**COMMENTS OF CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. AND ORANGE AND ROCKLAND UTILITIES, INC. ON THE DRAFT 2009 NEW YORK STATE ENERGY PLAN**

## INTRODUCTION

Consolidated Edison Company of New York, Inc. ("Con Edison") and Orange and Rockland Utilities, Inc. ("O&R") (collectively, the "Companies") hereby submit these comments on the Draft 2009 New York State Energy Plan (the "Draft Plan"), issued by the State Energy Planning Board in August 2009.[1]

The Companies have supported the State's effort to establish an integrated energy plan that will guide the State's decision-making on energy matters. Con Edison is currently engaged in a similar endeavor to produce integrated long-term plans for its electric, natural gas and steam systems. The Companies appreciate in particular the Draft Plan's comprehensive, thoughtful and professional review of energy use in the State, including detailed computer modeling of the electric and natural gas systems, long-range supply and demand forecasts. A meaningful energy plan must examine all sectors, including transportation because energy issues, especially climate change, involve all areas of the State's economy, and the Draft Plan achieves this. The Companies support the Draft Plan's objectives of assuring reliability, reducing emissions, addressing affordability, and maintaining and improving fuel diversity.

The Companies recommend that a detailed implementation plan – with an opportunity to comment – be issued by the Planning Board prior to finalizing the Draft

[1] By Executive Order, Governor David A. Paterson created the State Energy Planning Board (the "Planning Board") in April 2008 to develop a State Energy Plan to analyze a broad range of matters related to the State's energy systems, including, but not limited to, the reliability of delivery networks for electricity, natural gas and petroleum products and the interrelated effects of New York's production and use of energy on the State's economy, environment and transportation systems. As part of this effort, an Energy Coordinating Working Group was formed to draft an Interim Report, which set forth certain preliminary findings that were intended to "convey a sense of direction for the Plan." (Interim Report at 1-1). The Companies filed comments on the Interim Report.

Plan, which should include clear and specific tasks with milestones. An implementation plan should also prioritize the recommendations in the final Plan.[2]

The Companies provide here a summary overview of our comments. First, the final Plan should draw upon the full potential of utilities (as well as competitive energy market suppliers) to contribute to meeting the State's energy goals. Utilities are significant in-State resources, with significant engineering and energy expertise and a track record of implementing complex initiatives New York should tap into them to advance its energy program. The final Plan should build upon the unique role that utilities can play in the achievement of the energy delivery system reliability, clean energy goals and carbon savings. Utilities play a key role in maintaining reliability and delivering clean energy and encouraging energy efficiency (including implementation of Smart Grid and promotion of Smart Growth) in the State. Energy customers count on utilities for reliable service and advice about energy usage, a relationship which should be the foundation of meeting the State's goals. In particular, enhancing the abilities of utilities to participate in achieving the Plan's clean energy goals facilitates regional equity in achievement of those goals.

Both the Renewable Energy and the Energy Efficiency Assessments, issued in conjunction with the Draft Plan, recognize the economic benefits provided by the State's clean energy programs. Those economic benefits should be shared throughout the State. The New York State Public Service Commission ("PSC") has been moving in that direction by allocating more energy efficiency funds to utilities so that those funds can be directly spent in their service territories.[3] But there has been no parallel action for the

[2] The Companies note that New York City's PlaNYC contains a similar kind of implementation schedule.
[3] PSC Case 07-M-0548, *Order Establishing Energy Efficiency Portfolio Standard and Approving Programs*

State's renewable portfolio standard ("RPS") program and to date virtually all of the funds collected under that program have been spent upstate, without the benefit of a complete cost-effectiveness analysis. The final Plan should call for the PSC to conduct a direct comparison of the cost-effectiveness of utility customer surcharges used to fund energy efficiency and renewable power. Such an analysis should take into account the economic development benefits of such initiatives in order to best determine the use of customer dollars, especially during this economic crisis.

Second, the Draft Plan should have recognized that, to attract the considerable capital dollars required to achieve New York's goal of clean, reliable energy for its citizens, the State must maintain policies that will continue to attract investment. Capital allocation is highly competitive and energy utility companies in particular are capital intensive. But the State's regulatory policies have in recent times been considered to be less attractive to investors than many other States.[4] Investors seek consistent and clear regulatory policies and fair treatment from regulatory authorities. If investors do not believe that a state's regulatory policies are consistent, clear or fair, investors will seek investment opportunities in other jurisdictions, driving up New York's cost of capital, creating the risk of raising insufficient capital, and reducing the State's ability to achieve the objectives laid out for the State's residents and businesses. The final Plan should explicitly recommend the need to provide sufficient returns to utility common equity investors, comparable to returns allowed in other states, and to generally allow for multi-

(June 23, 2008).

[4] Regulatory Research Associates, *Regulatory Focus: State Regulatory Evaluations* (October 8, 2009).

year rate plans that will provide utilities with increased flexibility to achieve the State's goals.[5]

Third, the role of competitive markets in achieving the State's energy goals deserves more exploration and should play a more prominent role in State energy policy in the final Plan. In their Interim Report Comments (p. 7), the Companies urged the State to reaffirm its 2004 Vision Statement for competitive markets,[6] but the Draft Plan does not make such a statement. Competitive electricity markets have provided benefits, but they are still relatively young and must be both supported by state energy policies and vigilantly monitored.[7] The final Plan should also explicitly recommend new approaches to encourage developers to add new capacity resources in a timely fashion, when needed. For example, the adoption of a forward capacity market and the use of market-based methods to determine the cost of new entry used to determine the price for capacity could facilitate longer-term investments. Broader regional markets should also be carefully considered and encouraged based on identification of modifications that will provide benefits to the State's electricity customers.

Fourth, the State should support economy-wide clean energy policies that avoid cross-subsidies between fuels and customers because such cross-subsidies work against the overall public policy goal of providing the correct price signal to all customers. The

[5] The final Plan should also endorse the importance of addressing the utilities' ability to construct regulated generation, including generation needed to achieve public policy like reducing greenhouse gas (GHG) emissions, as recommended by the Companies in their comments on the Interim Plan. *Comments of Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc. on the 2009 New York State Energy Plan Interim Report*, (the "Interim Report Comments") at 16 (May 15, 2009).
[6] Case 00-M-0504, *Statement of Policy on Further Steps Toward Competition in Retail Energy Markets*, at 18 (Aug. 25, 2004).
[7] The FERC's recent decision on the Lake Erie loop flow transactions made clear that it is the NYISO's obligation to ensure that its market design will not allow for inefficient transactions that impose unnecessary costs on customers. *See Federal Energy Regulatory Commission*, 128 FERC ¶ 61,049 (2009).

Draft Plan endorses the movement to time-of-use pricing so that consumers will have appropriate price signals but the final Plan would be enhanced by extending that principle to every aspect of pricing. Accurate price signals that include the environmental impacts for all sources of energy will result in the most cost-effective achievement of the State's clean energy goals. Thus, the final Plan should avoid endorsing: (1) use of Regional Greenhouse Gas Initiative ("RGGI") funds collected from electric customers for other purposes, such as improving the efficiency of home oil-fired furnaces when oil-fired use is not included in RGGI compliance, or addressing general state budget requirements; (2) net metering and other policies[8] that enable on-site generation customers to bypass their actual interconnection costs and impose those costs on other customers; (3) renewable energy programs that fail to consider total costs such as the costs of additional transmission, which would mask total costs and could result in uneconomic projects; and (4) imposition of general taxes and assessments on the energy utility sector separate from other sources of energy or the economy as a whole.

## DISCUSSION

### I. Policy Objectives

The Draft Plan (at xi) sets forth five policy objectives: (1) assure that New York has reliable energy and transportation systems; (2) support energy and transportation systems that enable the State to significantly reduce GHGs, both to do the State's part in

[8] The exemptions for standby rates for certain distributed generation technologies, which have been continually extended beyond their usual expiration date, are another example. *See* New York State Public Service Commission, Case 09-E-0109, *Order Continuing and Modifying In Part the Standby Rate Exemption* (issued May 18, 2009).

responding to the dangers posed by climate change and to position the State to compete in a national and global carbon-constrained economy; (3) address affordability concerns of residents and businesses caused by rising energy bills,[9] and improve the State's economic competitiveness; (4) reduce health and environmental risks associated with the production and use of energy across all sectors; and (5) improve the State's energy independence and fuel diversity by developing in-state energy supply resources.

With respect to the State's efforts to reduce GHG emissions, the Companies propose that policy objective (2) should end with the phrase "by exposing all economic sectors to a GHG price to the extent there is not a federal program that achieves that goal." The Companies take climate change seriously. The Companies have extensive sustainability activities underway and Consolidated Edison, Inc. was recently added to the Dow Jones Sustainability Index. Our carbon disclosure practices are highly rated among our industry peers.[10] And the Companies support providing a carbon price signal to the entire economy. The State should make sure all energy sectors of the economy are exposed to a price for carbon emissions – not just the electricity sector, as RGGI currently does.

The Companies note here that opposing the relicensing of Indian Point takes the State in the wrong direction on climate change and affordability. For example, replacing Indian Point with a natural gas-fired combined cycle plant would increase GHG

[9] It should be noted that while the Draft Plan expresses concerns over "rising" energy bills, most energy bills have fallen over the past year, even in nominal terms, as energy supply prices have decreased significantly.

