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October 15, 2008

VIA ELECTRONIC MAIL: [Green.Communities@MassMail.State.MA.US](mailto:Green.Communities@MassMail.State.MA.US)

Mr. Philip Giudice  
Commissioner  
Massachusetts Department of Energy Resources  
100 Cambridge Street  
Boston, MA 02114

**RE: Section 32 of chapter 169 of Acts of 2008; Green Communities Act – Class I RPS**

Dear Commissioner Giudice:

Pursuant to the request for comments issued by the Massachusetts Department of Energy Resources (“DOER”) at the Stakeholder Forum on the Renewable Portfolio Standard held on September 29, 2008, and in furtherance of the requirements contained in the above referenced section of the Green Communities Act, the New England Power Generators Association, Inc. (“NEPGA”) hereby respectfully files these comments.<sup>1</sup> NEPGA represents sixteen companies and approximately 25,000 megawatts (or over 80 percent) of the generation in New England, and approximately 12,000 megawatts in Massachusetts.

As a part of the Green Communities Act, signed into law by Governor Patrick on July 2, 2008, the DOER has opened a stakeholder process to implement §32 of chapter 169 of the Acts of 2008 - Green Communities Act - as that provision altered G.L.c 25A §11F pertaining to the existing Renewable Portfolio Standard (“RPS”) to establish three separate standards -- a standard for “Class I” renewables, a standard for “Class II” renewables, and an alternative energy portfolio standard (AEPS). The original Massachusetts RPS was created in Chapter 164 of the Acts of 1997.<sup>2</sup> Subsequently, the DOER adopted RPS regulations that required all retail electricity providers in the state to utilize new renewable-energy sources for at least 1% of their power supply in 2003, increasing to 4% by 2009. After 2009, the RPS requirements increase

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<sup>1</sup> The views expressed in these comments do not necessarily represent the positions of each of NEPGA’s members. In addition, nothing in these comments should be deemed to waive any rights that NEPGA or any of its members may have to challenge the administrative, procedural or substantive validity of the proposed regulations.

<sup>2</sup> See, An Act Relative To Restructuring The Electric Utility Industry In The Commonwealth, Regulating The Provision Of Electricity And Other Services, And Promoting Enhanced Consumer Protections Therein.

by one percent per year until the DOER suspends the annual increase.<sup>3</sup> Beginning January 1, 2009, only “Class I” renewables are eligible to meet the RPS, as those resources are now defined.<sup>4</sup>

RPS requirements produce a number of benefits, such as reducing emissions of air pollutants and greenhouse gases, increasing diversity and security of energy supply, and reducing price volatility in energy markets. RPS requirements also promote economic development and create new jobs related to manufacturing, installing, and servicing RPS-eligible equipment and facilities within the competitive electricity markets. However, in order to continue to incent private investment in new renewable energy infrastructure technology to accelerate the benefits that improve the environment, Massachusetts must maintain a business climate that allows for sound and prudent investments through a consistent regulatory environment. With that goal in mind, NEPGA has provided the following answers to the questions presented:

## **I. Comments of NEPGA**

### **1. What should the Alternative Compliance Payment (ACP) amount be for Class I, and how should it be calculated?**

Alternative compliance payments (ACP) provide a mechanism under which an electric supplier or distributor can pay a fee to the state if they are unable to procure a sufficient supply of RECs. The ACP should be carefully calculated to encourage the development of renewable projects without burdening consumers with high energy costs. Payments to an ACP fund are usually used by the state to generate an additional revenue stream for certain technologies and to promote the development of renewable projects. For example, in Massachusetts, the ACP provides revenue to the Massachusetts Technology Collaborative which then uses the proceeds to fund clean energy and green buildings and infrastructure programs. Many of the qualifying renewable energy projects that have been developed since 1997 were only viable as a result of the additional revenue stream produced by the ACP.

Resultantly, the ACP should remain consistent with prior provisions and escalations to maintain the market dynamics and ensure a consistent revenue stream to eligible renewable energy installations. The ACP is currently calculated as follows:

The ACP Rate shall be \$50 dollars per MWh for Compliance Year 2003. For each subsequent Compliance Year, the Division shall publish the ACP Rate by January

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<sup>3</sup> 225 CMR 14.07

<sup>4</sup> See, G.L.c 25A §11F. These resources include: photovoltaics (PV); solar thermal-electric energy; wind energy; ocean thermal, wave or tidal energy; fuel cells utilizing renewable fuels; landfill gas; energy generated by certain new hydroelectric facilities, or certain incremental new energy from increased capacity or efficiency improvements at existing hydroelectric facilities; low-emission advanced biomass power conversion technologies using fuels such as wood, by-products or waste from agricultural crops, food or animals, energy crops, biogas, liquid biofuels; marine or hydrokinetic energy; and geothermal energy.

