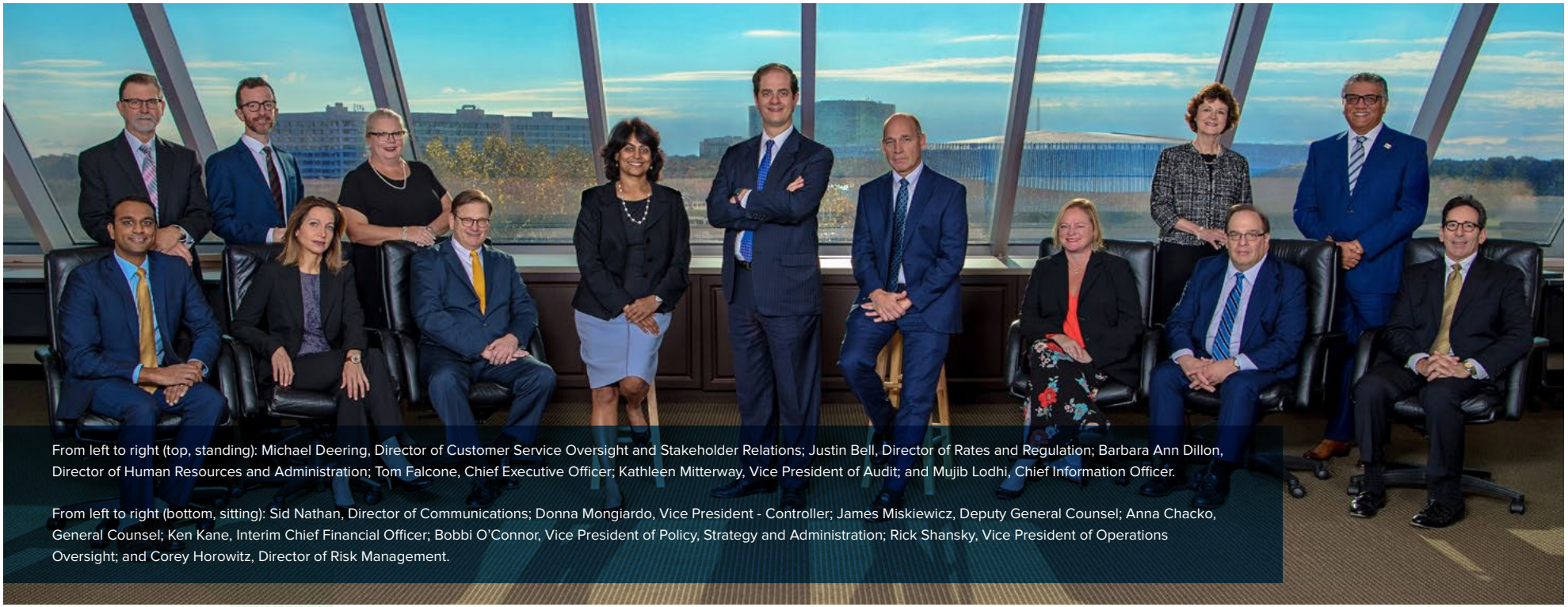
LONG ISLAND POWER AUTHORITY

POWERING LONG ISLAND'S CLEAN, RELIABLE, AND AFFORDABLE ENERGY FUTURE

LIPA
Long Island Power Authority

2019 BUDGET



From left to right (top, standing): Michael Deering, Director of Customer Service Oversight and Stakeholder Relations; Justin Bell, Director of Rates and Regulation; Barbara Ann Dillon, Director of Human Resources and Administration; Tom Falcone, Chief Executive Officer; Kathleen Mitterway, Vice President of Audit; and Mujib Lodhi, Chief Information Officer.

From left to right (bottom, sitting): Sid Nathan, Director of Communications; Donna Mongiardo, Vice President - Controller; James Miskiewicz, Deputy General Counsel; Anna Chacko, General Counsel; Ken Kane, Interim Chief Financial Officer; Bobbi O'Connor, Vice President of Policy, Strategy and Administration; Rick Shansky, Vice President of Operations Oversight; and Corey Horowitz, Director of Risk Management.

Board of Trustees

- **Ralph V. Suozzi**
  Chair, Board of Trustees
- **Mark Fischl**
  Vice Chair
  Oversight & REV
- **Elkan Abramowitz**
  Chair, Governance, Planning & Personnel
- **Sheldon L. Cohen**
  Chair, Finance & Audit
- **Drew Biondo**
  Trustee
- **Mathew C. Cordaro, Ph.D.**
  Trustee
- **Peter J. Gollon, Ph.D.**
  Trustee
- **Jeffrey H. Greenfield**
  Trustee
- **Thomas J. McAteer**
  Trustee

Executive Management

- **Tom Falcone**
  Chief Executive Officer
- **Anna Chacko**
  General Counsel
- **Kenneth Kane**
  Interim Chief Financial Officer
- **Rick Shansky**
  Vice President of Operations Oversight
- **Bobbi O'Connor**
  Vice President of Policy, Strategy, and Administration
- **Donna Mongiardo**
  Vice President, Controller
- **Kathleen Mitterway**
  Vice President of Audit
- **Mujib Lodhi**
  Chief Information Officer

LIPA
Long Island Power Authority

> CUSTOMERS
Residential:
1,008,486
Commercial:
120,950

> 2018 PEAK DEMAND
5,412 MW

> GENERATING CAPACITY
5,762 MW

> ENERGY REQUIREMENTS
20,195,715 MWh

> TRANSMISSION SYSTEM
1,360 miles

> DISTRIBUTION SYSTEM
9,000 miles overhead
5,000 miles underground
189,000 transformers

SUBSTATIONS
181 Substations
30 Transmission
151 Distribution

> 2019 BUDGET:
Operating
$3,598,846,000
Capital:
$868,829,000

Table of CONTENTS

Long Island is home to New York's three largest utility-scale solar fields. Pictured here is the Long Island Solar Farm at Brookhaven National Laboratory.

> 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.

LIPA
Long Island Power Authority

PUBLIC POWER BENEFITS LONG ISLAND

Your local public power utility is community owned and governed by a Board of Long Island residents.

LIPA is a not-for-profit electric utility that does not pay dividends to shareholders or corporate income taxes on profits. LIPA invests all of your dollars in a more reliable Long Island electric grid.

We contract with PSEG Long Island to manage our electric grid under a 12-year agreement. By using a public-private business model, we combine local control, public ownership, and a lower cost structure with the customer service and industry experience of a nationally recognized neighboring utility. In fact, Long Island's hometown electric utility is the most improved utility in the nation for residential customer satisfaction, according to J.D. Power.

Your local public power utility has access to government grants and tax-exempt financing. With Governor Andrew M. Cuomo's help, we secured the largest utility infrastructure investment in Long Island's history—a $730 million federally funded storm hardening program. From Merrick to Montauk and Bellmore to Blue Point, our investments are improving service for all 1.1 million customers.

Your local public power utility is also a powerful economic engine for Long Island. LIPA and PSEG Long Island support hundreds of local companies by purchasing over $120 million of goods and services each year from Long Island businesses. In fact, there are over 16,000 Long Island jobs connected to PSEG Long Island's presence.

We are proud of what LIPA and PSEG Long Island have accomplished together.

I wanted a change from my current job so I saved money and decided to start my own small business. PSEG Long Island's Main Street Revitalization Program helped me as a new business owner manage unexpected expenses and freed up a lot of my capital and cash flow. It was amazing to sit back at the end of my first day and say "I did it." It was really amazing."

— Mika Rose, My Home Favorites

PSEG LONG ISLAND in the COMMUNITY

There is more than one way to power the local economy. PSEG Long Island's customers are benefiting from new economic development programs that assist small businesses and revitalize downtown areas. The Main Street Revitalization Program and Vacant Space Revival Program are breathing new life into struggling business districts. Boosting the economic vitality of our downtowns is part of PSEG Long Island's core commitment to give back to the communities it serves.

There is also more than one way to invest in a community. PSEG Long Island supports charities, and actively volunteers at local community events such as the March of Dimes, Marcum Workplace Challenge, and Strides Against Breast Cancer. PSEG Long Island also provides educational programs on energy efficiency to 200 schools across Long Island and the Rockaways, reaching over 80,000 students each year.

LIPA
Long Island Power Authority

BUDGET MESSAGE

Dear Customers and Stakeholders,

LIPA and PSEG Long Island established goals for the first five years of our public-private partnership – the most important of which was to provide more value for our customers' dollars.

With 2018 coming to an end, we have completed the first five years together, and it is a good time to both reflect on what we have accomplished and to tell you what we have planned for the next five years.