[10] The Carbon Disclosure Project includes Consolidated Edison, Inc. in its list of top US and international utilities for its carbon disclosure practices. https://www.cdproject.net/en-us/results/pages/leadership-index.aspx.

emissions by approximately seven million tons of $CO_2$ emissions annually.[11] Moreover, replacing Indian Point with a gas-fired plant does not make the site any safer because the on-site storage of nuclear fuel remains. Careful analyses, including review of the environmental and economic impacts of replacement power, and any reliability concerns, must be completed in advance of any decision on Indian Point.

Second, the Companies would modify policy objective (5) to state "Improve the State's energy independence and fuel diversity throughout the State by developing in-state energy supply resources, including energy efficiency." The Companies explain this in more detail below in the section on energy efficiency and renewable power, but will note here that energy efficiency should be considered a form of an in-State resource.[12] Energy efficiency also has substantial potential as a highly cost-effective approach to addressing energy and climate objectives, and the final Plan should place more of an emphasis on all regions of the State benefiting from clean energy investments. The Companies note that a similar debate is occurring at the federal level -- many Northeastern states have objected to the efforts of some to build large wind farms in the Midwest and then connect them to load centers elsewhere via new transmission lines that would be billed to the customers in the load centers.

[11] Committee on Alternatives to Indian Point for Meeting Energy Needs, National Research Council, *Alternatives to the Indian Point Energy Center for Meeting New York Electric Power Needs*, 2006. *See* Table 4-3, page 55.

[12] The Con Edison Targeted DSM Plan evaluation notes that the Company is unique in considering energy efficiency as a resource. Case 07-E-0523, Navigant Consulting, *Evaluation of Targeted Demand Side Management Program, p. 1* (May 8, 2009).

## II. STRATEGIES

The Companies provide here specific comments on the strategies and the resulting recommendations that are proposed in the Draft Plan.[13]

### A. Strategies 1 and 2 – Efficiency and Other In-State Resources

The Companies have consolidated their discussion of these two strategies because they believe, particularly for clean energy – renewable power and energy efficiency – that there should be a consolidated instead of a separate review of these sources. This section then discusses natural gas and transportation efficiency.

#### 1. Renewable Power and Energy Efficiency

The Companies agree with the Draft Plan's statement (at xi) that energy efficiency is the "priority resource" for meeting the State's objectives because it is "the most economical approach to expanding the State's Clean Energy Economy." The Companies support the 15 x 15 goal adopted in the PSC's Energy Efficiency Portfolio proceeding, and applauds the PSC's recent approval of energy efficiency programs and the Con Edison demand response pilot programs.[14] The Companies recognize that the State is moving in the right direction on energy efficiency. Even though it remains unclear if the 15 x 15 goal can be reached, the State is correct to set goals and to encourage everyone in the State to move toward their achievement while at the same time evaluating costs and benefits of such targets, and the progress being made, on an ongoing basis. The Companies note that the Draft Plan adopts as its forecast the base case

[13] The Companies generally support the Draft Plan's recommendations and propose certain modifications and additions here. The Companies' comments on the Draft Plan's recommendations, and the Companies' proposed recommendations, are set forth in Appendix A attached hereto.

[14] PSC Press Release, Cases 09101/08-E-1127, 08-E-1128,08-E-1129, 08-E-1130, 08-E-1133, 08-E-1135, 09-G-0363, & 07-M-0548, *Major Energy Efficiency Programs Approved -- $166 Million Earmarked for Commercial & Industrial Energy Efficiency Effort* (Oct. 15, 2009).

forecast of the New York Independent System Operator ("NYISO") used for its reliability needs assessment, which assumed 27% achievement of the 15x15 goal. (Draft Plan at xix).

The Companies also support the Draft Plan's focus on strong measurement, verification and evaluation ("MV&E") for energy efficiency. Rigorous and transparent MV&E by all providers will also help to demonstrate the degree to which the 15x15 goal is achieved, and has been adopted by the PSC as a necessary component of the recently approved energy efficiency and demand response programs. This will help all planners – including the planners at utilities and the NYISO – to rely more confidently on energy efficiency programs in their forecasts as reductions to demand growth.[15] The Companies have begun to rely on these energy efficiency forecasts in their delivery infrastructure planning, but at this point have to reduce the amount of forecasted demand reductions to reflect the significant uncertainty associated with the penetration and persistence of those forecasts. MV&E should be transparent and accepted and appropriate to the program being measured and used by all program administrators, including State agencies, the New York Power Authority ("NYPA") and the Long Island Power Authority ("LIPA").

The Companies support increased use of renewable energy and the related goal of reducing greenhouse gas emissions. The Companies are concerned, however, that there is at this point insufficient economic analysis to show that the State's existing renewable power program is a cost-effective way to achieve the Draft Plan's environmental goals. The Draft Plan calls for the adoption of an aggressive renewable power goal of 30% of

[15] The Energy Efficiency Portfolio Standard proceeding (Case 07-M-0548) is helping to achieve standardization in the EE MV&E market, but it does not necessarily make sense to measure saving across program with varying goals using the same techniques.

electric energy coming from renewable sources by 2015.[16] The final Plan should rigorously examine whether this is the most cost-effective use of customer surcharges when energy efficiency may be a more effective way to meet the State's wider energy goals.

There should be considerable investment in clean energy as well but that investment should be made prudently.[17] It makes sense to rebalance the mix of resources needed to achieve the State's goals and experience is likely to point to opportunities for improvements. The cost that the Draft Plan states would be required to achieve a 30% renewable electric power goal depends on 100% achievement of the 15 x 15 goal, which is in doubt due to the time it has taken for programs to be approved and, even then, it will be difficult to determine the precise level of achievements until standard MV&E techniques are formally adopted by the PSC. Similarly, achievement of the 30 x 15 renewable energy goal will be difficult, as it requires the State to add almost as much renewable energy in two years (2014 and 2015) as it had previously planned to add in eight years (2005-2013).

New York will continue to make substantial progress in measuring cost effectiveness of its resource options. To make this analysis meaningful requires comparing the cost-effectiveness of energy efficiency and RPS surcharges on an apples-to-apples total cost basis, which has not yet occurred. To date, the PSC has required

[16] Achievement of the incremental 5% renewable energy would require 4,194 MW of new resources staring in 2014. New York State Public Service Commission SAPA Notice No. 03-E-0188SA19, Appendix 1: New York Renewable Portfolio Standard Cost Study Update (issued on October 1, 2009)**.** See page 21, for incremental MW additions required in years 2014 and 2015.

[17] *See Executive Summary, New York Renewable Portfolio Standard Cost Study Update*, La Capra Associates & Sustainable Energy Advantage, LLC. (March 18, 2008), submitted to the PSC for consideration in response to two Notices of Rulemaking: 03-E-0188SA18 and 03-E-0188SA19, published in the New York State Register on October 1, 2008**;** on the cost of achieving "30 by 2015" the study estimates $1.4 billion in payments to new renewables developers.

energy efficiency programs to pass the total resource cost ("TRC") test, which compares the total cost of the measure, the administrator's cost plus the customer cost, to the benefits produced by the measure. The Energy Efficiency Assessment recognizes (at 9) that there is another cost-effectiveness test, the program administrator cost ("PAC") test, which compares only the expenditure of funds by the program administrator to the benefits produced.

Because the customer cost is not considered in the PAC test, it will, all else equal, result in better benefit-cost ratios than the TRC test. For example, as set forth in the Energy Efficiency Assessment, the TRC benefit-cost ratio for the New York State Energy Research and Development Association ("NYSERDA") Energy Smart energy efficiency programs through 2008 was 1.8:1, while the PAC was 5.6:1 (Energy Efficiency Assessment at 9). Neither the PSC to date nor the Draft Plan employs a form of the TRC test for renewable power. The Renewable Energy Assessment uses only a form of the PAC test – comparing the cost of the incentive paid to renewable developers to the benefits achieved from new renewable power facilities – and that does not appear to be as cost effective as energy efficiency spending. *See* Renewable Energy Assessment at 18 (suggesting that the benefit/cost ratio for a 30% RPS goal would be in the range of 0.25 cents/kWh as compared to a cost of 0.10-0.20 cents/kWh, or a ratio of 2.5 to 1.25, as compared to 5.6 for energy efficiency for the incentive only).

Cost-effectiveness is a crucial assessment because the consumer will ultimately be asked to pay for the cost of virtually all these measures, and there is still much to be done in assessing cost-effectiveness. Particularly with respect to renewable power, there are many cost factors that should receive more detailed consideration: (1) the cost of

transmission, which in the case of renewable power can be substantial; (2) the cost of back-up supply that will be needed to maintain reliability while using what for the most part are intermittent renewable energy resources;[18] and (3) the cost of the federal renewable tax credit.

