

Mr. Paul DeCotis, Chairman State Energy Planning Board c/o SEP Comments NYSERDA 17 Columbia Circle Albany, NY 12203-6399

May 15, 2009

Re: Interim Report - 2009 New York State Energy Plan

Dear Mr. DeCotis,

The Alliance for Clean Energy New York, Inc. (ACE NY) respectfully submits to you and the other members of the State Energy Planning Board the enclosed comments on the Interim Report of the 2009 New York State Energy Plan.

Sincerely,

Carol E. Murphy

Carol E. Murphy, Executive Director Alliance for Clean Energy New York

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COMMENTS OF THE ALLIANCE FOR CLEAN ENERGY NEW YORK (ACE NY) ON THE "INTERIM REPORT OF THE 2009 NEW YORK STATE ENERGY PLAN"

I. INTRODUCTION

The Alliance for Clean Energy New York is a non-profit organization whose mission is to promote the use of clean, renewable electricity technologies and energy efficiency in New York State in order to increase energy diversity and security, boost economic development, improve public health, and reduce air pollution. Members of the Alliance for Clean Energy New York (ACE NY) include non-profit environmental, public health and consumer advocacy organizations, educational institutions, and private companies that produce or sell renewable energy technologies or energy efficiency services in New York.

ACE NY respectfully submits these comments on the *Interim Report of the 2009 New York State Energy Plan* (*"Report"*), dated March 31, 2009 and issued for public comment. We fully support the Executive Order on State Energy Planning and believe the work of the Board is essential to ensure New York can meet its energy needs in a manner protective of system reliability and consumer and environmental interests.

While recognizing that the *Interim Report* is an update of the Scoping document, there is little additional information that was not available or known at the time the Board issued the Scope for public comment. Therefore, we expect we will have lengthier comments on the draft report, as will others, and the Board should ensure it has reserved sufficient time to consider and incorporate comments after issuance of the draft. It would be preferable for the Board to release more extensive documents, including background and technical reports earlier in this process. Without additional information, it is difficult to comment on the process and what we hope will result in a document that we can support and agree is comprehensive enough to merit the title State Energy Plan.

Our comments on the *Interim Report* are below, some of which reflect that fact that we do not feel the *Interim Report* adequately addresses some of the comments we submitted on the *Draft Scope* previously issued for public comment. In addition, we have included extensive comments on the State RPS. This program, along with the newer Energy Efficiency Portfolio Standard, is in our opinion the most important State program in support of clean energy. These programs merit continued support and improvement, which should be discussed in detail in the final document. We believe a "plan" should provide guidance and direction on how to move New York to a green and sustainable economy in addition to a recitation of the status quo or ongoing efforts by various parties (such as the PSC, NYISO or NYC).

II. STATE RENEWABLE ENERGY PROGRAMS

In footnote 3 on the bottom of page 2-2, the *Report* states that the RPS and the EEPS have "been combined into a single clean electricity program goal." We assume the sentence refers to the Governor's support for a "45 by 15" goal (also mentioned elsewhere in the *Report*). It is misleading however to argue that the two programs have been combined, which is something ACE NY would oppose. In addition, the Governor's statements, while very welcome and supported by ACE NY, have not yet become State policy since the RPS has not yet been expanded to 30 percent by the PSC. It appears unlikely that the PSC will act to expand the RPS in time to ensure project development and to meet RPS goals. ACE NY believes the Governor's overall goal is laudable, however, we believe strongly that the two programs should remain separate and should be based on MWh goals rather than percentages.

The section on Renewable Energy Resources on page 4-5 is lacking in detail – even for an interim report – and contains a number of inaccuracies or unfortunate omissions. In particular, as we stated in our initial comments on the Plan Scope, it is difficult to fairly characterize "renewables" in a report of this nature when large, utility scale generation and small, distributed generation are combined into one. There should be separate consideration given to each.

