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**COMMENTS OF THE
NEW JERSEY DIVISION OF RATE COUNSEL**

**Proposed Rules for Implementation of the
Offshore Wind Economic Development Act**

**Submitted:
October 29, 2010**

1. Introduction

The New Jersey Division of Rate Counsel ("Rate Counsel") would like to thank the Board of Public Utilities ("Board" or "BPU") for the opportunity to present our written comments and suggestions on rules and regulations that will govern the Board's implementation of the Offshore Wind Economic Development Act ("OSWEDA" or "the Act"). While offshore wind ("OSW") represents a unique economic development opportunity for New Jersey, it is a technology that is new to the U.S. It is essential therefore, that the Board's regulations provide for sufficient scrutiny of proposed OSW projects to determine whether they have positive net benefits and are in the public interest.

Figure 1 below compares the estimated levelized cost of OSW on a per megawatt-hour ("MWh") basis to other forms of fossil and renewable energy. OSW is one of the more expensive renewable energy technologies, outside of solar photovoltaics.

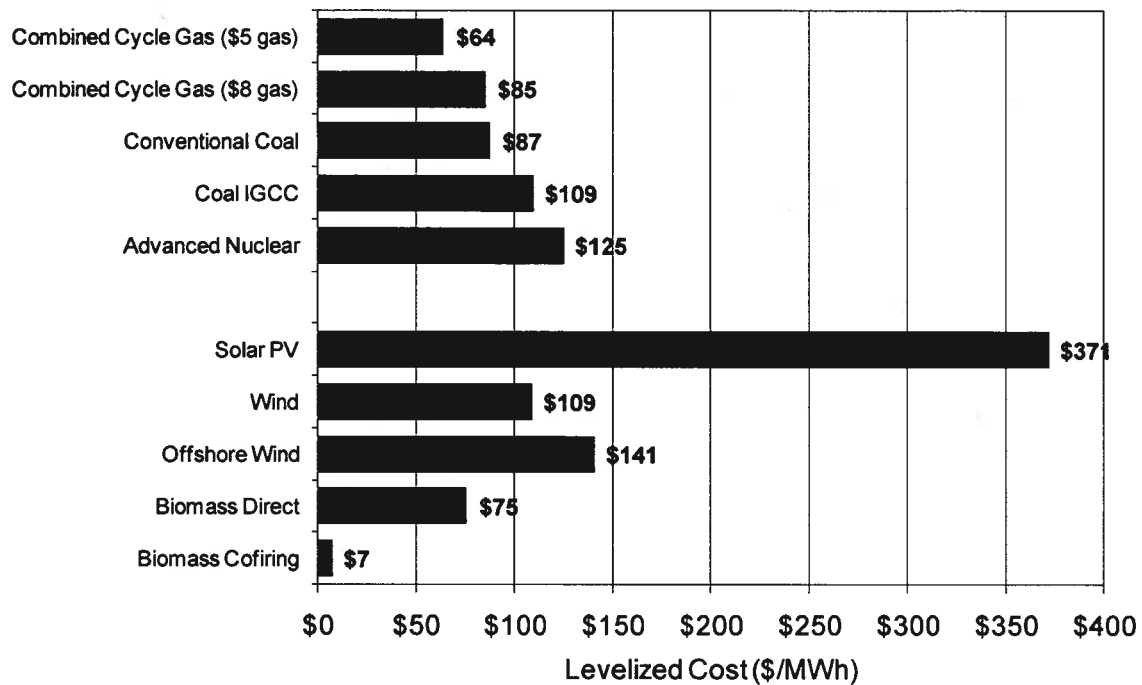


Figure 1. Levelized Cost of Generation

Given these costs, Rate Counsel recommends that the Board give particular attention to the rate impacts for any OSW proposal and ensure that in these difficult times, the negative rate impacts that may be created by these new installations are contained. The 1,100 megawatts (“MWs”) of capacity allowed under the OSWEDA is likely to result in a capital investment of some \$3.85 billion. While this represents a considerable economic development opportunity, it is still an investment that has to be recovered from New Jersey ratepayers.

Table 1 provides a preliminary estimate of the potential rate impacts that could be created from the development of 1,100 MWs of OSW at a cost of \$3,500 per kW.¹ New Jersey ratepayers are likely to incur an increase in their bills of some \$1.1 billion in net present value terms. On a forward-going basis, residential ratepayers would likely pay between \$10 and \$16 per year more to support the full amount of OSW allowed under the OSWEDA.

¹ See: Snyder, B. and Kaiser, M., “Ecological and economic cost-benefit analysis of offshore wind energy”, *Renewable Energy*, Vol. 34, No. 6, (June 2009); and Hunt, G., “Maine offshore wind energy, comparative cost analysis”, School of Economics, University of Maine (Feb. 2010).

Table 1. Total Cost and Rate Impact of Offshore Wind (1,100 MW Capacity)

	OSW Price Premium (\$/MWh)	OSW Production (MWh)	ANNUAL					MONTHLY		
			Total Cost of OSW (\$)	Total Sales (MWh)	Per MWh Cost of OSW (\$/MWh)	Average Use per Residential Customer (MWh)	OSW Cost per Residential Customer (\$)	OSW Cost per Residential Customer (\$)	Average Monthly Bill (\$/Customer)	Percent of Average Monthly Bill (%)
2010	\$ 72.00									
2011	\$ 69.84									
2012	\$ 67.74									
2013	\$ 65.71									
2014	\$ 63.74	1,638,120	\$ 104,415,542	88,043,552	\$ 1.19	8.87	\$ 10.52	\$ 0.88	\$ 123.07	0.7%
2015	\$ 61.83	1,911,140	\$ 118,163,588	89,364,205	\$ 1.32	8.93	\$ 11.81	\$ 0.98	\$ 125.13	0.8%
2016	\$ 59.97	2,184,160	\$ 130,992,778	90,704,668	\$ 1.44	8.99	\$ 12.98	\$ 1.08	\$ 127.21	0.9%
2017	\$ 58.17	2,457,180	\$ 142,945,869	92,065,238	\$ 1.55	9.05	\$ 14.04	\$ 1.17	\$ 129.34	0.9%
2018	\$ 56.43	2,730,200	\$ 154,063,881	93,446,217	\$ 1.65	9.10	\$ 15.01	\$ 1.25	\$ 131.50	1.0%
2019	\$ 54.74	3,003,220	\$ 164,386,161	94,847,910	\$ 1.73	9.16	\$ 15.88	\$ 1.32	\$ 133.69	1.0%
2020	\$ 53.09	3,276,240	\$ 173,950,446	96,270,629	\$ 1.81	9.22	\$ 16.66	\$ 1.39	\$ 135.92	1.0%
2021	\$ 51.50	3,276,240	\$ 168,731,933	97,714,688	\$ 1.73	9.28	\$ 16.03	\$ 1.34	\$ 138.19	1.0%
2022	\$ 49.96	3,276,240	\$ 163,669,975	99,180,409	\$ 1.65	9.34	\$ 15.41	\$ 1.28	\$ 140.49	0.9%
2023	\$ 48.46	3,276,240	\$ 158,759,876	100,668,115	\$ 1.58	9.40	\$ 14.83	\$ 1.24	\$ 142.84	0.9%
2024	\$ 47.00	3,276,240	\$ 153,997,079	102,178,136	\$ 1.51	9.46	\$ 14.26	\$ 1.19	\$ 145.22	0.8%
2025	\$ 45.59	3,276,240	\$ 149,377,167	103,710,808	\$ 1.44	9.52	\$ 13.72	\$ 1.14	\$ 147.64	0.8%
2026	\$ 44.23	3,276,240	\$ 144,895,852	105,266,471	\$ 1.38	9.58	\$ 13.19	\$ 1.10	\$ 150.11	0.7%
2027	\$ 42.90	3,276,240	\$ 140,548,976	106,845,468	\$ 1.32	9.65	\$ 12.69	\$ 1.06	\$ 152.61	0.7%
2028	\$ 41.61	3,276,240	\$ 136,332,507	108,448,150	\$ 1.26	9.71	\$ 12.20	\$ 1.02	\$ 155.16	0.7%
			NPV: \$ 1,088,872,949				\$ 104.69			

Note: OSW Price Premium is calculated as the difference between the current New Jersey REC trading price (\$6) and the cost of offshore wind (\$78). Both costs are assumed to decrease at a rate of 3 percent each year. The discount rate is assumed to be 10 percent.

If OSW capacity were to increase beyond 1,100 MW, with goals comparable to those suggested in the Board Staff's "DRAFT Offshore Wind Financing Rule Proposal" as circulated in July 2009, ratepayers would see their bills increase by \$20 to \$47 per year. This is an increase, in net present value terms, of over \$2.8 billion and has been presented in Table 2.²

² The "DRAFT Offshore Wind Financing Rule Proposal" was circulated via email on July 1, 2009 by the New Jersey Office of Clean Energy.

Table 2. Total Cost and Rate Impact of Offshore Wind (3,000 MW Capacity)

	OSW Price Premium (\$/MWh)	Capacity (MW)	OSW Production (MWh)	ANNUAL				MONTHLY			Percent of Average Monthly Bill (%)
				Total Cost of OSW (\$)	Total Sales (MWh)	Per MWh Cost of OSW (\$/MWh)	Average Use per Residential Customer (MWh)	OSW Cost per Residential Customer (\$)	OSW Cost per Residential Customer (\$)	Average Monthly Bill (\$/Customer)	
2010	\$ 72.00										
2011	\$ 69.84										
2012	\$ 67.74										
2013	\$ 65.71										
2014	\$ 63.74	1,000	2,978,400	\$ 189,846,440	88,043,552	\$ 2.16	8.87	\$ 19.13	\$ 1.59	\$ 123.07	1.3%
2015	\$ 61.83	1,400	4,169,760	\$ 257,811,465	89,364,205	\$ 2.88	8.93	\$ 25.76	\$ 2.15	\$ 125.13	1.7%
2016	\$ 59.97	1,800	5,361,120	\$ 321,527,727	90,704,668	\$ 3.54	8.99	\$ 31.86	\$ 2.65	\$ 127.21	2.1%
2017	\$ 58.17	2,200	6,552,480	\$ 381,188,983	92,065,238	\$ 4.14	9.05	\$ 37.45	\$ 3.12	\$ 129.34	2.4%
2018	\$ 56.43	2,600	7,743,840	\$ 436,981,189	93,446,217	\$ 4.68	9.10	\$ 42.57	\$ 3.55	\$ 131.50	2.7%
2019	\$ 54.74	3,000	8,935,200	\$ 489,082,792	94,847,910	\$ 5.16	9.16	\$ 47.25	\$ 3.94	\$ 133.69	2.9%
2020	\$ 53.09	3,000	8,935,200	\$ 474,410,308	96,270,629	\$ 4.93	9.22	\$ 45.44	\$ 3.79	\$ 135.92	2.8%
2021	\$ 51.50	3,000	8,935,200	\$ 460,177,999	97,714,688	\$ 4.71	9.28	\$ 43.71	\$ 3.64	\$ 138.19	2.6%
2022	\$ 49.96	3,000	8,935,200	\$ 446,372,659	99,180,409	\$ 4.50	9.34	\$ 42.04	\$ 3.50	\$ 140.49	2.5%
2023	\$ 48.46	3,000	8,935,200	\$ 432,981,479	100,668,115	\$ 4.30	9.40	\$ 40.43	\$ 3.37	\$ 142.84	2.4%
2024	\$ 47.00	3,000	8,935,200	\$ 419,992,035	102,178,136	\$ 4.11	9.46	\$ 38.89	\$ 3.24	\$ 145.22	2.2%
2025	\$ 45.59	3,000	8,935,200	\$ 407,392,274	103,710,808	\$ 3.93	9.52	\$ 37.41	\$ 3.12	\$ 147.64	2.1%
2026	\$ 44.23	3,000	8,935,200	\$ 395,170,506	105,266,471	\$ 3.75	9.58	\$ 35.98	\$ 3.00	\$ 150.11	2.0%
2027	\$ 42.90	3,000	8,935,200	\$ 383,315,390	106,845,468	\$ 3.59	9.65	\$ 34.61	\$ 2.88	\$ 152.61	1.9%
2028	\$ 41.61	3,000	8,935,200	\$ 371,815,929	108,448,150	\$ 3.43	9.71	\$ 33.28	\$ 2.77	\$ 155.16	1.8%
				NPV: \$ 2,830,776,685				\$ 271.49			

Note: OSW Price Premium is calculated as the difference between the current New Jersey REC trading price (\$6) and the cost of offshore wind (\$78). Both costs are assumed to decrease at a rate of 3 percent each year. The discount rate is assumed to be 10 percent.

Given these potential costs to New Jersey ratepayers, particular care should be given not to add other costs that should not fairly be borne by ratepayers. Thus, the Board's rules, as well as any approved OSW proposal, must draw the appropriate balance in allocating risk between ratepayers and developers. While the Board's rules should strive to minimize regulatory uncertainty, ratepayers should not be asked to assume development, operational and business risks for developers. Clearly defined and quantifiable benefits, in the form of reduced OSW development costs, would have to accompany any proposals that would attempt to shift risk away from developers and towards ratepayers.

2. Comments on the Definition of Qualified Project

Rate Counsel encourages the Board to establish firm rules and guidelines for the definition of OSW projects that are interconnected to the New Jersey transmission grid as defined by the OSWEDA. As the Board well knows, interconnection alone does not constitute or guarantee any geographic commitment, or containment of OSW project benefits, to New Jersey ratepayers. Within appropriate constitutional guidelines, Rate Counsel recommends the Board adopt clear rules that ensure that subsidies paid by New Jersey ratepayers result in benefits to New Jersey ratepayers, as opposed to other non-supporting jurisdictions along the East Coast.

Rate Counsel suggests that interconnection to New Jersey be the first, but not the only requirement of certifying an OSW project as "qualified." A certification should be required stating that all project output, including but not limited to energy, capacity, renewable energy attributes, and environmental attributes be guaranteed to New Jersey in return for the requested financial support. All gains made from the sale of any

attribute from a qualified OSW project, to markets other than those in New Jersey, should be credited to New Jersey ratepayers who supported the program.