31 of the Compliance Year. The ACP Rate shall be equal to the previous year's ACP Rate adjusted up or down according to the previous year's Consumer Price Index.<sup>5</sup>

Accordingly, the ACP for Class I resources should equal the 2008 RPS ACP plus the previous year's Consumer Price Index.

However, prudent economic and energy policy dictates that the DOER should recognize that the revenue from the ACP is used to subsidize resources that could not otherwise survive on market revenues and are ultimately paid by the electric consumer. RPS revenues are only one of the cost adders that currently burden the consumer cost of electricity and, as such, should be limited. Accordingly, NEPGA recommends placing a reasonable ceiling on the ACP, not to exceed a final cost of \$75.

**2. What new or modified criteria should be required for any of the specified eligible technologies or fuels?**

The criteria for Class I qualification should not exceed the existing statutory language or intent.<sup>6</sup> The DOER needs to provide regulatory certainty and policies that encourage development of renewable energy resources, as well as to ensure the continued economic well-being of resources developed under the original RPS. Energy projects are planned years in advance and involve a substantial financial commitment on the part of developers and financiers. With so much at stake, investors need to be confident that governments aren't going to change the rules in the middle of the development process.

**3. What should be the minimum percentage of megawatt hour (MWh) sales for on-site generation that is up to 2MW, located within Massachusetts, and began commercial operation after December 31, 2007? What should be the appropriate ACP rate for this technology?**

Section 32 of chapter 169 of Acts of 2008 adds a new G.L.c 25A §11(g) that provides, *inter alia*, as follows:

In satisfying its annual obligations under subsection (a), each retail supplier shall provide a portion of the required minimum percentage of kilowatt-hours sales from new on-site renewable energy generating sources located in the commonwealth and having a power production capacity of not more than 2 megawatts which began commercial operation after December 31, 2007, including, but not limited to, behind the meter generation and other similar categories of generation determined by the department...*(emphasis added)*

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<sup>5</sup> 225 CMR 14.08(4)(a)(2)

<sup>6</sup> See, G.L.c 25A §§ 11F(b) and 11F(c) as revised by Section 32 of chapter 169 of Acts of 2008

Commissioner Giudice

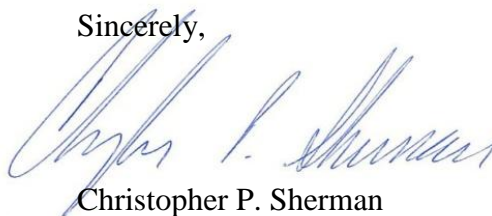
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As a matter of clarification, NEPGA interprets this provision to provide for a sub-class of the Class I renewables that are provided for in G.L.c. 25A §11(g), as opposed to an additional class of renewable energy. In furtherance thereof, the REC that is generated by this §11(g) should be priced similar to the existing Class I REC and should be comprised of a percentage of the §11(g) RPS that serves to incent this market without increasing the financial burden to the consumers.

NEPGA appreciates this opportunity and requests that the DOER consider its comments as submitted herein. Please contact me at the information provided above if I can provide any further information.

Sincerely,

A handwritten signature in blue ink, appearing to read "Chris P. Sherman". The signature is fluid and cursive, with a large initial "C" and "S".

Christopher P. Sherman  
General Counsel

October 15, 2008

**VIA ELECTRONIC MAIL: Green.Communities@MassMail.State.MA.US**

Mr. Philip Giudice  
Commissioner  
Massachusetts Department of Energy Resources  
100 Cambridge Street  
Boston, MA 02114

**RE: Section 32 of chapter 169 of Acts of 2008; Green Communities Act – Class II RPS**

Dear Commissioner Giudice:

Pursuant to the request for comments issued by the Massachusetts Department of Energy Resources (“DOER”) at the Stakeholder Forum on the RPS held on September 29, 2008, and in furtherance of the requirements contained in the above referenced section of the Green Communities Act, the New England Power Generators Association, Inc. (“NEPGA”) and the Independent Energy Producers of Maine (IEPM) hereby respectfully files these comments.<sup>1</sup>

NEPGA represents sixteen companies and approximately 25,000 megawatts (or over 80 percent) of the generation in New England, and approximately 12,000 megawatts in Massachusetts. IEPM is a not-for-profit association of renewable power producers, suppliers of goods and services to those producers, and other supporters of the industry. IEPM members generate electricity in a sustainable manner from hydro, biomass, wind, tidal, and waste to energy.

