	401-784-7667
National Grid	Celia.obrien@nationalgrid.com	
280 Melrose St.	Joanne.scanlon@nationalgrid.com	
Providence, RI 02907	Brooke.skulley@nationalgrid.com	
	corinne.abrams@nationalgrid.com	
Karen Lyons, Esq.	Klyons@riag.ri.gov	401-222-2424
Dept. of Attorney General	dmacrae@riag.ri.gov	
150 South Main St.	Lwold@riag.ri.gov	
Providence, RI 02903	jmunoz@riag.ri.gov	
Jon Hagopian, Sr. Counsel	Jhagopian@ripuc.state.ri.us	401-784-4775
Division of Public Utilities and Carriers	Sscialabba@ripuc.state.ri.us	
89 Jefferson Blvd.	Dstearns@ripuc.state.ri.us	
Warwick, RI 02888	Acontente@ripuc.state.ri.us	
	Jshilling@ripuc.state.ri.us	1. 125
Jerry Elmer, Esq.	jelmer@clf.org	401-351-1102
Conservation Law Foundation		Ext. 2012
55 Dorrance Street		2
Providence, RI 02903		
Richard Hahn	rhahn@lacapra.com	
Lacapra Associates		
1 Washington Mall, 9th floor	apereira@lacapra.com	
Boston, MA 02108		-
Alan M Shoer, Esq.	ashoer@apslaw.com	*
Adler Pollock & Sheehan P.C.		
One Citizens Plaza, 8th Floor		
Providence, RI 02903		

Seth H. Handy, Esq.	seth@handylawllc.com	401-626-4839
Handy Law, LLC		in neuronaliti (perindositivelle) de benalititizari
42 Weybosset St.		
Providence, RI 02903		
Jeff Broadhead, Executive Director WCRPC	jb@wcrpc.org	
Mark Depasquale, Wind Energy Development	mdepasquale@windenergydevelopmentllc.com	
Mike McElroy, Esq.	Michael@McElroyLawOffice.com	401-351-4100
Schacht & McElroy		5
PO Box 6721		
Providence, RI 02940-6721		
Joseph E. Donovan, Esq.	Joseph.donovan@constellation.com	410-470-3582
Constellation Energy Resources, LLC		
Jeffrey W. Garrison, Regulatory Associate	Jeffrey.Garrison@constellation.com	410-470-3160
Constellation Energy		
Daniel Allegretti, VP Energy Policy	Daniel.W.Allegretti@constellation.com	603-224-9653
Constellation Energy Commodities		
File an original & 10 copies w/:	Luly.massaro@puc.ri.gov	401-780-2107
Luly E. Massaro, Commission Clerk	Cynthia.WilsonFrias@puc.ri.gov	
Public Utilities Commission	Alan.nault@puc.ri.gov	
89 Jefferson Blvd.	Nicholas.ucci@puc.ri.gov	
Warwick, RI 02888	Dilip.shah@puc.ri.gov	
	Amy.Dalessandro@puc.ri.gov	
Interested Parties		
Alex Rivera, Vanguard Energy Partners	alex@vanguardenergypartners.com	617-261-8592
Anna Noucas, Sol Systems, LLC	anna.noucas@solsystemscompany.com	202-588-6469
Ben Riggs	rmcriggs@earthlink.net	
Bill Ferguson, The Energy Council of RI	bferguson2010@cox.net	
Bob Stickney	Bstickney@mercurysolarsystems.com	
Charity Pennock, NE Clean Energy Council	cpennock@cleanenergycouncil.org	401-345-1711
Craig Both, RGS Energy	Craig.Both@realgoods.com	203-210-7710
Dan Richardson	Dan.richardson@rterra.com	401-619-5297
Fred Unger, Hartwood Group	unger@hrtwd.com	
Hannah Morini, RIEDC	hmorini@riedc.com	
Hunter Strader, Bella Energy	Hunter.Strader@BellaEnergy.com	336-706-2043
James Schwartz, Independence Solar	jschwartz@independencesolar.com	
Jamie Fordyce, Energy Management Inc.	JFordyce@emienergy.com	415-948-4288
Jason Chamsarian	jchamsarian@mercurysolarsystems.com	
John D. Fish, Millwork One	jfish@millworkone.com	401-738-6990
John H. King, Gannon & Scott	JohnKing@gannon-scott.com	401-463-5550
John P. Harper, Birch Tree Capital LLC	jharper@birchtreecapital.net	508-665-5898
Joseph Peixoto, Gannon & Scott	JoePeixoto@gannon-scott.com	401-463-5550
Julian Dash, Clean Economy Dev.	jdash@cleaneconomydevelopment.com	401-954-6837
Karina Lutz	karinalutz@hotmail.com	401-497-5968
Karl Munzel	kmunzel@alterisinc.com	
Kelly Mahoney, Governor's Office Policy Dir.	Kelly.Mahoney@governor.ri.gov	401-222-8135
Kevin Stacom	Kevin.stacom@gmail.com	
Kirt Mayland	dkm@soltasenergy.com	
Kristie Caltabiano, Tecta Solar	kcaltabiano@tectaamerica.com	
Laurence W. Ehrhardt	RepLarry@gmail.com	
Lyle Trued, Fonroche USA	1.trued@fonrochegroup.com	646-535-8783
Mark Luders	mluders@vanguardenergypartners.com	0-0-000-0100

