Powering Long Island's clean, reliable, affordable energy future



LONG ISLAND POWER AUTHORITY



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MISSION STATEMENT

LIPA is a not-for-profit public utility with a mission to enable clean, reliable, and affordable electric service for our customers on Long Island and the Rockaways.



Thomas Falcone
Chief Executive Officer

Dear Customers and Stakeholders:

In the three years since the LIPA Reform Act of 2013, LIPA, together with its principal contractor PSEG Long Island, has furthered its mission to enable clean, reliable, and affordable electric service for our customer-owners on Long Island and the Rockaways.

LIPA's 2017 Budget enhances the quality of service and value we provide to our customers by allocating our time, focus, and funds to the areas that most advance our mission. The 2017 Budget also maintains a prudent fiscal path that will allow LIPA to afford the ongoing investments required to deliver safe and reliable electric service over the long term.

This year's budget includes a discussion of the overarching themes embedded in our plans over the next several years and how they further our mission. These themes include:

- Investing in Reliability, Resiliency, and Storm Response
- Enhancing Customer Service and Value
- Promoting Affordability for Our Customers
- Building a Clean Energy Future
- Transitioning to a 21st Century Utility
- Maintaining Fiscal Responsibility and Maximizing the Benefits of Public Ownership

Our hope is that this information helps to inform and align the perspectives of our Trustees, LIPA and PSEG Long Island employees, customers, and other stakeholders regarding our priorities. We believe this level of transparency is important to delivering value to you.

INVESTING IN RELIABILITY, RESILIENCY, AND STORM RESPONSE

Surveys tell us that customers value the reliability of their electric service more than anything else. Our customers had electric 99.98 percent of the time last year, which places our performance among approximately the top 25 percent of our peer electric utilities. But power outages cause more disruption to our lives than we would like, and severe storms – which appear more likely than in the past – are a significant concern for our community. That is why LIPA and PSEG Long Island continue to prioritize investments in our electric grid. In fact, as shown in **Chart R-1**, we anticipate investing a record \$2.8 billion in the infrastructure we use to serve our customers, between 2014 and 2018. Our key reliability and resiliency initiatives include:

Investing \$730 million to Storm Harden 1,025 Circuit Miles by 2019. LIPA's record \$2.8 billion three-year infrastructure investment plan includes a \$730 million storm hardening program. As shown in Chart R-2, this storm hardening investment rebuilds approximately 1,025 circuit miles of LIPA's mainline circuits with stronger construction techniques, elevates ten low-lying substations to mitigate flood risk, and deploys over 1,000 "self-healing" grid automation devices. These system enhancements reduce the likelihood the customers on these circuits will be affected by service outages by at least 20 percent.

Completing Our New Tree Trimming Program by 2017 to Reduce Outages. The single largest cause of power outages is downed trees and limbs. Beginning in 2014, PSEG Long Island launched an enhanced program to trim trees near power lines by adopting a more frequent preventative maintenance cycle. As shown in Chart R-3, our goal is to complete this new enhanced tree trim program on 100 percent of circuits by the end of 2017 and then maintain this level of preventative clearance around our power lines going forward to reduce power outages. Tree-related outages on circuits that have been trimmed under this program so far are down more than 60 percent.

Targeting Customer Reliability Improvements. The 2017 Budget funds several PSEG Long Island programs for customers experiencing a higher than typical level of power outages. These programs investigate and improve electric circuits that provide less reliable service, replace poles and wires, and make other enhancements. Through 2018, LIPA and PSEG Long Island will invest more than \$82 million in these programs, improving more than 100 miles of circuits, replacing 150,000 feet of underground cable, and upgrading over 1,700 electric poles.

Chart R-1 \$2.8 Billion Investment in Long Island Infrastructure Since the LIPA Reform Act

Enhances Reliability, Resiliency and Customer Service

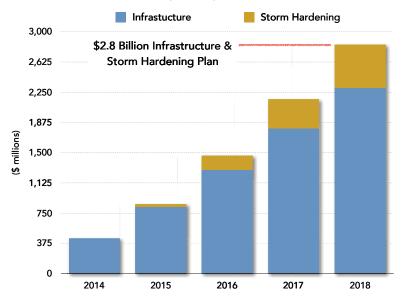
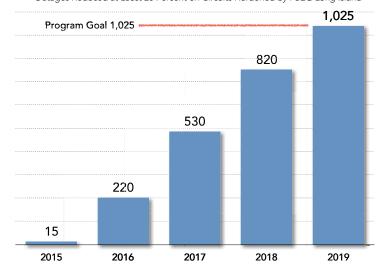


Chart R-2 1,025 Circuit Miles Storm Hardened by 2019

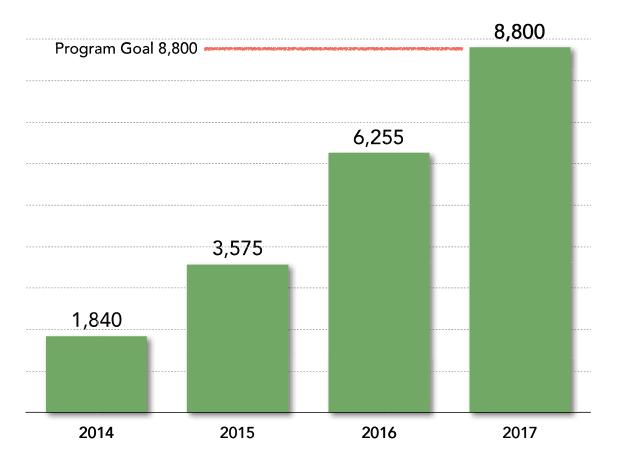
Outages Reduced at Least 20 Percent on Circuits Hardened by PSEG Long Island



Improving Storm Response. PSEG Long Island has undertaken numerous efforts over the last three years to minimize the effects of storms on our customers. These include installing a modern outage management system to better track customer outages and communicate with those who have lost power; deploying liaisons to county, city and state emergency operations centers to ensure situational awareness; establishing a municipal portal to allow local governments on Long Island to communicate directly with the utility on critical facilities and downed wires; and developing a flood assessment command center to coordinate activities associated with assessment, disconnection, and reconnection in the event of widespread flooding.

Chart R-3
8,800 Circuit Miles Trimmed by 2017

Tree-related Outages Down More than 60 Percent on Circuits Trimmed by PSEG Long Island



"Price is what you pay, value is what you get." — Warren Buffett

Improving customer service was a core goal of the LIPA Reform Act of 2013. LIPA historically lagged customer service industry benchmarks, necessitating a renewed focus on improving the customer experience and enhancing the value customers receive from their utility dollar. Notably as shown in Chart CV-1, the costs to provide electric delivery service is only 17 percent of your electric bill with the balance being power supply costs, taxes and fees, interest payments, and debt reduction. To provide even better service, greater reliability, and cleaner air while keeping the cost of electricity at or below that of neighboring utilities, LIPA and PSEG Long Island must look after all of the dollars that go towards powering your home or business. This requires us to be effective advocates for those portions of the customer bill that we have less control over. Our key initiatives to enhance customer service and value over the next several years include:

Achieving Our Initial 5-year Customer Service Goals by 2018. At the beginning of our public-private partnership in 2014, LIPA and PSEG Long Island set a number of customer service and operational improvement goals for each of the first five years of our service contract. These goals guide PSEG Long Island in making budget requests to the LIPA Board of Trustees, allocating time and resources and – importantly – determining the amount we pay PSEG Long Island for managing the LIPA electric system each year. Our first priority is to get these customer service basics right by achieving our five year goals by 2018.

In the first three years of our contract, PSEG Long Island has renovated and opened new customer service offices, increased call center staffing at peak times, introduced new technology to improve outage tracking and reporting, improved emergency response planning and communications, introduced a new paper bill design, upgraded our "My Account" web platform, and enabled customers to pay bills by text and credit card, among other changes. PSEG Long Island's progress is evident across many measures of customer service, as shown in **Chart CV-2**. In fact, **Chart CV-3** shows that PSEG Long Island is the most improved utility in our region since 2013 according to J.D. Power and Associates with a 91-point increase in residential customer satisfaction to a score of 610 – the highest ever achieved by LIPA since the survey began in 1999. While we strive for further advances, our score is a significant improvement over where we have been, and I would like to thank the employees of PSEG Long Island for their many efforts to better serve our customers.

Chart CV-1
2017 Costs to Deliver Electric Service to Customers

83 Percent of the Cost of Electric is Power Supply, Taxes and Debt

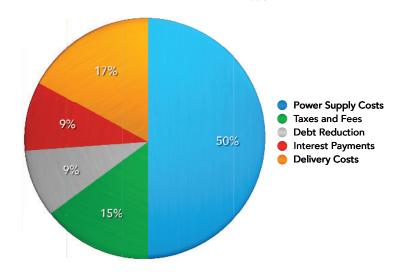
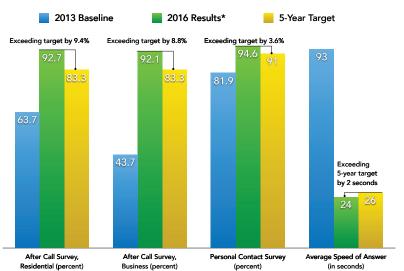


Chart CV-2

Key Measures of Customer Service Show Significant Improvement Since 2013

PSEG Long Island is Achieving 5 Year Performance Goals in Third Year of Contract



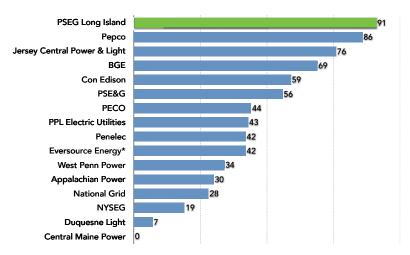
Making Smart Generation and Transmission Investment Decisions. PSEG Long Island is currently undertaking a study of Long Island's transmission and generation needs over the next 20 years. This study, called an Integrated Resource Plan, will be the first conducted for Long Island since 2010, and will incorporate such factors as the condition of local generation plants, load growth, changing technology towards smaller and more distributed generation, and the State's clean energy goals. This plan will outline a path to move Long Island towards cleaner and more modern sources of energy at the lowest possible cost for our customers.

Advocating for Fair Transmission and Gas Costs to Reduce Power Supply Costs. Due to our island geography, LIPA has fewer transmission interconnections to the rest of New York and other regional markets than do other utilities. Despite these physical barriers, various market forums have tried to allocate costs to our customers for regional projects in excess of the benefits we are likely to receive. Earlier this year, we had success in negotiating a fair settlement of cost allocations for certain statewide transmission projects, but LIPA needs to maintain a strong presence in market and transmission planning forums to ensure fair decisions and cost allocations for transmission, gas supply, and wholesale market costs. We have one clear principle in mind – utilities should pay costs in proportion to the benefits received.

Reducing the Hidden Burden of High Taxes and Fees. LIPA pays over \$535 million per year in taxes, payments-in-lieu-of-taxes ("PILOTs"), and fees or 15 percent of our customers' electric bills – about three times the national average, as shown in Chart CV-4. These are funds that otherwise would go to reducing customers' electric bills, paying down debt, or investing in reliability and customer service improvements. While all of our customers pay a roughly equal share of these taxes as a percentage of their bills, the payments to local communities vary by jurisdiction with some municipalities receiving much more in taxes than their residents pay – effectively transferring the cost of their local government services to other parts of Long Island. The LIPA Reform Act of 2013 reduced the growth rate of PILOTs on our transmission and distribution system from what had been 6-7 percent per year to 2 percent through a tax cap for LIPA-owned property. The Reform Act also reduced or eliminated certain other fees and charges. These reforms will save our customers an estimated \$580 million through 2020, as shown in Chart CV-5, but our customers still pay among the highest burden of hidden taxes and fees in their electric bill of anywhere in the country.

Chart CV-3 PSEG Long Island Is the Most Improved Utility in Our Region

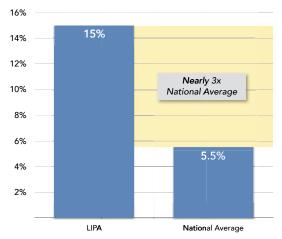
Change in JD Power & Associates Residential Customer Satisfaction Scores 2013 vs 2016



*2013 Eversource Energy is the average of NSTAR (611) and Connecticut Light & Power (580)

Chart CV-4 LIPA Customers Face High Hidden Tax Burden

Taxes, PILOTs and Fees are 15% of Customer Bills



Source: American Public Power Association; excludes corporate income tax

Chart CV-5 LIPA Reform Act Will Save Customers \$580 Million Through 2020

Taxes, PILOTs & Fees With and Without the LIPA Reform Act (\$000)

With LIPA Reform Act

Without LIPA Reform Act

Chart CV-6 Excessive Property Taxes on Power Plants Cost Customers Over \$185 Million Annually

Northport Power Plant 95 Percent Over Assessed



Earlier this year, LIPA's Board of Trustees passed a policy to pursue challenges to excessive hidden taxes and fees in order to restore ratepayer equity and minimize cross subsidization of local governments. In particular, LIPA is pursuing property tax challenges on four local power plants that are over assessed by 90 percent or more. The overtaxation of these four local power plants can readily be seen in Chart CV-6, which compares the taxes of two suburban New York City gas/oil-fired power plants of similar early 1970s vintage. Both plants, due to their older technology, run at only 15 to 20 percent of their capacity. Both plants are supposed to be assessed taxes based on their value. However, the Northport plant, located in Suffolk County, pays approximately \$76.6 million per year or \$48,200 per megawatt in property taxes while the Bowline plant, located in Rockland County, pays only \$2.7 million per year or \$2,375 per megawatt, a difference of 95 percent. These two counties otherwise have similar property tax burdens. That is why LIPA has filed tax grievances on these local plants and certain transmission and distribution property for every year since 2010. We have sought through negotiation to find an amicable solution for our customers with the taxing jurisdictions, but to date that has proved elusive, and therefore we intend to bring these tax challenges to resolution as quickly as possible. A market value assessment of these plants would reduce LIPA's taxes by more than \$185 million per year, which would be passed along to our customers to lower their electric bills.

Refinancing Debt to Save Customers Nearly \$500 million in Interest Costs. In 2013, the LIPA Reform Act allowed LIPA to be the first municipal utility in the country to create a separate securitization authority to refinance a portion of its debt with lower cost "triple-A"-rated bonds. Over the last three years, LIPA has refinanced \$4.1 billion of its debt at lower interest rates, saving customers \$445 million. By 2018, we expect to refinance an additional \$400 million in debt for an estimated \$40 million of additional savings, bringing total savings to our customers from this innovative refinancing plan to close to \$500 million dollars. These savings have been reinvested in the infrastructure of your local utility to improve customer service and reliability in ways that would not have been otherwise possible.

Capacity

Factor

15%

22%

PROMOTING AFFORDABILITY FOR OUR CUSTOMERS

In addition to delivering value for your dollars, we also want electric rates to be as affordable, stable, and predictable as possible for your budget. As a not-for-profit utility, we price electricity at the lowest level that pays our costs each year. We have already discussed taking such actions as reducing burdensomely high taxes, making smart investment decisions in generation and transmission, and advocating for no more than our fair share of wholesale market transmission and generation costs. In addition, we are taking the following steps to promote affordability for our customers:

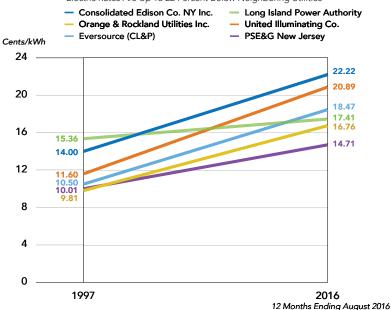
Maintaining Regionally Competitive Electric Rates. The LIPA Board of Trustees has adopted a goal to maintain electric rates that are competitive with those of our neighboring peer utilities in the New York metropolitan area. This goal will drive LIPA's long-range planning, including investments in generation, infrastructure and service quality decisions. Of note, as shown in Chart A-1, over the last 18 years since the LIPA acquisition of the Long Island Lighting Company, LIPA has gone from having the highest electric rates in our region to competitive rates, albeit in a region with above average costs. This was accomplished by raising electric rates less than neighboring utilities and less than the rate of inflation over time, see Chart A-2. The Trustees want to maintain or improve upon this progress, while investing in cleaner air, better reliability, and improved service quality.

Improving Customer Bill Predictability and Stability. Our customers value electric rates and bills that are predictable and stable. To allow our customers to better balance their own home budgets, PSEG Long Island is implementing a redesigned balanced billing program for 2017. Over forty percent of our residential customers use the balanced billing program, and with the planned improvements, they will see fewer "true ups" to their budgeted bills for 12 months of electricity. The program will also now have an option to roll any balance due on a customer's anniversary date into their next annual budgeted bill. Over the last three years, LIPA and PSEG Long Island have also implemented other changes to enhance rate and bill predictability and stability, including changing the design of our fuel hedging program and better matching the bill impacts of generation costs to the peak summer usage period.

Chart A-1

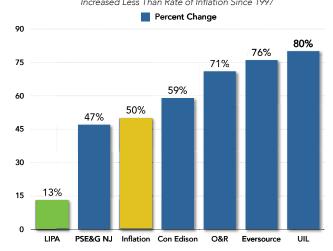
LIPA Rates Are Now Competitive in the New York Metro Area

Electric Rates Are Up To 22 Percent Below Neighboring Utilities



Source: System Average Rate from U.S. Energy Information Administration Form 826

Chart A-2
LIPA Rates Increased at Slowest Pace of All Regional Utilities
Increased Less Than Rate of Inflation Since 1997



Increasing Electric Discounts for Low Income Customers. LIPA and PSEG Long Island plan to enhance our low income discount program in accordance with Governor Cuomo's initiative on behalf of all of the State's utility customers. Our efforts will include both identifying and enrolling more qualifying customers and implementing a new tiered discount schedule based on benchmarked levels of need. The goal is to hold the cost of electricity at or below 6 percent of an eligible customer's income. Customers enrolled in our low income discount program will also be enrolled in our newly enhanced balanced billing program to provide a more stable bill during the year.

Enabling Our Customers to Lower Their Electricity Bills Through Energy Efficiency. Many of our residential and commercial customers spend more on electricity than they need to. Often customers aren't aware of the amount of money they could save by using less energy or find it hard to locate the products and services that would reduce their usage. Fortunately, helping our customers reduce their electric consumption isn't just good for them, it's also good for all of us. Energy efficency is less expensive than building new power plants or transmission lines and also better for our environment. That's why LIPA and PSEG Long Island spend nearly \$90 million per year helping our customers buy less of our services. Over 50,000 customers a year take advantage of our rebates on ENERGY STAR appliances or use our in-home or online energy audits. In fact, since we launched our ten-year 520 megawatt Efficiency Long Island program in 2009, our customers have saved over \$735 million in electric costs. In 2017, PSEG Long Island will further this progress with a new pilot customer engagement program focused on additional ways to help our customers reduce their energy usage and other improvements to our already successful energy efficiency programs.



BUILDING A CLEAN ENERGY FUTURE

Our customers value cleaner and more efficient energy. LIPA has long-supported these goals in a number of ways, including rebates and incentives for customer-sited photovoltaic ("PV") solar systems, net metering of self-generation, instituting an ambitious ten-year energy efficiency program, and directly procuring energy from renewable sources. Earlier this year, Governor Cuomo announced New York's Clean Energy Standard ("CES") as part of his signature energy policy, Reforming the Energy Vision ("REV"). REV and the CES seek to integrate the benefits of the central power grid with clean, locally generated power to combat climate change, reduce greenhouse gas emissions by 40 percent, increase renewable energy to 50 percent of the state's energy, and increase statewide energy efficiency by 600 trillion British thermal units ("BTUs") by 2030. To meet our share of Governor Cuomo's statewide energy goals and our customers' desires for cleaner choices, LIPA and PSEG Long Island are undertaking several initiatives including:

Powering 100,000 More Homes With Renewable Energy – CES Compliance Through 2023. In 2012, LIPA's Board of Trustees established a goal of 400 megawatts of new renewable energy to serve Long Island's energy needs. As shown in Chart C-1, LIPA has selected over 230 megawatts of projects so far and in 2017 we plan to sign contracts for the balance, which is enough to power over 100,000 homes. Right now, we are in negotiations for Long Island's first offshore wind farm, supported by our first utility scale batteries. We are also evaluating additional proposals for utility scale solar and wind projects and recently announced feed-in tariffs for commercial rooftop and carport solar. Combined, we anticipate these efforts will be sufficient to meet our share of Governor Cuomo's statewide CES goals through 2023, with additional efforts to follow.

Enabling Customers to Make Cleaner Choices – 35,000+ Solar PV Systems. Customers can take advantage of PSEG Long Island's Green Choice program to purchase energy with greater environmental attributes or opt for distributed generation like rooftop solar. Even our solar customers can choose among mounting PV panels on their own rooftop, shared solar through community net metering, or remote net metering where commercial customers can share the benefits of solar across multiple locations. In 2014, we celebrated the 10,000th PV solar system installation on our grid – a goal 14 years in the making. Now, just two years later, Long Island has reached another milestone with over 35,000 customers having installed rooftop solar – the equivalent of removing 25,000 cars from our roads, see Chart C-2. Having led the state with PV solar, Long Island now has the most robust local solar installation industry in New York.

