

# Draft Electric Resource Plan 2009 – 2018 Technical Workshop



## Action and Policy Plans

**June 15, 2009**

[www.lipower.org](http://www.lipower.org)

### 1. Energy Efficiency

- ▶ Endorse adoption of a LIPA 15 x 15 plan
  - End-use efficiency
    - **ELI**
    - **Additional DSM to close remaining gap**
  - Generation efficiency
  - T&D efficiency
  - **Smart Meters**
  - **Efficient Electro-Technologies**

### 2. Renewable Resources

- ▶ Endorse adoption of a LIPA RPS program that supports statewide goal of 30% renewables by 2015
- ▶ Off-Island Renewable RFP
- ▶ On-Island Resources
  - **Wind (regional and backyard)**
  - **PV 50 MW RFP and successors**
  - **Net Metering Program**
  - **Expansion of Solar Rebate**
- ▶ **Utilize renewables to enhance fuel diversity**

### 3. Upgrade Existing Fleet

- ▶ Repower older plants to address environmental and efficiency issues
- ▶ Competitive procurement of green field plants and repowering/retirement
- ▶ Retire some of older steam plants
- ▶ **Study best site for Peaking Unit retirements**
  - **Issue RFP for new 10-minute reserve**
  - **Retire targeted units**

### 4. Improve Interconnections & Reliability

- ▶ Proceed with NUSCO Upgrade
- ▶ **Study to examine membership in NYISO, PJM, or ISO-NE**
- ▶ **Target new interconnections with best ISO System**
- ▶ **SmartGrid System**

Legend:



**Committed**



**Planned**



**Under Study**

# LIPA Draft Electric Resource Plan

## Summary of Recommendations

- In this Electric Resource Plan, LIPA identifies a number of actions designed to facilitate achievement of the four key strategies while also meeting the five strategic objectives enumerated as part of its Recommended Plan.
  - ▶ **Committed** elements are either under firm contract, have approved funding, or are currently available;
  - ▶ **Planned** elements are those still under active discussion, negotiation, or development. While the intention is to proceed with these projects, LIPA may adjust the timing, size or design of the element as conditions change. For example, if LIPA has decided to issue a Request For Proposals (RFP) for power supply, transmission service, or DSM, the element is considered planned; and
  - ▶ **Under study** elements are those that are under discussion or in early stages of development, with no contractual commitment from LIPA. If, as an example, LIPA is considering the issuance of an RFP for power supply, transmission service, or DSM, but has not finalized the timing, or characteristics of the RFP, the element would be considered under study.

# Overview

- The Draft Electric Resource Plan contains 125 different initiatives in five separate plans.
  - ▶ 76 Committed
  - ▶ 20 Planned
  - ▶ 19 Under Study
- We will examine a select few initiatives in today's workshop

Planning Initiatives				
Plan	Committed	Planned	Under Study	Total
Environmental	8	2	4	14
Efficiency	5	1	2	8
T&D	56	8	7	71
Fuel	3	2	2	7
Power Supply	4	7	4	15

# Initiatives Discussed

- Power Supply CO<sub>2</sub> Footprint Reductions
- Efficiency Long Island Plan
- Meeting the 15 x 15 Goal
- Renewable Portfolio Standard Program Goal
- Solar PV RFP
- Regional Wind

## Recommendation 4.14 – Power Supply CO<sub>2</sub> Footprint Reductions

- **Recommendation** – Study and implement cost-effective ways of reducing power supply CO<sub>2</sub> footprint emissions to a level 10% below 2005 emission levels by 2020 and a level 20% below 2005 emission levels by 2030
- **Status – *Under Study***
  - ▶ Currently there is no Federal regulations regarding CO<sub>2</sub> emissions for electric utility companies
  - ▶ Proposed legislation advocates targets on the order of an 80% reduction by the year 2050.
  - ▶ LIPA is looking at taking preemptive action by setting targets before legislation is enacted
  - ▶ Studying how LIPA might achieve targets and impact on customer rates

### **Key Goals:**

- ✓ *Establish CO<sub>2</sub> carbon footprint reduction Key Goals*
- ✓ *Study Cost-Effective Ways of Reducing Power Supply CO<sub>2</sub> Footprint Emissions to a Level 10% below 2005 Emission Levels by 2020 and a Level 20% below 2005 emission levels by 2030*

### **Targets:**

- ✓ *CO<sub>2</sub> footprint emissions level 10% below 2005 emissions level by 2020*
- ✓ *CO<sub>2</sub> footprint emissions level 20% below 2005 emissions level by 2030*

### **Means:**

- ✓ *Implement Electric Resource Plan in a manner that reduces emissions.*
- ✓ *Refine Electric Resource Plan to achieve emissions target*

## Recommendation 5.1 – Efficiency Long Island Plan

- **Recommendation** – Invest in Efficiency Long Island Plan
- **Status** – **Committed**
- Efficiency Long Island currently underway in 2009
  - ▶ Funding reduced in 2009 due to budget concerns
  - ▶ Planning to make up lost ground via increased funding from 2010 to 2012
- Program is a major supporting component of 15 x 15 program

### *Key Goals:*

- ✓ *Reduce dependence on fossil fuels*
- ✓ *Reduce emissions*
- ✓ *Strengthen the Long Island Economy*
- ✓ *Defer the need for new generation resources*