Matt Shortsleeve	mshortsleeve@mercurysolarsystems.com	-
Meredith Skelly, RGS Energy	Meredith.skelly@realgoods.com	401-490-0800
Michelle Carpenter, Smart Energy Capital	Michelle.Carpenter@smartenergycapital.com	914-236-4284
Omay Elphick,	omayelphick@gmail.com	
Palmer Moore, Nexamp	pmoore@nexamp.com	
Pamela Mandler	PMandler1@gmail.com	401-864-5041
Phil Aftuck	paftuck@consortiumcapital.com	
Robert J. Tomey, Conanicut Energy LLC	conanicutenergy@cox.net	
Scott DeMatteo, Millwork One	sdematteo@millworkone.com	401-738-6990
Scott Rowsell, Beaumont Solar Co.	scott@beaumontsolarco.com	508-990-1701
Stephan Wollenberg	stephan@ripower.org	617-524-3950
Stuart Flanagan, Newport Renewables	sflanagan@nptre.com	401-619-5906
Ted Lawrence	ted.lawrence@renewableresourcesinc.com	203-674-8361
Ted Vansant, RGS Energy	tvansant@alterisinc.com	5.0

# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS PUBLIC UTILITIES COMMISSION

In re Rhode Island Distributed Generation Standard:Contract Board's Report and Recommendations:Regarding 2014 Distributed Generation Classes,:Ceiling Prices and Targets:

# Report and Recommendation Of the Rhode Island Distributed Generation Standard Contracts Board <u>On 2014 Distributed Generation Classes, Ceiling Prices, and Targets</u>

## I. <u>INTRODUCTION</u>

The Distributed Generation Standard Contracts Act, R.I. Gen. Laws §39-26.2-1 *et seq.* ("Act") requires the Distributed Generation Standard Contract Board ("Board") to develop and recommend to the Rhode Island Public Utilities Commission ("Commission") for review and approval ceiling prices for standard contracts under the Distributed Generation Standard Contracts ("DGSC") program, and develop and recommend to the Commission annual targets for enrollments by renewable energy technology and project for the program year. This is the first year in which the Board is submitting directly to the Commission. For Program years 2011, 2012, and 2013 the Office of Energy Resources ("OER"), acting in lieu of the Board in accordance with R.I. Gen. Laws § 39-26.2-3(3) made the submissions. Attached as **Exhibit 1** is a list of the members of the Board.

This filing represents the Board's Report and Recommendations for the 2014 Distributed Generation Standard Contracts Classes, Ceiling Prices, and Targets (hereafter "the 2014 Plan"). The 2014 Plan is summarized in **Exhibit 2** attached hereto and explained further in this report.

On August 29, 2013, the OER filed on behalf of the Board a motion for an extension of the October 15, 2013 deadline for the filing of the 2014 Plan for a period of sixty (60) days. By order dated October 10, 2013 the Commission granted the Board's motion for extension of time to submit the 2014 Plan.