3. Comments on the OSW Application Process

Rate Counsel offers the following comments on the various aspects of the Application process under which qualified OSW projects will be reviewed:

A. Notification and Qualification Provisions: Rate Counsel recommends that all potential OSW projects file a 90-day advanced notification to the Board and interested parties prior to submitting a full application and request for financial support. This advance notification should have basic project information such as the location, size, capacity, cost, developer and investor identification, and anticipated commercial operation date ("COD"). The advance certification should also include a preliminary identification of the type of financial support expected to be requested such as an Offshore Wind Renewable Energy Certificate ("OREC"), or long-term fixed price bilateral contract with a load serving entity ("LSE") or electric distribution company ("EDC"). The information included in the advance notification should provide information that gives parties an initial understanding of the proposed project proposal, its potential benefits and whether the project likely to meet the Board's qualification standards. This will allow interested parties and the Board to garner appropriate resources and expertise to evaluate the proposal fully and promptly when it is filed.

Rate Counsel believes that the Board should adopt rules that clearly define a "qualified project" and that certification of a project as "qualified" should occur in the initial stage of the formal application process. That initial stage will examine criteria that define a project as "qualified," including but not limited to, whether the project will be connected to the New Jersey transmission system, whether the applicant has sufficient integrity and financial and institutional wherewithal to complete the project, whether the applicant has applied for the necessary state and federal permits for the project, and whether its cost benefit analysis demonstrates a positive net benefit for New Jersey. The second stage of the formal application process should focus on the evaluation of the terms and conditions of the project, its rate impacts, and cost recovery. This will preserve state resources by ensuring that a project is qualified before further analysis is conducted.

B. Minimum Filing Requirements ("MFRs") and Completeness Determination: The Board's rules should define a set of MFRs comparable to those adopted for projects eligible for cost recovery under the Regional Greenhouse Gas Initiative ("RGGI") legislation, to ensure that the filing requirements in the statute are met. This process should also have a "completeness" review to ensure that each OSW proposal and application has provided all necessary information identified in the OSWEDA and the Board's rules.

All projects should be required to file the results of their PJM interconnection study. This study should identify all voluntary and involuntary transmission upgrades, and their corresponding costs.

A proposed set of Minimum Filing Requirements are provided as Attachment A.

C. Rate Impact Estimates: All applications should be accompanied by a detailed rate impact analysis for the proposed OSW project. Rate impacts should be based upon total costs that are supported by New Jersey ratepayers and should identify not only the OSW project itself, but any additional supporting infrastructure costs, such as transmission interconnection costs that may be incurred to support the project. The ongoing operations and maintenance (“O&M”) costs associated with the project should be identified as well as any periodic capital upgrades (i.e., turbine blade replacements), administrative and general (“A&G”) costs, taxes, and decommissioning costs.

Rate impacts should include a scenario analysis for the proposed OREC support mechanism or contract that considers such factors as cost escalation, electricity price forecasts, among others.

The models and spreadsheets used to estimate rate impacts should be provided with the analysis.

D. Economic Benefit Estimates: The Board should establish rules that require all OSW proposals to clearly identify project economic benefits net of benefits that would have been associated with forgone Class 1 onshore investments. Each project should be required to provide an economic impact analysis that provides the total project investment and investment profile for major project capital expenditure categories, such as turbine investment, platform/structure fabrication, structure installation, water and/or air transportation, among others. The allocation of these expenditures to onshore areas, and New Jersey, should be clearly provided and documented.

Each project should be required to provide the New Jersey-specific expenditures and employment estimates and identify where possible, New Jersey vendors, or potential New Jersey vendors, that are anticipated to contribute or compete for the opportunity to contribute, to the OSW project if developed. The Board should use the estimated New Jersey local content as one important criterion in its cost-benefit analysis for project approval.

E. Minimum New Jersey Impact Thresholds: The Board should establish minimum impact thresholds for the approval of an OSW project requesting New Jersey ratepayer financial support. Rate Counsel recommends no project be approved that (1) has an estimated rate impact that is likely to be greater than 2.5 percent per year, for any year during the course of the project’s life; and (2) have local New Jersey employment and economic content of less than 60 percent of total OSW project investment.

As noted earlier, Rate Counsel appreciates the importance of developing regulatory certainty and is not recommending the termination of financial support for any project that has a rate impact exceeding the 2.5 percent per year threshold once that project

has been (1) approved and (2) is commercially operational. The rejection threshold should be applied during the project evaluation and approval process and examined from reasonable forecasts of project investment, operation, and decommissioning costs relative to anticipated market prices for capacity, energy, and tradable renewable and environmental allowances and credits, as well as other support mechanisms such as federal and state tax incentives.

F. OREC Pricing

The OSWEDA gives the Board flexibility in considering OSW funding mechanisms including the use of ORECs. The Board has at least two regulatory issues that it may want to address in its proposed rules. The first issue is on the definition of what costs are included in the definition of an OREC. The second issue is the determination of OREC value.

OREC Determination: Rate Counsel's past comments to the Board have recommended that ORECs be determined on the "differential" between the revenues collected from OSW output that could be sold in wholesale markets and the investment costs (return on and of investment) not recovered from those revenues. ORECs, like long-term contracted SRECs, would be offered on a fixed levelized basis. OSW developers would be subject to the risk associated with collecting their competitive wholesale power market prices.

The other option, which has been discussed in past Board workshops, has been to set the OREC as an "all-in" price that imputes some wholesale power market value, and reconciles this piece of the OREC formula on an ex-post basis as wholesale power market prices change. So, if the observed wholesale power market price falls relative to the amount imputed in the OREC, OSW developers would be allowed to increase their revenues to compensate for this offset, and if wholesale power market prices rose relative to the amount imputed in the OREC, ratepayers would receive a credit.

Rate Counsel still prefers that ORECs be established on a "differential" basis for a variety of reasons. First, this approach is consistent with how the value for other renewable energy credits (RECs, and SRECs) are determined in New Jersey and regional renewable energy markets. SRECs for instance, typically reflect the additional (non-economic) cost of bringing solar to the market and reflect the amounts over and beyond the retail price of electricity which is avoided by a rooftop or other residential or commercial installation. ORECs should be established in a similar fashion.

Second, while Rate Counsel sees the merits of relieving OSW developers of regulatory risk by establishing a long-term contracted OREC program, we do not believe that these developers should also be insulated from market risk. OSW projects will be large and complicated. The entities developing these projects should have the corresponding degree of sophistication and market knowledge to bear commercial and market risks. If they do not, it raises questions about their ability to manage all of the risk associated with an OSW development project.

OREC Valuation: The next major issue for the Board will be in the determination of the method by which OREC values will be established. The fundamental challenge for the Board is that OSW is an emerging industry that, even when established, is likely to be comprised of only a handful of players, at best. OSW market structure is likely to never reflect the same number of market suppliers that exists in the solar industry. Thus, the Board needs to establish a method that ensures that the price paid for OSW is fair, just and reasonable given its oligarchic, or competitively monopolistic structure.

The Board has two potential options at its disposal. The first is to treat an OSW project like a natural monopoly and set ORECs at a level that gives the developers recovery of their costs plus an opportunity to earn a reasonable return of, and on, their investment. Such an approach does not suggest that the allowed return on equity for a project of this nature should reflect that found for regulated utilities. It does, however, suggest that the generic process by which rates are set for monopoly providers of service, could be followed in this instance. The challenge for the Board, admittedly, will be projecting the likely costs and determining a “reasonable” rate of return on the OSW project.

The second potential option is to require the limited number of OSW developers in the market to compete with one another through a competitive procurement/solicitation process. The process could be established in a number of different ways. Perhaps the most expeditious would be to establish a schedule of open solicitations for a discrete fixed number of megawatts of capacity over a number of years. For instance, 300 MW of capacity once every three years, until such time that 1,100 MW of OSW capacity is operational. Staggering the opportunities in such a fashion should create a sense of urgency for those developers wishing to get into the market early and establish themselves as market leaders. Staggering offers every three years would discourage participants from sitting on the sidelines.

Each solicitation would be subject to a competitive bidding process where each participant offers a fixed levelized OREC price much like the long-term contracting process for SRECs that has been established for three of the state’s EDCs (JCPL, RECO, ACE). The winning bid in the solicitation would set the market price for any participant that wanted to develop an OSW project, or, alternatively, the Board could fix the OREC price, and only certify only one participant to sell ORECs in this market at the fixed price. These ORECs could have vintages to distinguish them from future solicitations that may have different bidders. This approach would capture the competitive nature of bidding, even though there are only a handful of market participants. Such an approach will help provide the Board with assurances that the OREC prices they establish will be fair, just, and reasonable.

G. Alternative Financial Support Mechanisms: The Board should also allow OSW projects to explore financial support mechanisms that differ from an OREC-based approach. All mechanisms should be considered, especially those that have the ability to reduce overall costs. Direct long-term bilateral contracts between LSEs or EDCs

should be evaluated and considered as alternative support mechanisms to an ÖREC-based approach.

H. Financial Integrity: The Board should require a strict evaluation of the financial integrity of the parties submitting an OSW proposal as well as those ultimately approved. MFRs, as well as ongoing annual filings, should require projects to report, at minimum: anticipated interest coverage ratios; cash flow to construction; cash flow to debt; anticipated carrying costs for construction; debt-equity ratios; the number and identification of equity investors, their respective equity holdings relative to total equity, and those holding preferred equity; and outstanding debt and interest by issuance.

The Board should provide that all OSW approvals and their financial support mechanisms are non-transferrable. Projects seeking to be sold or merged with other entities should seek new approvals before the Board for financial support. Such projects should follow the same approval guidelines as a new OSW investment.

I. Post-Award Filing Requirements: The Board should require monthly reports during the development and construction phase for all OSW projects that are approved under its new process. These reports can be reduced to quarterly filings once approved OSW projects become operational. These reports should provide the objective basis for establishing “trigger mechanisms” that facilitate an “off-ramp” for the Board should actual project milestones and operations deviate significantly from the representations and expectations included in the approved OSW application. Off-ramp triggers could include, but are not limited to, substantial changes in rate impacts, the sale or merger of an approved OSW project, a natural disaster impacting continued operation of the project, or an extended outage that raises questions about an OSW project’s continued operational viability.

4. Conclusions

Rate Counsel thanks the Board for the opportunity to provide these comments prior the development of its rules that will govern the implementation of the OSWEDA. Rate Counsel recommends the Board set rules that will:

- (1) Give parties meaningful advance notice in order to assemble the necessary resources to evaluate each OSW proposal in a fair and reasonable fashion.
- (2) Establish clear minimum filing requirements to expedite the OSW application review process.
- (3) Establish clear filing requirements that identify all important and pertinent factors for each OSW proposal including important items such as project rate impacts, project economic benefits, financial integrity, and cost benefit analysis.

- (4) Recognize project funding and financing alternatives that have the ability to reduce, or potentially eliminate confusion and potentially administratively burdensome OREC mechanisms.
- (5) Set minimum cost-benefit thresholds that restrict rate impacts, and maximize New Jersey economic benefits, from OSW proposals.

Rate Counsel looks forward to offering more specific recommendations and comments once the Board publishes draft regulations and working with the Board and its staff in any future collaborative processes designed to expedite the implementation of its OSW rules.

Respectfully submitted,



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COMMENTS OF THE NEW JERSEY DIVISION OF RATE COUNSEL

Attachment A: Proposed Minimum Filing Requirements

- All OSW proposals shall contain information and financial statements for the proposed OSW project in accordance with the applicable Uniform System of Accounts. The proposed OSW project shall provide the Accounts and Account numbers that will be utilized in booking the revenues, costs, expenses and assets so that they can be properly separated and allocated.
- The proposed OSW project shall provide all quantitative and qualitative information supporting its application including explanations, assumptions, calculations, and work papers for each proposed OSW project and OREC or other cost recovery mechanism. The proposed OSW project shall provide electronic copies of all materials and supporting schedules, with all inputs and formulae intact.
- The proposed OSW project application and other required information, shall be verified as to its accuracy and shall be accompanied by a certification of service demonstrating that the petition was served on the Department of Law and Public Safety and the Division of Rate Counsel simultaneous to its submission to the Board Secretary.
- An entity seeking to construct an OSW wind project shall submit an application to the Board for approval by the Board as a qualified OSW wind project, which shall include, but not be limited to, the following information:
 - a) a detailed description of the project, including maps, surveys and other visual aides. This description shall include, but not be limited to: the type, size and number of proposed turbines and foundations; the history to-date of the same type, size and manufacturer of installed turbines and foundations globally; and a detailed implementation plan that highlights key milestone activities during the permitting, financing, design, equipment solicitation, manufacturing, shipping, assembly, in-field installation, testing, equipment commissioning and service start-up;
 - b) a completed financial analysis of the project including pro forma income statements, balance sheets, and cash flow projections for a 20-year period, including the internal rate of return, estimated revenues, expenses and capitalized investments and a description and estimate of any State or federal tax benefits that may be associated with the project;

- c) the proposed method of financing the project, including identification of equity investors, fixed income investors, and any other sources of capital;
- d) documentation that the entity has applied for all eligible federal funds and programs available to offset the cost of the project or provide tax advantages;
- e) the projected electrical output and anticipated market prices over the anticipated life of the project, including a forecast of electricity revenues from the sale of energy derived from the project and capacity as well as revenues anticipated by the sale of any ORECs, RECs, air emission credits or offsets, or any tradable environmental attributes created by the project;
- f) an operations and maintenance plan for the initial 20-year operation of the project that: details routine, intermittent and emergency protocols; identifies the primary risks to the built infrastructure and how the potential risks, including but not limited to hurricanes, lightning, fog, rogue wave occurrences, and exposed cabling, shall be mitigated; and identifies specific and concrete elements to ensure both construction and operational cost controls. This operations and maintenance plan shall be integrated into the financial analysis of the project, and shall identify the projected plan for the subsequent 20 years, following conclusion of the initial 20-year operations, assuming any necessary federal lease agreements are maintained and renewed;
- g) the anticipated carbon dioxide emissions impact of the project;
- h) a decommissioning plan for the project including provisions for financial assurance for decommissioning as required by the applicable State and federal governmental entities;
- i) a list of all State and federal regulatory agency approvals, permits, or other authorizations required pursuant to State and federal law for the OSW project, and copies of all submitted permit applications and any issued approvals and permits for the OSW project;
- j) a cost-benefit analysis for the project including at a minimum:
 - (i) a detailed input-output analysis of the impact of the project on income, employment, wages, indirect business taxes and output in the State with particular emphasis on in-State manufacturing employment;
 - (ii) an explanation of the location, type and salary of employment opportunities to be created by the project with