In addition to a thorough evaluation of the relative costs of energy efficiency and renewable power, the State should consider the issue of geographic equity. Both renewable energy and energy efficiency provide economic development benefits, and regional equity in provision of those benefits should be part of any overall program evaluation.[19] Particularly with respect to renewable power, there has been significant regional disparity. All of the large new renewable facilities paid for by utility customers have been constructed in the upstate region. In the downstate region, RPS payments have funded much smaller, customer-sited resources like solar energy.[20]

The Companies propose that the best way for the State to maximize both regional equity and cost-effectiveness would be to direct a significant share of available renewable energy and energy efficiency customer surcharge funds to the local utility and to allow the utility to propose the most cost-effective way to spend those funds, which could be either energy efficiency or renewable power. For example, Con Edison notes in particular that it believes that there are valuable energy efficiency programs that it could deploy in its service territory for residential customers if it were not subject to the rule

[18] Generally, as recognized by the Draft Plan, for intermittent resources such as solar and wind, conventional generation resources may "need to be available to reliably integrate variable generation resources into the bulk power system." (Renewable Energy Assessment at 4).
[19] This mirrors the debate over whether the federal government should be encouraging renewable power that is distant to load centers**.**
[20] Summit Blue Consulting, LLC, *New York Renewable Portfolio Standard Market Conditions Assessment*, pp. S-8 and S-9.

that the PSC has applied to date -- that the TRC ratio for an energy efficiency program should be 2:1 -- when such a ratio has never been applied to the RPS program.[21]

Another way for the State to improve regional equity would be to modify the RPS rules to place more value on local renewable power in the downstate area in recognition of the economic development benefits provided by local projects in addition to the emissions reductions, through the displacement of local fossil-fueled resources, that are more critical in non-attainment areas like New York City. This could be effectively achieved by creating a two-region (upstate and downstate) RPS goal, with a portion of the RPS goal allocated to each region based on that region's funding of RPS.[22]

Con Edison has been taking a lead role in advancing the assessment of the offshore wind resource. Con Edison, with its partners including LIPA, is seeking to determine the feasibility of wind power for the downstate area through its advancement of The Long Island – New York City Offshore Wind Project.[23] Con Edison is also interested in taking on a specific role to facilitate the development of solar resources in the State, and the State should consider making resources available to utilities in this regard.

There has been concern that allowing utilities to build renewable generation may expose utility customers to added risks or damage the competitive markets. However,

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[21] Another difficulty is having a specific renewable power goal when achievement of that goal is heavily dependent on wind and hydroelectric power, and the amount of power produced by both of those kinds of facilities is heavily dependent on wind and rainfall. *See* Renewable Energy Assessment at 7 ("the percentage of New York's electricity requirement met by renewable resources can fluctuate year to year due to factors such as weather, economic conditions, and energy prices.").

[22] PSC Case 03-E-0188, Modification of RPS Tier Allocation, et al., Comments filed by City of New York (Nov. 17, 2008), *passim*. Alternatively, the PSC could modify the current NYSERDA formula for evaluating RFP bids to encourage renewables throughout the State. The present formula evaluates projects by weighting 70% of the bid price of the REC and 30% of the economic development benefit. For a downstate project, this could be changed to 50% for the bid price of a REC with 30% for the economic development benefit and 20% for the value of local emission reductions (NOx and particulates).

[23] Con Edison's Solar Pilot (Case 09-M-0303) is on hold due to economic conditions; allowing RPS participation by utilities could allow this pilot to move forward.

New York may be alone in extending this concern, to its detriment. Other states and federal regulators recognize that energy utilities bring substantial advantages to the market, including expertise, and utility participation in bringing renewables to market is happening in other regions. In New York, utility affiliates have actively participated in the energy markets without prejudice to utility customers. The Companies believe that utility-built renewable generation in New York can effectively help meet public policy goals without harming the competitive markets or exposing utility customers to additional costs.[24]

Finally, the Draft Plan also suggests on-bill financing by utilities to reduce the financial barrier of paying for energy efficiency upgrades. The competitive markets already provide financing to facilitate customer energy efficiency efforts. Utilities believe that the State should support development of competitive markets for efficiency financing and not risk the substantial customer confusion that could result from a mixed mission (*e.g.*, banking-utility-home financing competitor mission) on the part of a utility. The Companies support deployment of utilities to achieve the Plan's goals because of their unique expertise and characteristics, but that expertise does not include taking on bank functions that can involve compliance with federal or state laws related to the extension of credit or debt collection under any of the various scenarios involving on-bill financing. In addition, mandatory on-bill financing could result in higher costs for utility customers due to increases in capital costs experienced to develop systems to support on-

[24] Case 07-M-0906, Joint Petition of Iberdrola, S.A., et al. for Approval of the Acquisition of Energy East Corporation by Iberdrola, S.A., *Order Authorizing Acquisition Subject to Conditions* (Jan.6, 2009), pp.78-85, 95-100.

bill financing and in utility administration and collections efforts. [25] As noted in the EEPS Working Group VI, On-Bill Financing Final Report, the program would involve: additional customer service staffing to administer day to day operations of on-bill financing including but not limited to handling customer, lender, and contractor calls regarding energy efficiency loans administered under the on-bill repayment mechanism; on-going program maintenance costs based on experience gained or external factors such as changes in customer outreach and education, system modifications, and changes associated with lenders or contractors; staffing to oversee the operation of the utility systems supporting the on-bill financing mechanism; transaction fees associated with required Uniform Commercial Code ("UCC") filings (used to establish security interests); costs associated with obtaining necessary credit reports; and where certification of energy savings is required, costs associated with such certification; and others.

**2. Natural Gas**

The Draft Plan **(**at 60**)** states that demand for natural gas will increase over the 10-year planning period and that, due to availability of Marcellus Shale gas, the State's natural gas production will increase significantly (pp. 49-50). New techniques to extract natural gas from shale have increased the nation's supply and reserves of natural gas, and the expanded supply and reserves expected to reduce price volatility. Furthermore, a larger supply of natural gas sourced close to our area, extracted in an environmentally

[25] State of New York Public Service Commission, Case 07-M-0548, *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard (EEPS) Working Group VI – On-Bill Financing* (December 19, 2008).

safe manner, would support the overall reliability of the natural gas delivery system as gas demand increases.

Accordingly, oil to gas conversions – particularly in non-attainment areas such as New York City – can be further encouraged and would provide major environmental benefits and GHG reductions.[26] New York City,[27] the State and Con Edison should work together on a plan to advance reductions in liquid fuel combustion for heating in the City.

Increased natural gas demand, which would be augmented by a plan to speed oil to gas conversions, will require additional natural gas infrastructure. The State can point to a relatively positive record on siting pipeline infrastructure, although the State should provide greater clarity to the marketplace on how it plans to use its delegated authority under the Coastal Zone Management Act. 16 U.S.C.A. § 1451 et seq. The Companies support the Draft Plan's acknowledgement of the need for more New York City delivery options (Natural Gas Assessment at 38). Additional New York City delivery points for the interstate pipelines will enhance reliability, provide greater access to developing sources of natural gas and mitigate price volatility, with benefits for both natural gas and electric customers. Con Edison notes that, in addition to subscribing to new capacity on the interstate pipelines when needed to support customer growth, it has also undertaken significant new infrastructure projects in its own service territory to expand the Con

[26] A recent study shows that conversion of home heating equipment from oil to natural gas could eliminate 8 million tons of CO2 annually in the Northeast. U.S. Greenhouse Gas Abatement Mapping Initiative, *Reducing U.S. Greenhouse Gas Emissions: How Much at What Cost?*, December 2007, p. 38.

[27] PlaNYC advocates the use of cleaner burning heating fuels, such as natural gas, as a strategy to reduce the negative impact of combustion-related emissions in New York City. The City of New York, *PlaNYC: A Greener, Greater New York*, 2007 (p. 127).

Edison natural gas transmission system. The final Plan should also reinforce the need to build new natural gas infrastructure, including new pipelines into the downstate region.[28]

Oil to steam conversion also provides benefits. The Con Edison steam system is already largely fueled by natural gas and the Company is planning for full gas burning capability on the balance of its production units that have partial natural gas firing capability or no natural gas firing capability.

**3. Transportation and Smart Growth**

The Companies support Smart Growth, both in our existing densely-populated urban footprint and in our suburban areas. The Companies agree that the State should seek ways to expand transportation capacity while minimizing impact on the environment and reducing dependence on foreign oil.[29] The Draft Plan appropriately encourages replication of transit-oriented development and higher-density living in our State, but should acknowledge that investment will be required to increase the availability of public transportation.

Con Edison notes that encouraging transit development in the downstate area will stimulate economic development in the New York City area and provide environmental benefits. Transit benefits the environment, both because transit produces less carbon dioxide than other forms of transportation and because the availability of transit facilitates Smart Growth – *i.e.*, high density development with reduced environmental impacts.[30] As PlaNYC observes (at 135):

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[28] The Draft Plan calls for new natural gas pipelines to access the Marcellus Shale gas, but the Planning Board should more explicitly recognize downstate needs in the final Plan.

[29] The Draft Plan (at xi) also appropriately recognizes that it is primarily efficiency in the transportation sector that will reduce dependence on foreign oil.

[30] For carbon footprint information, *see, e.g.*, http://www.sightline.org/maps/charts/climate-CO2byMode. For the connection between transit and Smart Growth, see "The Broader Connection between

> On average, each New Yorker generates 7.1 metric tons of CO2e, compared to 24.5 metric tons from an average American lifestyle. That means that making the city a more appealing place to live—through affordable housing, easily accessible parks, or cleaner air and waterways—radically reduces environmental impacts.
>
> And by investing in the maintenance of the infrastructure that supports urban life—the water system, the roadways, the subways, and our power grid—we ensure that this efficient lifestyle can continue to be sustained for generations.

The State should move forward with projects aimed at encouraging Smart Growth combined with new public transportation to serve underserved areas. For example, Orange and Rockland counties are underserved by rail into New York City; the State should move forward on developing a new rail connection between those counties and New York City. Moreover, the Metropolitan Transportation Authority ("MTA") and the Regional Plan Association have identified a number of other projects that would improve service in underserved areas in New York City area.[31] Con Edison would welcome the opportunity to work with the State of New York and the MTA to advance these options.