In order to meet the requirements of the Act, receive public comment and inform the Board of the past experience with the program, several public community review meetings were jointly held by the Board and the OER. Additionally, the Board met on this matter in accordance with the Rhode Island Open Meetings Act. There were a total of seven public meetings, which were held on the following dates: July 18th, August 19th, October 8th, 22nd, November 7th, 27th, and December 2nd. Attached as **Exhibit 3** is a list of attendees. The meetings provided the Board with information from the OER, The Narragansett Electric Company d/b/a National Grid ("National Grid"), and the Board's technical consultant, Sustainable Energy Advantage ("SEA"). Attached as **Exhibit 4** are the presentation documents. Additionally, public comment was received and incorporated into the 2014 Plan as necessary and deemed appropriate.

Despite the fact that the statutory timetable for the Board to conduct a review was both

tight and ambitious, the Board and the OER jointly conducted a transparent process to establish the 2014 Plan. The Board voted and approved the 2014 Plan on December 2, 2013.

## II. <u>BACKGROUND – 2011-2013 RESULTS</u>

In submitting the 2014 Plan to the Commission, the Board had an opportunity and an obligation to consider prior year experiences with the DGSC program. The OER monitored the implementation of the DGSC program over the last three years. National Grid's enrollments for the DGSC Program have occurred in December 2011; April and July 2012; and March, September and October 2013. Through the first three (3) years of the program (six enrollment periods), National Grid received 115 DGSC applications, totaling over 104.380 MW and has selected projects totaling 27.648 MW.

Thirty-three (33) projects have executed DGSC contracts with National Grid, including two (2) municipal projects (City of East Providence and Town of Coventry) and thirty-one (31) private projects. Over twenty (20) solar projects and one (1) wind turbine project are scheduled to be built over the next year. There were DGSC projects proposed in twenty-nine (29) municipalities. Projects associated with DGSC awarded contracts, have either been installed or are being planned for construction in the following eighteen (18) municipalities:

Providence, Glocester, Coventry, East Providence, Jamestown, Middletown, North Smithfield, North Kingstown, Woonsocket, Cranston, West Greenwich, Johnston, Hopkinton, West Warwick, Cumberland, Portsmouth, Warren and Pawtucket

The following chart shows the gradual decline for a majority of the DGSC ceiling price applications from December 2011 through November 2013. The price declines were strongest in the two (2) most competitive classes of projects, large and medium scale solar energy installations. Ceiling prices for wind energy projects have increased. To date, the number of small solar projects is comparatively small, thus although ceiling process have declined slightly, the impact on rate-payers was negligible. In 2011 it was expected that the cost of solar energy projects per kWh would be significantly higher than for wind energy projects; the trend has been in the opposite direction; this is making solar energy comparatively, increasingly cost effective.





The applicable provisions of the Act pertaining to the development of ceiling prices are as follows:

R.I. Gen. Laws § 39-26.2-5:

The ceiling price for each technology should be a price that would allow a private owner to invest in a given project at a reasonable rate of return, based on recent reported and forecast information on the cost of capital, and the cost of generation equipment. The calculation of the reasonable rate of return for a project shall include where applicable any state or federal incentives including but not limited to tax incentives. In setting the ceiling prices, the board also may consider: (1) Transactions for newly developed renewable energy resources, by technology and size, in the ISO-NE region and the northeast corridor; (2) Pricing for standard contracts received during the previous program year; (3) Environmental benefits, including, but not limited to, reducing carbon emissions, and system benefits; and (4) Cost effectiveness.

The applicable provisions of the Act pertaining to recommending enrollments by technology size and type are as follows:

## R.I. Gen. Laws § 39-26.2-3 (11):

"Renewable energy classes" means categories for different renewable energy technologies using eligible renewable energy resources as defined by § 39-26-5. For each program year, the board shall determine the renewable energy classes as are reasonably feasible for use in meeting distributed generation objectives from renewable energy resources and are consistent with the goal of meeting the annual target for the program year. For the program year ending December 31, 2012, there shall be at least four (4) technology classes and at least two (2) shall be for solar generation technology, and at least one shall be for wind. The board may add, eliminate, or adjust renewable energy classes for each program year with public notice given at least sixty (60) days previous to any renewable energy class targets for each class established. Class targets are the total program-year target amounts of nameplate capacity reserved for standard contracts for each renewable energy class. The sum of all the class targets shall equal the annual target.

