STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS PUBLIC UTILITIES COMMISSION

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

DOCKET 4288

## **DIRECT TESTIMONY**

### OF

## **KENNETH PAYNE**

## FEBRUARY 11, 2014

#### <u>Direct Testimony of Kenneth F. Payne – Chairperson of Distributed</u> <u>Generation Contracts Board</u>

I, Kenneth F. Payne, hereby testify under oath as follows:

1. Please state your name, employer and title?

My name is Kenneth F. Payne, I am principal of Systems Aesthetics LLC.

- 2. Can you please provide your background in the area of renewable technologies? I have been actively involved in renewable energy issues in Rhode Island for ten years; in 2004 as senior policy advisor to the RI Senate I drafted the Renewable Energy Standard Act, (RIGL chapter 39-26). In 2007 left my position with the Rhode Island Senate and joined the research faculty of the University of Rhode Island; while at URI I helped organize the Energy Fellows, oversaw the Fellows first major research project, and served as the chairperson of the stakeholder process. In 2009, through URI I began to provide professional support to the Office of Energy Resources on the design of Rhode Island's American Recovery and Reinvestment Act (ARRA) energy programs. In 2010, I was appointed head of the Office of Energy Resources. During 2011 I represented the Chafee Administration in drafting the comprehensive overhaul of the State's renewable energy financing laws, the package of bills included the Distribute Generation Standard Contacts Act
- 3. What was your role in the development of the 2014 Distributed Generation Contracts (DG) program?

I was, and am, a member and the chairperson of the Distributed Generation Standard Contract Board ("Board").

#### 4. What is your experience with the DG program over the last 3 years?

In 2011, when the Board had yet to be convened, as Administrator of the OER, pursuant to the statute, specifically RIGL § 39-26.2-3 (3), I acted in the stead of the Board to meet the statutory obligation to have the Distributed Generation Standard Contracts program operational in calendar year 2011. Through a very open and public process, I adopted the CREST model for the development of ceiling prices, retained Sustainable Energy Advantage to run the model, developed the language of the standard contracts, and recommended both ceiling prices and the standard contract to the Commission. I appeared before the Commission to present the work that had been done. Since this was new terrain, there was contentiousness and uncertainty in the renewable energy development community about how the program would work. In the end a working consensus was reached, and the program proceeded. At the end of 2011, I left State

government. In 2013, I was appointed to the Board by the Governor and received advice and consent of the Senate; subsequently the Governor designated me to chair the Board.

5. Did the Board hire Sustainable Energy Advantage (SEA) to develop and recommend the 2014 ceiling prices on behalf of the Board, including collecting and reviewing stakeholder inputs into the development of the ceiling prices for the eligible renewable energy technologies?

Yes, the Board made that recommendation to the OER, which did the actual hiring.

- 6. In a public meeting on December 2, 2013, did the Board vote to approve the recommended ceiling prices, along with the allocations for the 2014 DG Program? Yes.
- 7. Did the Board have a quorum? Yes.
- Were there any dissenting votes? No.
- Are recommendations voted on by the Board reflected in the Report and Recommendation submitted to the Commission? Yes.
- 10. Did you review the Report and Recommendation prior to the submission to the Commission? Yes.
- 11. Is it your understanding that the OER and SEA on behalf of the Board consider and review all of the stakeholder feedback given in the development of the DG program, prior to the Board voting on the recommendations made by SEA and OER? Yes.
- 12. Did SEA provide an overview of the CREST model and the process used in the development of the ceiling prices process to the Board? Yes. This was very important to me. Since I had worked with the CREST model in 2011, I knew it was a powerful, publicly available tool.

#### 13. Did the Board make any adjustments to the ceiling prices?

No. The Board took an active interest stakeholder questions, discussed the implications of those questions, and took into consideration any ceiling price adjustments proposed from the OER staff and the SEA consultants. These actions by the Board are reflected in the minutes of the meetings.

