

# YOU AND 1.1 MILLION LONG ISLANDERS

depend on PSEG Long Island to deliver safe and reliable energy.  
In order to meet your electricity needs now and in the future,  
independent energy studies are conducted every few years to better serve you.

## INTEGRATED RESOURCE PLAN (IRP) and REPOWERING STUDIES – FREQUENTLY ASKED QUESTIONS



### METHODOLOGY

General questions on  
the IRP



### KEY IRP FINDINGS

What are the conclusions  
of the IRP?



### REPOWERING

Should we build new power  
plants on Long Island?



### COST

What does this mean  
for my bill?



### TIMELINE

When will the IRP findings  
be implemented?

## METHODOLOGY

### WHAT IS AN INTEGRATED RESOURCE PLAN?

An Integrated Resource Plan, or IRP, studies the generation and transmission investments that a utility may need to make over the next twenty years to provide reliable electric service to customers under a range of scenarios. The IRP analyzes customer usage trends, existing resources, changing technology, risks and opportunities. The study is used to identify the types of generation and transmission investments a utility may make under various conditions. If a transmission or generation need is identified by the study, the utility then runs a competitive procurement among various technologies, sites and developers to identify alternatives that best meet that need. This process, conducted every 3-5 years, provides the highest electric reliability at the lowest possible cost to customers.

### WHY IS AN IRP IMPORTANT?

The costs to buy or manufacture electricity represent approximately half of customer bills. Decisions on power plants and transmission are long term commitments and potentially billions of dollars. A robust planning framework identifies the important trends that could alter the need for future investment.

### HOW WAS THE IRP CONDUCTED?

PSEG Long Island's engineers, energy specialists, planners and consultants developed a 20-year study (2016-2035) with a 10-year action period (2016-2025). Decisions on needs identified beyond the next several years will be deferred until after a future IRP study, as changing electric grid conditions could alter future investment.

### DID AN OUTSIDE ORGANIZATION VALIDATE PSEG LONG ISLAND'S ANALYSIS?

Yes, LIPA retained the Brattle Group to provide an independent second opinion on PSEG Long Island's reliability planning criteria and analyses of proposals for certain combined cycle plants (Caithness II and the repowerings of the Barrett and Port Jefferson steam plants). The NYS Department of Public Service also participated in the Brattle Group review and provided a supportive recommendation to LIPA.



## KEY IRP FINDINGS

### DOES LIPA HAVE SUFFICIENT POWER PLANTS TO SUPPLY LONG ISLAND'S ENERGY NEEDS?

Yes, LIPA is forecast to have surplus power plant generation capacity through 2035. Therefore, there is no need to build new large baseload combined cycle plants to supply Long Island's energy needs at this time.

### WHAT HAS CHANGED SINCE LONG ISLAND'S LAST ENERGY STUDY FORECASTED THE NEED FOR MORE POWER PLANTS?

The forecasted need for power plants in 2030 on Long Island has declined by 1,700 megawatts (24%) since 2013, the equivalent of 3-5 large baseload central station power plants. This dramatic reduction is primarily due to greater adoption of energy efficiency (modern appliances, building codes, utility incentives) as well as rooftop solar. The decline is consistent with state and national trends.

### IF LONG ISLAND HAS SURPLUS POWER PLANT GENERATION CAPACITY, WILL IT RETIRE ANY EXISTING POWER PLANTS?

LIPA will comprehensively evaluate whether existing power plants continue to provide a benefit to customers at each contract expiration. Nearly all of LIPA's generation contracts expire by 2030, providing substantial flexibility to rebuild and modernize Long Island's electric grid.

### HOW MUCH RENEWABLE ENERGY IS LIPA PLANNING TO BUILD?

New York has adopted a 50 percent renewable by 2030 goal (50 x 30). For the State to meet the 50 x 30 goal, each electric utility must supply an increasing share of its energy needs each year from renewable generation. For Long Island, this means adding approximately 800 megawatts of new renewable generation by 2030, enough to power approximately 350,000 homes. Additionally, LIPA expects energy efficiency programs and advancements to reduce the need for generation by 950 megawatts by 2030.



