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October 19, 2009

VIA EMAIL (www.NYSEnergyPlan.ny.gov)

Energy Plan Comments
NYSERDA
17 Columbia Circle
Albany, NY 12203-6399

Re: Comments of Pace Energy and Climate Center on Draft State Energy Plan

To The State Energy Planning Board:

Attached are the comments of the Pace Energy and Climate Center (Pace) with respect to the draft State Energy Plan.

Pace appreciates the opportunity to submit these comments with respect to the draft State Energy Plan. These comments are in addition to the comments submitted by Pace on July 8, 2008 regarding the draft Scope; the supplemental comments submitted jointly with Environmental Advocates and Alliance for Clean Energy New York on December 19, 2008; the comments on the Interim Plan submitted jointly with Environmental Advocates on May 15, 2009; and the oral comments delivered by Pace at the State Energy Planning Board hearing on August 21, 2009 at Hunter College in Manhattan.

We look forward to working with the Energy Coordinating Working Group and the State Planning Board in the remaining steps to develop the State Energy Plan by the end of the year. Questions regarding the attached comments should be directed to Jamie Van Nostrand at (914) 422-4082 or jvannostrand@law.pace.edu.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'James M. Van Nostrand', is written over the typed name and title below.

James M. Van Nostrand
Executive Director

Attachment



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COMMENTS
of the
PACE ENERGY AND CLIMATE CENTER
on the
DRAFT STATE ENERGY PLAN

October 19, 2009

The Pace Energy and Climate Center (Pace) strongly encourages the State Energy Planning Board to make several critical improvements to the Draft State Energy Plan (Draft Plan) before releasing it in final form. We think there are several very significant shortcomings that need to be corrected if the State Energy Plan is to be a truly useful working plan that guides the State's energy policies over the next few years.

The Biggest Issue

The main purpose of New York State energy planning is to identify optimal goals and to structure and guide public and private action towards their accomplishment. The Draft Plan does a very good job of accomplishing the general task of goal identification, but falls far short of creating a useful, useable action plan.

Governor Paterson has previously laid out a truly excellent set of appropriately ambitious goals concerning energy efficiency, renewable energy and climate change – and the Draft Plan reconfirms their great wisdom. But the most challenging part of energy planning is designing effective and “binding” strategies for execution. Here the Draft Plan fails, and does not do justice to the Governor's initiatives.

We urge the New York State Energy Planning Board to address this critical need before issuing the final State Energy Plan. The reality is that the Governor's initiatives, announced over two years ago, have not been effectively administered, and have foundered due to the inability of the several state agencies, authorities and commissions to work as a team. Collectively, *they have not moved forward the execution of the Energy Efficiency Portfolio Standard (announced in April 2007) and the Renewable Portfolio Standard* (initiated by the previous administration, but greatly improved and enhanced by Governor Paterson). *Progress has been at or near a standstill* at a time when the State desperately needs the employment and environmental as well as energy benefits of these programs.

Effective planning is not just about forecasts, model runs and comparison of policy alternatives. These are necessary but completely insufficient. To actually be useful and “real” the State Energy Plan must also seriously address execution – how to get the job done. This is not just a matter of formulating written strategies for administration and collaboration and targets and deadlines and public accountability all along the way – although these are necessary.

More fundamentally, there must be internal agreement within the Paterson Administration that the more important goals are vital and sacrosanct and must be pursued aggressively. There must be agreement within the Paterson Administration to put aside institutional jealousies and infighting and micromanagement and move forward these key programs that can, for instance, reduce wholesale electricity prices by 10% while creating jobs.

We highlight especially this issue because it concerns the most crucial part of the State Energy Plan (sustainable energy that reduces energy costs while promoting jobs now in New York), **and** because of the seeming administrative impasse on progress for these programs the past year or two. We realize that the Draft Plan states that the Final State Energy Plan will “contain a detailed implementation plan complete with milestones and deliverables for tracking progress implementing recommendations.”¹ We want to make sure that these are not just “words and plans” but actual internal administrative agreement and commitment.

