



Long Island Power Authority
Draft Electric Resource Plan
2009 - 2018

March 18, 2009

Appendix C, Response to Comments

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1 Overview

LIPA has organized the Electric Resource Plan and supporting documentation in a five volume set as follows:

- *The Electric Resource Plan*, provides a summary description of LIPA's plan for the period 2008 through 2017;
- *Appendix A, Technical Report*, provides detailed information regarding LIPA's plan, the planning process and the planning methodologies used to create the Electric Resource Plan;
- *Appendix B, Energy Primer*, offers readers an overview of energy related information, including the current state of the energy industry and a background on LIPA;
- *Appendix C, Response to Comments*, summarizes the comments received during the public hearing process and provides LIPA's responses to commentators; and
- *Appendix D, Technical Appendices*, provides additional details on studies, methodologies, and criteria used in the planning analysis.

This document is Appendix C, Response to Comments. This volume summarizes comments received by LIPA on its Draft Energy Master Plan Outline published in January 2008. Written comments were received during the open public comment period. Two public hearings were held where oral comments were presented. The two public hearings took place at the locations and times as shown below.

Energy Master Plan Outline Public Hearing Dates

Hearing Number	Location	Date	Time
One	Nassau County Legislative Chambers 1550 Franklin Avenue Mineola, New York	April 29, 2008	10:00AM – 12:00 PM
Two	Brookhaven Town Hall One Independence Hill Farmingville, New York	May 7, 2008	10:00 AM – 12:00 PM

In compiling the record of public commentary, LIPA has made every attempt to accurately represent the position of all oral and written comments and recommendations received that pertain to the development of the Electric Resource Plan. Transcripts of the Energy Master Plan Outline Public Hearings are posted on LIPA's Web site: <http://www.lipower.org/company/powering/energyplan08.html>.

LIPA has made a diligent effort to address all comments and recommendations. The material contained herein is organized on a topical basis to facilitate the reader's efficient review of public commentary and the associated LIPA response, highlighted in **bold** font, which follows the commentary. In many

instances a LIPA response will address more than one comment in which case the LIPA response is placed at the end of the series of comments.



2 List of Commentators

The following index provides a quick page reference in order to facilitate the reader’s ability to locate a specific organization or individual’s commentary and LIPA’s associated response. The index is arranged alphabetically by an organization’s name or an individual’s last name followed by the topical areas of interest.

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3 Response to Comments on Energy Master Plan Outline

3.1 AMI / Smart Grid

Sheila Sweeney, Consultant

I am with a consulting group, wondering whether there will be any capacity programs (similar to Con Ed, or direct through NYISO) for Summer 2008. Also, whether there are any opportunities for a health care facility to participate in Advanced Metering/Smart Grid pilot programs as early as 2008.

Long Island Progressive Coalition, John McConnell

In California and other places that use what they call variable pricing on the meters. Because what they've done in California -- I don't know why New York can't be the same as, you know, somewhat, anyway, catch up to California. California is way ahead of everybody else it seems like. What they've done there with variable pricing and all the other stuff that's done in California, it's estimated that 24 -- they have prevented the building of 24 new power plants in California because of what they've done. In California it's twice the population we have here. And what are we doing, we had people up last week selling power plants, building power plants. Why can't we be like California and stop building power plants? Twenty four, that's unbelievable. I don't know what timeframe it is, but 24 is very significant.

Long Island Solar Energy Industries Association (LISEIA), Kevin MacLeod

The next point I would like to talk about is smart metering. I don't know if you're familiar with the concept. But what it is is obviously LIPA has two base rates that they deal with: The higher peak rate during the day, three, 4:00 when everybody has their air conditioning on versus the nighttime rates when it's less usage, it's getting dark, you know, things like that, less air conditioning uses. So by allowing a customer to have a meter where they can be encouraged to use their energy more on the off-peak air times and get a benefit from a lower rate versus a higher rate during the peak times, would greatly enhance reducing LIPA's base load in this area. So we would encourage this also. And I know we've been hearing talk about this for a while now. And this is something I think we can easily achieve too. And this will also benefit solar energy customers too if they also include smart metering within their net metering process.

Response

As a first step, on June 26, 2008, the LIPA Board approved the 2008/09 capital budget which allocated \$300,000 toward a smart meter pilot program covering both Hauppauge and Bethpage. This pilot program is expected to provide solid information regarding the benefits, cost effectiveness, and usefulness of smart metering. Results will be evaluated during 2009. Based on these results the program will be expanded where cost effective.

Advanced Metering/Smart Metering has the potential to provide several benefits. It is an effective means of deploying DSM measures, deters theft of service, encourages customer-side renewables and allows for more flexible rate-making.

In addition, LIPA agrees that time-differentiated rates will encourage customers “to use their energy more on the off-peak times and a benefit from a lower rate versus a higher rate during the peak times.” LIPA currently offers voluntary time-differentiated rates to all its customers and will be considering how to encourage more customers to participate.

3.2 Appliances

Dora Coniglio

Re: Lower rates, refunds for those homeowners who update their appliances to "green"; I'm in a new condo (14 months old & I'm not about to change my new appliances & therefore lose out. Nice!

Response

LIPA has a variety of programs that support energy efficiency in different ways. The Green Appliance Program is designed to incent the replacement of older less efficient appliances. We also have market transformation programs designed to encourage the sale of more efficient appliances and construction of more efficient buildings. While you may not qualify for a rebate under the Green Appliance Program you did benefit from LIPA's ongoing market transformation efforts.

3.3 Climate Change

Long Island Climate Solutions Network, Scott Carlin

While LIPA is under no legal requirement to adhere to Kyoto, LIPA has a moral obligation to provide Long Island with a potential plan for meeting Kyoto-style reductions in regional carbon emissions. And right now that's not part of your nine scenarios.

Regional Plan Association, Robert Freudenberg

The master plan will have a major impact not only on energy supply and cost, but also on Long Island's contribution to global climate change. We feel that this presents a unique opportunity to outline the impacts that alternative energy sources and policies have on climate change. Specifically the plan should detail how both the energy provider and customer can take steps to reduce CO₂ emissions that contribute to warming and its effects such as sea level rise.

Renewable Energy Long Island (RELI), Gordian Raacke

LIPA has a unique responsibility and LIPA's update of this energy master plan, I believe, provides a perfect opportunity to focus on climate change mitigation and making this a guiding principle of this new plan. So I believe LIPA's draft outline should be amended in three ways: No. 1, it should recognize the urgent need for immediate and aggressive policies that can mitigate the devastating impacts of climate change on Long Island and other parts of the world. No. 2, it should consider adoption of a 2017 - because that's your planning horizon or maybe a 2020 target because that's what scientists are telling us now - of emission reductions of eighty percent over "business as usual" and set annual milestones to

ensure periodic progress review. Thirdly, once these annual CO₂ milestones have been established over the ten-year target horizon, LIPA can evaluate various supply and demand side scenarios and see which ones will deliver the required cuts in carbon emissions from Long Island's electricity sector in the most effective manner.

Renewable Energy Long Island (RELI), Gordian Raacke

I wanted to make some specific recommendations on what you might consider to include in the energy plan. I have just five very brief recommendations today for you on that.

First, as I said already, focus the energy plan on climate change and greenhouse gas reductions.

Second, set a 2017 target for carbon dioxide reductions that you can effect and then set annual targets that you can use to monitor your progress, metrics that you can use to see whether you're making the right kind of progress.

Establish carbon budgets would be my third recommendation. I was very encouraged by National Grid's goal to reduce company-wide reduction, CO₂ reductions eighty percent by 2050 and to direct department heads to establish a carbon budgeting process and look at each department level as to what these reductions are doing. National Grid needs to be commended for that. I would hope that LIPA could follow that same pattern. And a lot of businesses are establishing carbon budgets now.

The fourth recommendation is track your carbon emissions just like you would track financial expenditures in your budget. You need to, of course, make sure that once you've set up a budget, you stay on track. So to do that I would recommend that you look at some organizations that you can join and maybe you can get assistance in tracking that budget process such as: ICLEI, the International Council for Local Environment Initiatives for Climate Protection; The Climate Registry, which is an organization that has already been joined by the New York Power Authority, NYSERDA, the New York State DEC, the MTA, Con Edison and a few others, New York State and national entities. So I would encourage you to look into those resources that you can bring to bear here and also work with the New York DEC Climate Change office and I'm sure they would be happy to help us in steering the ship here.

The fifth and last recommendation I have is to assemble and lead a Long Island Climate Action partnership. We can't do this alone. The Long Island Power Authority should and will be, I believe, a leader in this effort but we need to work with all hands on deck. We need to bring the stakeholders and powerful partners in this effort. So I would suggest that you start the dialogue with the counties, with the towns on Long Island, bring in the gas and heating oil suppliers to the table, bring in the building sector. After all, buildings nationwide use about fifty percent of our energy and are responsible for a tremendous amount of carbon emissions. Make sure that we bring the building sector, the Long Island Builders Institute and others into that process. Bring in, of course, the transportation sector. At some point when electric plug-in hybrids will become more prevalent - they're looking at 2010, 2012 - you will, in fact, become a transportation fuel provider. As we plan for the 2017 planning horizon, you need to bring that constituency and stakeholders into the process. Bring in the business associations, LIA, HIA and others. And, of course, work with us, the environmental and civic groups to make that happen.

Wayne Horsley, Suffolk County Legislature

In 2002 the Legislature adopted a carbon dioxide emissions cap for electric generating plants in Suffolk County, and we have a Carbon Cap Committee currently reviewing the need to further reduce carbon

emissions from power plants over 25 MW in Suffolk County. The Legislature recognizes that to simply respond to demand growth with new supply resources not a sustainable philosophy, from an economic or environmental perspective.

Response

Climate change is one of the most fundamental public policy and social issues facing Long Island, its residents, and LIPA today. Indeed, it is an issue with implications reaching far beyond Long Island; response to climate change concerns must truly be regional, national, and international in scope. That being said, what we do here on Long Island is important for our piece of the globe, perhaps even more so in that we are an island more vulnerable to sea level and storm variations. LIPA takes its climate change responsibility very seriously.

LIPA is already part of the International Council for Local Environment Initiative for Climate Protection. As outlined in Recommendation 4.8 in the Electric Resource Plan, LIPA plans to register with The Climate Registry. As required by regulation, LIPA is participating in the Regional Greenhouse Gas Initiative (RGGI) that targets a 10% reduction in power plant CO₂ emissions by 2019. RGGI does not allocate reductions in CO₂ to specific utilities, but relies upon a market trading program to allocate CO₂ allowances. Section 8.5.5 of the Electric Resource Plan sets a target based on LIPA's energy weighted share of the New York State allocation. The modeling results of the Representative Plan project that LIPA will contribute its share toward these reductions through 2024. After 2024, more work needs to be done on the Representative Plan to stay below these targets.

LIPA will follow federal and state regulations regarding emissions of greenhouse gasses. However, at this point these regulations do not specify greenhouse gas reductions targets for LIPA. As outlined in Section 4.1.7 and Section 8.5.5 of the Electric Resource Plan, there are no standardized methods of measuring greenhouse emissions for electric utility power supply. However, there have been and are many serious legislative proposals that would reduce emissions of greenhouse gasses from 2005 levels. To respond to the potential greenhouse gas emissions targets, LIPA will study how it could achieve the power supply CO₂ emission reductions.

Therefore, given its commitment to climate change action and the current absence of regulatory reductions in greenhouse gases, LIPA has set a greenhouse gas emission target of reducing its power supply emissions from 2005 levels by 10% in 2020 and by 20% in 2030. Many strategies for reducing greenhouse gas emission are included in this Electric Resource Plan, others will be studied and evaluated for their efficacy and cost effectiveness as well.

LIPA's Electric Resource Plan is strategically focused in four major areas all of which address climate change by materially reducing greenhouse gas emissions.

1. Implementing Energy Efficiency
2. Increasing Renewable Resources
3. Upgrading the Existing Generating Fleet, and
4. Improving Transmission Interconnections

As outlined in Section 8.5.5, modeling LIPA’s Representative Plan, power supply CO₂ footprint emissions in 2009 are projected to be higher than 2005 level due to growing customer demand. Modeling of the Representative Plan results in power supply CO₂ footprint reductions of 5% from the levels 2005 2020 and of 12% from 2005 levels in 2026. While this shows progress toward the 10% and 20% targets, further study as outlined in Recommendation 4.14 of Section 4.3.14 is needed to determine how power supply CO₂ footprint targets could be cost effectively achieved.

3.4 Distributed Generation

Doug Hill

On Long Island, distributed generation can begin to be promoted by encouraging or requiring that large new developments, such as the Lighthouse development, Pilgrim State, Kings Park and Yaphank, provide their own local power for electricity, heat and air conditioning. The Alternative Scenarios for Consideration in the energy plan should therefore include the deliberate expansion of distributed generation in the next decade.