R.I. Gen. Laws § 39-26.2-4(b):

By October 15, 2011 and each calendar year following until October 15, 2013, the board may recommend to the commission that the annual target for the following program year be adjusted upward to reflect any shortfalls in meeting the previous program year's annual target or to reflect any standard contracts entered into during prior program years that are voided. The board may also recommend to the commission that the annual target for the following program year be adjusted downward by any amounts that the previous program year's annual targets were exceeded by the standard contracts entered into during that program year.

R.I. Gen. Laws § 39-26.2-4(c):

The board may, based on market data and other information available to it including pricing for standard contracts received during previous program years, recommend a reduction of the annual target for the upcoming program year where the board determines that market conditions would be likely to produce unfavorably high target pricing for standard contracts during that upcoming program year. In considering such issues, the board may take into account the reasonableness of current pricing and its impact on all electric distribution customers who will be paying for the output for up to twenty (20) years at such prices.

R.I. Gen. Laws § 39-26.2-5(b):

For small distributed generation projects, the electric distribution company shall select projects for standard contracts based on the lowest proposal prices received with any distributed generation project which meets the requirements of all applicable tariffs and regulations, and meets the criteria of a renewable energy class in effect, until the class target is met.

R.I. Gen. Laws § 39-26.2-5(c):

For large distributed generation projects, the electric distribution company shall select projects for standard contracts based on the lowest proposed prices received, but not to exceed the

applicable standard contract ceiling price, provided, that the selected projects meet the requirements of all applicable tariffs and regulations and meet the criteria of a renewable energy class in effect until the class target is met.

The DGSC law amendments, Senate Bill 641, as amended, and House Bill 5803, as amended, passed by the Rhode Island General Assembly during the 2013 legislative session require the following:

- 1. Competitive bidding in the small DGSC classes.
- 2. Allow small scale hydropower the ability to become commercially operational within forty-eight months, instead of the eighteen month deadline that wind, solar and anaerobic digestion projects are required to meet.
- 3. Quarterly reporting requirements to the OER and National Grid for both small and large DGSC projects awarded contracts.
- 4. An annual economic and environmental report to the Governor and General Assembly on the results of the DGSC program. The study shall include, but not be limited to, environmental benefits, including carbon emission reductions from the installations; economic impacts including, but not limited to, direct and indirect jobs created; system reliability improvements; property and income tax benefits; and ratepayer impacts including, but not limited to, hedges against general inflation and fuel price volatility, short term price impacts, and wholesale price suppression.

The objectives of amending the DGSC law were to decrease project-specific contract costs and overall program costs, both of which benefits ratepayer; expand the list of eligible technologies in order to diversify the program; and increase the oversight of projects awarded contracts but yet to be completed. Governor Lincoln Chafee signed the legislation into law on July 11, 2013.

# IV. 2014 DGSC PROGRAM PLAN

# A. <u>Technology Classes and System Sizes</u>

The anticipated outcomes for the 2014 program are the following:

- 1. Increase the opportunities for different technologies to participate in the program.
- 2. Decrease, where appropriate, the technology class ceiling prices.
- 3. Create a stable and predictable program.
- 4. Allocate a fair portion of the MW capacity to support each of the technologies.

5. Award the balance of the remaining DGSC program MW capacity to multiple projects by the end of 2014, if feasible.

The Board recommends the following 2014 classes and system size eligibility for solar, wind, anaerobic digestion and small scale hydropower:

Technology	Eligible System Size
Small Solar	50 – 200 kW DC
Medium Solar	201 – 500 kW DC
Large Solar	501 – 1,250 kW DC
Wind	50 -1,500 kW
Anaerobic Digestion	50 - 500  kW
Small Scale Hydropower	50 - 500  kW

# B. <u>Recommended Ceiling Prices</u>

The Board is recommending multiple ceiling prices for each technology. SEA examined the following criteria when setting the ceiling prices for the Board's consideration:

- 1. Any state or federal incentives including but not limited to tax incentives;
- 2. Transactions for newly developed renewable energy resources, by technology and size, in the ISO-NE region and the northeast corridor;
- 3. Pricing for standard contracts received during the previous program year;
- 4. Cost effectiveness; and
- 5. Public comments and data received from stakeholders and the community.