**B. Strategy 3 -- Reliability – Invest in Infrastructure**

The Companies support the Draft Plan's recognition of the importance of reliability as a foundation for economic competitiveness and growth and sustainability. In particular, the Draft Plan correctly states that "New York's massive energy and transportation infrastructure is in constant need of maintenance and repair to keep the State from backsliding on its high standards of infrastructure reliability." The final Plan should address a vital component of grid reliability —capital attraction.

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Public Transportation, Energy Conservation and Greenhouse Gas Reduction," American Public Transit Association, February 2008.

[31] State of the MTA Address, March 2008. "Tomorrow's Transit: New Mobility for the Region's Urban Core," Regional Plan Association, October 2008.

Capital attraction is critical to the State's goals of clean reliable energy. Cost-effective Smart Grid initiatives, transmission initiatives, renewable energy and efficiency and new technology all require substantial capital. The final Plan should more explicitly address the investment climate faced by utilities that are seeking to raise capital to meet their obligation to maintain reliability by including a recommendation that promotes consistent, clear regulatory policies that support fair treatment of investors to meet the goals laid out for the State's residents and businesses. Utility regulatory policies -- such as sufficient allowed returns on capital investment competitive with those allowed by other state regulatory authorities and pursuit of policies to encourage setting energy utility rates based upon a multi-year framework -- are policies that would increase New York's standing in highly competitive capital markets.

In addition, the State's transmission owning utilities are actively considering improvements to the State's electricity infrastructure by examining long-term transmission issues. Their State transmission assessment and reliability study ("STARS") looks at the long term need for future transmission under different generation scenarios, including increased development of renewable power facilities. This work, when completed, will recommend where new transmission makes sense, taking into account likely new generation. The STARS initiative will seek to move the State's transmission system forward; thus, the condition of infrastructure, rather than its age, will drive the need to replace transmission. The STARS initiative is also investigating maximizing existing rights-of-way for use in transmission upgrades, as recommended in the Draft Plan (pp. 59-60).[32]

[32] The State should also allow the *effective* unbundling of electric transmission and distribution rates. Transmission enhancements have numerous potential benefits to the public.

The Draft Plan's recognition that siting infrastructure in the State is a challenge is accurate. But it can be done. For example, from 2000 to 2004, there were agreements with generation developers, approved by the State Siting Board, which provided for the construction of approximately 2,000 MW of new combined-cycle natural gas generation, notwithstanding the City's reputation as a place where it is difficult to get major infrastructure projects done.[33] For this new generation, Article X worked in terms of allowing for the construction of new clean natural gas generation while accommodating community concerns (it should be noted that these plants emit less pollution than "clean DG").[34] The Draft Plan (at 54-55) appropriately calls for the reenactment of Article X without significant modifications.

Finally, with respect to New York City reliability, the final Plan would be enhanced by explicitly recognizing that meeting summer electric cooling demands with steam-powered air conditioning provides valuable reliability benefits by shifting demands on the electric system to the seasonally under-utilized steam system. The State should maintain existing cost allocation schemes between steam and electric in recognition of this valuable benefit**.** Steam air conditioning relieves pressure on the electric system during peak summer hours, and the State should support the steam system through additional incentives for steam air conditioning

### C. Strategy 4 - Stimulate Innovation in the Clean Energy Economy – Encourage Competition

[33] Notably, the City has recently released a study that preliminarily found that building new combined-cycle natural gas generation in the City would be one of the most cost-effective ways to provide the City with new clean energy supply. CRA International, *A Master Electrical Transmission Plan for New York City*, May 28, 2009.

[34] As an example comparing a repowered natural gas fired plant with "clean" DG, the Con Edison East River Cogeneration NOx emissions are approximately 0.075 lb/MWh, well below that of the lowest emitting DG at 0.5lb/MWh.

The Draft Plan (at 64) emphasizes the role that government can play in stimulating the new economy. But the role that competitive energy markets have played and can continue to play cannot be ignored. Competitive markets have provided benefits to the State's energy system in the past and should continue to be relied on in the future. Wholesale energy markets must also continue to innovate to further the move toward the clean energy economy. First, the NYISO should move more aggressively to a forward capacity market to be in place significantly in advance of when the State may have new reliability needs.[35] An effective forward market would more effectively encourage generation developers to build new units when needed by providing more certainty of revenues over some period of time, and allow the developers the time to finance and build those units, supported by the commitment of a successful bid in the forward market. The NYISO has postponed consideration of a forward capacity market due to the absence of any reliability needs, but the final Plan should require this kind of market to be available when needs change. Second, the demand curve construct used to price capacity should be reconsidered, or in the alternative should accommodate demand response or energy efficiency and other forms of capacity as a possible way to set the price of new entry. In addition, the final Plan should encourage assessment of broader regional markets and call for a plan to move ahead with such changes if they make sense for customers.[36]

On alternative transportation, initiatives to introduce electric and plug-in hybrid electric vehicles are accelerating. The guiding principle should be to reduce vehicle

[35] The Brattle Group, *Cost-Benefit Analysis of Replacing the NYISO's Existing ICAP Market with a Forward Capacity Market* (June 15, 2009).
[36] The recent bid of the Eastern Interconnection Planning Collaborative to the federal Department of Energy provides a good start to considering these interconnection-wide issues.

emissions cost effectively, not to pick technology "winners." Accordingly, the State should focus on removing barriers to adoption of new transportation technologies. Compressed natural gas ("CNG") vehicles could provide immediate benefits, especially CNG buses, but the residential CNG market in the State is languishing because there is no distributor for residential CNG delivery systems in the State. State rebates for this type of residential appliance could jump-start that market. Plug-in hybrid electric vehicles ("PHEVs") and electric vehicles ("EVs") face challenges, including charging time, parking, infrastructure impact and integration into Smart Grid. Finally, the State should use a "full life cycle" approach to evaluating emissions impacts of transportation technologies, including for bio-fuels.

**III. Affordability and Economic Development**

The Draft Plan (at 4) states that "New York's relatively high energy prices are attributable to the State's . . . relatively low dependence on coal which is a lesser expensive fuel, electricity system constraints, natural gas and petroleum product transmission and pipeline system constraints, the State's geographic location away from major supplies of energy, and State and local taxes and fees."[37] The Companies also note that New York, particularly in the downstate load center, benefits from low energy usage. Unit costs, driven by high energy prices and taxes and fees, are high, but total bills are not.

With respect to taxes and fees, while the Draft Plan recognizes that State and local taxes and fees contribute to high energy costs (at 4), there are no recommendations on

[37] The Companies wholly agree that New York's energy prices are affected by its lesser reliance on coal; the Companies note, however, that competitive markets are based upon marginal energy costs. Energy prices are substantially affected by the costs of the marginal fuel and less so by the costs of the inframarginal fuel like coal.

this and the Final Plan should include one. Energy taxes and fees are a regressive form of tax policy as burden falls disproportionately on those who can least afford it. They also penalize large industrial and commercial customers for locating their businesses in the State. Finally, they also serve to distort the economic signal to consumers regarding the true cost of their energy consumption, and may encourage customers with fuel-switching capability to make non-economic choices by switching to forms of energy that are not subject to these taxes and fees, such as petroleum-based fuels. One of the most effective policies the State could adopt is to seek to reduce energy costs overall by reducing taxes and fees collected via utility bills.[38]

In particular, the final Plan should reconsider recent revenue enhancement actions undertaken by the State and local municipalities that use utility bills as a substitute for collecting general purpose taxes.[39] Specifically, the recent six-fold increase in the Section 18a assessment, property tax increases focused solely on utility property, and substantially higher permit fees for doing work in certain municipalities in the Companies' service territories have resulted in substantial increases in energy costs to residents and businesses. The increased permit fees and Section 18a assessments, originally intended to recover the costs of regulating and inspecting utility work, go far beyond what is reasonably necessary to monitor utility activities and serve as hidden taxes on residents and businesses.

Moreover, with respect to affordability, the final Plan should emphasize the need for reform of those laws and regulations that have increased costs to consumers. Governor

[38] *See* Appendix B for details on the taxes and fees collected from Con Edison customers as a proportion of the total bill, which shows that the actual cost of delivery is less than one-third of the total bill.
[39] The Companies also oppose any proposal to use RGGI funds, which are collected from electric customers, for general budget balancing purposes by the State.

David Paterson's recent Executive Order Number 25 directing State agencies to pursue regulatory reforms is a step in the right direction.[40] State agencies adopt regulations to address concerns about specific matters. There is inadequate effort to revisit regulations with an eye to repealing or modifying regulations. Because regulations add costs to business in New York, the State needs to pursue regulatory reform to see that regulations that do not "add value" to the State are repealed.

For example, the restriction against joint bidding by New York City and Con Edison for municipal roadway projects, which effectively prevents the City and Con Edison from obtaining the least cost for municipal infrastructure work, increases significantly and unnecessarily the cost for such work, which cost is then passed on to utility customers. Current State law permits joint bidding in some areas in New York City, and there is no reason to preclude joint bidding generally. The final Plan should explore increased use of mechanisms that could be used to reduce costs.[41]

Over the long term, reducing customer utility bill surcharges to support public policy goals should also be a goal. The final Plan should call for the PSC to examine strategies for the reduction or phasing out of customer utility bill surcharges to fund energy efficiency and renewable power programs and to make those programs more market-based where appropriate. For example, the PSC could examine having utilities and NYSERDA fully or partially exit energy efficiency market segments where efficiencies can be achieved more efficiently through codes and standards and/or could be achieved by the competitive markets without bill surcharges.

