

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

**IN RE: REVIEW OF AMENDED POWER PURCHASE AGREEMENT
BETWEEN NARRAGANSETT ELECTRIC COMPANY
D/B/A NATIONAL GRID
AND DEEPWATER WIND BLOCK ISLAND, LLC,
PURSUANT TO R.I. GEN. LAWS § 39-26.1-7**

DOCKET NO. 4185

PREFILED TESTIMONY

OF

**MARTIN J. PASQUALINI
CP GLOBAL PARTNERS, LLC**

FOR

DEEPWATER WIND BLOCK ISLAND, LLC

July 15, 2010

1 **I. Introduction**

2
3 **Q. Please state your name and business address?**

4 A. My name is Martin J. Pasqualini and my business address is One Boston Place, Suite
5 4010, Boston, MA 02108.

6
7 **Q. By whom are you employed and in what capacity?**

8 A. I am a founding partner and Managing Director of CP Global Partners, LLC (“CP
9 Global”), a financial advisory and merchant banking firm, and the majority owner of CP
10 Energy Group, LLC (“CP Energy”), a subsidiary which specializes in providing advisory
11 services in connection with the development, financing, disposition and acquisition of
12 electric generation facilities. I devote one hundred percent of my time to CP Energy
13 related matters.

14
15 **Q. What is the purpose of your testimony and what is your relationship with**
16 **Deepwater?**

17 A. I have been asked by Deepwater to review its project financial pro forma, to formulate
18 market-based financing assumptions and to comment on the appropriateness of the
19 unleveraged and leveraged returns based on my industry experience and current known
20 market parameters for the financing of projects similar to the Block Island Wind Farm.

21
22 As for my relationship with Deepwater, an investment vehicle owned by principals of CP
23 Energy owns approximately 0.773% of the outstanding membership interests in
24 Deepwater Wind Holdings, LLC, which is the parent of Deepwater. This ownership
25 interest came by virtue of CP Energy providing advisory services to a financial investor
26 that previously had an ownership interest in Deepwater Wind Holdings, LLC. As a result
27 of this residual stake, I indirectly own a 0.0963% interest in Deepwater Wind Holdings,

1 LLC. In addition, CP Energy has received a fee in connection with the review of
2 Deepwater's financial model and the provision of my testimony.

3
4 **Q. Please describe your qualifications and experience?**

5 A. I have a Bachelor of Arts, *summa cum laude*, from Boston College in Political Science
6 (1987) and was elected to Phi Beta Kappa. I have a juris doctor, *cum laude*, from Boston
7 College Law School (1990). I have over 19 years of experience executing a wide variety
8 of project and structured financings, including extensive experience, both as a lawyer and
9 an investment banker, representing sponsors, equity investors, lenders and construction
10 contractors in connection with the development, financing, operation, acquisition and
11 disposition of domestic and international electric power projects. Prior to joining CP
12 Global, I was a partner in the Project and Structured Finance Group of Bingham Dana
13 LLP (now Bingham McCutchen LLP) and a Managing Director in the tax products group
14 of BTM Capital Corporation. I have worked on electric generation projects throughout
15 the continental United States as well as Hawaii, Puerto Rico, Jamaica, Costa Rica,
16 Scotland, the Dominican Republic and Germany.

17
18 CP Energy has a national reputation as an expert in the financing of renewable electric
19 generation projects. Since the formation of CP Energy in 2004, I have advised the tax
20 equity investor, lender or project sponsor in connection with the financing of 32 wind
21 farms in twelve different states with an aggregate nameplate capacity in excess of 3,700
22 MW. In addition, one of my colleagues was separately involved working for a sponsor in
23 connection with the debt and tax equity financing of an additional 16 wind farms with an
24 aggregate nameplate capacity in excess of 1,450MW. CP Energy also has extensive
25 experience in the financing of electric generation projects employing other renewable
26 technologies (solar, biomass and geothermal). We represented the tax equity investor in
27 connection with the financing of both the largest geothermal transaction and largest
28 utility scale solar photovoltaic transaction in the United States.

1
2 CP Energy's representative clients include AES Solar Ltd., BNB Renewable Energy, BP
3 Alternative Energy North America, Community Energy, Inc., CTC Electric, Denham
4 Capital Management, Eurus Energy America, First Wind, Foresight Wind Energy,
5 GeoGlobal Energy LLC, Lehman Brothers, Lincoln Renewable Energy, Metropolitan
6 Life Insurance Company, MSD Capital, Noble Environmental Power, NordLB, OPDE
7 USA, Orion Energy, Recurrent Energy, Terna Energy, Textron Financial Corporation,
8 Third Planet Wind, Toyota Tsusho, Wachovia Securities and Washington Mutual.