14. Did the Board make any adjustments to the megawatt allocations for the renewable energy class targets, prior to voting on the program plan in December, based on stakeholder feedback?

Yes. For class sizes and allocations, the Board, with assistance from the OER, considered and weighed stakeholder comments and made any adjustments as appropriate. These adjustments are reflected in the recommendations.

- 15. Can you please provide the Board's reasoning for adopting the recommendations for the various ceiling prices and allocations of renewable energy technologies? The Board reached a collective understanding that these recommendations should be made to the Commission. The Board reviewed the requirements of the statute, looked at past experience with the program, familiarized itself with the CREST model, received recommendations from OER staff, and took extensive input from SEA on what the CREST model runs showed. The Board, or SEA on behalf of the Board, received and discussed public and renewable energy developer comments, and the Board reached consensus that these recommendations should be submitted to the Commission for its consideration and approval. The process was conducted with public meetings and public comment was allowed and welcomed at all meetings. In sum the Board's reasoning followed a logical, ordered, reasonable and transparent process that enabled the Board to conclude that the requirements of the statute.
- 16. Does the Board believe that the 2014 program filing recommendations provide a balance in providing the most cost effective ceiling prices for the eligible renewable energy technology classes; encourage renewable energy development; and meeting the policy objectives of the DG law, including the amendments that were made during the 2013 legislative session?

Yes, the Board recognizes the statutory expectation to make the program accessible to different types and sizes of renewable energy projects, yet the Board also respects the principle, contained in the statute, of cost effectiveness. Projects that make efficient use of technology, that have a high "capacity factor", projects that have low siting and interconnection costs are in those respects cost effective, projects that make use of

Federal subsidies are more cost effective for Rhode Island rate payers than projects which do not have such subsidies. Higher ceiling prices make less cost effective projects possible, especially when there is an absence of competition within a specific class of projects. The statute is clear that the Board is to consider a range of data, including data from outside Rhode Island.

17. Did the renewable energy business community have sufficient time to know what the 2013 ceiling prices would be for a renewable energy class, and determine whether the economics would work for a specific project, prior to submitting a DG application in a given enrollment to National Grid to review?

The timetables effectively created by the statute are aggressive not leisurely. Data from the current enrollment year is important. If the Board were stretch out its work and give substantially more time for input and deliberations, the statutory expectations for multiple annual enrollments periods could not reasonably be met. What the Board is committed to is maintaining an open, public flow of information. The Board holds more meetings and public in-put sessions than required by statute, and at these meetings the shares what it knows and talks public in-put, including from the developer community. It is not the job of the Board to enable specific projects to be viable,

18. In your expert opinion, do the recommended ceiling prices and rate allocations for the 2014 DG program serve the best interests of the State of Rhode Island?

Rhode Island has many interests that come into play; some of those interests are frankly competing. The General Assembly has decided that it is among the interests of Rhode Island to have renewable energy from resources attached to our grid. The charge to the Board is to develop recommended ceiling prices and allocations among technologies and project sizes in a manner that balances competing factors. There is no one perfect and happy answer. Some proponents would prefer a balance that minimizes cost per kilowatt hour; others would prefer a balance that maximizes the diversity of projects. In my opinion, the recommendations made by the Board in concert with the OER and SEA, based on a publicly available, nationally recognized methodology, used by recognized experts, in a process that engaged the public and stakeholders, are fully consistent with the balancing of interests expected in the statute.

19. How would you respond to the assertion that factors related to a specific project were not considered as part of the recommendations?

Such an assertion if made would be incorrect. The Board listened carefully to all submissions made to it. Each Board member had to weigh the implications of such submissions and arrive at his/her position regarding how what was submitted should be

treated in making the recommendation of the Board to the Commission. Different parties made different submissions over the months in which the Board received community input; it was the job of the Board to come to a single coherent overall recommendation that was consistent with the balancing of factors specified in statute.