The *Report* identifies New York's RPS as "aggressive" and only discusses it as a 25% RPS by 2013. Given New York already has 19 % of its goal from existing large-scale hydropower, the RPS is in reality a 6% percent RPS. In addition, the *Report* refers to the Governor's call for an increase in the goal to 30% by 2015. However, given the Governor's approach also includes a substantial decrease in energy consumption from efficiency measures – which ACE NY wholeheartedly supports – the actual energy needed to meet the 30% target will likely be not much more than that needed to meet the original 25% target. This is an Energy Planning document that should realistically assess what is needed to move our economy to reliance on clean energy forward; and not rest entirely upon existing, and currently under-funded programs.

We believe the last half of pages 4-5 conveys an unnecessarily negative tone. While the information provided is not factually incorrect, positive information is not included. For example, there are challenges to integrating wind energy into bulk power systems and wholesale energy markets. However, tools to overcome those challenges are readily available and are being used by New York, and in other states and other countries – including those with substantially more wind power as a percent of overall energy supplies than New York. Likewise, the *Report* refers to controversy over siting of renewable generation and infrastructure to support it without commenting on the widespread support for renewable generation that exists throughout the state and in regions that already have operating wind facilities The *Report* would do better to include the positive support for wind power and other renewables that has been documented many times. One important example is "The Second Annual Lewis County Survey of the Community" conducted by Jefferson Community College. In addition, this paragraph of the *Report* makes it appear that it is only renewables that are subject to siting opposition when non-renewable generation. On a technical note, when discussing weather-dependent generation the preferred term is "variable"

rather than "intermittent." Production varies over time, ramping up and down, rather than the sharp on-offs that the word intermittent implies.

III. NEW YORK'S RPS PROGRAM

Given the importance of the RPS to the State's overall clean energy agenda, we have a number of recommendations to the State Energy Planning Board regarding continued implementation of this crucial program. State Renewable Portfolio Standards are an essential mechanism to support renewable energy development in the United States, and will continue to be so even if a federal standard is adopted. The New York RPS has been successful, playing an integral role in supporting the development of 1,160 MW of new renewable capacity, including over 700 MW of new wind generation, in New York. Many more MW could be built if New York would further indicate a commitment to its goals and fully fund the programs.

The modifications discussed below apply to the main tier of the RPS, although a REC tracking system and a liquid and transparent REC market would be beneficial for the customersited tier resources as well. As we said above, the Plan should discuss distributed generation separately from large, utility scale projects. Photovoltaics, digesters, fuel cells and behind the meter wind energy can provide significant benefits to New Yorkers. These benefits include reduced stress on the grid and lower line losses, decreased need for new transmission, power produced coincident with peak demand, economic development, energy security through stable-priced power and, of course, public health and environmental benefits. The Plan should identify the means to ensure additional deployment of these valuable resources.

While the RPS has been successful, our experience and those in other states with RPS programs, has shown us modifications that could make the RPS even more effective. It is ACE NY's purpose to describe these modifications and to encourage the State Energy Board to consider them in any evaluation and recommendations on how to support increased reliance on renewable generation in New York.

A. *The American Recovery and Reinvestment Act:* These comments are particularly timely in light of the recently enacted federal stimulus bill – The American Recovery and Reinvestment Act ("ARRA"). The energy provisions of this bill can provide a meaningful advantage for developing renewable energy projects in New York provided that the New York RPS is available and structured to complement ARRA. Renewable energy generation typically relies on three income streams: federal tax credits, energy sales, and renewable energy credits. For the last several months two of these streams, federal tax credits and renewable energy credits, have been unavailable to New York developers. The federal production tax credit ("PTC"), which provides a \$20 per MWh tax credit (increasing annually to reflect inflation) has been unavailable because of the lack of tax-advantaged partners, generally banks and other investment firms, able to use the credit during this global fiscal crisis. ARRA has addressed this issue by allowing renewable energy projects qualifying for the PTC to take a 30% investment tax credit ("ITC") instead and potentially to convert the ITC into a direct grant from the Treasury Department. This is particularly helpful for developers generally in that they do not have to give some of the PTC's value to their tax-advantaged partners, and for New York