Joseph Schroeder, Suffolk County Legislature

Distributed generation technology, such as that demonstrated by Dr. Vasile, and nonelectric technology should be supported more aggressively and embraced by LIPA as a tool to manage the growth of demand on the system as opposed to a threat to revenues.

Wayne Horsley, Suffolk County Legislature

The Legislature recognizes that electric utilities have historically resisted competing non-electric technologies as a perceived threat to revenues. For the same reason, electric utilities have also made it very difficult and costly for consumers to install distributed generation technologies to more efficiently and affordably provide electric power and thermal energy to their operations. The Legislature encourages LIPA, as a Public Authority, to abandon these historical prejudices. Rather than a threat to revenues, the Legislature suggests that LIPA embrace these technologies as vehicles to better manage demand growth on the Long Island electric grid. Indeed, for portions of the grid with capacity issues, LIPA should weigh the public benefit of incentives for these technologies against otherwise necessary infrastructure upgrades.

Response

Distributed Generation (DG) has both advantages and disadvantages. There are economies of scale in generation and environmental benefits - less emissions per kWh - from larger power plants. To the extent DG is cost effective and can be operated in an environmentally compliant manner LIPA encourages such development. DG, if properly sited and operated can reduce transmission line losses by placing generation closer to the point of use, and reducing the distance it must be moved over the wires. If multiple Distributed Generation installations are located in one area that needs transmission or distribution improvements, it may allow utilities to defer or eliminate investments in transmission and distribution system upgrades. However, a single customer DG installation usually is unable to eliminate the need for transmission and distribution infrastructure improvements since the T&D system would be needed to provide backup power in the event that the DG installation was not operational.

The use of DG has been recommended as part of the LIPA Storm hardening initiative. In fact, the Initiative review suggested more DG in certain parts of the system to increase reliability. The design, installation and use of distributed generation is under consideration in specific instances as part of this important on-going initiative. However the nature of the existing technology is such that many DG options use more fuel and produce more emissions per kWh generated than from large central power station sources. LIPA currently supports non-polluting DG in the form of the Solar Roofs initiative which offers residential and small commercial customers rebates for installations. In addition LIPA's recently issued Solar RFP is designed to encourage larger scale DG installations on the electric utility scale. For more information on LIPA's Solar Roof initiative and the Solar RFP, please refer to www.lipower.org/efficiency/solar_nfp.html and www.lipower.org/company/papers/RFP/solar08.html respectfully.

LIPA does not at present support requiring new developments provide their own electric power separate from LIPA for both economic and environmental reasons. Such localized, distributed generation may well cost more than the central station delivered electricity and be more polluting and far less efficient in converting fuel to electricity.

LIPA's current rate structure addresses DG in two ways: net metering for solar and wind generation and Standby and Supplemental Service rates for generation that doesn't qualify for solar or wind net metering. LIPA will include the considerations regarding the potential benefits of distributed generation as it evaluates its rate structures in the future.

3.5 Energy Efficiency Financing

Citizens Campaign for the Environment, Adrienne Esposito

The first is to have some section in the plan that is about financing for homeowners and small businesses. Now, yes, you could use what was mentioned earlier, what I call the Berkeley City model which is where the utility company provides low-interest loans to homeowners and small businesses so that they can implement solar heating or solar thermal, solar warming, solar thermal for hot water. And that works because it gets added to the electric bill. It's paid out per month. It takes away the blockade of that people can't afford to implement it. That's one solution. Another one is to also use what I call the Green Levittown model which is engaging a financial institution. If I look at Green Levittown, in this case it would be the Bethpage Federal Credit Union, where the financial institution is given a low-cost loan to the homeowner. The homeowner can pick a five-year payback, ten-year payback, whatever the homeowner is comfortable with. And the cost of the monthly payback of the loan is less than the savings of the energy. So let me say that a different way, a better way: The savings is greater than the cost of the payback of the loan. So the homeowner has two options in the Green Levittown program. They can either pay back the cost of the loan over five years in which case they basically break even for five years and then save a lot of money for the next ten or twenty, or they can have a loan for ten years in which case they'll save a little each year. Imagine that to be the choice of the public. I can save a little bit over the next ten years or I can break even for five years and then save a lot on my energy costs. Those are two great choices we'd like to have for the public.

Long Island Energy Partners, John Eff

The need for energy efficiency or for Efficiency Long Island's success, we do have some suggestions. It's a very comprehensive program, nearly one billion dollars over ten years, and key elements of the success

will probably be driven by enhanced educational outreach to make the program successful, continued single-point accountability on LIPA's side working with the contractors and mostly a contractor partnership outreach on LIPA's behalf to continue to assist the contractor in these efforts. Finally, if there's an ability to have any kind of financing for these programs moving forward as it relates to retrofitting and energy efficiency improvements on commercial customers that would be extremely helpful. What we find is working with the various market segments, customers have a wish list of various projects they have to accomplish to keep their businesses viable. Although energy efficiency is near the top of the list, the financing comes up in certain market segments as a key element.

Dowling College, Peter Maniscalco

As well intentioned as you are in giving rebates for conservation, the only way this plan is ever going to work is if it's done with a pool of front money. This was done before by the New York Power Authority, with all of Long Island's schools. There is so much demand to be squeezed out of the energy system that they put up the money and they got paid back out of the energy savings. Now, Nassau County has a similar program working with Citizens Campaign for the Environment where they're putting up-front money and the people are repaying low-interest loans. And unless there's a pool of front money to do this conservation program, it will fail. We will all say yes, we had the best of intentions and we tried and we did the best that we could.

Response

LIPA, through its new Efficiency Long Island program due to start in 2009, will be partnering with banks that have expertise in providing loans to customers purchasing energy efficient products. Bank financing is just one component of this program that offers a range of services including analysis, presentation of cash flow benefits to customers, and financial incentives like direct cash rebates for solar installations and commercial energy efficiency measures.

3.6 Economic Development

Regional Plan Association, Robert Freudenberg

We'd like the master plan to address how new initiatives around clean energy and conservation will foster new economic development for the Island. In particular, the plan should detail how the new green job possibility generated by the company's commitment to energy and conservation and renewable energy will take place.

Response

LIPA is a supportive and active participant on the Governor's Renewable Energy Task Force which has instituted a number of green collar training programs as identified below:

LIPA's Home Performance with ENERGY STAR® Program supplies training to building analysts, shell specialists and heating/cooling specialists. The training for each of these courses includes both classroom and field work with a required exam upon completion. In addition to passing the required exam, contractors are required to become accredited by the Builders Performance Institute prior to being listed as a participating contractor in LIPA's program. This training is

delivered for LIPA by both Hudson Valley Community College and Conservation Services Group, both of which are under contract.

LIPA's ENERGY STAR® Labeled Homes Program supplies training to Home Energy Rating System Specialists. Again, this training includes both classroom and field work with a required exam upon completion. This training for this program is delivered by Conservation Services Group under separate contract with the Long Island Builders Institute. In addition, LIPA also underwrites training to builders and their trades on various building science topics which are facilitated by organizations such as the Building Performance Contractors Association and the Northeast Home Energy Rating System Alliance.

LIPA's Solar Pioneer Program supports various training programs. LIPA has co-sponsored contractors attending Farmingdale University's five-day Photo Voltaic workshops, as well as directly hosted in-house training that included working with PACE University for PV Inspector Guidelines in New York State and Inspecting Photovoltaic Systems to Conform to the National Electric Code, where participants received CEU credits. Classes have also incorporated Sales Skills for Contractors, including how to develop and market a small business, and Public Speaking / Presentation Skills. Additionally, while not required, many solar installers seek certification through the North American Board of Certified Energy Practitioners.

LIPA's Red Book Training Program provides training to all electrical contractors regarding standards and requirements for interconnection to LIPA's system. It also provides annual CEU credits for attendance in the half day training program.

Future LIPA efforts will focus on continuing to expand the number of initiatives to support the development of a Green Collar Workforce on Long Island.

3.7 Efficiency & Conservation Targets

Long Island Climate Solutions Network, Scott Carlin

LIPA needs to stop forecasting annual increases in consumption and start leading the region toward annual reductions in energy demand. Step one would be an aggressive energy efficiency campaign. We should aim to reduce total demand by 25 percent by 2040. LIPA has ignored a prior Sustainable Energy Alliance proposal to offer a rate rebate to households that use fifteen to twenty percent less electricity. A plan like that was enacted in California. And in 2002, that same coalition, SEA, advocated reducing regional energy demand ten percent by 2010. And we failed to act on that well-thought out proposal.

The Sustainable Energy Alliance of LI, Mark Seratoff

LIPA needs to stop forecasting annual increases in energy consumption and start leading the region toward annual reductions in energy demand. The current system is organized around energy consumption, not conservation. The mantra remains growth - more consumption, larger power plants, and new regional supplies of energy. 1. Develop an aggressive energy efficiency campaign. We should aim to reduce total electric demand by a minimum of 25% by 2040. 2. Set aggressive renewable energy objectives. 3. Cut system-wide fossil fuel MW production. We should replace today's inefficient plants with high efficiency generators. Total electric energy demanded can drop by 25% through improvements

in system efficiencies by 2040. At most, we should plan for 2,500 MW of fossil fuel capacity - half of today's needs. We should not build or repower beyond that capacity...

The Sustainable Energy Alliance of LI, Mark Seratoff

The Northeast Energy Efficiency Partnership (NEEP) estimates that aggregate energy demand can safely be reduced by 1.38% per year, in their 2005 report Economically Achievable Energy Efficiency Potential in New England. Furthermore, "energy efficiency is 67 percent cheaper than the cost of electric power supply." Therefore investments in energy efficiency ought to precede investments in new generating plants.

Response

In early 2009 LIPA is planning to launch its Efficiency Long Island (ELI) program, one of the Nation's most ambitious energy efficiency programs. The 10-year program will significantly reduce peak demand and postpone the need to build new power plants.

The 10-year, 927 million dollar program kicks off on January 1, 2009 and will offer residential and business customers an array of programs to help reduce their energy usage resulting in savings on future bills and achieving significant environmental benefits.

ELI is expected to reduce peak electric demand by 500 megawatts by 2018. This new program succeeds and expands on LIPA's clean energy initiative offering more programs while continuing to promote clean, renewable electric generation technologies and energy conservation and efficiency.

Under the program, residential and commercial customers will have easy access via the internet or telephone to enroll in the following five programs:

For Residential Customers

- **Efficient Products – Purchases of lighting, appliances, consumer electronics, in-wall air conditioners and dehumidifiers from retail outlets**
- **ENERGY STAR Labeled Homes – includes building shell upgrades, HVAC, hot water, duct seals, lighting and high efficiency appliances**
- **Existing Homes – duct sealing and tune-ups for central air conditioners, whole house retrofit assistance and installation services, Residential Energy Affordability Program (REAP), and properly installed higher-than-code efficiency central air and heat pump equipment**

For Commercial Customers

- **Commercial & Industrial ("C&I") New Construction – targets all new buildings and major renovations**
- **C&I Existing Buildings – addresses equipment purchases stemming from natural replacement at the end of useful life and retro-fits, meaning discretionary replacement of functioning inefficient equipment.**

LIPA endorses its own 15 x 15 Initiative designed to support the efforts of the New York statewide 15 x 15 Initiative which established the goal of reducing electricity use in New York State to 15 percent below forecasted levels by 2015. LIPA is evaluating a number of 15 x 15 strategies involve an array of efforts designed to increase energy efficiency at all levels of the power system from generation and operations through transmission and distribution to reducing customer demand for electricity through improved energy efficiency. More information about these efforts can be found in the Energy Efficiency section of Appendix A, Technical Report.

3.8 Efficiency & Conservation Incentives

Long Island Solar Energy Industries Association (LISEIA), Michael Bailis

To encourage people to save energy, the easiest thing you can do, in my way of thinking, is to reward people that conserve. Now, your energy efficiency program that you have just recently announced is a very, very aggressive program and we encourage you to do that. I would also encourage you to relook at enhancing the program by adjusting the rates in such a way that reward the homeowners or the commercial businesses that do, in fact, take advantage of these programs. The most critical portion of the rate is the fuel adjustments. These fuel adjustments represent more than fifty percent of the cost of the rate of the bills. Those people that take the initiative to take advantage of these energy efficiency programs should be rewarded and not just by the fact that they save energy, but they should be rewarded by not having to pay the fuel adjustments on a portion of their bill. If you take and shift some of that cost to those abusers, the revenue stream to LIPA will not change but the people that take the initiative to save energy will be rewarded doubly, not just saving the electricity but also saving additional funds on that first five hundred or a thousand kilowatt hours that they consume.

Sierra Club, Fitzgerald Yaw

...Establish energy efficiency and conservation incentives. High efficiency lighting, chilling, and refrigeration could cut commercial, industrial, municipal and residential electricity use up to 35%.

Edward Romaine, Suffolk County Legislature

What I would ask you to do is when you think about energy conservation, instead of adding more money into the rate to encourage conservation -- because I think the rates are already high enough and the encouragement is already there -- that you use the carrot as opposed to the stick approach, that you use incentives.

