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Mark Musser, Secretary  
New Jersey Board of Public Utilities  
Two Gateway Center  
Newark, NJ 07102

**Re: Draft Interim Renewable Portfolio Standards  
Interim Net Metering, Safety and Power Quality Standards for  
Wind and Solar Photovoltaics**

Thank you for the opportunity to offer comments on behalf of Natural Resources Defense Council, New Jersey Public Interest Research Group, Pace Energy Project and Union of Concerned Scientists. Our organizations have been extensively involved in electric restructuring proceedings and the development of the Electric Discount and Energy Competition Act. We applaud the Board of Public Utilities for its efforts to ensure that the introduction of competition to the electric industry in New Jersey does not result in adverse environmental impacts.

We look forward to working with Board staff and other interested stakeholders to develop the regulatory framework that will allow New Jersey to realize the goals that the legislature has set forth.

Sincerely,

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## Comments on Draft Interim Renewable Portfolio Standards

The renewable portfolio standard is one of the key policy tools included in the Act to protect the environment and help New Jersey develop a robust and self-sustaining market for clean technologies like wind and solar power. We urge the Board of Public Utilities (Board) to use this tool in a way that complements – and in no way undermines – the emerging market for environmentally preferable electricity products and the other environmental provisions of the Electric Discount and Energy Competition Act of 1999 (Act). A number of revisions to the draft standards are essential to achieve this goal.

### 1. All customers should bear the costs of the RPS

As currently drafted, electric power suppliers can satisfy the RPS by selling a single product with a relatively large percentage of renewable resources to a small number of customers. If suppliers do this, customers who may be paying a premium for products marketed as environmentally preferable are likely to believe they are paying more for incremental environmental benefits, when in fact they are simply paying for the cost of their electric supplier's compliance with a regulatory requirement while the supplier's other customers are able to avoid that cost.

Statewide benefits should be supported by all customers. The RPS was adopted by the legislature in order to provide environmental benefits to all New Jersey citizens by increasing the percentage of power sold in the state that is generated from resources with minimal environmental impacts, and to provide support for new, clean technology companies that can provide jobs and other economic development benefits to the state. Like the system benefits charge, the RPS will provide statewide benefits, and as a matter of equity should be supported by all New Jersey electric customers, not merely by those who are willing to pay a premium for cleaner electricity products.

The legislature adopted the RPS to provide *additional* benefits to New Jersey. Although the legislative provision that establishes the RPS does not address implementation details, it provides the Board with sufficient flexibility to implement the standard in the smartest way and in a manner that is consistent with the legislature's goal of promoting clean technologies and mitigating the environmental impacts of electric restructuring. The legislative history makes clear that the legislature adopted the RPS in an effort to provide environmental and economic benefits to New Jersey *above and beyond* what the market would provide. Certainly it would contravene the intent of the legislature to implement the RPS in a way that undermined the emerging market for environmentally preferable electricity products which the legislature clearly sought to promote, which is precisely what the rule, as currently drafted, would do.

The RPS must not undermine the integrity of the emerging market for environmentally preferable electricity products. Electric power suppliers should not be permitted to mislead customers who purchase environmentally preferable products into believing that they are paying for incremental environmental benefits when in fact they are paying for the cost of the supplier's compliance with a regulatory requirement. The interim standards, as currently drafted, would permit this. Programs that have allowed companies to package renewables resources that would have been generated in any case as "green" products have been severely criticized by some environmental and consumer groups in many areas of the country. In Minnesota, for example, an environmental coalition opposed a utility green-pricing program that would have marketed generation installed to meet a legislative renewable energy mandate. Such criticism undoubtedly has a negative impact on the credibility and consumer acceptability of green markets. In Maine, in response to complaints from environmental and consumer groups, and renewable energy producers and marketers, the legislature recently overturned Public Utilities Commission regulations that would have allowed green marketing to meet that state's Renewables Portfolio Standard. The legislature subsequently passed an additional requirement that any company marketing renewables at a level exceeding the state's renewables standard may not count the generation marketed as exceeding the standard toward meeting the company's minimum requirement:

If a competitive electricity provider represents to a customer that the provider is selling to the customer a portfolio of supply sources that includes more than 30% eligible resources, the resources necessary to supply more than 30% of that customer's load may not be applied to meet the aggregate 30% portfolio requirement.