As a part of the Green Communities Act, signed into law by Governor Patrick on July 2, 2008, the DOER has opened a stakeholder process to implement §32 of chapter 169 of the Acts of 2008 - Green Communities Act - as that provision altered G.L.c 25A §11F pertaining to the existing Renewable Portfolio Standard (“RPS”) to establish three separate standards -- a standard for “Class I” renewables, a standard for “Class II” renewables, and an alternative energy portfolio standard (AEPS).

A separate “Class II” standard, which takes effect January 1, 2009, requires all retail electricity suppliers to provide annually a minimum percentage – to be determined by the DOER – of kWh sales to end-use customers in Massachusetts from “Class II” renewables. “Class II” renewables include systems operating before December 31, 1997, that generate electricity using PV; solar thermal-electric energy; wind energy; ocean thermal, wave or tidal energy; fuel cells utilizing renewable fuels; landfill gas; energy generated by certain existing hydroelectric facilities up to five megawatts in capacity; certain waste-to-energy which is a component of conventional municipal solid waste plant technology in commercial use; low-emission advanced

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<sup>1</sup> The views expressed in these comments do not necessarily represent the positions of each of NEPGA/IEPM’s members. In addition, nothing in these comments should be deemed to waive any rights that NEPGA, IEPM or any of their members may have to challenge the administrative, procedural or substantive validity of the proposed regulations.

biomass power conversion technologies using fuels such as wood, by-products or waste from agricultural crops, food or animals, energy crops, biogas, liquid biofuels; marine or hydrokinetic energy; or geothermal energy.

## **I. Comments of NEPGA and IEPM**

### **1) How should the Annual Class II RPS percentage rate be determined, and what should that rate be?**

The Annual Class II RPS percentage rate should be determined in a manner that achieves an overall diversity of resources and maintains valuable environmental assets. In the same respect, the Class II RPS program must not disproportionately burden consumer costs. NEPGA/IEPM suggest establishing the Class II percentage rate at 25% of the Class I percentage rate.

### **2) What criteria should be required for any of the specified eligible technologies or fuels?**

NEPGA/IEPM disagree with the provision in Section 32 of chapter 169 of Acts of 2008 - Green Communities Act - that limits Class II eligibility for hydroelectric facilities to existing facilities that are 5 MW or less in size as follows:

(6) energy generated by existing hydroelectric facilities, provided that ... only energy from existing facilities up to 5 megawatts shall be considered renewable energy ... (*emphasis added*)

NEPGA/IEPM acknowledge that the construction and operation of hydropower dams can significantly affect natural river systems as well as fish and wildlife populations. Therefore, assessment of the environmental impacts of a specific hydropower facility requires case-by-case review. The language in §11F (6) adequately provides that protection as follows:

...such existing facility shall meet appropriate and site-specific standards that address adequate and healthy river flows, water quality standards, fish passage and protection measures and mitigation and enhancement opportunities in the impacted watershed as determined by the department in consultation with relevant state and federal agencies having oversight and jurisdiction over hydropower facilities... (*emphasis added*)

The imposition of a 5 megawatt threshold in Massachusetts only serves to distinguish the Commonwealth from other New England states by limiting a prolific source of renewable energy that could otherwise benefit the regional economy and environment.<sup>2</sup> Vermont allows existing hydroelectric facilities up to 200 MW, which covers all 1,838 MW of conventional hydroelectric facilities in New England. Maine allows existing hydroelectric facilities up to 100 MW which

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<sup>2</sup> Global hydroelectricity production grew by 1.7% in 2007, down from 4.0% in both 2005 and 2006 but similar to the ten-year year average of 1.9%. Energy Information Association.

covers everything in New England except the Moore and Comerford facilities. Maine's eligibility equates to approximately 1,485 MW of eligible hydroelectric facilities, or 81% of the conventional hydroelectric capacity in New England. Rhode Island allows hydroelectric facilities up to 30 MW, or 962 MW (53%) of conventional hydroelectric facilities. New Hampshire and Connecticut only allow hydroelectric facilities up to 5 MW, thereby limiting their eligibility to 235 MW or 13% of the hydro capacity in the region.

NEPGA/IEPM maintain that a hydro facility that meets all of its environmental and regulatory requirements (fish passage, minimum flows etc) should not be constrained from participating in the program because of an arbitrary size limit. Increasing the pool of resources will help keep the price of the new RPS Class II program lower to consumers while providing the "green" attributes the Commonwealth is striving for.