Edward Romaine, Suffolk County Legislature

One of the things that disturbed me is in an effort to stimulate the economy we're sending people checks. What we should be doing instead is taking that money and targeting, saying we will give you tax credits, federal tax credits if you install solar power on your homes. We will give you federal tax credits if you insulate your home; install new energy efficient windows or appliances. I always think the carrot approach is better. So I would encourage you, when you do this master plan, not to think about raising rates as a way to pay for this because that in it self will obviously discourage energy use but also will have a downturn in terms of an economic effect on our economy. So I would encourage you not to raise rates as part of any master plan, but instead to use incentives, if that is possible.

Edward Romaine, Suffolk County Legislature

I would encourage you to work with the townships and the County in helping them craft policies that mirror your policies that will further encourage conservation by using incentives. It's the one way that we can go. It may cost us a little bit in the long run, but we will save.

Wayne Horsley, Suffolk County Legislature

Whatever the customer class, based on Suffolk County's actual experience we encourage LIPA to establish a higher priority for a timely review of energy projects applying for LIPA incentives. Moreover, the Legislature suggests that LIPA take a more proactive role in promoting energy efficiency review of applications for new loads on the grid. Given the volume of applications LIPA must receive annually, it may be more practical to establish a load threshold that would trigger a more aggressive review than may already be typical. These reviews should target both new construction and added load to existing facilities. In a sense, this would help to close the gate before the horse gets away.

Response

The Efficiency Long Island program uses several different mechanisms for delivering energy efficiency savings. Energy efficiency incentives are a major component of several of these programs. Other programs focus on changing the types of products that are sold in the market, a practice referred to going forward as “market transformation”. Partnering with banks, developing incentive programs, and utilizing market transformation are all available mechanisms used to pay for Efficiency Long Island programs, given that LIPA does not have alternative sources of funds, apart from its customers.

The ENERGY STAR Labeled Homes program and the Existing Homes program are examples of LIPA programs designed to capture developers as well as customers, in an effort to conserve demands on electricity.

The comments regarding LIPA's rates contain some interesting points and some common misconceptions. First, it is important to remind our customers that the Power Supply Charge – sometimes known as the “fuel cost adjustment” – is not some extra charge that LIPA tacks on to its bill. The Power Supply Charge pays for the fuel that goes into the generators that produce the electricity that is sold to our customers. It also recovers the cost of environmental compliance related to that generation – like the renewable portfolio, the regional greenhouse gas initiative, emissions, credits, etc. – the cost of the generators themselves, and the cost of power purchased from other sources. Each customer's bill is based on the amount of energy they consume from LIPA, and a significant part of that cost is contained in the Power Supply Charge. More efficient customers will use less electricity and will have smaller bills, but it is still appropriate for them to pay the full cost of the energy that they are using, rather than shifting that cost onto other customers.

Second, LIPA would be pleased to accept financial support for its efficiency programs to fund the incentives. If Federal policy were to allocate significant funds to pay for incentives, it would relieve a significant burden on LIPA's customers. However, at present, LIPA needs to fund its own energy efficiency programs, and that means collecting those costs from our customers. Various rate alternatives could be considered, and have been discussed, but the bottom line remains that it costs

money to save money, and those savings and costs have to be allocated among LIPA's customers in some fashion through the rates.

3.9 Efficiency & Conservation Programs

Citizens Campaign for the Environment, Adrienne Esposito

In this new energy plan we would like to see the plan that accompanies the implementation of the energy efficiency program. The energy efficiency program needs an outreach component that is defined and laid out in the plan. And that outreach component needs to include outreach to our educational institutions. It needs to include outreach to civic leaders and civic groups and also the environmental community.

Citizens Campaign for the Environment, Adrienne Esposito

We have to get the message across to the public that energy efficiency is the easiest, the safest, the quickest way to bring consumption down resulting in lower energy costs. That's what energy efficiency is about. Yes, it might cost \$3 on the bill, but it's going to save us money later. Spending \$3 now to save money later is a good investment of funds. It's not an expenditure of funds. There's a big difference.

John Edwards, Councilman, Town of Islip

We would ask that LIPA consider promoting further the training of their HERS Ratings in regard to the Energy Star program. The Town wanted to include in our requirements an Energy Star indoor air quality package. However, we were informed by LIPA's local representatives and contractors that the HERS Ratings on the local level are not up to speed on that program and so we had to withdraw that language from our resolution. But we're hoping that if the HERS Raters can be brought up to speed on that indoor air quality program, that at some point in the near future we can put that back into our requirements.

Long Island Energy Partners, John Eff

We are an ESCO working in the demand side management and clean energy programs that LIPA has and energy efficiency programs. We work with these clean energy programs. We've completed a number of projects in the commercial market. And we continue to work in the market segments in educational, manufacturing, retail, healthcare, religious institutions and other markets. What we see from working with these customers is the important viability of these programs and the economic development aspects of these companies' businesses and institutions. They're important programs. We look forward to working closely with you on Efficiency Long Island which we feel is just a fantastic program moving forward.

Joe Schwarz

Please consider the possibility of completely or partially turning off the street lighting (except on & off ramps & signs) on major highways (with no intersections)i.e. Northern State Pkwy -Meadowbrook Pkwy etc. I feel the savings could be enormous.

Carmine Vasile

That's something you may want to do, set up a smart living center like they have in Connecticut. And they had everything there, geothermal, solar, and it was for educating the public.

Long Island Association, Daniel Perkins

LIPA's energy efficiency programs should, where appropriate, be coordinated with and be designed to complement and supplement the actions of other levels of government

Long Island Association, Harry Davitian

Our recommendation is that LIPA quantitatively compare the benefits that the implementation of each program element will bring about to -- as compared to the cost of that program element. A minimum cost benefit ratio should be established as a threshold that every program element must need to be considered. It's important that LIPA make sure that each specific program element included in the plan actually achieve the desired benefits and do so at a cost that is reasonable. Secondly, with respect to energy efficiency we think LIPA should learn from experience and to conduct a thorough review of energy conservation programs that it's involved in.

Long Island Progressive Coalition, Lisa Tyson

We think maybe you want to - maybe you can change the name of a blueprint to a "green print" which says what the goals are here. And then maybe something fun. I was just thinking there could be like a LIPA family challenge. Look at your energy usage as a family and have goals as a family in how to reduce it and check in and maybe the family that has the most reduction gets an award from LIPA, you know, really thinking about outside the box of how people think about energy.

Wayne Horsley, Suffolk County Legislature

With careful consideration to the cost/benefit impact on ratepayers, the Suffolk County Legislature believes that reducing demand for electricity through energy efficiency programs supported by the ratepayers provides the most economic and environmental benefits for our region. The Legislature is concerned that LIPA programs thus far have not been appropriately aggressive, and have done little to mitigate the runaway growth in demand that LIPA has experienced since assuming ownership of the former LILCO system. In fact, there were few observable adjustments of consequence to LIPA programs even as LIPA was adding many new power plants and two new electric transmission cables.

LVL Inc., Peter Meeker

As an engineering/design company specializing in electrical efficiency programs, I believe LVL, Inc. can fit into LIPA's Energy Efficiency & Demand Reduction Plan. We offer a 6-20% reduction in KWH for commercial & industrial facilities. To date, I've seen collaboration with the very short list of 5 ESCOs in this field. Will LIPA open up the market to smaller energy conservation companies? If yes, how so?

Response

LIPA is encouraged by the interest in its energy efficiency, demand side management and energy conservation programs, as evidenced by the number of comments received in this area. Such input has also made it clear to us for the need of a more consistent and aggressive approach to publicly reporting the results from the conduct of such efforts. The Authority plans on increasing its investment and support of customer programs to encourage and expand efficiency and conservation efforts among the electric consumers on Long Island. LIPA's approach to this plan is to revisit its current portfolio of programs to re-evaluate both program plans and delivery methods to improve upon overall efficiency achieved while also aiming at keeping future costs for such

efforts as low as practical for the goals established. The programs, both existing and additions being introduced with the Electric Resource Plan, are both cost effective and beneficial to ratepayers and will continue to serve in reducing costs and significantly improving the efficiency with which electricity is used on Long Island. The expanding efficiency programs under the 10 year Efficiency Long Island program provide increased opportunities for LIPA customer participation. As described in section 3.7 of this volume, LIPA endorses its own 15 x 15 Initiative designed to support the efforts of the New York statewide 15 x 15 initiative. More information about these efforts can be found in the Energy Efficiency section of Appendix A, Technical Report. LIPA will continue to evaluate the best mechanisms to improve its public education and outreach programs and identify the communication vehicles that are most effective.

3.10 Emissions

Carmine Vasile

Ed Dumas made a statement that they don't burn contaminated or waste oil in the power plants in Northport. And I have the air permit right here. And it says here, in addition to No. 1, No. 2 and No. 6 fuel oil and natural gas, these boilers burn waste oil generated on site and other company facilities for energy recovery, and incinerate CitraSolve, a boiler-cleaning solution, following the boiler cleaning. Now, in addition to this, they're violating the air permits and the DEC is inspecting it now, because Eric Knudsen testified to FERC. We were -- Peter Quinn, John McConnell and I. He said they were burning Jiffy Lube, oil from Jiffy Lube which is a violation of this air permit. Now, I don't know how it's getting into the Northport Power Plant. But that has to be stopped immediately.

Long Island Association, Daniel Perkins

The Plan should recognize the continuing importance of reducing emissions from power generation and explicitly incorporate consideration of the effect of imports of power to Long Island from PJM on the overall emissions from power generation facilities.

Long Island Association, Harry Davitian

With respect to the conventional air emissions, it's important for the plan to recognize that power plants to the west of us contribute substantially to the emission concentrations on Long Island. In particular, all coal-fired plants with minimal pollution control equipment in the PJM system emit a disproportionate share of the power generation-led pollution on Long Island's area. Therefore, the plan should recognize the continuing importance of reducing emissions from power plant generation and explicitly incorporate consideration of the effect of imports of power to Long Island from PJM from the overall emissions from power generating facilities.

Response

While LIPA does not own or operate fossil-fired power plants, it does monitor the emissions of power plants under contract to LIPA. LIPA works with its suppliers to make sure the facilities operate in compliance with permit requirements and state law. LIPA's current planning process explicitly incorporates CO₂ emissions in its evaluation of alternative resource plans. Two mechanisms aid in quantifying CO₂ emissions – the first is direct emissions measurements from power plants under contract to LIPA, the second is a footprint calculation that captures the impact of importing power from New York State, New England, and PJM, specifically resources

contracted to LIPA. Examples of LIPA’s recent efforts to import non-emitting renewable based power include recent contracts with Bear Swamp Pumped Hydro, Brookfield and PP&L Landfill gas facilities.

LIPA does, from time to time, contribute waste dielectric fluid from its transformers, cable, and circuit breakers to the Northport plant fuel mix. This disposal is entirely within the plant’s permit and the total volume is inconsequential to the plant’s fuel consumption. The emissions from this disposal on a per gallon basis is less than the plant’s normal fuel oil.

Longer term, much of the PJM region is participating in the RGGI program along with New York. The expectation of RGGI, or possibly similarly designed national programs, is to, among other things, both limit carbon emissions in the region, including much of the PJM area, and impart a cost to the continuing carbon emissions that endure. This market price will tend to be self regulating and encourage on-going cleanup of electric generation emissions. To the extent Long Island continues to import power from PJM it will tend to have these self-regulating factors causing a decrease over time of emission related to such generation.

3.11 Energy Prices

Long Island Climate Solutions Network, Scott Carlin

How will the energy plan address the possibility that energy prices will continue to rise? It's not clear from what has been publicly let out how pricing will fit into your modeling. How will this affect LIPA's investment strategies?

Response

In the past 12 months we have witnessed extraordinary volatility across the entire energy complex of products including gasoline, home heating oil, natural gas, residual oils and purchased power. LIPA has not been immune from these volatility impacts. LIPA uses a two pronged strategy to mitigate the impact of price volatility in both the short and long term.

In order to minimize the short term (0-5 yrs. forward) effects of volatility, in 2002 LIPA developed and deployed a proactive fuel hedging program. A Fuel hedge is a financial contractual instrument used to fix future fuel cost exposures. A fuel hedge contract commits LIPA to paying a pre-determined price and volume for future fuel purchases for a specific period of time or delivery. Utilities enter into such instruments to reduce the turbulence of confronting future fuel expenses. LIPA’s hedging program goal is designed to provide a range of certainty for future fuel needs to generate power on Long Island. In fact, the NYS PSC issued an order in 2007 to regulated utilities in NYS to develop hedging guidelines¹ – “as a way to smooth out on an on-going basis, commodity rates to reduce volatility of commodity supply services to mass market customers”.