### *Targets:*

- ✓ *By 2015 Peak reduction of 318 MW*
- ✓ *By 2015 Energy Savings of 1,279 GWh*
- ✓ *By 2018 Peak reduction of 508 MW*
- ✓ *By 2018 Energy Savings of 1,663 MWh*

### *Means:*

- ✓ *Efficient Products initiative*
- ✓ *Energy Star Homes Initiative*
- ✓ *Existing Homes Initiative*
- ✓ *C&I New Construction Initiative*
- ✓ *C&I Existing Buildings Initiative*

# Meeting the 15 x 15 Goal

## Recommendation 5.8 – Meeting the 15 x 15 Goal

- **Recommendation** - Study Cost-Effective Ways of Meeting the 15x 15 Goal
- **Status – *Under Study***
- Part of plan to meet Governor's 45 x 15 goals
- Preliminary plan developed before PSC order on 15 x 15 program.
- Study underway for development of final plan
  - ▶ Targets and goals will be updated based on PSC adopted plan and updated evaluation of program options

### *Key Goals:*

- ✓ *Implementation of the Program by pursuing a 15% energy reduction by the year 2015*

### *Targets:*

- ✓ *Develop detailed plan for 15x15 by December 2009*
- ✓ *By 2015 Peak reduction of 978 MW*
- ✓ *By 2015 Energy Savings of 3315 GWh*
- ✓ *By 2018 Peak reduction of 1359 MW*
- ✓ *By 2018 Energy Savings of 4534 GWh*

### *Means:*

- ✓ *ELI Program*
- ✓ *Accelerate and Expand ELI Program*
- ✓ *Transmission and Distribution Efficiency*
- ✓ *Generation Efficiency*
- ✓ *Smart Meters*
- ✓ *Distributed Generation*
- ✓ *Electro technologies program*

## Recommendation 8.1 – Renewable Portfolio Standard Program Goal

- **Recommendation** – Endorse the Adoption of a LIPA RPS Program that support the statewide Goal
- **Status – *Planned***
- LIPA 25% program adopted LIPA's share of the goals set by PSC.
- LIPA Program different
  - ▶ Purchases Energy as well as RECs
  - ▶ Requires delivery to LI
  - ▶ Different rules for energy balancing
- LIPA 30% program targets supports governor's 45 x 15 goal
- LIPA current 30% targets based on assumption of what PSC 30% program would look like
- Program targets will be adjusted based on final PSC program

### *Key Goals:*

- ✓ *30% renewables by 2015*

### *Targets:*

- ✓ *Achieve LIPA Share of Statewide 25% renewables target by 2013*
- ✓ *Achieve LIPA Share of Statewide 30% renewables target by 2015*

### *Means:*

- ✓ *Contract for on-Island qualified renewable resources through RFP process*
- ✓ *Contract for off –Island qualified renewable resources through RFP process*

## Recommendation 8.5 – Solar PV RFPs

- **Recommendation** - Solar PV RFPs
- **Status – Planned / Under Study**
- Trustees selected 4 companies for a shortlist for up to 50 MW of Solar PV to be installed by 2011.
- Contract negotiations and environmental permitting underway
- Second RFP dependent upon lessons learned from first RFP

### *Key Goals:*

- ✓ 50 MW of Solar PV by 2011

### *Targets:*

- ✓ Trustee review and approval of contracts by September 2009
- ✓ Installation of 13 MW in 2010
- ✓ Installation of 37 MW in 2011

### *Means:*

- ✓ Completion of RFP process

### *Key Goals:*

- ✓ An additional 50 MW of Solar PV by 2015

### *Targets:*

- ✓ Issue a 2<sup>nd</sup> Solar RFP by the Summer of 2010
- ✓ Installation of and additional 50 MW of capacity between 2012 and 2015

### *Means:*

- ✓ Completion of RFP process

## Recommendation 8.3 – Regional Wind

- **Recommendation** – Regional Wind
- **Status** – *Under Study*
- Collaborative membership currently includes: LIPA, Con Ed, NYPA, New York City, MTA, Port Authority of NY, NYSERDA, DEC
- Issued report determining that the preferred interconnection point is on the Far Rockaway peninsula
- Currently in process of developing
  - ▶ RFI
  - ▶ Public outreach plan
  - ▶ Web site

### *Key Goals:*

- ✓ *Assessment of the viability of building a 350 MW to 700 MW wind farm off the shores of Long Island*
- ✓ *If feasible develop the project to provide energy toward meeting LIPA's RPS targets*

### *Targets:*

- ✓ *Issues a request for information by June 30, 2009*
- ✓ *Issue an RFP for an offshore wind farm by December 31, 2009*
- ✓ *LIPA to contract for a share of the 350 MW to 700 MW project*

### *Means:*

- ✓ *Create a collaborative to study and if feasible contract for an offshore wind farm*
- ✓ *Issue an RFI to obtain input from industry on the potential project*
- ✓ *If no fatal flaws are discovered, issue an RFP for a 350 MW to 750 MW offshore wind farm delivered to Long Island and New York City*

# End of Presentation

## Discussion

Target Completion Time **4:10 pm**

- Discussion on Action and Policy Plans
- Process Check

## Next Up

- Opening Remarks
- Overview of Workshop Format
- Overview of Electric Resource Plan
- *Break*
- Review of Modeling System and Assumptions
- Energy Efficiency
- Need Analysis
- *Lunch*
- Technology Screening
- Alternative Plan Analysis
- *Break*
- Action Plan
- **Policy Input**
- **Input on Workshop Approach**