Thomas Falcone
Chief Executive Officer

OUR FOCUS is on **CUSTOMER VALUE**

In last year's budget message, we described the significant components of customer satisfaction for an electric utility:

- **Power Quality and Reliability**, including investments that avoid outages and timely and accurate communications about service restoration;
- **Customer Service**, including friendly, knowledgeable employees, who can resolve customer issues the first time;
- **Corporate Citizenship**, including environmental stewardship and community involvement;
- **Reasonable Rates**, including stable electric bills and pricing options that meet diverse customer needs; and
- **Helpful Billing and Payment Processes**, including bills and websites with useful information and convenient methods to pay bills.

We also described how LIPA's Board of Trustees sets high goals for our organization based on this feedback from our customers. These goals guide our budgetary

tradeoffs between cost and service in meeting our customers' expectations. Our Board's policies are described on our website, and the actions required to meet our customers' expectations are summarized in Figure 1.

Historically, LIPA had been focused on "bread and butter" utility operations. Our past budgets prioritized system reliability, within the constraints of keeping delivery rates and debt flat. Within those constraints, there were less than adequate funds to leverage technology or enhance customer service and reliability.

Customers compare and expect the interactions they have with their electric utility to be on par with their other business interactions. We simply were not investing sufficiently to meet those expectations, let alone to be considered among the successful companies in our industry.

FIGURE 1

LIPA
Long Island Power Authority

PRICE IS WHAT YOU PAY, VALUE IS WHAT YOU GET

In 2014, we changed our focus to ensure that your needs are our priorities. I would like to summarize how LIPA and PSEG Long Island have performed since that change.

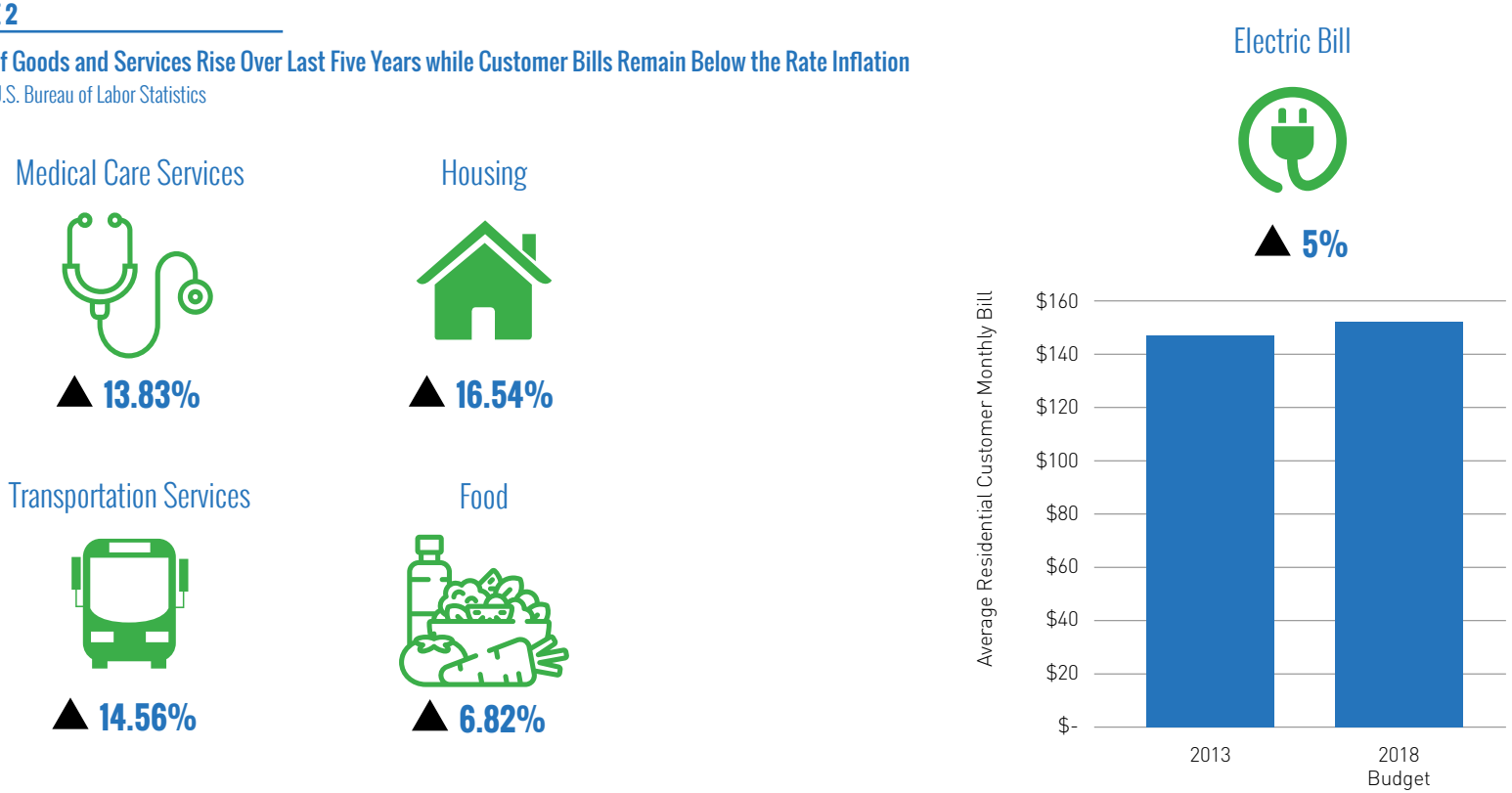
Figure 2 shows our average residential customer's electric bill in 2013 and 2018. Electric rates remain below the rate of inflation, while other goods and services steadily increase.

The average bill has increased from $151.64 per month in 2013 to $158.61 per month in 2018, a change of five percent over five years, or half the rate of inflation. Part of that is due to moderate fuel and power costs, but it is also a direct result of the savings initiatives described on page 20, which have reduced 2019 customer bills by 17 percent.

FIGURE 2

Costs of Goods and Services Rise Over Last Five Years while Customer Bills Remain Below the Rate Inflation

Source: U.S. Bureau of Labor Statistics



Long Island Power Authority

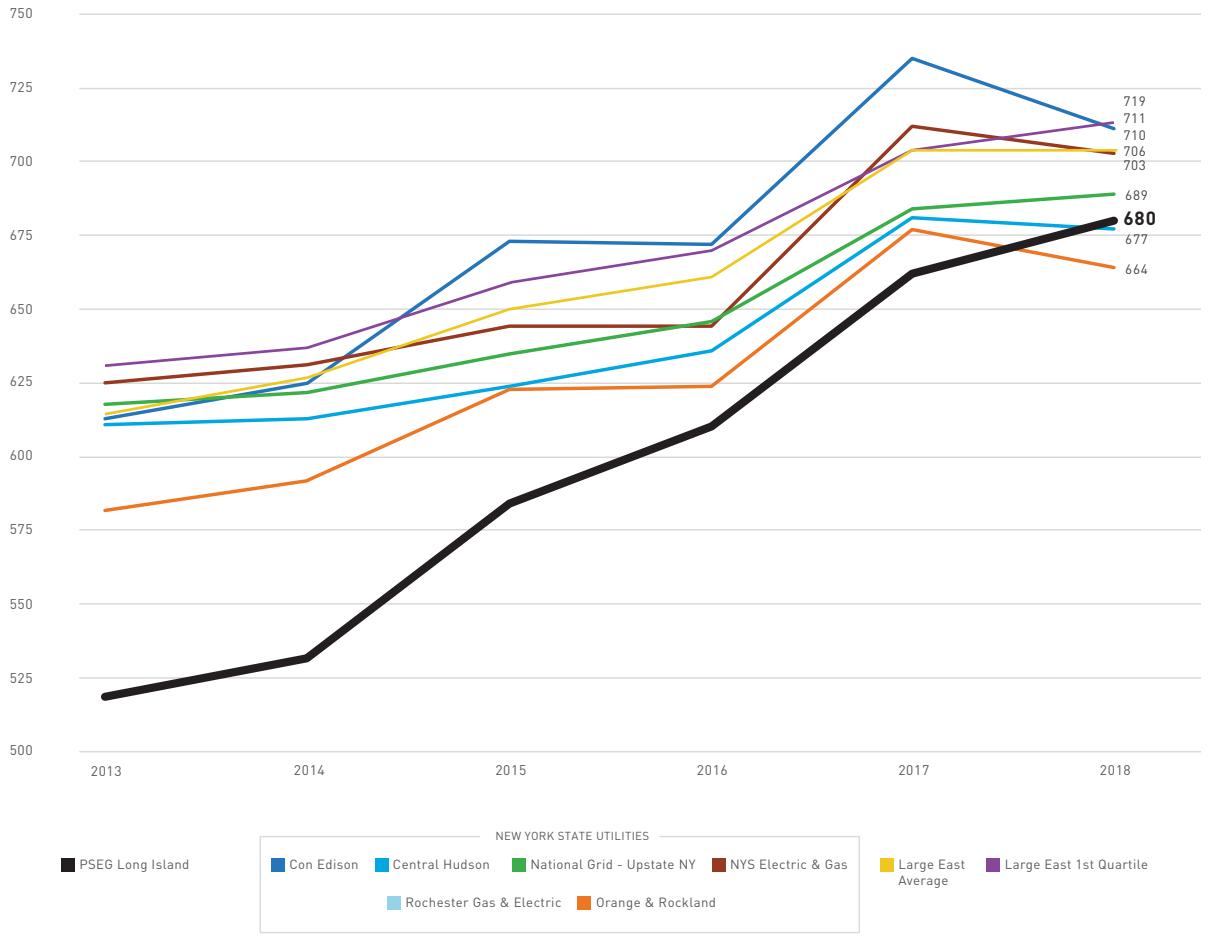
Figure 3 shows that while average bills have been roughly flat over the past five years, **customer satisfaction, as measured by the J.D. Power Residential Customer Satisfaction Study, has increased by more than 161 points**. Price is what you pay, and value is what you get. With bills roughly flat, improving customer satisfaction is the result of customers indicating they are receiving more value for their money.