In the long term LIPA’s planning process evaluates alternative resources under a variety of varying fuel price forecasts in order to test the sensitivity of technologies to fuel price variations. As a means of reducing long run energy price volatility the ERP emphasizes diversity of resources including renewables and an increasing emphasis on efficiency of use. In June 2008 LIPA began an

¹ Order No. 07028/06-M-1017 dated 04/18/2007 “PSC Requires Development of Hedging Guidelines for Utilities

administrative process to implement a multi-pronged rate mitigation package which will allocate more than \$140 million in reserve funds to residential and small business customers and create a special \$10 million fund aimed at low-income senior citizens struggling to pay their electric bills. The funds committed in response to increasing energy prices were realized largely through a settlement of disputed payments under a previous Management Services Agreement (MSA) with KeySpan and through savings extracted under a renegotiated MSA with National Grid after its announced merger with KeySpan.

3.12 Environmental

Long Island Association, Harry Davitian

The environmental cleanup costs and decommissioning costs associated with older power plants should remain the liability of the owners of the power plants and not be passed onto LIPA's ratepayers.

Response

LIPA currently has no direct obligations for decommissioning costs associated with the older, former KeySpan power plants which it has under contract. During to term of the contract for these power plants, LIPA does help pay for some environmental compliance costs. After the expiration of the contract, LIPA would not have responsibility for these types of costs. In the event that LIPA buys the power plants, it will absorb any costs of decommissioning.

3.13 Forestry Management

New York Releaf, Robert Sympson

I am really excited about today is the opportunity to bring to you the knowledge of the Sacramento Municipal Utility District. For the last fifteen years or so -- and, you know, I have the data here. I could not believe what they were doing. I've had communications with the director out there. They're planting - - they're funding thousands of trees to be planted on private property because they have figured out that ten years down the road it is cheaper to plant trees now than to build power plants out into the future, that the demand side -- in other words, it's cost effective. I want to encourage you to look into that because you're a big operation on Long Island. You can affect an awful lot of change. And as a matter of fact, where my little committee in East Rockaway will be developing a program for next year where we're going to try, with the help of a Scout who wants the Eagle Scout Award, we're going to try to duplicate what SMUD's doing.

New York Releaf, Robert Sympson

I want to make you aware of the fact that we have a hundred-million-dollar bond issue that was passed. And in that is a modest proposal for a Nassau County forest management plan. And I think it's imperative that LIPA be part of that forestry management plan.

Response

LIPA has participated in the development of the Nassau County program and supports the goals of the plan. One of the most effective programs that help reduce electric outages and improve safety area is LIPA's Forestry Program, which features line clearance and planting smaller, "wire-

friendly” trees near electric lines. Every year, over 90% of all electric service interruptions result from tree or tree limb contact with overhead electric lines. LIPA spends over \$14 million annually on its tree trim and Wire-Friendly Tree Program, which promotes the use of trees that will have a less adverse impact on Long Island’s electric wires, poles and other components. Due to its efforts in this area LIPA was the first electric utility in New York State to be honored as a “Tree Line USA” utility by the National Arbor Day Foundation and the National Association of State Foresters.

3.14 Fuels

Marc Alessi, Assemblyman

The plan should incorporate an analysis of the possible benefits associated with changing its current fuel oil supply for the oil fired power plants, with a B20 blend of biodiesel. As a result of work I have done with both SUNY Stony Brook, and Brookhaven National Lab (list of researchers consulted attached), it is my understanding that should you use a B20 blend of BioDiesel (20% biofuel and 80% Petroleum based) the power plants you currently have would need little to no retrofitting, will operate much more efficiently, and you can reduce your emissions to the point where they are more closely associated with emissions that come from a natural gas plant. As a matter of fact, according to researchers at Brookhaven National Lab, new research indicates that we will be able to remove the Nitrous Oxide from BioDiesel emissions and once this is done, a B20 blend when burnt will actually be healthier for our environment over gas. We will save money on each gallon of fuel oil, we will clear up emissions to better levels than natural gas, we will reduce the need for capital investment in repowering, we will create jobs in grease collection, on farms, and in refineries throughout this state, we will lead the nation in a technology that is already proving itself in Europe.

Long Island Association, Harry Davitian

A robust energy plan would reduce LIPA's dependence on fossil fuels including both LIPA's direct purchases of those fuels as well as the fuels used in on-Island and off-Island plants from which LIPA purchases powers.

Wayne Horsley, Suffolk County Legislature

As fuel supply for proposed repowering and other projects is considered, the Legislature encourages LIPA to evaluate upstream influences on natural gas capacity and supply for Long Island - back to the fuel source. The Legislature notes that proposals for new gas supply identified by LIPA in its Energy Plan 2004-2013 interconnect with transmission pipelines already serving the entire northeast. The Legislature observes that each of the proposed projects requires additional upstream investments beyond landfall in Connecticut. Based on presentations made by KeySpan the Suffolk County Legislature has expressed support for the proposed Islander East Pipeline, but we also note that when KeySpan was promoting the expansion of its Liquefied Natural Gas (LNG) facility in New England, one of the justifications for expansion the company noted was inadequate supply of natural gas in New England.

Doug Hill

An ample supply of natural gas at reasonable cost is an urgent requirement for Long Island’s energy future. The major growth in the supply of natural gas to the U.S. must come from imported liquefied

natural gas (LNG). Having acquiesced to the scuttling of the proposed Broadwater LNG terminal, LIPA is now burdened with showing in its energy master plan where the natural gas will come from in the coming decades.

National Grid, David Manning

We look forward to participating with you in any way that we can assist on trying to overcome some of the challenges of bringing additional supplies of natural gas to Long Island. The inability to build the Islander East Pipeline, I think, is a very serious issue for LIPA and for National Grid going forward. The project is not dead but it certainly is not -- it's not embraced by Connecticut. It has been approved by all federal authorities, as you know, but it lacks state support.

Response

LIPA and National Grid have implemented the testing of biofuels on several 2 MW diesel engines at the East Hampton and Montauk peaking facilities. The environmental and economic aspects of the tests have been evaluated to determine whether use of biofuels can be demonstrated on a larger scale for existing diesel fired units or to use biofuels in other oil fired units. LIPA is also exploring converting other peaking facilities to biofuels.

This Draft Electric Resource Plan reduces dependence on fossil fuels through the use of energy efficiency, renewables, and repowering. With respect to natural gas supply, information on upstream gas supply can be found in the Fuel Management Plan, contained in Appendix A, Technical Report.

3.15 Net Metering

Long Island Solar Energy Industries Association (LISEIA), Michael Bailis

As I've been advised, there's a high likelihood that the net metering, the commercial net metering will pass this year. We're hopeful that it will. At that moment LIPA needs to address how to encourage those medium-sized plants, those 20 to 100 Kw solar plants to be installed because under the present program it doesn't encourage them. So if you combined a net metering program with a moderate solar program that encourages this size, you decentralize the grid and it becomes even more secure.

Phil Healy

It seems that, you know, with a simple change in the law, that municipalities, school districts, even large municipalities like the County, what we could return to the taxpayer, who would then have the ability to buy things, increase the sales tax and all those good issues that go with spending, by just changing a few laws. Once sentence in the law, in the tariff law that restricts you from allowing a municipality to tie into a solar issue to generate enough power not only to zero us out, but to sell it back to you at a fair rate, the amount of money that the municipality would save just as a tax issue and being able to keep people on Long Island and for residents to be able to survive here, I mean if I could return a quarter of a million dollars to my taxpayers that I -- that I answer to, that would unbelievable. It's just -- it's beyond just the greenhouse gas issue. It's beyond all the solar issues. But I'm looking at it last night with the Mayor and the Board. And it's like if we could find a way to cut our utility by two hundred grand in a small municipality on an annual basis, it's just -- that's an ambulance that we weren't able to buy, you know, that's two or three officers that we need that we're not able to hire. So it has a real-life thing. And I for the

life of me over these years cannot understand why elected officials haven't given that issue some legs to relieve you of that burden. We know you have to pay a huge debt, a bond that, you know, to pay a utility. I'm sure the Upstate people would kind of complain that they may not get the revenue they need back from you in a timely fashion to pay off the debt. But it's about keeping people on Long Island. It's about making jobs and being able to live here. So whatever you can do. I know there's a huge -- you just need somebody to champion the cause politically and you would have a lot of followers. So whatever you can do to relieve of us that burden would be tremendous.

Long Island Solar Energy Industries Association (LISEIA), Kevin MacLeod

Our rates are going to -- oil prices, gas prices, our rates are going continue to go up over the next fifty years if we -- So what we need to do is, LIPA needs to shift more away from fossil fuels and more towards this to achieve that goal. I know -- obviously we must have a rate increase coming here any day now being the fact that gas and oil is \$119 a barrel. So what I would like to do here is recommend three particular points that maybe could help LIPA achieve this goal of moving towards the renewable market. One, it would be commercial net metering; Two, smart metering; and Three, low-interest loans for solar energy projects.

Long Island Solar Energy Industries Association (LISEIA), Kevin MacLeod

First I would like to talk about commercial net metering. What I want do to is make a statement on this that LIPA has the authority to implement commercial net metering on their own without the state legislation. And we believe that we're not going to see the lead from the state this year in commercial net metering. So with LIPA's uniqueness down here, the fact that we can do that without the state legislation, and the uniqueness of the fact that we don't have that luxury of being able to generate our power with hydro, with water, that we should have commercial net metering. And we need to have it. Because schools, libraries, public institutions, all these -- all these areas could benefit greatly from having commercial metering, in other words, allowing their meters to go backwards. This will help with the implementation of solar energy in your program also and enhance and increase the number of installations.

Long Island Solar Energy Industries Association (LISEIA), Sal Von Nostrand

We agree wholeheartedly with today's Newsday editorial about commercial net metering. And we know that you feel the same way. You've told us that directly. But you can't stop there. Commercial net metering is only going to benefit a select few of commercial customers because of our rate structure, which was built way before the concept of net metering. We need to change the rate structure. We need to pursue your smart metering plan. Those two combined will make a huge difference and will really unleash the market forces that are just waiting to be cut loose but can't under the current circumstances. It doesn't take rebates. It takes releasing the pent-up demand by changing the way the rules are written. LIPA and the ratepayers will benefit from really studying the German model and understand how Germany unleashed the market on solar.

Wayne Horsley, Suffolk County Legislature

The Legislature also supports net metering for commercial and municipal properties as a means to better support development of a local "green collar" economy. As part of its Energy Plan LIPA should investigate the long-term carrying costs of net metering on ratepayers, however, and evaluate the cost /

benefit of a per project sunset provision, and/or a declining block buy-back price for net metered projects over the rated life of those systems.

John Schneider

We're looking to see if we can use solar power to really meet all of our energy demands at the Town Hall and possibly even be able to sell some energy back to the grid. And hopefully that's the kind of collaborative project that the other municipalities can take going forward.

Response

Regarding commercial net metering, LIPA has amended its electric service tariff to further encourage the use of solar generating resources and is the first utility in the state to make net metering available to commercial buildings, schools, municipal buildings, hospitals, fire houses and all other non-residential customers.

Under the changes, LIPA introduced new tariff provisions to allow for net metering of energy for non-residential customers who install solar generating equipment at their facilities and expanded the existing size limits for net metering to residential customers as well. The amendments included the following:

- 1) Authorized net metering for non-residential customers with an overall capacity of up to the lesser of the customers peak demand, or 2MW**
- 2) Increased the overall capacity for net metering on residential solar customers from 11kW to 27.5 kW**
- 3) Increased the combined total allowed overall capacity for residential and non-residential net metering on LIPA's transmission and distribution system from 3.6 MW to 51.2 MW**

LIPA's tariff changes conform to the legislation spearheaded by Long Island lawmakers Senator Owen J. Johnson and Assemblyman Steve Englebright that passed both houses of the Legislature in 2008 and that authorizes utilities to implement these changes statewide.

3.16 New Energy Technology

Liquid Air Energy, Nelson Stewart

I am here and I represent Liquid Air Energy. And I'm here to talk about a seven trillion dollar energy and pollution tax rebate for Long Island residents...I have in production a prototype. I've run it. It's on my Web site. You can watch it. The lights go on. That's cold energy. Nothing is burned. It comes from a cylinder that has 3,000 pounds of energy. I built liquefaction plants and liquid air plants that produce anywhere from three to ten million gallons a day of liquid air I have a prototype and it works. ... And the prototype is a 17.5-kilowatt machine. It puts out 17.5 kilowatts per hour without pollution cost, without emission, without heat, without terrorism, without anything. And you can make it right here in this room

Commercial Illuminations, Inc. (the ElectricSaver), Gabriel Tordai

In the fourth quarter of 2007 we brought this capacitor based power-factor correction device to the market which is a well known technology or it has been in existence for several decades. And we were hoping to address the problem of the never-ending energy increases and to help businesses to reducing the

environmental footprint and also help the homeowners to reduce their electric bills. So that's what this product is for. The reason why I came to speak is because we were submitting test units to LIPA before hoping that eventually it will be put under a program. And at least we were hoping that it would be endorsed by LIPA. And we got a very interesting response that it could not be endorsed or put under any programs in the future because of the short return on the investment. We could definitely save five, ten, fifteen percent with this product for the homeowners. That's what we've been doing for commercial operations for these supermarkets, for instance. So it's been proven. And basically why this would be important for the utility company, such as LIPA, because as you know, energy savings won't come easily, but buildings that are retrofitted with a capacitor, which I want to talk a little later, suddenly becomes greener with a great effect. It can bring up the power factor, which is basically the efficiency of the home, near to the desired 100 percent unit level which meets or even exceeds the Energy Star standards. That's without changing a single appliance in the home. In fact, since only two percent of the buildings in America were built in the last two years, we kind of expect that retrofit is the way to go. And this is -- this should have a huge part in the efficiency improvements. We believe that our unit helps the utility companies to better allocate and distribute the electricity throughout their grid therefore helping to reduce the chance of these unwanted events. And I would like to wrap up my speech. I kind of hope that there's maybe a chance for us that you would reconsider and test this unit again because as I see that you have great efforts putting together a great plan, this energy master plan, and somewhat experiencing is that lower levels of different departments losing motivation and it's basically going against the plan a little bit.