The Board is recommending a conditional, tiered approach to the ceiling prices for each technology to account for the uncertainty surrounding federal renewable energy incentives, which may or may not be in effect for 2014. The impact of the availability of federal incentives on project economics can be calculated and thus defined tiers can be proposed. A majority of the federal renewable energy incentives expire on December 31, 2013, and it is currently unknown if or when the federal incentives will be reinstated. Accordingly, the Board provides different ceiling price scenarios that support DGSC project development, protect the ratepayers, and keep the cost of the projects commercially reasonable. The uncertainty around the federal incentives was also experienced toward the end of 2012, as the OER submitted the 2013 DGSC program recommendations to the Commission. This year, the Board is recommending approval of three (3) ceiling prices for wind, anaerobic digesters and hydroelectric projects, and two (2) ceiling prices for solar projects. A third ceiling price is not necessary for solar because the solar Investment Tax Credit is known to be in effect through December 31, 2016. The effective DGSC ceiling price between National Grid and the selected renewable energy project will depend on which federal incentives are available at the time of enrollment.

The Board is also recommending that any renewable energy project that takes action to effectively qualify itself for the federal renewable energy production tax credit (or investment tax credit in lieu thereof) before the end of 2013 and then applies for a DGSC contract in 2014 will be awarded a ceiling price contract that includes the applicable federal renewable energy incentives. This rule would apply for those projects even if the federal incentives are not in place during a specific enrollment in 2014.

## 2014 Ceiling Price Development

The Board voted to contract with Sustainable Energy Advantage ("SEA"), which had previously advised on the 2011, 2012 and 2013 ceiling prices, to perform the analysis supporting ceiling price development and recommended ceiling prices for the 2014 Plan. SEA used the Cost of Renewable Energy Spreadsheet Tool ("CREST") Model to evaluate potential pricing for the target classes. The CREST Model is current (May 2011) and publicly available for use by all stakeholders. The CREST Model was published in a report from the National Renewable Energy Laboratory ("NREL"), a national laboratory under the purview of the U.S. Department of Energy, Office of Renewable Energy and Energy Efficiency. The CREST Model is publicly available and not proprietary; thus it can be used freely. This availability contributes to transparency of Rhode Island's DGSC program. SEA authored the report on CREST which was published by NREL.

The CREST model was used to develop the PUC approved ceiling prices for the 2011, 2012 and 2013 DGSC programs. To generate ceiling prices with the CREST Model, SEA collected data from similar renewable energy programs in Massachusetts, Connecticut, Vermont, and New York. SEA also requested from National Grid the economic data from the DGSC applications submitted in 2011, 2012 and 2013. SEA, on behalf of the Board, also requested data from stakeholders in the development of the 1st and 2nd drafts of the 2014 ceiling prices, including distributing a "Call for Ceiling Price Data" to stakeholders for the development of the ceiling price technologies. Attached as **Exhibit 5** is a copy of the request. The SEA staff was available to the Board and stakeholders during the development of the ceiling prices. SEA attended and participated in four of the seven DGSC public meetings, including a presentation of the CREST Model to the Board and stakeholders and three public presentations on the development of the proposed 2014 ceiling prices, which are being recommended to the Commission.

Technology and Eligible Class	Ceiling Price w/ITC/PTC+ Bonus Depreciation	Ceiling Price w/ITC/PTC, No Bonus Depreciation	Ceiling Prices No ITC/PTC, No Bonus Depreciation
Small Solar: 50-200 kW	25.75	27.10	N/A
Medium Solar: 201-500 kW	25.90	27.30	N/A
Large Solar: 501 kW-3,000 kW	22.25	23.50	N/A
Wind: 50 kW-999 kW	15.55	16.20	19.95
Wind: 1,000 kW-1,500 kW	16.35	17.50	20.55
Anaerobic Digestion: 50-500 kW	17.70	18.55	19.55
Small Scale Hydropower 50-500 kW	17.25	17.90	18.85

Rhode Island Distributed Generation Standard Contracts Board Recommended Ceiling Prices (¢/kWh), by Technology Class