#### 20. What constitutes the recommendation to the commission?

The recommendation has two parts really, first an allocation plan for 2014 by technology type and size, measured in kW nameplate capacity, this is the more over arching of the parts of the recommendation. The second part of the recommendation is the ceiling prices for technology types and sizes set forth in the allocation plan for the year. The Board received and considered submission during the community input process regarding both parts of the recommendation.

## 21. Explain factors that were considered in the development of class allocations and ceiling prices in the recommendations to the Commission?

The statute RIGL chapter 39-26.2 contains both general principles and specific requirements, which are effectively limitations on what the Board can base its recommendation. Clearly the first principle of the statute is that the recommendation should promote the development of renewable energy that conforms to the definition of distributed generation; a second principle is that the recommendation should consider different types of technologies and different sizes of projects; a third principle is competition. The statute is cost conscious at its core: the prices recommended by the Board to the Commission are "*ceiling prices*"; competition is typically seen as means to get lower prices; and there is a requirement to consider cost effectiveness, logically this means the Board should favor technologies and project sizes with lower kW hour cost.

RIGL § 39-26.2-5 Standard contract ceiling price reads in part "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." This list of factors is limiting, the Board can not base its recommendation on other data; for example the phrase "Pricing for standard contracts received during the previous program year" is subject to precise meaning. In the end the Board must be sensitive to the overall objectives of the statute in a balanced manner. If there are market constraints affecting specific technologies or project sizes, setting ceiling prices so high that they overcome those constraints might stimulate competition, in a gold rush sort of way, but would be contrary to cost effectiveness from rate payer perspective. If renewable energy were less expensive to rate payers than electricity generated from non-renewable resources there would be no logic either for setting overall

program size, currently 40 mW nameplate capacity, or for requiring the establishment of ceiling prices; the reality right now is that for rates paid today, electricity generated from renewable resources is more expensive. The General Assembly has determined that all things considered RI should get an increasing proportion of its electricity from renewable resources but it has <u>not</u> said to do so at any price necessary to attract developers and overcome market constraints.

This testimony is based on my own true and accurate recollection of events and is free from any undue influence from any third parties

Signed,

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Kenneth F. Payne

Date: February 11

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

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

DOCKET 4288

## DIRECT TESTIMONY

## OF

## CHRISTOPHER KEARNS

## FEBRUARY 11, 2014

#### Direct Testimony of Christopher Kearns – RI Office of Energy Resources

I, Christopher Kearns, hereby testify under oath as follows:

- Please state your name, employer and title?
   Chris Kearns, Office of Energy Resources, Chief Program Development
- 2. What is your role in the development of the 2014 Distributed Generation Contracts (DG) program?

I oversee the OER role in staffing and assisting the Distributed Generation Standard Contracts Board ("Board") with the development of the 2014 program recommendations.

- 3. What is your experience with the DG program over the last 3 years? I have been involved in the direct oversight of the DG program's implementation in coordination with National Grid over the past 3 years. I have viewed the projects/locations being proposed; the different renewable energy technologies and systems sizes submitted; the price per kWh of the DG applications; and arranging public outreach and presentations on the DG program. I have been directly involved in the first 3 years of the DG program filings before the Public Utility Commission (PUC), including the launch of the DG program in December 2011.
- Is this the first time Board participated in the DG program? Why?
   Yes. The Board members were selected by Governor Chafee and confirmed by the RI Senate in May 2013.
- 5. What is the role of the OER and Commissioner in assisting the Board? In accordance with R.I. Gen. Laws § 39-26.2-11(a), the Commissioner of OER is the executive secretary and executive director of the Board and is also a non-voting member of the DG Board. The OER provides assistance to the Board in the development of the annual program plan, including contracting with the Board's selected contractor performing the ceiling price analysis.

The OER provides recommendations on the ceiling price process, eligible renewable energy technologies and how to allocate the megawatt capacity amongst the different technologies. The Board relied on the OER this year, based on the OER experience overseeing the DG program during the past 3 years.