The Biggest Methodological Issue with the Electricity Assessment

In terms of analysis, there is a critical shortcoming that also should be addressed before the plan is made final. Modeling should be the analytical backbone of the State Energy Plan. Generally there should be one or two (or at most several) Reference Cases against which alternative scenarios or policy options are compared. ***At least one of the Reference Cases should project some form of informed estimate of what is most likely to happen given current trends, directions and policies.***

It is against such projected reference cases that we “try out” alternative policies or eventualities to see what impacts they yield. Our concern is that neither of the Reference Cases provided in the Draft Electricity Assessment provides such a basis for analysis. ***First, neither of them includes a federal carbon price – something that the vast majority of energy analysts consider extremely likely.² Second, neither Reference Case provides for a strong EEPS throughout the duration of the planning period.***

The “Starting Point” case essentially assumes that the Paterson Administration achieves only 27% of the 15 x 15 EEPS goal. The SEP Policy Reference Case assumes that the 15

¹ *Draft 2009 New York State Energy Plan*, p. 90.

² Even were the federal climate legislation not to pass Congress during 2009, it is likely to during 2010 or 2011. Further, the Obama Administration has made it clear that it intends to use Administrative means to move forward if Congressional action is stymied—and such administrative action will have a significant price impact as well.

x 15 EEPS goal is achieved by 2015, with benefits outweighing costs by a ratio of 2.6 to 1.0,³ **and also** producing an **additional 10% reduction** in wholesale electric prices enjoyed by all electricity customers,⁴ with the program discontinued thereafter. Why or how would the State of New York completely discontinue this program in 2016 and thereafter, turning its back on further billions of dollars of net benefits for electric customers? And this at a time when national CO₂ reduction requirements will make such a program all the more compelling. Continuation of such a clearly successful program through the whole planning period appears to be the only reasonable assumption for a Reference Case. Continuing this program for the additional years 2016-2024 has a highly significant effect. Not doing so makes no sense.

Both of these assumptions would have very significant implications for the policy options considered in the Draft Plan, such as the closing of the Indian Point nuclear plant, examination of the two new transmission lines, and consideration of a new nuclear plant in Oswego. We urge the New York State Energy Planning Board to conduct one additional series of model runs using an additional *reference* case that includes (a) the assumptions about a federal carbon policy currently included in the “national carbon policy” scenario, and also (b) a continuation of the 15 x 15 EEPS through 2024. Doing so will provide much more useful data on the impacts, implications and net costs of the other sensitivity runs.

The Biggest Success: Climate Action Plan and Executive Order 24

We applaud the Governor’s leadership in promulgating Executive Order 24 and integrating it into the Draft Plan. It is now time for New York to begin to deal with the hard realities that climate change will impose upon us. It is time for us to start to develop strategies for most cost-effectively responding to this challenge. By establishing the Climate Action Plan and the Climate Action Council, New York can intelligently begin this process, and will provide leadership to the rest of the country while doing so.

New York’s Department of Environmental Conservation and NYSERDA staff began a year ago to develop a planning model for examining how New York might achieve an 80% reduction in CO₂ emissions by 2050. We hope this work is continued, expanded and improved upon – and that adequate resources are made available for the expensive modeling that is essential to do this work well. We support the Draft Plan’s approach of developing an interim target of a 28.7% reduction by 2025 – realizing, of course, that the quantum difficulties in achieving the 80% reduction will likely reside in the final 20% reduction, not the first 30%. But the Draft Plan is correct to add, from an action perspective, a nearer term goal that we can mobilize for now.

It will be more important than usual to emphasize the role of the Climate Action Council and other outreach and information activities. Much of what the Climate Action Plan can

³ *Achievable Electric Energy Efficiency Potential in New York State (DRAFT)*, Optimal Energy et. al., November 2008.