Categories, 2012, in kW	2012 CP	Categories, 2013, in kW	2013 CP <sup>+</sup>	Categories, 2014, in kW	2014 <i>Proposed</i> CP <sup>+</sup>	Net Change 2013→201 4
Solar, 501 – 5,000	28.95	Solar*, 500 +	24.95	Solar*, 501-3,000	23.50	-6%
Solar, 151 – 500	31.60	Solar*, 251 – 499	28.40	Solar*, 201-500	27.30	-4%***
Solar		Solar*, 101 – 250	28.80	Solar*, 50-200	27.10	-6%***
Solar, 10 – 150	33.35	Solar*, 50 – 100	29.95			
Wind	13.35	Wind*, 1,000-1,500	14.80	Wind*, 1,000-1,500	17.50	18%
Wind		Wind*, 400 – 999	16.20	Wind*, 50-999	16.20	0%
Wind		Wind*, 90-100	24.65			
AD		AD**, 400 – 500	18.55	AD**, 50-1,000	18.55	0%
Hydro		Hydro** 500-1,000	17.90	Hydro**, 50-1,000	17.90	0%

The chart below provides the details and differences in the approved ceiling prices in 2012 and 2013, and what the Board is recommending for 2014:

\*\*\* Note, changes in selected sub-class definitions prevents a direct comparison in these circumstances.

Solar – The proposed solar ceiling prices would provide a 4 to 6 percent reduction, for the eligible classes, compared to 2013. SEA used solar data inputs provided by stakeholders, and from the Massachusetts SREC Database. Interconnection cost data were provided by National Grid. SEA also looked at existing renewable energy procurement programs in Connecticut, Massachusetts, Vermont, and New York.

Wind – The proposed wind turbine ceiling prices represent an increase of 18 percent over 2013 prices. The Board and SEA recommend these proposed ceiling prices in acknowledgement

ITC

<sup>\*\*</sup> **PTC** 

of the increased challenge of wind project siting and permitting, and the overall challenge presented by the development, financing and operation of small wind projects.

Anaerobic Digestion – This will be the second year that anaerobic digestion is eligible to participate in the program. The Board is recommending the same ceiling price used in 2013, and hopes that this new renewable energy sector will continue to develop in Rhode Island.

Small Scale Hydropower – This will be the first year that small scale hydropower is eligible to participate, due to the amendments to the DGSC law. For hydro's first enrollment year, the Board is recommending use of the prices first developed during the 2013 ceiling price process.

## C. Recommended Allocation Plan

The 2014 DGSC program will solicit bids for 13.352 MW of total nameplate capacity. This is a result of the 10 MW that was originally allocated for 2014 by statute, the MW capacity of a 2011 solar contract that was terminated in 2013, and MW of capacity that rolled over from the 2013 program due non-enrollments in certain technology types and class sizes. (This MW capacity number is tentative and may be adjusted in 2014.)

The Board and the OER jointly held two public meetings around the MW allocation plan and solicited feedback from stakeholders on the 2014 allocation plan for the different technologies.

The annual goal is to award 13.352 MW of capacity to multiple small and large DGSC projects. The Board recommends that 9.6 MW are allocated to the small DGSC system classes and 3.752 MW are allocated to the large DGSC system classes. This matter will be explained further in the Board's recommended allocation plan.

## D. Adjustments to the Enrollment Plan

The Board considered the following factors when developing the 2014 enrollment plan:

- 1. Proposed increases and decreases to the ceiling prices from 2013.
- 2. Actual proposed and awarded DGSC prices in 2013.
- 3. Program expansion from three technologies to four. (small scale hydropower)
- 4. Market response and competition over the first three years of the program.
- 5. Availability of the federal renewable energy incentives in 2014 for certain technologies. The Production Tax Credit and Investment Tax Credit in lieu thereof, expire on December 31, 2013 for wind, digester and hydroelectric technologies. The Investment Tax Credit is available for solar through the 2016. Bonus depreciation is presently scheduled to expire on December 31, 2013 for all technologies.

6. Allocating a fair portion of the MW capacity to support each of the technologies.

The Board recommends following a similar administrative process that was used for the 2013 program, but instead of the establishment of an enrollment target, an annual goal should be established. In other words, instead of setting a target by class for each enrollment, the practice of using an *annual* goal for each class would be reestablished. This change follows the process used in 2011 and 2012, and accommodates consideration of projects for which the lead time in developing applications is longer.