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[40] Executive Order Number 25, *Establishing a Regulatory Review and Reform Program* (August 6, 2009).
[41] One example is that utilities are currently ineligible for NYSERDA tax-exempt financing because their credit ratings are too low. It is a sign of the State needing to be more strategic when leading utilities do not have the financial strength, due to regulation, to access desirable State-sponsored financing programs.

There should be a concern that the current regulatory strategies for achieving utility delivery rate affordability (*e.g.*, prolonged capital recovery and mandated austerity measures) may ultimately result in substandard utility service. The State has surgical tools to meet the needs of those who do need relief such as low income rate mechanisms, tools which are superior to blunt instruments used recently to keep energy prices low. Beyond the Companies' preference for precision to address a particular problem, the Companies believe that affordability should be addressed in the context of development and support of robust economic development policies with the goal of creating a "bigger pie" for all of New York and thereby to increase income. The Draft Plan recognizes the benefits of economic development by, among other things, supporting "business incubator" programs and the need for a strong transportation and energy infrastructure. [42]

[42] The utility role in economic development should also be acknowledged. This role could be recognized in the form of revenue decoupling mechanisms adopted in rate proceedings. See the Companies' Interim Report Comments, at p. 13. Moreover, with respect to Green Jobs, utilities provide entry level jobs for many people too, and fostering Smart Grid will increase job opportunities. Because of the significant new training that will be required for workers to effectively manage the Smart Grid, the United States Department of Energy (the "DOE") recently issued a funding opportunity for approximately $100 million in assistance for worker training. Con Edison plans to actively pursue a training grant from the DOE.

## CONCLUSION

The Companies appreciate the opportunity to provide these comments on the Draft Plan and look forward to continue working with the State to meet its laudable goal of moving toward a sustainable clean energy economy that will further economic growth.

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# APPENDIX A

## Recommendations Appendix

### The Companies' Proposed Recommendations

***Recommendation***. New York's energy utilities are major employers and taxpayers with substantial experience and expertise in energy matters, and are companies that are committed to the future success of the State and have a vital interest in the State's long term success. The energy utilities are a significant State resource that the State should look to for help in meeting energy challenges.

***Recommendation.*** The PSC should establish consistent and clear regulatory policies that provide fair treatment to investors so that utilities can continue to meet the State's goals for its residents and businesses. Allowed rates of returns in utility rate cases should be comparable to returns earned by business of comparable risk, including returns allowed utility companies in other states. The PSC should seek to align customer and investor interests through incentive regulation including regulatory policies to encourage establishment of rate plans covering extended periods, providing incentives for utilities to achieve long-term efficiency of operations and opportunities for utilities to achieve reasonable returns on investment.

***Recommendation.*** Competitive markets have helped to achieve State goals and the State should continue to seek to use competitive solutions where possible. Efforts to improve the markets so that they produce competitive market results should be continued. Competitive structures and principles should be employed where practicable in the state's initiatives, including programs to encourage broader regional markets that can provide benefits to customers in the State, the use of forward capacity markets to facilitate the construction of new generation capacity and market-based methods for determining the cost of new entry to address affordability of capacity prices.

***Recommendation.*** The State should improve coordination of State clean energy funds (SBC, RPS, RGGI) so that they are used in a cost-effective manner that promotes regional equity. In addition, strategies for reducing customer surcharges and making long-term changes in customer behavior should be considered. Clean energy funds that come from assessments on energy customers should not be diverted to other purposes but remain devoted to clean energy.

***Recommendation.*** Utilities and/or utility affiliates should be afforded an increased and meaningful role in the supply of clean energy resources, including new clean efficient generation, and State policies clarified to allow for such a role to help the State reach its aggressive clean energy goals.

***Recommendation.*** The State should acknowledge the value that the steam system provides to the New York City metropolitan area and recommend continuation of the cost allocation methodologies that have helped to maintain the viability of the system.

***Recommendation.*** The RGGI program should be expanded to cover all sectors, including transportation, recognizing that RGGI should be terminated if a federal cap-and-trade program is adopted.

## COMPANIES' COMMENTS ON SPECIFIC RECOMMENDATIONS CONTAINED IN THE DRAFT PLAN

***Recommendation.*** *All State agencies and authorities and utilities that administer energy efficiency programs must consistently measure and report results of efficiency programs, including energy savings, peak demand reductions, and load shifting, using similar techniques, metrics, and reporting formats. Agencies and Authorities must use those results to optimize program support going forward. Program results should be summarized and made available to the public on an annual basis.*

Companies Position: Support. The measurement and reporting methodologies must be fully transparent and apply to all of the State's program administrators in order to maintain standardization across the State. The institution of various market sector technical manuals and common reporting elements through the New York State Evaluation Advisory Group will guide in this effort.

***Recommendation.*** *The State needs to maintain efforts that mitigate short-term impacts of rising energy costs on New York's low income populations caused by implementation of public policy driven programs.*

Companies Position: Support. The PSC should carefully evaluate the cost of all public policy programs on behalf of all customers. The State should also continue to seek to identify regulatory reforms that can reduce utility costs without adverse effects on the public.

***Recommendation.*** *The State should amend Article 11 of the Energy Law to: (1) provide that the Energy Code applies to renovations of residential buildings and commercial buildings to the same extent that the 2009 IECC and the 2007 ASHRAE 90.1, respectively, apply to such renovations, (2) clarify that historic buildings, rather than historic properties, are exempt, (3) eliminate the 10-year payback requirement, and (4) require the State Fire Prevention and Building Code Council (the Code Council) to amend the Energy Code so that it equals or exceeds the 2009 IECC for residential buildings and equals or exceeds the 2007 ASHRAE 90.1 for commercial buildings.*

Companies Position: Support.

***Recommendation.*** *DOS should provide regular updates to the Energy Code in response to updates to the IECC for residential buildings and ASHRAE 90.1 for commercial buildings.*

Companies Position: Support.

***Recommendation***. *DOS, in consultation with NYSERDA, should follow through on the implementation of the Code compliance plan required by ARRA, including Code training and enhanced Code enforcement resources*.

Companies Position: Support.

***Recommendation.*** *The State should enact energy efficiency standards for products for which the federal government does not preempt states.*

Companies Position: Support, while recognizing that the first choice should be federal standards. The State must be aware of the need to maintain New York's overall economic competitiveness and avoid imposition of regulatory requirements that will raise the cost of business in New York and put New York companies at a competitive disadvantage.

***Recommendation.*** *Assure that efficiency outreach, educational and marketing efforts conducted by State agencies and authority administrators and utilities reflect best practices in terms of design and delivery, are geared to diverse audiences, and are provided in languages other than English.*

Companies Position: Support. The State should measure the effectiveness of its outreach and education efforts, and how this message is delivered so that it clearly addresses the multitude of efficiency opportunities that are now available to customers. The State should partner with utilities in this area and utilize existing channels of communication that are already available to mitigate cost. Utility customers look to utilities to provide unbiased advice and trust utilities to do so.

***Recommendation.*** *Targeted outreach should be used to deliver energy efficiency programs and services to commercial and industrial customers, residential and low income communities, to improve program performance and reduce administrative costs. Education, outreach and marketing for energy programs should be tailored, e.g., foreign language advertising, to target vulnerable populations and potential environmental justice areas.*

Companies Position: Support. Should be done in partnership with utilities, which can coordinate with NYSERDA to utilizing existing channels of customer communication to mitigate costs.

***Recommendation.*** *The State should amend the Truth in Heating law to ensure that prospective purchasers of residential and commercial buildings, as well as lessees responsible for payment of utility bills, are provided relevant information regarding the key energy efficiency attributes of the building.*

Companies Position: Limited Support. Measures implementing this initiative can advance energy efficiency but it is very important that such measures recognize

the practical challenges in collecting this data and the potential limited usefulness of data to consumers and possible privacy concerns, which means that the data should come from the customers themselves.

***Recommendation.*** *The State, in cooperation with New York City and other large municipalities, should implement energy-use benchmarking programs under which a building's energy use indexed against comparable buildings is publicly disclosed. This requirement should cover at least commercial office buildings and should include a report on the opportunities for energy savings, costs of achieving such savings, and impacts on property values and the local tax base.*

Companies Position: Limited Support. Measures implementing this initiative should recognize the limited usefulness of such data and potential concerns regarding proprietary business information, which means that the data should be provided by the customers themselves. Challenges in collecting this data make it likely to provide little value to consumers. Providing comparable building data in a diverse urban area such as New York City results in significant challenges that may be difficult to overcome. A better program would require detailed energy audits with subsequent implementation plans and ongoing monitoring of progress against those plans. A policy that would encourage implementing efficiency measures and lowering operating costs would help create a premium in the market for rents in the buildings undertaking such improvements and keep these efforts in the competitive market.

***Recommendation.*** *The State should identify and implement alternative financing programs to fund energy efficiency projects, exploring all available innovative financing mechanisms, including use of a performance management approach where the beneficiary of the efficiency services repays the lender from energy savings for money loaned. Private and other governmental sources of funding should be explored.*

Companies Position: Support. The State must not mandate on-bill financing by utilities. On-bill financing for energy efficiency should be optional; there are many third party providers of such financing who are already serving this market. Using already designated public benefits ("SBC") funds does not expand the capital pool for efficiency, a typical important goal of financing. Only capital from outside does that and such capital is then better lent and collected by those in the business to evaluate lending risk.