developers specifically, because the ITC compared to the PTC is more economically beneficial for the relatively lower capacity factor projects and higher capital costs found in the eastern United States. <u>To qualify for the ITC/Treasury Department Grant</u>, renewable energy projects must begin construction by the end of 2010 and be in service no later than the close of 2012. Therefore it is essential that the New York PSC approve additional collections to support the RPS so that renewable energy developers can begin to price the full value of their New York projects in comparison to other national investments.

- **B.** *Modifying NYSERDA's Centralized Procurement Parameters:* In the near term, to take advantage of the new federal incentives and to ensure continued investment in renewable energy in New York, it is essential that the PSC approve an order for additional collections to support the RPS, and that NYSERDA issue an RFP as soon as possible, incorporating changes to the procurement process as discussed below. Twenty-seven states plus the District of Columbia have Renewable Portfolio Standards. New York's RPS is met through request for proposals for renewable energy credits (RECs) linked directly to specific qualifying projects. To date, this approach has been successful in promoting renewable energy development. However, the approach suffers from some shortcomings compared to RPS programs in other states:
 - NYSERDA's procurements are periodic and random, making long-term planning difficult since developers are uncertain when/whether they will obtain a contract for their RECs or even have the opportunity to try for a contract.
 - There is little REC price transparency and little to no market liquidity since there is a single buyer NYSERDA and no secondary market.

Modifying NYSERDA's centralized procurement approach can address these issues. ACE NY recommends the following changes to NYSERDA's future main tier procurements:

1. <u>Fulfill the full RPS procurement target</u>: In order for price formation to occur at a level supportive of new renewable energy projects it is essential that RPS demand be fully met. Under-procurement will send a distorted price signal as to the true costs of new renewable energy development necessary to meet the RPS targets and will discourage investment since developers will be unable to forecast the actual quantity of RECs that NYSERDA is going to procure and, therefore, will be unable to estimate whether their project will be "in the money" and ultimately selected as part of the NYSERDA procurement.

The 2008 RPS main-tier goal was 3,549,000 MWh. NYSERDA procured 75% of this goal or only 75% of the target. In other RPS markets – in which load-serving entities are required to fully comply with the RPS targets – REC prices would form at a level that supports the cost of new development. In this case, NYSERDA is artificially suppressing REC prices. The results are that main tier REC prices have fallen in New

York through the first three solicitation periods (first solicitation: \$22.50; second solicitation: \$15.52; third solicitation: \$14.75).¹

Thus, the decline in REC prices has not been the result of falling development costs in relation to the RPS targets, but NYSERDA's unwillingness to procure RECs at a higher price to meet the full main tier RPS requirement.

Current market conditions also will require REC price formation at a level that reflects both increasing capital and development costs and falling energy prices.

In order for New York to meet its RPS goals, including Governor Paterson's commitment to achieving 45% renewable energy and energy efficiency by 2015, it is essential that New York's RPS provide the proper price signals. This can only be achieved by NYSERDA procuring RECs equal to the annual RPS targets.