How significant is this increase in customer satisfaction? LIPA was not just last in customer satisfaction among large, Northeast utilities in 2013, but last in the country -- and by a wide margin. In fact, LIPA was consistently among the lowest ranked utilities in the country for customer satisfaction since the survey began in 1999.

FIGURE 3

J.D. Power Residential Customer Satisfaction - New York State and Large East Utilities

PSEG Long Island has improved customer satisfaction by 161 points since 2013.



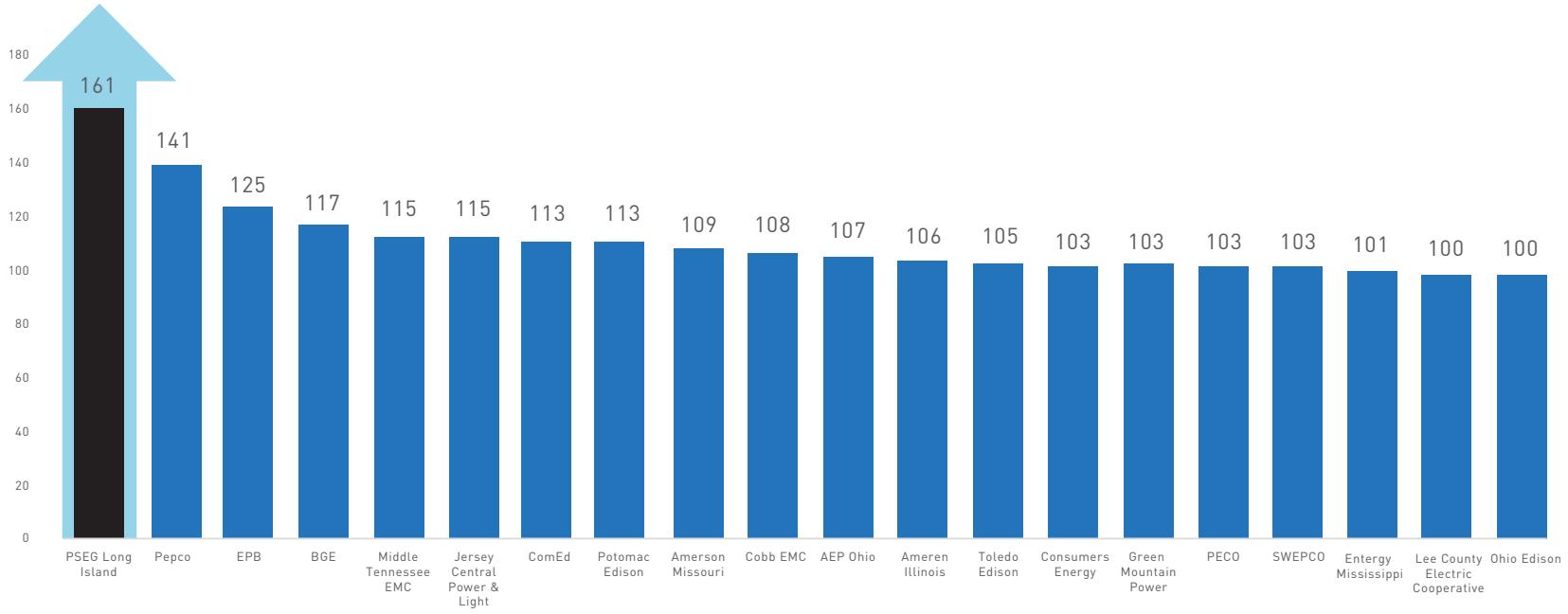
LIPA
Long Island Power Authority

As shown in Figure 4, **PSEG Long Island is now the most improved utility in the country for customer satisfaction over the past five years.** Of the 138 largest electric utilities in the United States, which collectively serve over 99 million customers, PSEG Long Island is among only 20 utilities to increase their score over 100 points.

FIGURE 4

PSEG Long Island Ranked Most Improved Utility in Nation

PSEG Long Island has improved at a rate 55 percent greater than the average rate of improvement of the other 19 most improved electric utilities in the country over the period 2013-2018; and twice the rate of improvement of the average electric utility in the nation (national average = 81).



There is always more to do, but we are providing a better product, and our customers are noticing. I will now discuss some of our major initiatives, both in the past five years and for the next five.

IMPROVING CUSTOMER SERVICE

PSEG Long Island serves customers much better than LIPA and its prior service provider did five years ago, across a broad range of metrics. In 2013, LIPA and PSEG Long Island set improvement goals for key measures of customer service. Figure 5 shows how significantly **PSEG Long Island has improved performance on customer service measures** in areas such as:

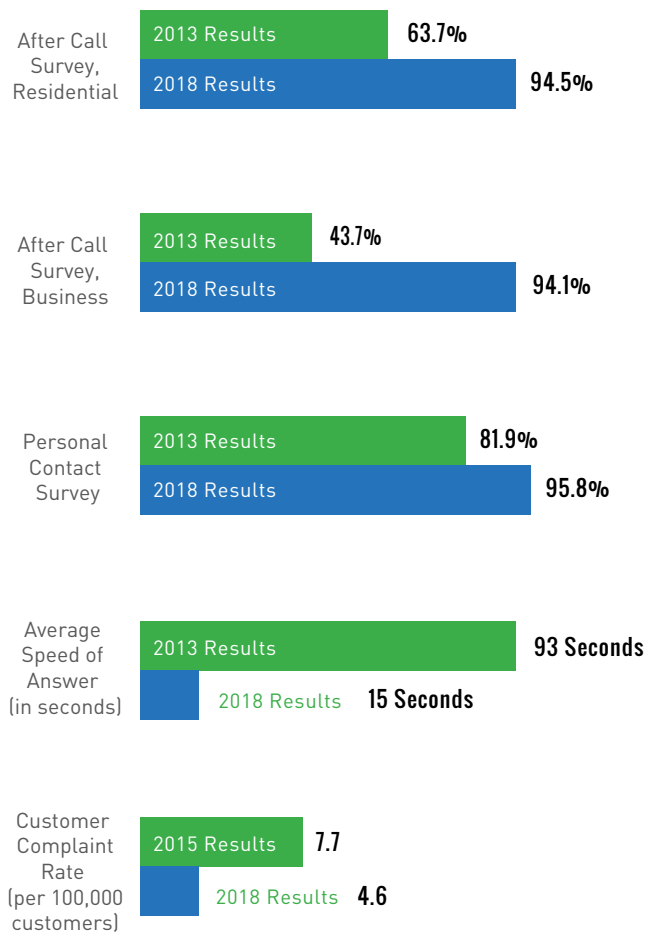
- **After-call satisfaction surveys** of residential and business customers;
- **Surveys of customer satisfaction** after a personal interaction with the utility, including at home, one of our customer offices, with one of our large account representatives, or on our energy efficiency information line; and
- **Customer complaints** filed with the New York Department of Public Service.

These improvements required changes in processes to eliminate friction points for customers, investments in information technology and customer-facing systems, and improvements in employee training programs.

The 2019 budget invests in our customer service and community involvement initiatives for the next five years.