- 6. Was this the first year that the Board participated in the development of the annual plan for the DG Program?
  Yes
- How many public meetings were organized by the Office of Energy Resources and the Board for the development of the 2014 program recommendations?
   The Office of Energy Resources and the Board hosted several public meetings over numerous months on the development of the 2014 program.
- Was public notice posted on the Secretary of State's website for those meetings? Yes.
- Was additional notice sent to stakeholders regarding the public meetings?
   Yes. In addition to posting the meetings on the Secretary of State website, the OER also sent out reminder email notifications about the upcoming 2014 DG program development public meetings.
- 10. Did OER send notice to Wind Energy Development ("WED") and/or their attorney? Yes. The OER sent to WED and all of the participating stakeholders notice of upcoming meetings from July 2013 through January 2014, and also follow up reminder email notifications of the public meetings that were occurring.
- 11. Did the Board hire Sustainable Energy Advantage ("SEA") to develop and recommend the 2014 ceiling prices on behalf of the Board, including collecting and reviewing stakeholder inputs into the development of the ceiling prices for the eligible renewable energy technologies?

Yes.

#### 12. Why was SEA hired?

SEA was hired due to their extensive experience in the renewable energy market and the development of projects. SEA was also one of the co-authors of the Cost of Renewable Energy Spreadsheet (CREST) modeling tool.

13. How many years has SEA been involved with the development of the annual ceiling prices?

This will be SEA's 4<sup>th</sup> year being involved with the annual ceiling prices for the DG program. SEA had developed the ceiling prices for the prior 3 years of the DG program using the CREST model.

14. How and when did the Board/OER/SEA solicit input from stakeholders to establish the ceiling prices/allocation?

The Board through SEA solicited input from stakeholder through requests for information starting in October. The OER distributed the request for information to stakeholders on the Board's behalf. SEA presented two drafts of the 2014 ceiling prices at public meetings, and also collected additional feedback and comments from stakeholders at those meetings. Through the Board's approval, SEA was made available to stakeholders by phone, email, or if necessary through face-to-face meetings.

- 15. Did the OER and SEA on behalf of the Board consider all of the stakeholder feedback given in the development of the DG program? Yes.
- 16. Did WED submit information regarding ceiling prices and was it considered? Yes. WED did submit information and it was considered.
- 17. Were adjustments made to the proposed 2014 ceiling prices from 2013, based on stakeholder suggestions, including WED's suggestions and including the 1.5 megawatt wind turbine renewable energy class?

Yes. Adjustments were made to the wind turbine ceiling prices from 2013 to 2014, and WED's comments and suggestions were considered in the adjusted ceiling price.

18. Were stakeholders advised and given notice regarding the allocation of renewable energy technologies?

Yes. The Board and OER hosted two public meetings on the allocation of megawatt capacity for the eligible renewable energy technologies.

19. Was there discussion between OER and with WED and/or their attorney regarding the ceiling prices or allocations?

Yes. WED, OER and SEA met in person prior to the public meeting on the first draft of the proposed 2014 ceiling prices. WED and SEA also exchanged emails and phone calls with each other during the development of the ceiling prices.

20. Did WED or their attorney on behalf of WED submit verbal comments regarding the allocation of renewable energy technologies? **Yes.** 

21. What are the recommended allocations of the renewable energy technologies and how did they change from 2013?

The megawatt allocation is split amongst four technologies in 2014. In 2013, the DG program had allocations made to solar, wind and anaerobic digestion. Small scale hydropower is being added to the 2014 program. For the wind turbine technology class, the megawatt capacity was reduced from 4.5 to 3.0 megawatts in the 2014 Board recommendations. The wind turbine class could be given additional megawatt capacity in the final enrollment in 2014, but that decision would be made by the Board, based on competition amongst the different renewable energy technologies and the price per kWh contracted for by National Grid in the first 2 enrollments in 2014.