# E. <u>2014 Enrollment Plan Recommendations</u>

The Board is recommending the following for the 2014 DGSC enrollments:

- 1. Maintain the MW rollover rule for technologies from the 2013 DGSC program for the first two enrollments in 2014.
- 2. The small solar class has the option of applying in either the small or the medium scale solar categories, but not both. The applicant would need to indicate in their DGSC application whether they want their proposed project to be evaluated in one or the other solar class categories. To be eligible for consideration, applications would need to be at or below the ceiling price established for the category for which the application is being submitted. This recommendation from the Board is to allow small solar developers the ability to compete with other solar class sizes, if the allocation to such class is fully subscribed during the first enrollment. This recommendation would further increase the competition amongst the solar classes, which will assist in reducing the costs of projects and increasing the benefits for Rhode Island residents.
- 3. If there are no DGSC applications received in the final enrollment for a given technology class, then that capacity shall be committed to other technologies, with due consideration for cost effectiveness and competitiveness.
- 4. The final enrollment allocation would be determined by the Board consistent with the Commission order. The allocation of remaining MW capacity would be based on market demand and ceiling prices results from the first two enrollments amongst the technologies.
- 5. The final enrollment rules would also apply to any contracting capacity that becomes available due to 2012 or 2013 DGSC contracts for projects that fail to become operational and are terminated.

Technology & Eligible Class	kW Allocations
Wind: 50-1,500kW	3,000 kW
Small Solar PV: 50-200 kW	500 kW DC
Medium Solar PV: 201-500 kW	4,100 kW DC

The Board recommends the following annual goal for 2014:

Large Solar PV: 501-1,250 kW	3,752 kW DC
Anaerobic Digestion: 50-500 kW	1,000 kW
Small Scale Hydropower: 50-500 kW	1,000 kW
Total	13,352 kW

# First Enrollment

The Board is recommending the following for the first enrollment:

Technology & Eligible Class	kW Allocations
Wind: 50-1,500 kW	1,500 kW
Small Solar PV: 50-200 kW	500 kW DC
Medium Solar PV: 201-500 kW	1,400 kW DC
Large Solar PV: 501-1,250kW	1,250 kW DC
Anaerobic Digestion: 50-500 kW	500 kW
Small Scale Hydropower: 50-500 kW	500 kW
Total	5,650 kW

# Second Enrollment

The second enrollment and the available MW capacity would be adjusted depending on the results of the first enrollment.

# Third Enrollment

Prior to the final enrollment, the Board would host a public meeting to determine the final enrollment allocation.

# F. Economic and Environmental Report

The OER is currently in the process of launching an Economic and Environmental Study of the DGSC program, which is needed to comply with the 2013 amendments to the Act. That report will be submitted to the Governor and General Assembly by April 2014. The OER will provide copies of the report to the Board and Commission upon its completion.

# G. <u>Stable Program</u>

The Board will work in coordination with the OER and National Grid to schedule three (3) enrollment periods for 2014, to provide for a predictable program, and build off the success of the first three years.

## V. <u>CONCLUSION</u>

The Board on Monday, December 2, 2013 after final presentations by SEA, OER and receiving final public comments, took two separate votes to approve the 2014 Plan for recommendation to the Commission. The 2014 Plan includes ceiling prices and a MW allocation plan. The Board voted unanimously (4-0) on both matters. The Board submits that it adhered to the requirements of 39-26.2-5 in its consideration of factors in developing the ceiling prices as developed by SEA.

The recommended ceiling prices recognize that, as should be expected, some technology classes are trending upward in cost while others are trending downward, that greater competition exists within certain technology classes, with the result that actual contract prices are below ceiling prices. Finally, the value of Federal incentives is likely to be greater for some technologies than for others; since incentives have rate payer benefits, the allocations favor, although not disproportionately, those technologies where incentives are most likely to be available.

The Board respectfully requests the Commission's approval of the 2014 Plan.