***Recommendation.*** *Amend Executive Order No. 111, which places requirements on State agencies pertaining to energy efficiency and renewable energy, to ensure efficient and consistent administration and measurement of savings.*

Companies Position: Support. First determine whether competitive service providers can provide this service (the federal government provides a model here). The State should ensure the transparency of its methodologies so others can rely on its achievements.

***Recommendation.*** *Encourage agencies to work with NYPA to take advantage of its efficiency financing programs in order to meet the goals of Executive Order No. 111.*

Companies Position: Support. The State should ensure the transparency of its methodologies so others can rely on their achievements; NYPA should make forecast of savings available to the utilities and NYISO and LIPA should make a forecast of savings available to the NYISO.

***Recommendation.*** *NYPA and LIPA should take the necessary action, including funding decisions consistent with their adoption of "15 by 15" initiative, to ensure they are contributing appropriately to the State's clean energy goals.*

Companies Position: Support. The State should require transparency of its methodologies so NYPA and LIPA achievements are clearly known and measured in the same way. NYPA should make forecast of savings available to the utilities and NYISO.

***Recommendation.*** *The State should expand green transportation choices to users of the transportation system (residents and businesses). This includes enhanced public transportation service and carpooling/ride-matching services for commuters and intercity rail, as well as waterborne services, for shippers. In this way, the State will help meet the statewide goal of reducing VMT 10 percent below projected levels by 2020.*

Companies Position: Support. The Companies note that the transportation sector using liquid fuels is not currently exposed to cost of carbon, yet contributes substantially to the emissions of greenhouse gases.

***Recommendation.*** *All State agencies should consider transportation choices, energy use, energy conservation, and climate change as part of their State Environmental Quality Review Act (SEQRA) reviews when they are lead agencies. Transportation Plans and Transportation Improvement Programs (TIPs) should embrace smart growth and GHG emission reductions as key principles.*

Companies Position: Support.

***Recommendation.*** *The State should support changes in federal surface transportation funding that encourages energy efficiency and GHG reductions.*

Companies Position: Support.

***Recommendation.*** *The State should work with the federal government to strengthen the recently proposed CAFE standards to standards that require greater fuel economy but are technologically and economically feasible. The State should support efforts to develop and promulgate fuel economy standards for heavy duty on-road vehicles.*

Companies Position: Support.

***Recommendation.*** *The State should aggressively pursue cost-effective approaches and technologies that facilitate demand response to achieve reliability and other public policy objectives.*

Companies Position: Support. The PSC recently moved to approve Con Edison's demand response filing, a step that can be expected to help move such initiatives forward.

***Recommendation.*** *Consistent with addressing cyber-security and physical security risks, the State supports the ongoing efforts of the Smart Grid Consortium to identify opportunities for accelerating advancements and investments in Smart Grid technologies; greater use of distributed resources; advanced meters and pricing mechanisms; and leveraging of federal ARRA Smart Grid funding to support greater system reliability and efficiency, and to reduce electricity costs to customers.*

Companies Position: Support. Con Edison is a member of the consortium, which will help to develop technology to accommodate distributed renewables and empower customers with new information. The Companies appreciate the State's efforts at promoting cost-effective Smart Grid. The PSC's recent approval of utility Smart Grid proposals will provide environmental benefits and enhance customer choice. It will also help to reduce costs now and over the long run.

***Recommendation.*** *PSC should be authorized to require that electricity be priced on a time of use basis for all customers, upon a finding that it is in the public interest to do so. Issues that should be considered in making that determination include: the practical hardships and difficulties related to implementing time of use rates for residential customers, and possible means to mitigate any such hardships; and alternative rate regimes, based on voluntary participation of residential customers.*

Companies Position: Support. The Companies would add small commercial customers here with respect to the difficulties of implementing time-of-use rates.

***Recommendation.*** *The State should broaden the installation of advanced meters and implementation of mandatory hourly pricing for industrial and commercial customers by continuing to reduce the demand thresholds. PSC and State energy authorities should evaluate and aggressively support implementation of demand response measures where cost-effective and environmentally beneficial.*

Companies Position: Support

***Recommendation.*** *The State should continue to implement rate structures and metering requirements for non-residential customers that encourage use of electricity at off-peak hours and/or encourage control of daily electric load.*

Companies Position: Support.

***Recommendation.*** *The State should include energy storage technologies in the definition of "alternative energy production facility" under PSL, Section 2(2-b), in order to exempt energy storage facilities up to 80 MW from the jurisdiction of PSC. This would reduce the time and cost of permitting and encourage the development of these technologies.*

Companies Position: Support.

***Recommendation.*** *Expand the RPS Program to meet the Governor's goal to meet 30 percent of the State's electricity needs with renewable resources by 2015, taking into*

*consideration the voluntary market and other renewable energy initiatives of the State's energy authorities and agencies.*

Companies Position: Support increased use of renewable energy, but the Companies are concerned about the total cost and consequent customer impact without further analysis, as well as the timeframe that has been proposed which may not be reasonably achievable. The goal should not be adopted until there has been a thorough review of the costs by the PSC and such costs are compared to the costs of achieving more energy efficiency.

***Recommendation.*** *Enhance certainty in the renewable energy market by scheduling regular solicitations for Main Tier procurements. Consider more flexible solicitation schedules, other than the standard 10 year contracts, to accommodate changing market conditions.*

Companies Position: Support. Achievement of the RPS goals would also be advanced if the State clarified that utilities may participate. Utilities are a significant resource that the State should tap into for achievement of State energy goals and will help to achieve regional equity.

***Recommendation.*** *Create a tracking and trading system for RECs to foster development of a robust voluntary market for REC purchases and to help ensure integrity in measuring compliance with the RPS.*

Companies Position: Support.

***Recommendation.*** *Continue to provide incentives for environmentally beneficial, renewable DG resources, including CHP, with specific targets determined by PSC in the expanded RPS proceeding, funded through the Customer-Sited Tier. Identify opportunities for targeted DG deployment that may serve to reduce the need for peaking power plants in load pockets.*

Companies Position: Qualified support. The Companies oppose the designation of CHP as a renewable resource; the State should continue to prefer repowering at existing sites over installing new DG, especially in non-attainment areas. Especially for non-attainment areas, power plants with higher stacks and greater emission velocities are generally better for the environment than customer-sited DG that is fossil-fueled.[43]

***Recommendation.*** *Examine the transmission system needs to identify and evaluate appropriate investment strategies for needed bulk transmission system upgrades or expansions needed to allow for delivery of the energy output from renewable energy systems.*

Companies Position: Support. The utility-led STAR initiative to study the long-term need for additional energy should be relied upon by the State as an indication of where and when transmission investment is needed. Joint ownership of transmission assets by the State's utilities should be encouraged as an effective

[43] University of California Energy Institute, *"Quantifying the Air Pollution Exposure Consequences of Distributed Electricity Generation,"* November 2005.

and equitable way to finance any new transmission that is needed to achieve societal goals like GHG reduction.

***Recommendation.*** *Encourage the State's power authorities to procure diverse renewable electricity resource development, including solar, on-shore and off-shore wind, hydrokinetic and sustainably managed biomass. LIPA and NYPA should continue analyzing bids received through their RFP and complete their purchases of 150 MW of solar photovoltaic power as expeditiously as possible. Based on the experience of these initiatives, LIPA and NYPA should consider achievable targets for subsequent PPAs.*

Companies Position: Support. Con Edison is actively leading the study of off-shore wind and has proposed a solar pilot program which is on hold due to the current economic climate. The Companies also support consideration of the full delivered cost of renewable power, and comparing that cost to energy efficiency, in determining how to proceed.

***Recommendation.*** *Encourage LIPA and NYPA, with utilities and other partners, to proceed with issuing an RFP for the private development of off-shore wind resources (off the waters of Long Island and in the Great Lakes) in a manner protective of natural resources under power purchase agreements.*

Companies Position: Support. Utilities are also playing a key role in the process of developing off-shore renewable power and should be encouraged by the State to continue to play this role.

***Recommendation.*** *Amend the net metering law to provide greater flexibility to commercial customers to size systems to meet a greater percentage of their energy requirements, while ensuring that system reliability is not negatively impacted.*

Companies Position: Oppose. Net metering, as a subsidy, is non-transparent, since the benefit provided to net metered customers cannot be calculated. The Companies support use of transparent subsidies. There are also social issues in net metering because it departs from basic cost-causation principles. At most, the State should allow net metering up to the existing 1% caps only and then begin to explore other methods. The Companies are concerned about the possible impact of oversized net metered resources on the system. Finally, fossil-fueled resources, even highly efficient CHP, should not be considered to be renewable power and should not be eligible for net metering.

***Recommendation.*** *Examine the protocols used by NYISO and utilities for connecting DG sources to the grid to help ensure such implementation is timely and cost-effective.*

Companies Position: Support. The final Plan should acknowledge the considerable progress that has already been made in this area by utilities and the NYISO.

***Recommendation.*** *Assess the potential for siting renewable energy projects, including wind, solar, geo-thermal, hydrokinetic and hydropower on those State-owned lands and waterways where such development would not require a constitutional amendment or be*

*inconsistent with the public trust or parkland doctrines. This will be accomplished by developing a process for installing renewable energy technologies on State facilities, particularly those that are energy intensive, and have open space and/or compatible roofing.*

Companies Position: Support. The State should acknowledge that utilities will play a key role in interconnecting resources on State lands.