22. Did the Board make any adjustments to the ceiling prices or megawatt allocations for the renewable energy classes, prior to voting on the program plan in December, based on stakeholder feedback?

Yes, the Board heard from two stakeholders at the December Board meeting, including WED attorney. After listening to the stakeholder comments, an adjustment was made by the Board in their 2014 program recommendations to allow small scale solar projects to either submit into the small or medium scale solar allocations in a given enrollment, but not both.

23. Are those adjustments reflected in the Report and Recommendation submitted to the Commission?

Yes.

24. Does the Report and Recommendation submitted to the Commission reflect a fair and accurate representation of the Board's determination and vote at its December 2, 2013 public meeting?

Yes.

25. Were the ceiling prices and allocations provided to stakeholders prior to the December 2<sup>nd</sup> vote?

The tentative ceiling prices and allocations were presented to the stakeholders at public meetings, prior to the Board's December 2<sup>nd</sup> vote.

26. What is the 2014 ceiling price recommendation for the 1.5 megawatt wind turbine renewable energy class?

The current 2014 ceiling prices for wind, due to the expiration of the federal renewable energy incentives is the following:

- 20.55 cents per kWh for the 1.0-3.0 MW wind turbine class
- 19.95 cent per kWh for the 50-999 kW wind turbine class
- 27. How does that compare to 2013 for same class?

The proposed 2014 wind turbine ceiling price increased by 39% for the MW-scale category. The increase would be 18% if the Federal Production Tax Credit was extended retroactively. The proposed 2014 ceiling price for the 50 to 999 kW category increased by 23%. The ceiling price for this category will remain the same if the Federal Production Tax Credit is extended retroactively.

28. Does OER believe a balance was provided in providing the most cost effective ceiling prices for the eligible renewable energy technology classes to encourage development and meet the policy objectives of the DG law?

Yes, the OER believes a balance was struck in the development of the 2014 program recommendations, including the ceiling prices for the eligible renewable energy technologies, and meeting the policy objectives of the 2011 law and the amendments made during the 2013 legislative session.

29. Besides WED, did any other renewable energy organizations or businesses participate in the process?

Yes, there were other renewable energy businesses and organizations that participated in the programs process.

- 30. Besides WED objections to the Board's 2014 filing for the recommended ceiling prices and megawatt allocations for the different renewable energy technologies, are you aware of any other renewable energy organizations or businesses that have participated in the process, that objected to the Board's filing? No.
- 31. How many 1.5 megawatt wind turbine applications were submitted in the 2011 and 2012 DG Programs?

There was one application submitted in 2011, and no applications were received in 2012.

32. How many 1.5 megawatt wind turbine applications were submitted in 2013 at the ceiling price approved by the Public Utility Commission in February 2013?

There were three applications submitted in 2013.

33. Did the renewable energy business community have sufficient time to know what the 2013 ceiling prices would be for a renewable energy class, and determine whether the economics would work for a specific project, prior to submitting a DG application in a given enrollment to National Grid to review?

Yes. The renewable energy business knew what the proposed 2013 ceiling prices were when the OER made its original and amended 2013 program filing recommendations to the PUC in January 2013, and also when the PUC approved the ceiling prices in March 2013. Applicants had sufficient time to determine whether the economics would work before submitting a DG application to National Grid to review.

- 34. WED has objected to the 1.5 megawatt wind turbine ceiling prices being proposed for the 2014 program, as not being high enough to develop wind turbine projects, and not provide a developer a reasonable rate of return. What is your response to this objection? The OER disagrees with this. SEA developed ceiling prices that provide a reasonable rate of return for cost effective projects. The wind turbine ceiling prices were adjusted and raised based on SEA analysis and stakeholder comments.
- 35. The development of the 2014 ceiling prices began in fall of 2013 and there was one final enrollment for the 2013 DG program enrollment that occurred in late October/early November. Is that correct?
  Yes. The final 2013 enrollment opened toward the end of October and closed in November.
- 36. While WED was objecting to the 2014 ceiling prices being too low to develop 1.5 megawatt wind turbine projects during the first and second draft of the 2014 ceiling prices, did WED submit two separate 1.5 megawatt wind turbine applications in the final enrollment of 2013 in November at a lower ceiling price than what is proposed for the 2014 program?