Chart C-1
LIPA's Goal of Powering 100,000 Homes with Clean Energy
LIPA's Renewable Contracts Will Meet New York's Clean Energy Standard Through 2023

400 Program Goal 400 Megawatts

400 MW

350

250

200

173 MW

100

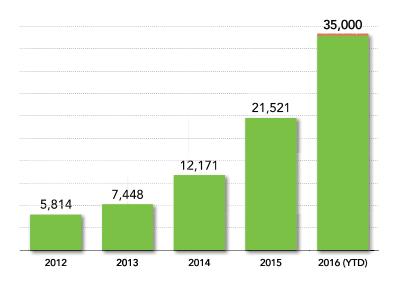
50

2014

2016

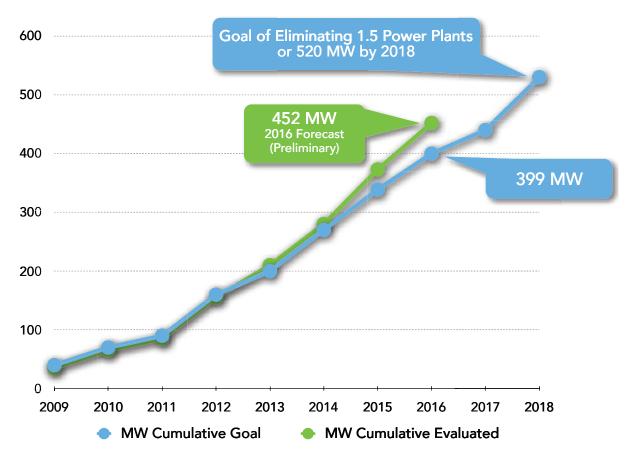
2017 projected

Chart C-2
Long Island Rooftop Solar Growth Leads New York State
Milestone Reached: 35,000 Solar Rooftop Installations on Long Island



Reducing Peak Energy Use 520 Megawatts by 2018 – Saving Customers \$735 Million To Date. In 2009, LIPA's Board of Trustees established a goal to use energy efficiency to reduce peak load on Long Island by 520 megawatts by 2018. As shown in Chart C-3, we remain on track to achieve our goal – roughly the equivalent of taking one-and-a-half power plants out of service or 325,000 cars off of our roads. Not only do these investments lower LIPA's costs, the customers taking part also save significant money on their electric bills – over \$735 million since we launched our program in 2009. In 2017, we will be reviewing how our programs fit within Governor Cuomo's new energy efficiency goals as part of our Integrated Resource Plan, ensuring we are doing our part to meet the statewide Clean Energy Standard.

Chart C-3
LIPA's Goal of Eliminating 1.5 Power Plants by 2018
\$735 Million in Customer Savings to Date



Note: Efficiency Long Island and Renewable Energy Load Reduction in Megawatts

TRANSITIONING TO A 21ST CENTURY UTILITY

The electric utility industry is faced with a number of significant new trends. To name several examples:

- Customers are now energy producers, representing a shift from large central station power plants producing energy distributed over the electric grid.
- The infrastructure that makes up the electric grid is aging and needs to cope with new physical and cyber security concerns.
- Electric sales growth is modest or declining but peak energy usage continues to grow in certain parts of the electric system, driving the need for localized infrastructure investments.
- With the increasing penetration of digital devices and services, customers expect and value reliable electric service now more than ever.
- The cost of natural gas has fallen sharply, lowering electric bills but also causing the retirement of older non-gas fired generation.
- The cost of renewable energy is declining rapidly.
- The need for quick start generation, energy storage, or on-demand load reduction is increasing with intermittent renewable generation.
- New tools like web apps, improved voice recognition, and data analytics are allowing companies to serve customers better than before but also raising customer expectations across all industries.
- The falling cost of batteries is helping car companies to develop electric vehicles with longer ranges, which could electrify a greater share of transportation; and
- Finally, smart meters and other new technologies are providing customers with greater information on managing their energy usage and will enable more granular electric pricing.





Adjusting to these and other changes will require experimentation and adaptation. Some of our key initiatives over the next several years include:

Using Innovation to Reduce the Cost of Meeting Peak Demand. A significant portion of a utility's cost is tied to investments in generation, substations, and transmission needed to meet peak energy demand. This peak demand typically occurs during just a handful of days in the summer when temperatures soar and air conditioning use increases. In addition to systemwide needs, there are also peaks within small parts of our system, known as load pockets, where local load growth is driving transmission or substation investment. Governor Cuomo's REV initiative seeks to use technology, markets, and innovation to defer or displace this utility investment at a lower cost. Over the last two years, LIPA and PSEG Long Island have undertaken a number of initiatives towards this end.

In 2016, PSEG Long Island identified two areas requiring substantial investment to meet local energy needs and sought proposals from developers for lower cost alternatives. In one location, we found that new transmission investment was actually the lowest cost solution. By contrast, on the South Fork, PSEG Long Island found that combining our renewable energy goals with the needs for growing power supply in that region economically deferred transmission investment, a success for this type of integrated planning that will save all of our customers money. In the next 18 months, we will ask developers to provide project proposals in another load pocket as part of an integrated planning solution, with the goal of deferring or displacing another pending infrastructure need.

In 2016, LIPA and PSEG Long Island also established the Smart Savers bring-your-own-thermostat program (and similar programs run by third parties) that provides rebates and payments to customers willing to allow the utility to manage their wifi-enabled thermostat on a handful of days during the year. By using private sector providers, rather than a one-size fits all utility offering, we aim to accommodate a wider range of devices and services in our program and use the marketing instincts of our partners to acquire customers with a diverse array of needs and interests. In 2017, we expect to continue to grow this program, with the goal of achieving sufficient enrollment to replace our aging LIPAEdge thermostat offering.

In 2017, we also plan to launch a new pilot customer engagement program, introduce an interconnection portal to provide solar developers with information on siting projects in locations that can accept power without costly system upgrades, and experiment with using





fuel cells in targeted areas of our system to defer or eliminate substation and transmission investment. These programs and others seek to maximize the efficiency of existing assets with the aim of replicating those initiatives that reduce cost for our customers.

Advancing an Electric Rate Modernization Roadmap. Another component of improving the efficiency of the electric grid is using smart meters and other technologies to provide more granular electric pricing that can save customers money. In New York, we expect electric utilities will experiment with time, location, and demand-based pricing as part of the State's REV framework. During 2017, we will formalize our "roadmap" for experimenting with and modernizing LIPA's electric rates over the next several years.

To take an example of why electric rate design is so important to improving the efficiency of the electric grid and lowering your bills, over the next decade electric vehicles will become increasingly popular as the declining cost of batteries allows automakers to manufacture more affordably priced cars with longer driving ranges. Electrification of transportation could bring significant air quality and carbon emissions benefits to our community. Meeting the potential electric demand, however, could require significant utility investment to reinforce parts of our electric grid that are near their limits for the amount of power they can deliver at peak times. But if we can encourage our customers to take advantage of programs that provide savings for off peak charging, or even better still incentivize electric vehicle owners to sell power back to the electric grid during peak times, the incremental investment may be modest or even negative. This is just one example of how innovative pricing and programs could save all of our customers' money.

Using Technology to Better Serve Our Customers. New technology is impacting all aspects of energy production, delivery, and customer service and can help us better meet the needs of our customers. Already, new technology allows PSEG Long Island to answer customers calls faster and provide customers with more information regarding outage restoration times. New





PSEG Long Island "MyAccount"

platforms like PSEG Long Island's redesigned "MyAccount" mobile website allows customers 24/7 access via a smart phone or computer to sign up for new service, pay their bill, or report a power outage. Over the next two years, PSEG Long Island will deploy over 1,000 "self-healing" grid automation devices that will isolate faults on the electric grid and reduce power outages. Smart meters will enable our customers to obtain detailed information about their daily energy usage, try innovative electric pricing programs that lower their bills, and enable greater two-way communication like real time "high bill" energy use alerts. And advances in distributed generation are permitting customers to cost effectively generate their own power in a cleaner fashion. Innovation will impact the safety, efficiency, convenience and cost of nearly all aspects of utility operations over the next decade. During 2017, PSEG Long Island will continue to roll out new products and programs to take advantage of these new technologies.

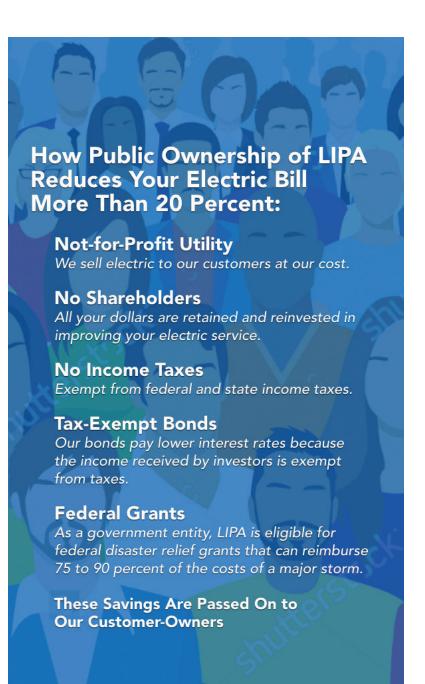
MAINTAINING FISCAL RESPONSIBILITY AND MAXIMIZING THE BENEFITS OF PUBLIC OWNERSHIP

LIPA's public ownership and not-for-profit business model reduces electric rates on Long Island and the Rockaways by more than 20 percent. In fact, all of your dollars are used to run the electric system at our cost and are retained and reinvested in improving electric service for our community. Our Board of Trustees, comprised of LIPA customers appointed by our State's elected officials, ensures local decisions made openly and transparently, so you can see exactly how your utility dollars are spent. With no private stockholders, LIPA pays no dividends and is exempt from corporate income tax. No shareholders also means that the bonds we sell pay interest that is exempt from federal and state income taxes, providing LIPA with a lower cost of borrowing. And as a government utility, LIPA is eligible for federal disaster relief grants that can reimburse 75 to 90 percent of our storm restoration costs. All of these savings are passed on to our customer-owners in their utility bills.

Public ownership means that our customers benefit when we run the utility in a fiscally prudent manner with your long-term interests in mind. It's easy to shave a few dollars at your utility by not trimming the trees or keeping up with maintenance, but that lack of investment invariably means costly repairs. Investing in your community utility and maintaining its infrastructure is the lowest cost solution in the long term and also provides better reliability and service.

At the same time, we don't want to put our repair bills on our credit card. That's just leaving the cost to customers down the line. So we have to charge the cost for providing electric service today, which will also mean lower utility bills in the future. In sum, there's an old joke that "nobody ever washed a rental car." At LIPA, we try to keep in mind that this isn't a rental car – our customers own the utility and asked us to watch over it. Here are some of our major initiatives to maximize the benefits of your public ownership of LIPA:

Adopting Best Practices in Governance. During 2016 and 2017, the LIPA Board of Trustees is undertaking a best practices review of public utility governance so as to better define LIPA's mission and the important aspects of providing electric service that delivers value to our customer-owners. This review incorporates all of the utility's operations, including customer service, reliability, borrowing, taxes, electric rates, clean energy, and resource planning with the goal of ensuring that LIPA maintains a constant long-term orientation towards its role in our community. By making our goals available to the public, every member of the community can also see how we are doing relative to our plans. As Winston Churchill said, "however beautiful the strategy, you should occasionally look at the results."



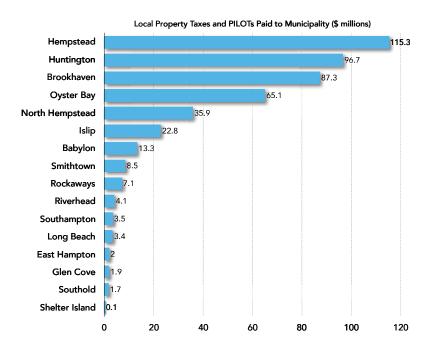
Ensuring Prudent Borrowing, Higher Credit Ratings, and Lower Cost. The first policy adopted by LIPA's Board in its governance initiative was a new financial policy to reduce LIPA's borrowing to 64 percent or less of LIPA's infrastructure investment. Each year, LIPA makes a contribution to pay for new infrastructure from its Operating Budget. This 64 percent guideline is based on industry benchmarks for electric utilities and ensures that customers today and in the future both pay a fair share of the costs of an investment during the period the assets are in use. This new financial policy was designed to raise LIPA's credit ratings over a five-year period, thereby reducing cost for LIPA's customers. Fitch Ratings commented that the Board's new policy "provides sound long-term financial goals and policies," "should moderate future borrowings," and "is in-line with industry standards." Moody's went further and upgraded LIPA's bond rating for the first time in eleven years, citing "improvements in LIPA's operating performance, better customer satisfaction levels... and an expectation for better financial performance on a sustained basis."

Reducing Customer Costs by \$1.4 billion with FEMA Grant. As a publically-owned utility, LIPA is eligible for federal disaster relief grants in the event of a major storm. This has saved our customers over \$750 million in the last five years, including costs incurred to restore power after Hurricane Irene and Superstorm Sandy. As important, with the help of Governor Cuomo, LIPA secured a federal grant to fund 90 percent of the cost of a \$730 million storm hardening program – allowing LIPA to accelerate our investment for improved system resiliency while saving our customers over \$650 million.

Benefiting From Local Control and Jobs -- Over \$500 million Per Year to Local Schools and Governments and \$700 million in Local Public Investment. LIPA's mission is to serve our customer-owners on Long Island and the Rockaways. LIPA directly and indirectly employs over 5,600 people on Long Island. Annually, we purchase more than \$120 million in goods and services from over 900 local companies. We are one of the largest taxpayers on Long Island – paying nearly \$500 million per year in property taxes and PILOTS to local schools and governments, see Chart P-1. We are also among the largest investors on Long Island spending over \$2.8 billion through 2018 on our infrastructure investment program. Putting all of these together, LIPA helps our local community by providing reliable electric service, hiring local workers, paying a share of our local tax burden, and keeping our focus on how best to serve you.

In the next section let's translate our priorities into budget figures for 2017.

Chart P-1
LIPA Pays Over \$500 Million Per Year to Local Schools and Governments



Moody's Upgrades LIPA's Bonds Rating for the First Time in Eleven Years Citing:

"...improvements in LIPA's operating performance,
better customer satisfaction levels...
and an expectation for better financial
performance on a sustained basis."

SUMMARY OF PROPOSED 2017 BUDGET

2017 Budget is Consistent with Three-Year Rate Plan. The 2017 Budget consists of two parts – an Operating Budget of \$3.6 billion and a Capital Budget of \$717 million. LIPA's 2017 Budget follows the recommendations provided by the Department of Public Service ("DPS"), the staff arm of the State Public Service Commission, in the Three-Year Plan approved by LIPA's Board of Trustees in December 2015. The Three-Year Plan funds improvements in customer service and reliability and adopts sound fiscal targets.

LIPA's \$3.6 billion 2017 Operating Budget, presented on a cash requirements basis in **Chart B-1**, allows LIPA to recover sufficient revenue from its customers and other sources to pay its expenses and make a contribution towards its Capital Budget. The financial policy adopted by the LIPA Board of Trustees last year established a fixed obligation coverage target of 1.30x for LIPA debt payments and leases for 2017. Staff projects that the 2017 Budget will achieve slightly below the 2017 target at 1.28x due to an \$11 million shortfall relative to the original Three-Year Plan projections. The 2017 shortfall is principally caused by higher than originally forecast write-offs of \$9 million and higher than forecast pension trust contributions of \$4 million, in part offset by other variances in revenues and expenses. However, staff projects that 2016 results will be \$13 million better than originally forecast, thereby netting to roughly no change across the 2016 and 2017 Plan years.

LIPA's \$717 million 2017 Capital Budget funds long-life infrastructure investments like transmission, substations, poles, and wires. These assets are paid for in part by a contribution from the Operating Budget to reduce borrowing, in part from a grant received from the federal government for storm hardening, and in part by long-term borrowing to be repaid by customers over the period that the new infrastructure assets are in use. Chart B-2 summarizes the Capital Budget and its funding sources. The financial policy adopted by LIPA's Board of Trustees last year calls for new debt issues to fund no more than 64 percent of capital projects. For 2017, staff projects LIPA will fund 60 percent of capital projects from new debt issues. This results in LIPA's debt-to-capitalization ratio declining from 96 percent at year-end 2016 to 93 percent by year-end 2017. Publically-owned utilities like LIPA are more typically 55 to 65 percent debt funded. The policy adopted by the LIPA Board of Trustees last year will result in the continued reduction of LIPA's debt ratio towards industry benchmarks, reducing interest rates paid on LIPA bonds and reducing future electric bills.

Electric Sales Are Modestly Declining Largely Due to Energy Efficiency Investments. In terms of electric sales, we expect to see growth on a gross basis of approximately 1 percent per year through

Chart B-1 2017 Operating Budget Meets Sound Fiscal Targets

Funds Improvements to Customer Service and Reliability

	(millions)
Operating Revenues	\$3,58 6,948
Grant and Other Income	\$71 ,915
Total Revenues and Incomes	\$3,658 ,863
Power Supply Costs	\$1,781 ,569
Delivery Costs	\$679 ,095
PILOTs, Taxes, and Fees	\$538 ,511
Interest Payments	\$334, 314
Debt Reduction & OPEB Funding	\$32 5,374
Operating Budget	\$3,658 ,863
Fixed Obligation Coverage	
LIPA Debt Plus Leases	1.28x
LIPA and UDSA Debt Plus Leases	1.19x

Note: Operating Budget shown based on revenue requirements

Chart B-2 2017 Capital Budget Reduces Borrowing

Funds Record Investments of Infrastructure and Storm Hardening

	(millions)
Capital Projects	\$527,746
Storm Hardening	\$18 8,754
Capital Budget	\$716,500
Funding from Operating Budget	\$1 17,581
FEMA Grant	\$169,879
Debt Issued to Fund Projects	\$429,040
Funding Sources	\$71 6,500
Percent of Capital Projects Funded from Debt	
Including FEMA Projects	60%
Excluding FEMA Projects	78%
Projected Debt to Capitalization Ratio	
Year-end 2016	96%
Year-end 2017	93%

2018, which will be more than offset by our significant investments in energy efficiency and behind-the-meter distributed energy like rooftop solar. These investment cost effectively defer the need for new generation, substation, and transmission investment and reduce greenhouse gas emissions. PSEG Long Island estimates that our efficiency programs will reduce gross sales by approximately 1.3 percent per year while voluntary measures by customers will reduce sales an additional 0.2 percent. PV rooftop solar and improvements to standards and codes are projected to reduce sales an additional 0.4 percent per year and 0.1 percent per year, respectively, for net sales growth of approximately negative 1.1 percent per year through 2018. These sales trend are illustrated in Chart B-3. Declining sales will continue to put pressure on electric rates, as the same electric rates produce less revenue to fund necessary utility operations. Our projections assume a certain amount of growth in the economy as well as weather that is historically typical for Long Island. Economic projections can change, and weather in any given year is rarely the historical average, so actual sales will be modestly higher or lower than projected.

Electric Rates are The Lowest Since 2005 Due to Lower Power Supply Costs. The LIPA Reform Act of 2013 introduced a new, transparent process to review LIPA's costs and determine electric delivery rates. That process, which takes close to a year, incorporates public participation as well as independent review by the DPS. The Three-Year Rate Plan recommended by the DPS and approved by the LIPA Board of Trustees in December 2015 included a 0.8 percent adjustment to total forecast charges in 2016, 2.1 percent in 2017 and 2.1 percent in 2018 or a cumulative 5 percent over three years. Importantly, these delivery rate adjustments followed a three-year delivery rate freeze, and therefore resulted in average rate adjustments of less than one percent per year over the six-year period beginning in 2013 – less than the rate of inflation.

Electric rates have fixed and variable components. The components of LIPA's electric rates that vary with actual cost – no more and no less – are for conditions largely outside of LIPA's control like the market price to purchase fuel and power, the volume of electric sales, debt costs, storm restoration costs, and taxes and fees.

An important trend in LIPA's costs, and therefore its electric rates, has been the decline in natural gas prices in the northeast over the last two years. LIPA has immediately passed these savings on to our customer in their monthly bills. As shown in **Chart B-4**, declining fuel prices have caused our total electric rates, including all bill components, to decline since 2013. Our rolling 12-month system average rate in 2016 is down 9.5 percent [1] from 2013 to our lowest system average electric rates

Chart B-3 LIPA's Sales Are Declining Due to Solar PV and Energy Efficiency Investments

Investments Cost Effectively Defer Projects Needed to Meet Load Growth

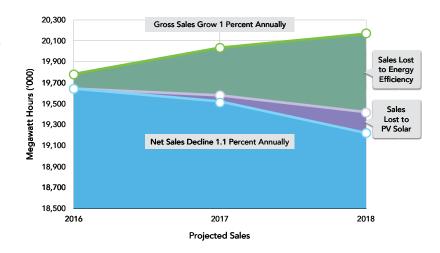
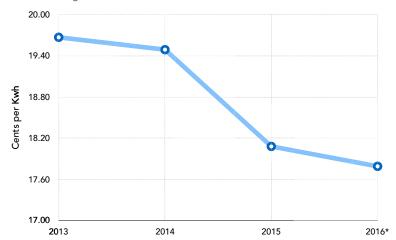


Chart B-4
LIPA's Electric Rates are the Lowest Since 2005

Savings from Lower Natural Gas Prices Have Been Passed On to Customers



Source: US Energy Information Administration *12 month rolling average ending September 2016 17

since 2005. There is no guarantee such favorable energy prices will continue, but our customers will always pay only our actual power supply costs.

Due to lower power supply costs, total electric rates in 2017 are forecast to be \$221 million less than originally projected in the Three-Year Plan. Excluding these lower power supply costs, electric rates will be \$2 million lower than originally proposed. The delivery portion of electric bills is forecast to increase \$1.16 per month for the average residential customer beginning on January 1, 2017.

CONCLUSION

"By failing to prepare, you are preparing to fail." — Benjamin Franklin.

