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VIA EMAIL (www.NYSEnergyPlan.ny.gov)

Energy Plan Comments
NYSERDA
17 Columbia Circle
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Re: Comments of Pace Energy and Climate Center on Draft Scope

On May 30, 2008, the State Energy Planning Board issued a working paper setting forth a draft Work Scope ("Scope") for the 2009 New York State Energy Plan,¹ and solicited comments from the public on the draft Scope. Pace Energy and Climate Center (formerly the Pace Energy Project) ("PECC") submits these comments on the draft Scope. PECC participated in the meetings of the Energy Coordinating Working Group ("ECWG") on June __ and June 20. We appreciate the opportunity to meet with the ECWG to express our views, and we offer the following written comments with respect to the draft Scope.

Essential Elements of the State Energy Plan

PECC submits that the following items should be included as essential elements in the development of the State Energy Plan:

- Cost-Effective Energy Efficiency Savings. In meeting any resource deficiency (*i.e.*, a projected gap between supply and demand), top priority must be given to achieving all cost-effective energy efficiency savings and demand reduction programs. The "15 by 15" initiative adopted in April 2007 is a significant effort to implement energy efficiency and conservation in New York, and the Public Service Commission's recent actions in the Energy Efficiency Portfolio Standard (EEPS)

¹ In Executive Order No. 2 issued April 9, 2008, Governor Paterson created a State Energy Planning Board and required the Board to create a State Energy Plan.

proceeding² implement a plan that is designed to enable the PSC-regulated electric utilities to meet their jurisdictional share of a 15 percent reduction in projected electricity usage by 2015. More needs to be done, however. First, the \$13 million dedicated to natural gas efficiency programs in the PSC order is only a preliminary step to development and implementation of a comprehensive plan to obtain all cost-effective reductions in natural gas end use. Second, the “15 by 15” target does not purport to capture the extent of cost-effective energy efficiency available in New York. Energy efficiency and demand reduction programs that emerge from rigorous analysis as the most cost-effective long-term options for New York must be implemented through investments in energy efficiency and demand reduction of a size and scale necessary to reap the benefits of those programs (even though that level of commitment may suggest a multi-billion dollar price tag).

- Renewable Energy. Acquisition of all cost-effective savings from energy efficiency and demand response programs will not be sufficient to meet a resource deficiency. The State Energy Plan should facilitate the development of renewable energy sources, at least to the extent necessary to satisfy the obligations under the state’s Renewable Portfolio Standard (RPS). The ECWG should consider whether New York’s RPS should be revised to adopt more aggressive targets, given the actions by other states in adopting more aggressive targets.
- Minimizing CO₂ Emissions. As discussed below, the State Energy Plan should assume the existence of federal legislation designed to reduce greenhouse gas emissions (such as a cap-and-trade regime currently proposed in the Lieberman – Warner Climate Security Act of 2007 or a carbon tax) and should incorporate reasonable estimates for the costs imposed by such legislation. This analysis will inform the decisions necessary to address the resource deficiency that likely will remain after reflecting (1) achieving the attainable levels of cost-effective energy efficiency and demand reduction, and (2) achieving attainable levels of renewable and clean energy resources. The fuel supply for these “bridging” resources – whether it is natural gas, nuclear, or “clean” coal – must be priced under a cost analysis which assumes the imposition of a significant cost burden on carbon through federal legislation.
- Encouragement of CHP. The ECWG should consider whether New York’s RPS should be revised to include a separate tier with a goal for high-efficiency CHP, to create an RPS-like procurement obligation for utilities, requiring that an increasing percentage of total energy consumption in each utility territory will be served by CHP.³ Such an initiative would simultaneously promote specific beneficial CHP projects, and help align utility incentives with the state’s efficiency and energy

² Case 07-M-0548, *Order Establishing Energy Efficiency Portfolio Standard and Approving Programs*, Issued June 23, 2008.