Yes. WED submitted two separate 1.5 megawatt wind turbine applications in the same municipality that WED was awarded a DG contract from the first enrollment in March at the approved 2013 ceiling price, while the 2014 ceiling prices were being developed.

- 37. Is it the position of the OER that WED and other renewable energy companies have ample time to determine if the economics would work with the 2013 ceiling prices, prior to submitting their two 1.5 megawatt wind turbine applications? Yes.
- 38. Did WED sign those two applications in December 2013? After WED submitted the two separate 1.5 megawatt wind turbine applications in the final enrollment, National Grid requested the bond deposits for the two applications and that the DG contracts be signed and sent to National Grid by the deadlines established within the rules and regulations. Upon consulting with the OER, National Grid gave WED and extension of time to sign the two contracts in December. Ultimately, the contracts were not signed and by the end of December the additional megawatt capacity rolled over into the 2014 program.
- 39. Does WED have the potential to benefit from the increase in ceiling prices in 2014 compared to 2013 if it has the ability to move forward with the same projects that WED submitted applications for in 2013?

Yes. WED does have the ability to resubmit those two applications for the 2014 program, and benefit from the 2014 ceiling prices.

This testimony is based on my own true and accurate recollection of events and is free from any undue influence from any third parties

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Signed,

**Christopher Kearns** 

Date

#### Direct Testimony of Jason Gifford – Sustainable Energy Advantage

I, Jason Gifford, hereby testify under oath as follows:

- Please state your name, employer and title? My name is Jason Gifford. I am a Director at Sustainable Energy Advantage, LLC ("SEA").
- 2. Can you please provide your background related to renewable energy technologies? I have over 15 years of experience in the development of renewable energy policy, market, and financial analysis. My practice with SEA focuses on policy, strategy and financial advisory services to a broad range of both public and private sector clients.
- 3. Can you please provide SEA's background related to renewable energy technologies? Sustainable Energy Advantage has been a national leader on renewable energy policy analysis and program design for over 15 years. In that time, SEA has supported the decision-making of more than 100 clients—including more than 20 governmental entities— through the analysis of renewable energy policy, strategy, finance, projects and markets. SEA is known and respected widely as an independent analyst, a reputation earned through the firm's ability to identify and assess all stakeholder perspectives, conduct analysis that is objective and valuable to all affected, and provide advice and recommendations that are in touch with market realities and dynamics.

#### 4. What was your role in the development of the 2013 DG program?

SEA supported the development of the 2013 DG program through research and analysis, and as a joint facilitator of the stakeholder process. SEA and OER solicited CREST modeling input data from all stakeholders and interested market participants, and utilized NREL's CREST model to generate recommended ceiling prices. This analysis was intended to enable the OER and PUC to make an informed decision with respect to 2013 Ceiling Prices.

#### 5. What was your role in the development of the 2014 DG program?

SEA played the same role in 2014 as it did in 2013. During the 2014 process, SEA provided research, analysis and market expertise not only to the OER but also to the Distributed Generation Standard Contracts Board ("Board").

6. What is your experience with the DG program over the last 3 years? SEA has served as the OER's technical consultant in each of the last 3 program years.