- job totals expressed as full-time equivalent positions assuming 1,820 hours per year;
- (iii) an analysis of the anticipated environmental benefits and environmental impacts of the project; and
 - (iv) an analysis of the potential impacts on residential and industrial ratepayers of electricity rates over the life of the project that may be caused by incorporating any State subsidy into rates;
- k) a proposed OREC pricing method and schedule for the Board to consider;
 - l) a timeline for the permitting, licensing and construction of the proposed OSW project;
 - m) a plan for interconnection, including engineering specifications and costs;
 - n) the proposed OSW project shall provide the estimated program costs by the following categories: investment costs, return on investment, depreciation, administrative costs, operation and maintenance costs, regulatory costs, and other costs on an annual basis;
 - o) the proposed OSW project shall provide a description of how the proposed OSW plan will complement, and impact existing programs being offered by the New Jersey Clean Energy Program with all supporting documentation;
 - p) the proposed OSW project shall provide a detailed description of how the project comports with New Jersey State policy as reflected in reports, including the New Jersey Energy Master Plan, or, pending issuance of the final Energy Master Plan, the draft Energy Master Plan, and the greenhouse gas emissions reports to be issued by the New Jersey Department of Environmental Protection pursuant to N.J.S.A. 26:2C-42(b) and (c) and N.J.S.A. 26:2C-43 of the Global Warming Response Act, N.J.S.A. 26:2C-37;
 - q) the proposed OSW project shall describe whether the proposed program will generate incremental activity in the renewable energy marketplace and what, if any, impact on competition may be created, including any impact on employment, economic development and the development of new business with all supporting documentation;
 - r) the proposed OSW project shall provide a description of any known market barriers that may impact the project and address the potential impact on such known market barriers for each proposed project with all supporting documentation;

- s) the proposed OSW project shall propose the method for treatment of any air emission credits and offsets, including Regional Greenhouse Gas Initiative carbon dioxide allowances and offsets including ownership, and use of the certificate revenue stream(s);
- t) the proposed OSW project will provide a detailed rate impact analysis that will investigate retail rate impacts, on an annual per class basis over the life of the proposed project. The OSW rate impact analysis should include a variety of scenario analyses that examines potential risks that may be borne, through increased rates, by ratepayers;
- u) the proposed OSW project will provide a detailed economic impact analysis that quantifies, on an annual and per sector basis, the direct, indirect, and induced economic impacts of the proposed project net of the best available Class 1 renewable alternative. The economic impact analysis will detail the output, value-added (wages, proprietor income, rentals, etc.) information on an annual basis. The economic impact analysis must detail, on an annual basis, the New Jersey-based employment and economic content of the project;
- v) the proposed OSW project shall provide a detailed explanation, with all supporting documentation, of the recovery mechanism it proposes to utilize for cost recovery of the project including detailed spreadsheets of the accounting treatment of the cost recovery/financial support mechanism describing how costs will be amortized, which accounts will be debited or credited each month, and how the costs will flow through the proposed method of recovery of project costs; and
- w) any other information deemed necessary by the Board in order to conduct a thorough evaluation of the proposal.



Kristi Izzo
Secretary
Board of Public Utilities
State of New Jersey
Two Gateway Center
Suite 801
Newark, New Jersey 07102

October 29, 2010

RE: OSW Rule Comments

AREVA Renewable Inc. is pleased to respond to the New Jersey Board of Public Utilities (BPU) call for public comment on the recently enacted Offshore Wind Economic Development Act. AREVA Renewable Inc., through its affiliate AREVA Wind (collectively "AREVA"), manufactures a 5MW advanced technology offshore wind turbine, specifically designed for harsh sea conditions.

AREVA appreciates the opportunity to provide this input and looks forward to working with the BPU on the development of a sustainable and economically viable renewable energy credit program that will serve to provide New Jersey with clean offshore wind power and significant economic benefits.

AREVA offers these brief comments as general statements on the approach we believe the BPU should take in addressing two issues: 1) the calculation of the benefits of job creation and 2) independent pricing of ORECs per projects based on the cost benefit analysis. AREVA anticipates once a draft rule is promulgated we will comment in further detail.

COMPANY BACKGROUND

AREVA is a global energy company that helps its customers generate CO₂-free electricity. AREVA is organized into several business groups that focus on nuclear and renewable power generation. AREVA's renewable business in the U.S. – AREVA Renewable, Inc. – is the entity responding to this RFI.

AREVA has ongoing activities in offshore wind, solar, energy storage and biomass energy generation. In the offshore wind area, the AREVA M5000 is an industry-leading state of the art 5MW offshore wind turbine that has been installed 45 km off the island of Borkum in Alpha Ventus, Germany. This installation was Germany's first offshore wind park. Subsequently, the M5000 was chosen for Germany's first utility scale offshore wind project – Global Tech 1.

AREVA RENEWABLES INC.

The M5000 turbine represents a leading-edge technology with a light-weight hybrid drive-train solution, and is foundation technology neutral. Thanks to an enclosed, wear-resistant design, the M5000s are particularly designed for use in the harsh conditions of the sea. Little maintenance and high technical availability are guaranteed by the optimum protection against corrosive sea air and the minimum-wear design of components.

AREVA has wind operations Europe and is developing operations in North America and Asia, where we are able to offer industry leading offshore wind turbines implemented in association with local industries for the production of energy from renewable resources that are truly competitive when compared to traditional solutions. Our staff sums up several decades of experience in the field and concentrates on the development of reliable and effective technology. The M5000 is the world's first wind energy converter exclusively designed for harsh offshore sea conditions.

COMMENTS

Under the analysis contemplated in paragraph 10 sub (a) the BPU should ensure that the benefits ascribed to a qualified offshore wind project shall not be limited to those benefits (jobs created, wages, various tax revenue) with a direct nexus to the qualified wind project. Instead, the regulations should require the BPU to consider the all benefits enjoyed by the State as a result of any supplier/manufacture attracted as a result of the qualified wind project. Such a rule would encourage developers to identify and recruit suppliers with diverse industrial portfolios which can situate themselves into the existing New Jersey industrial infrastructure. This course would ensure the wind industry in New Jersey serves as a jobs and revenue multiplier.

Secondly, the BPU should provide for a pricing structure and terms of availability for ORECs that takes into account and rewards the different levels of overall instate economic benefits generated by the various qualified offshore wind projects. Failing to do so would negate the purpose of a cost benefit analysis and would result in the BPU basing the pricing on uniform assumptions. The State instead should encourage each developer to maximize their competitive advantage through creativity in attracting maximum instate benefits.

AREVA thanks the BPU for the opportunity to provide the preliminary general comments and looks forward to reviewing and commenting on the draft rule in more detail.

Sincerely,



Steven J. Cuevas
Director of Business Development; Off Shore Wind
AREVA Renewables Inc.



October 23, 2010

Kristi Izzo, Secretary
State of New Jersey
Board of Public Utilities
Two Gateway Center, Suite 801
Newark, NJ 07102

RE: Implementation of the Offshore Wind Economic Development Act

Dear Ms. Izzo:

The Atlantic Wind Connection (AWC) project, sponsored by Good Energies, Google and Marubeni Corporation, is an offshore backbone transmission system designed to interconnect 6,000 MW of offshore wind turbine capacity built off the coasts of New Jersey, Delaware, Maryland and Virginia to the region's population centers. We appreciate this opportunity to comment on the Board's implementation of New Jersey's Offshore Wind Economic Development Act (Act).

AWC is indispensable to building the robust offshore wind industry that New Jersey and the other Mid-Atlantic region states hope to create. AWC will accelerate offshore wind development, help create thousands of jobs, improve consumer access to clean energy sources, and increase the reliability of the Mid-Atlantic region's existing power grid.

The Board should ensure that an offshore wind energy project is able to connect to the New Jersey transmission grid through a backbone system like AWC or with an individual project radial transmission tie. According to the Act, the term "Qualified offshore wind project" means a wind turbine electricity generation facility in the Atlantic Ocean and connected to the electric transmission system in this State, and includes the associated transmission-related interconnection facilities and equipment, and approved by the board pursuant to section 3 of [the Act].'

The Board should clarify in its rules implementing New Jersey's Offshore Renewable Energy Certificate (OREC) program that a wind turbine electric generating facility in the Atlantic Ocean attached to an electric transmission system that connects to New Jersey is eligible to be a "qualified offshore wind project." AWC would be such an electric transmission system. AWC would be

comprised of transmission substation platforms located offshore in federal waters near wind farms, subsea cables traversing federal and state submerged lands, and terrestrial cables terminating at land-based substations located in New Jersey and other Mid-Atlantic states. AWC's facilities should be considered "associated transmission-related interconnection facilities and equipment" within the meaning of the Act. The "connected . . . in this State" requirement under the Act should be satisfied by AWC's terrestrial substations and cable in New Jersey and by demonstrating, as explained below, that a wind farm delivering power to AWC and earning ORECs from New Jersey actually delivers equivalent energy to New Jersey contemporaneously.



AWC's offshore substations would accept energy collected from an offshore wind farm, metering it in real time. AWC's terrestrial substations also would meter in real time the energy removed from the AWC transmission system and injected into the New Jersey grid. We can, therefore, monitor in real time the energy produced by a qualified offshore wind project and ensure that an equivalent amount of energy is delivered into New Jersey when it is produced by the offshore wind farm. The Board can be assured through such energy accounting that ORECs awarded to a wind farm are used to support energy production that benefits New Jersey.

Making it possible for a wind farm to connect to AWC consistent with “qualified offshore wind project” status is beneficial to New Jersey consumers and the development of a robust New Jersey offshore wind industry. AWC is designed to provide efficient transmission access for offshore wind projects and a north-south backbone that lessens congestion and reinforces the weak terrestrial grid. AWC also will allow offshore wind farms to be built in Federal waters, well beyond the 3-mile state limit, which will minimize visual impacts and lessen objections to offshore wind development.

The Department of Energy has labeled the Mid-Atlantic region from Washington to New York City a “National Interest Electric Transmission Corridor” because of severe congestion and reliability issues. Congestion on the transmission grid contributes to keeping electricity prices in New Jersey high relative to other regions by blocking distant, less expensive, surplus generation from accessing the New Jersey market. Variable offshore wind energy injections from individual offshore wind farm radial transmission ties will heighten the challenges of reliably and efficiently operating the grid given its congested state.

The AWC backbone system would lessen the impact of wind energy production variability by mixing output over a broad region.¹ This benefit reduces PJM costs of integrating the injected generation which ultimately lowers the cost of delivered power for consumers. In addition, when the wind is calm and offshore turbines are not generating electricity, less expensive electricity from other parts of the Mid-Atlantic region brought to New Jersey on the backbone will help to lower New Jersey’s energy costs. The benefits of the backbone system can help to answer the objections of those concerned about offshore wind energy’s cost. The AWC backbone system will help to improve reliability and provide New Jersey with greater access to both wind energy and less expensive terrestrial energy resources. These benefits would not be available if offshore wind projects are connected directly to the New Jersey grid through individual project radial transmission ties.

The AWC system would be operated as a traditional utility with regulated transmission rates. Transmission facilities can be expected to have a life of 40 years or more, approximately twice the life of a wind farm. It makes little sense to finance long-lived transmission assets with high-cost wind farm capital. Consumers should be better off by funding offshore wind farm transmission under the regulated utility model.

In addition, the AWC backbone transmission system can free wind farm developers from unpredictable transmission interconnection queues and

¹ See, Willett Kempton, Felipe M. Pimenta, Dana E. Verona, and Brian A. Colle, *Electric power from offshore wind via synoptic-scale interconnection*, Proceedings of the National Academy of Sciences of the United States of America (2010) (demonstrating that a backbone along the eastern seaboard could substantially reduce wind energy output variability).

unexpected upgrade costs. As the choicest coastal grid interconnection points are occupied by the early wind farms, interconnection for subsequent projects will grow more costly and time consuming. The AWC backbone system will provide predictability in cost and timing to the development process, helping to set the conditions for steady industry growth in which expensive facilities such as ports and specialized offshore construction vessels can be used efficiently.

The AWC backbone also helps New Jersey to leverage its efforts to build a local offshore wind industry. The backbone makes it more practical to build offshore wind farms off of the Delmarva Peninsula, where transmission is even more constrained than in New Jersey. Greater demand for offshore wind components and construction services throughout the region will benefit New Jersey, especially if the State has established an early lead through its OREC program. The specialized port proposed for Paulsboro, New Jersey is just as well positioned to serve Delaware and Maryland wind farms as it is to serve New Jersey wind farms. And turbine, blade and foundation manufacturers that might have hesitated to locate in New Jersey to supply only 1,100 MW of New Jersey offshore wind will certainly be more interested in building factories when 6,000 MW of offshore wind seems possible.

The benefits of offshore backbone transmission are so important to the development of an offshore wind industry that 10 governors from Maine to Virginia wrote to Congressional leaders last year asking for policies that would help to provide for such a system off the east coast. Interior Secretary Salazar also has commented favorably on the merits of an offshore backbone transmission system.

In conclusion, we believe that the AWC backbone transmission system is an essential part of the foundation for a large-scale, efficient offshore wind industry. We urge the Board to adopt rules under the Act that provide flexibility for wind developers to connect to an offshore backbone like AWC or to use individual radial ties. Without such rules, wind developers (and ultimately New Jersey's consumers) will not be able to share in the benefits of the AWC and the cost of delivered energy will not be reduced accordingly. The end result would be an unintended consequence: New Jersey's investment in wind energy through the OREC program would not be as effective as intended by the legislature.

Sincerely,

/s/

Markian Melnyk
Principal
Atlantic Wind Connection

FISHERMEN'S ENERGY OF NEW JERSEY, LLC

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www.fishermensenergy.com



OSW Rule comments Fishermen's Energy October 29, 2010

Fishermen's Energy appreciates the opportunity to provide these comments in the above matter.

Fishermen's Energy is a company founded by the leadership of the New Jersey fishing industry to evaluate and help guide the development of the use of our coastal waters in a manner that is compatible with the fishing industry and our environmental concerns. Data available from 2008 shows that fishing and seafood handling/preparation in New Jersey was worth \$142.8 million in that year. In 2007, the industry employed over 1,500 people in the processing and wholesale dealer segment of the industry, with the commercial fishing segment employing upwards of 2,000 people on New Jersey's 532 federally permitted fishing vessels.