³ This could be modeled on Connecticut’s “Tier III” program, which adds a separate CHP obligation to the existing RPS.

price goals. The benefits offered by CHP in meeting the state's energy needs – including increased total fuel conversion efficiency, reduced emissions, contributions to disaster resilience, reliability improvements, and avoided T&D investments – are already substantial, and will grow as a substantial price is put on carbon, given the reduction in CO₂ emissions associated with installation of CHP facilities. The State Energy Plan should include a stated goal for development of high-efficiency CHP in New York. The Draft New Jersey Energy Master Plan, for example, includes an objective to foster the development of 1500 MW of new CHP capacity by 2020, through economic and regulatory incentives.⁴ The New York Energy Plan for 2002 failed to include a specific goal for CHP development; the Plan expressed support for “the development and use of distributed generation (DG) and combined heat and power (CHP) technologies at customer sites, with the goal of becoming a national leader in the deployment of clean, distributed generation technology.”⁵ New York is currently far from being a national leader with respect to the number of MWs of installed CHP and, in fact, is not even a leader within the Northeast region. This Energy Plan should move beyond stating “soft” goals – such as “becoming a national leader” – to defining specific targets for deploying CHP and clean DG and a path for achieving them.

- Removing Barriers and Providing Incentives. As part of the state energy planning process, the ECWG should consider the existing barriers that may stand in the way of achieving policy objectives. Greater use of district energy system and micro-grids, for example, would enhance the benefits of CHP and clean Distributed Generation (DG) by facilitating the sizing such facilities in a manner that maximizes efficiency. More widespread deployment of these practices, however, could be thwarted by existing statutory restrictions, regulatory policies or utility practices. Where possible, the ECWG should identify the barriers that obstruct implementation of the Energy Plan objectives, so that the necessary steps can be taken to address these barriers. An example is the disincentive under standard ratemaking practices for utilities to promote energy efficiency which, as the Public Service Commission has recognized, can be addressed through Revenue Decoupling Mechanisms. In addition to removing barriers, the ECWG should consider use of incentive mechanisms to encourage utilities to embrace and promote the objectives from the State Energy Plan. While a properly designed revenue decoupling mechanism may remove the disincentives, it does not provide any economic incentive for utilities to promote conservation. An incentive mechanism that would reward the utility for achieving a defined savings target may be the most effective means of producing the desired result. Similar incentive mechanisms, coupled with an RPS-like procurement obligation, may be appropriate to encourage utilities to facilitate increased penetration of CHP and clean DG.

⁴ Draft New Jersey Energy Master Plan, Issued April 17, 2008, p. 70.

⁵ 2002 New York State Energy Plan, Executive Summary, Item 12 on page S-4.

- Robust and Rigorous Modeling Analyses. Quantitative estimates of alternative energy supply and demand options must form the basis for major state energy policies. The ECWG and the Energy Planning Board must have extensive modeling capability available to inform their analyses under a variety of scenarios. In addition, these analyses should cover a suitable long-term planning horizon; Section 3(b) of Executive Order No. 2 specifies that the applicable term in the case of demand forecasts is “for periods of up to ten years.” A longer-term horizon, such as twenty years, is probably necessary for meaningful analysis of supply-side and demand-side resources.
- Enforceability and Accountability. The State Energy Plan should include strategies for ensuring that this planning process has a serious impact and influence on the involved agencies’ decisions and public and private processes, including consideration of legislation and administrative rules.⁶ Given the time and expenditures devoted to this effort by numerous state agencies and dozens of stakeholders, it is essential that the outcome of this process have some durability and impact in New York’s energy planning decisions.
- Coordination Among Levels of Government on Energy Issues. The State Energy Plan should attempt to incorporate and implement the energy planning efforts from city, county and regional governments. Rather than proceeding on a parallel, unrelated path, the state planning process should reference and adopt, where appropriate, the initiatives from city, county and regional efforts.⁷ PlaNYC, for example, contains eleven energy initiatives, many of which could be considered on an expanded scope as part of the State Energy Plan. Among other initiatives, PlaNYC includes a goal of increasing the amount of DG, by 800 MW by 2030. PlaNYC also includes an initiative to strengthen energy and building codes to support energy efficiency strategies and other environmental goals, including rebates for some green building features, requirements for cool (white) roofs and energy code certification, and more stringent ventilation standards.

Comments on Process

According to the draft Scope, the ECWG plans to address the elements required by Executive Order No. 2 through the development of technical assessments and Issue Briefs. The technical assessments will include energy efficiency, renewable energy, electricity,

⁶ Section 3(n) of Executive Order No. 2 provides that the Energy Plan must include “recommendations for administrative and legislative actions to implement the policies, objectives, and strategies set forth in the Energy Plan.”