- 2. Provide standard RPS procurement schedules with flexible bid terms: Long-term contracts are an essential component for financing new renewable energy projects and the long-term contracting approach of the centralized procurement system is one of its strengths. However, it is also a limitation in that if a project that does not receive a NYSERDA contract has very limited opportunities for REC sales its options are limited to either the voluntary market or exports to PJM or ISO-NE to serve State RPS programs in those control areas. Thus, there is a meaningful risk in developing a project in New York, since a project that does not receive a NYSERDA contract either as a result of the timing of development relative to an uncertain procurement cycle, or because price formation occurred at a level lower than expected demand because of under procurement would have very limited opportunity to sell its RECs. NYSERDA can address this challenge and create a more efficient centralized procurement process in several ways:
 - NYSDERDA should have a standardized procurement schedule. We recommend quarterly procurements, but six-month procurements at a minimum. This will enable RECs from projects on different permitting schedules to be assured of a near-term opportunity to sell RECs.
 - Allow bidders to offer RECs for different terms. All bidders should be able to offer RECs for terms from three to ten years at their discretion.
 - Create a spot-market exchange and allow banking and borrowing. A spotmarket REC exchange would allow NYSERDA to fill any annual REC shortfall prior to the end of the year or to take advantage of various longpositions and the willingness of parties to sell RECs at any time at a price that NYSDERDA finds favorable. NYSERDA would periodically be able to make offers on this exchange to get a sense of the spot-market prices and act whenever the pricing is in its favor. At the same time, the spot-market exchange would provide a mechanism to ensure that NYSERDA acquires its full annual RPS target.

¹ New York State Renewable Portfolio Standard: Performance Report, Program Period ending June 2008. New York State Energy Research and Development Authority. September 2008.

3. <u>Procure "products" not "projects</u>: Like all northeastern states, project development and siting in New York presents challenges that result in unexpected delays. Tying REC procurement to specific projects puts great – and unnecessary – pressure on developers to meet the timelines set forth by NYSERDA while facing delays that are outside their control from appeals processes as well as state regulators. These hurdles are a natural part of the project development and siting process but they can be mitigated by allowing the RPS to be met by products instead of projects, which would in turn help the State meet its renewable energy goals.

To achieve this, NYSERDA would seek RECs that meet certain identified criteria relating to fuel, vintage, and geographic location – just like the current project-based approach, but with much greater flexibility since REC delivery would not be tied to specific projects.

This approach can meaningfully reduce the regulatory risk of developing projects in New York. Should unexpected permitting or legal delays occur, a developer that had bid into and won a NYSERDA contract could much more easily obtain RECs from the secondary market to fulfill its contractual obligations, than through the current project substitution requirement. The risk for meeting the contract would still be on the developer and NYSERDA could still require security as part of the contractual obligation, but this additional flexibility would reduce risk for developers (risk which is otherwise priced into REC bids).

C. *Ensuring a Long-Term Commitment to RPS:* All energy projects, including commercial scale renewable energy projects, are capital intensive and require a long-term time horizon for planning, development and construction. The stop and start nature of the New York RPS can be problematic for long-term renewable energy development in the state. In addition to the recommendations above, the PSC should order the collection of funds to support the RPS component of Governor Paterson's 45% by 2015 goal. For this purpose, the goal should be translated into a MWh goal (as was done in the original RPS Order from the PSC) and those MWh requirements should be fixed as a minimum requirement in order to provide certainty to the market.

IV. STATE SUPPORT FOR NON-RPS INITATIVES

The RPS provides an incentive program for eligible technologies in the electric production sector. However, the State also has an interest in supporting research and development efforts, market transformation efforts and certain desirable technologies that are not included in the RPS because they are electricity-producing technologies. These should be more fully discussed and more direction should be provided for these programs, some of which are currently being supported under the auspices of Energy Efficiency Programs or using RGGI funds.

A. Solar Thermal Installations: Solar thermal installations for hot water and heat can help reduce fossil fuel consumption, lower carbon emissions, provide economic development opportunities for manufacturers and installers, and help consumers stabilize their energy costs. For example, a report by NYSERDA ("NYSERDA Solar Domestic Hot Water Technologies Assessment Study August 2008") found that water heating accounted for 18% of New York State household energy consumption and that solar hot water systems could provide over half of the energy need to heat water in an average New York home. While New York has a developing solar thermal installation market, lack of consumer awareness and stable and supportive State programs hamper widespread adoption of this technology.