FIGURE 5

PSEG Long Island Customer Service Improvements



LIPA
Long Island Power Authority

2019 Budget Invests In Customer Service and Community Involvement Initiatives for the Next Five Years

Customer Service

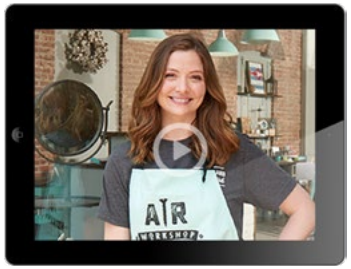
- Deploying smart meters to all customers by the end of 2022, transforming the customer experience with information and tools to manage energy usage;
- Integrating industry-leading customer relationship software to deliver a unique and personalized customer experience;
- Modernizing the customer experience, including more pro-active communication with customers about their usage and outages, new convenient payment options, and improved power quality measured at each customers' home or business;
- New electric rate pricing plans that better meet customers' lifestyles and needs, such as smart home rates, green rates, and a good neighbor rate; and
- Launching a new mobile app to enhance the customer experience through features such as outage tracking, bill payment, and outage and energy alerts.

Smart Meters will modernize the customer experience and will be fully deployed by 2022

Community Involvement

Visit YouTube @PSEGLongIsland

Vacant Space Revival Program helps small business and communities thrive



- Continued community involvement, such as PSEG Long Island's Main Street and Vacant Space Revitalization Programs to help small businesses open their doors and downtown business districts remain vibrant on Long Island and in the Rockaways; and
- Building a state-of-the-art Energy and Nature Education Center at Jones Beach State Park to encourage visitors of all ages to become good stewards of the environment and smart energy consumers.

LIPA
Long Island Power Authority

MEETING THE STATE'S AGGRESSIVE CLEAN ENERGY GOALS

Your customer owned local electric utility plays an important part in reducing emissions and meeting the clean energy needs of Long Island and the Rockaways.

New York has nation-leading clean energy policies, including:

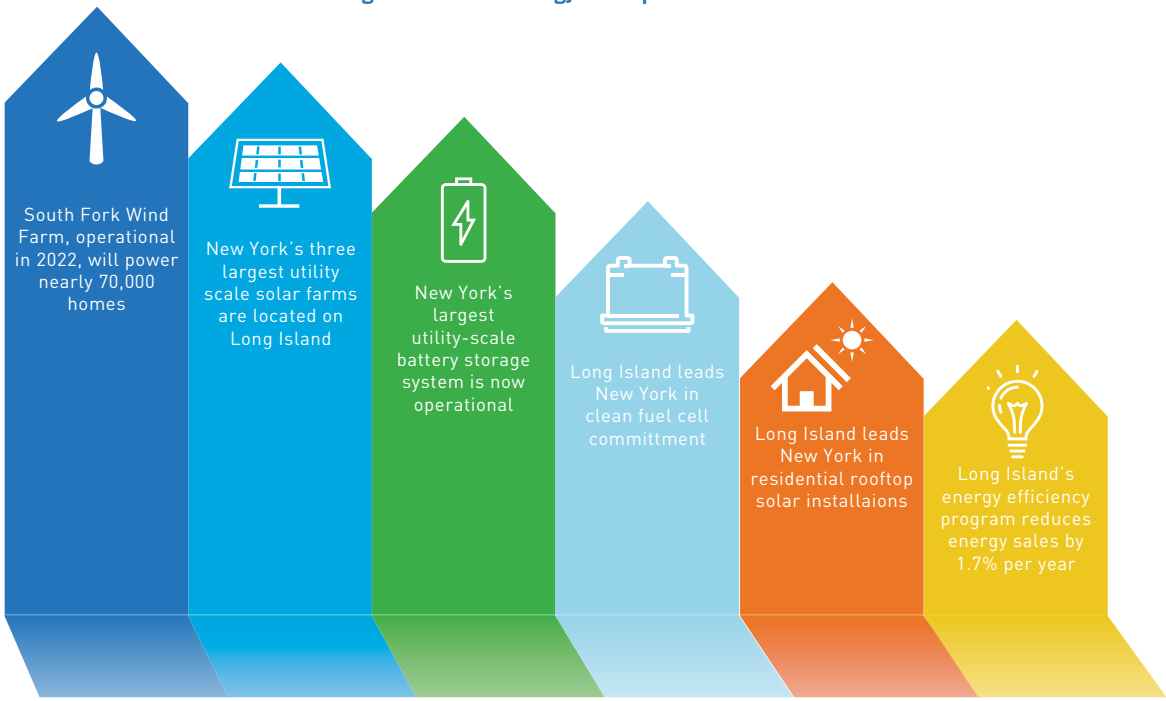
- Increasing renewables to 50 percent of New York's electricity by 2030;
- Installing 2,400 megawatts of offshore wind by 2030 – enough to power 1.25 million homes;
- Deploying 1,500 megawatts of storage by 2025; and
- Decreasing greenhouse gas emissions from all sources by 40 percent by 2030 and 80 percent by 2050.

In each area, LIPA and PSEG Long Island have been leading the way in meeting the state's goals. Figure 6 shows a few of our initiatives, including New York's:

- First offshore wind project, the 130 megawatt South Fork Wind Farm[1];
- Three largest utility-scale solar farms, totaling 92 megawatts[2];
- Largest commitment to utility scale storage, with 80 megawatt-hours deployed;
- Largest commitment to clean fuel cell technology, over 40 megawatts;
- Most vibrant residential solar program, with over 44,000 customers; and
- Largest energy efficiency program as measured by load reduction, reducing emissions and helping customer save money on their electric bills.

FIGURE 6

LIPA and PSEG Long Island's Clean Energy Accomplishments



[1] *In November 2018, LIPA upgraded the South Fork Wind Farm from 90 to 130 megawatts to take advantage of the next generation of offshore wind turbines. The project will have the same 15-turbine footprint, but the larger turbines will deliver more clean energy at a lower cost.*

[2] *Utility-scale solar programs and projects exceed 173 megawatts of operational and contracted resources and an additional 77 megawatts of selected resources.*

LIPA has invested more than $1.4 billion in energy efficiency and clean energy resources over the last ten years, reducing Long Island's energy peak by more than 585 megawatts. Our continued investment will reduce carbon emissions on Long Island by 276,359 tons in 2019 and 3,559,833 tons by 2030, the equivalent of 286,069 average Long Island homes.

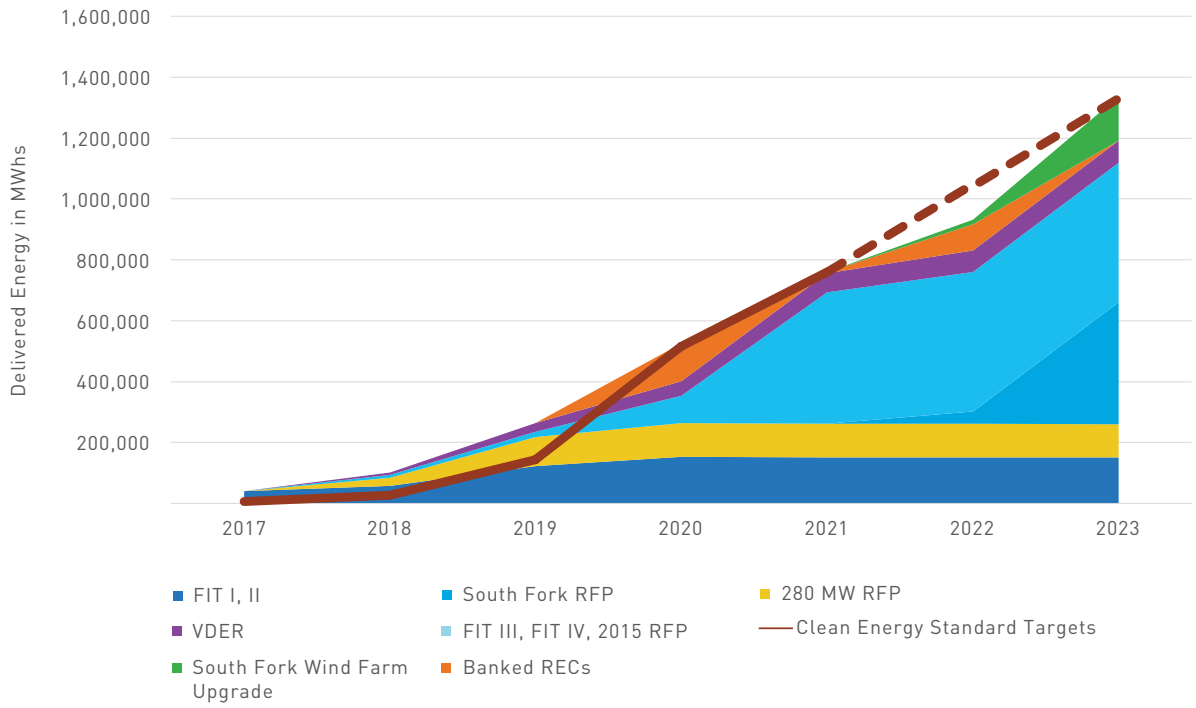
New clean energy programs for 2019 include:

- Integrating a **new utility-scale storage program** to cost-effectively defer the need to build new distribution substations, while enhancing clean energy storage capacity;
- Offering a **residential and commercial customer storage program** to provide an incentive to third-party aggregators who can use behind-the-meter storage to provide load relief to the electric grid on peak days; and
- Promoting programs to **electrify transportation**, with the introduction of residential charger rebates, a residential Smart Charging discount for customers who charge their electric vehicle off-peak, and an incentive to encourage deployment of more electric vehicle fast charging stations on Long Island.[3]

With our existing and planned programs, **LIPA and PSEG Long Island are on target to meet the state's aggressive energy efficiency and clean energy standard goals**, as shown in Figure 7.