Additionally, Massachusetts is a party to the ten-state Regional Greenhouse Gas Initiative aimed at reducing the region's greenhouse gas emissions. Hydroelectric facilities of any size help the region, including the Commonwealth, to work toward its goal of increasing the use of clean, renewable "green" power. Penalizing or implementing policies that create disincentives for hydropower to compete in the marketplace is the wrong message to send at a time when the Commonwealth, New England, and the country are calling for more indigenous resources to power their homes, businesses, and industries.

**3) What should the Alternative Compliance Payment (ACP) amount be for Class II, and how should it be calculated?**

Prudent economic and energy policy dictates that the DOER should recognize that the revenue from the ACP for the Class II RPS is ultimately paid by the electric consumer. RPS revenues are only one of the cost adders that currently burden the consumer cost of electricity and, as such, should be limited. Accordingly, NEPGA recommends establishing a proper ACP by utilizing a more comprehensive stakeholder process consisting of balanced representation between supply-side and consumer-side interests to identify the issues relating to all parties. The stakeholder process should be narrowly focused and limited to the development of an ACP that adequately incents development of resources in satisfaction of the goals of the Class II RPS, and should not revisit the substantive merits of the Class II RPS.

NEPGA/IEPM appreciate this opportunity and requests that the DOER consider its comments as submitted herein. Please contact us if we can provide any further information.

Commissioner Giudice

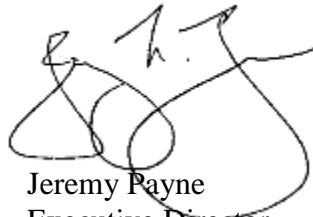
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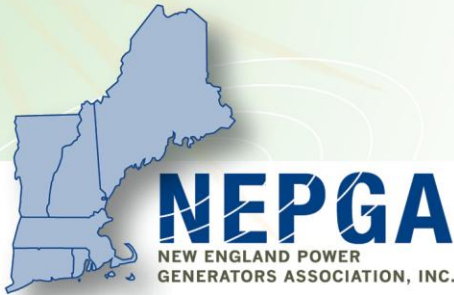
Sincerely,

A handwritten signature in blue ink, appearing to read "Chris P. Sherman".

Christopher P. Sherman  
General Counsel  
New England Power Generators  
Association, Inc.

A handwritten signature in black ink, appearing to read "Jeremy Payne".

Jeremy Payne  
Executive Director  
Independent Energy Producers of Maine



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Mr. Philip Giudice  
Commissioner  
Massachusetts Department of Energy Resources  
100 Cambridge Street  
Boston, MA 02114

**RE: Section 32 of chapter 169 of Acts of 2008; Green Communities Act - Alternative Energy Portfolio Standard**

Dear Commissioner Giudice:

Pursuant to the request for comments issued by the Massachusetts Department of Energy Resources (“DOER”) at the Stakeholder Forum on the Alternative Energy Portfolio Standard held on September 29, 2008, and in furtherance of the requirements contained in the above referenced section of the Green Communities Act, the New England Power Generators Association, Inc. (“NEPGA”) hereby respectfully files these comments.<sup>1</sup> NEPGA represents sixteen companies and approximately 25,000 megawatts (or over 80 percent) of the generation in New England, and approximately 12,000 megawatts in Massachusetts.

As a part of the Green Communities Act, signed into law by Governor Patrick on July 2, 2008, the DOER has opened a stakeholder process to implement §32 of chapter 169 of the Acts of 2008 - Green Communities Act - as that provision altered G.L.c 25A §11F pertaining to the existing Renewable Portfolio Standard (“RPS”) to establish three separate standards -- a standard for “Class I” renewables, a standard for “Class II” renewables, and an alternative energy portfolio standard (APS). The Act also sets a goal of meeting at least 25 percent of electric load with demand-side resources including energy efficiency, load management, demand response, and distributed generation by 2020. Combined Heat and Power (“CHP”) systems with an annual efficiency of 60 percent or greater may count toward meeting the APS target, with the goal of achieving 80 percent efficiency for CHP systems by 2020.

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## **I. Comments of NEPGA**

### **1. How should the Annual APS percentage rate be determined, and what should that rate be?**

The Annual APS percentage rate should be determined in a manner that achieves the goals of incenting alternative energy without burdening consumer costs. NEPGA suggests establishing the APS percentage rate at 1% total annual sales of each retail electricity product sold to Massachusetts end-use customers by a retail electricity supplier in 2009 in order to incent the initial market for alternative energy resources. After 2009, the minimum standard should increase by one percent per year until the DOER determines that the goals of the APS have been met.