It is my privilege to work with the LIPA Board of Trustees and the employees at LIPA and PSEG Long Island to realize the vision of the LIPA Reform Act of 2013 for a cleaner, more reliable, and more affordable electric utility for our customer-owners.

The 2017 Budget reflects our mission, the values defined by LIPA's Board of Trustees, and the perspectives of LIPA and PSEG Long Island's management about how best to achieve these goals for our community. The electric utility industry is in a period of change. That is reflected in our plans. The Budget also addresses challenges unique to LIPA.

The 2017 Budget is the culmination of many months of effort by the staff at both LIPA and PSEG Long Island. In the spirit of Benjamin Franklin, who never failed to prepare, I appreciate all of their efforts in ensuring a successful and productive 2017.

Thomas Falcone

Chief Executive Officer

December 20, 2016



2017 BUDGET EXECUTIVE SUMMARY

In the three years since the LIPA Reform Act of 2013, LIPA, together with its principal contractor PSEG Long Island, has furthered its mission to enable clean, reliable, and affordable electric service for our customers-owners on Long Island and the Rockaways.

LIPA's plans for the next several years include:

- Investing in Reliability, Resiliency and Storm Response
- Enhancing Customer Service and Value
- Promoting Affordability for Our Customers
- Building a Clean Energy Future
- Transitioning to a 21st Century Utility
- Maintaining Fiscal Responsibility and Maximizing the Benefits of Public Ownership

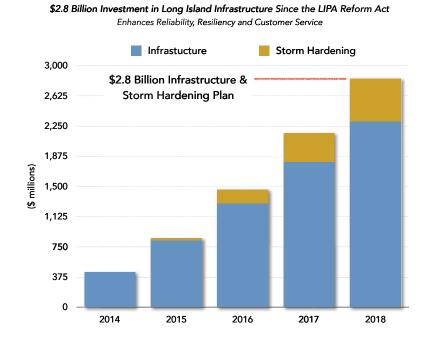
LIPA's 2017 Budget updates our spending and investment projections while remaining consistent with our Three Year Rate Plan.

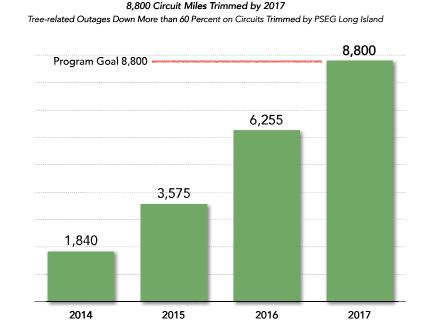
INVESTING IN RELIABILITY, RESILIENCY AND STORM RESPONSE

- Surveys Tell Us That Customers Value the Reliability of Their Electric Service More Than Anything Else
- Customers Had Electric 99.98 Percent of the Time Last Year Among Top 25 Percent of Peer Electric Utilities

Our key reliability and resiliency initiatives include:

- Investing \$730 Million to Storm Harden 1,025 Circuit Miles by 2019
- Completing Our New Tree Trimming Program by 2017 to Reduce Tree Related Outages by 60 Percent
- \$82 Million for Customer Reliability Improvements in 2017 and 2018
- Improving Storm Response





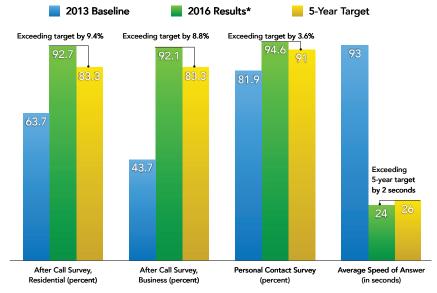
- Enhancing Customer Service Was a Core Goal of the LIPA Reform Act
- Achieving Our Initial 5-year Customer Service Goals by 2018

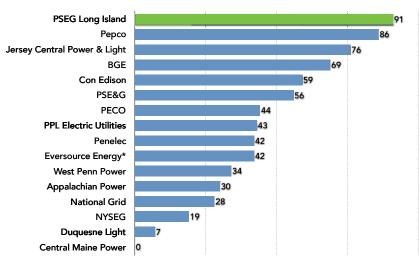
Key Measures of Customer Service Show Significant Improvement Since 2013

PSEG Long Island is Achieving 5 Year Performance Goals in Third Year of Contract

PSEG Long Island Is the Most Improved Utility in Our Region

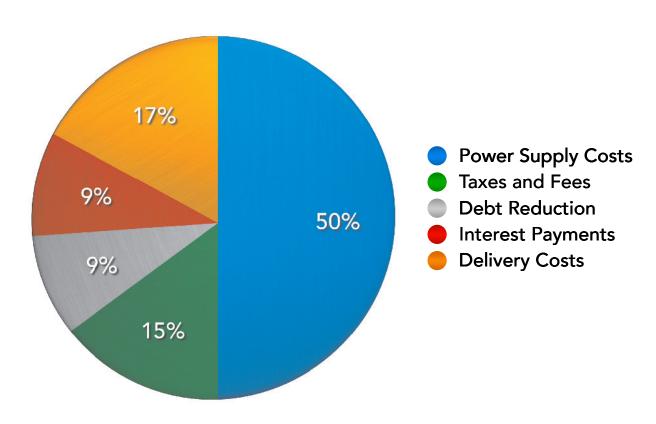
Change in JD Power & Associates Residential Customer Satisfaction Scores 2013 vs 2016



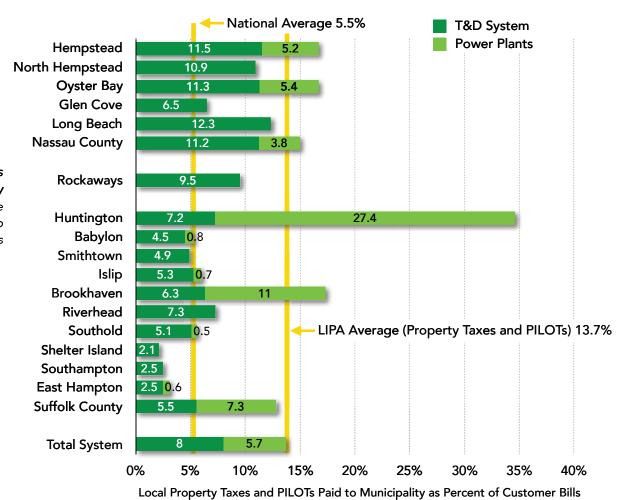


*2013 Eversource Energy is the average of NSTAR (611) and Connecticut Light & Power (580)

- Delivery Costs are Only 17% of Electric Bills
- Delivering Customer Value Requires a Focus on all Parts of the Customer Bill
- Making Smart Generation and Transmission Investment Decisions
- Advocating for Fair Transmission and Gas Costs to Reduce Power Supply Costs
- Refinancing Debt to Save Customers Nearly \$500 Million in Interest Costs



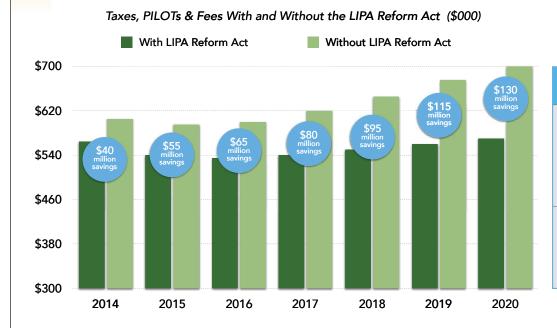
- Reducing the Hidden Burden of High Taxes and Fees
- LIPA Pays Over \$535 Million Per Year in Taxes, PILOTs and Fees
- 15% of Customer Bills 3x National Average



Analysis of Local Property Taxes
Reveal Ratepayer Inequity
Some Long Island Towns Transfer The

Some Long Island Towns Transfer The Cost of Local Government Services to Other Municipalities

- LIPA Reform Act Will Save Customers \$580 Million in Taxes and Fees Through 2020
- Local Power Plants are 90+ Percent Over Assessed
- Excessive Property Taxes on Local Power Plants Cost Customers More Than
 \$185 Million Per Year



Northport Power Plant 95 Percent Over Assessed

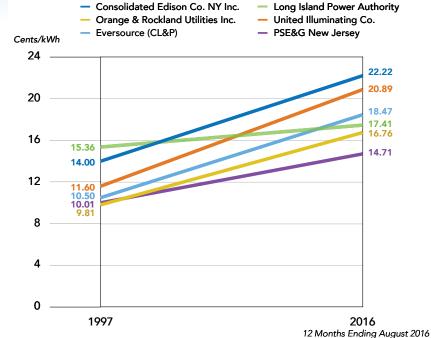
Plant	Age (years)	Size	Taxes ('000)	Capacity Factor
Bowline (units 1-2) Rockland County, NY	42-44	1,135MW	\$2,700 (\$2,375 per MW)	15%
Northport (units 1-4) Suffolk County, NY	39-49	1,589MW	\$76,600 (\$48,200 per MW)	22%

PROMOTING AFFORDABILITY FOR OUR CUSTOMERS

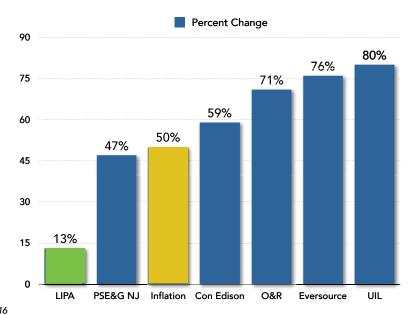
- Maintaining Regionally Competitive Electric Rates
- Improving Customer Bill Predictability and Stability
- Increasing Electric Discounts for Low Income Customers

LIPA Rates Are Now Competitive in the New York Metro Area

Electric Rates Are Up To 22 Percent Below Neighboring Utilities



LIPA Rates Increased at Slowest Pace of All Regional Utilities
Increased Less Than Rate of Inflation Since 1997



Source: System Average Rate from U.S. Energy Information Administration Form 826

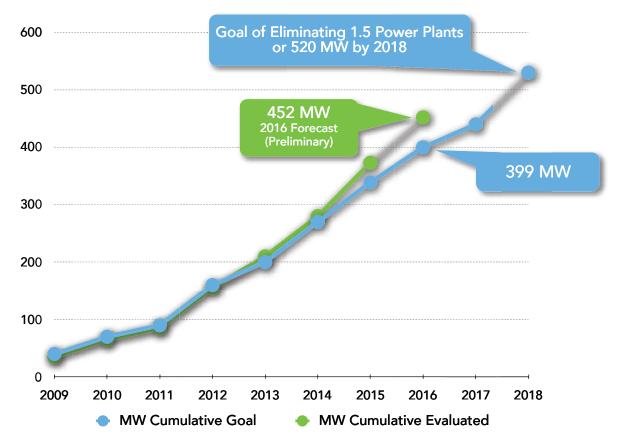
PROMOTING AFFORDABILITY FOR OUR CUSTOMERS

• Our Energy Efficiency Programs Enable Our Customers to Reduce Their Energy Usage & Bills



BUILDING A CLEAN ENERGY FUTURE

Reducing Peak Energy Use 520 Megawatts by 2018 – Saving Customers \$735 Million To Date



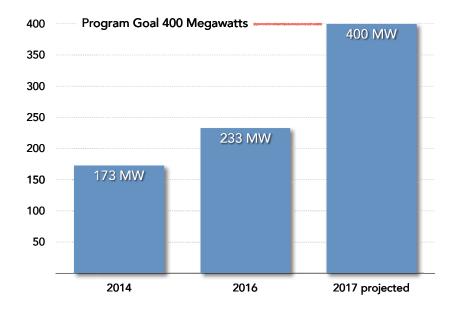
Note: Efficiency Long Island and Renewable Energy Load Reduction in Megawatts

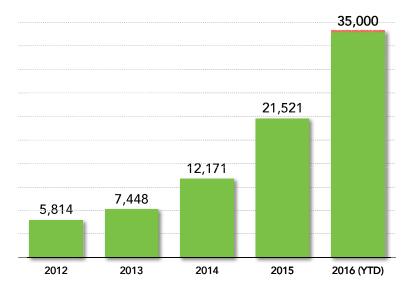
BUILDING A CLEAN ENERGY FUTURE

- Powering 100,000 More Homes with Renewable Energy CES Compliance Through 2023
- Enabling Customers to Make Cleaner Choices 35,000+ Solar PV Systems

LIPA's Goal of Powering 100,000 More Homes with Clean Energy LIPA's Renewable Contracts Will Meet New York's Clean Energy Standard Through 2023

Long Island Rooftop Solar Growth Leads New York State Milestone Reached: 35,000th Rooftop Installations on LI in 2016





A 21st CENTURY UTILITY

- Using Innovation to Reduce the Cost of Meeting Peak Demand
- Advancing an Electric Rate Modernization Roadmap
- Using Technology to Better Serve Our Customers







MAINTAINING FISCAL RESPONSIBILITY AND MAXIMIZING THE BENEFITS OF PUBLIC OWNERSHIP

How Public Ownership of LIPA Reduces Your Electric Bill More Than 20 Percent:

Not-for-Profit Utility

We sell electric to our customers at our cost.

No Shareholders

All your dollars are retained and reinvested in improving your electric service.

No Income Taxes

Exempt from federal and state income taxes.

Tax-Exempt Bonds

Our bonds pay lower interest rates because the income received by investors is exempt from taxes.

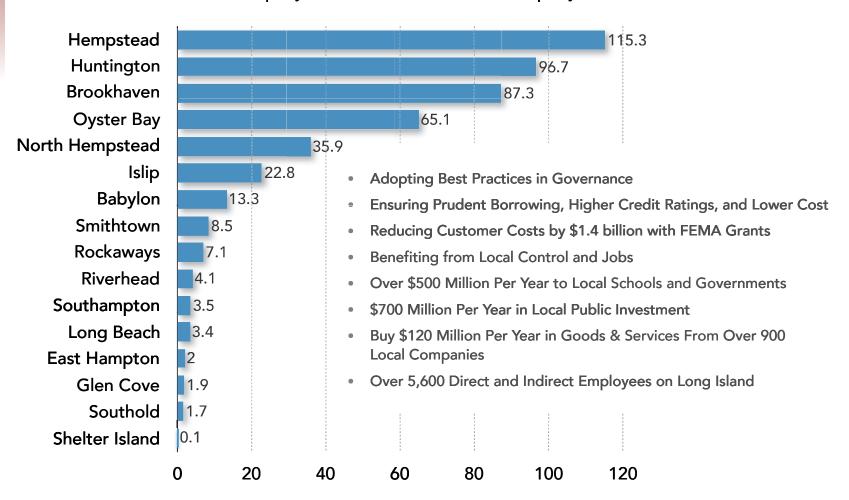
Federal Grants

As a government entity, LIPA is eligible for federal disaster relief grants that can reimburse 75 to 90 percent of the costs of a major storm.

These Savings Are Passed On to Our Customer-Owners

MAINTAINING FISCAL RESPONSIBILITY AND MAXIMIZING THE BENEFITS OF PUBLIC OWNERSHIP

Local Property Taxes and PILOTs Paid to Municipality (\$ millions)



2017 BUDGET SUMMARY

2017 Operating Budget Meets Sound Fiscal Targets

Funds Improvements to Customer Service and Reliability

(millions) **Operating Revenues** \$3,586,948 Grant and Other Income \$71,915 **Total Revenues and Incomes** \$3,658,863 **Power Supply Costs** \$1,781,569 **Delivery Costs** \$679,095 PILOTs, Taxes, and Fees \$538,511 Interest Payments \$334,314 **Debt Reduction & OPEB Funding** \$325,374 **Operating Budget** \$3,658,863 **Fixed Obligation Coverage** LIPA Debt Plus Leases 1.28x LIPA and UDSA Debt Plus Leases 1.19x

Note: Operating Budget shown based on revenue requirements

2017 Capital Budget Reduces Borrowing

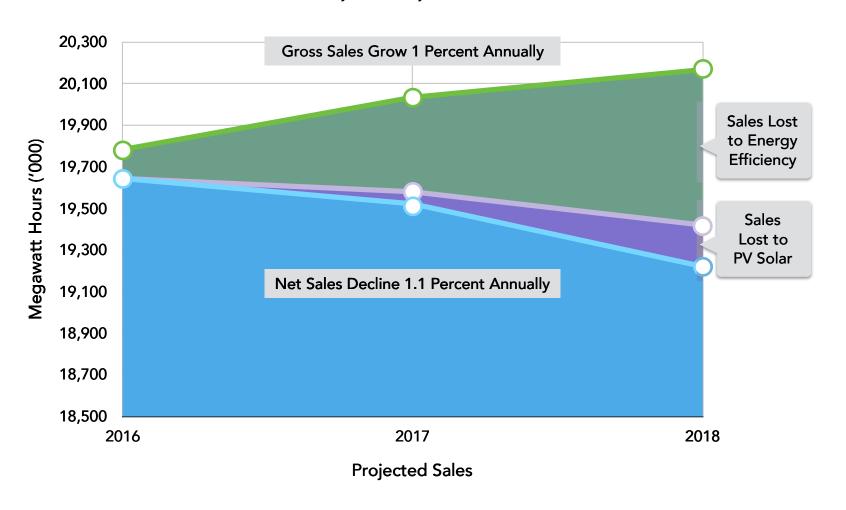
Funds Record Investments of Infrastructure and Storm Hardening

	(millions)
Capital Projects	\$527,746
Storm Hardening	\$188,754
Capital Budget	\$716,500
Funding from Operating Budget	\$117,581
FEMA Grant	\$169,879
Debt Issued to Fund Projects	\$429,040
Funding Sources	\$716,500
Percent of Capital Projects Funded from Debt	
Including FEMA Projects	60%
Excluding FEMA Projects	78%
Projected Debt to Capitalization Ratio	
Year-end 2016	96%
Year-end 2017	93%

2017 BUDGET SUMMARY

LIPA's Sales Are Declining Due to Solar PV and Energy Efficiency Investments

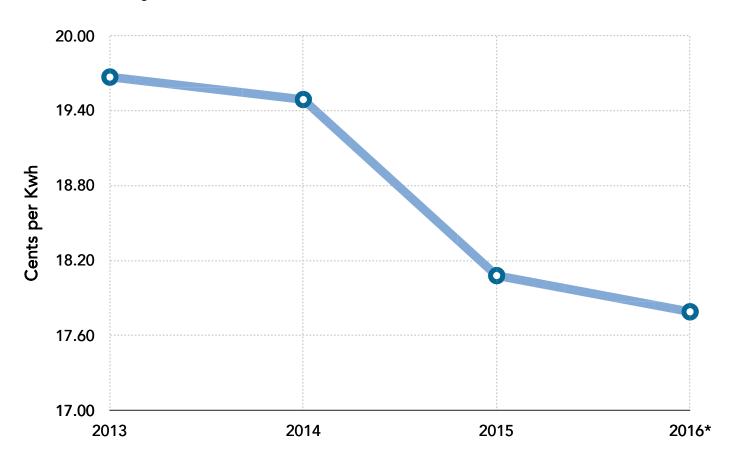
Investments Cost Effectively Defer Projects Needed to Meet Load Growth



2017 BUDGET SUMMARY

LIPA's Electric Rates are the Lowest Since 2005

Savings from Lower Natural Gas Prices Have Been Passed On to Customers



Source: US Energy Information Administration

^{* 12} month rolling average ending September 2016



LIPA is a not-for-profit public utility with a mission to enable clean, reliable, and affordable electric service for our customers on Long Island and the Rockaways.