FIGURE 7

Clean Energy Standard Resources Coming Online are Sufficient to Meet Targets Through 2023



[3] *The electric vehicle fast charging incentive program will be designed during 2019 in coordination with a state-wide initiative.*

MAINTAINING HIGH ELECTRIC SERVICE RELIABILITY

In 2013, LIPA and PSEG Long Island committed to maintaining electric grid reliability benchmarked to among the top 25 percent of peer utilities in the Northeast region. Several factors go into sustaining a reliable overhead utility, including system design, maintenance programs, and the level of capital investment. Actions taken to improve reliability can take several years to become evident to customers. To paraphrase one utility veteran, if you are sitting in the shade today, it is because someone planted a tree a long time ago.

To paraphrase one utility veteran, if you are sitting in the shade today, it is because someone planted a tree a long time ago.

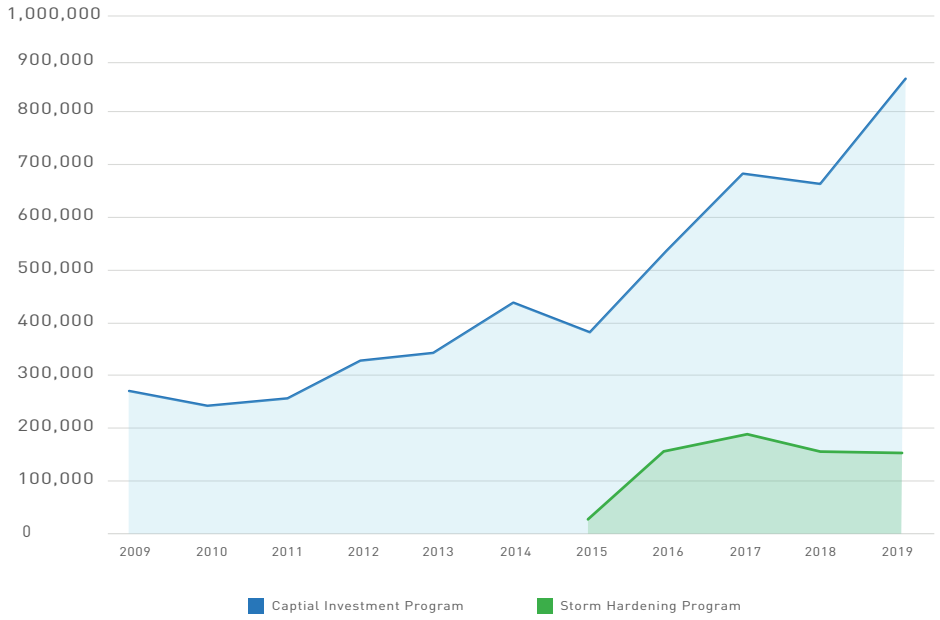
To meet our commitment to reliable electric service, LIPA and PSEG Long Island have taken several actions over the past five years, including:

- **Increasing the level of funding available to maintain the electric grid**. For example, in 2016 PSEG Long Island implemented a four-year tree trim cycle, replacing an older program with a cycle of six to seven years that left some trees untouched even longer. Pole inspection and maintenance programs were also enhanced, along with capital programs that target reliability;
- **Implementing a $730 million program to harden 1,000 miles of Long Island's electric circuits, raise ten at-risk substations above projected flood levels, and add nearly 900 new automated switches** that allow service interruptions to be isolated and minimized. Importantly, LIPA secured a federal grant to fund 90 percent of the cost of the storm hardening program – a benefit only available to publicly-owned utilities like the Authority; and
- **Establishing a standard for reliability for each customer**, to ensure that customers with worse than average electric service are prioritized in our programs to maintain and improve the electric grid.

Figure 8 illustrates the level of system investment since 2009. LIPA averaged approximately $300 million per year of capital expenditures over the five-year period from 2009 to 2013. **Since 2013, LIPA's annual spending on infrastructure has more than doubled, reaching $869 million in 2019.**

FIGURE 8

LIPA and PSEG Long Island Are Investing Record Funds in Electric Grid Reliability and Resiliency

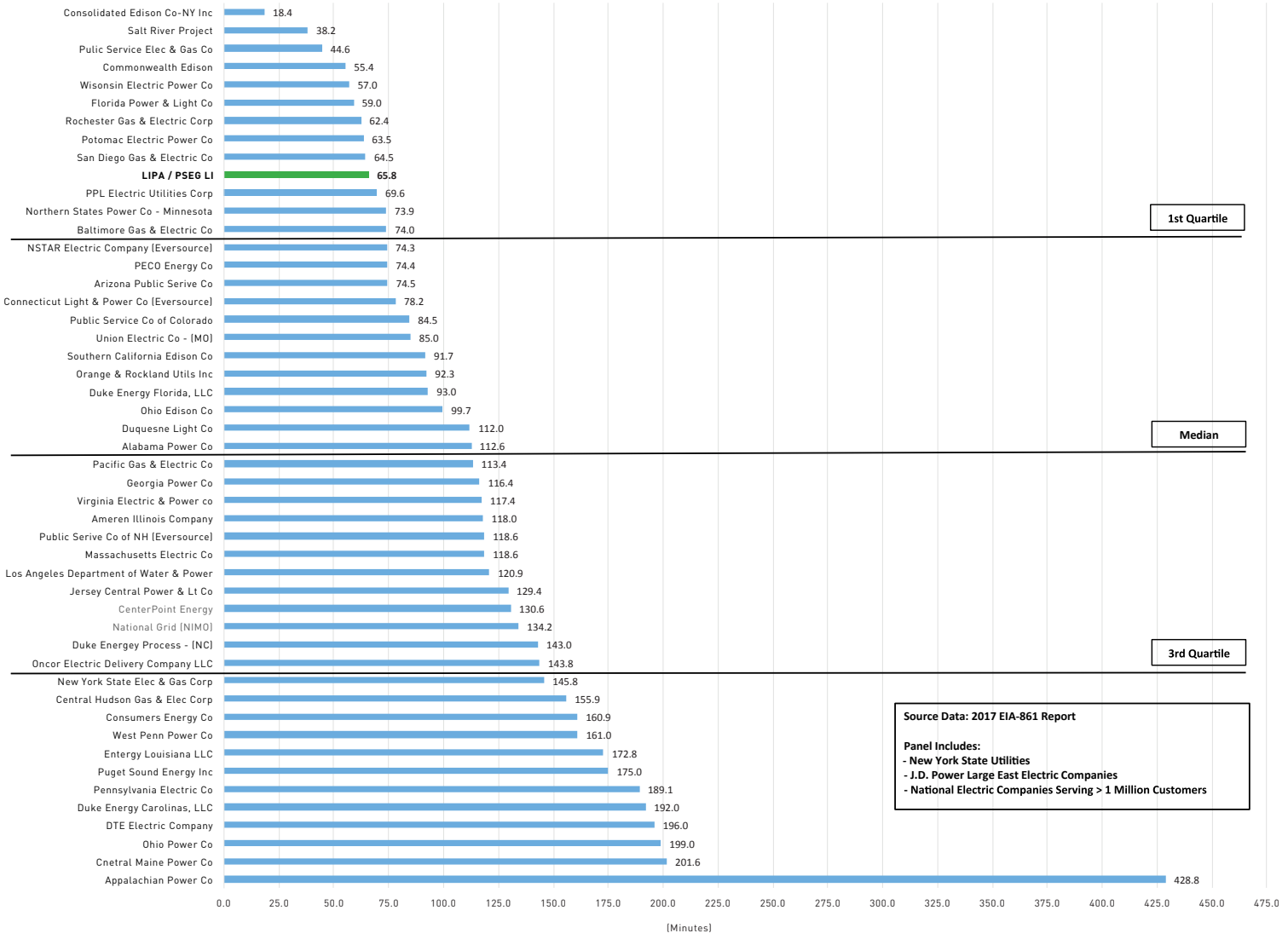


LIPA
Long Island Power Authority

More important than the level of investment is the results our customers experience. Figure 9 compares PSEG Long Island's level of day-to-day system reliability to other utilities in New York and across the country. In 2017, on average, each Long Island customer experienced less than a single electric outage (0.95 outages per year) and was without power for 65.8 minutes[4]. **These results are among the best for large utilities in the Northeast and across the country** -- equivalent to a car traveling 24-hours a day, 365 days a year, for 350,000 miles on one hour of service.