⁴ *Electricity Assessment: Modeling New York State Energy Plan 2009*, New York State Energy Planning Board, p.6

accomplish, especially in the early years, is to explore and understand the monumental challenges and changes and consequences involved in massive climate gas reductions – and educating all of us about them.

The Biggest Failure: The Raid on RGGI Auction Revenues

More recent developments since the Draft Plan was issued, however, jeopardize the entire Climate Action Planning process. It is difficult to envision accomplishing an 80% reduction in greenhouse gases by 2050 without the funding – and the necessary political will – to do so. The Governor’s decision on October 15 to sweep \$90 million of RGGI auction revenues into the State’s general fund cripples the funding for, and undermines the purported commitment to, a Climate Action Plan. To the extent the Draft Plan reflects assumed spending by NYSERDA in accordance with the RGGI Operating Plan – such as the reference to the “all fuels, all sectors” approach to energy efficiency activities that the RGGI auction revenues would have enabled⁵ – those assumptions will need to be revisited accordingly in the final State Energy Plan. The missing \$90 million, representing less than a fraction of 1% of the overall \$5 billion deficit, will do relatively little to improve New York’s fiscal standing. It will, however, severely hamper the State’s ability to meet its broader energy efficiency and renewable goals – including the Climate Action Plan, which was slated to be funded by this very revenue source.

Missing in Action: Distributed Generation and Combined Heat and Power

Short-shrift is an exaggeration of how much attention Distributed Generation (DG) and Combined Heat and Power (CHP) receive in the Draft Plan.⁶ As one of the leading policy analysts of the potential efficiency, economic and environmental potential of CHP, Pace has a special interest in correcting this shortcoming in the Final Plan. The State should establish a target of achieving 2,200 MW of clean CHP by 2020. Further, the Final Plan should call for the adoption of the measures developed by the CHP Working Group of the Governor’s Renewable Energy Task Force. Pace chaired this Working Group, which met several times between October 2008 and January 2009 and produced several specific recommendations that should be incorporated as part of the State Energy Plan’s implementation plan. The final report of the CHP Working Group, including a listing of the members of that group who devoted substantial time to the development of the recommendations, is attached to these comments as Appendix A.

Efficiency of Electricity Capacity Markets

It is very surprising that the Draft Plan does not even analyze the efficiency or the costs and benefits of the NYISO Capacity Market. Given the detailed analysis of far less costly or consequential issues by the Draft Plan, it is worrisome that no scrutiny was given to the efficiency with which New York assures itself of a reliable stock of generating capacity – or alternative methods and costs for doing so. The NYISO capacity

⁵ *Draft Plan*, p. 27.

⁶ Combined Heat and Power is not explicitly discussed in the Draft State Energy Plan, and is mentioned only on pages 57-58 of the *Electricity Assessment: Resources and Markets*.

market costs New York consumers around \$1 billion per year. Plans are being developed and discussed at the NYISO for increasing the expense and expenditure of the capacity market to include multi-year payments.

There are several very significant factors that should be examined by the State of New York (independent of the NYISO) in assessing how best to acquire and maintain installed capacity:

- Does commitment to the new, large-scale EEPs and RPS, along with the impacts of emerging federal sustainability programs, so reduce prospective capacity needs that the NYISO ICAP market should be reconsidered?
- Are long-term bilateral Power Purchase Agreements (PPAs) between the regulated utilities or the New York Power Authority and individual generators for newly constructed power plants more properly an alternative to the current ICAP market rather than a financial supplement to it? Such PPAs seem to have emerged as the major mechanism for installing new capacity in the major area of need – New York City.
- Given that nuclear power and coal with sequestration may be the major future sources of new capacity, and given their clear need for very significant public funding and subsidy, is it reasonable to continue paying \$1 billion per year to all existing generators serving the State’s consumers?
- Given these emerging developments, should the demand curve aspect of the ICAP market be reconsidered?
- One of the purposes of the ICAP market is to provide fixed cost and profit recovery for gas generators that are on the margin, inasmuch as they recover in general only their marginal costs. Given the changes under way as discussed above, should the State of New York consider the merits of separating this payment from the installed capacity program and replace it with a more direct form of compensation for the “missing money” so that only those missing the money receive the compensation? This would also allow the installed capacity market to focus on maintaining the optimal level of installed capacity.
- Obviously the currently lower gas prices impact on all of this by reducing the producer surpluses enjoyed by generators whose marginal costs are below that of the marginal price setter. Such prices may well not persist, and the gas prices forecasted by the Draft Plan seem to be in the reasonable range.
- Another compelling reason why the State of New York needs to carefully examine the wholesale market mechanisms relates to the forthcoming federal cap and trade program for CO₂. With natural gas often setting the price, the dollar value of half an allowance will be added to the market clearing price. Coal generators will only recover about half of their allowance costs, and oil generation about two-thirds. But nuclear and hydropower will receive the full “windfall” except to the extent that they are locked into bilateral contracts.

How customers will be affected by this price increase is important to examine, especially in comparison with what is done in more coal-reliant states with regulated markets. We

could find, for example, that the relative prices in the Northeast actually get worse compared to prices in the Midwest and South. This could happen if free allowances are given to fossil emitters by their state PUCs.

It is time for New York to evaluate the positives and negatives of competitive restructuring of its electric markets which began ten years ago. Such an effort should not be directed at passing judgment on “did we win or did we lose,” but on how to maximize consumer and public benefits at the least cost going forward. Although the NYISO process itself is open to this kind of analysis, the State’s responsibilities and constituency are different from the NYISO’s. It is therefore critical that the State of New York perform its own review – one which could include the various concerns about, and voices for, reform.⁷

NYISO Environmental Responsiveness

When the NYISO was first formed, there was a close attention to environmental concerns. The NYISO issued a statement of environmental responsibility and stewardship.⁸ At that time there was an exceptional Board Member, Peter Berle, who, along with several other Board Members, provided statesmanlike environmental leadership. At that time the President of the NYISO, Bill Museler, though not a “Prince of the Environment,” was very willing to accommodate an environmentally proactive agenda. The NYISO Board at that time established an Environmental Advisory Panel as well.

In more recent years, this focus has dulled and been in retreat. We do not sense there is as much commitment on the part of the Board to be environmentally proactive. And someone with strong environmental credentials has not been added to the NYISO Board. Further, the environmental community lacks the funding for someone to represent their interests in the NYISO governance process full-time (even the large consumer communities lack such resources). Due to the extensive market participant working group and committee structure, it is impossible to represent an interest well at the NYISO by participating only one day a week – and environmentalists collectively cannot afford even that. Pace once had someone who did so, but he did it by “contributing” significant portions of his time – and he was worn out by the process.

⁷ In March 2006 the Department of Public Service issued a *Staff Report on the State of Competitive Energy Markets: Progress to Date and Future Opportunities*. We do not believe there was an opportunity to comment on drafts of that report, and, as we had issues with several of the key assumptions, and would have welcomed a chance to discuss and comment. In any case, that report is now 3 ½ years old.

⁸ Attached as Appendix A

Conclusion

Pace urges the State Energy Planning Board to modify the Draft Plan as necessary to act upon and incorporate these recommendations.

Submitted this 19th day of October, 2009.

PACE ENERGY AND CLIMATE CENTER
White Plains, New York

**Final Recommendations of
Combined Heat and Power (CHP) Working Group
Governor's Renewable Energy Task Force**

January 15, 2009

Adopt a Specific Goal for CHP Development in New York: New York should commit to installing 2200 MW of clean and efficient CHP capacity by 2020, as compared to a base year of 2009.