Revenue Requirements
(Thousands of Dollars)

Total Revenue Requirements \$ 3,368,434 \$ 3,392,132 \$ 3,586,948 \$ 218,514 \$ 3,668,136 \$ 81,188 A-2								(Change from			Ch	ange from	
Total Operating & Deferred Expenses \$ 1,067,042 \$ 1,092,788 \$ 1,072,682 \$ 5,640 \$ 1,091,177 \$ 18,495 \$ 1,950			20	16			Approved		Prior Year		Projected	F	rior Year	I
PSGE Compositional Operating and Managed Expenses 1,000			Approved	L	Projected	L	2017		\$	L	2018		\$	<u>Ref.</u>
PSGE Compositional Operating and Managed Expenses 1,000	Total Operating & Deferred Expenses	\$	1,067,042	\$	1,092,738	\$	1,072,682	\$	5,640	\$	1,091,177	\$	18,495	1
PLOTS - Revenue-Based Taxes 36,828 36,860 32,482 (4,346) 33,556 1,072 A-6				Ľ				•		Ľ				
LIPA Operating & Deferred Expenses 131,420 107,668 124,644 (6,776) 125,132 488 A.4 Less Non-Cash Items			36,828				32,482		(4,346)		33,556			A-6
Less Non-Csah Items LIPA Deferred Lapenses LIPA Debt Service LIPA D	PILOTs - Property-Based Taxes		278,482		279,503		285,772		7,290		290,782		5,010	A-6
LIPA Deletred Expenses (47,618 (31,015) (31,015) (65,302) (67,788) (5,502) (67,788) (5,502) (67,788) (5,502) (67,788) (5,502) (67,788) (5,502) (67,788) (5,502) (67,788) (67,788) (67,788) (67,788) (67,788) (68,943) (1,695) (42,218) (42	LIPA Operating & Deferred Expenses		131,420		107,668		124,644		(6,776)		125,132		488	A-4
LIPA Deferred Expenses (47,518 (31.015) (31.015) (36.04 (31.015) - A 4 1.05 (65.02) (67.788) (5.504 (69.493) (1.695) (Less Non-Cash Items	\$	(138,843)	\$	(117,897)	\$	(118,738)	\$	20,105	\$	(122,679)	\$	(3,941)	
SSLE pensions/OPLBS 173,303 (65,302) (67,788) 5,504 (69,493) (1,695) A-4.1	LIPA Deferred Expenses										(31,015)			A-4
Visual Benefitz Assessment (396)	PSEG Pensions/OPEBS		(73,303)				(67,798)		5,504		(69,493)		(1,695)	A-4.1
Plus Cash Expenditures Contribution to Pension Trust 17,199 17,994 22,400 5,201 26,820 4,428 Contribution to Pension Trust 17,199 17,994 22,400 5,201 26,820 4,428 A-4.1 Swap Payments, LOC Fees and Remarketing Fees 40,915 34,836 29,955 (10,960) 29,903 (52) A-9 Less Other Income and Deductions \$ 32,368 \$ 38,188 \$ 33,552 \$ 1,184 \$ 33,660 \$ 108 A-7 Less Grant Income \$ 38,363 \$ 34,363 \$ 34,363 \$ 34,363 \$ 38,363 \$ 34,363 \$ 38,363 \$ 5 - \$ 8,874 Total Adjusted Operating Expenses \$ 915,583 \$ 955,110 \$ 934,384 \$ 18,802 \$ 953,258 \$ 18,874 Debt Service \$ 606,268 \$ 602,997 \$ 659,688 \$ 53,400 \$ 199,562 \$ 691,848 \$ 32,160 LIPA Debt Service 266,418 269,685 240,919 (25,409) 195,562 (45,357) A-10 LIPA Debt Service 2115,980 222,139 264,811 48,821 313,360 48,549 A-10 Fixed Obligation Coverage 123,870 131,174 153,958 30,088 182,926 28,968 A-10 Power Supply Charge 1,846,583 1,814,025 1,992,875 146,291 2,023,030 30,155 A-3 Total Revenue Requirements \$ 3,368,434 \$ 3,392,132 \$ 5,586,948 \$ 218,514 \$ 3,668,136 \$ 81,188 A-2 Effect of Delivery Adjustments on Billed Revenues Change in NYSA Expense & Revenues Second Stage Adjustment Per DPS Recommendation 2017 Subtotal - Adjustments due to Staged Update Feed Delivery Service Adjustment- PSA and NMP2 True Up Delivery Service Adjustment Strom Recovery	Suffolk Property Tax Settlement		(17,526)		(21,121)		(19,496)		(1,970)		(21,714)		(2,218)	A-2
Contribution to Pension Trust 17,199 17,994 22,400 5,201 26,880 4,480 A-4.1	Visual Benefits Assessment						(429)		(33)		(457)			A-2
Contribution to Pension Trust 17,199 17,934 22,400 5,201 26,880 4,480 A-4.1	Plus Cash Expenditures	\$	58,114	\$	52,820	\$	52,355	\$	(5,759)	\$	56,783	\$	4,428	
Swap Payments, LOC Fees and Remarketing Fees 40,915 34,836 29,955 (10,960) 29,903 (52) A-9						Ľ		•		Ľ		•		A-4.1
Less Grant Income \$ 38,363 \$ 34,363 \$ 38,363 \$ \$ 38,363 \$ \$ 38,363 \$ A-8 Total Adjusted Operating Expenses \$ 915,583 \$ 955,110 \$ 934,384 \$ 18,802 \$ 953,258 \$ 18,874 Debt Service \$ 5,606,268 \$ 622,997 \$ 659,688 \$ 53,420 \$ 691,848 \$ 32,160 \$ 195,552 \$ (45,357) \$ A-10 \$ 195,562 \$ (45,357) \$ A-10 \$ 195,562 \$ (45,357) \$ A-10 \$ 195,660 \$ 195,560 \$ 195,	Swap Payments, LOC Fees and Remarketing Fees		· ·											A-9
Less Grant Income \$ 38,363 \$ 34,363 \$ 38,363 \$ \$ 38,363 \$ \$ 38,363 \$ A-8 Total Adjusted Operating Expenses \$ 915,583 \$ 955,110 \$ 934,384 \$ 18,802 \$ 953,258 \$ 18,874 Debt Service \$ 5,606,268 \$ 622,997 \$ 659,688 \$ 53,420 \$ 691,848 \$ 32,160 \$ 195,552 \$ (45,357) \$ A-10 \$ 195,562 \$ (45,357) \$ A-10 \$ 195,562 \$ (45,357) \$ A-10 \$ 195,660 \$ 195,560 \$ 195,	Less Other Income and Deductions	Ś	32,368	Ś	38,188	Ś	33,552	\$	1,184	Ś	33,660	\$	108	A-7
Debt Service \$ 606,268 \$ 622,997 \$ 659,688 \$ 53,420 \$ 691,848 \$ 32,160 \\ LIPA Debt Service \$ 266,418 \$ 269,685 \$ 240,919 \$ (25,499) \$ 195,562 \$ (45,357) \$ A-10 \\ LIPA Debt Service \$ 215,980 \$ 222,139 \$ 264,811 \$ 48,831 \$ 313,360 \$ 48,549 \$ A-10 \\ Fixed Obligation Coverage \$ 123,870 \$ 131,174 \$ 153,958 \$ 30,088 \$ 182,926 \$ 28,968 \$ A-10 \\ Power Supply Charge \$ 1,846,583 \$ 1,814,025 \$ 1,992,875 \$ 146,291 \$ 2,023,030 \$ 30,155 \$ A-3 \\ Total Revenue Requirements \$ \$ 3,368,434 \$ 3,392,132 \$ 3,586,948 \$ 218,514 \$ 3,668,136 \$ 81,188 \$ A-2 \\ Effect of Delivery Adjustments on Billed Revenues \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$		1		\$				\$			-	
LIPA Debt Service 226,418 229,685 221,399 222,139 264,811 48,831 313,360 48,549 A-10 A-1	Total Adjusted Operating Expenses	\$	915,583	\$	955,110	\$	934,384	\$	18,802	\$	953,258	\$	18,874	
UDSA Debt Service 215,980 222,139 264,811 48,831 313,360 48,549 A-10 123,870 131,174 153,958 30,088 182,926 28,968 A-10	Debt Service	\$	606,268	\$	622,997	\$	659,688	\$	53,420	\$	691,848	\$	32,160	
Fixed Obligation Coverage 123,870 131,174 153,958 30,088 182,926 28,968 A-10	LIPA Debt Service		266,418		269,685		240,919		(25,499)		195,562		(45,357)	A-10
1,846,583	UDSA Debt Service		215,980		222,139		264,811		48,831		313,360		48,549	A-10
Sample S	Fixed Obligation Coverage		123,870		131,174		153,958		30,088		182,926		28,968	A-10
Effect of Delivery Adjustments on Billed Revenues Change in NYSA Expense & Revenues Second Stage Adjustment per DPS Recommendation 2017 Subtotal - Adjustments due to Staged Update Revenue Decoupling Mechanism Delivery Service Adjustment - PSA and NMP2 True Up Delivery Service Adjustment - Storm Recovery Delivery Service Adjustment - Debt Service and Coverage Subtotal - Timing Adjustments to Revenues Subtotal - Timing Adjustments to Revenues C (6,125) (10,282) (1	Power Supply Charge	ш	1,846,583	ı	1,814,025	ı	1,992,875		146,291		2,023,030		30,155	A-3
Change in NYSA Expense & Revenues Second Stage Adjustment per DPS Recommendation 2017 Subtotal - Adjustments due to Staged Update Revenue Decoupling Mechanism Delivery Service Adjustment - PSA and NMP2 True Up Delivery Service Adjustment - Storm Recovery Delivery Service Adjustment - Debt Service and Coverage Subtotal - Timing Adjustments to Revenues - (6,125) 759 \$ (10,282) \$ (10,282) \$ (5,366) 17,533 13,920 - (33,715) - (22,154) - (22,154) - (34,000)	Total Revenue Requirements	\$	3,368,434	\$	3,392,132	\$	3,586,948	\$	218,514	\$	3,668,136	\$	81,188	A-2
Change in NYSA Expense & Revenues Second Stage Adjustment per DPS Recommendation 2017 Subtotal - Adjustments due to Staged Update Revenue Decoupling Mechanism Delivery Service Adjustment - PSA and NMP2 True Up Delivery Service Adjustment - Storm Recovery Delivery Service Adjustment - Debt Service and Coverage Subtotal - Timing Adjustments to Revenues - (6,125) 759 \$ (10,282) \$ (10,282) \$ (5,366) 17,533 13,920 - (33,715) - (22,154) - (22,154) - (34,000)		╀		H		H				H				<u> </u>
Second Stage Adjustment per DPS Recommendation 2017 Subtotal - Adjustments due to Staged Update Revenue Decoupling Mechanism Delivery Service Adjustment - PSA and NMP2 True Up Delivery Service Adjustment - Storm Recovery Delivery Service Adjustment - Debt Service and Coverage Subtotal - Timing Adjustments to Revenues (10,282) (10,2							(6.425)							
Subtotal - Adjustments due to Staged Update Revenue Decoupling Mechanism Delivery Service Adjustment - PSA and NMP2 True Up Delivery Service Adjustment - Storm Recovery Delivery Service Adjustment - Debt Service and Coverage Subtotal - Timing Adjustments to Revenues \$ (10,282) \$ (10,282) \$ (5,366) 17,533 13,920 (33,715) 22,154 29,154 20,154 20,1553 20,			- (40.202)		- (40.202)									
Revenue Decoupling Mechanism Delivery Service Adjustment - PSA and NMP2 True Up Delivery Service Adjustment - Storm Recovery Delivery Service Adjustment - Debt Service and Coverage Subtotal - Timing Adjustments to Revenues - 17,533 13,920 - (33,715) - 22,154 - 840 \$\$17,533 \$3,199		 		l .		l -								
Delivery Service Adjustment - PSA and NMP2 True Up Delivery Service Adjustment - Storm Recovery Delivery Service Adjustment - Debt Service and Coverage Subtotal - Timing Adjustments to Revenues - (33,715) 22,154 - 840 \$17,533 \$3,199	Subtotal - Adjustments due to Staged Update	\$	(10,282)	\$	(10,282)	\$	(5,366)							
Delivery Service Adjustment - Storm Recovery Delivery Service Adjustment - Debt Service and Coverage Subtotal - Timing Adjustments to Revenues 840 \$17,533 \$3,199			-		17,533									l
Delivery Service Adjustment - Debt Service and Coverage Subtotal - Timing Adjustments to Revenues \$ 17,533 \$ \$3,199			-		-									
Subtotal - Timing Adjustments to Revenues \$0 \$17,533 \$3,199			-		-									
	Delivery Service Adjustment - Debt Service and Coverage			I —		1_	840							
Total Adjustment \$ (10,282) \$ 7,251 \$ (2.167)	Subtotal - Timing Adjustments to Revenues		\$0		\$17,533		\$3,199							
	Total Adjustment	\$	(10,282)	\$	7,251	\$	(2,167)							

Revenue Requirements

The Authority's annual revenue requirements are projected to grow from a budgeted \$3.4 billion in 2016 to \$3.6 billion in 2017. The primary drivers of this change include: (i) increases in the Power Supply Charge; (ii) increases in operating expenses to support new programs in order to maintain reliability, improve system resiliency and customer satisfaction; (iii) increases in property tax assessments; and (iv) increases in debt service, including fixed obligation coverage, to support the Authority's capital improvement program. These costs are further detailed on the following pages herein.

Beginning in 2016, the Authority's revenue requirements are calculated in accordance with the practices utilized by other large public power utilities in the United States (the "Public Power Model") and reflect the recovery of operating expenses in the current year plus debt and other fixed payment obligations (including fiscally sound levels of fixed obligation coverage), as opposed to the requirements to reach a targeted net income of \$75 million in each year. A \$75 million net income target had been the Authority's historic practice through 2015.

As set forth on the page, the Authority's methodology for calculating revenue requirements and fixed obligation coverage excludes certain specified non-cash items from reported expense. These exclusions reflect the non-cash portion of costs amortized to expense, such as depreciation, amortization, and deferred expenses (the costs of which are generally recovered in revenues through debt service payments) and the portion of expense associated with voluntary contributions to the Authority's OPEB Account, which are made after debt payments each year (and thus are first available to make debt payments and are thus part of fixed obligation coverage). The Authority's financial policies are further detailed herein in the description of debt service and fixed obligation coverage requirements.

Statements of Revenues and Expenses (Thousands of Dollars)

									Cha	ange from			Cha	ange from	
		2015		20	16		1	Approved	P	rior Year		Projected	Pr	rior Year	Ī
	_	Actual	oxdot	Approved		Projected	_	2017		\$	ш	2018		\$	<u>Ref.</u>
	ı				ı						ı				
Revenues	\$	3,505,209	\$	3,368,434	\$	3,392,132	\$	3,586,948	\$	218,514	\$	3,668,136	\$	81,189	A-2
Power Supply Charge ^(a)	-	2,017,658	-	1,846,583	-	1,814,025	-	1,992,875		146,291	-	2,023,030		<i>30,155</i>	A-3
Revenue Net of Fuel Costs	\$	1,487,551	\$	1,521,851	\$	1,578,107	\$	1,594,073	\$	72,222	\$	1,645,107	\$	51,034	
PSEG Long Island Operating and Managed Expenses	г		П		П		_				П				
PSEG Long Island Operating Expenses	\$	432,650	\$	455,210	\$	445,633	\$	488,945	\$	33,735	\$	498,506	\$	9,561	A-4.1
PSEG Long Island Pensions/OPEBs		24,366		73,303		65,302		67,798		(5,504)		69,493		1,695	A-4.1
PSEG Long Island Managed Expenses		112,069		91,799		157,771		73,040		(18,759)		73,708		668	A-4
Utility Depreciation		110,723		139,362		153,417		167,634		28,272		180,802		13,168	A-5
PILOTs - Revenue-Based Taxes		36,795		36,828		36,860		32,482		(4,346)		33,556		1,074	A-6
PILOTs - Property-Based Taxes	ı	274,224		278,482	ı	279,503		285,772		7,290	ı	290,782		5,010	A-6
LIPA Operating Expenses	\$	53,570	\$	83,802	\$	76,653	\$	93,630	\$	9,828	\$	94,117	\$	488	A-4.2
LIPA Deferred Amortized Expenses		11,403		47,618		31,015		31,015		(16,604)		31,015		-	A-4.2
LIPA Depreciation and Amortization		112,884		112,239		111,956		111,781		(458)		111,800		20	A-5
Interest Expense		361,726		318,176		352,926		331,032		12,856		332,549		1,517	A-9
Total Expenses	\$	1,530,409	\$	1,636,819	\$	1,711,037	\$	1,683,128	\$	46,310	\$	1,716,328	\$	33,200	
Other Income and Deductions	\$	37,745	\$	32,368	\$	38,188	\$	33,552	\$	1,184	\$	33,660	\$	108	A-7
Grant Income	\$	53,288	\$	40,570	\$	34,363	\$	43,363	\$	2,793	\$	43,503	\$	140	A-8
Excess of Revenues Over Expenses	\$	48,175	\$	(42,031)	\$	(60,380)	\$	(12,140)	\$	29,891	\$	5,942	\$	18,082	

Note: (a) National Grid Power Supply Agreement and Nine Mile Point 2 O&M have been reclassified from PSEG Long Island Managed Expenses to Power Supply Charge for presentation purposes for all years

Statement of Revenues and Expenses

The Authority's projection of Revenues and Expenses are expected to result in a net loss over the three year Rate Plan. Further information on the components of Revenues and Expenses are included on supplemental schedules herein.

Two factors contribute to the projection of net losses over the Rate Plan: (i) a new financial policy that adopts the Public Power Model, seeking to recover current year operating expenses plus debt and fixed obligation payments (including a fixed obligation coverage requirement) rather than achieve a net income target; and (ii) the amortization of certain non-cash regulatory assets to expense, which are excluded from revenue requirements under the Public Power Model including (a) non-cash pension expenses and voluntary deposits into the Authority's OPEB Account for post-retirement benefits of PSEG Long Island employees (see Schedule A-4.1) and (b) for other deferred expenses (see Schedule A-4.2).

As shown on Schedule A-10, despite these net losses, the Authority is forecast to achieve higher levels of fixed obligation coverage and increase the amount of cash flow available to fund its capital program in lieu of debt financing during the Rate Plan period, consistent with the Authority's financial goals to improve its credit ratings and reduce debt funding of its capital plan over five years.

Sales and Revenues

Sales of Electricity (MWh)

Residential Sales

Commercial Sales

Other Sales to Public Authorities/Street Lighting

Total Sales of Electricity (MWh)

Delivery Charge (Rates at DPS 2nd stage update) (a)

Power Supply Charge (a)

Energy Efficiency and Renewable Energy

New York State Assessment

Suffolk Property Tax Settlement

Suffolk Property Tax Settlement - Amortization

Suffolk Property Tax Settlement - Interest Income

Visual Benefits Assessment (VBA)

VBA - Amortization

VBA - Interest Income

Revenue Related PILOTS

Sales for Resale

Wheeling Revenues

Pole Attachment Fees

Late Payment and Dishonored Check Charges

Miscellaneous Revenues

NYS Assessment on Miscellaneous Revenues

Total Revenues

					Change from		Change from
	2015	20	16	Approved	Prior Year	Projected	Prior Year
	Actual	Approved	Projected	2017	\$	2018	\$
	9,611,160	9,584,560	9,604,542	9,237,712	-346,848	8,963,110	-274,603
	9,730,214	10,251,721	9,791,644	9,728,068	-523,653	9,703,943	-24,126
	584,266	582,554	601,477	555,815	-26,739	553,458	-2,357
Ш							
	19,925,640	20,418,835	19,997,663	19,521,596	-897,239	19,220,510	-301,086

\$ 1,354,465	\$ 1,384,024	\$ 1,450,746	\$ 1,467,547 <i>\$</i>	83,523	\$ 1,518,990	\$ 51,443
2,017,611	1,846,583	1,814,025	1,992,875	146,291	2,023,030	30,155
49,018	47,719	47,236	52,342	4,623	51,775	(567)
21,326	20,841	14,162	8,880	(11,961)	7,934	(946)
38,990	43,498	47,093	44,318	820	45,274	956
(11,969)	(17,526)	(21,121)	(19,496)	(1,970)	(21,714)	(2,218)
(27,021)	(25,972)	(25,972)	(24,822)	1,150	(23,560)	1,262
909	948	1,007	948	0	948	-
(336)	(396)	(459)	(429)	(33)	(457)	(28)
(573)	(552)	(548)	(519)	33	(491)	28
36,795	36,828	36,860	32,482	(4,346)	33,556	1,074
1,264	1,207	1,132	1,207	-	1,207	-
3,507	3,947	4,103	3,933	(14)	3,932	(1)
6,126	3,635	4,730	5,387	1,753	5,386	(2)
14,164	15,668	12,558	14,225	(1,444)	14,487	263
933	7,810	6,551	7,998	188	7,779	(220)
	<u> 171</u>	30	71	(100)	61	(10)
\$ 3,505,209	\$ 3,368,434	\$ 3,392,132	\$ 3,586,948 <i>\$</i>	218,514	\$ 3,668,136	\$ 81,189

Note: (a) 2015 Actual, 2016 Approved and 2016 Projected capacity costs of \$507 million, \$511 million and \$479 million, respectively, were reclassified from Delivery Charge to Power Supply Charge to be consistent with 2017 presentation

Sales and Revenues

Revenues are derived primarily from retail sales of electricity to residential and commercial customers. Also included are revenues from electric sales to public authorities and for street lighting. In accordance with the Authority's Tariff for Electric Service (the "Tariff"), the Authority's Delivery Charge recovers the costs associated with maintaining and improving its transmission and distribution system and serving its retail customers. Additionally, the Authority recovers those costs associated with purchasing and producing electric energy (fuel and purchased power) through the Power Supply Charge. Finally, the Authority has various surcharges and non-electric service charges, such as those to recover costs associated with its distributed energy programs, assessments, revenue-related PILOTs, fees for pole attachments, late payment charges to customers whose bills are in arrears, and other miscellaneous service fees.

PSEG Long Island's sales forecast projects an approximately 1.1% decline in sales annually through 2018, reflecting the impact of PSEG Long Island's energy efficiency programs combined with voluntary measures taken by customers, PV rooftop solar, and improvements to standards and codes. Any surplus/shortfall in delivery revenue due to sales higher/lower than budgeted will be recovered in the Revenue Decoupling Mechanism. The forecast assumes historically average weather conditions over the period.