Fishermen's Energy is developing its visionary State waters' project, sited 2.8 miles from Atlantic City, to serve as a symbol of a City that has embraced renewable energy; as well as a utility scale project in federal waters. At the recent AWEA Offshore Wind Conference in Atlantic City from October 4-6, 2010, Fishermen's Energy evidenced its commitment to offshore wind by showcasing innovative technology that it procured (horizontal scanning LIDAR unit placed in demonstration phase at the ACUA windfarm so conference participants could see it on their windfarm tour), and furthermore by continuing its geo-technical investigation with a jack-up barge, drilling contractor and geo-technical engineers located in clear sight at 2.8 miles from the Atlantic City beach. Fishermen's Energy has also procured a vertical floating LIDAR system that will be deployed in December 2010. In the area of environmental monitoring, Fishermen's Energy has been conducting weekly and bi-weekly boat transect surveys for avian and marine mammals since May of this year. Our combined NJ Waterfront Development and CAFRA

permit application has been deemed complete by the NJ DEP and we are working on a similar process with the US Army Corps of Engineers and other Federal agencies.

We have been proponents of offshore wind and have been active in the Offshore Renewable Energy Credit ("OREC") stakeholder process and industry discussions leading up to the legislation that was passed in June 2010, and signed by Governor Christie on August 19, 2010.

With respect to the BPU's efforts to develop rules to implement the Offshore Wind Economic Development Act (the Act), Fishermen's Energy respectfully recommends the following:

- **Develop the rules in an open, collaborative manner**

These implementing regulations represent new policy development for all stakeholders. New Jersey's OREC programs, as envisioned by the Act, is different, -- and potentially more beneficial -- than the structure used anywhere else. Accordingly, it is imperative that the BPU and affected parties work closely together to develop a regulatory approach that is beneficial to New Jersey's ratepayers but also is commercially sensitive, that is, is written in a way that is mindful of how projects are developed, financed, constructed and guaranteed. Industry participants including financing institutions specializing in energy and developers of these projects must be able to provide the feedback to assure that a commercially and financially workable program is established in the regulations. To that end, Fishermen's Energy recommends that the BPU allow continued input from affected parties as it drafts its rules; and not limit input to those comments received during this formal "comment period".

- **Effective project financing depends on regulatory risk being appropriately addressed**

Any plan to develop and finance a project and sell ORECs will require BPU approval. While the Act contemplates a thorough review of these proposed plans to protect ratepayers and assure "net positive benefits", the Act is equally clear on assuring that once approved, investors can rely on the OREC plan to be sustainable over its term without revisitation by the BPU (unless undertaken with the consent of all parties). As a result, Fishermen's Energy recommends that

the BPU's rule likewise indicate that all requirements and OREC prices formulas approved by the BPU are not subject to amendment, modification or rescission. Investors -- and the ultimate achievement of New Jersey's offshore wind energy goals -- depends on this certainty.

- **The BPU should use project development criteria to determine which projects are qualified.**

As a result of the passage of the Act and the Administration's leadership in developing this industry, it is likely that more offshore wind energy developers will enter the New Jersey market. If the amount of development exceeds the RPS capacity it may become necessary for the BPU to develop criteria to determine which federal waters projects receive OREC pricing plan approval.

For New Jersey to achieve its goals it is important that projects with a higher probability of completion in a timely manner receive greater consideration in any BPU evaluation process.

For low price projects to be selected and approved, but not developed, is simply not in New Jersey's interest. Accordingly, specific criteria should be utilized to sort and select federal waters projects (and if proposed supply exceeds RPS requirements). These criteria would include where the project is in the PJM interconnection process; whether the project has an interim lease or lease with the Department of the Interior; and whether the project has devoted resources toward project design (and is not just a "placeholder" in a lease application). This process will increase the success of New Jersey's effort to build a new energy industry and attract manufacturing and assembly plants into New Jersey.

- **The net positive benefits test should capture costs and benefits of offshore wind OREC proposals**

The Act provides that every project must meet the "net positive benefit test" to be qualified for an OREC pricing plan. In order to fully capture economic benefits of a project, the following additional factors should be considered in the review:

- a) The diversity benefit of offshore wind energy, that is, a zero fuel cost electricity supply serves to diversify New Jersey from fossil fuel price increases. This diversity benefit is a "risk management" benefit that is separable from other economic benefits.

- b) The merit order effect: it is well established by PJM and other economic analysis conducted internationally that "zero bid price" energy will reduce market clearing wholesale energy prices, and reduce cost to all ratepayers. Since offshore wind energy will bid into the PJM market at a zero bid price, this effect (known as the merit order effect) should be included in the benefits analysis.
- c) Environmental benefits (including reduced emissions of NO_x, CO₂, SO₂ and mercury) should be recognized and quantified.

Fishermen's Energy appreciates the opportunity to file these comments. Thank you.



October 29, 2010

BY ELECTRONIC DELIVERY

Kristi Izzo, Secretary of the Board
New Jersey Board of Public Utilities
Two Gateway Center, Suite 801
Newark, New Jersey 07102

**Re: Informal Comments Regarding BPU's Implementation of the
Offshore Wind Economic Development Act**

Dear Secretary Izzo:

On behalf of Garden State Offshore Energy ("GSOE"), a joint venture between PSEG and Deepwater Wind, I offer the following comments for the Board's consideration as it prepares to draft regulations to implement the Offshore Wind Economic Development Act ("the Act"). These comments largely follow my remarks at the October 19, 2010 Offshore Wind Stakeholder meeting held in Trenton.

First, I would like to acknowledge your efforts in bringing offshore wind development in New Jersey to this significant stage as well as the challenging need to now meet multiple objectives, including:

- Issuing rules in accordance with the statutorily imposed timeframe so the manufacturing industry that has been waiting to develop can take root and bring much needed employment and environmental benefits to the State and region while also ensuring the program will yield successful qualified offshore wind projects; and
- Ensuring that costs to customers are minimized, while recognizing that only projects that have prudently estimated costs and contingencies and utilized appropriately risk-adjusted returns will be viable.

Recognizing these critical challenges, along with the myriad of other issues involved in drafting first of its kind offshore wind regulations, in support of the Board's efforts, GSOE offers the following comments for your consideration.

Project Viability: The Board's offshore wind development program could potentially attract a significant amount of interest from parties with various backgrounds and experiences. It is therefore important that the Board assess the ability of the developers and the viability of their proposed project in a manner that does not delay the objectives of the program – the delivery of renewable energy and the development of the



supply chain. An important criteria in evaluating a project should be the Board's assessment of the developer's ability to deliver the project, specifically considering a developer's:

Technical skills – The developer should exhibit the necessary technical skills in the wind, offshore and energy industries. The developer should have experience in developing, constructing, owning and operating energy infrastructure, wind turbines, and have experience in an offshore environment. Each of these technical skills in all three industry sectors will be paramount for success for what will be the first, or among the first, commercial-scale offshore wind farms in the United States.

Project viability: The Board needs clearly defined criteria to assess the viability of the project. Is it expected to clear the permitting process? Does it have support of the areas impacted locally? Are the costs estimated realistic? Are there appropriate contingencies and risks reflected in the estimates? Are the risk-adjusted returns sufficient to attract capital? Is the construction and logistical plan thoughtfully prepared?

Financial capability - Developers must exhibit the ability to finance the development and construction of the project. The developer should be an investment grade entity, and/or have a sufficient asset base and committed funds to ensure that they have the financial wherewithal to bring a project to fruition. The development of 1,100 MWs or more of offshore wind is a multi-billion dollar endeavor. Therefore, the ability to develop a project and fund it will be critical for the viability and success of the Board's program.

These factors, the technical ability, financial capability and project viability should be the cornerstones of the Board's offshore wind development program rules for evaluating developer proposals. In the absence of such criteria, the program could quickly devolve and be held hostage by a wide-eyed, inexperienced developer who offers empty promises and hopes of lower costs, but will ultimately not be able to deliver.

Program Timing and Size: GSOE believes that it is important to initiate the process to accept bids as soon as practicable after the issuance of the regulations. Assuming Board regulations are published and enacted in February 2011 as required by the Act, the Board should consider opening the program to receive proposals from interested offshore wind developers within sixty to ninety days of that date. That would give a reasonable amount of time for the developers to complete their proposals and advance the program on a timely basis while also allowing the Board and its consultants to remain fully connected with the recently enacted rules and engaged along with applicants in order to ensure effective resolution of any "growing pain" issues that are only natural with new programs.



Also, consistent with the provisions of the Act, if the Board receives proposals that exceed 1,100 MW, but the proposals bring net positive benefits to the State, the Board should consider accepting the proposals for the additional megawatts.

Net Positive Benefits: Perhaps one of the most critical components of the Legislation is the net positive benefits test. We believe that this hurdle, while difficult to clear, is a thoughtful balanced public policy that can support the development of these renewable energy projects and bring the environmental and economic benefits to the State while maintaining strong financial discipline. The definition and application of this standard will be an important aspect of the regulation. GSOE believes that the criteria that the Board includes in the regulations for this test should consider the following:

Market price assumptions:

- **Market price projections:** The Board should engage a consultant to create their projections of market prices for energy, capacity and environmental and other externalities against which the OREC price proposals will be measured. The Board should share these assumptions with developers for comment during the stakeholder process much like the process the Board is using to solicit comments on the Energy Master Plan data and assumptions. It is important for developers to be aware of what their proposals will be measured against so they can ascertain whether their projects are viable and/or if they have different market views from those of the Board's consultant, an opportunity to assert those perspectives for consideration. Such projections should include various scenario analyses so that the prices can be compared against multiple projections.
- **Impact on system prices:** The introduction of these projects will have an impact on market prices. The Board should engage a consultant to assess that impact and share these assumptions with developers for comment during the stakeholder process. As with the market price projections, the developers should have this information available in advance of their bid submittal and be able to assert their own perspectives for consideration if desired.
- **Common measures:** Each of these factors will likely be common for each proposed project (although some could have different capacity factors based on the wind resources at a specific site). Barring any reason for differentiation, the Board should measure applicant proposals against common assumptions.

Economic development:



- Give superior recognition to job creation assumptions that are supported by MOUs with vendors (i.e., a developer has a MOU with a manufacturer that commits to build a facility in the state)
- Recognize assumed job creation benefits (a developer assumes certain levels of direct job creation based on project spend in certain areas)
- Recognize upstream job creation (i.e., a turbine manufacturer that a developer has signed a contract with expects to source certain equipment from local suppliers)
- Induced economic benefits
- Indirect economic benefits
- State and local income, property and payroll taxes
- The Board should also give guidance with respect to assumed multipliers for induced and indirect job creation calculations. It is important for developers to have this clarity in advance and for the Board to review different developers' applications on a consistent basis.

Environmental benefits:

- Commonality and early definition: The Board should define early in the process how it will assess the environmental benefits of the project. Similar to market price assumptions, these benefits will likely be the same or quite similar amongst each proposed offshore wind farm. Therefore, the Board should define this portion of the test early on so the developer knows how they will be measured and can put forth their own views if desired.
- The benefits should consider the avoided cost of emissions from generation that the project would displace. The estimate of that cost should consider the impact on public health and environment.

Rate impact on customers:

- The Legislation also includes a requirement to assess the potential rate impacts on customers as part of the net positive benefits test. Similar to the other criteria, it will be important for the Board to define their calculation of this impact early on in the process. The rate impact will be a function of the



Board's projections of market prices, system impact and the developer's proposals for OREC pricing, so the impact cannot be determined until after the proposals are submitted, but the Board can define its approach to addressing this assumption.

OREC price assumptions: The Legislation required developers to provide information in the proposals to assess the cost of various aspects of the project, including operating costs, tax benefits and return assumptions. This may be substantive in allowing the Board to assess the thoroughness and therefore viability of the projects proposed by the applicants. It will also provide insight into the risk-adjusted returns needed to raise capital to fund these projects. It will be important for the Board to recognize the balance between risk allocation (such as development cost and schedule risk, permitting cost and schedule risk, construction cost and schedule risk, wind resource risk, turbine availability / outage risk, operating cost risk, decommissioning cost risk, and many other factors) and return requirements. These factors should be recognized in the regulations.

There are obviously many other factors that will need to be considered in drafting the regulations, including ensuring that the OREC purchase obligations are cleanly incorporated into the existing BGS/Supplier mechanisms. We can also offer thoughts on this consideration, other aspects that are of note to the Board or expand on our thinking on the above outlined matters if desired.

We thank the Board and its Staff for their efforts on this important program and for your time and consideration of our comments. Please do not hesitate to contact us for any clarifications on these comments or questions you may have.

Best Regards,

Scott Jennings

Scott Jennings
PSEG Global LLC – President
GSOE Board Member

Cc: Rhea Brekke, NJBPU
Joe Sullivan, NJBPU
Mike Winka, NJBPU



Scott Hunter, NJBPU
Anne Marie McShea, NJBPU
Alma Rivera, NJBPU
Rachel Boylan, NJBPU
Ken Sheehan, NJBPU
Alexander Stern, Esq., PSEG Services Corporation
Rob Gibbs, GSOE
David Hang, Deepwater Wind



Kenneth J. Sheehan
Chief Counsel
New Jersey Board of Public Utilities

Dear Kenneth,

Thank you for the opportunity to provide comments regarding the Offshore Wind Economic Development Act. Below are our comments; please let us know if we can provide any additional information.

- The Offshore Wind Economic Development Act is a significant milestone and has the potential to establish New Jersey as a state leader in offshore wind development.
- GE intends to be a significant participant in the establishment of an offshore wind industry in New Jersey and the United States. However, decisions to establish manufacturing and assembly facilities are significant, long-term investments, and require the presence of a sustainable pipeline of projects to justify these investments. As such, we believe it is essential that the rulemaking provide clear guidance in the following areas:
 - **“Positive net benefit” determination.** It will be critical for GE to understand the process and metrics by which the BPU will determine whether a project “demonstrates positive economic and environmental net benefits to the State.” For industry to respond meaningfully and execute on the plan, this process should be defined and transparent; metrics for measuring job creation and other costs and benefits should be clear. Such clarity will help us, as a manufacturing company, understand how we can select and work with suppliers to optimize benefits for the community, as well as develop our plan for building assembly / manufacturing plants.
 - **Draft rules comment period.** A sufficient lead time for reviewing a draft of the rules is also recommended to permit adequate public and private sector input and ensure that the legislation achieves the desired industry response in terms of economic and environmental benefits to the State.