Response

LIPA is continuously evaluating new technologies for inclusion in its customer incentive programs. However, in doing so, LIPA must ensure that such technologies and their claims are commercially proven and represent a cost effective means of improving customer efficiency and not resulting in a negative customer experience.

3.17 New Generation

Long Island Association, Harry Davitian

LIPA should not incur the risks of construction and ownership of generating facilities. Given the disastrous long-term effect of the Shoreham debacle on electric rates, it is important to remember that the risks and liabilities of building and operating power plants is not a theoretical concept. Utility customers should not once again be put in a position of being unwitting risk-takers insuring utilities against mistake they may make in construction projects or in operating power plants. LIPA should select new generation facilities through competitive bids to make sure LIPA pays the lowest price. LIPA should open the bids to all conventional generating facilities to make sure that the Island gets the benefits of the very best ideas and proposals.

Response

LIPA has acquired a significant amount of power through a series of successful and efficient bidding processes and is likely to continue to doing so as a standard practice. However, ownership of power plants on a temporary basis may be beneficial to LIPA. Such ownership may afford LIPA the ability to better control its energy future.

3.18 Planning Objectives

Long Island Neighborhood Network, Neal Lewis

I think there should be an explicit analysis in the beginning of the plan of the competing goals; the need to pay down bonds, the need to, in essence, generate income by generating and selling energy and how that goal competes with some of these other goals in terms of the need to address the impact that our energy generation has on global warming.

Doug Hill

While the LIPA Energy Master Plan outline indicates that there will be a summary of Strategic Objectives, none are listed there. A few suggestions: • Preeminently, reducing greenhouse gas emissions • Second, reducing dependence upon imported oil • Reducing the vulnerability of the distribution system, not primarily to terrorist acts, but to severe storms and human mismanagement, such as that leading to the 2003 blackout of the Northeast.

Long Island Regional Planning Board, Michael White

I want to first note that your proposed energy plan, master plan outline, now the -- now the 2008 to 2017 plan, pretty much presents a plan in the same form as that existing plan indeed describes the organization of the new plan. Its elements are almost identical. And on one hand I would say that it seems to make sense because you don't want to reinvent the wheel, at least with respect to form. But I would also argue that it better be a new, improved, greener and cheaper plan with respect to content. Indeed, if LIPA is going to make a difference in the areas that it must, it must change the objectives or at least create a new priority of objectives that are expressed in that 2004 to 2013 plan; because I would submit to you we are under exigent circumstances.

Long Island Regional Planning Board, Michael White

I suggest to you we not only have exigent circumstances but we need bold and provocative steps from LIPA and to simplify your objectives. And I'm going to go through five points:

- Reduce consumption of fossil fuels;
- Reduce emissions of air pollutants, greenhouses gases, specifically CO₂;
- Implement real energy efficiency and conservation.
- Increase the use of renewables;
- Reduce or at least stabilize the cost of electrical generation or electrical cost to ratepayers.

Joseph Schroeder, Suffolk County Legislature

What we're looking for from LIPA is some assurance that things that are within your control and beyond your control are addressed adequately in the plan.

Response

The Draft Electric Resource Plan includes a concise discussion of its Objectives in Section 3 of Appendix A, Technical Report. The five Objectives of the Electric Resource Plan are as follows:

1. Promote a healthy environment through leadership in efficiency and renewables
2. Balance plan objectives against impacts on customer electric bills
3. Enhance the reliability of the bulk power system
4. Enhance the reliability of the distribution system
5. Position LIPA to respond rapidly to change in order to manage risk

To accomplish these objectives the plan is strategically focused in the following four major areas:

1. Energy Efficiency
2. Renewable Resources
3. Upgrading the Existing Generating Fleet, and
4. Improving Transmission Interconnections

More information about these objectives and strategies can be found in the Electric Resource Plan volume and Appendix A, Technical Report.

3.19 Planning Alternatives

Long Island Progressive Coalition, Lisa Tyson

And the other piece of it, which I'm hearing today, LIPA is a public authority. We were calling for this for the past fifteen years as an organization. Do not be scared to purchase a power plant if it makes sense. Do not be scared to do it what's right. Because when we take the private companies and their shareholders out of the scenario, we can save significant amounts of money. Of course, liability is important and to look at all of the financial situations. But do not be scared to do this. Because when we talk about public authorities and look at other public authorities, they do run generation and they do have a different role than you might have.

Caithness Long Island Energy Center, Ross Ain

In spite of the great efforts to modernize generation, LIPA still relies, day-to-day, for much too much of its megawatt hours on plants that were built more than thirty years ago. And stated historically, if these plants were cars, they would have antique plates on them. LIPA may need these plants for the foreseeable future for capacity, for peak load and some intermediate service, but they should be minimized in terms of their base load service to save energy, dollars and to minimize environmental damage. Caithness Long Island is prepared to work in a competitive process with LIPA to develop a proposal that we would offer to LIPA, as we did in 2003 when fourteen proposals came to LIPA, of which two were selected. We believe with the -- with the success we're having at our current site and with some studies we've undertaken to demonstrate cost savings and economies that could be achieved in an additional unit at that site; we're prepared to participate in a competitive solicitation process for the benefit of LIPA and its ratepayers.

Dowling College, Peter Maniscalco

I would recommend that there has to be two essential components of what you're going to do here. No. 1 is in terms of priorities, conservation and efficiency have got to be the highest priority, the first investment. I disagree with the point of view that we need to do all of these things at the same time. Once all the demand is squeezed out of this system, then the next investment has to be renewable energy. The third component, the repowering component, maybe we have to do that. Maybe we don't. We probably have to do some of it. But to do repowering first is going to undermine this whole process.

Hispanic American Association, Cesar Malaga

LIPA is spending millions of dollars to provide the facilities out east to the McMansions, they call them. Those tremendous, big houses. The people who build those houses, they can well afford to install their own, you know, a power plant out there. They only need about three or four months during the year. And the investment you're making, you are not going to get back that money from them. They can install out there solar panels for their homes or small generators to care for electricity out there. So we should not be wasting money to provide power to the billionaires, millionaires out there. We are people who do not make millions. But you should look into that. They should build their own power and solar panels. We should not be wasting money.

Long Island Solar Energy Industries Association (LISEIA), Bill Feldmann

The largest, by far, available energy source is the sun for solar on land. Six hundred terawatts of clean energy is available on rooftops and land that doesn't need to be used for agriculture. So by far that study concluded where we should invest our money is in capturing the sun's energy. It's the largest untapped natural resource in the world.

So the energy master plan should consider that heavily. Again, energy efficiency is very important because of where we're getting our energy from. If we were getting it from the sun with no environmental impacts, the efficiency would not be as important. So I think that this plan should look heavily at solar even though right now it's expensive, but it's compatible to retail electricity.

Long Island Solar Energy Industries Association (LISEIA), Sal Von Nostrand

What we've asked you to consider is that all future demand be met with renewable energy and only renewable energy. No increased demand should be met with further commitment to oil or a further commitment to polluting the environment. For the good of our Island, for the good of our children, and the interest of national security, we ask that you do all of this and you do it all on a very fast track. We don't have anymore time.

Long Island University, Matthew Cordaro

I did make a comment at the board meeting last week, which I'll expand upon a little bit. And that's in regards to the need to include all major decisions, from an energy supply standpoint, from an electricity resource standpoint, in the energy planning process that's underway. And this includes the \$924 Efficiency Long Island program, as well as the fifty-megawatt solar program, and also the continuing solar rebate program and Renewable Energy Initiatives which are outside of the Efficiency Long Island program. I think they need to be included in this emergency -- energy planning process and not be decided upon outside of the framework of that process. If this is not done and we move forward and prematurely adopt those programs, it undermines considerably the results of the energy planning process.

And the reason for this is because it severely limits the funds that are going to be available for the other alternatives that will be considered. Obviously, there's a limit to the amount of money that ratepayers can come up with to help finance and fund these programs. And by limiting that prematurely and not subjecting the distribution of those funds to the energy planning process, it compromises the results and it doesn't provide a combined energy strategy which is the most cost effective and also the one that causes the least environmental impact. The only way to distribute these scarce financial resources and produce the greatest benefits in a true energy planning process is to examine all alternatives at the same time and produce a combined strategy that minimizes the customer review requirements while maximizing the environmental benefits.

Wayne Horsley, Suffolk County Legislature

The Legislature encourages that all energy supply projects be reviewed in the context of a companion effort to reduce energy demand. To that end, it is no more appropriate for LIPA to indiscriminately support development of a major bulk power renewable project than it would be for LIPA to indiscriminately support development of new fossil fuel generation. In that context, we observe that the previously conceived offshore wind project may have done more to cast the potential of wind power in question than it could have done to promote public awareness and acceptance of wind power technologies. The Legislature encourages LIPA to exercise the greatest possible transparency and promote the greatest possible public awareness (justification) for successor proposals to the recently abandoned offshore wind farm.

Response

LIPA's planning process incorporates an analysis of a diverse and comprehensive list of planning alternatives. The technologies can be broadly grouped into six major categories, supply, efficiency, renewable, repowering, retirement and transmission.

Supply options include; peaking, intermediate and base load alternatives located both on and off Long Island. Efficiency options encompass a range of both end-use - customer focused - and delivery - reducing wires losses and improving generation efficiency - based solutions. Renewable options include wind, solar, landfill waste to energy and bio-fuels. Repowering alternatives included all the major facilities on Long Island; Northport, Port Jefferson, Barrett, Shoreham and Warding River. Retirement options focused on the implications of retiring one or a combination of the existing generating units on Long Island either as a stand alone strategy or as part of a repowering effort. Lastly, the transmission options focused on enhancing interconnections to adjacent ISO's either by adding new interconnections or increasing the capacity of existing ones.

For a more detailed discussion of the alternatives LIPA considered in the development of its ERP please refer to Appendix A, Technical Report.

3.20 Name of Plan / Purpose

Long Island University, Matthew Cordaro

I would suggest a more appropriate label for it is an "electric resource plan" or "integrated electric supply plan," something along those lines. Because a total energy plan is really something much broader than what you are proposing to do and what you should be doing.

Long Island University, Matthew Cordaro

The last comment refers to your volume II [Appendix B, Energy Primer] in the outline. My concern here is that the expense of producing this volume should be critically minimized compared to what should be allocated to the true planning efforts you are undertaking. The focus of the energy plan should be how LIPA intends to go forward, not dwell on justifying past decisions and, you know, which it turns out to be more of a public relations document if you start doing that.

Regional Plan Association, Robert Freudenberg

We urge LIPA to consider the energy applications of alternative land use patterns. Redevelopment of downtowns, particularly around transit facilities, can result in more efficient energy use. Municipal county and state governments are wrestling with policies right now that could either encourage or discourage this type of growth. While it's not LIPA's responsibility to make these development choices, it will be of utmost importance to ensure that there's coordination between LIPA and the appropriate state and local government agencies and private stakeholders to address the areas where energy intersects with changes in land use and transportation. The energy master plan should detail any plans for such coordination.

Doug Hill

The outline of the LIPA Energy Master Plan 2008-2017 needs to be evaluated in the context of the evolving nature of electricity generation and distribution in the U.S. In addition, both Kevin Law and John Cameron of the Long Island Regional Planning Board have stated that the LIPA plan will also serve as the energy plan for the LIRPB. Therefore the outline needs to be evaluated as the Long Island – not only the LIPA – energy master plan. From this perspective, the outline is inadequate in several respects:

- As it is concerned only with electricity – about one-third of Long Island's energy consumption – it falls far short of serving as Long Island's energy master plan.
- With a 10-year planning horizon, it is limited to fine-tuning the present electricity system without evaluating possible long-term transformational changes.
- The "scenarios" described are alternative resource plans. Ordinarily, the term "scenarios" describes various external conditions – such as future energy prices, possible restrictions on carbon dioxide emissions, or availability of natural gas – under which such plans would be evaluated. No such uncertainty in future circumstances seems to be considered.
- With the availability of natural gas likely to be crucially important in the future – even in the next decade – there is no mention of plans to secure an adequate supply. While a Renewable and Distributed Generation plan and a Transmission and Distribution Plan are promised, the Alternative Technologies Considered do not include local combined heat-and-power, "district energy," fuel cells, or ground-source heat pumps that could be promoted in the development of "smart growth" communities, as an alternative to continued near-total dependence upon centralized power generation.
- There is no statement of the objectives of the plan in the outline. From the list of Alternative Technologies Considered, it would seem that a primary objective is to perpetuate the present obsolescent centralized generation and distribution system."