9
10 **Q. Have you previously testified before the Rhode Island PUC or other state or federal**
11 **regulatory commissions?**

12 A. I have not.

13
14 **II. Overview of Block Island Wind Farm's Economics**

15
16 **Q. As an expert in renewable project finance, how do you typically evaluate a**
17 **renewable energy project?**

18 A. As a rule I look at the 20 year unleveraged return for a given project assuming no residual
19 value and a single owner that can efficiently utilize the tax benefits generated by the
20 project as they are produced. The unleveraged return is widely accepted to be the best
21 way to measure the relative economic robustness of a project as it defines the total
22 amount of cash and tax benefits that can be allocated between project participants and
23 against which leverage can be applied. Although this is a simplification, it is a
24 reasonable approximation and is the industry standard in the renewable sector for both
25 sponsors and parties providing debt and third party tax equity financing to look to the
26 unleveraged return when evaluating a project.

27
28

1 **Q. What analysis have you performed in connection with this testimony?**

2 In my capacity as an energy financing expert, I frequently review project sponsor models.
3 As a definitional matter, these models are projections based upon a series of assumptions.
4 I have reviewed Deepwater's projections for the Block Island Wind Farm and created
5 leveraged return models based upon the unleveraged information Deepwater provided,
6 my own experience and feedback from other market participants.

7
8 I note that I have not engaged in a quantitative review of the construction costs, revenue
9 and operating expense assumptions reflected in Deepwater's project model. That is an
10 exercise which ordinarily takes place when third party financing parties are engaging in
11 due diligence with the assistance of qualified experts (e.g. an independent engineer). I
12 have reviewed their model and have constructed my own model for evaluation of the
13 project for the purpose of this testimony.

14
15 **Q. Deepwater has provided calculations showing that the estimated projected**
16 **unleveraged rate of return for the Block Island Wind Farm is 10.5%. How does this**
17 **unleveraged return compare to other wind projects that you have reviewed?**

18 A. Since to date the only wind projects in the United States have been on-shore facilities, my
19 point of reference is the very large sampling of on-shore projects with which I have been
20 associated in some capacity over the course of the last 6 years. Over that period of time
21 unleveraged returns for on-shore projects has typically been in the range of 8-11% after-
22 tax (assuming a tax efficient owner). Given the much higher risk profile for an off-shore
23 project, I would expect to see a substantial premium for the Block Island Wind Farm as
24 compared to the typical on-shore project. The return I estimate for this project is
25 comparable to the higher end of on-shore returns where the risks associated with an off-
26 shore project are absent.

27
28

1 **Q. What are examples of such risks associated with offshore projects?**

2 A. Given the fact that the Block Island Wind Farm will be one of the first, if not the first,
3 off-shore wind farm constructed in the United States there are numerous uncertainties
4 that add risk for the sponsor.

- 5 • Given the lack of supporting infrastructure construction costs could be higher,
6 perhaps substantially so.
- 7 • The operating performance and project availability could differ substantially from
8 Deepwater's base case assumption. The operating performance could be
9 impacted by untested ambient operating conditions that could substantially
10 decrease turbine availability, the wind resource could prove less robust than
11 projected, and the wind turbines could have technological issues. Maintenance
12 vessel availability and cost could differ substantially from the base case, as well.

13
14 Given these risk factors, I would have anticipated a substantial return premium to a
15 comparable on-shore facility where the construction and operating variables are much
16 better understood.

17
18 **Q. Have you evaluated Deepwater's economics assuming leverage is introduced to the**
19 **capital structure?**

20 A. Yes, I have developed market-based financing parameters in order to estimate leveraged
21 returns.

22
23 **Q. What are the parameters you assumed?**

24 A. As I also did when computing the unleveraged returns, I assumed that the project elects to
25 take the cash grant in lieu of investment tax credit with respect to eligible property and
26 that debt supported by a Department of Energy guarantee is used. I used my own debt
27 parameters based on my experience with other renewable projects and based on specific
28 guidance from institutional lenders in the renewable sector in order to calculate the

1 leveraged returns. I limited the amount of the debt to 80% of the capital cost after receipt
2 of the cash grant by introducing my best current estimate based on input from lenders in
3 other DOE guaranteed debt transactions interest rates, coverage ratios and term
4 limitations. I would caution that the amount of term leverage could actually be
5 substantially lower. It is likely that given the risk factors noted above and upon
6 completion of commercial and technical due diligence by experts working on behalf of
7 the debt providers that debt providers will take a very conservative view of the Block
8 Island Wind Farm. This could result in higher interest rates, larger debt and maintenance
9 reserve requirements, increased expense assumptions and decreased revenue assumptions
10 all of which will affect that level of actual debt funding.