## REPOWERING

### WHAT DOES REPOWERING MEAN?

Repowering a power plant typically means upgrading components using newer technology. For the repowering proposals of the Port Jefferson and E.F. Barrett plants, few existing components would be reused and repowering refers to building new power plants at the existing sites. Typically, a power plant would be repowered to provide a reliability, emissions, or economic benefit to customers.

### HOW DOES REPOWERING EXISTING PLANTS COMPARE WITH THE CAITHNESS II PROPOSAL TO BUILD A NEW PLANT?

The Caithness II proposal uses similar combined cycle technology as the repowering proposals of the Port Jefferson and E.F. Barrett steam plants. The main difference is whether the new power plant is built at the location of an existing power plant or in a new location. The Caithness II power plant would be built on a parcel adjacent to another combined cycle power plant.

### AREN'T THE TAXES TOO HIGH ON THESE POWER PLANTS?

Yes, LIPA continues to challenge the tax assessments and has proposed fair, long-term solutions. The host communities deserve taxes based on fair tax assessments. Our other 1.1 million customers deserve to pay no more than their fair share for local government services.

### IS LIPA PLANNING TO REPOWER THE EXISTING STEAM PLANTS OR BUILD CAITHNESS II?

No. The specific proposals offered by developers to build large new baseload power plants provide too few benefits and significantly raise customer cost. Other alternatives, such as power plants of a different technology, size, or location are likely to provide similar or greater benefits at lower cost to customers.



## COSTS

### WHAT IS THE IMPACT TO MY BILL IF WE BUILD (REPOWER) NEW BASELOAD FOSSIL FUEL POWER PLANTS?

The proposed new baseload power plants would increase customer bills by up to \$5 billion through 2030. For a typical residential customer, that's roughly \$536 dollars for the E.F. Barrett plant, \$378 for the Port Jefferson plant and \$1,297 for the Caithness II plant for a total of \$2,210 per household.

### IS RENEWABLE ENERGY MORE EXPENSIVE THAN FOSSIL FUELS? HOW MUCH MORE WILL RENEWABLE ENERGY COST?

Today's prices for renewable energy are comparable to the proposed baseload fossil fuel power plants. The proposed baseload power plants will sit idle for 30% to 40% of the year, and because of the high fixed costs to build and operate the plants, their output on a cents-per-kWh basis is more expensive than most people realize. Renewable energy continues to rapidly decline in cost with technological innovation, greater efficiency, and economies of scale. In addition, the impact of carbon and other emissions on the environment and your quality of life are not embedded in the cost of conventional fossil fuels. Specific projects and technologies to meet the State's 50 x 30 goal will be selected over the next decade based on the best value to customers at that time.

### HAS ANYONE STUDIED THE COST TO MEET THE STATE'S 50 PERCENT RENEWABLE BY 2030 GOAL?

Yes. More than 140 parties participated in developing New York's 50 x 30 goal and the costs and benefits through 2023. Additionally, NYSERDA will release an Off-Shore Wind Master Plan during 2017 informed by industry experts examining cost drivers, sites, financing, construction, supply chain, and transmission considerations for meeting the State's 2,400 megawatt offshore wind goal.



## TIMELINE

### WHEN WILL THE FINDINGS OF THE IRP AND REPOWERING STUDIES BE IMPLEMENTED?

Individual projects, such as off-shore wind and solar, will be selected over the next decade and beyond through competitive solicitations among multiple sites, technologies, and developers so as to obtain the lowest cost and best solutions for customers.

### WILL I HAVE AN OPPORTUNITY TO VOICE MY OPINION?

Yes, the Department of Public Service will host public comment sessions in Suffolk County on June 21, 2017 and in Nassau County on June 22, 2017. For more details, visit [www.dps.ny.gov/longisland](http://www.dps.ny.gov/longisland).