Thank you again.

Best regards,

Tomi Motoi



NRG Bluewater Wind
22 Hudson Place
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October 29, 2010

VIA ELECTRONIC FILING

Secretary Kristi Izzo
New Jersey Board of Public Utilities
Two Gateway Center, Suite 801
Newark, NJ 07102

Re: Offshore Wind Economic Development Act Implementation
— Comments of Bluewater Wind New Jersey Energy LLC

Dear Secretary Izzo:

On behalf of Bluewater Wind New Jersey Energy LLC, a wholly-owned subsidiary of NRG Energy, Inc. (“NRG Bluewater”), these comments are submitted to the Board of Public Utilities (the “Board”) regarding the Board’s implementation of the Offshore Wind Economic Development Act, P.L. 2010, c.57 (“OWEDA”).

NRG Bluewater and its affiliates have projects under active development in several states in the northeast and mid-Atlantic regions, including New Jersey and Delaware. In fact, Bluewater Wind Delaware LLC executed the nation’s first offshore wind power purchase agreement with Delmarva Power and Light Company.

In enacting OWEDA, Governor Christie and the State legislators exhibited bipartisan leadership on offshore wind. OWEDA empowers the Board to bring large-scale renewable energy to New Jersey using the only abundantly-available resource in a state as small and densely populated as New Jersey -- offshore wind. Offshore wind generation technology has been spinning in Europe for 20 years, and has led to more than 30 projects now in operation. Without this technology, New Jersey cannot serve a significant portion of its population with in-state, renewable electricity. One-thousand megawatts of offshore wind generation would power roughly 300,000 New Jersey homes with pollution-free, renewable energy.

Over the past five years, the European land-based wind industry has come to the United States as the U.S. market and policy environment for that business have matured. Today, the U.S. wind industry employs over 85,000 people, and domestic wind manufacturing plants now number 400. Additionally, the cost of land-based projects has gone through a long period of decline since the first

projects came online in the early 1980s. This story will repeat itself soon for offshore wind, an industry employing about 42,000 people in Europe and maybe as many as 160,000 by 2020.

OWEDA and the regulations to follow will allow the Board to set the cost of each megawatt-hour of offshore wind for 20 years. This is a key difference with the other generation sources supplying the lion's share of electricity in the state. This combination of price stability and fuel diversity protects the state from and acts as a hedge against escalating fossil fuel prices and is therefore a key economic advantage of offshore wind.

With respect to the forthcoming regulations, NRG Bluewater makes the following recommendations:

(1) The Board should draw upon the products of last year's offshore wind stakeholder meetings, which resulted in a draft rule in June and substantial comments from many parties, including NRG Bluewater and other offshore wind developers. The Board made important headway on issues such as the mechanics of Offshore Wind Renewable Energy Certificate ("OREC") project payments; the flow of PJM revenues from projects to ratepayers; and offshore wind production goals.

(2) Given the importance of this rulemaking endeavor, NRG Bluewater requests that the Board share with stakeholders its anticipated schedule for meeting the 180-day deadline and provide an additional opportunity – or opportunities, if possible – to comment on a draft of the regulations before they are released.

(3) The regulations should go hand-in-hand with review and revision of the offshore wind components of the Energy Master Plan ("EMP"). Without an updated EMP, the Board will be unable to establish an OREC program to support "at least 1,110 megawatts" of offshore wind. The reasons are two-fold: (a) OWEDA requires applications to be consistent with the EMP, and (b) the scope and schedule in the OREC regulations will need to reflect EMP goals.

(4) The Board should clearly define "qualified offshore wind project" and, specifically, the meaning of the "financial integrity and sufficient access to capital to allow for a reasonable expectation of completion of construction of the project." *OWEDA Section 3b(1)(d)*. Defining these terms is an issue of current interest to the Bureau of Ocean Energy Management, Regulation and Enforcement of the U.S. Department of the Interior, as it determines the qualifications of respondents its Requests for Interest in commercial leasing on the Outer Continental Shelf.

(5) OWEDA requires that, at the time of an OREC application, the applicant has sought all "eligible federal funds and programs." However, this requirement may be difficult to meet since these funds and programs may require more developed projects before making application. For that reason, NRG Bluewater urges the Board to incorporate some flexibility in its defining requirements to determining eligibility for federal funds and programs.

(6) A clear goal of the regulations should be for applicants to be compared fairly and expeditiously with one another. The cost-benefit analyses themselves, if conducted differently by applicants or the Board, will likely end up creating confusion and expending considerable amounts of Board Staff's time reconciling the analyses with one another. To the maximum extent possible, the regulations should mandate common assumptions or inputs – such as, the emissions reductions, carbon mitigation, and other objective measures of the environmental benefits of offshore wind per megawatt-hour of New Jersey offshore wind energy, and electricity market price projections under base, low-fuel-cost, and high-fuel-cost scenarios – to simplify comparisons of projects' net benefits.

(7) One of the great achievements of OWEDA is the regulatory certainty that it ensures: “production projection and OREC purchase requirement [of a qualified, offshore wind project], once approved by the board, shall not be subject to reduction,” *OWEDA Section 2d(4)*, and stipulates that “an order issued by the board pursuant to this subsection [concerning approval of an application for a qualified offshore wind project] shall not be modified by subsequent board orders, unless the modifications are jointly agreed to by the parties” *OWEDA Section 3c(4)*. NRG Bluewater applauds these requirements and encourages the Board not just to draft regulations consistent with OWEDA, but also to maximize the certainty provided by OWEDA. In doing so, the Board will help ensure that financing for these large, capital-intensive projects can be obtained.

NRG Bluewater thanks the Board for the opportunity to provide these comments. Should you wish to discuss any of them, please feel free to contact the undersigned at 860-343-6967 or ray.long@nrgenergy.com.

Respectfully submitted,

/s/ Raymond G. Long

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Comments and Suggestions for Developing and Implementing the Offshore Wind Program

Submitted by OffshoreMW, LLC

October 29, 2010

We thank the Board for the opportunity to provide input into the regulations required by the Offshore Wind Economic Development Act (OWEDA). OffshoreMW provides the following comments and suggestions for the Board's consideration as it prepares the rules to implement OWEDA.

As described by President Solomon at the October 26, 2010, Offshore Wind Stakeholder meeting, the Board is under a tight timeframe to prepare the regulations required by OWEDA. While providing input via the stakeholder meetings and the opportunity to provide written comment will provide the Board with useful input as the regulations are drafted, these venues should not replace the ability of stakeholders to review and comment on the draft regulations prior to the rules being filed with the Office of Administrative Law and being effective upon that filing. Further, an ongoing dialogue among all stakeholders and regulators as the regulations are developed can result in a rule that is workable and efficient from the very start. To help provide this input in the most efficient and timely manner, it is suggested that BPU staff hold working group meetings with stakeholders to discuss issues that they determine would benefit from such discussions. At these meetings, the staff might present an outline of how they envision the regulations will operate, so that stakeholders can offer specific and detailed suggestions and comments. The cost-benefit analysis, and the interface of OREC Orders and the RPS carve-out, are two topics where a discussion of the issues would likely prove especially useful. In addition, as sections of the regulations are drafted they could be released for stakeholder review and comment, instead of waiting for the entire set of draft regulations to be completed. This would provide Board staff with early input on the regulations so that possible unintended consequences could be avoided.

With passage of the OWEDA, New Jersey has an historic opportunity to develop a new industry for the state. A large and robust offshore wind industry will create jobs in project construction, operations, and, if given the opportunity to reach sufficient scale, manufacturing and assembling offshore wind equipment that is used along the New Jersey coast and beyond. Implementation of the OREC program in a manner that allows multiple projects to move forward to financing and construction with confidence is the foundation of New Jersey's strategy to build an offshore wind industry. The regulations put in place to implement the OREC program are critically important to New Jersey making the most of this opportunity.

1. Summary of key suggestions

1) **OREC Orders should be as immutable as possible while maintaining ratepayer equity:** Any provisions in the OREC regulations that increase regulatory risk to developers will drive up costs, and could well undermine the success of the entire program. Therefore the regulations should be structured to reduce regulatory risk. Changes in price due to inflation during the long development period prior to financial close, and due to changes in federal incentives or support prior to project operation, are two areas where price adjustments after an OREC Order would be consistent with the OWEDA purposes, fair to both ratepayers and developers, and relatively easy to implement. Most other risks (e.g. construction over-runs, pre-construction costs, etc) should remain with the developer, and not ratepayers; however the developer should have the opportunity to cancel a project without penalty in exchange for taking on these risks.

2) **Multiple projects should be pursued simultaneously:** Given the complexity and long-lead time to develop projects, it is reasonable to assume that one or more projects may not ultimately go to construction. Therefore, by enabling multiple projects which meet the cost-benefit test to proceed simultaneously, the OREC program can better ensure that New Jersey's offshore wind industry quickly achieves the scale necessary to attract the significant job creation that is a principle objective of the policy. We note that the OWEDA has a minimum requirement of 1100MW capacity, but no cap; therefore we believe a multi-project approach to facilitating project development is in keeping with both the letter and spirit of the law.

3) **There should be a comprehensive and uniform approach to the cost-benefit test and price setting:** In terms of both achieving the goals of OWEDA and general fairness (among developers and to ratepayers), the critical question is if the average price paid by New Jersey results in net benefits, given the totality of costs and benefits resulting from supporting enough projects to establish an offshore wind industry in the state. A comprehensive and uniform approach is also more transparent and simpler, reducing transaction costs and the administrative burden of regulators, suppliers, and developers. A comprehensive and uniform approach also better addresses the fact that no single cost-benefit analysis or price proposal is necessarily more accurate than another, and recognizes that a better approach is to make decisions based on the range and averages of the findings resulting from analyses, using information from proposals and elsewhere.

4) **The regulations should allow OREC purchases over terms of 20 years or more:** While the statute requires analysis based on the first 20 years of a project's operation, longer terms of actual OREC purchases will likely enable lower OREC prices and greater rate-payer benefits, particularly with regard to rate-stabilization and, ultimately, lower rates. We note that in instances where ratepayers have benefited from "below market" rates, it is typically because they were on the latter part of a long-term contract with non-fossil generation (e.g. Vermont's agreements with HydroQuebec). The experience with long-term investment in hydro-electric facilities in the south and northwest regions of the country also demonstrate that this strategy can help reduce energy costs in the long-term, while stabilizing costs in the interim.

In the following sections we provide detailed commentary further addressing each of these key suggestions. In addition, Section 5 discusses issues around integrating the OREC Orders with the offshore wind carve-out of the RPS and suppliers' OREC obligations. In the last section, Section 6 starting on page nine, we provide an outline of how regulations could be structured so as to capture our key suggestions, above, as well as provide minor suggestions and details that are more process oriented.

2. Immutable OREC Orders with limited but important price adjustments

Given the long time between the issuance of the OREC Order and a project's financial close, it is impractical for any developer to credibly offer a fixed price at the time of an OREC Order without taking into account variation in the market place due to inflation or deflation over the long pre-construction period. It is also impossible to know what federal support (e.g. investment tax credits) a developer may be able to utilize by the time a project is in operation, given that current programs are currently set to expire before they can be utilized in New Jersey, and no one can predict future federal legislation. Without an adjustment for inflation and federal policies, developers will have to build in conservative estimates of what the situation will be by the time they go to construction, resulting in unnecessarily high costs to ratepayers. At the same time, by not allowing for a downward adjustment for any federal incentives becoming available, ratepayers would lose out on the opportunity to benefit from these programs. Therefore, the OREC price set in an OREC Order should be allowed to be adjusted –uniformly among projects under development– for these two factors as needed during the time between the initial Order and commercial operation. However, aside from any economically neutral price adjustments to account for changes in federal policy, the price should be fully fixed after financial close in order to maximize rate-payer value and the price stabilization benefit of offshore wind energy, and to enable financing of the projects (as discussed further below).

Aside from these two uniform price adjustments, which should be built into the Order from the start, it is essential that the OREC Order to a developer (or its successors) be as immutable as possible, unless the modifications are jointly agreed to by the parties, as allowed per statute. Should the OREC Order be subject to excessive “regulatory risk” –that is the risk that the government will change its policies or regulations after committing to an OREC Order– then the result will be either unnecessarily higher costs to ratepayers, or the inability to finance the projects at all. Either one of these outcomes would clearly defeat the purpose of the OWEDA. Regulatory certainty is therefore absolutely essential if OWEDA is to be a success. As President Solomon summarized during the October 19th meeting, the offshore wind developers need what is akin to a contracted obligation by the ratepayers, so that we can obtain the financing that will be needed to build these projects and industry for New Jersey.

The reason for this is the very nature of the type of financing that will be used to build offshore wind projects for New Jersey. Called project finance, or non-recourse finance, in this structure the only means for an investor to earn a return on a project are revenues from the project itself (as opposed to say, a large corporation using its balance sheet to ensure sufficient capital or revenues to the project). This arrangement can enable extremely efficient financing, and thus lower costs to ratepayers. However if any risk outside of the control of the developer and its

investors (such as regulatory risk of a change of public policy) is inappropriately placed on the project, then the result will be higher return requirements for the capital (as determined by the capital markets), and consequently higher prices to ratepayers or inability to raise capital.

As described above, during the relatively long period between an OREC Order and a project going to financial close and construction, there are two key areas where it is in all parties' interest to adjust the OREC price. The first is simply inflation (or deflation), which can be easily made neutral to both the project developer and ratepayers by allowing for a simple inflation/deflation adjustment using a public and uniform index. After financial close the operational costs subject to inflation are relatively minor, and inflation during the manufacturing and construction period can be managed through contracts. So it is reasonable to expect a developer to bear the risk of inflation after financial close (i.e. during construction and over the operational life of the project). Prior to financial close, however, there is a risk to developers that inflation of capital costs will be great enough to render a particular OREC Order price uneconomic by the time a developer gets through the lengthy federal permitting and leasing process. Therefore, we recommend that the OREC Order price be given in current year dollars (i.e. the year in which the Order is issued), with an adjustment up or down for inflation/deflation during the period before financial close, on the basis of a publicly available index up until the time of financial close.