Long Island Association, Harry Davitian

The long-range plan developed by LIPA needs to take into consideration the expiration of LIPA's contract with National Grid for the provision of 4,000-plus megawatts of power generating facilities which expires in 2013.

Long Island Neighborhood Network, Neal Lewis

We, of course, for almost ten years now do have a public utility. I think that the master plan should start by explaining how that's different than private utility. What's the mission of LIPA? What are the statutory requirements as it applies to issues of renewables and energy efficiency?

Long Island University, Matthew Cordaro

I'm here to urge that the process you have laid out is pursued vigorously and not compromised in any way. This should have always been the approach to energy planning. In the past, the earlier plan that was produced was more of a collection of things that LIPA was already committed to, programs LIPA had in place and served more to justify the decisions being made rather than be a future-looking document to be used as a planning tool to make decisions in the future. And I think what you've done and what you've laid out, in fact, does that.

Wayne Horsley, Suffolk County Legislature

These are serious energy supply issues for our region and the Suffolk County Legislature is relying heavily on the due diligence of LIPA to aggressively and openly investigate and evaluate the benefit of each project on the total cost / benefit for Long Island.

The Sustainable Energy Alliance of LI, Mark Seratoff

What Long Island needs is a bona fide public authority that champions a new vision of energy supply and usage on Long Island - conservation, efficiency, and renewable energy.

Response

The Electric Resource Plan provides a blueprint for Long Island's electric energy future. It articulates LIPA's strategy for developing a balanced and comprehensive electric energy policy. It discusses the methodologies employed and the rigorous technical analyses undertaken in support of crafting the plan. It also incorporates valuable oral and written commentary received from LIPA's concerned customers and other interested parties. Additionally, the LIPA Electric Resource Plan features a discussion of the critical education activities which are underway to disseminate information regarding how changes in the electric industry impact LIPA and its customers. In order to comprehensively address these issues, LIPA has organized the LIPA Electric Resource Plan and supporting documentation into one main document and four appendices as described in the Overview in Section 1.0 of this appendix.

In direct response to input received during the Hearing process, LIPA has renamed its Master Energy Plan to Electric Resource Plan in order to better align with the core focus of the report.

3.21 Planning Goals / Targets

Long Island Climate Solutions Network, Scott Carlin

LIPA's new efficiency program talks about the need to slow growth. But, no, first we need a plan that commits Long Island to negative growth in fossil fuel consumption. Second, LIPA needs to establish a more democratic decision-making process. There are hundreds of professionals outside of LIPA with an

interest in building a more successful regional energy system. Give them a greater role in your decision making. A 2002 report by the Sustainable Energy Alliance recommended placing the LIPA Board -- replacing the LIPA Board with one elected by Long Island citizens. That report also recommended the establishment of a Citizen Advisory and Oversight Committee. LIPA should hold public hearings as part of its planning process to investigate what the region would gain and lose from those kinds of structural changes. Third, the new energy master plan needs to plan for a wider range of scenarios given the volatility of today's world. And my comments reflect the nine different scenarios that were in that document you released.

Long Island Climate Solutions Network, Scott Carlin

LIPA's energy plan extends to 2017. It is certainly reasonable to expect that in the 2012 to 2017 time -- sorry, 2017 time period, the United States will initiate programs to cut total carbon emissions. It's not unreasonable to explore aggressive reduction targets. My numbers would be ninety percent by 2030, not too far off from Adrienne's eighty percent by 2020. In fact, it is morally unconscionable to not explore such options. We're not committing to a path. We're just saying if we follow that path, what does that mean for us? How expensive would such a path be? What benefits would the region derive? In proposing nine scenarios, LIPA might protest that we already are modeling many alternatives. But these nine fail to explore the full range of choices that are available to us. They fail to explore the full range of likely regulatory changes over the next few years.

Long Island Neighborhood Network, Neal Lewis

Is LIPA still seeking to grow? That I think is a fundamental question that needs to be addressed.

Long Island Neighborhood Network, Neal Lewis

It's said in the business community that you can't manage what you don't measure. I think it's absolutely critical that we bring in resources to begin to analyze what's going on. Are the business -- is the business community continuing to go up in its demand? Are homeowners going up in demand? Is the Hamptons going through the roof with large houses forcing a seven percent growth or something like that while the rest of the Island is at two percent growth? We need to know all of those numbers. We need to be able to talk about schools and institutions. And so I really encourage much more detailed numbers being generated about where we are today, how it's grown to get to where we are today. Because otherwise, talking about plans and such it's just not grounded. And so I think there's mechanisms and resources available to do that.

Long Island Progressive Coalition, Lisa Tyson

We see the energy master plan as that kind of a system where you have your goals and then every year we go and we say well, where are we at with these goals? And then there are recommendations. Well, how else can we meet these goals? So if the solar program isn't getting enough people to join it, well, what are some different strategies to do that?

Wayne Horsley, Suffolk County Legislature

The Legislature observes that the previous Energy Plan LIPA published relied on projected peak demand levels that were below peak demand levels LIPA had already experienced. In the context of measuring

the efficacy of LIPA programs we encourage LIPA rely on genuine data when available, and adjust projections periodically to better reflect actual experience...

Long Island Association, Daniel Perkins

The financial impact on LIPA resulting from RGGI will be material. Accordingly, LIPA can and should make reduction of greenhouse gas emissions an important goal as it considers its various energy supply options for the Plan.

Long Island Association, Harry Davitian

Long Island may be particularly vulnerable to the effect of climate change that are expected from greenhouse emissions. New York has entered into an agreement with other states in the Northeast, with respect to the Regional Greenhouse Gas Initiative that creates regional wide cap and trade program. The financial impact on LIPA due to this will be material. Accordingly, LIPA can and should make the reduction of greenhouse gas emission an important goal as it considers its various energy supply options for the plan.

Response

The Electric Resource Plan incorporates many difficult and often competing issues such as power supply adequacy and security, low costs for consumers, grid reliability and protection of the environment. The evaluation of these and other weighty issues is fundamental to the planning process. Both short- and long-term customer needs must be met through creation of an energetic process which is intended to satisfy the key issues in this sometimes conflicting planning effort. This Energy Resource Plan is part of a long-term responsive and dynamic planning process designed to address demand and supply options on a continuing basis to meet Long Island’s future energy requirements.

3.22 Power Line Construction

Robertson Laytin Inc., Elizabeth Robertson Laytin

STOP cutting down trees and building ugly power lines on Northwest Rd in the Northwest Woods! Why do you think they call it the Northwest Woods? Because we love our woods and our nature trails and we want the character of our neighborhoods to remain unspoiled by horrible high wires. How can you cut down trees and build new power lines where there were none before, before asking the people of the town how we feel. Our bills keep going up and our neighborhoods keep getting uglier. STOP! Bury them or find a way to use the lines you have! STOP the building and tearing up of Northwest Road. It (USED TO BE) one of the prettiest roads to drive on in America.

Response

LIPA agrees that the Northwest Road area in East Hampton is a unique location surrounded by permanently preserved land. LIPA has no current plans for constructing overhead lines on Northwest Road. However, an underground distribution line was installed in this area in 2008. LIPA’s transmission and distribution line planning and construction processes consider many factors before building or expanding new lines. Primarily, the need for additional grid facilities must be well proven, usually driven by growth in consumer demand for power and/or aging and

deterioration of the existing system to a point that it must be replaced. LIPA has guidelines and procedures in place governing new construction standards including environmental impact. The cost to build lines underground can be significantly more expensive than overhead construction. As a result, it may not be cost effective to build underground.

3.23 Power Plant Operations

Carmine Vasile

There's an old report by NYPIRG and they're saying that the Northport power station is dirtier than the coal-fired plant. The only way that can be is that nobody ever tuned up the power plants. Now, they talk about an efficiency of 33 percent. But one of the units was running at twenty percent. So that's a violation of the Power Supply Agreements that LIPA has with KeySpan and now National Grid. Those plants should be tuned up.

Carmine Vasile

When LIPA took over the power plants, they were at certain efficiency. These have degraded since then. KeySpan never tuned up these power plants. They let them go to pot. And according to Eric Knudsen's testimony to FERC, they got as low as thirteen percent.

Response

LIPA's ERP specifically outlines maintaining and upgrading the existing generating fleet as one of its goals. LIPA is committed to cost effective and prudent maintenance of the former KeySpan (now National Grid) generating facilities it has under contract, which includes Northport Station. As part of this commitment LIPA in conjunction with National Grid routinely maintains these units on an annually and overhauls these units on a scheduled basis in order to regain lost efficiencies and replace worn components.

3.24 Public Input & Transparency

Long Island Climate Solutions Network, Scott Carlin

One of the core messages that I've tried to convey publicly is that the theme of our era is now interdependence. You have to start preparing for the day when you become a transportation energy agency as well. And I really wanted to endorse the notion that we're only going to get through this by working more collaboratively together and that involves the public. It involves all the other governmental institutions and I hope that is something that makes it into your plan as well.

Citizens Campaign for the Environment, Adrienne Esposito

The second thing that I'd ask you to do is in the plan to have a section on how you will implement massive, effective, meaningful, substantive, public involvement.

Peter Quinn

You need to openly publish, as I have indicated to you both at the board meeting and in a meeting last week, the thermal heating percentage for each of the generating plants. It would be absurd to buy any

generating plants that are thermally -- the thermal heat percentage is less than twenty percent. And who knows, given the long length of time that these generating plants have been in existence, there may be many that are poorly -- provide poor amounts of energy efficiency at those plants. And that information should be publicized before any decision is made.

Long Island Association, Daniel Perkins

LIPA should inject transparency into the process of how it determines its level of spending on energy efficiency programs, how it is selecting programs, and the efficacy of those programs.

Wayne Horsley, Suffolk County Legislature

As a whole, the volume of energy consumed by Suffolk County facilities makes the County one of LIPA's large volume energy consumers. The Legislature suggests that the County and other consumers across the spectrum be given ample opportunity to influence the types of programs, and to a degree incentive levels that LIPA plans to offer with its new energy efficiency programs. From the County's perspective, we recommend that LIPA's "prescriptive" programs be accompanied by ample opportunities for "non-prescriptive - or - custom" programs that afford customers energy saving opportunities. We also encourage LIPA to offer incentives that address the higher cost of installed projects where prevailing wage is a factor. To that end, LIPA might consider tiered incentive levels.

Wayne Horsley, Suffolk County Legislature

The Legislature encourages that the Energy Master Plan provide for scheduled reviews with all interested parties, at least annually, and (quarterly or semiannual) working group reviews.

Wayne Horsley, Suffolk County Legislature

...The Legislature also encourages LIPA to conduct quarterly assessments of all internal goals in order to maintain proper balance between supply and demand issues. The Legislature suggests the Energy Plan provide for those assessments to be made available to interested parties.

Wayne Horsley, Suffolk County Legislature

To the degree that LIPA intends genuine demand reductions as a consequence of new energy efficiency / conservation programs, the Legislature encourages that the new Energy Plan speak to the anticipated balance between demand growth and new electric supply projects, including repowering. The Energy Plan should also provide for greater coordination with local planning boards so that the impact of new developments on energy infrastructure is better understood in the planning process.

Response

The LIPA planning process is continually on-going and the public is invited to comment at key points in time along this process. LIPA's ERP which includes this Response to Comments volume is a direct result of LIPA's effort to seek public input regarding its proposed outline of its Electric Resource Plan. LIPA routinely makes its draft planning documents available on-line and in hardcopy for public review and holds public meetings especially to receive the input from customers, Long Island residents and other interested parties. LIPA encourages comments in as open and as responsive a process as possible. Examples of LIPA's commitment to public input

beyond the development of the ERP include; Repowering Stakeholder Committee and regularly scheduled LIPA Board meetings. The schedule for the Board meetings can be found on LIPA's Web site at <http://www.lipower.org/newscenter/calendar/events08.html>.

3.25 Purchased Power Contract

John Edwards, Councilman, Town of Islip

I would ask that the master plan just take into consideration that the Town of Islip and LIPA currently have an agreement concerning the eight megawatts of electricity produced by our Waste Energy facility and that that agreement is expiring in 2010, which is right around the corner. At the conclusion of this agreement, the Town will obviously seek the best price available to benefit our residents for that energy that we're providing. But we would welcome a competitive bid from LIPA or prior to the conclusion of that agreement, maybe a renegotiation of its terms and an extension.