LD 2154, amending Sec. 1-3. 35-A MRSA §3210, subsection 3 and 4, as enacted by PL 1997, c. 316, §3.

The easiest way to address these issues is to revise the interim standards to apply to each electricity *product*. Alternatively, the Board could take the approach used in Maine. Other, more complicated mechanisms could also be employed and we would be happy to explore the feasibility of these with the Board at any time.

## **2. The RPS should be competitively neutral**

The RPS should not impact the decision of consumers to choose a particular supplier or any supplier at all. As currently drafted, the interim standard would allow electric power suppliers but not basic generation service providers to shift all costs of compliance to a small segment of customers, creating an uneven playing field between basic generation service providers and suppliers that offer

only one product, and suppliers that offer multiple products.

The interim standards should also make clear that suppliers cannot avoid compliance with the RPS by selling power through aggregators. The definition of “electric power supplier” should clarify that retail customers include aggregators and the definition of “retail customer” should clarify that the aggregator, as well as its customers, is a retail customer.

### **3. The Board should make compliance with the RPS as flexible and easy as possible**

We wholeheartedly support the development of trading and banking programs that will make it as easy as possible for electric power suppliers and basic generation service providers to comply with the RPS. We suggest that the Board convene a working group to assist the Board and the Department of Environmental Protection (DEP) in developing such programs and to ensure that they operate in a fashion that is consistent with the state’s environmental disclosure program.

One mechanism proposed to be included in Phase II of the disclosure program may be of particular interest in this regard. “Conversion transactions,” which the New York Public Service Commission developed in connection with its environmental disclosure program, would allow generators and suppliers to in effect extract bilateral contracts for specific resources for power that is delivered into and purchased from the PJM spot market through simple contracts. The environmental disclosure program administrator could facilitate these transactions to ensure that suppliers are aware of all available renewable resources in the region.

With respect to a banking provision, we recommend limiting the banking period to two years. This is sufficient to provide suppliers with the flexibility needed due to the natural fluctuations in output of intermittent renewable resources without allowing suppliers to unduly delay compliance. A three-month true-up period may also be appropriate but again, it would be necessary to coordinate such a mechanism with the disclosure program.

### **4. The Board should impose strict penalties for non-compliance**

The legislature established the RPS as a statewide policy and the Board should establish strong penalties to those who choose to ignore this law. The penalties proposed in the interim standards do not provide a sufficient incentive for compliance. Simply allowing suppliers to comply in a later year is no penalty at all and would surely encourage many suppliers to delay compliance. Appropriate penalties would include requiring a supplier to pay a monetary

penalty equal to 4 cents for each kilowatt-hour of renewable energy it failed to purchase, or to require a supplier to purchase two or three times the amount of renewable energy it failed to purchase in the following year. This is also necessary to fully compensate the air for the impacts of delayed compliance. In addition, the Board could require suppliers to purchase and retire DER credits under New Jersey's open market emissions trading program in lieu of simple financial penalties.

## **5. The Board should clarify that the RPS does not expire in 2012**

The legislation does not establish any end date for the RPS but merely indicates that the percentage of renewable resources required under the standard does not increase after 2012. The table in Section 3 should be revised to make this clear by indicating the renewables requirements for years "2012 and beyond." Without a clear indication that the renewables standard continues, even if the level of the standard does not increase, renewables would become artificially more expensive as the year 2012 approaches. Developers would structure contracts (or price renewable energy credits) to try to recover most or all of their fixed costs by 2012. New projects may not be developed at all in the last few years before 2012, because of the risk of non-recovery of costs, making the legislated standard difficult or impossible to achieve.

## **6. The definition of renewable energy should be clarified**

The definition of "renewable energy" should conform to the statutory definition: "electric energy which is produced from a source of energy that belongs to one of the following two classes." Resource recovery facilities have substantial environmental impacts and do not conform to the definition as currently drafted. The current definition also conflicts for fuel cells that operate on natural gas, since electricity produced from them is produced from a source of energy that is finite.