The second area where the OREC price should be adjusted up or down is in regard to federal policies which may or may not be in place by the time a project goes to construction. This would include investment tax credits, loan guarantees, and other federal incentives. On the one hand the implementation of such programs after an OREC Order could result in a windfall to a developer at the expense of ratepayers, but on the other hand the cessation of such programs could render a project uneconomic. The OREC Order should therefore allow for additional price adjustments resulting from changes in federal policies, so long as the project is kept economically indifferent (i.e. financially held harmless) as a result of the price adjustment.

Other variables that might change price after the OREC Order but before financial close are either not significant enough to effect price, simply too difficult to fairly adjust (e.g. commodity prices), and/or enough in developers' control (e.g. early estimates of construction costs or wind resource) that no allowance should be made for price adjustments due to these factors.

Beyond the price adjustments described above, which should be anticipated in the original OREC Order, we can identify only two other circumstances where it would be appropriate for the Board to re-open an OREC Order for the purpose of revision or cancellation: i) In the event of bankruptcy of the project developer¹, or ii) should the developer fail to achieve a milestone

¹ It was suggested in the public stakeholder meeting that the sale of the development company should also allow for re-opening of an OREC Order. However, given that any project, regardless of owner, will still have to comply with the milestones and other provisions in an OREC Order, we fail to see how a change in project ownership after an OREC Order is relevant to either effective implementation of state policy or ratepayer protection. Meanwhile, it is typical in the energy project industry for a special purpose project company to be created to legally house the project, and this special-purpose company may routinely change hands more than once during the development process for reasons that have little or nothing to do with the capability of the project sponsors, nor do such ownership changes impact the economics of the project.

specified in the OREC Order. And even in these very limited cases, a unilateral revision or cancellation by the Board should be made only if changes to the original OREC Order cannot first be mutually agreed upon by the developer and the Board.

The detailed outline in Section 6 contain specific suggestions as to how the regulations can reduce regulatory risk while allowing price adjustments to be made that both benefit the ratepayer and better ensure success of the OWEDA.

3. Multiple projects developing in parallel

Given the complexity, long-lead time, and scale of offshore wind projects, it is possible that not all project proposals will ultimately be successful. At the same time, meeting the statutory minimum requirement for offshore wind capacity, and indeed exceeding that minimum so as to achieve the goals of the EMP, are essential in order to maximize the economic benefits of offshore wind by creating a new industry in the state. Furthermore, given the long-lead times and many changing variables, it is essentially impossible for the Board to select the one project that will be completed first, or has an “optimum” cost/benefit structure for ratepayers.

The statutory requirement for the amount of offshore wind the Board is required to achieve is clearly a minimum of 1,100 MW, and given the job creation impetus for the OWEDA, the policy is best served by having as many “net-benefit” projects moving forward as soon as possible. In order to maximize the OWEDA’s economic development potential, the regulations must facilitate the development of as large an industry as possible, in a responsible manner. The net-benefit test will insure that only qualified projects, that are in fact contributing to the state’s economic development and environment, move forward.

Therefore, in order to ensure the OWEDA’s minimum requirements are met, and to prevent a key economic policy of the state from hinging on the success of just one or two projects, multiple projects should be selected to move forward simultaneously so as to create a sustainable industry through a steady stream of projects. The Board can enable multiple projects developing in parallel by following a “round” or “tranche” procedure, which simultaneously evaluates (and if appropriate, approves) multiple projects in a single evaluation and stipulation process. By announcing a tranche or round to consider multiple projects, the Board would also garner additional industry attention and foster competition. Ratepayers (as well as the developers) will also benefit from having multiple projects evaluated simultaneously, as this will better ensure that reasonable assumptions and estimates are used in evaluating proposals and conducting the net-benefits test.

There is no additional risk to rate-payers in a multiple-project scenario, as the ratepayer is by statute assured of paying for only projects that actually generate electricity, which can be done by structuring the OREC program in a manner such that the amount of ORECs required to be purchased by suppliers is set only as projects meet certain milestones towards construction and operation. In addition, per OWEDA, any Offshore Wind Alternative Compliance Payment (OWACP) collected is to be credited back to the ratepayer if ORECs are unavailable, resulting in no rate impact until a project is operational (this issue is discussed in more detail in Section 5).

In utilizing a multiple project approach, it is not necessary, appropriate, or even possible for the Board to sequence the order in which projects would go into construction or operation. The marketplace, and success and capabilities of the various project developers, will determine which projects get completed, and when. The Board's role with regard to judging a project's progress to completion should be limited to removing projects from the pipeline if it can be demonstrated they are not making progress, and ensuring OREC purchases by suppliers comes into place as projects come on-line, so that the projects get the OREC revenues as required, while avoiding needlessly collecting and refunding OREC revenues if projects are not being built on schedule (as discussed further in Section 5).

A system of multiple projects being selected through a series of rounds has been used successfully in the UK to establish that country's booming offshore wind industry. The outline in Section 6 provides additional detail as to how such an approach could be incorporated into New Jersey's regulations.

4. Comprehensive and uniform cost-benefit analysis and price setting

Given the strategy of OWEDA to "jump start" a new offshore wind industry for the state by requiring a minimum amount of new projects, the critically important question in evaluating projects and determining price is if the average price of offshore wind paid by the state yields a net benefit when taking into consideration all of the benefits and all of the costs from the all of the projects. It really is not important, for example, that one project's proposed price is x and another project's price is y , since at the end of the day all ratepayers will be paying the average of x and y , and reaping the benefits of both projects being built and thus launching and sustaining an industry. This is particularly true given that the costs and benefits of any one project really cannot be fully isolated or identified separately from the costs and benefits of other projects that contribute to the pool of projects that will float New Jersey's offshore wind industry.

Furthermore, the fact that both the cost-benefit analysis (regardless of who may conduct it) and the pricing proposals by developers' is the product of many estimates should be acknowledged and addressed squarely in designing the evaluation and price setting mechanism. An evaluation and price setting process that relies heavily on specific assumptions and estimates (for example, those used by a developer's own cost-benefit analysis) is by its very nature going to be susceptible to faulty conclusions because of outlier estimates. To use a term from economics and science, the evaluation process must guard against "precision bias", which is the normal human tendency to assign a high degree of confidence or credibility to a very precise number, when in fact we should be more confident thinking in terms of an average or range of numbers. As it relates to the OREC program, attempting to be very precise in identifying what price x is, and separately what price y is, does not get us closer to (and is indeed probably a distraction from) answering the critical question of whether the average price paid by the state is fair and equitable, and yields the net economic and environmental benefits called for in OWEDA.

There are also many benefits to designing a program that is as fair and transparent as possible, and this in turn means seeking simplicity and applying uniform assumptions and estimates

whenever possible. And the less complex a program, the less the administrative burdens and transactions costs to all involved, which is particularly important given that ultimately it is ratepayers and taxpayers who pay for these avoidable costs.

Given that the critical issue is whether the OREC program as a whole is a net benefit to the state (and can really only be evaluated as a whole anyway), given the need to avoid attempting to achieve a level of precision that is both not possible and could well reduce accuracy, and given the importance of transparency and simplicity throughout the program, and uniform evaluations, we are proposing the following approach to evaluating proposals and determining an OREC price: First, all proposals received are qualified in terms of complete applications. Next, proposals are evaluated with regard to their qualifications in terms of financial and technical capability, and project development status and credibility of project plan (“pre-qualified”). The prices of proposals that pass this pre-qualified level of review are then averaged, and this becomes the target price. A stipulation process, which includes any interested parties, is then undertaken in which a comprehensive cost-benefit analysis of the entire pool of pre-qualified projects is conducted, to determine if, given the target price, the totality of projects offers net economic and environmental benefits to the state. Each of the individual analyses received from the project proposals are used to design and inform this project pool analysis, and uniform assumptions and estimates are applied whenever applicable. If this project pool analysis finds net economic and environmental benefits, then each of the pre-qualified projects is deemed to be fully qualified and offered an OREC Order at the target price. If the project pool analyses does not find net benefits, or if a pre-qualified project does not wish to accept an OREC Order at the target price, then pre-qualified projects may request that the Board consider their proposal individually and separately, using the cost-benefit analysis they supplied in their application. However, should the Board agree to separately consider an individual application, they may continue to apply uniform estimates and assumptions to the cost-benefit model, as they may deem to be appropriate. This will ensure a fair evaluation process, and prevent “gaming” the analysis by making overly optimistic assumptions and estimates. Applicants that do not either agree to the target price, or secure approval of a different price based on their separate cost-benefit analysis, are not deemed to be qualified and do not receive an OREC Order.

An ancillary but important benefit to this approach is that it will likely simplify the administration of the OREC program generally, especially with regard to determining the RPS OREC carve-out obligations by suppliers, the OWACP, etc.

Contained in the outline of Section 6 are detailed suggestions of how the regulations could implement a uniform, transparent, and fair approach to the cost-benefit analysis and price setting.

5. Integrating the OREC Program and the RPS

The amount of electricity that will be produced from offshore wind facilities that receive an OREC Order needs to be incorporated into the State’s Renewable Portfolio Standard (RPS) in the form of an offshore wind “carve-out”, similar to existing the solar carve-out. OWEDA requires the Board within 180 days from enactment to “establish an offshore wind renewable energy certificate program to require that a percentage of the kilowatt hours sold in this State by

each electric power supplier and each basic generation service provider be from offshore wind energy in order to support at least 1,100 megawatts of generation from qualified offshore wind projects.” Thus, the statute requires a program, and not the actual schedule, within the 180 day time period. This gives the Board the flexibility to set up a program that will allow the OREC Order application process to determine the amount of offshore wind facilities that will be built, and then establish the RPS carve-out requirement based on the approved amount of offshore wind facilities. The Board can thereby support the construction of the approved and qualified offshore wind capacity by defining the offshore wind carve out for each energy year.

Furthermore, the nature of offshore wind project development can provide sufficient advance notice to the BPU as to what projects will be operational, and when, so that the carve-out can be adjusted accordingly. It is anticipated that the time period from the issuance of OREC Orders to actual generation of electricity will be at least three years. And, there is a 1-3 year period from financial close of a commercial sized project (at which point it becomes virtually certain that a project will be built), and actual commercial operation. This provides additional flexibility for incorporating offshore wind projects into the RPS.

Therefore, the offshore wind carve out in the RPS can be put in place “just in time” to allow suppliers to incorporate the OREC price for projects that will be generating electricity in that energy year into the BGS auction, and to allow independent suppliers to plan their RPS compliance and product pricing. This just-in-time approach will decrease the possibility that ORECs would not be available for suppliers to purchase.

Clear regulations around an Offshore Wind Alternative Compliance Payment (OWACP), and exactly when and how OWACPs should be refunded to ratepayers as required by statute, should be developed to ensure that 1) there is an efficient and transparent administration process for suppliers, offshore wind projects owners, and regulators, 2) suppliers are prevented from obtaining a wind fall profit in the event that an offshore wind project does not come on line when anticipated, and 3) there is no negative ratepayer impacts if fewer ORECs are generated. This approach is also consistent with the requirements put in place for Solar Alternative Compliance Payments in The Solar Energy Advancement and Fair Competition Act, enacted this past January.

By utilizing this approach the Board would not need to sequence the actual construction order of projects in its OREC Orders, as this is totally unnecessary for the success of the program or to protect rate-payers. In fact, it is difficult if not impossible for anyone to be able to correctly identify which projects will be ready, in what order, five or more years before hand. If the BPU were to select incorrectly, it would needlessly hold-up the development of the offshore wind industry in the state. Therefore, the Board should issue OREC Orders to multiple developers so that multiple projects are proceeding at the same time (as described in Section 4), and then set the offshore wind carve-out to come into place as each particular projects near commercial operation. If there are resource constraints that the industry needs to work through, that is immaterial to the state’s role of building an industry and better left to the industry itself to sort out. If a developer has done advanced work that they believe should allow them to be first, then nothing will prevent them from in fact being first if their early work really does put them in a position to proceed first.

By utilizing the above approach to align individual offshore wind projects with the offshore wind carve out in the RPS, the Board can ensure the development of a sustainable offshore wind industry in New Jersey. We again respectfully urge the BPU to undertake a working group process to develop specific regulatory language to efficiently implement these concepts.

6. Suggested outline of regulations

The following is a suggested outline of how the regulations may be structured, incorporating the key suggestions discussed above as well as other minor suggestions.

a) For each round, the Board establishes a “Target Round Capacity”, based on minimal statutory requirements, goals of the EMP, estimated time for project completion, and reasonable assumptions about installation speeds, project sizes, and the amount of attrition of projects over the development period. In the case of the initial (first) round, it is also critically important that enough capacity is approved from the start to support the establishment of an offshore wind manufacturing industry in New Jersey. In speaking with manufacturers, we believe this amount is at least between 1200 and 1500 MW of nameplate capacity.