DATE: December 16, 2013

## EXHIBIT 1

# Distributed Generation Standard Contracts Board

Name	Representing	Voting or Non-Voting Member
Marion Gold	Office of Energy Resources	Non-Voting
Thomas Teehan	National Grid	Non-Voting
Hannah Morini	Economic Development Corporation	Non-Voting
Kenneth Payne (Chair)	Energy regulation and law	Voting
Charity Pennock (Vice- Chair)	Construction of renewable generation	Voting
William Ferguson	Large commercial/industrial users	Voting
Sam Bradner	Small commercial/industrial users	Voting
Christine Malecki West	Residential users	Voting
Sharon Conard-Wells	Low income users	Voting
Unfilled	Environmental issues pertaining to energy	Voting

The Board members received confirmation from the Rhode Island Senate in May 2013.

## **EXHIBIT 2**

## Rhode Island Distributed Generation Standard Contracts Board Recommended Target Classes, Ceiling Prices, and Targets for the 2014 Distributed Generation Standard Contracts Program

The Board recommends that National Grid conduct three enrollments in 2014 with an annual goal of 13.352 MW of DGSC projects being awarded contracts.

## Recommended Technology Classes and Targets

Small DGSC Enrollment Program	
Technology & Class	kW Allocation
Wind: 50-1,500 kW	3,000
Small Solar PV: 50-200 kW	500
Medium Solar PV: 201-500 kW	4,100
Small Scale Hydropower: 50-500kW	1,000
Anaerobic Digestion: 50–500 kW	1,000

## Large DGSC Enrollment Program

Large Solar PV: 501–1,250 kW	3,752
Total kW	13,352 kW

## Rhode Island Distributed Generation Standard Contracts Board Recommended Ceiling Prices (¢/kWh), by Technology Class

Technology and Eligible Class	Ceiling Price w/ITC/PTC+ Bonus Depreciation	Ceiling Price w/ITC/PTC, No Bonus Depreciation	Ceiling Prices No ITC/PTC, No Bonus Depreciation
Small Solar: 50-200 kW	25.75	27.10	N/A
Medium Solar: 201-500 kW	25.90	27.30	N/A
Large Solar: 501 kW-3,000 kW	22.25	23.50	N/A
Wind: 50 kW-999 kW	15.55	16.20	19.95
Wind: 1,000 kW-1,500 kW	16.35	17.50	20.55
Anaerobic Digestion: 50-500 kW	17.70	18.55	19.55
Small Scale Hydropower 50-500 kW	17.25	17.90	18.85

#### EXHIBIT 3

The following individuals attended one or more of the DSGC meetings:

- Marion Gold Office of Energy Resources
- Chris Kearns Office of Energy Resources
- Ken Payne Distributed Generation Standard Contracts Board
- Charity Pennock Distributed Generation Standard Contracts Board
- Sharon Conard-Wells Distributed Generation Standard Contracts Board
- Sam Bradner Distributed Generation Standard Contracts Board
- Christine Malecki West Distributed Generation Standard Contracts Board
- Hannah Morini Distributed Generation Standard Contracts Board
- Bill Ferguson Distributed Generation Standard Contracts Board
- Julian Dash Clean Energy Economy
- Ian Springsteel National Grid
- Corinne Abrams National Grid
- Thomas Teehan National Grid
- Jerry Elmer Conservation Law Foundation
- Jason Gifford Sustainable Energy Advantages
- Bill Ferguson The Energy Council of Rhode Island
- Seth Handy Handy Law LLC
- Stephen Wollenberg People's Power and Light
- Karina Lutz Consultant, People's Power and Light
- Scott Milnes Beaumont Solar
- Frank Epps Rterra Renewables
- Fred Unger Heartwood Associates
- Tim Faulkner ECO RI
- Dennis McCarthy Solect Energy Development
- Tony Callendrello NEO Energy
- Palmer Moore NEXAMP
- Alan Clapp Woodard & Curran
- Charity Pennock New England Clean Energy Council
- Barry Wenskowicz Narragansett Bay Commission
- Keith Boivin BCX Energy
- Misha Glazomitsky Munro Distributing
- Mark DePasquale Wind Energy Development
- Tim Bojar Wind Energy Development
- Roland Moulin Munro Distributing
- Ben Sutrih Sun Edison
- Jason Gifford Sustainable Energy Advantage
- Peter Bay New England Hydropower
- Martin McGowan Alumini Solar
- Dennis Starch Alumini Solar
- Karen Hawes Munro Distributing
- Robert Nicholson NEO Energy