Power Supply Charge (Thousands of Dollars)

									Cha	ange from	_		Char	ge from
		2015		20	16			Approved	P	rior Year		Projected	Pri	or Year
	_	Actual	<u></u>	Approved		Projected	L	2017		\$	ᆫ	2018		\$
Fuel and Purchased Power Costs					_				_		١.		_	(0.000)
Fuel Oil	\$	109,030	\$	50,586	\$	50,586	\$	76,083	Ş	25,497	\$	69,210	\$	(6,873)
Natural Gas		317,793		239,401		239,401		253,122		13,721		243,627		(9,495)
Purchased Power		544,551		517,659		517,659		421,221		(96,438)		418,615		(2,605)
Regional Greenhouse Gas Initiative		25,302		28,495		28,495		36,842		8,347		40,849		4,007
Renewable Power ^(a)		-		-		-		145,248		145,248		177,430		32,182
Wheeling Charges		14,916		18,389		18,389		18,744		355		16,486		(2,258)
Capacity Charges		444,199		423,843		423,843		445,976		22,133		443,397		(2,579)
Nine Mile Nuclear Fuel		12,446		13,195		13,195		17,488		4,293		16,449		(1,039)
Y-49 Cable Operating Costs		24,085		25,181		25,181		24,731		(450)		24,158		(573)
Zero Emissions Credits		-		-		-		34,397		34,397		45,862		11,466
Power Supply Management Services		12,008		14,127		14,127		14,725		598		14,978		254
Fuel Management Services		6,394		4,399		4,399	I_	4,500		101	l_	4,604		104
														_
Total Fuel and Purchased Power Costs	\$	1,510,725	\$	1,335,273	\$	1,335,273	\$	1,493,077	\$	157,802	\$	1,515,666	\$	22,589
														_
Capacity Costs														_
National Grid (PSA) Operation and Maintenance Expenses	\$	265,677	\$	264,685	\$	244,334	\$	260,395	\$	(4,290)	\$	262,067	\$	1,672
														_
Refueling Outage Amortization	\$	4,561	\$	3,927	\$	3,283	\$	3,518	\$	(409)	\$	4,214	\$	696
Non-Outage Operating Expenses	_	26,864	_	24,062		25,726	I_	24,579		517	I_	24,808		229
Total Nine Mile Point 2 O&M Expenses	\$	31,425	\$	27,989	\$	29,009	\$	28,097	\$	108	\$	29,022	\$	925
Droporty Tayor in Dayor Cumply Charge														_
Property Taxes in Power Supply Charge		402 720	_	200.050		100.054	,	405 622	4	(5.225)		200 524		4 004
National Grid (PSA) Property Taxes	\$	192,729	\$	200,958	\$	189,351	\$	195,633	\$	(5,325)	\$	200,524	\$	4,891
Nine Mile PILOTs Merchant Power Plants		5,801 11,301		5,844 11,834		4,530		4,044 11,629		(1,800)		3,981 11,770		(63) 141
	<u> </u>		<u></u>		\$	11,528	<u>-</u>	•	<u>~</u>	(205)	\$		<u> </u>	
Total Property Taxes in Power Supply Charge	\$	209,831	۶	218,636	Ą	205,409	\$	211,306	Ą	(7,331)	۶	216,274	Þ	4,969
Total Capacity Costs (b)	\$	506,933	\$	511,310	\$	478,752	\$	499,798	\$	(11,512)	\$	507,363	\$	7,565
				4.040.555		4.044.555		4 000 000		440.00		2 222 222		20.15-
Total Power Supply Costs	\$	2,017,658	\$	1,846,583	Ş	1,814,025	\$	1,992,875	\$	146,291	\$	2,023,030	\$	30,155

Note: (a) Renewable Power costs are embedded in Purchase Power for 2015, 2016 Approved and 2016 Projected.

(b) 2015 Actual, 2016 Approved and 2016 Projected capacity costs of \$507 million, \$511 million and \$479 million, respectively, were reclassified from Delivery Charge to Power Supply Charge to be consistent with 2017 presentation

Power Supply Charge

Power Supply Charges, including the reclassification of certain capacity and other costs that were previously recovered in delivery rates, were budgeted at \$1.8 billion in 2016 and are forecast to increase by \$146.3 million in 2017 and an additional \$30.2 million in 2018. The primary drivers of the increases are: (i) higher projected commodity prices which increase costs for the fuels used in electric generation; (ii) higher costs due to incremental renewable power; and, (iii) commencing in 2017, the payment of Zero Emissions Credits associated with the New York State Public Service Comission August 1, 2016 Order adopting the Clean Energy Standard. New baseload generating capacity is not forecast to be added within the remaining portion (2017 and 2018) of the Three Year Rate Plan period.

Fuel and purchased power cost projections are prepared utilizing a generation economic dispatch model that considers among other variables, the availability and efficiency of generating resources, delivered fuel prices, and environmental regulatory requirements. The projected fuel (commodity) prices for 2017 and 2018 were provided by an energy consulting firm, whose forward price forecast was as of August 2016.

In addition to the cost for generation fuels and purchased power, power supply costs include the cost of emission allowances for generation under contract to the Authority, generation and transmission cable capacity covered by various contracts, the Authority's share of costs charged by the New York, New England and PJM independent system operators ("ISO"), electric power wheeling, payments made to Energy Service Companies ("ESCOs") in accordance with the Long Island Choice program, services received under energy, power and fuel management agreements, fuel hedging program costs, and energy from renewable resources.

(Note: Beginning in 2015, the Authority's 18% share of operation and maintenance expenses related to the Nine Mile Point 2 nuclear generating station and the National Grid Power Supply Agreement have been reclassified to the Power Supply Charge. This change was made to be more consistent with how all other New York State electric utilities classify generation capacity costs).

Operating and Deferred Expense (Thousands of Dollars)

_									Cha	ange from			Cha	nge from
		2015		20:	16		Α	pproved	Pı	rior Year	P	rojected	Pri	ior Year
	$ldsymbol{ldsymbol{eta}}$	Actual	A	pproved	P	rojected	_	2017		\$	L	2018		\$
PSEG Long Island Operating Expenses	\$	457,015	\$	528,512	\$	510,935	\$	556,743	\$	28,232	\$	567,999	\$	11,256
PSEG Long Island Managed Expenses														_
Uncollectible Accounts		26,765		18,421		23,619		25,647		7,226		26,231		583
Storm Restoration ^(a)		63,210		48,169		116,410		34,077		(14,092)		34,854		777
NYS Assessment		21,326		21,012		14,162		8,880		(12,132)		7,934		(946)
Accretion of Asset Retirement Obligation		2,877		4,021		3,581		4,253		232		4,498		245
Miscellaneous	I	(2,109)	I_	176			I	183		7	I	191		8
Total PSEG Long Island Managed Expenses (b)	\$	112,069	\$	91,799	\$	157,771	\$	73,040	\$	(18,759)	\$	73,708	\$	668
Total PSEG Long Island Operating and Managed Expenses	\$	569,084	\$	620,311	\$	668,707	\$	629,784	\$	9,473	\$	641,707	\$	11,924
LIPA Operating Expenses														_
Management Fee (including incentive)	\$	44,396	\$	73,383	\$	73,383	\$	75,034	\$	1,651	\$	76,722	\$	1,688
Capitalized Management Fee		(7,449)		(16,406)		(12,674)		(12,779)		3,627		(13,067)		(287)
LIPA Operating Costs (c)		16,623		26,825		15,944		31,375		4,550		30,462		(913)
LIPA Operating Expenses	\$	53,570	\$	83,802	\$	76,653	\$	93,630	\$	9,828	\$	94,117	\$	488
	,	11 102	_	47.640	,	24.045		24.045	~	(4.5.50.4)		24.045	4	_
LIPA Amortization of Deferred Expense	\$	11,403	\$	47,618	\$	31,015	\$	31,015	\$	(16,604)	\$	31,015	\$	- 1
LIPA Operating & Amortization of Deferred Expenses	\$	64,973	\$	131,420	\$	107,668	\$	124,644	\$	(6,776)	\$	125,132	\$	488
PSEG Long Island & LIPA Total Operating & Deferred Expenses	\$	634,057	\$	751,731	\$	776,374	\$	754,428	\$	2,697	\$	766,839	\$	12,411

Note: (a) 2016 Storm Restoration is above approved level due to extraordinary storm activity. 2017 Storm Restoration reflects changes for accounting assessments.

⁽b) Excludes National Grid Power Supply Agreement and Nine Mile Point 2 O&M, which were reclassified to the Power Supply Charge. Amounts for 2015, 2016 Approved, and 2016 Projected totaled \$507 million, \$511 million and \$479 million respectively.

⁽c) 2015 Actual includes \$5 million of accrual reversals upon termination of the prior service provider relationship. 2016 Projected includes credits from prior years expenses.

Operating and Deferred Expenses

Total Operating and Deferred Expenses were \$751.7 million in the approved 2016 Operating Budget and are planned to increase to \$754.4 million in 2017 and \$766.8 million in 2018.

Operating and Deferred Expenses are comprised primarily of costs associated with operating and maintaining the Authority's Transmission and Distribution (T&D) system. They consist of three major expense categories: (i) PSEG Long Island Operating Expenses (which constitute the expenses for which PSEG Long Island must remain within 102% of budget in order to earn incentive compensation); (ii) PSEG Long Island Managed Expenses (expenses for which PSEG Long Island manages the expense but which are substantially outside of the control of PSEG Long Island); and (iii) the Authority's Operating and Deferred Expenses. Costs related to each category of expense are detailed and discussed on Schedules A-4.1 through A-4.2.

PSEG Long Island Operating Expenses include costs related to the following major areas: Transmission and Distribution, Customer Services, Shared Services, Power Markets and Energy Efficiency and Renewable Energy Programs. The budget for the Energy Efficiency and Renewable Energy Programs provides for additional peak load reductions as well as customer-based solar and wind distributed generation, among other things.

PSEG Long Island Managed Expenses includes costs related to assessments, losses on uncollectible accounts, and Storm Restoration. The Rate Plan includes reconciliation mechanisms for several of the PSEG Long Island Managed Expenses, which are subject to variation for reasons generally outside of the control of the utility, such as storm restoration costs and property taxes.

LIPA Operating and Deferred Expenses consist of the PSEG Long Island Management fee, amortizations of deferred costs, and costs related to the Authority staff and outside professional services, as detailed on Schedule A-4.2.

(Note: Beginning in 2015, the Authority's 18% share of operation and maintenance expenses related to the Nine Mile Point 2 nuclear generating station and the National Grid Power Supply Agreement have been reclassified to the Power Supply Charge. This change was made to be more consistent with how all other New York State electric utilities classify capacity costs).

Depreciation, Amortization and Deferred Expenses (Thousands of Dollars)

								Cha	inge from			Cha	ange from
	2015		20	16		Α	pproved	Pı	ior Year	Р	rojected	Pı	rior Year
	Actual	Α	pproved	P	rojected		2017		\$		2018		\$
		_				-				_			-
		١.		١,		١,		,		١,		,	
\$	110,723	\$	136,910	\$	153,417	\$,	\$	27,030	\$	174,385	\$	10,444
I -		l -	2,452	l —		۱.	3,694		1,242	۱.	6,417		<u>2,724</u>
\$	110,723	\$	139,362	\$	153,417	\$	167,634	\$	28,272	\$	180,802	\$	13,168
\$	111,375	\$	111,375	\$	111,375	\$	111,375	\$		\$	111,375	\$	_
	1,509		864		581		406	7	(458)		426	7	20
\$	112,884	\$	112,239	\$	111,956	\$	111,781	<u> </u>	(458)	\$	111,800	<u> </u>	20
*	112,00	ľ	111,200	ľ	222,550	*	,	7	(130)	ľ	,	7	
\$	223,607	\$	251,602	\$	265,373	\$	279,415	Ś	27,813	\$	292,602	\$	13,188
*		ľ		ľ		ľ	_,,,	7		`		•	
\$	11,403	\$	13,600	\$		\$	-	\$	(13,600)	\$	-	\$	-
	-		10,573		9,381		9,381		(1,193)		9,381		-
	-		1,811				-		(1,811)		-		-
I _		I	21,634	I	21,634	I_	21,634			I	21,634		<u>-</u>
\$	11,403	\$	47,618	\$	31,015	\$	31,015	\$	(16,604)	\$	31,015	\$	-
\$	235,010	\$	299,220	\$	296,388	\$	310,429	\$	11,209	\$	323,617	\$	13,188

PSEG Long Island Managed Utility Depreciation

Depreciation Expense Related to FEMA Capital Projects

Total PSEG Long Island Managed Utility Depreciation

LIPA Depreciation and Amortization

Amortization of Acquisition Adjustment
Depreciation - LIPA
Total LIPA Depreciation and Amortization

Total Depreciation and Amortization

LIPA Deferred Expenses

Deferred Transition Cost 2014/2015 Pension/OPEB Deferral Rate Case Deferral Ngrid Pension/OPEB Settlement **Total Deferred Expenses**

Total Depreciation, Amortization and Deferred Expenses

Depreciation, Amortization and Deferred Expenses

Depreciation, Amortization and Deferred Expenses were approved at \$299.2 million in 2016 and planned at \$310.4 million in 2017 and \$323.6 million in 2018.

PSEG Long Island Managed Utility Depreciation consists primarily of depreciation of transmission and distribution, information technology, and FEMA storm hardening assets. 2017 also reflects the impact of a depreciation study completed and implemented in 2016 which led to a \$15 million increase in annual depreciation on T&D assets, \$6 million in additional depreciation on NMP2 and catch-up depreciation on capital software of \$12 million. Depreciation increases approximately \$10 to \$12 million annually due to investment in new infrastructure.

LIPA Depreciation and Amortization consists primarily of the amortization of the Acquisition Adjustment related to the merger with the Long Island Lighting Company in 1998, which is budgeted at \$111.4 million a year for 2017-2018, and certain LIPA leasehold improvements referred to as Depreciation-LIPA.

LIPA Deferred Expenses are the amortization of certain regulatory assets, the majority of which relate to pension and OPEB expenses for former National Grid and current PSEG Long Island employees that directly serve the Authority's customers, for which the expense is a contractual obligation of the Authority. The amortization of the regulatory asset aligns the cost in reported expenses in a manner similar to this workforce being directly employed by the Authority. See the Authority's audited financial statements for more information.

Taxes, Payments-in-Lieu of Taxes and Assessments (Thousands of Dollars)

_									Cha	ange from			Char	nge from
		2015		20			/	Approved	Pı	rior Year	Р	rojected	Pri	or Year
	ш	Actual	A	pproved	Р	rojected	ᆫ	2017		\$	ш	2018		\$
PILOTs - Revenue-Based Taxes	\$	36,795	\$	36,828	\$	36,860	\$	32,482	\$	(4,346)	\$	33,556	\$	1,074
PILOTs - Local Property-Based Taxes	\$	274,224	\$	278,482	\$	279,503	\$	285,772	\$	7,290	\$	290,782	\$	5,010
Property Taxes in Power Supply Charge											H			
National Grid (PSA) Property Taxes	\$	192,729	\$	200,958	\$	189,351	\$	195,633	\$	195,633	\$	200,524	\$	4,891
Nine Mile PILOTs		5,801		5,844		4,530		4,044		(1,800)		3,981		(63)
Merchant Power Plants	_	11,301	l	11,834		11,528	l_	11,629		(205)	_	11,770		141
Total Property Taxes in Power Supply Charge	\$	209,831	\$	218,636	\$	205,409	\$	211,306	\$	(7,331)	\$	216,274	\$	4,969
Other Taxes and Assessments		_				_				_				
NYS Conservation Assessment		21,326		12,836		6,162		880		(11,956)		-		(880)
NYS Department of Public Service				8,000		8,000		8,000		-		7,934		(66)
NYS Office of Real Property Services	I _	<u>-</u>	_	176		30	۱_	71		(105)	I _	61		(10)
Total Other Taxes and Assessments	\$	21,326	\$	21,012	\$	14,191	\$	8,951	\$	(12,061)	\$	7,995	\$	(956)
Total PILOTs, State and Local Taxes and Assessments	\$	542,176	\$	554,958	\$	535,964	\$	538,511	\$	(16,447)	\$	548,607	\$	10,097

Taxes, Payments-in-Lieu of Taxes and Assessments

Payments-In-Lieu of Taxes ("PILOTs") and New York State Assessments are budgeted at \$555.0 million in 2016, \$538.5 million in 2017 and \$548.6 million in 2018 or approximately 15% of total revenues, compared to a national median of 5.5%.

Revenue-based PILOTs are based on gross revenues received from the sale of electricity and other sources of revenue and are subject to true up to actual cost through a PILOT payments recovery rider. The reclassification of \$507.0 million of capacity costs from Delivery Charge to Power Supply Charge creates a reduction to Revenue-based PILOTs due to the lower tax rate charged on commodity costs relative to the delivery charges.

Property-based PILOTs are for payments on Authority owned properties. The LIPA Reform Act establishes a 2% cap in the increase in T&D property based PILOT payments allowable in every year beginning in 2015. Additionally, this cost is reflected in a Staged Update to actual cost in each year.

Additionally, the Authority also incurs real property-based taxes associated with the generating assets under contract through the National Grid PSA. These taxes are budgeted at \$201.0 million in 2016, \$195.6 million in 2017, and \$200.5 million in 2018. The Authority continues to challenge the property tax assessments on the PSA plants, which are significantly over-assessed. These costs, as with all power supply costs, are reconciled to actual costs.

The budget for the New York State Temporary Energy and Utility Conservation Assessment is budgeted at \$0.9 million in 2017 after which this charge is phased-out. This cost is reconciled to actual cost through the NYS Assessment rider.

In addition, a New York State DPS Administrative Assessment will be imposed to recover costs related to DPS' oversight of PSEG Long Island's operations. This cost is planned at \$8.0 million per year.

Other Income and Deductions (Thousands of Dollars)

Short-Term Investment Income
Interest from Shoreham Property Tax Settlement
Interest from Visual Benefits Assessment
Income on Nuclear Decommissioning Trust Fund
Earnings on OPEB Fund
Miscellaneous Income and Deductions (a)

Total Other Income and Deductions

								Ch	nange from			Ch	nange from
	2015		20)16		Δ	Approved	P	Prior Year		Projected	F	Prior Year
	Actual	A	pproved	P	rojected		2017		\$		2018		\$
\$	1,749	\$	746	\$	2,092	\$	2,063	\$	1,317	\$	2,063	\$	-
	27,021		25,972		25,968		24,822		(1,150)		23,560		(1,262)
	573		552		503		448		(104)		416		(32)
	4,735		3,004		3,307		2,048		(956)		2,102		54
	-		1,103		576		2,132		1,029		3,550		1,418
	3,667	-	991		5,742	-	2,039		<u>1,048</u>	ı	1,969		(70)
\$	37,745	\$	32,368	\$	38,188	\$	33,552	\$	1,184	\$	33,660	\$	108

Note: (a) Includes \$3.6 million related to insurance settlement in 2016

Other Income and Deductions

Other income and deductions are budgeted at \$32.4 million in 2016, \$33.6 million in 2017 and \$33.7 million in 2018. This category consists of income on the Authority's short-term investments, carrying charges accrued on deferred balances related to the Shoreham property tax settlement, earnings on NMP2 nuclear decommissioning trust fund and OPEB account balances, and miscellaneous sources of revenues and expenses, such as income from certain customer-requested work not included in electric rates.

Pursuant to the Three Year Rate Plan projected interest rates on short-term investments are updated to then-prevailing interest rates in a Staged Update each fall as part of the annual budget process and differences between projected and actual interest rates are reconciled at year end through the Delivery Service Adjustment.

Grant Income (Thousands of Dollars)

Build America Bonds Subsidy - U.S. Treasury FEMA Non-Sandy Efficiency & Renewables - RGGI Funding

Total Grant Income

Recognition of Deferred FEMA Grant / Sandy

Total Grant Income & Deferred Credit

								Char	nge from			Cha	nge from
	2015		20	16		Ap	proved	Pri	or Year	F	Projected	Pr	ior Year
ш	Actual	Ap	proved	Pr	ojected	_	2017		\$	ш	2018		\$
\$	3,835 14,853	\$	3,763	\$	3,763	\$	3,763	\$	-	\$	3,763	\$	
ı	34,600		34,600		30,600		34,600		-	ı	34,600		- 1
<u>\$</u>	53,288	\$	38,363	\$	34,363	\$	38,363	\$	<u> </u>	\$	38,363	\$	<u></u>
l-		_	2,207		<u> </u>	-	5,000		2,793	-	5,140		140
\$	53,288	\$	40,570	\$	34,363	\$	43,363	\$	2,793	\$	43,503	\$	140

Grant Income

Grant Income consists primarily of a grant of \$34.6 million to be received from NYSERDA Regional Greenhouse Gas Initiative funds to support PSEG Long Island's energy efficiency programs, and subsidy payments from the United States Treasury equal to approximately 35% of the interest payable on the Authority's debt issued as Build America Bonds pursuant to the American Recovery and Reinvestment Act of 2009 totaling \$3.8 million.

In February 2014, the Authority signed a Letter of Undertaking ("LOU") with FEMA that provides for \$730 million of grant funding for storm hardening measures. To better reflect the nature of this grant it will be amortized to Grant Income in an amount equal to the incremental depreciation expense incurred as a result of the storm hardening program. This amortization is estimated \$5.0 million in 2017 and \$5.1 million 2018.

Interest Expense (Thousands of Dollars)

						Change from			ange from			Change from		
		2015		20	16			Approved	Р	rior Year	Р	rojected	Pri	ior Year
		Actual	A	pproved	Pi	rojected	L	2017	\$		2018		\$	
	ı		ı				ı							
Accrued Interest Expense on Debt Securities	\$	329,562	\$	318,084	\$	331,310	\$	334,314	\$	16,230	\$	336,718	\$	2,404
Amortization of Premium	_	(7,505)	I –	(44,737)		(41,617)	١.	(53,226)		(8,489)	_	(51,001)		2,225
Net Interest Expense on Debt Securities	\$	322,057	\$	273,346	\$	289,693	\$	281,088	\$	7,742	\$	285,717	\$	4,629
Other Interest Expense			ı				ı							
Amortization of Deferred Debt Issue Costs	\$	2,157	\$	3,505	\$	3,555	\$	3,209	\$	(296)	\$	3,079	\$	(130)
Amortization of Deferred Losses on Refundings		8,299		9,307		33,801		29,013		19,706		27,255		(1,758)
Interest Rate Swap Payments		23,638		29,334		23,936		21,105		(8,229)		21,053		(52)
Letter of Credit and Remarketing Fees		10,269		10,189		7,769		7,150		(3,039)		7,150		-
Interest on Customer Security Deposits		286		892		900		900		8		900		-
Bond Administration Costs and Bank Fees		1,515		500		2,231		800		300		800		-
Other Interest Amortizations	_	616	_			(5,493)	I_	(6,242)		(6,242)	_	(6,359)		(117)
Total Other Interest Expense	\$	46,781	\$	53,727	\$	66,699	\$	55,935	\$	2,208	\$	53,878	\$	(2,057)
Subtotal - Interest Expense	\$	368,839	\$	327,073	\$	356,392	\$	337,023	\$	9,950	\$	339,595	\$	2,572
Less: Capitalized Interest		7,113		8,897		3,466		5,991		(2,906)		7,046		1,055
Total Interest Expense (a)	\$	361,726	\$	318,176	\$	352,926	\$	331,032	\$	12,856	\$	332,549	\$	1,517

Note: (a) Projections used for fixed interest rates as of October 2016, variable interest rates projection as of November 2016 per DPS recommendation.