***Recommendation.*** *Diversify transportation fuel use and introduce alternative fuel vehicles into public and private fleets in the mid and long term as it moves toward electrification of the transportation sector. This will be accomplished by:*

- *Encouraging State Agencies and Authorities to use their fleets and facilities as test-beds for "real-world" testing and application of alternative fuel technology.*
- *Undertaking a full life-cycle analysis to determine the optimal fuel for a substantial replacement of petroleum, considering environmental, economic and energy benefits.*
- *Working with federal policymakers to support federal tax incentives for fleet and private individual alternate fuel vehicle purchases.*

Companies Position: Support. The transportation sector should be encouraged to reduce its carbon output by being exposed to a carbon price, as is the case for the electric sector pursuant to RGGI.

***Recommendation.*** *Adopt where practicable a low-carbon fuel standard for liquid fuels used in transportation, taking into account the results of the multi-state effort to analyze policy options for a regional low-carbon fuel standard.*

Companies Position: Support, but federal regulation may be preferred.

***Recommendation.*** *Support biofuels production from sustainably managed feedstocks. State agencies should develop programs to implement measures recommended by the Biofuels Road Map, when it is completed.*

Companies Position: Support and emphasize that these programs should be evaluated on a full life-cycle basis.

***Recommendation.*** *Extend the tax credit for bio-heat beyond the current expiration date of 2011.*

Companies Position: No position.

***Recommendation.*** *The State should expand funding and implementation support for environmentally beneficial distributed energy resources (DER). Technical and financial support for DER should include solar thermal, geothermal heat pumps, and other resources that are economical and result in energy and cost reductions, improved energy security and reliability, and reductions in air emissions. Furthermore, the State should design programs to increase public awareness of the benefits of using DER.*

Companies Position: Support, but need to examine net metering. Also, need to make sure resources are reasonably cost-effective.

***Recommendation.*** *Support private interest and investment in drilling in the Marcellus Shale natural gas reserves and natural gas pipeline expansions to improve supply and*

*deliverability of natural gas to markets in New York in an environmentally acceptable manner.*

Companies Position: Support; need to provide for sufficient environmental review, including the New York City watershed.

***Recommendation.*** *Study the potential for new private investment in extracting natural gas in the Marcellus Shale on State-owned lands where it would not be inconsistent with public trust or parkland doctrines, in addition to development on private lands.*

Companies Position: Support.

***Recommendation.*** *Develop a Climate Action Plan in accordance with Executive Order 24. The Climate Action Plan will identify additional strategies and actions, including likely major infrastructure investments, as well as the benefits and costs of each, consistent with a long-term GHG reduction goal of 80 percent below 1990 levels by 2050. It should also identify appropriate mid-term targets.*

Companies Position: Support.

***Recommendation.*** *The State supports enacting a power plant siting law that provides greater market certainty to developers and investors, enhances public participation with sufficient intervenor funding made available to local communities, includes improved notice provisions, and addresses environmental justice issues.*

Companies Position: Support and the Companies note that the Article X siting law that expired January 1, 2003 does not require substantial modification.

***Recommendation.*** *Enact legislation that addresses CO2 pipeline siting and CO2 injection to facilitate the demonstration of Carbon Capture and Sequestration technology.*

Companies Position: Support. The Companies believe that CO2 sequestration, while a laudable goal, is a technology that is very far from commercial. More study is appropriate, but siting legislation can be addressed now.

***Recommendation.*** *The State supports the use of repowering and replacement of existing units with new facilities when such actions can be justified by their reliability, economic and environmental benefits.*

Companies Position: Support.

***Recommendation.*** *Encourage and facilitate the repowering and replacement of existing energy systems to reduce overall actual emissions and environmental impacts, particularly in potential environmental justice communities.*

Companies Position: Support, provided that the reliability and economic impacts of proposed projects are adequately considered.

***Recommendation.*** *PSC, along with NYPA and LIPA, should continue a systematic examination and evaluation of the State's transmission and distribution infrastructure and maintain its emphasis on appropriate replacement and upgrade of aging infrastructure to maintain safe and adequate service and also increase the efficient*

*utilization of the electric system, while minimizing, where possible, upward pressure on rates.*

Companies Position: The Public Service Commission should provide returns to investors in New York State utilities that will encourage the needed level of investment to maintain reliability. The STARS effort being undertaken by the State's utilities should be the underpinning to any investigation of long-term transmission adequacy.

***Recommendation.*** *Amend PSL Article VII for siting of transmission lines and pipeline to provide a sufficient level of intervenor funding and to indicate that State or local approvals, consents, permits, certificates or other conditions for construction and operation shall apply in connection with the State's Uniform Fire Prevention and Building Code.*

Companies Position: Oppose, because efforts to carve out an exception to the PSC's exclusive permitting jurisdiction under Article VII with respect to the State Fire Prevention and Building Code would impose an unnecessary procedural burden where compliance with such code is already required pursuant to Article VII.

***Recommendation.*** *The State should initiate a study to inventory existing utility corridors used for electric, natural gas, petroleum products, water and telecommunications facilities that are underused or can be expanded to accommodate new facilities, along with highways, railroads, and waterways. Improve and coordinate efforts to identify and promote the use of linear property interests for use of existing and siting new electric and gas transmission facilities.*

Companies Position: Support; the STAR study is looking at the issue of optimizing existing rights-of-way.

***Recommendation.*** *The State should encourage cooperation in the development of electricity transmission and distribution infrastructure, including Smart Grid technologies, using State-owned lands and rights-of-way unless such development would require a Constitutional amendment or be inconsistent with the public trust or parkland doctrines.*

Companies Position: Support; joint ownership of transmission assets by the State's utilities may be an effective way to make sure the right amount of transmission is constructed, and should be encouraged.

***Recommendation.*** *The State should advocate for more federal funding for public transportation in reauthorization of the federal surface transportation bill to guarantee investment in the federal public transportation program to support a doubling of rider-ship nationwide in twenty years; support a federal financial commitment and strategy for rehabilitating, maintaining, operating, and, when necessary, replacing the existing transportation infrastructure before investing in system expansion; retain the Congestion Mitigation and Air Quality programs; and establish a companion program for transportation projects and programs that reduce GHGs.*

Companies Position: Support.

***Recommendation.*** *The State should allow for more private investment in public transportation and amend the State Tax Law to allow private individuals and or businesses to provide direct public transportation infrastructure investment in return for State income tax credits. For example, an individual or business could sponsor the installation of a bus shelter on a transit line and a portion of the cost of that shelter could be offset by a tax credit.*

Companies Position: Support.

***Recommendation.*** *To support the growth of the State's clean energy sector, the State should strengthen and expand collaboration among, and develop more formal interactions between, the intellectual and professional resources in the State's public and private education institutions, research and development organizations, national laboratories, private businesses and industry.*

Companies Position: Support.

***Recommendation.*** *Implement where practicable, the recommendations of the Task Force on Diversifying the New York State Economy through Industry-Higher Education Partnerships, established by Executive Order No. 19. The Task Force will study and report on best practices and generate recommendations on fostering business incubation, growth and emerging technology commercialization.*

Companies Position: Support.

***Recommendation.*** *Increase the emphasis on State incentives and economic development assistance to clean energy companies and component manufacturers and service businesses, looking to locate and or remain in business in New York.*

Companies Position: Support.

***Recommendation.*** *Support and enhance research and development of next-generation clean energy technologies in the energy and transportation sectors; seek opportunities to establish New York as a regional energy innovation hub in strategic areas; foster regional clusters of clean energy businesses and institutions to promote long-term economic growth; and develop the export potential for New York-based firms to sell products and services to the rest of the world.*

Companies Position: Support.

***Recommendation.*** *The State should support efforts to expand electrification in the transportation sector, starting with on-road vehicles such as plug in hybrid vehicles and truck stop electrification, i.e., technology to reduce diesel engine idling, for heavy duty vehicles as well as ancillary equipment in other modes, such as ground support equipment at airports, hybrid switcher locomotives at rail yards and cold ironing at ports.*

- *To demonstrate feasibility of electrification of the transportation system and to promote the use of plug-in hybrids in the State, the State fleet plug-in hybrid vehicle demonstration program should be expanded to private sector fleets.*

- *The State should work collaboratively with other States and regional and national groups to encourage electrification of the transportation system at the national level.*
  Companies Position: Support. Con Edison has been active in testing new electric vehicle technologies like plug-in hybrid electric cars.

***Recommendation.*** *Coordinate all agencies involved in workforce training, and partner with unions, non-profits, colleges, and BOCES and technical high schools to expand the existing network of 32 clean energy workforce training sites and make a clean energy training curriculum standard for SUNY and CUNY schools.*
Companies Position: Support.

***Recommendation.*** *Dedicate funding for "pathways out of poverty" programs to train unskilled workers for clean energy jobs. These programs should target residents of environmental justice communities.*
Companies Position: Support, but these efforts should be funded in a way that does not increase cost to customers. Traditional utility jobs have also been a source of economic opportunity for young people in New York.

***Recommendation.*** *Coordinate a Statewide workforce strategy to address the workforce needs of the State's clean energy industry, and maximize the State's ability to obtain federal workforce training funding.*
Companies Position: Support, but this strategy should be funded in a way that does not increase cost to customers and provide broad skills training for a broad spectrum of workers from entry level labor up to credentialed professionals to fill clean energy jobs.

***Recommendation.*** *Implement NYSDOL's clean energy workforce development plan.*
Companies Position: Support, but this plan should be funded in a way that does not increase cost to customers and provides broad skills training for a broad spectrum of workers from entry level labor up to credentialed professionals to fill clean energy jobs.