Solar heating also could be used in New York. Nearly no one knows that New York hosts the largest solar air heating installation in North America. The 4 MWs of solar thermal installed at Fort Drum is composed of 100,000 square feet of Solar Air Heating which annually eliminates 2,000 tons of carbon per year – by reducing natural gas burned for heating. In addition, a similar Solar Air Heating system at the Rockland County Co-Compost facility is unheralded, even though it is saving the County ~14,100 gallons of oil per year.

A coordinated public education and market transformation campaign would provide the knowledge base for other municipalities, institutions, businesses and residents to use more solar thermal technologies. We encourage the State Planning Board to include aggressive targets for expansion of this market in the State Energy Plan.

V. STATE RESPONSE TO CLIMATE CHANGE

The *Report* contains some excellent descriptions of the challenges facing New York in its attempts to respond to the threat of climate change and the solutions that must be found, including the use of building codes and distributed generation to lower carbon emissions as well as low-carbon liquid fuels. The discussion of the transportation sector assumes plug-in-hybrid vehicles (PHEV) powered by zero or low carbon emission generation and better battery storage technologies. Plug-in vehicles can only be powered by zero or low-carbon emission generation once such generation is actually built. New York State must ensure that programs to support clean generation remain in place or the plug-in-hybrids that are sure to come to market will end up increasing our energy needs from carbon emitting generation on line these vehicles will be charged at night, without additional wind energy generation on line these vehicles will be charged using coal-fired electricity – or if demand is high enough, expensive gas-powered generation. New York State will not be able to control the pace at which PHEV come to market and are adopted en masse by consumers. The State must act **now** to facilitate construction of the wind energy generation that will be needed to charge these vehicles and still result in carbon emissions reduction and a reliable electric system.

As the *Report* points out, while New York has made great progress in reducing emissions, we can do better. The best method of achieving additional gains in air quality and related public health and environmental protection are through the increased use of non-pollutant emitting resources including energy efficiency and renewable generation.

New York State has committed to carbon reduction in the electric sector via its leadership and membership in RGGI. All analyses for the State Energy Plan should assume that carbon controls would expand to include other sectors and to become federal policy. Given this reality, it will become clear that there are advantages to investment now in zero- or low-carbon emitting technologies and this should be modeled in all of the studies conducted in support of the planning process.

ACE NY agrees with the *Report's* assertion that NYPA is well positioned to assist the State in meeting aggressive clean energy goals. ACE NY supports NYPA's efforts to explore using the wind resource offshore in the Great Lakes as well as its interest in other clean energy options and transmission upgrades.

VI. STATE ENERGY EFFICIENCY GOALS

With regard to efficiency goals, the Report identifies a number of areas that it says are likely to be addressed in the Plan, including the role of the utilities, multi-family housing and commercial buildings, consumer information and accessible financing. The Plan should address all of these areas as well as building codes and standards and provide direction on how to achieve the State's aggressive efficiency goals. The Energy Efficiency Portfolio Standard proceeding is an excellent start but it is difficult to see how it alone, as being currently implemented, will result in a 15% reduction in expected energy use by 2015.

A. *Demand Response:* The *Report* should include a much fuller discussion of how to ensure adoption of more clean distributed generation, efficiency and demand response. Demand response is critical given the need to move away from reliance on peaking power plants. If peak demand cannot be reduced or controlled, New York will have continued need for seldom used peaking – and polluting – power plants even if efficiency efforts prevent increases in average overall demand.

VII. FUEL USE AND AVAILABILITY

While we support the efforts at addressing the interactions between heating and electric power sectors when they compete for natural gas, as well as the efforts to address infrastructure for liquid fuel deliveries, the Plan should emphasize renewable and sustainable alternatives. Solar thermal installations, for example, should receive support as they displace carbon-based fuels. Fuel cells are also a low-emission solution with applications in transportation, heating and power supply.