### 7. Can you please explain the Cost of Renewable Energy Spreadsheet Tool ("CREST") Model?

The CREST model is a discounted cash flow analysis tool. CREST was developed to be a public and transparent tool to aid policymakers in the development of renewable energy incentives. The model is designed to calculate the cost of energy, or minimum revenue per unit of production, necessary for the modeled project to cover its expenses and meet its equity investors' assumed minimum required after-tax rate of return. CREST was developed in Microsoft Excel, so it offers the user a high degree of transparency, including full visibility into the underlying equations and model logic. SEA was the primary architect of the CREST model, which was developed under contract to the National Renewable Energy Laboratory.

#### 8. Were the CREST models made available to stakeholders?

Yes. SEA emailed the CREST models to all stakeholders in MS Excel format so that stakeholders could both replicate the proposed ceiling prices and conduct CREST modeling with their own inputs. SEA also provided CREST modeling support by phone to assist stakeholders with use of the model.

## 9. How many public meetings did SEA participate in with the development of the 2014 ceiling prices?

Four.

# 10. Is it your understanding that SEA was contracted by the Board to develop and recommend the 2014 ceiling prices, including collecting and reviewing stakeholder inputs for the eligible renewable energy technologies?

Yes. SEA conducted this research and analysis in order to enable the OER, Board and Commission to make an informed decision with respect to 2014 ceiling prices.

11. Are those recommendations reflected in the Report and Recommendation submitted to the Commission?

Yes.

12. Can you verify the ceiling prices included in the Report and Recommendations?Yes. The recommended ceiling price for each technology category and federal incentive regime is as follows:

| Tech., class <u>(kW)</u> | 2014 Proposed CP<br>w/ITC/PTC + Bonus | 2014 Proposed CP<br>w/ITC/PTC, No Bonus | 2014 Proposed CP<br>No ITC/PTC, No Bonus |
|--------------------------|---------------------------------------|---|--|
| Solar, 501-3,000         | 22.25                                 | 23.50                                   | N/A                                      |
| Solar, 201-500           | 25.90                                 | 27.30                                   | N/A                                      |
| Solar, 50-200            | 25.75                                 | 27.10                                   | N/A                                      |
| Wind, 1,000-3,000        | 16.35                                 | 17.50                                   | 20.55                                    |
| Wind, 50-999             | 15.55                                 | 16.20                                   | 19.95                                    |
| AD, 50-3,000             | 17.70                                 | 18.55                                   | 19.55                                    |
| Hydro, 50-1,000          | 17.25                                 | 17.90                                   | 18.85                                    |

- 13. Are these the same ceiling prices that were developed through the CREST modeling in conjunction with the stakeholder process and OER, and recommended to the Board? Yes.
- 14. How were these ceiling prices developed and what factors were considered in developing them?

The ceiling prices were developed through a collaborative process between SEA, OER, the Board and stakeholders. Through a formal data request issued by OER and SEA, all participants were encouraged to provide market data (including sources) with respect to each of the technologies and sub-categories being evaluated. Recent transactions in ISO-NE, pricing for standard contracts received during the previous program year, and other publicly available reports and data sources were also considered in the CREST modeling and cost effectiveness review. The analysis was conducted using NREL's CREST model, a publicly available and peer reviewed cost-of-energy calculator.

15. So, the recommended ceiling prices are not just based on stakeholder input? Why?

Correct. While stakeholder input is extremely important, it would be difficult to explain and defend a contract price based solely on the reported assumptions of the entities seeking such contracts. The recommended ceiling prices take other recent data sources into account and are intended to encourage projects in Rhode Island that can be demonstrated to be competitive with similar projects in the region.

16. Why are there proposed changes to the 2014 ceiling price for the larger wind category but not for the smaller wind category?

The ceiling price for the larger wind category is proposed to increase between 2013 and 2014 based on stakeholder feedback. No market participants provided comments with

respect to the smaller wind category and so the proposed ceiling price remains unchanged from its 2013 level.

17. Did the Board allow SEA to have direct communication with the stakeholders on the development of the ceiling prices, including by email, phone calls and face to face meetings?

Yes. The Board encouraged stakeholders to ask questions of SEA directly by phone, email or in person.