FIGURE 9

Average Number of Minutes a Customer is Without Service is Among the Top 25 Percent of Utilities

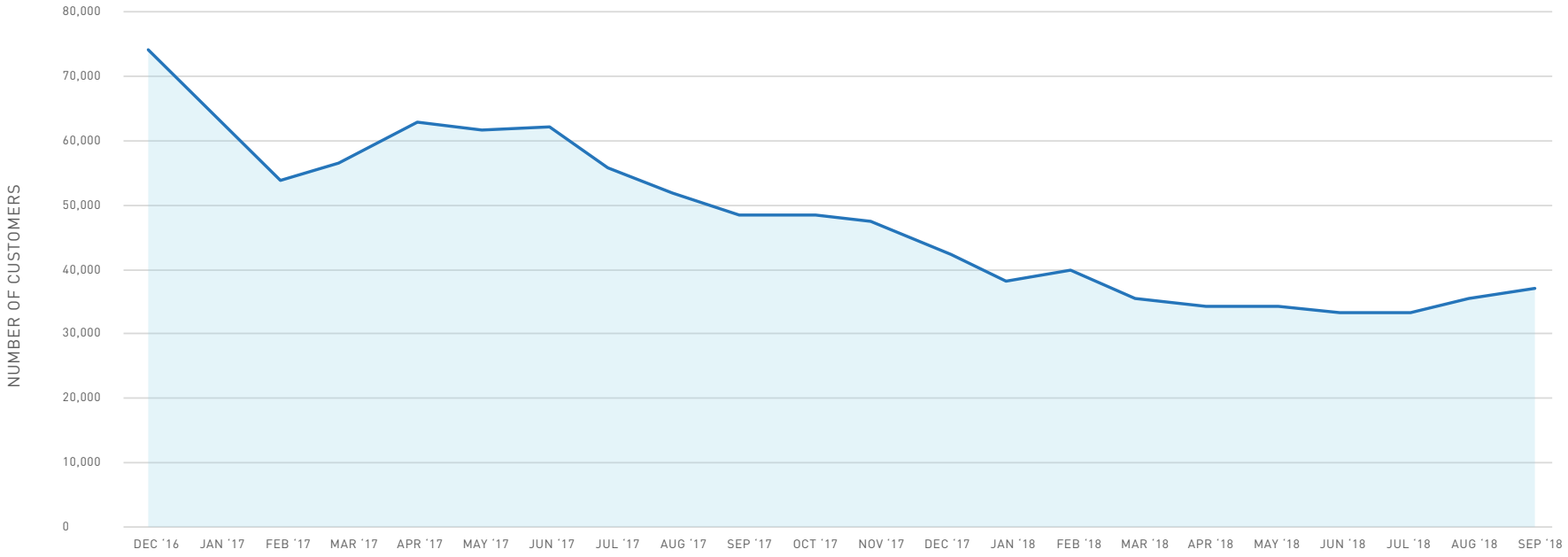


[4] *System Average Interruption Frequency Index ("SAIFI") and System Average Interruption Duration Index ("SAIDI"), respectively.*

While the average customer has favorable reliability, PSEG Long Island has also enhanced reliability for our customers with worse than average electric service. **The number of customers experiencing four or more outages in a year[5] has declined from 70,248 in 2016, to 39,018 today, a decline of 45 percent,** as shown in Figure 10. We aim to further reduce this number over the next several years.

FIGURE 10

45 Percent Fewer Customers Experience Multiple Outages in a Year



[5] *CEMI-4, which stands for Customers Experiencing More Than Four Outages of five minutes or more in the past year*

Reliability

Areas of focus for 2019 and beyond to enhance reliable service for customers include:

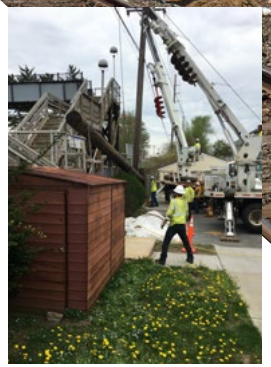
- Powering up new projects to serve famed Long Island locations such as the Nassau Hub, Sloan Kettering, Nassau County Police Academy, and Belmont Racetrack;
- Deploying Smart Wires to cost-effectively defer transmission investment by shifting power from overloaded to underutilized circuits;
- Building the Western Nassau Transmission Project to make the electric grid more resilient and reliable; and
- Upgrading the South Fork electric grid to meet growing energy demand.

Partnering with Long Island Rail Road to Enhance Service

PSEG Long Island is replacing 250 older transmission poles along the Long Island Rail Road over the next two years to improve electric grid reliability and minimize the risk of disruption to train service in bad weather.

- Babylon Branch
- Central Branch
- Far Rockaway Branch
- Mainline Branch
- Montauk Branch
- Oyster Bay Branch
- Port Jefferson Branch

Syosset



Hewlett

AFFORDABLE ELECTRIC SERVICE FOR OUR CUSTOMERS

LIPA's mission is to provide "clean, reliable and affordable electric service for our customers." **As a publicly-owned electric utility, LIPA's electric rates reflect its costs to provide service with no profit margin**. Our business model – public ownership with a private operator – reduces the cost of electric service on Long Island by 20 percent or more[6]. The LIPA Board of Trustees has established goals to maintain electric rates that are:

- At the lowest level consistent with sound fiscal and operating practices;
- Comparable, and preferably at the lower end, of other regional utilities that surround LIPA's service territory; and
- Affordable for households with low and moderate incomes.

[6] *Public ownership significantly reduces LIPA's cost of capital compared to privately-owned utilities by allowing the Authority to access the tax-exempt bond market, not pay dividends to shareholders, and eliminate corporate income tax payments embedded in private-utility electric rates. Additionally, LIPA is eligible for disaster recovery and storm hardening grants unavailable to private utilities, which reduces the cost to LIPA's customers of storm restoration in the event of severe weather events. LIPA has received more than $1.5 billion of such federal and state grants.*

EFFORTS TO MINIMIZE CUSTOMER BILLS ARE WORKING

LIPA and PSEG Long Island have taken many actions to achieve the Board's rate affordability policy. **Achieving a balance of service quality and cost requires reducing cost in areas that provide less value to customers while continuing to invest in customer service, clean energy, and reliability**. Some of our cost saving initiatives since 2013 include:

- Discontinuing investments in new combined cycle plants, as the declining cost of renewable energy will reduce the run-time and value of the plants;
- Reducing taxes paid by LIPA on behalf of its customers by defending the LIPA Reform Act's two percent per year tax cap on transmission and distribution property in court and challenging unreasonably high tax assessments[7];
- Refinancing existing debt with higher-rated "triple-A" Utility Debt Securitization Authority bonds for savings;
- Renegotiating expiring power purchase agreements for savings;
- Investing in cost-effective energy efficiency to reduce Long Island's peak generation capacity needs;
- Maintaining a flat PSEG Long Island operating budget for 2019, thereby offsetting inflation with productivity savings;
- Reducing the long-term cost of pensions and retirement benefits imbedded in LIPA's Power Supply Agreement;
- Re-negotiating gas transportation contracts;
- Obtaining LIPA's share of corporate tax savings on power purchase agreements from the recently passed federal corporate tax bill;
- Deploying distributed energy resources to defer transmission and distribution system investments in load pockets; and
- Negotiating reductions to the New York Independent System Operator's state-wide transmission costs, when such costs disproportionately benefit other regions of the state.

Figure 11 shows the impact on 2019 electric rates from each of these initiatives. **The $598 million in savings equals 17 percent of customer electric bills.** Without these initiatives, LIPA and PSEG Long Island would have been unable to fund the investments that have improved satisfaction for our customers over the last five years.