Interest Expense

Interest expense is planned at \$331.0 million in 2017 and \$332.5 million in 2018. The planned expense for this period is based on forecasted levels of outstanding debt, associated fees, and the amortization of previously deferred debt-related charges and credits. Interest expenses are updated to reflect actual interest rates achieved in LIPA's October 2016 financing. Actual interest costs have been reflected in the Staged Update each fall as part of the annual budget process and differences between projected and actual interest expense, alongside other components of debt cost, excluding non-cash amortizations, are reconciled at year end through the Delivery Service Adjustment.

Interest expense reflects the accrual of interest on outstanding debt in the calendar year. It can differ from interest payments made to bond holders with respect to timing, but the actual amounts will be the same over time.

Amortization of premiums increased in 2016 as a result of the issuance of \$1.1 billion of securitization bonds by the Utility Debt Securitization Authority ("UDSA") on behalf of the Authority. These bonds were sold at a premium to their par value, and the premium is being amortized over the life of each series of bond issued. This USDA bond refinance program is expected to save nearly \$500 million of present value debt service for LIPA customers.

Debt Service Requirements (Thousands of Dollars)

	2015 2016						_			ge from				nge from	
		2015				unio et a d	A	pproved	Pric	or Year	P	rojected	Pri	or Year	
		Actual	I A	pproved	<u> </u>	rojected		2017		\$	\vdash	2018		\$	
UDSA Debt Service on Existing Debt	\$	101,286	\$	215,980	\$	222,139	\$	264,811	\$	48,831	\$	305,023	\$	40,213	А
LIPA Debt Service on Existing Fixed Rate Debt		378,783		263,980		255,701		223,570		(40,410)		178,281		(45,289)	В
LIPA Debt Service on Existing Variable Rate Debt ^(a)		-		-		13,984		17,349		17,349		17,369		20	С
LIPA Debt Service on Capital Borrowings ^(a)		-		2,438		-		-		(2,438)		5,796		<i>5,796</i>	D
Expected Reduction in LIPA DS from Remaining UDSA Authorization		-		-		-		-				5,884		5,884	E
Expected Increase in UDSA DS from Remaining UDSA Authorization		-		-		-		-		- 1		8,336		8,336	F
Total UDSA Debt Service		101,286		215,980		222,139		264,811		48,831		313,360		48,549	A+F=G
Total LIPA Debt Service	_	378,783	I —	266,418		269,685	_	240,919		(25,499)	I —	195,562		(45,357)	B+C+D-E=H
Total Debt Service	\$	480,069	\$	482,398	\$	491,824	\$	505,730	\$	23,332	\$	508,922	\$	3,192	1
Total Coverage Requirements	_	132,909	_	123,872		117,967	۱.	164,710		40,838	۱	190,142		25,432	J
Subtotal Debt Service plus Coverage	\$	612,978	\$	606,270	\$	609,790	\$	670,440	\$	64,170	\$	699,064	\$	28,624	K
LIPA Capital Lease Obligation (b)	\$	310,882	\$	312,944	\$	320,150		\$308,115	\$	(4,829)	\$	279,793	\$	(28,322)	l ı
Excess Revenue Net of Requirements	\$		\$	(2)	\$	13,207	\$	(10,752)	\$	(10,750)	\$	(7,216)	\$	3,536	M
Total Coverage		132,909		123,870		131,174		153,958		30,088		182,926		28,968	J+M=N
Projected Coverage Ratio on LIPA Obligations		1.19 x	ı	1.21 x		1.22 x		1.28 x				1.38 x			=1+N/(H+L)
Coverage Ratio on LIPA Obligations from Approved 2016 Budget			ı	1.20x				1.30x				1.40x			
Projected Coverage on LIPA & UDSA Obligations		1.17 x		1.16 x		1.16 x		1.19 x				1.23 x			=1+N/(I+L)
Coverage on LIPA & UDSA Obligations from Approved 2016 Budget				1.15x				1.20x				1.25 x			
Note: (a) Projections used for fixed interest rates as of October 2016, variable	intorc	est rates proj	oction	os as of Novo	mher	2016 per DD	Sroco	mmondatio	n						

Note: (a) Projections used for fixed interest rates as of October 2016, variable interest rates projections as of November 2016 per DPS recommendation. (b) LIPA Capital Lease Obligation in 2017 is \$308,115, however DPS is recommending coverage excluding fleet leases adjustments.

Reconciliation of Revenues Net of Requirements

Uncollectible Accounts
Change in Accounting Assessments
Capitalized Management Fee
DPS Management Audit
Late Payment Charges
Contributions to Pension Trust
Fixed Obligation Coverage for Fleet
Other

Total

_	 	
	\$ (9,008)	
	7,275	
	(3,996)	
	(1,500)	
	(2,100)	
	(4,193)	
	(1,676)	
	(1,676) 4,446	
	\$ (10,752)	

Debt Service Requirements

Debt service consists of principal and interest payments due to the bondholders. Debt service payments are broken out separately for UDSA debt and Authority debt. Authority debt service declined largely as a result of refinancing debt through the UDSA. UDSA debt service payments will increase, but still result in a net savings to customers.

In addition to debt service payments, under the Public Power Model, the Authority also recovers "fixed obligation coverage." Fixed obligation coverage is the portion of the Authority's capital program funded by cash flow in each year rather than by new borrowings. Fixed obligation coverage is a ratio based on the Authority's annual debt service payments and the imputed payments on capitalized leases. Capitalized leases are obligations of the Authority and consist primarily of Power Purchase Agreements ("PPAs") and to a much lesser extent fleet vehicles, both of which represent long term obligations of the Authority.

The 2015 DPS Rate Recommendation endorsed the financial policy proposed by the Authority in the Three-Year Rate Plan filing, which included several components:

- (i) **Public Power Model.** The Public Power Model used by nearly all of the country's major public power entities recovers the Authority's operating expenses in each year plus its debt service requirements (including fixed obligation coverage) rather than using a net income target as the Authority had previously used to calculate revenue requirements;
- (ii) Mid-A Ratings Target Over Five Years. At the time of the Rate Plan filing in 2015, the Authority had credit ratings of Baa1 (stable outlook), A- (negative outlook), and A- (negative outlook) (M/S/F), which were the lowest of any large public power utility by several credit categories. The adoption of the Public Power Model combined with the utility's rate adjustment mechanisms, predictable cash flow, investments in operational and system improvements and positive customer service metrics resulted in a ratings upgrade by Moody's to an A3 rating in August 2016, reaffirmed with a stable outlook in September 2016. An improvement from Negative to Stable outlooks by Standard and Poor's and Fitch Ratings further reflect the recognition of the changes at LIPA and offer the potential for future improvements in the Authority's credit ratings. As part of the rate plan, the Authority explicitly adopted a five-year rating target to improve ratings to A2/A/A;

- (iii) **Reduce Borrowings to No More than 64% of Capital Spending.** The Authority's "debt ratio" (defined as the percentage of debt in the Authority's capital structure to total debt plus net position) is higher than most utilities. This is a historical legacy. A ratio of 55%-65% is typical for large public power utilities like the Authority, whereas the Authority's debt ratio is currently 95.6% (see A-4.5).
 - The higher-than-average debt ratio is attributable to the debt incurred to acquire the electric system from its previous owner in 1998. That acquisition resulted in an approximate 20% reduction in customers' electric bills, a benefit that continues today. However, in order to reduce the debt ratio over time, the Authority has adopted a target to reduce borrowings in each year to no more than 64% of capital spending, with the balance funded by cash flow in lieu of new debt. This level is typical for large public power utilities and an industry best practice.
- (iv) **Increasing Fixed Obligation Coverage Targets.** To achieve the Authority's goals of improved credit ratings and reduced borrowings over five years, the Authority has achieved the fixed obligation coverage target in 2016 and expects to increase that target gradually as outlined in the table below. Given the Authority's two types of debt Authority revenue bonds and UDSA securitization debt the Authority adopted coverage ratios with and without UDSA bonds.

Minimum Fixed Obligation Coverage Ratios

Fixed Obligations	<u>2016</u>	<u> 2017</u>	<u>2018</u>	<u> 2019</u>
Authority Debt + Capitalized Leases	1.20x	1.30x	1.40x	1.45x
Authority Debt + UDSA Debt + Capitalized Leases	1.15X	1.20x	1.25X	1.25x

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Capital and Deferred Expenditures (Thousands of Dollars)

									Ch	ange from]		Change from	
		2015		20	16		А	pproved	-	rior Year	Р	rojected	ŀ	rior Year
	⇤	Actual	A	pproved	P	rojected	⊢	2017		\$	┡	2018		\$
Transmission and Distribution														
Regulatory Driven	\$	55,008	\$	35,757	\$	54,230	\$	12,884	\$	(22,873)	\$	32,805	\$	19,921
Load Growth		67,270		97,724		74,630		162,548		64,824		171,870		9,322
Reliability		135,418		228,121		201,420		192,183		(35,938)		174,687		(17,496)
Economic, Salvage, Tools, Equipment & Other Total Transmission and Distribution Projects Evaluating FEMA	<u> </u>	9,895	ć	5,158	ć	11,983	ć	31,156	ć	25,998	ć	25,106	ć	(6,050)
Total Transmission and Distribution Projects Excluding FEMA	3	267,592	>	366,760	Ş	342,263	•	398,771	Ş	32,011	Ş	404,468	>	5,697
Other PSEG Long Island Capital Expenditures														
Information Technology Projects	\$	60,045	\$	22,559	\$	36,748	\$	38,180	\$	15,621	\$	42,183	\$	4,003
Customer Operations		8,572		25,694		15,395		11,197		(14,497)		11,394		197
Other General Plant Projects		5,814		4,841		6,169		5,006		164		5,162		156
Fleet				-		8,587		27,899		27,899		8,526		(19,373)
DPS Capital Reductions		-		(14,170)		-		-		14,170		-		-
Total PSEG Long Island Excluding FEMA and Before Deferred Projects	\$	342,023	\$	405,684	\$	409,162	\$	481,053	\$	75,368	\$	471,733	\$	(9,320)
Prior Years Deferred Capital Projects				52,074				_		(52,074)		_		_
Budget Amendment to Carryover Projects to 2017				(44,335)				_		44,335		_		_
FEMA Related Projects		33,124		186,200		144,816		188,754		2,554		170,033		(18,721)
Total PSEG Long Island Capital	\$	375,147	\$	599,623	\$	553,978	\$	669,807	\$	70,184	\$	641,766	\$	(28,041)
LIDA Constal and Defermed Francischtungs														
LIPA Capital and Deferred Expenditures Nine Mile Point 2	خ	20 212	Ś	10 262	¢	12 442	\$	22 401	ć	12 120	\$	14 205	ć	(0.206)
LIPA - Accounting System	Ş	30,213	Ş	10,363 5,431	Ş	12,443	P	22,491 5,431	Ş	12,128	P	14,205	Ş	(8,286) (5,431)
En A Accounting System				3,431				3,431						(3,431)
Total LIPA Capital Expenditures & Deferrals	\$	30,213	\$	15,794	\$	12,443	\$	27,922	\$	12,128	\$	14,205	\$	(13,717)
Allowance For Funds Used During Construction		7,113		8,897		3,466	ı	5,991		(2,906)		7,046		1,055
Capitalized Management Fee		7,449		16,406		12,674		12,779		(3,627)	ı	13,067		287
Total Capital Expenditures & Deferrals	\$	419,922	\$	640,720	\$	582,561	\$	716,500	\$	75,779	\$	676,084	\$	(40,416)
FEMA Contribution ^(a)		(29,812)		(167,580)		(130,334)		(169,879)		(2,299)	ı	(153,030)		16,849
Net Capital Expenditures & Deferrals	\$	390,110	\$	473,140	\$	452,227	\$	546,621	\$	73,480	\$	523,054	\$	(23,566)
Deduct Allowance For Funds Used During Construction				8,897		3,466		5,991		(2,906)	ı	7,046		1,055
Funding Available from Coverage				123,870		131,174		153,958		30,088		182,926		28,968
Contribution to OPEB Fund from Revenue Requirements				(49,821)		(49,792)		(42,368)		7,453		(43,136)		(768)
Deduct Net Funding of Capital Expenditures			\$	74,049	\$	81,382	\$	111,590	\$	37,542	\$	139,790		28,200
Funding Required from New Debt	ı		\$	390,195	\$	367,379	\$	429,039	\$	38,845	\$	376,218	\$	(52,821)
		_				_								
Percent of Capital Funded from Debt: Including FEMA spending and reimbursement				61%		63%		60%		51%		56%		131%
Excluding FEMA spending and reimbursement				82%		81%		78%		51% 53%		71%		235%
Endading I Emin opending and reminduscriterit				02/0		01/0		70/0		33/0		, 1/0		233/0

Note: (a) Amounts not yet reimbursed by FEMA; pending completion of individual projects

Reconciliation of Total PSEG Long Island Capital Excluding FEMA Approved Rate Case Target	\$	405,684	\$	\$	380,844	
Project Carryover from 2015		52,074	 	l	<u>-</u>	
Subtotal 2016 Approved	\$	457,758	\$ 413,423	\$	380,844	
Project Carryover to 2017	-	(44,335)			44,335	
Updated Project Cost Estimates	-	-	(4,261)		-	
South Fork Amendments	-	-			20,335	
Fleet	-	-			27,899	
Changes in Assessment	-	-			7,275	
Union Wage Increase			 	l	365	
Total PSEG Long Island Capital Excluding FEMA	\$	413,423	\$ 409,162	\$	481,053	
FEMA Related Projects		186,200	144,816		188,754	
Total PSEG Long Island Capital Including FEMA	\$	599,623	\$ 553,978	\$	669,807	

Capital and Deferred Expenditures

Capital and Deferred Expenditures are planned at \$717 million in 2017 and \$676 million in 2018. Net of contributions from FEMA, Capital and Deferred Expenditures are planned at \$547 million in 2017 and \$523 million in 2018. The 2017 Capital Budget includes a deferral of certain specified 2016 Capital projects into 2017, as detailed in Schedule B-1.

Transmission and Distribution projects are evaluated using a Project Prioritization and Risk Evaluation protocol to determine the projects that have the highest risk for system and company performance. In 2016 PSEG Long Island began using an Investment Evaluation System that is consistent across all PSEG companies. The projects being pursued will improve system reliability and resiliency and include a Circuit Improvement Program to address poor performing circuits, the Multiple Customer Outage Program to address customers that experience an unusual number of outages, and a Transformer Load Management Program that will target transformers for replacement prior to an emergency.

In February 2014, the Authority signed a Letter of Undertaking ("LOU") with FEMA that provides for a \$730 million storm hardening initiative. As part of this program, FEMA will contribute 90% of the cost to this project.

Information Technology projects include improvements and upgrades to systems that support Transmission and Distribution, Customer Services and Power Markets.

Capital expenditures for Customer Services are primarily comprised of costs associated with residential and commercial meter replacement.

NMP2 Capital Expenditures relates to the Authority's share of capital expenses for the NMP2 nuclear generating station of which the Authority owns an undivided 18% interest in one of two nuclear units. These expenditures include cost for capital improvements to the facility and the cost of nuclear fuel.

Major Projects (Projects with a total cost greater than \$25 million)

				Cash	Flows (r	ows (millions)			
Description	Justification	Service Date	2016	2017	2018	2019	2020 & Beyond	Total Cost	
Berry St: Construct new substation with 2 transformers & 6 new distribution feeders	Meet the load growth in the towns of Farmingdale & Lindenhurst	2018	\$9.3	\$12.1	\$4.0	-	-	\$25.4	
Kings Highway: Construct new substation with 3 transformers & 8 new distribution feeders	Meet the load growth in the towns of Smithtown, Hauppauge & Islip	2018	\$4.9	\$15.6	\$15.0	-	-	\$35.5	
South Hampton - Canal: Install new 69 kV underground cable in an existing conduit	Meet the load growth in the South Fork	2019	-	\$2.6	\$17.8	\$35.8	-	\$56.2	
Bridgehampton - Buell: Install a new 69 kV underground cable (approximately 5 miles)	Meet the load growth in the South Fork	2019	\$0.12	\$2.3	\$15.7	\$31.5	-	\$49.6	
Sagtikos: Construct new substation with 2 transformers and 6 new distribution feeders. Land purchase is required	This project is required to support the Heartland Town Square Development	2019	-	\$0.2	\$2.1	\$23.9	-	\$26.2	

Major Projects (Projects with a total cost greater than \$25 million)

Description	Justification	Service Date	2016	2017	2018	2019	2020 & Beyond	Total Cost
Nassau Hub: Construct new substation with 2 transformers and 6 new distribution feeders. Land purchase is required	Meet the forecasted load growth for the Nassau Coliseum re-development which includes new: retail stores, restaurants, movie theaters and Police Academy	2019	\$0.5	\$5.2	\$12.2	\$19.4	-	\$37.3
PSEG LI - Two Way Radio System Replacement: Replace existing VHF conventional radio system with new territory-wide radio system	Current system is a mix of Legacy Radio Console, Mobiles and Portable Radios with average age of equipment ranging from 10 to 35 years old that vendors no longer support	2019	\$1.15	\$12.4	\$15.4	\$21.0	-	\$50.0
East Garden City - Valley Stream: Install new 138 kV underground cable	Meet new NERC reliability requirements	2020	\$0.2	\$6.2	\$25.1	\$75.0	\$84.1	\$190.6

Major Projects (Projects with a total cost greater than \$25 million)

			-								
				Cash Flows (millions)							
Description	Justification	Service Date	2016	2017	2018	2019	2020 & Beyond	Total Cost			
Syosset – Shore Rd: New 138KV underground cable with Phase Angle Regulator	Meet new NERC reliability requirements	2021	\$0.22	\$5.74	\$7.69	\$47.6	\$193.6	\$254.9			
Riverhead - Canal: Install new 138 kV underground cable	Meet the load growth in the South Fork	2022	-	\$0.8	\$2.8	\$3.0	\$184.9	\$191.5			
Substation Security Expansion Project	Enhance substation security	2024	\$8.6	\$0.81	\$0.65	\$16.8	\$30.8	\$57.6			
Wainscott - Canal - New 138KV underground cable (approximately 19 miles) and construct new substation. Land purchase is required	Meet the load growth in the South Fork	2025	-	\$0.14	\$1.4	\$5.0	\$407.2	\$413.7			

Appendix

PSEG Long Island Operating Expenses (Thousands of Dollars)

Transmission & Distribution (a)
Customer Services (a)
Shared Services
Power Markets
Energy Efficiency & Renewable
Turnover
FIT Evaluation Costs (DER)
Total PSEG Long Island Operating Expenses

GAAP Pensions/OPEBS Expense (b)
--------------------------------	---

Transmission & Distribution
Customer Operations
Storm Costs
Shared Services
Energy Efficiency and Renewables
Power Markets

Deferred 2014/2015 Pension & OPEB

Grand Total Pensions/OPEBS

Contribution to Pension Trust O&M/Storms (C)

								Cha	nge from			Cha	nge from
	2015		20	16		Α	pproved	Pr	ior Year	Р	rojected	Pr	ior Year
	Actual	A	proved P		rojected	2017		\$		2018			\$
\$	150,548	\$	170,943	\$	175,371	\$	189,797	\$	18,854	\$	194,542	\$	4,745
	92,711		121,156		115,232		117,997		(3,159)		120,947		2,950
	131,525		137,912		127,482		144,025		6,113		147,626		3,601
	6,451		13,328		10,767		13,409		81		13,744		335
	75,781		86,807		82,084		88,918		2,111		91,141		2,223
	-		(1,634)		-		-		1,634		-		-
			_				2,598		2,598		-		(2,598)
\$	457,015	\$	528,512	\$	510,935	\$	556,743	\$	28,232	\$	567,999	\$	11,256

\$ 8,516	\$ 24,414	\$ 21,231	\$ 26,991	\$ 2,578	\$ 27,666	\$ 675
8,680	25,482	22,286	23,272	(2,210)	23,854	582
2,485	10,292	10,292	5,197	(5,095)	5,327	130
3,406	9,182	7,910	9,613	432	9,854	240
781	2,487	2,328	1,273	(1,214)	1,305	32
498	1,446	1,255	1,451	5	1,487	36
46,137	-		-	- 1	-	- 1
\$ 70,503	\$ 73,303	\$ 65,302	\$ 67,798	\$ (5,504)	\$ 69,493	\$ 1,695
-	17,199	17,984	22,400	5,201	26,880	4,480

Note: (a) Vehicle maintenance saving of \$1.9 million associated with purchasing new vehicles is included above

- (b) GAAP cost of retirement benefits included in operating expenses above
- (c) Contribution to Pension Trust is the cost of retirement benefits recovered in revenues in the current period to meet ERISA funding requirements

Reconciliation of PSEG Long Island Operating Expenses

Approved Rate Case Target Changes in Assessment Union Wage Increase FIT Evaluation Costs (DER)

Total PSEG Long Island Operating Expenses

\$ 528,512	\$ 547,843	
 	5,579	
 	723	
l	2,598	
\$ 528,512	\$ 556,743	

PSEG Long Island Operating Expenses

PSEG Long Island Operating Expenses are related to five major areas: Transmission and Distribution, Customer Services, Shared Services, Power Markets and Energy Efficiency and Renewable Energy Programs. Operating expenses in 2017 reflect an increase of \$28.2 million primarily due to increased efforts to maintain system reliability and improve resiliency, customer satisfaction, storm response, and inflationary pressures less a 1% per year productivity benefit.