#### 18. Did SEA give presentations regarding the 2014 DG Program?

Yes. SEA gave four presentations. SEA provided a CREST model introduction and "tour" to the Board and public on October 8<sup>th</sup>, presented the first draft of proposed ceiling price inputs and results for all technology categories in a public meeting on October 22<sup>nd</sup>, presented the second draft of proposed ceiling price inputs and results for all technology categories in a public meeting on November 14<sup>th</sup>, and presented the proposed final draft ceiling price inputs and results for all technology categories at the December 2<sup>nd</sup> Board meeting. SEA answered questions posed by the Board and/or stakeholders, as applicable, in each of these meetings.

- **19. Are those presentations attached to the Report and Recommendation?** Yes.
- 20. How many years has SEA been involved with the development of the annual ceiling prices?

This is SEA's fourth year of participation in the program.

- 21. Did SEA on behalf of the Board consider all of the stakeholder feedback given in the development of the DG program? Yes.
- 22. Were adjustments made by SEA to the proposed 2014 ceiling prices from 2013, based on stakeholder suggestions, including the 1.5 megawatt wind turbine renewable energy class?

The answer is technology dependent. Adjustments were made to all three solar categories, and to the larger of the two wind categories. No adjustments were made to the anaerobic digester and hydroelectric categories. Based on stakeholder suggestions, adjustments to the larger wind category were made in between the first and second public meetings, and again between the second public meeting and the December 2<sup>nd</sup> Board meeting.

# 23. Did SEA meet with Wind Energy Development to listen to their feedback in the development of the ceiling prices between the first and second drafts of the ceiling prices?

SEA met with WED on October 22<sup>nd</sup> before the first public meeting, and spoke with WED and several of its representatives on numerous occasions between the first public meeting and the December 2<sup>nd</sup> Board meeting.

# 24. Does SEA believe a balance was provided in its recommendations for the most cost effective ceiling prices for the eligible renewable energy technology classes and for meeting the policy objectives of the DG law?

Yes. SEA believes that every stakeholder comment and submission was seriously considered and that the recommended ceiling prices represent a balance among all of the policy objectives of the DG law. Proposed stakeholder adjustments were fully incorporated where the impacts were applicable to all potential bidders – for example, debt interest rates, interconnection costs and the monetization of federal tax incentives. Proposed adjustments relating to a single project site – for example, installed costs and capacity factor – were not fully incorporated on the basis that such feedback may not represent the most cost effective project. Nonetheless, the capacity factor input for the larger wind category was adjusted downward based on WED's comment that low wind speed turbine technology may not be easily deployed in Rhode Island. It is important to note that this adjustment was made without a corresponding downward adjustment to the capital cost assumption – which was increased in 2013 to represent the additional cost of low wind speed technology.

25. Does SEA believe that the ceiling prices approved by the Board in its vote on December 2, 2013 and recommended to the Commission are reasonable and are in the best interests of the State of Rhode Island?

Yes.

26. Does this conclude your testimony?

Yes.

This testimony is based on my own true and accurate recollection of events and is free from any undue influence from any third parties.



3/11/2014

#### 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

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February 12, 2014

#### 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:

On behalf of the Office of Energy Resources and the Distributed Generation Standard Contract Board, ("Board"), enclosed in an original and ten (10) copies of the direct testimony of Kenneth Payne, Christopher Kearns and Jason Gifford concerning the above-referenced proceeding. Additionally, enclosed is a Memorandum and 10 copies responding to the Objection filed by Wind Energy Development, LLC.

Electronic copies were sent to all persons named on the attached Service List and the Board will provide a hard copy to anyone who requests it. If you have any questions regarding this filing, please contact me at 401.222.8880.

Sincerely,

Daniel W. Mojihan

Daniel W. Majcher, Esq.

DWM/njr

Enclosure

c. Thomas R. Teehan, Esq. Amy DAlessandro Docket 4288 Service List