VIII. NEW YORK INDEPENDENT SYSTEM OPERATOR

As we said in our comments on the Scope for the Report, the NYISO's market rules will play an important part in achieving the state's overall energy goals. This is true both in encouraging the use of clean energy options and in the development of improved energy infrastructure. The intersection of the regulatory oversight of the Public Service Commission and the market services provided by the NYISO, overseen by the Federal Energy Regulatory Commission or FERC, is clearly too large to be <u>fully</u> addressed as part of the Energy Plan, however, we do think it is worth pointing out – within the Issue Briefs and the Plan – where the NYISO rules will intersect with and impact the realization of state energy planning processes and goals and where State agency intervention is needed. Development of transmission infrastructure and how to pay for it is but one, albeit crucial, example. This *Interim Report* fails to address the important functions provided by the NYISO and how State agencies should work with the NYISO.

IX. TRANSMISSION INFRASTRUCTURE AND SMART GRID

This section of the State Energy Plan is crucial and yet the *Interim Report* contains numerous caveats that suggest the final Plan will not address these issues because they are too complex or will not be resolved within the Plan's time horizon. Both the focus of this section and the actual content are lacking and in need of substantial work. This section implies that the "smart grid" will solve our transmission needs. The "smart grid" encompasses a wide variety of technologies to help consumers and load-serving entities manage energy flows and consumption, but it is not a substitute for transmission planning and transmission upgrades. The *Report's* paragraph on regional transmission planning and the NYISO is weak. The Report states that the NYISO is the primary electric system planning entity. The NYISO, however, has no ability to direct investments in transmission; the State must fill that role and how it proceeds on the course of planning for transmission improvements should be part of the State Energy Plan.

X. SITING

As we have said earlier, a State Energy Plan should provide direction for the State. A significant impediment to the development of clean energy projects in New York is the uncertainty and inconsistency project developers face at State agencies involved in permitting and approvals for such projects. Increased focus on the need for consistency and coordination among agencies and between agencies and overall state goals is clearly needed, especially in the absence of a state power plant siting law. While overall the State has declared goals for clean energy, developers often find roadblocks and uncertain timelines at DEC, PSC, and OPRHP. This is especially problematic when, as is often the case, developers are faced with deadlines for committing significant sums of money for projects. There is the unfortunate sense that staffs at some agencies are not fully aware of or supportive of the State's commitment to clean energy development. We do not mean to imply that agencies should not fulfill their individual mandates, whether those are protecting natural resources or consumer interests; such mandates do not exist in a vacuum and should be evaluated in context. We recommend, as did the Governor's Renewable Energy Task Force, that the State Energy Plan set forth specific guidelines against which agency actions and decisions can be judged for consistency with overall state energy goals.

XI. CONCLUSION

In conclusion, the State Energy Plan should address the importance of investing now in the infrastructure to transition to reliance on clean energy options, which have higher upfront

capital costs but low and stable operating costs as well as environmental benefits. We believe that renewable resources must cease to be the "alternative" and a second tier approach to meeting our energy needs. The Plan should include a technical assessment for customer-sited renewable resources such as solar power systems, including both photovoltaics and solar thermal systems, fuel cells, digesters and wind systems. Also, cross resource impacts must be addressed and acknowledged. As but one example, previous studies have shown that the increased use of wind energy can dampen demand for natural gas at peak demand times and result in lower natural gas and electricity prices; this impact should be identified in discussions of both wind energy and natural gas. New York possesses an excellent wind resource that is capable of providing emission-free, domestic power and thereby improving our environment as well as our energy security. We believe transmission constraints will be the most significant impediment to the development and delivery of clean power generation. The cost allocation process for transmission upgrades should be included in the Plan's analysis given the current structure does not seem to be conducive to significant investments in much needed infrastructure. Progress in other jurisdictions, such as the Midwest, California and Texas, in building transmission to connect wind resources with load should be explored.

Thank you for once again considering our comments on this important public policy endeavor. We look forward to continue working with the State Energy Planning Board.

Respectfully submitted,

Carol E. Mungely

Carol E. Murphy Executive Director