This budget includes significant investment in process improvement activities, including storm response and communication, system reliability and safety enhancements, preventative maintenance activities and vegetation management. It also reflects the utilization of newly implemented systems including the Outage Management System, Interactive Voice Response technology, and the Asset Management Model in T&D. Labor costs are based on an organization structure consisting of 2,361 employees. The benefit costs are based on programs designed and utilized in 2014 that transitioned from National Grid and have since been updated in the 2016 Collective Bargaining Agreement.

LIPA Operating & Deferred Expenses (Thousands of Dollars)

									Cha	inge from			Change from		
	2015		2016					pproved	Pr	ior Year	P	rojected	Prior Year		
		Actual	A	pproved	ed Projected		2017		\$		2018		\$		
LIPA OPERATING EXPENSES															
PSEG Long Island Management Fee	\$	44,396	\$	73,383	\$	73,383	\$	75,034	\$	1,651	\$	76,722	\$	1,688	
Capitalized Management Fee	_	(7,449)	-	(16,406)		(12,674)	-	(12,779)		3,627	I —	(13,067)		(287)	
Total Operating Management Fee	\$	36,947	\$	56,976	\$	60,709	\$	62,255	\$	5,278	\$	63,655	\$	1,401	
LIPA OPERATING EXPENSES															
Employee Salaries & Benefits Expenses	\$	8,504	\$	10,735	\$	11,200	\$	12,635	\$	1,900	\$	12,762	\$	127	
Insurance		2,075		2,482		1,626		2,180		(302)		2,289		109	
Office Rent		1,799		1,687		1,856		1,802		115		1,805		3	
Miscellaneous ^(a)		(5,165)		2,049		(9,909)		1,978		(71)		2,024		46	
Total Labor, General and Administrative	\$	7,214	\$	16,954	\$	4,773	\$	18,596	\$	1,641	\$	18,880	\$	284	
Engineering and Consulting	\$	204	\$	1 111	\$	1 /50	\$	1 500	ć	59	\$	1 650	ć	158	
Engineering and Consulting	۶	4,473	Ş	1,441 3,850	Ş	1,458	۶	1,500 3,878	Ş	28	Ş	1,658 3,983	Ş	105	
Legal Financial Advisor/Cash Management		1,434		1,270		3,850 1,559		1,604		334		1,647		43	
Accounting and Audit Services (b)		1,107		1,748		2,069		3,340		1,592		1,787		(1,553)	
Information Technology		563		863		1,000		912		49		937		25	
Risk Management-Fuel & Insurance		522		442		362		395		(47)		409		14	
Superstorm Sandy Grant Administration		116		200		308		225		25		231		6	
Miscellaneous		988		58		565		925		867		930		4	
Total Professional Services	\$	9,409	\$	9,871	\$	11,172	\$		\$	2,908	\$	11,582	\$	(1,197)	
LIPA Operating Expenses	\$	53,570	\$	83,802	\$	76,653	\$	93,630	\$	9,828	\$	94,117	\$	488	
Deferred Expenses															
Deferred Transition Cost	\$	11,403	\$	13,600	\$		\$	-	\$	(13,600)	\$	-	\$		
2014/2015 Pension/OPEB Deferral				10,573		9,381		9,381		(1,193)		9,381			
Rate Case Deferral				1,811		-		-		(1,811)		-		-	
Ngrid Pension/OPEB Settlement	_			21,634		21,634	l	21,634			I_	21,634			
Total Deferred Expenses	\$	11,403	\$	47,618	\$	31,015	\$	31,015	\$	(16,604)	\$	31,015	\$	-	
Total LIPA Cash Operating and Deferred Expenses	\$	64,973	\$	131,420	\$	107,668	\$	124,644	\$	(6,776)	\$	125,132	\$	488	

Note: (a) Includes credits from prior years expenses

⁽b) 2017 includes \$1.5 million for NY State DPS management audit

LIPA Operating and Deferred Expenses

The Authority Operating and Deferred Expenses are planned at \$124.6 million in 2017 and \$125.1 million in 2018. The 2017 plan represents a decrease of \$6.8 million as compared with the Approved Budget for 2016.

The primary drivers of the change is the elimination of \$13.6 million of Deferred Transition Costs, costs originally planned to be amortized over the contract period of the A&R OSA, but as LIPA funded such costs with the proceeds of an insurance settlement in 2016, the amortization is no longer necessary. In addition, LIPA also funded from operations the costs associated with the 2015 rate case and reduced the amortization of the 2014/2015 Pension/OPEB deferral together totaling \$3 million. Offsetting these reductions is an increase of \$5.3 million primarily related to a smaller portion of the PSEG Long Island Management Fee being capitalized, and an increase of \$4.5 million of LIPA administrative costs, the primary drivers of which is the one-time charge associated with the 2017 DPS Management Audit of \$1.5 million and higher employee salaries and benefits and professional services of \$3.0 million. Beyond 2017, this category of costs is expected to increase by approximately 2% per year.

Utility Debt Securitization Authority (Thousands of Dollars)

								Change from					Change from		
	2015		2016			Approved		Prior Year		Projected		Prior Year			
	ш	Actual	Α	pproved	P	rojected	2017		\$		2018			\$	
OPERATING REVENUES	\$	73,158	\$	220,085	\$	287,911	\$	263,923	ć	43,838	\$	310,406	ć	46,483	
OF ENATING REVENUES	۲	73,138	,	220,003	Ţ	207,511		203,323	Ţ	43,838		310,400	Ţ	40,403	
LIPA OPERATING EXPENSES														_	
Allowance for Bad Debt	\$	846	\$	1,298	\$	1,801	\$	1,900	\$	602	\$	2,235	\$	335	
General and Administrative Expense														_	
Ongoing Servicer Fee	\$	1,161	\$	1,803	\$	1,903	\$	2,065	\$	262	\$	2,065	\$		
Administration Fees				316		300		400		84		400			
Bond Administration Fees		20		205		269		400		195		400			
Bond Trustee Fees and Expenses				44		44		56		12		56		-	
Legal Fees				32		32		40		8		40		-	
Accounting Fees		75		63		90		149		86		149			
Directors and Officers Insurance		352		352		381		390		38		410		20	
Miscellaneous	_	2		20		20	_	25		5	_	25			
Total General and Administrative Expense		\$1,610		\$2,835		\$3,038		\$3,525		\$690		\$3,545		\$20	
Amortization of Restructuring Property	\$	15,672	\$	62,690	\$	98,953	\$	101,838	\$	39,148	\$	161,436	\$	59,598	
Interest Expense Accrual	\$	94,948	\$	158,167	\$	164,738	\$	185,899	\$	27,732	\$	181,823	\$	(4,076)	
Amortization of Issue Premium		(10,227)		(29,340)		(32,376)		(43,153)		(13,813)		(41,322)		1,831	
Amortization of Issuance Costs				1,907		2,167		2,445		538		2,340		(105)	
Total Interest Expense	\$	84,721	\$	130,734	\$	134,529	\$	145,191	\$	14,457	\$	142,841	\$	(2,350)	
Reserve Fund Earnings		33		-		169		-		-		110		110	
Excess of Revenues Over Expenses	\$	(29,658)	\$	22,528	\$	49,759	\$	11,469	\$	(11,059)	\$	459	\$	(11,010)	

Long Island Power Authority and Subsidiaries 2017 Approved and 2018 Projected Operating and Capital Budgets

Utility Debt Securitization Authority

The LIPA Reform Act, as amended, created the Utility Debt Securitization Authority ("UDSA") to issue restructuring bonds in an aggregate amount not to exceed \$4.5 billion so as to refinance a portion of the Authority's existing debt at a lower cost. The UDSA has no commercial operations and was formed solely to issue bonds to refinance Authority debt. The UDSA has bond ratings of Aaa(sf), AAA(sf) and AAA(sf) from Moody's, Standard & Poor's and Fitch Ratings, respectively, compared to ratings of A3, A-, and A-, respectively, for Authority issued bonds.

The Authority issued approximately \$2 billion of UDSA bonds in 2013, an additional \$1 billion in October 2015 and completed two offerings in 2016, \$636.8 million in March and \$469.3 million in August. The Authority anticipates using the balance of the authorized par amount of UDSA bonds of approximately \$367 million during 2018 to refinance Authority bonds as they become eligible for refinancing or are otherwise financially beneficial.

The Authority's customer bills recover UDSA Restructuring Charges on every kilowatt hour of energy delivered and the Authority's own delivery charges are reduced by an amount that corresponds to the UDSA charges in each period; however, the UDSA charges are <u>not</u> Revenues subject to the Authority's bond resolutions.

The UDSA's revenues and expenses are consolidated with those of the Authority for financial reporting purposes; and therefore the information on UDSA presented herein is also reflected within the categories of revenue and expense of the Authority's Operating Budgets shown elsewhere. This supplemental schedule is shown separately as an information item for the reader.

Projected Borrowing Requirements and Facility Renewables (Thousands of Dollars)

Total Capital Expenditures & Deferrals
FEMA Contribution
Deduct Allowance for AFUDC
Net Capital Expenditures & Deferrals

Projected Funding Available from Coverage
Contribution to OPEB Account from Coverage
Proceeds from 2015B Borrowings
Proceeds from 2016 Borrowings
Projected Borrowing Requirements for Capital Expenditures
Projected Cost of Issuance on Borrowing Requirements

Projected Borrowing Requirements with Cost of Issuance

Series 2014C - Floating Rate Notes
Series 2015C - Floating Rate Notes
Bonds Subject to Mandatory Refinancing

General Revenue Notes, Series 2015
Revolving Credit Agreement
Subordinate Lien Commercial Paper, Series 2014
Revolving Bank Facilities and Commercial Paper Subject to Renewal

Total Capital Expenditures, Refinancings, and Facility Renewals

Series 1998A Series 2008A-B Series 2009A Series 2011A

Potential Refinancing Opportunities

Total Borrowings, Facility Renewals, and Refinancing Opportunities

								Cha	ange from			Ch	ange from
	2015		20	16		Α	pproved	Pı	rior Year		Projected	P	rior Year
ш	Actual	A	pproved	Р	rojected	$ldsymbol{ldsymbol{ldsymbol{eta}}}$	2017		\$	ш	2018		\$
\$	419,922	\$	640,720	\$	582,561	\$	716,500	\$	75,779	\$	676,084	\$	(40,416)
	(29,812)		(167,580)		(130,334)		(169,879)		(2,299)		(153,030)		16,849
I –	(7,113)	I —	(8,897)		(3,466)	I —	(5,991)		<i>2,906</i>	I –	(7,046)		(1,055)
\$	382,997	\$	464,243	\$	448,761	\$	540,629	\$	76,386	\$	516,008	\$	(24,621)
\$	(132,909)	\$	(123,870)	\$	(131,174)	\$	(153,958)	\$	(30,088)	\$	(182,926)	\$	(28,968)
	-		49,821		49,792		42,368		(7,453)		43,136		768
			(94,578)		(119,000)		-		-		-		-
			-		(280,198)		(130,825)				_		
\$	250,088	\$	295,617	\$	(31,819)	\$	298,214	\$	2,598	\$	376,218	\$	78,004
	1,250	ľ	1,478	•	(159)	'	1,491	,	13	ľ	1,881	,	390
\$	251,339	\$	297,095	\$	(31,978)	\$	299,705	\$	2,610	\$	378,099	\$	78,394
			•	·	, , ,	l .	•	•	ĺ	Ľ	·	·	
	-		-				-				150,000		150,000
	<u>-</u>		<u>-</u>				_			l _	149,000		149,000
\$	-	\$	_	\$		\$	_	\$		\$	299,000	\$	299,000
\$	-	\$	-	\$		\$	-	\$		\$	75,000	\$	75,000
	-		-				-				-		-
		I				l _	300,000		300,000	I_			(300,000)
\$	-	\$	-	\$		\$	300,000	\$	300,000	\$	75,000	\$	(225,000)
\$	251,339	\$	297,095	\$	(31,978)	\$	599,705	\$	302,610	\$	752,099	<i>\$</i>	152,394
,	231,333	,	237,033	Ą	(31,376)		333,703	7	302,010	'	12,047	J	
			-		1		-		1				12,047
	-		-		- 1		-		- 1		7,000		7,000
	-		-		- 1		-		- 1		181,550		181,550
<u> </u>		l .		_		l .		_		-	199,790	_	<u>199,790</u>
\$	-	\$	-	\$	- 1	\$	-	\$	-	\$	400,387	\$	400,387
					- 1								
\$	251,339	\$	297,095	\$	(31,978)	\$	599,705	\$	302,610	\$	1,152,486	\$	<i>552,781</i>

Projected Borrowing Requirements and Facility Renewals

The Authority anticipates funding from fixed obligation coverage (i.e., cash flow) after the payment of all expenses of \$154.0 million in 2017 and \$182.9 million in 2018. The Authority has established an OPEB Account to pre-fund future post retirement related workforce expenses in each year after the payment of all other expenses and debt payments. These contributions are budgeted at \$42.4 million and \$43.1 million in 2017 and 2018, respectively, leaving funds available to contribute to the Capital Budget (in lieu of debt financing) of \$111.6 million and \$139.8 million in 2017 and 2018. The balance of the Capital Budget will be funded from debt issues. In total, the Authority will fund \$717 million of infrastructure investments in 2017 with debt funding of \$430 million, or approximately 60% debt financing and 40% grant and pay-as-you-go funding, significantly reducing the ratio of debt to net tangible assets.

The Authority has \$299 million of variable-rate bonds that are subject to mandatory refinancing in 2018. In addition, the Authority has \$712.5 million of revolving and other bank facilities due for renewal through 2018.

In addition, the Authority anticipates potential economic refinancing opportunities of up to \$400 million through 2018. All or a portion of these refinancings of outstanding debt may be executed pursuant to the existing UDSA authorization.

Capital Structure (Thousands of Dollars)

				Change from		Change from	
	Actual	Projected	Approved	Prior Year	Projected	Prior Year	
	2015	2016	2017	\$	2018	\$	
UDSA Existing Long Term Par Outstanding LIPA Existing Long Term Par Outstanding LIPA Short Term Par Projected Balance Total Par Outstanding	\$ 2,919,439 4,380,595 350,000 \$ 7,650,034	\$ 3,965,529 3,527,567 350,000 \$ 7,843,096	\$ 3,892,931 3,435,139 350,000 \$ 7,678,070	(92,427)	\$ 3,770,128 3,387,501 350,000 \$ 7,507,629	\$ (122,803) (47,638) - \$ (170,441)	
UDSA Refinancing Debt to Be Issued LIPA Debt to Be Refinanced LIPA Long Term Par To Be Issued	\$ - - -	\$ - - -	\$ - 268,057	\$ - - 268,057	\$ 365,980 (400,387) 635,619		
Projected Par Amount UDSA Projected Par Amount LIPA	\$ 2,919,439 4,730,595	\$ 3,965,529 3,877,567	\$ 3,892,931 4,053,196	175,630	\$ 4,136,108 3,972,733	(80,463)	
Total Projected Par Amount Projected Capital Lease Obligations	\$ 7,650,034 \$ 2,379,250	\$ 7,843,096 \$ 2,232,853	\$ 7,946,127 \$ 2,037,996	\$ 103,032 \$ (194,857)	\$ 8,108,841 \$ 1,856,744	\$ 162,714 \$ (181,251)	
Total Par and Capital Lease Obligations	\$ 10,029,284	\$ 10,075,949	\$ 9,984,123	\$ (91,826)	\$ 9,965,586	\$ (18,537) A	
Excess of Revenues Over Expenses	\$ 48,175	\$ (60,380)	\$ (12,140)	\$ 48,239	\$ 5,942	\$ 18,082	
Net Position Before Deferred Grants Deferred Grants	481,499	421,119 45,334	406,028 330,025	(15,091) 284,691	410,061 483,055	4,033 153,030	
Net Position	\$ 481,499	\$ 466,453	\$ 736,053	\$ 269,600	\$ 893,116	\$ 157,063 B	
Debt to Capital Ratio	95.4%	95.6%	93.1%	-2.4%	91.8%	- 1.4% =A/(A+B	3)

Long Island Power Authority and Subsidiaries 2017 Approved and 2018 Projected Operating and Capital Budgets

Capital Structure

The Capital Structure outlined on Schedule A-4.5 provides the funding sources for the capital program. The Authority completed the bulk of its authorized refinancing of LIPA debt in 2016 with UDSA, with the remaining authorization expected to be utilized in 2018. Through 2018, LIPA expects to issue debt to fund its capital investment program and anticipates utilizing a combination of short and long-term debt financing through 2018.

The Authority adopted a plan to alter the funding of the capital program from predominantly debt to a combination of debt and pay-as-you go funding from revenue. After funding \$1.4 billion in infrastructure investments through 2018, total projected debt outstanding for LIPA and UDSA rises modestly from \$7.9 billion in 2016 to \$8.1 billion in 2018.

The Authority also has significant capital lease obligations during this period. Combined debt and capital lease balances across the period decline from \$10.1 billion at the end of 2016 to \$10.0 billion at the end of 2018. Importantly, the Authority's Debt to Capital Ratio declines from 95.6% in 2016 to 91.8% in 2018.

Project To Date

	Location	Investment Description	In Service Date	Total Project Cost	Expenditures through 12/31/16 ^(a)	Approved 2017	Projected 2018
Transmission & Distribution							
Regulatory Driven Projects							
	East Garden City	Install new 138kV feed to Valley Stream (NERC)	Jun-20	190,600	206	6,160 **	25,110 **
	Syosset	Install new 138kV feed to Shore Rd (NERC)	Dec-21	254,900	221	5,740 **	7,695 **
	Various	Disturbance Monitoring Equipment (DME) Install Program (NERC)	Dec-17	1,928	944	984	-
Total Regulatory Driven Projects		<u> </u>		\$ 447,428	\$ 1,371	\$ 12,884	\$ 32,805

Load Growth Projects

Levittown	Reconductor 69 kV circuit to Plainedge	Dec-16	7,108	6,812	296	-
North Bellmore	Upgrade 13kV switchgear	Dec-16	4,892	4,044	103	-
Deer Park	Distribution - Reinforcement 13kV feeders	Jun-17	986	-	986	-
Deer Park	Transmission - Install 27 MVAR Cap Bank	Jun-18	1,690	10	-	1,680
Orchard	Expand 69/13kV Substation & Feeders	Jun-17	18,947	17,016	560	1
Great Neck	Upgrade Distribution exit Cable	Jun-17	1,039	-	1,039	-
Jamesport	Transmission - Install 14 MVAR Capacitor	Jun-17	1,446	272	1,174	-
Mitchell Gardens	Install 2 new 13 kV distribution feeders	Jun-17	5,963	-	5,963	-
Cedarhurst	Upgrade substation from 33 kV to 69kV	Jun-17	12,155	8,121	4,034	-
Pulaski	Install new 13 kV distribution feeder	Jun-17	2,525	-	2,525	-
Riverhead	Reconductor 69 kV circuit to Eastport	Jun-17	10,559	1,225	8,737 *	-
Sterling	Reconductor feeders 7J-883 and 7J-868	Jun-17	1,389	-	1,389	-
Whitesde	Replace 13kV distribution cable	Jun-17	2,402	1,052	1,350 *	-
Syosset	Expand 138/13kV Substation & feeders	Jun-17	12,038	11,618	420	-
Mitchell Gardens	Overhead13 kV Feeder Extension	Dec-17	501	-	501	-
West Bartlett	Establish new 69/13kV substation	Dec-17	14,533	963	13,569 *	-
Arverne	Underground 13 kV feeder extension	Dec-17	1,961	-	1,961	-
Barrett	Install new transformer and feeder to Bay Park	Dec-17	799	417	282	100
Deer Park	Install New 13kV distribution Cable	Dec-17	547	-	547	-
South Shore Mall	Install additional switches	Jun-17	110	-	110	-
Kings Highway	Establish new 138/13kV substation	Jun-18	35,449	4,222	15,609 *	14,980
Berry Street	Establish new 69/13kV substation	Jun-18	25,414	3,348	18,016 *	4,050
MacArthur	Transmission - Install 27MVAR Cap Bank	Jun-19	2,804	1,124	-	980
Navy Road	Establish new 33/13kV substation	Jun-18	13,820	1,364	8,676	3,780
Pilgrim	Replace 13kV switchgear & install new feeder	Jun-18	4,402	29	3,532	840
Malverne	Upgrade 69/13kV substation & distribution feeders	Jun-18	18,077	2,804	8,274	7,000
Canal	Install new 69 kV circuit to Southampton	Jun-19	56,200	-	2,632 **	17,766 **
Flowerfield	Upgrade 69/13kV substation & distribution feeders	Jun-19	13,057	201	156	700
Bridgehampton	Install new 69 kV circuit to Buell	Jun-19	49,600	-	2,324 **	15,687 **

^{*} Includes carry over from 2016. See "Carry Over" table for details

^{**} Includes amendment costs. See "Amendments" table for details

 $^{^{\}rm (a)}$ Project to date expenditures includes projects that began prior to 2016