⁷ The “Framework” document suggests that the ECWG will consider the “[a]ssessments of intrastate and interstate planning entities,” including the Long Island Power Authority Energy Master Plan and the City of New York. It should be noted that while the Framework indicates the ECWG will “consider” these assessments, the commitment is much stronger in the case of incorporating state planning efforts, where the ECWG commits to “make every effort to tap a complete set of relevant resources . . . to complete the Energy Plan, minimize duplicative efforts, and achieve consistency in the use of analytical data and tools.”

natural gas, petroleum, coal, demand forecasts, and price forecasts. In addition, the draft Scope indicates that the Energy Plan will contain Issue Briefs on “cross-cutting issues” affecting the development, distribution and use of energy in New York. PECC’s comments on various of these Issue Briefs are provided below.

The Schedule for Planning Process included in the Framework does not indicate an opportunity for public comment on the elements of the Energy Plan as they are developed, other than through these comments on the draft Scope. It appears from the Schedule that, following meetings of the Planning Board on August 7, 2008, December 11, 2008, and March 31, 2009, the Draft Plan will be released. PECC assumes that there will be additional ability to comment on the technical assessments and Issue Briefs as they are developed. Most of the substantive work in the development of the Energy Plan will occur between August 2008 and March 2009; public hearings in April and May 2009 and written comments on May 15, 2009 will not provide a meaningful opportunity for comment on the plan as it is developed. PECC encourages the ECWG to provide some opportunity for participation in the review and development of the technical assessments and Issue Briefs prior to the release of the Draft Plan on March 31, 2009.

Comments on Issue Briefs

PECC offers the following additional comments on certain of the identified Issue Briefs, as set forth below:

Energy Infrastructure Needs. Included in this Issue Brief is the consideration of infrastructure additions to deliver wind power to loads. This is an issue of increasing importance given the planned addition of significant wind generation in New York. The issue also raises important policy considerations, given the costs associated with integrating wind generation. At issue is a balancing of traditional cost-of-service principles – which require that the “cost causers bear the costs,” *i.e.*, that wind development requiring the construction of the lines bear the entire costs of its construction – versus the need to stimulate additional wind development in the face of the high costs associated with delivering wind resources over long distances from remote locations to load centers. This tension is exacerbated by potential inequity between cost recovery principles under which the “new” developer pays versus the “rolled in” cost recovery mechanisms that funded the existing transmission system serving fossil and large hydro generation. At the same time, it is not clear that the Energy Planning Board will have a direct ability to address this issue, given the federal ratemaking matters involved in the pricing of transmission services. The Board could, however, take a policy position that would help guide stakeholders in their participation in FERC-related proceedings.

Energy Costs and Economic Development. PECC is interested in a number of issues to be addressed in this particular Issue Brief.

Rate Impacts. Serious attention must be paid to the mechanisms for financing long-term energy investments so that major upfront investment costs are

spread across beneficiaries and through time in an efficient and equitable manner. In its recent order in the Energy Efficiency Portfolio Standard (EEPS) proceeding,⁸ the Public Service Commission acknowledged “great potential value in on-bill financing” inasmuch as “[i]t can eliminate a major barrier to participation in efficiency programs for consumers that lack ready access to capital” and “can, in the long run, reduce reliance on ratepayer-funded programs to achieve the State’s energy efficiency goals.”⁹ The PSC will continue to address implementation issues associated with on-bill financing as part of the EEPS proceeding. As it examines the extent to which energy price affects the economic competitiveness of New York State, the ECWG should be mindful of the opportunities presented by on-bill financing, preferably a tariffed installation program such as Pay-As-You-Save™ (PAYS®), for minimizing rate impacts associated with investment in energy efficiency.

Incentive Programs for NYPA Customers Based on Non-NYPA Rates.