FIGURE 11

Savings in 2019 from Efforts to Manage Customer Bills :

Discontinuing investments in combined cycle plants	$342M
LIPA Reform Act's 2% Tax Cap	$100M
Refinancing existing debt	$88M
Renegotiating expiring power purchase agreements	$18.5M
Investing in cost-effective energy efficiency	$15.6M
PSEG Long Island productivity savings	$9.6M
PSA pension and retirement savings	$8M
Corporate tax savings on power purchase agreements	$6M
Reductions to gas transportation costs	$6M
Transmission and distribution investment deferrals from distributed energy resources	$3M
Reductions to New York Independent System Operator state-wide transmission costs	$1.7M
TOTAL :	**$598.4M in savings to customers in 2019**

[7] *See LIPA's Annual Report on Property Tax Reduction Efforts for more information.*

Many of these cost saving initiatives have not realized their full potential. Additionally, LIPA and PSEG Long Island have several new initiatives that will add value for our customers, including:

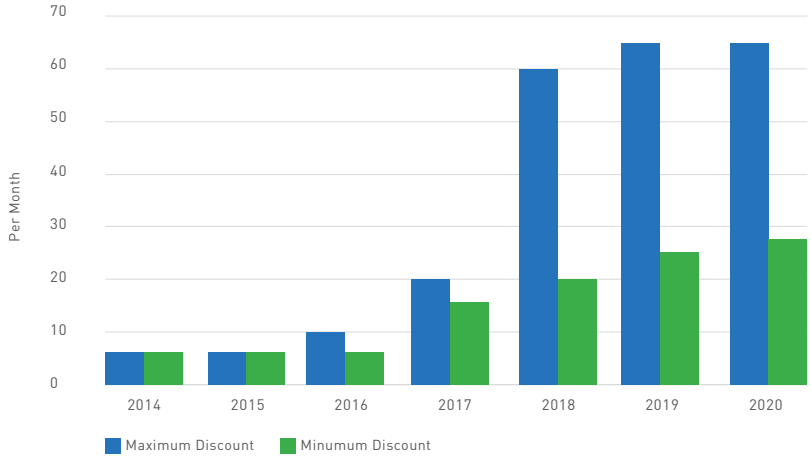
- **Using technology to reduce cost and improve service**, such as the deployment of Smart Meters, which will reduce future electric rates while providing better service to customers;
- **Encouraging cost-effective electrification of vehicles and heating**, thereby reducing Long Island's carbon footprint and spreading the fixed costs of maintaining the local electric grid over more kilowatt-hour sales; and
- **Pursuing opportunities to "pre-pay" for electric and natural gas costs**, thereby securing a discount for our fuel and purchased power costs.

PROVIDING ASSISTANCE TO LOW AND MODERATE INCOME CUSTOMERS

In addition to maintaining overall rate affordability, LIPA's Board policy on Regionally Comparable Electric Rates ensures that electric rates are affordable for our customers with low and moderate incomes. LIPA and PSEG Long Island have taken actions, consistent with New York State policy, to provide an increased level of assistance to eligible customers. **Over the past five years, discounts available to eligible customers have increased from $5 to anywhere between $25 and $65 per month**, depending on customer needs, as shown in Figure 12. When our discounts are fully phased-in for 2020, energy costs will be limited to, on average, no more than six percent of household income for low-income customers.

FIGURE 12

Increasing Low and Moderate Income Customer Discounts



LIPA
Long Island Power Authority

2019 BUDGET by the **NUMBERS**

The 2019 Budget consists of an Operating Budget of $3.599 billion and a Capital Budget of $868.8 million. The Operating Budget, shown in Figure 13, funds delivery and power supply costs, energy efficiency and distributed energy programs, taxes, and debt service. The Capital Budget, summarized in Figure 14, funds long-life infrastructure investments such as transmission, substations, poles and wires, as well as information technology, bucket trucks, and other assets.

Figure 13

2019 Operating Budget ($ thousands)

Operating Revenues	3,525,754
Grant & Other Income	73,092
Total Revenues and Income	**3,598,846**
Power Supply Costs	1,584,086
Delivery Costs	715,836
PILOTs, Taxes & Fees	536,675
Interest Payments	372,666
Debt Reduction & OPEB	389,583
Operating Budget	**3,598,846**
Fixed Obligation Coverage	
LIPA Debt Plus Leases	1.45x
LIPA & UDSA Debt Plus Leases	1.27x

Note: Operating Budget shown based on revenue requirements. Taxes on power supply have been reclassified to PILOTs, Taxes and Fees

Figure 14

2019 Capital Budget ($ thousands)

Capital Projects	715,220
Storm Hardening	153,609
Capital Budget	**868,829**
Funding from Operating Budget	190,797
FEMA Grant	138,248
Debt Issued to Fund Projects	539,784
Funding Sources	**868,829**
Percent of Capital Projects Funded from Debt	
Including FEMA Projects	62%
Excluding FEMA Projects	73%

MEETING THE BOARD'S FINANCIAL POLICY FOR 2019

LIPA's Board of Trustees established goals to measure the prudence and sustainability of our financial performance. These include:

- Achieving "mid-A" credit ratings by the end of 2020;
- Long-term borrowing of no more than 64 percent of capital spending; and
- Achieving fixed-obligation coverage of 1.45x on LIPA debt and capitalized leases[8].

As a publicly-owned utility, there are only two sources of funds for the substantial capital investments required to maintain the physical electric grid on Long Island – electric rates and debt.[9]

The aim of the Board's financial policy is to reduce the cost of providing electric service to our customer-owners over the long-term. Overborrowing and unsustainable financial policies can reduce electric rates today, at the expense of driving up future electric rates. Prudent fiscal and debt management reduces the cost our customers' pay to borrow funds and allows LIPA to appropriately spread the cost of long-life infrastructure investments over the useful life of the assets, ensuring that today's customers pay for a portion of the investment and that future customers, who will also benefit, pay an appropriate share of the cost too.

The Board's financial policy measures our fiscal prudence the way rating agencies and investors do. The importance of using the right measures as our guide is evident from the increase in our credit ratings over the last five years, as illustrated in Figure 15. This improved outlook has correspondingly reduced LIPA's borrowing cost.

FIGURE 15

LIPA Receives Credit Upgrades

These upgrades reflect rating agencies' expectations of continued improvement in our operational and financial performance.

	2013 RATING (Outlook)	2018 RATING (Outlook)
MOODY'S INVESTORS SERVICE	Baa1 (Negative)	A3 (Positive)
STANDARD AND POOR'S	A- (Negative)	A- (Positive)
FITCH RATINGS	A- (Negative)	A- (Stable)

As shown in Figures 13 and 14, the proposed 2019 Budget meets the Board's financial policy requirements. The Operating Budget achieves 1.45x fixed obligation coverage. The Capital Budget meets the Board's financial policy for borrowing, with new debt funding 62 percent of capital spending.

[8] LIPA's financial policy targets fixed obligation coverage of 1.20x, 1.30x, 1.40x, and 1.45x for 2016, 2017, 2018, and 2019, respectively. The Board also targets a minimum of 1.25x fixed obligation coverage on the combination of LIPA debt, Utility Debt Securitization Authority debt, and capitalized leases.

[9] As a public power utility, LIPA is also sometimes eligible for federal grants like those described above to fund 90 percent of our $730 million storm hardening program; however, these are limited to specific purposes and for exceptional circumstances.

CHANGES IN THE 2019 OPERATING BUDGET

Figure 16 compares the $3.53 billion 2019 Operating Budget to the $3.52 billion 2018 budget. **The Operating Budget is increasing by $4.1 million or 0.1 percent from the prior year**.

> The budget includes annual updates to actual cost -- no more and no less -- for certain costs largely outside of LIPA and PSEG Long Island's control, as in prior years. **The net effect of these adjustments is to reduce electric rates by $70.7 million**. These adjustments include:

- Debt payments, multiplied by the related debt service coverage factor, net of interest earnings on investments;
- Taxes and fees paid by LIPA;
- Realized storm costs as compared to budget, net of insurance and federal disaster grants;
- Union wages;
- Power supply and fuel costs; and
- Sales.