11
12 **Q. What do you estimate Deepwater's leveraged return to be after applying your**
13 **assumed debt parameters?**

14 A. Based upon my financial modeling and assumptions, I believe that the leveraged return of
15 the project could be expected to be as high as approximately 17.8% after-tax assuming
16 80% post-ITC leverage. Due to the fact that Deepwater does not generate sufficient
17 taxable income to utilize the tax benefits produced by the project as they are produced, I
18 also assumed that tax benefits are carried forward to offset taxable income generated by
19 the project. However, it is my expert opinion that based upon the risk profile of this
20 project that such a level of leverage would be practically impossible to achieve in today's
21 market without a federal loan guarantee. Without a federal loan guarantee, in the private
22 project finance market today, post-ITC leverage of 50-75% is likely to be aggressive. At
23 these levels, the leveraged after-tax rate of return for the project would approximately be
24 in the range of 13.5 – 16.0%.

1 **Q. Could a tax equity investor be introduced into the capital structure to monetize the**
2 **tax benefits (depreciation and interest expense)?**

3 A. As I note above, Deepwater does not generate sufficient taxable income to utilize the tax
4 benefits produced by the project as they are generated. So, theoretically, a tax equity
5 investor could be introduced into the capital structure to provide tax efficiency through a
6 tax equity financing. By my estimates, efficient use of the tax benefits generated by the
7 project could increase the leveraged rate of return in the 80% post-ITC leverage scenario
8 from approximately 17.8% to possibly as high as 25.4% (approximately 16.3 – 21.3%
9 assuming 50-70% post-ITC leverage). However, based on the feedback from leading tax
10 equity investors in the market, it is unclear on what terms (pricing and otherwise) such a
11 transaction could be executed. This is due in part to the long construction period for the
12 project as compared to an on-shore wind farm (tax equity investors fund on or about the
13 commercial operations date) and the first of its kind nature of this particular project. Tax
14 equity investors do not forward commit capacity for multiple years due to the fact it is
15 difficult to project their tax position accurately. Due to the fact there is currently no
16 precedent for an off-shore tax equity financing, even the largest and most active tax
17 equity investors have yet to formulate underwriting parameters. In addition, due to the
18 increased risk and existence of project level leverage, it is my opinion that it may be
19 practically impossible to execute.

20
21 **Q. How do you believe a lender would evaluate this project in addition to items you**
22 **have already discussed?**

23 A. I have advised many lenders in their evaluation of renewable and other energy projects. I
24 believe that there are two material issues upon which I have not yet expanded - one,
25 lenders' typical treatment of sponsor projections and two, lenders' evaluation of risk
26 sharing in contracts.

- 27 • In my experience, lenders will view Deepwater's model as a typical "sponsor
28 model" and will immediately build in contingency, reduce volume

1 projections, and increase expense projections as a way of sizing the debt. So,
2 it is worth noting that banks will likely use a model that is materially more
3 conservative than the projections Deepwater is using for the purposes of this
4 Docket.

- 5 • One of the most important differences between this project's power purchase
6 agreement and typical power purchase agreements with which I am familiar is
7 the asymmetric risk profile. If Deepwater's capital cost estimates prove to be
8 low, their returns go down. If Deepwater's capital cost estimates prove to be
9 high, those savings go entirely to the ratepayers and the return stays constant.
10 Deepwater bears all of the risk of the wind performance being lower than
11 expected but shares 50% of the performance that is higher than expected. In
12 my expert opinion, this is an unprecedented risk profile for a project which the
13 sponsor intends to take to the project finance markets.

14
15 Both of these items will negatively impact the availability of financing for this project.

16
17 **Q. Are the leveraged returns what you would expect for a project of similar technology,**
18 **size and location?**

19 A. Given the nature of the project and risk profile, the estimated leveraged after-tax return is
20 at the lower end of what I would expect to see for an off-shore wind farm. As I noted
21 earlier the assumptions I have used to formulate a debt scenario are only a current view
22 based on my experience and market feedback. They do not reflect detailed commercial
23 and technical due diligence which will affect spreads, debt and maintenance reserve
24 requirements, revenue and expense assumptions (including turbine availability
25 assumptions throughout the project's life). Given that this is a financing of first-
26 impression and that third-party financing parties will take a conservative view, the
27 leveraged return stated above is in all likelihood a best case scenario as it is based on the
28 sponsor's pro forma and thus the sponsor's estimate of revenue and expenses. Based on

1 my extensive experience in financing on-shore wind facilities and my familiarity for the
2 underwriting process employed by financing parties, it is my opinion that the sponsor's
3 revenue assumptions will be reduced and the operating expenses resulting in a lower
4 level of debt financing than assumed in my return estimates.

5

6 **Q. Does that conclude your testimony?**

7 A. Yes.

8

9

CERTIFICATION

I hereby certify that on July 15, 2010, a copy of the within was sent to all parties set forth on the attached Service List by electronic mail and copies were sent to Luly Massaro, Commission Clerk, by electronic mail and hand delivery.

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