Location	Investment Description	In Service Date	Total Project Cost	Project To Date Expenditures through 12/31/16 (a)	Approved 2017	Projected 2018
Old Bethpage	Establish new 69/13kV substation	Jun-19	17,469	320	1,649	8,400
Wildwood	Upgrade 69 kV circuit to Riverhead to 138kV	Jun-19	11,107	-	539 **	3,638 **
Nassau Hub	Purchase land for substation and establish new 69/13kV substation	Jun-19	37,298	485	5,233	12,180
Ruland Road	Install new 69 kV circuit to Plainview	Dec-19	21,966	1,181	10,285 *	9,800
Lake Success	Reconductor 69 kV circuit to Whiteside	Jun-20	9,100	-	-	2,800
Roslyn	Expand 138/13kV Substation and feeders	Jun-20	9,672	-	472	1,400
Amagansett	Upgrade substation from 23 kV to 33kV	Jun-20	11,200	-	420 **	1,350 **
E. Hampton	Upgrade substation from 23 kV to 33kV	Jun-20	4,480	-	420 **	1,350 **
Buell	Upgrade substation from 23 kV to 33kV	Jun-20	5,180	-	420 **	1,350 **
Hither Hills	Upgrade substation from 23 kV to 33kV	Jun-21	6,720	-	420 **	1,350 **
Culloden Pt.	Upgrade substation from 23 kV to 33kV	Jun-22	3,920	-	420 **	1,350 **
Riverheard	Install new 138kV circuit to Canal	Jun-22	191,520	-	840 **	2,800 **
Sagtikos	Purchase land for new substation	Jun-22	26,191		191	2,100
Wainscott	Purchase land, establish new 138kV Wainscott substation and install new 138kV UG cable from Canal	Jun-25	413,700	-	140 **	1,400 **
New Cassel	Purchase land and establish new 69/13kV substation	Dec-20	16,373	30	643	700
New South Road	Expand 69/13kV substation and procure easement	Dec-20	10,512	364	548	700
Hempstead	Convert station to 69kV/13kV	Dec-20	50,228	356	7,949 *	12,123
Various	Distribution Feeder - Conversion and Reinforcement and Exit Feeder Projects	Program	-	1,319	-	15,200
Various	Distribution Facilities to serve New Business	Blanket	-	35,903	27,194	24,316
			\$ 1,167,050	\$ 104,601	\$ 162,548	\$ 171,870

Reliability Projects

Total Load Growth Projects

	1	1			ı	ı
Arverne	Storm harden substation (Damaged by Sandy)	May-16	8,435	8,227	208	-
Barrett	Storm harden substation (Damaged by Sandy)	Dec-16	3,028	2,760	268	-
Long Beach	Storm harden substation (Damaged by Sandy)	Jun-17	6,711	3,866	2,645	200
Sayville	Relocate underground distribution feeders	Jun-17	275	1	275	-
Shelter Island	Replace underground failed cable	Jun-17	21,786	1,073	19,988 *	-
Elwood	Install bus tie breaker	Jun-17	2,520	-	2,520	-
Far Rockaway	Storm harden 13 kV substation (Damaged by Sandy)	Jun-17	7,382	3,881	3,501	-
Lake Success	Upgrade relays for intertie to Con Edison	Jun-17	48	48	-	-
Woodmere	Storm harden 69kV Control House (Damaged By Sandy)	Jun-17	3,166	1,056	2,110	-
Far Rockaway	Storm harden 33 kV substation (Damaged by Sandy)	Oct-17	9,636	5,547	3,889	200
Garden City	Upgrade 4kV Switchgear to 13kV	Dec-17	3,023	386	2,417	-
Northport	Replace auxiliary power supply to main transformer banks	Dec-17	639	-	639	-
Northport	Upgrade monitoring equipment to increase circuit capacity	Dec-17	504	34	470	-
Valley Stream	Replace Phase Angle Regulator Transformer	Dec-17	3,340	951	2,259	130

^{*} Includes carry over from 2016. See "Carry Over" table for details

^{**} Includes amendment costs. See "Amendments" table for details

 $^{^{\}rm (a)}$ Project to date expenditures includes projects that began prior to 2016

				Project To Date		
				Expenditures through	Approved	Projected
Location	Investment Description	In Service Date	Total Project Cost	12/31/16 ^(a)	2017	2018
Various	Transmission Pipe Type Cable Pump House Refurbishment (Pines and Y-50)	Dec-17	2,552	1,262	1,290	-
Various	Communication Relay Replacement Program	Dec-17	387	306	81	-
Various	Upgrade Radio Control System to Dispatch Center	Dec-17	145	-	145	-
Fire Island Pines	Install new 13 kV distribution feeder to Davis Park	Jun-18	4,060	-	2,660	1,400
Shoreham	Replace 8 substation 138kV Switches	Jun-18	1,120	-	-	1,120
Captree	Install new 23 kV circuit to Robert Moses	Jun-18	3,061	204	=	2,380
Fire Island Pines	Install new 23 kV circuit to Ocean Beach	Jun-18	14,867	46	5,628	8,400
Barrett	Procure new spare 220 MVA Phase Shifting transformer	Dec-19	6,796	-	346	4,200
Various	Upgrade Mobile Capacity Bank trailers	Dec-18	450	-	=	450
Various	Upgrade Radio Communication to Far Rockaway	Dec-19	463	-	88	-
Fair Harbor	Upgrade 23 kV circuits to Ocean Beach and Robert Moses	Jun-19	8,286	-	306	3,640
Various	Upgrade substation breaker controls for Non- Reclosure Assurance (NRA)	Dec-19	24,678	2,593	6,485	5,850
Various	Install Disconnect Switches in underground Network systems	Jun-20	-	600	-	1,650
Various	Accidents (3rd Party Damage)	Blanket	-	6,297	3,630	3,311
Various	Distribution Pole Reinforcement	Blanket	-	-	11,817	2,331
Various	Distribution Pole Replacement	Blanket	-	14,492	-	10,955
Various	Distribution System Improvements - Services, Branch lines & Customer requests	Blanket	-	32,897	24,256	29,133
Various	Distribution Transformers - Add/Replace	Blanket	-	27,603	27,382	26,965
Various	Multiple Customer Outage Program	Blanket	-	5,390	7,697	10,623
Various	Public Works	Blanket	-	8,400	7,361	6,762
Various	Transmission Pole Replacement Program	Blanket	-	1,782	2,561	2,674
Various	Transmission Equipment Failures	Blanket	-	2,263	2,345	2,447
Various	Substation Equipment Failures	Blanket	-	9,502	6,579	6,700
Various	System Spares	Blanket	-	2,213	3,531	3,820
Various	Distribution Feeder Reliability Improvement Program	Program	-	13,880	3,732	3,821
Various	Bus-Tie Breaker Replacement Program	Program	-	-	-	680
Various	Distribution Breaker Replacement Program	Program	-	768	786	723
Various	Mechanical Relay Replacement Program	Program	-	1,169	812	891
Various	Substation Equipment Replacement/Upgrade Program	Program	-	2,232	515	522
Various	Pipe Type Cable -Install Pressure Monitoring Devices	Program	-	443	656	614
Various	Pipe Type Cable - Install Low Pressure Trip Devices	Program	-	275	-	1,088
Various	Protection and Controls Upgrade Program	Program	-	1,888	510	4,109
Various	Remote Terminal Unit Replacement/Upgrade Program	Program	-	1,508	697	900
Various	Residential Underground Development Area Rehabilitation Program	Program	-	2,024	5,178	4,444
Various	Upgrade Substation Distribution Breaker Racking System	Program	-	895	1,065	900
Various	Substation Battery Replacement Program	Program	-	669	477	455
Various	Substation Lightning & Grounding Upgrade Program	Program	-	1,948	496	790

^{*} Includes carry over from 2016. See "Carry Over" table for details

^{**} Includes amendment costs. See "Amendments" table for details

 $^{^{\}rm (a)}$ Project to date expenditures includes projects that began prior to 2016

Location	Investment Description	In Service Date	Total Project Cost	Project To Date Expenditures through 12/31/16 (a)	Approved 2017	Projected 2018	
Various	Substation Control Power Transformer Replacement Program	Program	-	-	199	255	
Various	Upgrade Supervisory Controllers for Capacitor Banks	Program	-	-	-	1,000	
Various	Transfer Trip/SCADA Comms Network Upgrade Program	Program	1	1	274	300	
Various	Transformer Life Extension Program	Program	-	-	456	457	
Various	Transformer Load Tap Changer Replacement Program	Program	-	1	291	-	
Various	Transformer Monitoring Program (TMP)	Program	1	1,606	688	1,295	
Various	Transmission Breaker Replacement Program	Program	1	3,122	2,753	3,300	
Various	Transmission Cables Cathodic Protection Program	Program	1	326	310	353	
Various	Underground Distribution Cable End of Life Replacement Program	Program	1	15,274	9,515	12,450	
Far Rockaway	Land Purchase	Specific	-	-	7,400	-	
			\$ 137,358	\$ 191,707	\$ 192,183	\$ 174,687	

^{*} Includes carry over from 2016. See "Carry Over" table for details

^{**} Includes amendment costs. See "Amendments" table for details

 $^{^{\}rm (a)}$ Project to date expenditures includes projects that began prior to 2016

					Project To Date Expenditures through	Approved	Projected
	Location	Investment Description	In Service Date	Total Project Cost	12/31/16 ^(a)	2017	2018
Tools, Equipment, Other, Economic, Sal	lvage						
		Wantagh Bridge - Replace Temporary overhead with submarine cable	Jun-17	3,588	619	2,969	-
	East Hampton	Replace reactive power compensator	Jun-17	1,753	1,100	653	-
	East Hampton	Relocate 23 kV feeder underground	Dec-17	4,632	130	4,391	110
		Electrical Shop General Shops Building - Door Replacement	Dec-17	600	-	600	-
	Glenwood	Building Removal	Mar-19	1,398	1	-	1,200
		Two Way Radio System Upgrade Project	Dec-19	49,963	1,151	12,411	15,400
	Various	Substation Security Upgrade Project	Jun-24	57,674	8,610	814	650
		Salvage Blanket	Blanket	-	(471)	(514)	(509)
	Various	Transfer Distribution Facilities to new Telephone Poles	Blanket	-	3,650	3,780	3,737
		Capital Tools	Blanket	-	2,319	3,513	3,658
		OH/UG Fault Locating Equipment	Blanket	-	-	-	210
	Various	Distribution Capacitor Banks Installation Program	Program	-	3	391	-
	Various	Support Long Island Railroad Capital Program - Load Growth and Interference	Program	-	3,012	2,148	650
Total Tools, Equipment, Other, Economic	ic, Salvage			\$ 119,608	\$ 20,125	\$ 31,156	\$ 25,106
Grand Total Transmission & Distributio	n			\$ 1,871,444	\$ 317,804	\$ 398,771	\$ 404,468

^{*} Includes carry over from 2016. See "Carry Over" table for details

^{**} Includes amendment costs. See "Amendments" table for details

 $^{^{\}rm (a)}$ Project to date expenditures includes projects that began prior to 2016

Information Technology Projects by Business Unit	Investment Description	In Service Date	Total Project Cost	Project To Date Expenditures through 12/31/16 (a)	Approved 2017	Projected 2018
Customer Service		•				
	2016/2017 Rate Change Project	2017	734	584	150	=
	Customer Experience & Web Design	2017	760	563	197	=
	Debt Next Recovery Carryover	2017	438	338	100	-
	Meter Inventory - Phase 2	2017	985	932	53	1
	One Step application with Ipay	2017	747	547	200	1
	Paperless Billing	2017	837	737	100	-
	AMI Customer Engagement Portal	2017	500	=	500	-
	Automation of Web application for new service/ service upgrade and integration to SAP	2017	500	-	500	-
	Install TV's and Monitor - CAC and Customer Office	2017	400	=	400	-
	My Account Release 2	2017	2,400	-	2,400	-
	My Alerts Enrollment Channels (IVR & HVCA integration)	2017	700	=	700	-
	Mobile Workforce Enhancements	2017	700	-	700	-
	Municipal Portal Phase 2	2017	500	=	500	-
	MVRS Upgrade	2017	700	=	700	-
	PMP Market Switch - Behavioral Scoring Experion	2017	600	-	600	-
	Public Website launch	2017	1,000	=	1,000	-
	Real Time Activity Monitoring Desktop	2017	700	=	700	-
	True Trace/ Phone ID - Experian	2017	200	=	200	-
	Automation and emailing of COF forms	2018	750	-	500	250
	Automation of Web Apps for new service/service upgrade and intergration to SAP	2018	250	-	-	250
	CRM for LCS - Salesforce	2018	600	-	300	300
	Customer 360/New Analytics Platform	2018	1,700	-	700	1,000
	Meter Platform Improvements (New generation of smart meters)	2018	800	=	-	800
	MDM	2018	1,576	-	250	1,326
	Mobile App	2018	1,000	-	-	1,000
	Pin Point Final Bill Matching Program Experian	2018	400	-	-	400
	Recovery Score Final Bill Analysis Experian	2018	300	-	=	300
	Webchat	2018	750	-	=	750
	2018/2019 Rate Case Enhancements	2019	750	-	-	750
	CAS Continuous Improvement Blankets	Blanket	-	-	800	800
	Call Center Technology Enhancment Blanket	Blanket	-	-	-	300
	Customer Billing Enhancements	Blanket	-	-	-	1,000
	IVR Nuance Continuous Improvement	Blanket	-	-	1,400	1,400
	Outage Communication Blankets- Callbacks, Proactive , Alerts	Blanket	-	-	600	700
	Web Continuous Improvement Blanket	Blanket	-	=	=	2,500
Total Customer Service			\$ 22,277	\$ 3,701	\$ 14,250	

 $[\]ensuremath{^*}$ Includes carry over from 2016. See "Carry Over" table for details

^{**} Includes amendment costs. See "Amendments" table for details

 $^{^{\}rm (a)}$ Project to date expenditures includes projects that began prior to 2016

Information Technology Projects by Business Unit	Investment Description	In Service Date	Total Project Cost	Project To Date Expenditures through 12/31/16 (a)	Approved 2017	Projected 2018
Transmission & Distribution						
	CMMS Phase 2	2017	365	319	46	-
	SAP MM/WMEnhancements	2017	530	375	155	-
	SGIP Phase 1	2017	1,000	210	790	-
	Compatible Units and SAP (Work Mgmt)	2018	4,706	-	2,356	2,350
	Cost Estimating Tool ;Timberline	2018	500	-	500	Ī
	DMS/ADMS Implement OSI ADMS	2018	2,800	-	-	2,800
	Develop Analytics For Equipment on Common Corporate Platform	2018	800	-	-	800
	DSCADA	2018	6,500	-	3,900	2,600
	GIS Designer Field Smart Design	2018	1,900	-	-	1,900
	P6 Analytics Portfolio Dashboard Solution	2018	1,500	-	-	1,500
	Primavera/SAP P6 Interfaces Phase 2	2018	1,000	-	500	500
	CGI CAD Upgrade 6.5 and Address Validation	2019	15,637	-	8,097	7,540
	LI SCADA Network Upgrade to MPLS (Verizon MPLS)	2019	9,910	543	4,000	5,367
Total Transmission & Distribution			\$ 47,148	\$ 1,447	\$ 20,344	\$ 25,357
Information Technology		T		Ī	ı	
	DR Configuration for Critical LI Apps	2017	500	-	500	-
	LI Phone System Hardening	2017	350	100	250	-
	LI Privileged Account Management	2017	273	198	75	-
	PI Upgrade	2017	50	-	50	-
	Replacing Splunk with Nitro Security	2017	550	-	550	-
	Secure Out of Band (OOB) management for remote sites	2017	250	-	250	-
	T&D Control Room turret phones	2017	24	-	24	-
	Upgrade / Implement Testing Toolkit	2017	100	-	100	-
	Vmware Automation Tool (CMP)	2017	100	-	100	-
	Infrastructure Equipment	2017	100	-	100	-
	All Flash Storage Array	2018	100	-	100	-
	LI Review Trunking Strategy	2018	500	-	-	500
	Life Cycle Infrastructure Replacements	2018	1,000	-	-	1,000
	Long Island Switch Replacement	2018	800	-	300	500
	Storage Capacity Expansion	2018	200	-	-	200
	Laptops Replacements	Blanket	-	-	100	300
Total Information Technology			\$ 4,897	\$ 298	\$ 2,499	\$ 2,500

 $[\]ensuremath{^*}$ Includes carry over from 2016. See "Carry Over" table for details

^{**} Includes amendment costs. See "Amendments" table for details

 $^{^{\}rm (a)}$ Project to date expenditures includes projects that began prior to 2016

Information Technology Projects by Business Unit	Investment Description	In Service Date	Total Project Cost	Project To Date Expenditures through 12/31/16 (a)	Approved 2017	Projected 2018
Power Markets						
	Contract Management System	2017	300	-	300	-
	Disaster Recovery Pwmkt systems (MAPS)	2017	150	-	150	-
	Disaster Recovery Pwmkt systems (spotfire)	2017	150	-	150	-
	GOMS Executive Dashboard	2017	487	-	487	-
	Power Markets Executive Dashboard	2018	500	-	Ī	500
Total Power Markets			\$ 1,587	\$ -	\$ 1,087	\$ 500
			•		•	
Grand Total Information Technology Proj	jects		\$ 75,909	\$ 5,446	\$ 38,180	\$ 42,183

 $[\]ensuremath{^*}$ Includes carry over from 2016. See "Carry Over" table for details

^{**} Includes amendment costs. See "Amendments" table for details

 $^{^{\}rm (a)}$ Project to date expenditures includes projects that began prior to 2016

				Project To Date Expenditures		
Business Units	Investment Description	In Service Date	Total Project Cost	through 12/31/16 ^(a)	Approved 2017	Projected 2018
Customer Service		•	•			•
	Purchase Electric Meters	Blanket	-	3,004	4,738	4,832
	Install/Remove Meters	Blanket	-	7,951	5,909	6,012
	Tools/Equipment	Program	-	211	550	550
Total Customer Service Projects			\$ -	\$ 11,165	\$ 11,197	\$ 11,394
Facilities		1	T	Ī	<u> </u>	1
	Facilities Services	Program	-	6,579	5,006	5,162
Total Facilities Projects			\$ -	\$ 6,579	\$ 5,006	\$ 5,162
Fleet	Fleet	Ī		8,587	27,899	0.526
Total Fleet Projects	Fleet		\$ -	\$ 8,587	\$ 27,899	\$,526 \$ 8,526
Total Heet Projects	<u> </u>	ļ	, -	3 8,387	\$ 21,833	3 8,320
Grand Total PSEG LI Projects with Carryov	ver and Amendments				\$ 481,053	\$ 471,733
FEMA Related Projects					\$ 188,754	\$ 170,033
PSEG Long Island and FEMA Related					\$ 669,807	\$ 641,766

^{*} Includes carry over from 2016. See "Carry Over" table for details

^{**} Includes amendment costs. See "Amendments" table for details

 $^{^{\}rm (a)}$ Project to date expenditures includes projects that began prior to 2016

T&D 2016 Projects Carry Over Costs into 2017 (Thousands of Dollars)

Load Growth Projects

Location	Investment Description	2016 C	arry Over Costs
Riverhead	Reconductor 69 kV circuit to Eastport		3,300
Whiteside	Replace 13kV distribution cable		1,350
West Bartlett	Establish new 69/13kV substation		6,560
Kings Highway	Establish new 138/13kV substation		1,680
Berry Street	Establish new 69/13kV substation		7,251
Ruland Road	Install new 69 kV circuit to Plainview		1,100
Hempstead	Convert station to 69kV/13kV		1,100
		\$	22,342

Reliability Projects

Total Load Growth Projects

	Shelter Island	Replace underground failed cable	14,593
	Far Rockaway	Land Purchase	7,400
Total Reliability Projects		\$ 21,993	

Total 2016 Carry Over Costs into 2017	\$ 44,335
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T&D Projects Amendments for 2017 Approved and 2018 Projected (Thousands of Dollars)

Load Growth Projects

Location	Investment Description	In Service Date	Approved 2017	Projected 2018
Bridgehampton	Install new 69 kV circuit to Buell	Jun-19	2,324	15,68
Canal	Install new 69 kV circuit to Southampton	Jun-19	2,632	17,76
Wildwood	Upgrade 69 kV circuit to Riverhead to 138kV	Jun-19	539	3,638
Amagansett	Upgrade substation from 23 kV to 33kV	Jun-20	420	1,350
East Hampton	Upgrade substation from 23 kV to 33kV	Jun-20	420	1,350
Buell	Upgrade substation from 23 kV to 33kV	Jun-20	420	1,350
Hither Hills	Upgrade substation from 23 kV to 33kV	Jun-20	420	1,350
Culloden Pt.	Upgrade substation from 23 kV to 33kV	Jun-20	420	1,350
Riverhead	Install new 138kV circuit to Canal	Jun-20	840	2,800
Wainscott	Purchase land, establish new 138kV Wainscott substation and Install new 138kV UG cable from Canal	Jun-25	140	1,400
ts			\$ 8,575	\$ 48,041

Regulatory Driven Projects

East Garden City	Install new 138kV feed to Valley Stream (NERC)	Jun-20	6,160	-
Syosset	Install new 138kV feed to Shore Rd (NERC)	Dec-21	5,740	-
Total Regulatory Driven Projects			\$ 11,900	\$ -

TD Total 2017 and 2018 Amendments	Ś	20.475	\$	48.041	
TO Total 2017 and 2018 Amendments	Þ	20,475	Ş	48,041	