Background: New York State has approximately 5,000 MW of installed CHP, consisting of approximately 210 sites. An October 2002 NYSERDA study indicated a technical potential for 8,500 MW of new CHP over a ten-year period, and concluded that 2200 MW was feasible over the same period under a recommended "accelerated" deployment. The study provided a good estimate of untapped New York State CHP potential, although it did not take into account the use of CHP technology for cooling purposes nor the increasingly stringent air permitting requirements. Also, energy and capital pricing costs are changing rapidly. Given the potential identified in the study, 2200 MW of new capacity over the next decade seems a reasonable goal for which New York should strive. As a point of reference, the New Jersey Energy Master Plan calls for 1500 MW of new CHP capacity by 2020.

Adopt a Definition of CHP for New York State: A definition for CHP should be developed and applied to determine eligibility requirements for available funding or other incentives. The definition should include at a minimum the following criteria:

- Cleanliness of emissions of NO_x, VOCs, CO₂, etc.,
- Overall efficiency of the system including heat recovery,
- Inclusion of mechanical work versus electric generation, and
- Site-specific utilization.

Adopt Measures to Encourage Utility Involvement in CHP

Development: Utilities have been increasing their involvement in CHP development. Utilities can play an even more active role in encouraging the development of CHP in their service territories, and should be provided with reasonable economic incentives for facilitating CHP deployment. The utility role could be any one or combination of the following:

Utility Ownership of CHP: A utility would be allowed to own a CHP project in its entirety, or as partial owner in partnership with the customer owning the host site. A utility would be permitted to include its investment in CHP facilities in rate base and earn a return on the investment.

Utility Financing of CHP: A utility would provide the capital costs of investment in customer-sited CHP resources, and these capital costs would be repaid over time through payments from the customer, either as part of the utility bill or through a separate credit arrangement. A utility would be permitted to include the unrecovered portion of the investment as part of its rate base in determining its revenue requirement in general rate proceedings.

Incentive Payments for CHP: A utility could receive incentive payments upon demonstrating that it played a meaningful role in facilitating CHP installations within its service territory. The incentives could be paid on an installed kW basis and thereby provide some economic incentive at a modest overall cost, which would be recovered as part of the utility revenue requirement in general rate proceedings.

Streamline and Promote Existing Programs: NYSERDA should consider streamlining processes under the existing programs to provide easier access to available funding balanced with the need to guarantee credible system performance and exploration of targeted technological solutions that will help promote future CHP. In addition, NYSERDA should be encouraged to pursue targeted outreach to the industries for which CHP is most suitable (many hospital, office building, college and hotel facilities that have balanced and coincident heating, cooling, and electricity load profiles for sufficient run hours that justify the investment).

Improve Access to Available Public Funding Sources: Given that initial capital costs represent a significant hurdle to CHP development, programs could be developed to improve the access to existing bonding authority from state agencies to provide necessary funding. These include the following:

Bonding Authority from the Dormitory of the State of New York (DASNY): DASNY can borrow funds for cost-effective CHP installations at SUNY campuses, City University, hospitals, libraries, private colleges, and other non-profit organizations. In addition, DASNY could explore the possibility of DASNY financing and ownership of CHP equipment that would be operated by another entity.

Bonding authority from NYPA: NYPA can provide funding for CHP installations at governmental entities throughout New York, at all levels of government. In determining the cost-effectiveness of CHP installations, it may be useful to perform a sensitivity analysis that compares CHP project economics at market prices and at the lower NYPA rates.

CHP Feasibility Study in Large or Publicly Financed Projects: The feasibility of installing CHP should be evaluated when large new or existing building projects are undertaken with public government financing. At a minimum, project developers should be required to complete a summary screen or checklist which contains the inputs necessary to determine the preliminary economic feasibility of including CHP. For projects that look attractive for CHP, a detailed investment grade study should be encouraged. Feasibility should be

considered for (i) large government buildings, whether new or existing, such as prisons, colleges, universities, government office buildings; (ii) new, large private developments (*e.g.*, larger than 350,000 square feet, as recommended in PlaNYC 2030), and (iii) projects involving public subsidies or financing (*e.g.*, Empire State Development Corporation, DASNY).