An example of how the Target Round Capacity might be calculated is as follows: If the EMP calls for 1500MW by 2020, than a reasonable assumption as to how this might be achieved would be five 300MW projects, with one project constructed each year between 2016 and 2020. Further assuming (for example) it is determined that one-in-five projects can be expected to not carry through to construction and operation, then this means that at least six 300MW projects would be needed at the start of the development process to meet the policy objectives. Finally, given that about five years, but possibly up to 10 years, is reasonably necessary for any one project to obtain permits (hopefully the federal process will be streamlined to allow a shorter permitting period), then all projects needed to meet the 2020 objective should be issued Orders in 2011. Putting all this together, this means the example Target Round Capacity would be 1800MW (six projects of 300MW average size), with all projects receiving an OREC Order in 2011. The Target Round Capacity is then re-evaluated prior to each new round, and a new target amount of new projects established, along the lines of the example given above.

b) Regulations require requests for proposals by a certain date or on a certain schedule (e.g. the first RFP deadline could be 90 days after regulations being issued; the RFP deadline for subsequent rounds might be 180 days after public notice, with public notice to occur on the anniversary of the deadline of the first round). The regulations should require that a minimum set of parameters be included in the standard cost-benefit analysis submitted by each developer, which should include (but not be limited to):

- Additional wage-earnings within the state, employment, direct and indirect tax revenues, and other economic development impacts;
- Wholesale price suppression caused by the project “bidding zero” into the wholesale market;

- Long-term energy price stabilization;
 - The system reliability benefit of providing additional new generation capacity to the region (as valued by Capacity payments received by the developer through PJM, for example);
 - The avoided costs of otherwise having to secure RECs to meet RPS requirements, as well as savings or revenues from by the sale of air emission credits or offsets, or any other tradable energy or environmental attribute product;
 - Jobs created in New Jersey during development and construction, assembly and manufacturing, and operations and maintenance activities, including wages and taxes paid and an economic multiplier for the jobs created (the multiplier being another variable that should be treated uniformly, as described in Section 4);
 - Environmental and human health benefits from reduced emissions of contaminants (NOx, SOx, Hg, particulates, etc.) from fossil fuel powered generation stations (information from the Department of Environmental Protection could be used to determine the range of benefits);
 - Environmental benefits from reduced carbon dioxide emissions;
 - Multiplier or additive benefits of the project to related policies, for example programs to entice manufacturing to the state or to facilitate vehicle and mass-transit electrification.
- c) After receipt of proposals for a given round, Board staff determine if applications received are complete. In particular this includes a screening to determine if proposals submitted include the thirteen items called for in the OWEDA. If an application is determined to be incomplete, Board staff notifies the applicant of the deficiencies and give 30 days to provide the missing information. After this opportunity to correct any deficiencies, all complete applications submitted for the round are notified that the 180 review period has commenced. Any projects that failed to submit a complete application, or correct an incomplete application within 30 days, would be ineligible for the round.
- d) A joint proceeding, opened to all interested parties, is then opened to simultaneously review all of the complete proposals received. This review includes a determination of the likelihood of success based on financial and technical capability (as specified in OWEDA) and experience of the company, along with current project status and proposed schedule of the particular project. It is suggested that the Board utilize the Financial Capability guidance issued by the Department of Interior's Bureau of Ocean Energy Management, Regulation and Enforcement guidance – Qualification Requirements to Hold Renewable Energy Leases and Grants and Alternate Use Grants on the U.S. Outer Continental Shelf – on October 5, 2010. These requirements could be included in the regulations so that the same information is provided at the time of application. Projects that successfully complete this review are deemed to be “pre-qualified” and proceed to the cost-benefit analysis and price determination stage. Any project that Board staff determines does not have the financial or technical capability and experience to complete

the project would have an opportunity to provide additional information to address the concerns raised during the 180 day review period.

e) Proposed prices from all of the pre-qualified proposals are averaged to determine a Target Price, which is used by the joint proceeding to conduct a cost benefit analysis of the entire project pool. As part of the joint proceeding, the information and methods from each of the individual cost-benefits analyses may be incorporated into the cost-benefit analysis of the pool of qualified projects. Also at this time, any issues raised by Board staff or intervening parties regarding the Target Price and cost-benefit analysis methods are addressed.

f) If this project pool analysis finds net economic and environmental benefits to the state using the Target Price, then pre-qualified developers would deem to be fully “qualified” and eligible to receive an OREC Order if they agree to the Target Price, and stipulate to any changes deemed necessary by Board staff or intervening parties in order to meet the cost-benefit test.

g) If the parties are not able to reach such conclusion as above, if the project pool analysis does not find net benefits, or if an applicant does not wish to accept the Target Price, then an applicant has the choice to either withdraw their application or request that the Board separately and individually consider the application as submitted. Any such separate evaluation shall use the cost-benefit analysis originally submitted by the applicant, except that the Board may require the use of the same uniform estimates and assumptions used in the project pool analysis. Such uniform assumptions might include, for example, job creation multipliers, future energy costs, or wind resource estimates based on the same meteorological model. Once this separate review is complete, a stipulation is prepared and recommendations made to the Board to either deny the application or be deemed eligible to receive an OREC Order but using a price different from the Target Price.

h) Developers whose proposals do not receive an OREC Order in any given round are not penalized, and may submit proposals in future rounds without prejudice.

i) If the total MW capacity of proposed projects recommended for approval in a given round is less than, or does not materially exceed, the Target Round Capacity, then all projects would go to the Board for issuance of an OREC Order at their agreed upon price. Note that since at this point all the projects eligible for an OREC Order will have demonstrated net benefits, which is the statutory requirement for making an OREC award (and not a particular price), it is appropriate to accept all of the qualified proposals. To not accept all qualified proposals needed to exceed the minimum requirements and reach the EMP goals would be to arbitrarily penalize a proposal that brings net benefits to the state, and to undermine the policy objectives of OWEDA.

If the total MW capacity of proposed projects that have been recommended for an OREC Order is significantly greater than the Target Round Capacity, then the projects are scored, and based on this scoring enough projects are selected to meet (or not materially exceed) the Target Round Capacity. The scoring system should recognize that project completion is more important to state policy than price (again, given that at this point in the process all the projects under consideration have passed the cost-benefit test); so a suggested scoring could be 35% financial and technical capacity and experience of the

company, 35% project status and feasibility of the particular project, and 30% price and benefits to New Jersey. The Board then accepts the qualified applications of those projects with the highest scores, up to the Target Round Capacity, in determining which projects should receive an OREC Order. Projects not selected under a particular round could apply as part of a later round without prejudice.

j) Project proposals selected through the process above are then subject to an “OREC Order”, which specifies:

i) Price in current year dollars, with the provision that there will be price adjustments for inflation. Using current year dollars for the approval process and initial OREC Order will make uniform analysis and comparisons easier, and facilitate the cost-benefit review and program management. The Order also allows for price adjustments, after a proceeding, due to changes in federal programs, as described below. The Order specifies that any such price adjustments due to changes in federal policies will be economically indifferent to the projects.

ii) Maximum quantity of ORECs that can be sold under the Order, and the term (time period) over which the Order applies. The quantity is specified as all of, or a specific portion of, the amount of ORECs actually generated by the project in a given period, up to the agreed upon maximum amount. Provisions for “banking” ORECs may be allowed in order to smooth out annual fluctuations in generation. While the cost-benefit and other analysis is required by statute to be made on a 20 year basis, there is no reason the term of the actual OREC Order could not be longer than 20 years, and in fact as discussed in Section 1 it is likely that a longer term would yield better rate-payer value and more benefits to the state.

iii) A schedule of dates by which the developer must meet specific project milestones as agreed to in the stipulation, reporting requirements, and other obligations on the developer, identified in the stipulation, which must be fulfilled in order to sell ORECs per the Order. The reason for these project milestones is to prevent essentially defunct projects from lingering in the OREC process, thus creating an administrative burden and undermining the ability of the State to meet its offshore wind objectives. These milestones could include but not be limited to the following: receipt of permits and lease, financial close, major payments to vendors, completion of electrical interconnect system, installation of foundations, and installation of turbines.

k) The OREC Order specifies that the developer will give the Board at least 90 days notice of anticipated date of financial close, which is defined as the disbursement of the lesser of \$100 million or 5% by the investors. Within this 90 day period, the Board will provide an opportunity for intervening parties to the initial Order to comment, and issue an order setting the inflation-adjusted price of the OREC Order, subject to that developer’s concurrence per statute. This inflation-adjusted price will be determined by taking the price as established in the year of the initial Order and adjusting the price up or down by the Consumer Price Index for each whole year since the date of the original OREC Order.

l) At any point after an initial OREC Order, the Board may call for a joint proceeding to adjust prices due to changes in federal policy, except that any such adjustment must, per

the original Order, hold a project economically indifferent to the price adjustment. This price adjustment is only to account for federal incentives, subsidies, or supports that are, or should be, utilized by the project but were not known or available at the time the price was first set in the original OREC Order.

m) The OREC Order further specifies that the Board will not re-open or change the Order once issued except i) if agreed to by both the Board and the project owner, ii) to determine the inflation-adjusted price, or to adjust price because of a change in federal policy, as described above and anticipated in the original order, or iii) if the Board finds Cause to seek a change, and makes such a change only after an evidentiary hearing process. "Cause" is defined as i) bankruptcy of the project owner or ii) failure to remedy a missed milestone, as described below. To further enhance the "financability" of the OREC Order, we strongly recommend that the OREC Order contain language as follows: "Neither the board nor any other government agency shall have the authority, directly or indirectly, legally or equitably, to rescind, alter, modify or amend this Order approving an application for a qualified offshore wind project. Projects subject to this Order are relying upon the State's approval of the application to incur debt and raise the equity necessary to support development of the project. Any State action that would result in the alteration, modification, amendment, reduction, impairment, postponement or termination of an approved application without due process per the regulations and the written acceptance of the effected qualified offshore wind project shall be considered to have caused a manifest injustice to the project owner and an unlawful interference with a vested right."

o) If a milestone is not met per the schedule in an Order, the Board shall require the developer within 30 days to either meet the milestone or provide a written explanation for the delay and a proposed new milestone date. If the developer requests a new milestone date, the Board may accept the new proposed date if it finds the delay is reasonable, substantially due to reasons beyond the developers control or do to a factor impacting all developers, and will not materially impact the prospects for the project being successfully completed. If the Board does not summarily accept the proposed revised deadline date, the Board shall hold an evidentiary hearing and then make a ruling to either terminate the OREC Order or adjust the milestone date. This final action is made by Board Order so that the developer has appropriate legal recourse if the developer believes the Board acted inappropriately.

p) As discussed further in Section 5, the actual total capacity issued Orders in the initial round would be used to set the initial carve out and schedule in the RPS for offshore wind. The OREC Order to each developer requires that they report specific milestones towards construction and operation, allowing the Board to adjust the initial carve-out and schedule such that the actual carve-out is supporting operational projects only.

q) After the initial round, additional rounds are scheduled on a regular basis so that enough qualified projects continue to enter the development pipeline to meet the State's long-term policy objectives and sustain the industry. It is critical to sustaining manufacturing in the state that the OREC program be implemented as an on-going

program. The net-benefit test will continue to protect rate-payers and ensure the OREC program is in fact a positive benefit to the state. For this reason, we suggest that proposals be solicited annually, but certainly at least every two years. If rounds are conducted less frequently than annually, provisions should be included to allow proposals to be received and considered in between rounds.

P.O. Box 385
Camden, Delaware 19934

November 3, 2010

Ms. Kristi Izzo
Secretary of the Board
New Jersey Board of Public Utilities
Two Gateway Center, Suite 801
Newark, NJ 07102

Re: The Board of Public Utilities Implementation of the Offshore Wind Economic Development Act

Dear Ms. Izzo:

On October 8, 2010, the New Jersey Board of Public Utilities (“Board” or “BPU”) issued a notice announcing two stakeholder meetings and seeking public input and comments with regard to developing rules for and the implementation of the offshore wind program. Stakeholder meetings were held on October 19, 2010 in Trenton, New Jersey and on October 26, 2010 in Egg Harbor Township, New Jersey. The Mid-Atlantic Renewable Energy Coalition (“MAREC”) attended each meeting and provided oral comments to the Board and those present at the second meeting held in Egg Harbor Township. MAREC now files these written comments to reinforce the input we provided during the stakeholder meeting and to offer additional detail to those remarks.

MAREC is a nonprofit organization that was formed to help enhance the opportunities for renewable energy development primarily in the region where the Regional Transmission Organization, PJM Interconnection, LLC (“PJM”), operates. MAREC’s footprint includes New Jersey, Delaware, Pennsylvania, Maryland, Virginia, Ohio, West Virginia, North Carolina, and the District of Columbia. MAREC’s membership consists of wind developers, wind turbine manufacturers, service companies and nonprofit organizations dedicated to the growth of renewable energy technologies to improve our environment, boost economic development in the region and diversify our electric generation portfolio, thereby enhancing energy security. The primary areas of focus of MAREC are to provide education and expertise on the environmental sustainability of wind energy; offer technical expertise and advice on integrating variable wind energy resources into the electric grid; and work with state regulators to provide information on siting transmission lines and developing rules and supportive policies for renewable energy. MAREC appreciates the opportunity to provide these comments.

MAREC commends the State for its ambitious program to begin the development of its offshore wind potential. Significantly, the Offshore Wind Economic Development Act (“Act”) is as much about developing jobs and a new industry as it is to help meet the requirements of the State’s renewable

portfolio standard. A major component of the offshore wind industry will be the potential development of manufacturing and assembly facilities in New Jersey that could supply the parts, assembly of wind turbines and many of the jobs for the offshore wind industry.

In order for the objectives of the Act to become reality MAREC believes that the Board will need to develop rules that provide a level of certainty to potential investors who will be making very significant economic decisions to site their facilities off the coast of New Jersey. As part of the application process to construct an offshore wind project under N.J.S.A. 48:3-87.1.3.a(10), an applicant is required to submit a cost-benefit analysis for the project. When considering the application pursuant to N.J.S.A. 48:3-87.1.3.b.1(b), the Board must determine in part that the cost-benefit analysis provided by the applicant “demonstrates positive economic and environmental net benefits to the State.” MAREC believes that the rules developed associated with the filing of the cost-benefit analysis and the subsequent Board determination of the positive net benefits need to be transparent and sufficiently detailed to provide clear guidance to applicants. The rules need to apply a high level of detail of what is required for the submission of the cost-benefit analysis, as well as the process and any metric utilized by the Board to make its determination of a project’s positive net benefits.

Similarly, there needs to be clear guidance provided to manufacturers of equipment associated with qualified offshore wind projects that seek financial assistance to locate their facilities in New Jersey. While the power to grant such assistance is vested in the New Jersey Economic Development Authority (“Authority”), the BPU has an important consultative role to help determine the level of the assistance to be provided to these entities. MAREC understands that the Authority will have its own implementation and rulemaking process to provide direction and guidance as to the Authority’s responsibilities under the Act. However, the Board’s participation and consultative role can be used to help the Authority shape its rules and its consideration of these critical facilities.

As MAREC stated in its public comments made at the Egg Harbor Township stakeholder meeting, even with the 1100 MW of offshore wind required by the Act, a significant portion of the renewable portfolio standard of 22.5 percent by 2021 will need to be met by the acquisition of other renewable resources, such as onshore wind. MAREC members are committed to providing assistance to help ensuring that this important state policy is met. We understand that the design for meeting the requirements of the renewable portfolio standard should be dealt during the current update of the Energy Master Plan.

While MAREC recognizes that the Board was provided a short timeframe for the rulemaking process, we believe it is very important to gain adequate feedback from stakeholders to draft rules. Therefore, it is essential that there be sufficient time for stakeholders to review and provide comments to specific rules developed by the BPU to implement the Act. Providing stakeholders with an adequate opportunity to review and comment on a draft of the rules will avoid significant confusion once the rules are promulgated. We believe the process will benefit significantly by having comments from stakeholders that are appropriately focused.

MAREC would like to again thank the Board for this opportunity to comment on the implementation process and the prospective development of rules.