### **2. What criteria should be required for any of the specified eligible technologies or fuels?**

The criteria for any of the statutorily delineated alternative energy sources should not be limited in a manner that effectively eliminates an intended source in a manner that is contrary to the legislative intent. To that end, NEPGA disagrees with oral testimony at the September 29<sup>th</sup> hearing that sought to limit emissions in a manner that would disqualify otherwise beneficial technologies. NEPGA is specifically concerned that an arbitrarily low emission rate could disqualify valuable sources of CHP and serve as a disincentive to existing facilities to develop environmental upgrades that could further this initiative.<sup>2</sup>

CHP captures waste heat that is ordinarily discarded from conventional power generation; typically, two-thirds of the input energy is discarded to the environment as waste heat (up exhaust stacks and through cooling towers). This captured energy can be used to provide process heat, space cooling or heating for commercial buildings or industrial facilities, and cooling or heating for district energy systems. By providing electrical and thermal energy from a common fuel input, CHP significantly reduces the associated fuel use and emissions. Due to its higher efficiency compared to conventional central-station generating systems, CHP produces lower emissions of traditional air pollutants and carbon dioxide, the leading greenhouse gas associated with global climate change, than conventional generating systems.

The United States had approximately 85 gigawatts (GW) of CHP capacity in place as of 2007, yet the potential for substantial expansion is great. In 2000, the U.S. Department of Energy (DOE) and U.S. Environmental Protection Agency (EPA) set a goal to double the

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<sup>2</sup> CHP is the sequential generation of power (electricity or shaft power) and thermal energy from a common fuel combustion source.

capacity of U.S. CHP installations by 2010.<sup>3</sup> The DOER should not set arbitrarily low emissions rates that are contrary to the Green Communities Act and state and national energy policy.<sup>4</sup>

**3. What should the Alternative Compliance Payment (ACP) amount be for APS, and how should it be calculated?**

Prudent economic and energy policy dictates that the DOER should recognize that the revenue from the ACP for the APS is ultimately paid by the electric consumer. RPS revenues are only one of the cost adders that currently burden the consumer cost of electricity and, as such, should be limited. Accordingly, NEPGA recommends establishing a proper ACP by utilizing a more comprehensive stakeholder process consisting of balanced representation between supply-side and consumer-side interests to identify the issues relating to all parties. The stakeholder process should be narrowly focused and limited to the development of an ACP that adequately incents development of resources in satisfaction of the goals of the APS, and should not revisit the substantive merits of the APS.

**4. What criteria should be applied to emission performance standards and permanent CO2 sequestration standards as referenced in the Act?**

Emissions should be considered on a case-by-case basis through the implementation of an emissions optimization plan that is specific to each alternative energy resource and is administered by the Massachusetts Department of Environmental Protection, in conjunction with the DOER. The regulations should specify that the emissions optimization plan must be approved or denied by the agencies within 60-days of submittal of an administratively complete draft plan.

NEPGA proposes an additional methodology that enables the alternative energy resource to adjust the emission limitation for a CHP system and take into account emissions that will not be created by omitting a conventional separate system (e.g. boiler) to generate the same thermal output. NEPGA expects that the proposed methodology will have a positive impact upon air quality, mainly in the form of reductions in greenhouse gas emissions as less fuel is consumed to produce the same electrical and thermal energy outputs in a CHP system as compared to separate systems.

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<sup>3</sup> US DOE, Energy Information Association

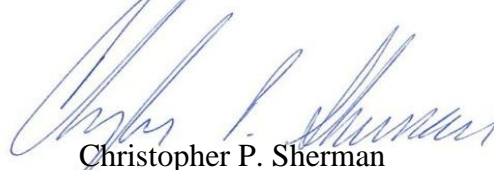
<sup>4</sup> See, G.L.c. 111, §§ 142A through 142N; c. 21§§ 26 through 53; c.21A§§2, 13 and 16; and c.21C, (March 2008), The Massachusetts Department of Environmental Protection proposed additions and revisions to the Department's Air Pollution Control Regulations (310 CMR 7.00) to encourage the installation of CHP systems.

**5. What specific means of monitoring and verification will be necessary for compliance with the APS regulation?**

As with the Class I and Class II REC, the APS should be based on the amount of electricity generated by the qualified alternative energy source. NEPOOL's GIS tracks generation and even classifies RECs according to their eligibility to meet different state RPS requirements. The specificity with which the existing GIS system tracks resources is sufficient to ensure that retail suppliers are complying with the APS.

NEPGA appreciates this opportunity and requests that the DOER consider its comments as submitted herein. Please contact me at the information provided above if I can provide any further information.

Sincerely,



Christopher P. Sherman  
General Counsel