***Recommendation.*** *NYPA's economic development programs to reduce energy prices and bills for businesses, industry, and not-for-profit organizations should be tapped to attract clean energy industries and facilitate energy efficiency in support of the State's "45 by 15" initiative.*
Companies Position: Support.

***Recommendation.*** *NYPA's Power for Jobs program should be extended for a longer period of time, beyond the current one-year cycle of extensions. Opportunities for increasing the size of the program should also be explored.*
Companies Position: Support; encouraging more economic development in the New York City area helps the State's overall energy efficiency, and the State should consider directly allocating some of the Power for Jobs program for City initiatives.

***Recommendation.*** *All of NYPA's economic development customers should be incentivized to invest in cost-effective energy efficiency measures.*

Companies Position: Support; but NYPA should use transparent methods to measure its EE achievements, and provide forecasts to the utilities to incorporate into their load planning process.

***Recommendation.*** *The State's business attraction strategies for advanced energy technology manufacturing should be a priority for economic development programs offered by ESD, and the State's authorities and utilities.*

Companies Position: Support, but need to make sure these efforts are effective.

***Recommendation.*** *Revise the City, Town, Village, and General Municipal Laws to incorporate energy considerations in Comprehensive Plans. Revisions should be made to explicitly identify energy components that would engage communities in helping to meet the State's energy goals.*

Companies Position: Support.

***Recommendation.*** *Enact Tax Increment Financing reform legislation to encourage the redevelopment of distressed communities and revitalize downtown areas as recommended by the Governor's Smart Growth Cabinet.*

Companies Position: Support.

***Recommendation.*** *Collaborate with Metropolitan Planning Organizations, regional planning councils, and municipal governments to promote and incentivize land use patterns that reduce reliance on vehicle trips and establish consistency between transportation planning and land use planning.*

Companies Position: Support.

***Recommendation.*** *Provide technical assistance and funding opportunities via State grant programs for localities that incorporate land use, transportation, and energy planning.*

Companies Position: Support.

***Recommendation.*** *Pursue Transit Oriented Development strategies and expand the DOS's current initiative working with MTA to encourage development in the Hudson Valley and Long Island along MTA transportation routes. Specifically, the State should expand the inter-agency TOD incentive package beyond the MTA's rail service area to include upstate TOD opportunities around rail and bus. Sustainable transportation features such as TOD should be incorporated into major transportation projects and TOD outreach modules should be incorporated into DOS municipal land use training.*

Companies Position: Support. The Companies also have economic development programs that can help businesses succeed.

***Recommendation.*** *Encourage municipalities to adopt land use and zoning tools that support Smart Growth.*

Companies Position: Support.

***Recommendation.*** *Expand Climate Smart Communities as a valuable component of achieving the State's clean energy goals.*

Companies Position: Support.

***Recommendation.*** *Address the public health and safety needs of communities by continuing to provide and enhance mechanisms for early, fair and meaningful public involvement with transparency in energy-related decisions (through such measures as improved public outreach and notice, alternative times and locations for public meetings, and language translation of notices and key documents).*

Companies Position: Support.

***Recommendation.*** *Develop energy facility siting and permitting criteria that assess disproportionate health risks and environmental impacts on potential environmental justice areas. Identify measures to avoid, or if un-avoidable, to mitigate potential impacts.*

Companies Position: Support. The Companies support the development of criteria consistent with the DEC's EJ policy for conducting "a disproportionate adverse environmental impact" analysis as a component of an EIS, and incorporating "existing" and "reliable" human health data into the environmental review process. Companies support community awareness of, and governmental dissemination of, DOH/DEC/PSC-based health, environmental, and regulatory process information that has the potential to impact community life.

***Recommendation.*** *Provide information to the public, especially to environmental justice communities, on such subjects as disease burdens, environmental facilities, energy-related regulatory processes and ways to reduce heath or environmental risks. Such information will help communities participate meaningfully in energy planning and siting processes.*

Companies Position: Support. The Companies are supportive of community awareness of, and governmental dissemination of, DOH/DEC/PSC-based health, environmental, and regulatory process information that has the potential to impact community life.

***Recommendation.*** *Support regional, national, and international cooperation and collaboration in developing energy resources; creating jobs and spurring greater economic development; protecting and enhancing the environmental and coastal resources; and reducing harmful air pollutant and GHG emissions.*

- *Ensure continued progress in addressing regional clean energy issues through the leadership of NEMAG. Plan and help organize the second meeting of NEMAG to follow-up on implementation actions taken since the meeting held in New York City in the fall of 2008, and plan the actions necessary for further cooperation in the coming year.*
- *Support and build upon the interstate agreement among MARCO to foster a more efficient and sustainable regional economy and improve the quality of life for citizens.*

- *Initiate a regional offshore planning effort to identify appropriate areas for energy development, while accommodating and protecting economic activities and environmental resources in collaboration with MARCO and relevant federal agencies. In addition, consultation with ongoing energy development efforts, such as the Long Island-New York City Offshore Wind Project, needs to be built into the planning process.*

  Companies Position: Support efforts to reduce GHGs. The Companies prefer a national, economy-wide program on climate change which will set a national, economy-wide price for carbon; States should then be free to design programs which will implement the federal framework.

***Recommendation.*** *The State should work more closely with FERC to address issues of common concern for Smart Grid investments.*

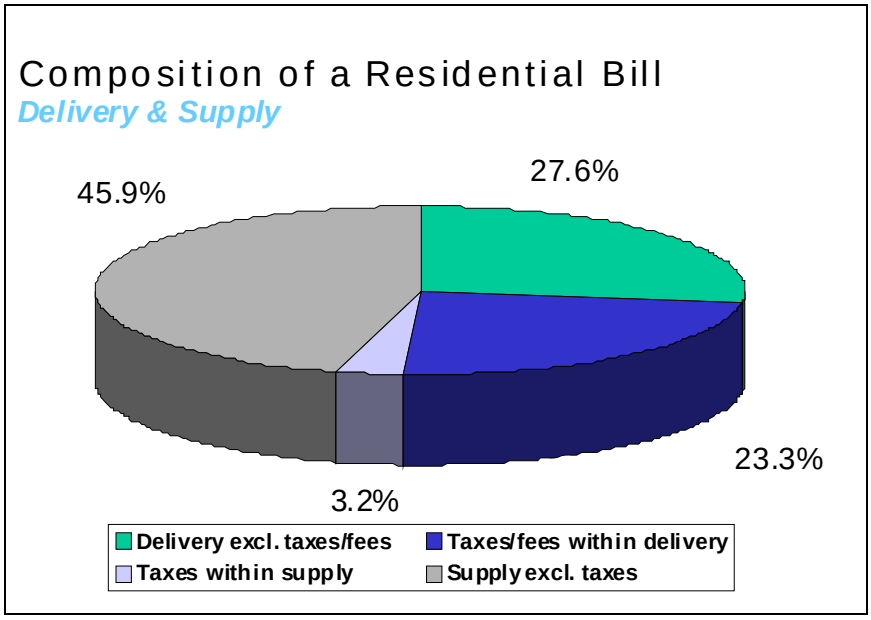
Companies Position: Support; the State and the federal government should respect jurisdictional boundaries in developing these rules and consider using collaborative fora like NARUC to discuss joint technical requirements for Smart Grid.

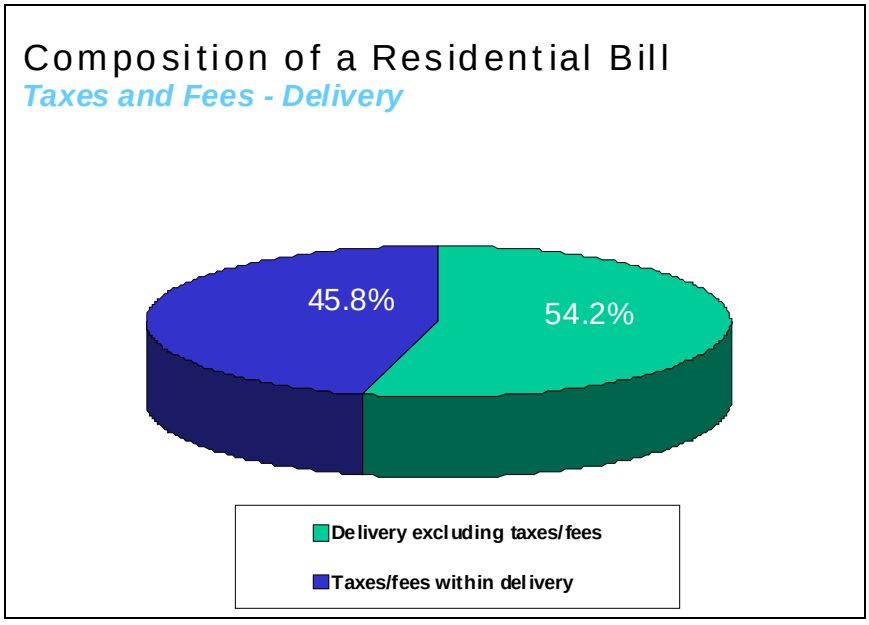
***Recommendation.*** *The State and the New York Congressional delegation should optimize coordination and collaboration with the federal government to ensure that New York's energy policy objectives and strategies will be advanced at the national level.*

Companies Position: Support.

## APPENDIX B

### Taxes and Fees as a Proportion of a Typical Residential Con Edison Customer Bill•




• The data shown in this appendix are based upon Con Edison 2010 forecasted supply prices and current delivery rates.