Response

LIPA would consider, subject to its procurement guidelines, discussing renewal and extension of the purchase agreement with Islip.

3.26 Rates

Rose Van Guilder

I would just like to say that Long Island is not in an economical position to put into effect this master plan. What we need is a smart plan which will include some conservation programs and also keep the cost of electricity affordable to the ratepayers. The people of today are in foreclosure. They're losing their jobs. The economy is in a recession. We are in a very bad economy. These programs are great and you can introduce them in a time when the economy is flourishing and everyone would applaud you.

Long Island Association, Daniel Perkins

High electric rates increase the cost of living on Long Island and make it harder to attract and retain businesses here. In considering the best actions to help reduce the cost of electricity, the Plan should focus on those that have the potential to cause meaningful long run reductions in the cost of power. Examples of such actions that LIPA should examine are: paying down once and for all the Shoreham debt; reducing property tax payments that in some cases are significantly above the level that would result from treating the utility asset like other commercial/industrial property; and reducing dependence on higher cost generating facilities by constructing new generating facilities and repowering existing facilities to the extent economically feasible.

Long Island Association, Harry Davitian

High electric rates increase the cost of living here on Long Island and make it hard to attract business and retain businesses here. And in considering the actions to help reduce the cost of electricity in the plan, it should focus on those that have the potential to cause meaningful, long-run reductions in the cost of power.

Long Island Association, Harry Davitian

LIPA needs to consider the interest of all of Long Island's electric rate customers when making its generating resource decisions and not those of particular communities on Long Island that benefit disproportionately from tax rates that greatly exceed the normal rates applicable to industrial/commercial facilities."

John McConnell, Long Island Progressive Coalition

We the ratepayers don't like the fact that National Grid seems willing to pass the cleanup of the manufactured gas plants onto us, which Legislator Wayne Horsley said probably would be about a billion dollars. Why should we the ratepayers do that?

Response

LIPA's intent is to keep customer bills as low as reasonably possible in line with electric reliability and sound system operations. Much of this revised Plan is focused on long run affordability and measures to encourage cost stability measures to the extent possible, realizing of course that some costs are outside of LIPA's, and LIPA's customer's, control. The Authority is proud of its conservation programs which serve to keep customer bills down compared to what they would be absent the conservation programs. The approach of this plan to pursue diversity of energy supply, include repowering of existing plants as appropriate and feasible, increase renewable energy use and concentrate significantly more resources on efficiency and Demand Side Management are all focused on keeping future costs as low as practical. LIPA's programs, especially ones being introduced with this Plan, are both cost effective and beneficial to customers and will continue to serve to stabilize costs and significantly improve the efficiency with which electricity is used on Long Island. The expanding efficiency programs under the 10 year, nearly \$1 billion Efficiency Long Island program, as well as new programs such as commercial net metering with increased opportunities for LIPA customers will target a larger volume of consumers and increase demand reduction.

3.27 Rate Structure

John Edwards, Councilman, Town of Islip

We'd also like LIPA, the master plan, to include a reassessment of the discount LIPA will provide our Town and others for use of LED technology in traffic control signals. Currently, traffic signals are not metered individually so that our Town pays LIPA a flat rate per signal. I'm informed that converting to LED would result in a ninety percent reduction in the energy needed to power each signal. However, to date, LIPA has only offered a fifty percent reduction in the cost of every signal that we would convert. So that we would ask that LIPA revisit this issue and assist us in making the conversion to LED technology by providing the appropriate cost savings that we would be achieving through such conversion.

Wayne Horsley, Suffolk County Legislature

Targeting the largest volume consumers is the best way to affect the greatest demand reductions throughout our region, but programs that LIPA may adopt should include effective efficiency opportunities for ratepayers across the spectrum. Given the burden of energy prices on lower and fixed income residential ratepayers, LIPA is encouraged to consider tiered cost structures for residential

customers that provide greater ratepayer equity to lower volume residential consumers. In turn, higher volume residential consumers should be responsible for a more equitable share of the cost of providing increased service. A simple example might include a two tiered cost profile applied to homes above and below a square foot threshold (4,000 - 5,000 sq ft).

Carmine Vasile

What this thing is it's a heat recovery system. It recycles energy from drain water. Very simple. I invented this thing in 1980. Thousands worldwide. We've got a federal rebate in Canada, nationwide and some provinces match it. I got a call yesterday, Minnesota Power was ordered to put a \$350 rebate on this by the Department of Commerce. I had a rebate from Minnesota Power years ago but they locked it to new conservation and I never got Energy Star labels. So they kept it out of the new conservation. LIPA gave a very generous rebate years ago. Now, I'll leave these couple of sheets. They gave one of the best commercial rebates there was. And I have it in here. I have a handout. And what happened is, they limited the commercial electric. And when I went around to McDonald's and other places that had all electric heating, they said we're not going to put this in because we have ratcheted rates. So even though we save energy, we don't save money. So you have to -- in your master plan, you have to do something about these ratcheted rates. Now, they create a misconception because when it ratchets down, it stays there so you do have money in the long term. But the owner said well, it's not going to save me money in the first year. And I said it's not, I know.

Response

LIPA currently evaluates its rate structures to determine whether and where improvements are required, and how best to design its rates. LIPA is aware of the customer dissatisfaction with the demand ratchet, but we are not in a position to change that in the near term. As we study the impact that eliminating the demand ratchet might have on our ability to recover our costs, and consider other billing methods to recoup or reallocate those lost revenues, we believe that the merits of the price signals received by customers from the demand ratchet are reasonable and appropriate. We also recognize that only a portion of LIPA's customers are affected by the ratchet, since it only applies to Service Classifications 2-L and 2-H, and not every customer in those service classifications are impacted by the ratchet. Our largest commercial customers representing about half our commercial sales base, do not have a demand ratchet. The smallest commercial customers, representing more than half our commercial customer base, do not have any demand charges.

The demand ratchet causes certain customers to pay for their peak summer time demand over the course of the entire year. To the extent that DSM devices can be installed before the summer peak period, they can help to reduce summer peak demand and LIPA's overall costs. Correspondingly, the customer's peak summer demand will be less, which will reduce the customer's bill in those summer months, and in the following winter months to the extent that ratchet applies. If a DSM device is installed after the summer peak has occurred, LIPA cannot avoid those costs until the following summer and the customer's obligation to help defray some of those costs remains as well. As a result, we believe that the demand ratchet sends an appropriate pricing signal to those customers affected by the demand ratchet, by encouraging them to install the devices before the summer peak period, rather than after it.

LIPA is interested in all proven technologies for consideration in its energy and rebate programs which have evolved over time and will likely continue to change as needed to remain relevant and useful to the LIPA customers.

3.28 Reliability

Long Island Association, Daniel Perkins

Given our society's increasing reliance on electronic equipment and devices that require stable voltage and continuous power supply, it is important that LIPA continue to maintain the T&D system reliability at a high level.

Long Island Association, Harry Davitian

Since LIPA took over, the reliability of LIPA's transmission system has gone from worst in the state to best in the state. It's very important that that be maintained going forward given our society's increasing reliance on electronic equipment and devices that require stable voltage and continuous power supply.

Response

The LIPA Transmission and Distribution System is among the most reliable in country and annually operates as the best or second best in the New York State. It is LIPA's intent to maintain first-quartile performance, as measured against Investor Owned Utilities, across the nation. LIPA places significant emphasis on maintaining the reliability of the electric system. This Electric Resource Plan places grid reliability among its major objectives. LIPA has invested \$ 2.5 billion in improving its grid reliability since taking over the Long Island electric system, and has nearly \$280 million budgeted for grid improvements in 2008. In addition, separate planned investments of nearly \$500 million over 20 years were begun in 2006 as part of LIPA's "Storm Hardening" initiative designed to reduce the amount of damage inflicted upon the Long Island grid system by severe storms such as hurricanes.

3.29 Renewables Targets

Citizens Campaign for the Environment, Adrienne Esposito

In this new plan I'd like to suggest that we have a goal for renewable energy usage. What is the target?

Long Island Neighborhood Network, Neal Lewis

It's still somewhat unclear to me as to what is LIPA's position on the renewable portfolio standard, for example. We understand it's not compulsory upon LIPA, but nonetheless it should be in the master plan.

Long Island Association, Harry Davitian

In effect, waste energy facilities have many of the characteristics of a renewable resource. And the LIA's position is that LIPA should -- should treat, and the state should treat real waste energy as a renewable energy resource and LIPA should consider a modest subsidy for new waste energy capacity.

Long Island Climate Solutions Network, Scott Carlin

We have to set aggressive renewable energy objectives. In 2002, again, SEA advocated a goal of ten percent renewables. Our region is much worse off today. Perhaps we should be thinking sixty percent

renewables by 2040. But we need to clear away existing institutional barriers that continue to impede renewable installations.

Response

LIPA has been pursuing an RPS program since 2006 that supports the PSC RPS goal of 25% by 2013. As outlined in this Electric Resource Plan, LIPA supports the adoption of a LIPA Renewable Portfolio Standard (RPS) program that parallels the statewide RPS goal as well as explores the addition of new waste energy facilities.

3.30 Renewables Financing

Long Island Solar Energy Industries Association (LISEIA), Kevin MacLeod

The third point would be low-interest loans for solar energy projects. As you know, like as a contractor myself, we're faced with having to sell a system to a customer that is considerably of high cost, in most cases \$20,000 to \$30,000 out of their pocket for an average solar system for their home. So what we would like to see is LIPA work with several financial institutions to offer a low-interest loan program, maybe coupled with their electric bills, so that it could make it a little bit more achievable for residential, commercial customers to be able to purchase solar. A lot of homeowners who are in the lower income brackets can't do that. They can't afford it. So what I tell my customers here is like, hey, you can either put solar on your roof and wipe out your LIPA bill and take that and pay towards the balance of the loan or you just can continue doing the same thing, don't do solar and just keep on paying your LIPA bill each month like renting and owning. So what I'm saying is have a low-interest loan program, allow the customers maybe to pay that loan off through their LIPA bills, if it's possible, maybe even a small fee to recover for administrative charges so you would make the whole program a little bit more affordable and also achieve the insulation goals that we're looking for.

Response

The topic of on-bill financing and low-interest loans has and is expected to remain an area of continued focus for both energy efficiency and renewable programs. While initially appearing simple in nature, it has impacts ranging from bond covenants and tax-exempt financing, through customer accounting systems to additional service and support contractual requirements. LIPA believes that there may various means of providing financing capabilities to its customer programs and plans to continue its dialogue with the financial industry to build off the ground work established by President's Law's first ever banking summit held in the third quarter of 2008.

3.31 Renewables Policy - Solar

Empower Clean Energy Solutions, David Schieren

For this planning process we believe that great local investment is warranted and that the benefit to ratepayers, our citizens, will be profound. There are many different ways to implement solar programs and we look forward to engaging with you on those.

Hispanic American Association, Cesar Malaga

All the schools on Long Island, they should be using solar panels. All of the schools. They should be getting money from the state or Federal Government. And there are no trees surrounding the schools. These are wasting, wasting our solar energy.

Peter Quinn

I had proposed, at various times -- and you've been there when I talked about nano-solar, a company in Palo Alto, California. They produced a very cheap way of producing solar panels, aluminum foil with solar chips encrypted on them. It rolls off a roller the same way that ink does on a newspaper. It can be produced for ninety-nine cents a watt, which is the equal of coal and considerably less than oil and natural gas.

Long Island Solar Energy Industries Association (LISEIA), Michael Bailis

We are a contractor here on Long Island installing solar electric systems under the LIPA Solar Pioneer program. I do want to point out that under the present structure of that program it may not necessarily benefit some of the local contractors that have really put solar on the map here. And the way the program is structured it might very well bring in outside contractors and not support the industry that was created. So I want you to consider that as part of your, not necessarily this program, but any future programs that you make sure that you don't turn your back on the solar industry that you've created. In Germany - the global leader in solar right now - eighty percent of the installations are under 100 Kw. It's a very decentralized industry. It doesn't require megawatts of solar plants. The one thing we do not have a lot of here is a lot of land. We have a lot of rooftops and a relatively speaking moderate sized rooftops. The programs that you should be encouraging should be a very decentralized solar program with incentives towards these types of systems.

Joseph Schroeder, Suffolk County Legislature

On a per building basis, incentives for renewables are something the County strongly supports and urges. But renewables are not the panacea for our energy problems. And incentives for a solar installation, for instance, on a building that hasn't met the basic energy efficiency needs is not appropriate. So we would support a contingent requirement that buildings that received incentives for renewable installations also are required to bring themselves in line from an energy efficiency standpoint.

Response

LIPA intends to expand its Solar Entrepreneur Program from the size limit of 10 kW to 100 kW and allow all customer classes to participate in the program. Rebates would ratcheted down with increasing size in recognition of cost due to economies of scale. Projects over the 100 kW limit will be eligible to receive rebates on only their first 100 kW of generation.