We do not oppose the interim standards for hydroelectric and resource recovery facilities. We note that this approach is consistent with the actions of other states and, with respect to hydro, the Green-e certification program standards. However, DEP should work to improve these standards to more precisely identify those facilities that in fact meet the highest environmental standards and minimize any impacts to the environment and local communities, as required by the Act. Clearly, such impacts are not limited to air emissions; many hydro and resource recovery facilities of varying sizes have substantial impacts and DEP should work to identify and disqualify these facilities as Class II renewable energy resources.

In addition, the interim standard should clarify the definition of Class I renewable

energy with respect to the eligibility of electricity produced from the direct firing of biomass fuels. Although the legislative history makes clear that such generation should be included as a Class I renewable, the current definition could be read as only including electricity produced from *methane gas* derived from biomass and not direct firing of sustainable biomass.

To clarify the eligibility of biomass when used as a direct fuel source, we suggest two changes in the current rule:

- i) delete the word “and” and insert a comma in the Class I renewable energy definition after “methane gas from landfills” so that the new definition would read: “...wave or tidal action, methane gas from landfills, or a biomass facility, provided that the biomass is cultivated and harvested in a sustainable manner.”; and
- ii) add the following clarifying paragraph in Section 4:

Section 4. (2) (B) (1) For the limited purposes of this interim standard, the NJDEP has determined that electric energy produced from biomass that is cultivated and harvested in a sustainable manner and fired or co-fired in conjunction with other renewable or non-renewable energy sources qualifies as Class I renewable energy in an amount equal to the total electric energy produced from the facility multiplied by the percent of total Btu input at the facility derived from biomass fuel.

## **Comments on Interim Net Metering, Safety and Power Quality Standards for Wind and Solar Photovoltaic Systems**

The Board of Public Utilities' (Board) draft net metering standards represent a strong and accurate interpretation of New Jersey's restructuring legislation. In most crucial aspects the standards will provide New Jersey with one of the country's best net metering rules. This said, there are a number of specific ways that the standards could be made clearer and provisions that need to be corrected to ensure implementation can go forward without challenge.

### **1. The Board should clarify the allowable interconnection costs**

The responsibility for costs associated with interconnection are in need of clarification. The Board's draft standards appear to suggest that distribution utilities can not require interconnection configurations, equipment or testing beyond those specified by NEC, IEEE and UL but that the cost of installing a system to these standards is the responsibility of the net metering customers. However there is ambiguity in the way this is presented in that the costs are dealt with in the interconnection standards section and the system requirements in the safety standards section. We suggest that section (2)(f) of the net metering standards be deleted and section (a) of the safety standards be rewritten as follows:

- (a) Customer-generators *shall bear the cost of meeting* all applicable safety and power quality standards *approved by* the National Electrical Code, Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories. [New language in italics.]

### **2. The Board should clarify the definition of “non-discriminatory rates”**

Section (a) of the interconnection standards states that service providers must offer net metering “at non-discriminatory rates” to their residential and small commercial customers. This reference to non-discriminatory rates is in the restructuring statute, but the Board needs to clarify this in implementing the statute because it is ambiguous. There are a variety of ways to deal with this issue, but the easiest would be a new definition that reads:

“non-discriminatory rates” means rates that are identical, with respect to rate structure, all retail rate components, and any monthly charges, to the rates the customer-generator would have been charged if the customer were not a customer-generator.

This suggested language is derived from Section (1)(d) of the California net metering law (as amended during 1998), which is codified at Section 2827 of the

California Public Utilities Code.

### **3. The Board should clarify restrictions regarding contracts**

Another important issue is raised by section (2)(b), which addresses contracts. Contracts can present a substantial barrier if they are long, technical or not standardized. We would suggest that the contracts be submitted to the Board for review to ensure they are consistent statewide and not overly burdensome for the customer-generators.

To prevent delay of these contracts, the standards should also explicitly prohibit indemnification, easement and special insurance requirements. Existing legal and tariff provisions adequately address the utilities' need to access systems in case of emergencies and seek redress in case of negligence.

Furthermore, in a restructured electric industry, there are two parties that need to be informed when a customer net-meters—the power supplier and the distribution utility. The distribution utilities' primary concern is the safety of the interconnection. For this reason, section (b) should be amended to require that each electric power supplier and basic generation service provider file a copy of its standard contract with the distribution utility.