NYPA power provided to state agencies and municipalities serves many policy objectives, but also creates a disincentive for recipients to invest in CHP and other efficiency measures because the relatively inexpensive electric supply reduces the opportunity for savings. Given the cost differential in tariffed rates, the cost-effectiveness analysis for customers served by NYPA differs from that of customers served by investor-owned utilities. In the case of CHP or DG installations, for example, projects that may be cost-effective under IOU-based rates may not be cost-effective under NYPA rates or, alternatively, there may be imperceptible benefits to displacing NYPA power, given the lack of incentives for NYPA-served customers to do so. Yet if examined under a broader, statewide perspective, it would likely be beneficial to make investments that displace NYPA power to enable such power supplies to be re-deployed elsewhere. The ECWG should consider development of programs designed to provide customers served by NYPA with price incentives based on such a statewide analysis. For example, a shared benefit scheme could reward NYPA customers taking action to make more NYPA power available by installing CHP. Such a shared benefit scheme would allow customers to capture some of the benefits of the value provided by reduced consumption of NYPA power as well as the value of CHP.

Job Impacts of Energy Efficiency Investments. In addition to the benefits of investing in cost-effective energy efficiency provided by reducing CO₂ emissions and helping ratepayers reduce their utility bills, investment in energy efficiency would provide substantial economic development benefits. The Apollo Alliance, in a 2004 Published Report, *New Energy for America*, estimated that for every \$1 million invested in energy efficiency in the United States, 21.5 new jobs are created as compared to only 11.5 jobs for investment in new natural gas generation. Other

⁸ Case 07-M-0548, *Order Establishing Energy Efficiency Portfolio Standard and Approving Programs*, Issued June 23, 2008.

⁹ Order at p. 50.

estimates suggest slightly lower job benefits; according to *Greener Pathways: Jobs and Workforce development in the Clean Energy Economy, 2008*, every \$1 million invested in efficiency retrofits generates eight to eleven on-site jobs. A United Nations Environment Programme (UNEP) Report, *Green Jobs, Preliminary Report*, December 21, 2007, states that for every 30 million kWh of energy saved, 40 to 100 jobs are created. With respect to weatherization in particular, the U.S. Department of Energy estimates that, on average, weatherization creates 52 direct jobs and 23 indirect jobs for every \$1 million invested.

Environmental Justice. Long-term health, job, environmental justice and economic impacts of energy alternatives must be thoroughly analyzed and weighed as a part of any serious long-term consideration of energy options. Environmental justice efforts should focus on under-served communities, and should take into account adverse environmental effects that may bear disproportionately on minority and low-income populations. A 2002 Report entitled *Recommendations for the New York State Department of Environmental Conservation Environmental Justice Program* focused on the environmental permit process, and contained a number of recommendations to ensure that DEC's programs are open and responsive to environmental justice concerns. These recommendations could form a logical starting point for the ECWG's analysis of environmental justice issues and the incorporation of these issues in the development of the State Energy Plan.

Meeting Transportation Needs and Alternative Transportation Options. Included in this Issue Brief is the discussion of local, state or regional efforts to reduce vehicle miles traveled. The ECWG should consider the extent to which local governments can achieve reductions in CO₂ emissions through the legal authority delegated to them to regulate land use and building construction. Professor John Nolon, Professor of Law and Counsel to the Land Use Law Center at Pace Law School, is developing a "Land Use Stabilization Wedge," which comprises all the ways the device of land use control can reduce CO₂ and other greenhouse gas emissions. These include (1) shifting development patterns so that less driving occurs, (2) reducing the size of housing units, (3) creating more compact and thermally efficient buildings, (4) reducing the materials consumed in building construction, (5) preserving undisturbed vegetated areas that sequester carbon, and (6) retaining agricultural lands and the production of farm products close to urban centers, further reducing transportation costs. Other elements are issues more commonly included in other portions of the State Energy Plan, such as creating more energy efficient buildings, utilizing more efficient equipment and appliances, permitting and encouraging the use of wind energy generation facilities, and permitting and encouraging the use of solar energy generation facilities. According to Professor Nolon's work, the new paradigm for development under the strategic approach of the Land Use Stabilization Wedge is a more compact, dense, and mixed-use human settlement pattern, one capable of being implemented through coordinated local land use law. This envisions a shift in the dominant pattern of development from single-family, single-use neighborhoods to neighborhoods characterized by smaller homes, clustered and stacked, mixed with service

and retail uses reachable by foot or on bicycle, with nearby schools and recreation, served by transit stops, now or in the future.