3.32 Renewables Policy - General

Long Island Association, Daniel Perkins

Renewable energy resources hold the potential for providing large supplies of power without most of the negative consequences of using fossil fuels. For this reason, LIPA needs to look at renewable energy as a

potentially attractive, major energy resource that it may increasingly rely on in the future. As such, it is prudent for LIPA to seek to speed their introduction. This means that LIPA should be willing to make reasonable investments to promote and to subsidize the introduction of renewable energy resources.

Long Island Association, Harry Davitian

We recognize that some level of subsidies will be required in the near term to allow promising renewable energy projects to proceed. Given the potential of the long-range benefits of renewable energy and resources to LIPA, it is appropriate and prudent for LIPA to provide such subsidies. However, reasonable limits should be placed on the magnitude of such subsidies so that the rate increases needed to support such subsidies are minimal. With respect to standalone projects, those that are not on rooftops or behind the fence, LIPA should establish a mechanism to purchase power from renewable projects through purchase tariff rates and through a reverse auction. With regard to customer sited or other projects, we think LIPA should ensure that its tariffs and interconnection procedures facilitate the development of such renewable projects and not create unnecessary obstacles. And LIPA should purchase power from such facilities, customer-sited facilities at a price which is no less than its avoided cost of generation-using mechanisms such as net metering which we think can be very effective.

Long Island Solar Energy Industries Association (LISEIA), Gregory Sachs

I mean this -- a vast majority of all the solar that's installed in New York State is on Long Island. It's because of what you guys have done. But this is just the beginning. The existing rebates are -- it's a good structure to help to get where we are now. But when we want to talk about real grassroots, long-term growth, we ought to be looking at some of the precedent that's been set by, you know, not that they're perfect models, but in New Jersey, California, Germany, and those are much more different. Now, again, I commend you on the fifty megawatt RFP. But that's only one step. And that's great. But let's also look at feeder models. Let's also look at various -- the sale of long-term contracts for solar renewable energy credits and kind of revisit these things. And I know they're not necessarily tomorrow. But LISEIA exists to help us figure out these very hard details and figure out how we can set wise and astute policies so we can keep going for that pie-in-the-sky, that goal that we ultimately are going to get.

Sierra Club, Fitzgerald Yaw

LIPA must protect its customers from price increases by shifting its energy supply towards renewable energy. Developments at the state level (Executive order 111, the Renewable Portfolio Standard, and now RGGI) and the high likelihood of some form of national carbon regulations make aggressive movement towards reducing CO₂ emissions the best business move LIPA can make. There is no one solution for reducing CO₂ emissions. Reducing regional emissions will require a thoughtful and fully committed strategy combining renewable energy, energy efficiency, and conservation. 1. Adopt standards for power purchasing that treat distributed renewable power sources as equal or superior to centralized power, and encourage the development of these new sources. 2. Identify and invest in new sources of commercial renewable energy. 3. Develop a new business model. LIPA needs a new model that moves away from selling kilowatts and toward providing services such as lighting, chilling etc. The goal would be to uncouple the profit motive from the sale of energy and redirect it towards increased efficiency. 4. As the above processes proceed, keep the public informed.

Edward Romaine, Suffolk County Legislature

I mean I would encourage LIPA and National Grid to start thinking about running their diesel vehicles on either propane or bio diesel made from fats, oil and grease because I think that type of thing sends a very clear message.

Edward Romaine, Suffolk County Legislature

This is about energy -- we should take a look at alternative energies. Obviously, wind energy is something that we should take a serious look at. There are aesthetics about that. There are people, for example, savejonesbeach.org, that don't want to see it out in the ocean. But wind power has tremendous potential, as well as power. If we want to get solar power, let's start giving. Let's work with the Towns, the County, the State, even the Federal Government to give rebates.

Joseph Schroeder, Suffolk County Legislature

Development of renewables is supported by the County. However, on a bulk power basis, just as LIPA would not support the indiscriminate development of fossil fuel power plants, any proposal for a bulk power renewable should have a component and contingent demand side management initiative. Maybe that can be accounted for in your energy efficiency programs.

Wayne Horsley, Suffolk County Legislature

In terms of LIPA programs to promote renewables at ratepayer facilities, the Legislature recognizes that rising energy prices have helped improve the payback of renewable energy technologies, but the installed cost of those technologies are still prohibitive for the general population. The Legislature supports utility incentives to promote the proliferation of renewable energy technologies but suggests that rebated projects should be considered in context to the energy efficiency profile of the intended host building. It is pointless to install a high end energy technology on a building that has inadequately addressed basic energy issues. Even worse, it sends the wrong message to ratepayers who otherwise may conclude that through the installation of a very expensive system they have done enough to improve their energy use profile.

Response

LIPA supports and encourages the use of renewable energy sources as an environmentally responsible way to meet the demand for electric power on Long Island. LIPA also recognizes the need to subsidize renewable technologies as a means of encouraging the development of the renewable industry. LIPA also has a responsibility to balance its objective to promote the use of renewable resources with the impact on customer electric bills.

LIPA's Electric Resource Plan outlines the following strategies in support of renewables:

- 1. Endorse adoption of a LIPA RPS program that supports statewide goal of 30% renewables by 2015**
- 2. Issuance of a Off-Island Renewable RFP**
- 3. Expansion of On-Island Renewable Resources**

- a. Wind
- b. PV 50 MW RFP and successors
- c. Net Metering Program
- d. Expansion of Solar Rebate Program

3.33 Repowering

Peter Quinn

First of all, I have been, since the announcement of repowering, been strongly opposed to the concept. One requires the utility to go into debt to reconstruct those facilities. Two, the toxics at those facilities are so numerous that no matter which kind of repowering is done, it will be very difficult to spend less than \$800 million per facility. And considering you've got 53 generating plants, it becomes problematic for a company that already has high debt like LIPA.

Carmine Vasile

Before you get to repowering you have to increase the efficiency of the old plants.

Long Island Progressive Coalition, Lisa Tyson

The one piece here that we're really hopeful for and we really hope that you go forward with is repowering the Barrett Power Plant. We see this as a win/win for the community. It's a win/win for energy. And it's really, as long as the studies show that it's economically viable and there's a week to do it, and a good engineering plan, we really hope that you go forward.

Long Island Progressive Coalition, John McConnell

Even before you do repowering in Northport maybe what you can do is to burn cleaner fuel up in that plant. It's become a well known fact that for many, many years the Northport plant, and probably the others, have been burning toxic fuels up there, which cuts down efficiency. Instead of forty percent it's probably thirteen or fourteen percent. So if you clean that up, even without repowering, you would burn a lot less fuel and, you know, maybe pass it onto the consumers.

David Denenberg, Nassau County Legislator

Something that's very important to the people of Nassau County - I'm sure Suffolk County as well - are the issues of repowering, both from an environmental standpoint as well as from an energy efficiency standpoint. I want to commend you on the work that I think you're doing towards the Barrett plant. But I want to assure you and urge you that repowering of the Barrett plant in Nassau County is something that is imperative in our view and certainly for the people in Nassau County both in terms of protecting the environment from a plant that is certainly not efficient nor running cleanly. We do think that you could get more power and at the same time clean the environment.

Joseph Schroeder, Suffolk County Legislature

Repowering in a similar fashion should not be done in a vacuum and should be considered in context to demand side management initiatives that LIPA hopes to implement. And I look forward to a review and an opportunity to comment on those initiatives, as we've discussed. One thing the County does not support is that should repowering include a reconstruction or other scenario relating to existing plants owned by KeySpan/National Grid or any other private entity, that the costs of repowering not be borne entirely by ratepayers. Those costs should be shared, to a degree, by the company that's going to benefit from the improvement of their asset.

The Sustainable Energy Alliance of LI, Mark Seratoff

...Repowering, or replacing the 50 year-old KeySpan generators with state-of-the-art units will yield these benefits:

- 1- On-Island reliability, security and capacity are increased 200 to 300 %.
- 2- Numerous, skilled jobs are created.
- 3- Pollution is significantly lowered (over 90%) and public health improved.
- 4- Tax benefits accrue to host communities of the power stations.
- 5- The local economy is helped by keeping revenues on-Island.
- 6- Medical and health costs are lowered.
- 7- Productivity is increased due to fewer sick days.
- 8- Reliance on foreign oil is reduced.

This can be paid for by a bond issue using LIPA's advantageous bonding rates. Since this also benefits National Grid, they should match the public funds. This will reduce costs in half.

Wayne Horsley, Suffolk County Legislature

The Suffolk County Legislature supports the repowering of electric generation on Long Island, in the context of demand growth mitigated by efficiency gains. To the degree that repowering includes the upgrade of existing generating facilities, owned and operated by a private sector company, the Legislature does not support that those costs be borne entirely by ratepayers.

Sierra Club, Fitzgerald Yaw

...Repowering these inefficient plants can decrease emissions and increase power production. Long Island's aged power plants are notorious for their inefficiency and emissions...

Response

LIPA is investigating the repowering of older power plants to produce more electricity with far fewer damaging emissions from the same amounts of fuel. LIPA has, in conjunction with National Grid, been evaluating six existing generating units for potential repowering. The benefits of repowering existing plants include greater fuel efficiency, increased generating capacity and reduced emission rates. The repowering process rebuilds all key components of the power plant such that if LIPA determines that it is technically viable, economical and environmentally sound to acquire and repower these plants, the result will be an efficient, newly rebuilt facility that produces less emissions than in past operations.

Please refer to Appendix A, Technical Report of the ERP for a more detailed discussion of all of the demand reduction and supply options that LIPA has considered in the development of its IRP. Options focus on a balance between expanding the use of energy efficiency, an increasing reliance on renewable energy, upgrading existing generating fleet and improving transmission interconnections.

3.34 Reserve Margin

Joseph Schroeder, Suffolk County Legislature

I'm not as encouraged as you are that the recent completion of projects here leaves us in as comfortable a reserve of supply as you seem to think. In fact, factoring in the growth rates that we've been experiencing, it would appear that we're at a net zero gain with the completion of the Neptune Cable and even with the pending completion of the Caithness Plant.

Wayne Horsley, Suffolk County Legislature

During the summer of 2005 LIPA experienced a 500 MW increase in peak demand over the prior year. It does not seem likely that the 500 MW increase occurred in a single year, but rather the region did not experience the severe weather conditions that revealed that demand growth over time. Given the annual increases in demand that LIPA has recorded, the Legislature is concerned that recently completed energy projects have left Long Island with the excess reserve in capacity that LIPA has recently suggested. Rather we are concerned that supply additions LIPA has recently secured have achieved a practically net zero gain that will only be revealed when we have another severe summer heat wave.

Response

Evaluation of adequate reserves is a complex process. LIPA uses models to normalize historic peak loads to a weather normalized peak that would have occurred if Long Island had experienced average weather conditions. These weather normalized peaks are then used to determine what underlying load growth is occurring and forecast future peak demand. Finally the need for capacity is evaluated under a wide range of uncertainties including year-to-year variations in weather. As shown in the evaluation contained in Appendix A, Technical Report, Long Island appears to have adequate supplies for the short-term but needs to take action soon to address need for capacity in the mid term.

3.35 Street & Road Lighting

International Dark Sky Association, Susan Harder

A new tariff needs to be established for the use of public utility poles by municipalities for their street lighting. Currently dusk to dawn sensors activate light fixtures which are owned and maintained by municipalities. Municipalities install "Part Night" sensors on some fixtures which will use half as much electricity as the dusk to dawn sensors. The new tariff should reflect the reduced energy use. 2. LIPA should discontinue the practice of allowing their salespeople to promote and sell leased LIPA floodlights which are mounted on the utility poles in towns where these fixtures are not allowed by law. 3. LIPA's Light Solutions Program needs to be promoted and enlarged to capture the customers who need the

program where towns do not allow the utility pole floodlights. More towns will disallow these pole lights and the customers would benefit from this program if they knew about it.

The Sustainable Energy Alliance of LI, Mark Seratoff

Night Lighting Recommendations for LIPA Energy Plan 2008 a complete re-evaluation of criteria for roadway lighting needs to be established, promoted, and adopted by all municipalities. LIPA should host a Roadway Lighting Forum to bring these issues to the forefront, bringing in non-industry experts on lighting to include speakers on the effects of night lighting on vision, the environment of flora and fauna, and on human health. LIPA needs to promote their "Customer Owned" program and to stop violating local zoning codes with their utility pole floodlights. Reconnect Long Island to NYSERDA. This state-wide program has many resources, yet Long Islanders cannot tap into the program. Remove the legal roadblocks.

Response

LIPA does not own or operate any street lighting, except in those limited area under the dusk to dawn lighting program. There are many evolving and “cutting edge” lighting technologies, including LED lighting, which are beginning to gain popularity. LIPA continues to work with state, county and local governments regarding the use of energy efficient street and traffic lighting. LIPA has also worked with the International Dark Skies Association to only offer lighting technologies for new and replacement installations that are designed to minimize light pollution. LIPA understands the use of lighting for security and safety purposes, and is committed to advising customers on how to efficiently and sensibly light outdoor areas.