Sincerely,

Bruce H. Burcat
Executive Director



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**STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES**

**I/M/O STAKEHOLDER MEETINGS REGARDING BPU'S
IMPLEMENTATION OF THE OFFSHORE WIND ECONOMIC DEVELOPMENT ACT**

COMMENTS OF THE RETAIL ENERGY SUPPLY ASSOCIATION

The Retail Energy Supply Association (“RESA”)¹ respectfully submits these comments on the Board’s implementation of the Offshore Wind Economic Development Act (the “Offshore Wind Act” or “Act”). RESA member companies that are licensed third-party suppliers (“TPSs”) in New Jersey provide customers with robust choices of both commodity-related services like fixed and market-index priced products and green-related products such as renewable energy, demand response programs, energy efficiency and carbon reduction. In their capacity as competitive energy suppliers, RESA members support energy policies that apply neutrally to all electric suppliers, without creating any policy-based competitive advantages for one type of supplier over another.

RESA believes it is essential that the Offshore Wind Act is implemented in a competitively neutral manner. Specifically, RESA members are concerned that the Board could establish rules that increase the cost of complying with the Act’s Offshore Wind Renewable Energy Certificate (“OREC”) renewable portfolio standards (“RPS”) obligations for existing contracts and potentially in the midst of a prompt compliance year. The following will highlight the specific areas of the Act to be implemented by the Board that concern RESA.

**OFFSHORE WIND RENEWABLE ENERGY ALTERNATIVE COMPLIANCE PAYMENTS
 (“OACPS”) SHOULD BE SET EQUAL TO THE OREC PRICE**

RESA recommends that the Board set the OACP price equal to the OREC price established in any OREC compliance schedule. In a typical RPS framework, an ACP is designed to act as a price ceiling for the prevailing market price of a REC. This provides some degree of price certainty for both buyers and sellers of the REC and can create price convergence for REC and ACP values. Under the

¹ RESA’s members include ConEdison *Solutions*; Constellation NewEnergy, Inc.; Direct Energy Services, LLC; Energy Plus Holdings, LLC; Exelon Energy Company; GDF SUEZ Energy Resources NA, Inc.; Green Mountain Energy Company; Hess Corporation; Integrys Energy Services, Inc.; Just Energy; Liberty Power; NextEra Energy Services; PPL EnergyPlus; Reliant Energy Northeast LLC; Noble Americas Energy Solutions, LLC. The comments expressed in this filing represent the position of RESA as an organization but may not represent the views of any particular member of RESA.

Offshore Wind Act, however, the OREC price is not a function of the market for ORECs, but is instead an administratively determined price set by the Board based on its review of offshore wind generators' ("Generators") estimated electric output (Page 16, Lines 15-17 and Page 23 Lines 21-22) and projected costs. The Act requires the Board to set the OREC price and RPS obligations at the levels required by the Generators to operate and OACPs may only be paid if there is a shortage of ORECs (Page 16, Lines 33-34). Because the OREC price is administratively determined and the OACP is not linked to the OREC price as in typical RPS regimes, the OACP does not have the same "price ceiling" effect on the price of ORECs as exists in other RPS compliance frameworks. Put another way, the relationship between the OREC price and OACP do not track with each other to any appreciable degree. Hypothetically, in a compliance year in which the OACP is set higher than the OREC price and not enough ORECs were generated, TPSs that happen to have purchased ORECs prior to their running out would pay a wholly different price for OREC RPS compliance than TPSs that had to pay the OACP. This discrepant RPS compliance cost between TPSs would not be predictable nor subject to hedging—it would be based purely on whether a supplier was lucky enough to buy more ORECs ahead of other suppliers before they ran out. Thus, it is appropriate for the OREC price and the OACP to be set at the same value. To do otherwise, would unfairly penalize or benefit suppliers that end up complying with the Offshore Wind RPS requirement through the OACP when ORECs become unavailable.

RESA also urges the Board to consider what will happen if ORECs do indeed become unavailable. Presumably, an OREC shortage can only occur in two instances. First, an OACP may be necessary when demand for ORECs exceeds supply because each TPS or BGS provider must "round up" its OREC purchases to the next full OREC.² In this situation, the OACP merely serves as a necessary compliance mechanism with minimal impacts. Second, an OACP may become necessary due to Generators' inability to produce electricity and generate ORECs due to scheduled or unscheduled maintenance and outages. Alternatively, the Generator may have simply over estimated the amount of electricity it is capable of producing. In these latter situations, a Generator will necessarily fail to generate the OREC revenue it needs to remain operational because suppliers will be forced to pay the OACP, and OACP funds do not flow to Generators (Page 16, Lines 36-38). If this occurs, RESA is concerned that the Board may agree to increase the OREC price or percentage requirements in order to provide Generators with sufficient revenues to recommence operations (Page 23, Lines 23-25). RESA believes that any situation giving rise to such a change in the OREC price or requirements must provide adequate protection for market participants' existing contracts, as explained more fully in the next section.

CHANGES TO OREC REQUIREMENTS SHOULD NOT IMPACT EXISTING CONTRACTS

According to the Act, the Board will review a Generator's OREC price and amount required by it to operate its turbines and issue an Order that establishes a 20 year schedule of OREC prices and RPS requirements that provides the Generator with sufficient operating revenue (Page 16, Lines 15-17 and Page 23 Lines 21-22). Any such Order may not be modified by the Board unless agreed to by the Generator and the Board (Page 23, Lines 23-25). RESA is concerned that the Generator and Board may agree to increase the amount of ORECs required, or the price of ORECs, should the Generator be unable to meet its revenue requirements or generation estimates provided to the Board. Such an increase would upset existing contracts that TPSs have with customers and lead to uncertainty in the

² For example, there may be a total of 10 ORECs available to 3 suppliers each with an equal amount of load. Under this situation, each supplier would need to buy 3 1/3 ORECs. However, suppliers must comply in increments of full ORECs, so there is actual demand for 12 ORECs even though only 10 exist.

competitive electric supply market. While RESA supports the idea of providing sufficient market support to a Generator, RESA requests that any future changes in the price of ORECs or in the percentage-based OREC RPS requirement become effective in the third energy year from the next BGS Auction to occur from the year in which the modification is demanded.

RESA makes this request to prevent any OREC RPS modification from upsetting customer expectations for RPS compliance costs under existing contracts. TPSs must factor in the cost of RPS obligations, including the cost of any OREC requirements, in their prices offered to customers. While some TPSs may have “change in law” contractual provisions that permit the supplier to pass on incremental costs resulting from new or increased regulatory mandates, actions to trigger such provisions will generate customer confusion, dissatisfaction and may undermine customer confidence in the competitive retail market. The Act creates significant regulatory certainty for off-shore wind developers by creating OREC mandates that cannot decline in future years. RESA submits that similar regulatory certainty must be afforded to the ratepayers.

Additionally, RESA notes that the Act states that ratepayers and the State shall be held harmless from any “cost overruns associated with the project” (Page 23, Lines 15-16). This “hold harmless” provision should also apply to any cost increases that may result from necessary repairs, market swings in the components used to set the OREC price (e.g, the price of electricity), inefficient operations or simple miscalculation on the part of the Generator. RESA believes that Generators should be held accountable for their own business decisions and losses associated therewith. Off shore wind facilities should not have a “blank check” from ratepayers to cover the cost of inefficient operations and unreasonable cost overruns occurring in the construction phase or after commencement of commercial operation.

ANY OREC RPS OBLIGATIONS SCHEDULE SHOULD BE PERCENTAGE BASED

RESA members request that the Board establish any OREC RPS obligations as a percentage of megawatt hours served and not as a fixed schedule. The Act requires the Board to require a percentage of kilowatt hours produced in the state to come from offshore wind to support 1,100 megawatts of generation (Page 16, Lines 8-45). The wording of the Act appears to allow the Board to set an OREC RPS as a fixed amount of ORECs required per year to make up the Act’s required percentage. RESA members simply cannot, to any reasonable degree of accuracy, take a fixed OREC requirement and calculate its OREC RPS costs when developing price offers to customers. Such a calculation would presumably require all suppliers to comply on a pro rata basis based on their ratio of total load share compared to the total statewide load in advance of an energy year. However, such load data is not available or known until after the energy year. Therefore, any contract entered into for an energy year, including BGS contracts, run the risk of being over or underpriced. On the other hand, requiring that each supplier comply with ORECs based on a percentage of their total load served allows suppliers to contemplate the cost of compliance in their energy supply contracts at the time the contracts are entered into.

NEW GENERATOR’S OREC RPS REQUIREMENTS SHOULD BECOME EFFECTIVE NO LESS THAN THREE YEARS FROM THE ENERGY YEAR IN WHICH THEY ARE INITIALLY DEMANDED

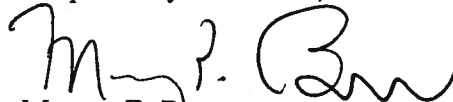
RESA is concerned that the Board may interpret the Act to require a discrete OREC price schedule for each qualifying Generator. It is likely that many offshore wind projects will be approved,

but unlikely that they will all come on line at the same time. RESA is concerned that the cost of complying could increase for customers under existing contracts and that such an RPS framework would create substantial cost uncertainty for TPSs and their customers. If, however, the Board does decide to modify the OREC price and RPS schedule each time a new generator comes on line, as previously discussed, such adjustments to RPS obligations can have adverse consequences for TPSs and their customers by undermining the ability of TPSs to offer true, fixed priced service. Consistent with its prior recommended, RESA requests that: 1) the initial OREC RPS schedule be established at least three years in advance of the next BGS Auction to occur after the energy year in which the OREC RPS schedule requirements are effective, and 2) any new OREC RPS schedule established after the first OREC RPS schedule is established be effective in the third energy year after the next BGS Auction to occur after the year in which the new schedule is requested. Establishing new RPS obligations with a future effective date will ensure that TPSs can properly account for the new compliance costs in their price offers and will minimize customer confusion.

CONCLUSION

RESA supports the implementation of the Offshore Wind Act to the extent that it is operationally feasible and implemented in a competitively neutral manner. RESA requests that the Board take into account the potential for sudden and unanticipated cost increases or OREC shortages in its implementation of its OREC rules and craft rules that shield suppliers and ratepayers from bearing such costs. Any rule that could allow for such increases must be operationally feasible and should only permit increases to impact the energy years that are three years from the next BGS Auction to occur from the year in which the increases are requested.

Respectfully submitted,



Murray E. Bevan

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Dated: November 1, 2010



October 29, 2010

Secretary Kristi Izzo
New Jersey Board of Public Utilities
Two Gateway Center, Suite 801
Newark, NJ 07102

Re: Offshore Wind Economic Development Act
Letter of Support for Implementation — Sierra Club

Dear Secretary Izzo:

On behalf of the New Jersey Sierra Club, this letter of support is submitted to the Board of Public Utilities (BPU) related to the implementation of the Offshore Wind Economic Development Act (OWEDA). We believe that proper implantation of this law is critical for New Jersey to meet their renewable energy goals and reduce green house gases. We believe that offshore wind is the most reliable and cost effective form of wind energy. Projects that are further off the coast have more consistent wind and the least potential impact on the environment. We believe that in designing this program we have to ensure the viability of offshore wind.

We need to allow for a long term energy contracts so that we ensure financial stability for wind projects as well as access to capital. Offshore wind credits need to be set at a price that is high enough will ensure the viability of the projects and allow for the private sector to invest in offshore wind. The projects need to be located in areas with easy access to energy markets so that the power can be used as close to where the wind is generated as possible and it will be cheaper to bring the power onshore. We should allow for utilities the ability to do decoupling to help provide financial support for offshore wind projects. When accessing the financial impacts of offshore wind projects we need to look at long term cost and viability. The environmental, health, economic, and job benefits from wind projects should be part of the financial analysis.

We are seeing a major increase in wind both onshore and a potential for offshore. We believe that not only will this provide for good clean energy, but the wind industry already employees over 85,000 people in the United States. The materials that are used for manufacturing of this product have risen to 50% in domestic production. We believe this legislation will help create an even higher percentage and will help to develop one manufacturing facility in New Jersey, if not more. By developing offshore wind we will see a major reduction in pollutants especially carbon dioxide to diversify New Jersey's energy portfolio. The 1100 MW that is proposed here will reduce our carbon output by over 1.1 million pounds. This reduction will also mean less mercury, sulfur dioxide, nitrous

oxide, and other pollutants that harm the environment. By having offshore wind this will help against black outs along our coast. The 1100 MW of offshore wind will provide enough electricity for close than half a million people.

The OWEDA will create a critical framework through which developers may build and maintain an offshore wind industry in New Jersey. The Sierra Club encourages the BPU to fully implement the Offshore Renewable Energy Certificate program and meet the state's goal of at least 1,100 MW of installed capacity. We hope that this will be a major step for New Jersey to reach energy master plan goal of 3,000 MW of offshore wind.

Sincerely,

Jeff Tittel
Director, New Jersey Sierra Club

-----Original Message-----

From: Sara Bluhm [mailto:sbluhm@njbja.org]

Sent: Friday, October 29, 2010 9:27 PM

To: Comments, Rule

Subject: OSW rule development

On behalf of the 22,000 members of the New Jersey Business & Industry Association (NJBIA), we appreciate the opportunity to provide the Board with comments prior to rule proposal. NJBIA is supportive of private sector development of renewables, but continues to caution the Board regarding the impact to ratepayers. In drafting a rule proposal we would ask that the Board craft a rule that looks out for the economic and environmental aspects associated with offshore wind as well as the economic impacts on ratepayers. NJBIA has provided previous testimony on potential cost impacts which is the basis of our concern for ratepayers.

While the law includes a net economic benefit test to be considered, NJBIA would hope that in crafting this definition the BPU consider the impact on the electric grid, generation potential, pricing, and ratepayer impact in addition to other commonly used indicators presently being utilized for other state cost benefit analysis.

Furthermore, we were encouraged at the first stakeholder meeting when it was mentioned by President Solomon that a rule may allow for true ups and additional financial review considering the OREC's. Due to the tight time frames established by law, it could occur that proposals are submitted that could fluctuate under certain circumstances. For example, tax credits could become available that would lower the cost to ratepayers by reducing the needed OREC. NJBIA would not want to see ratepayers stuck with an OREC that is more costly than need be because there was not the ability of the Board to review the pricing down the road.

We look forward to continuing to work with staff on this issue as the rule proposal is developed.

Thank you for the opportunity to comment.

Sara Bluhm