Environmental Impact and Regulation of Energy Systems. Included in this Issue Brief is the assessment of the “environmental impacts of energy systems,” including an “inventory of existing and proposed environmental programs and policies that affect the energy sector.” For purposes of this Issue Brief, PECC recommends that all modeling exercises and comparisons of alternatives assume the existence of federal legislation that “puts a price on carbon” through either a cap-and-trade regime such as that currently proposed by Senators Lieberman and Warner in the Climate Security Act of 2007 (S. 2191) or a carbon tax. Specifically, the analyses should assume the impacts of such a program beginning in 2012, and should consider scenarios for a CO₂ price in ranges of \$15 to \$30 per ton. In this regard, the Environmental Protection Agency in March estimated the cost per ton of allowances under a federal cap-and-trade program at \$61 – 83 per ton in 2030, and \$159 – 220 per ton in 2050.¹⁰ For 2015, other estimates cited in the EPA analysis place the forecasted cost per ton at \$29 per ton (ADAGE¹¹) and \$40 per ton (IGEM¹²). Thus, a figure in a range of \$15 to \$30 per ton seems to be a reasonable figure that may be appropriate to be included as an assumed allowance price in 2012 under a “medium” scenario, with a broader range for “high” and “low” prices.

Regional Energy Issues. As part of the modeling activity, analyses should be conducted of ways to improve the efficiency and effectiveness of New York’s competitive wholesale electricity markets, particularly with respect to existing or any subsequently developed capacity markets. An ongoing, significant modeling effort must be developed and maintained that will examine natural gas and electricity supply and demand alternatives; such planning must be embedded in a regional context that eventually involves consideration of the other Northeast States, the regional ISOs and RTOs, and Eastern Canadian Provinces. In addition, there are a number of legal and jurisdictional issues that must be addressed in the development of the State Energy Plan, including providing the proper incentives for energy efficiency and demand response programs in capacity markets. The ECWG should explore mechanisms to facilitate energy efficiency participation in existing capacity markets, perhaps through bilateral contracts or a central registry of eligible projects. The ECWG should also be mindful of the role of the State Energy Plan in the New York ISO’s regulatory backstop process, which would be triggered if new efficiency or market investments fail to meet future reliability needs. The PSC issued an order in December 2007 initiating a collaborative process to develop “recommendations regarding the implementation of NYISO’s regulatory backstop process for near-term (2012-2013) reliability needs.” In particular, the PSC requested suggestions on a process and “decisional standards” that it could use in selecting a preferred regulated

¹⁰ EPA Analysis of the Lieberman-Warner Climate Security Act of 2008, *S. 2191 in 110th Congress*, March 14, 2008.

¹¹ Applied Dynamic Analysis of the Global Economy (Ross, 2007).

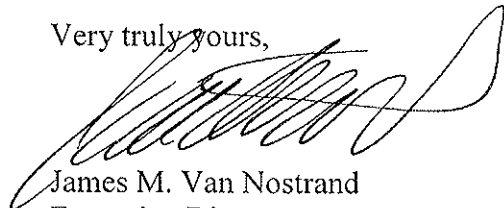
¹² International General Equilibrium Model (Jorgenson, 2007).

project among various potential solutions to a Reliability Need identified by the New York ISO.¹³ In comments filed on June 27, 2008 in that proceeding, the parties referenced the development of state energy policies over time and, specifically, “the public policy goals in the State Energy Plan, which is scheduled to be finalized by June 2009.” It is essential that the Energy Plan assign great weight to environmental considerations, and provide the necessary support for energy efficiency and renewable energy given the extent to which these policies will be incorporated in related proceedings.

Conclusion

The Pace Energy and Climate Center appreciates the opportunity to submit these comments on the draft Scope. We look forward to working with the ECWG and the State Planning Board in the remaining steps to develop the State Energy Plan by June 30, 2009. Questions regarding the foregoing comments should be directed to Jamie Van Nostrand at (914) 422-4082 or jmvannostrand@law.pace.edu.

Very truly yours,



James M. Van Nostrand
Executive Director

¹³ December 24 Order at p. 3. The PSC also requested the development of a long-term (ten to fifteen year) electricity resource plan (ERP) to provide any additional guidance regarding Initiative II issues and to address the “long-term energy policies, goals, and needs of New York.”