Address Code-Related Issues to Facilitate CHP Development: While insuring that health and safety issues remain of paramount concern, a number of steps can be taken in building and fire codes to facilitate installation of CHP facilities. These include the following:

CHP-Specific Provisions in Building Codes: Standardized CHP-specific code requirements could be developed for consideration by local governments, so that the process for accommodating CHP installation is consistent and streamlined.

Revise NYC Fire Code: The policies of the New York City Fire Department should be analyzed for possible use of natural gas as the fuel source for emergency generators. The economic feasibility of CHP would be enhanced if the same systems necessary to comply with emergency backup power requirements could be used for CHP.

Revise Electrical Code Requirements: Electrical code requirements impose safety-related restrictions on emergency power systems that often conflict with CHP configurations. These requirements should be identified and analyzed for modifications to CHP systems and Electrical Code Requirements to make them more compatible.

Address Regulatory and Policy Barriers to Customer Wheeling: The ability to serve more than one property with electricity and/or steam from a single CHP system would improve the economic viability of CHP units by allowing CHP installations to be sized to maximize efficiency. Given that there are no major technological barriers to wheeling electricity and steam, regulatory and policy barriers that impede customer wheeling of electricity and steam should be identified and addressed or eliminated.

Members of the CHP Working Group:

James M. Van Nostrand, Pace Energy and Climate Center
Echo Cartwright, Office of the Governor
Ashok Gupta, Natural Resources Defense Council (NRDC)
Donna DeCostanzo, NRDC
Dana Levy, New York State Energy Research and Development Authority
(NYSERDA)
Mark Gundrum, NYSERDA
Jaime Ritchey, NYSERDA
Jodi Smits Anderson, Dormitory Authority of the State of New York (DASNY)
Tom Piwinski, DASNY
Michael Nash, New York Power Authority
Floyd Barwig, New York Public Service Commission
David Bomke, New York Energy Consumers Council
Scott Frank, Jaros Baum & Bolles

NYISO Statement on Environmental Responsibility

The NYISO realizes that the introduction of competition in the electric market will impact the environment. To the extent that competition encourages new power plant construction and in-plant investments to improve efficiency, and displaces the power produced by older facilities that are not equipped with modern air and water pollution equipment or aquatic protection technology, competition can reduce the impact of electricity generation on the environment. Similarly, the use of locational-based marginal cost pricing should encourage more investments in end-use energy efficiency and load control through identification of the geographic areas where such investments are the most cost-effective.

Specific NYISO operations and policies can also impact the extent of and pace at which we see environmental improvement. The NYISO Board of Directors is determined to consider identifiable environmental consequences of NYISO policies and operations and to balance, as reasonably as possible, the risks of harm to the environment against the benefits to be derived from proposed actions.

The NYISO intends to incorporate an environmental perspective on its overall operations and in market development in order to avoid, and change where necessary, policies and practices that unnecessarily and negatively impact environmental quality while maintaining reliability and the fair and non-discriminatory operation of energy markets.

To accomplish this objective, the NYISO will:

- (1) Evaluate and report to its Board, and, where appropriate, to its Management Committee, on those operations and energy market software changes or enhancements, that appear on its “project list,” that have the potential to improve or degrade air quality (and when appropriate, water quality). Where reasonable, and on a case by case basis, the NYISO will implement the most environmentally beneficial approach if reliability and fair energy market administration can be preserved.
- (2) With the input of market participants, assess annually the overall environmental implications of the NYISO’s operation of the bulk power system, including the several energy markets that the NYISO administers on a going forward basis. To the extent feasible, the NYISO will also evaluate the environmental consequences of ISO’s operation of the bulk power system as compared to the cost-based precompetitive New York electric system.
- (3) Prepare an annual report on matters related to its environmental policy.
- (4) Include an environmental audit as part of its routine annual audit plan to ensure its own internal administrative policies and practices enhance the environmental quality of the workplace.