### **4. The Board should clarify the method for calculating net metering credits**

Section (c) may also result in some confusion. We suggest the following language, adapted from the New York net metering law:

- (c) An electric power supplier or provider of last resort shall use net metering to measure and charge for the net electricity supplied by the corporation and provided to the corporation by the a customer-generator, according to these requirements:
  - (i) In the event that the amount of electricity supplied by the corporation during the billing period exceeds the amount of electricity produced by a customer-generator, the corporation shall charge the customer-generator for the net electricity supplied at the same rate applicable to service provided to other customers in the same customer-class as the customer-generator absent net metering.
  - (ii) In the event that the amount of electricity produced by a customer generator during the billing period exceeds the amount of electricity used by the customer-generator, the corporation shall apply a credit to the next bill for service to the customer-generator for the net electricity produced at the same rate applicable to service provided to other customers in the same customer-class as the customer-generator absent net metering.

(iii) At the end of each annualized period that service is supplied by means of net energy metering, the corporation shall promptly issue payment at its annual average avoided cost of energy to the customer-generator for the value of any remaining credit for the excess electricity produced during the annualized period by the customer generator.

The definition of “net metering” is also vague regarding the type of meter that may be used by customer-generators. The meter should be defined as a non-demand, non-time-differentiated meter that measures both flow of electricity from the supplier to the customer-generator and vice versa. If the party responsible for maintaining the meter determines that the meter will not measure the reverse flow of electricity reasonably accurately, this party should be required to replace the meter at no cost to the customer. If the customer is currently in a time of use or demand meter rate class, it should be required to qualify and change to a non-demand, non-time-differentiated rate class before net metering. The Board may benefit from a call for specific proposals as to how net metering would work for customers in these rate classes.

**5. The Board should require companies to determine the net financial impact of net metering, including all offsetting benefits**

Section (2)(d) refers to a cap on net metering based on the annual aggregate financial impact from net metering. We urge the Board to make clear that the aggregate financial impact should be calculated as the *net* financial impact, accounting for the fact that the revenue losses from offering net metering will be at least partially offset by the “distributed benefits” associated with generation placed closer to the end-user. A variety of utility studies have confirmed that there are direct, measurable economic benefits associated with distributed generation, and it is now clear that even in non-optimal locations the value of energy delivered into the distribution system almost always exceeds the value of energy delivered into the transmission system. The financial impact analysis must account for these offsetting distributed benefits.

In addition, the revenue losses attributed in the aggregate financial impact analysis should be the losses attributable to the *difference* between the revenue losses from net metering and the revenue losses from alternative metering arrangements to which customers are already entitled under the federal PURPA law. This is a subtle but important point. Even in the absence of net metering, customers-generators are entitled to use the electricity they generate to offset their own electricity use on an *instantaneous* basis, which results in revenue losses to the utility as the customer purchases less energy from the grid. These revenue losses – which are analogous to the revenue losses attributable to a customer’s decision to invest in energy efficiency measures – should not be counted in the financial impacts attributable to net metering. In other words, the revenue losses properly attributable to net metering are the *difference* between the retail price and the avoided cost price for any electricity that is delivered to

the utility grid (and not for the electricity that goes directly to serving the customer-generator's own needs).

## **6. Existing net metering customers should be grandfathered**

Section (d) of the interconnection standards states that "Net metering will cease to be offered whenever . . ." the total generating capacity of net metered facilities reaches either of the proposed caps. Although the intent is clear, this language is ambiguous and suggests the possibility that net metering will cease to be offered to *existing* net metering customers as well as *new* net metering customers. This sentence could be amended to read: "Net metering will cease to be offered to *new customer-generators* whenever . . ." (New language in italics.)

## **7. Customers Should Be Able to Choose Their Own Annualized Period**

Customers should be able to define their own annualized period. A default of January 1 through December 31 is fine, but some solar and wind installations and load profiles could result in dramatically more benefit to the customer-generator depending on the annualized period.

## **8. All residential and small commercial customers should be eligible for net metering**

The Board should not revise its proposed 100 kw size limit for net metering customers. The legislation clearly states that all residential and small commercial customers should be eligible for net metering and the Board should not draft regulations that would exclude any of these customers. We will work with the Board and the distribution utilities to address any safety concerns by ensuring the adoption of appropriate safety standards.

Finally section (b) of the safety standards section should be revised as follows: "An electric *distribution* utility may not ... additional controls *or equipment*, perform..." [New Language in italics.]