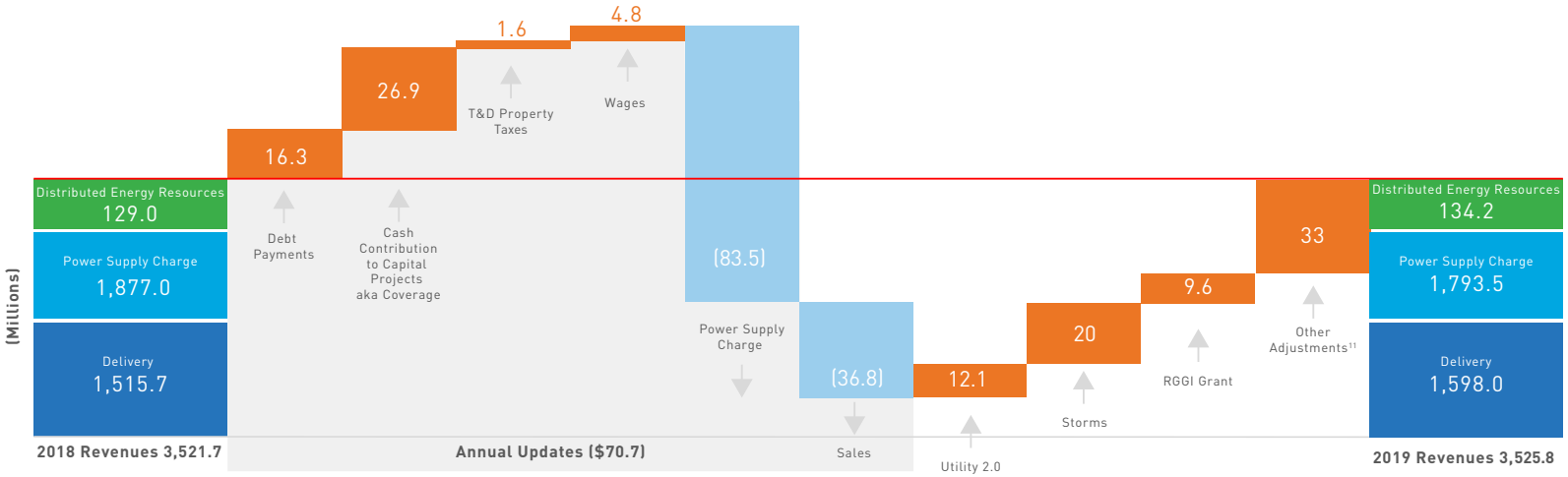
> The budget includes **$12.1 million of incremental funding for PSEG Long Island's Utility 2.0 plan**, primarily for Smart Meters. This investment will provide customer benefits starting in 2019 and will provide customer savings by reducing operating costs, thereby having a favorable impact on electric rates, starting in 2022[10];

> Two additional changes in the 2019 budget, which are described below, are:

- **A $20 million increase in the budget for storm response**, consistent with the higher level of spending LIPA has experienced over the last five years; and
- **A $9.6 million decline in grant revenue for energy efficiency and renewable energy programs**, which will be made up for by an increase in the Distributed Energy Resources Charge on customer bills.

FIGURE 16

2019 Operating Budget is Flat to 2018



[10] *See PSEG Long Island's 2018 Utility 2.0 filing for more detail.*
[11] *Represents the difference in timing between the recognition of payments from customers and actual receipt of revenue.*

Long Island Power Authority

STORM RESTORATION COSTS ARE RUNNING ABOVE BUDGET

Our customers expect timely storm and emergency response; however, the cost to restore the electric grid after a storm is volatile and largely unpredictable from year to year. Over the past five years, LIPA's annual cost for storm recovery has ranged from $30.5 million in 2014 to $112.3 million in 2016, net of insurance and federal grants for disaster recovery, as illustrated in Figure 17.

FIGURE 17

Long Island Experiencing More Severe Storms Requiring Mutual Aid

	2014	2015	2016	2017	2018
STORM SPENDING ($'000)	30,462	63,210	112,337	66,574	108,111
NUMBER OF STORMS	16	19	20	13	14
STORMS REQUIRING MUTUAL AID	-	1	5	4	6
AVERAGE COST PER STORM ($'000)	1,904	3,327	5,617	5,121	7,722

In a typical year, PSEG Long Island responds to between 13 and 20 storms. As Figure 17 shows, small differences in the severity of storms[12] from year to year can result in large differences in annual spending on storm response. LIPA attempts to minimize storm recovery costs for our customers in three ways:

> First, **we maintain prudent levels of insurance, where such coverage is available and cost-effective**. Unfortunately, insurance is either unavailable for certain portions of the electric grid or the cost is too high to be economic for our customers.

> Second, as a publicly-owned utility, **LIPA is eligible for federal disaster recovery grants that are unavailable to investor-owned utilities**. These grants are only available for the most severe of storms, such as Hurricane Irene or Superstorm Sandy, but as these storms are also the costliest to restore, this is an important protection for our customers.

> Finally, as discussed in last year's budget message, **LIPA and PSEG Long Island have undertaken several initiatives aimed at hardening the electric grid**, including a $730 million storm hardening program, 90 percent of which is funded via an agreement between Governor Cuomo and the Federal Emergency Management Agency. **Major storms will continue to cause damage to the electric grid, but a robust resiliency program reduces the damage caused by storms and speeds restoration times**.

As a customer-owned utility, the residual cost to restore the electric grid from storms is recovered from our customer-owners. There is no other source. While storm recovery spending is volatile from year to year, LIPA attempts to minimize this impact on customers by budgeting for a prudent level of storm spending each year and recovering any differences over time.

In 2015, LIPA established a "Delivery Service Adjustment" for electric rates to ensure customers pay only actual storm costs each year. Differences between budgeted and actual costs are reflected in charges or credits to customer bills in following years. This follows the practice the state's investor-owned utilities use to track and recover prudently incurred storm costs.

The 2019 budget increases the storm budget from $34.9 million to $54.9 million, based on recent levels of spending. **If the levels of the last five years represent what we should expect for the future, we believe it is prudent to budget more for storms.**

[12] *The severity of storms is illustrated in Figure 17 by the number storms that require mutual aid from other utilities.*

RECORD FUNDING FOR DISTRIBUTED ENERGY RESOURCES AND CLEAN ENERGY PROGRAMS

LIPA and PSEG Long Island are leading the way on New York's aggressive climate goals and this year's budget includes a record level of funding. Our distributed and clean energy programs are funded from three sources:

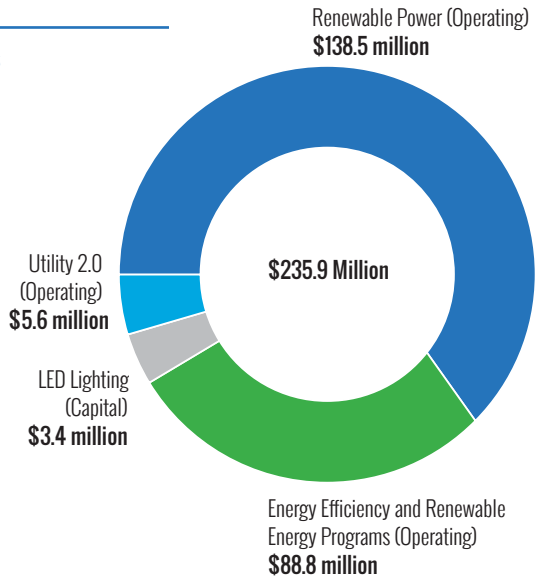
- Purchases of renewable and zero carbon energy are funded by customers as part of the Power Supply Charge, which is set each month based on LIPA's actual cost, similar to other New York utilities;
- Rebates and the costs to run energy efficiency and renewable energy programs, less any grants received for these programs, are funded from the Distributed Energy Resources ("DER") Charge on customer bills, which is similar to the System Benefits Charge on the bills of the state's investor-owned utilities; and
- Capital investments in long-life infrastructure owned by LIPA that result in greater system efficiency are funded in the Capital Budget, resulting in debt repaid over the useful life of the investments, matching the benefits and the costs for our customers.

The 2019 budget continues our investments in distributed and clean energy programs with a record level of resources, as shown in Figure 18.

Funding for LIPA's distributed and clean energy programs is primarily from our customers; however, a portion is funded from grants received from the Regional Greenhouse Gas Initiative ("RGGI").

FIGURE 18

Distributed Energy Resources and Clean Energy Programs



RGGI is a cooperative effort among nine states – New York, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, Rhode Island, and Vermont – to reduce greenhouse gas emissions. LIPA buys CO2 allowances as part of its purchased power expense. A portion of these RGGI funds are returned to LIPA to fund energy efficiency and renewable energy programs on Long Island.

RGGI grant funding will decline by $9.6 million from 2018 levels to $25 million. This decline will increase the portion of such programs funded by customers through the DER Charge.

CHANGES IN THE 2019 CAPITAL BUDGET

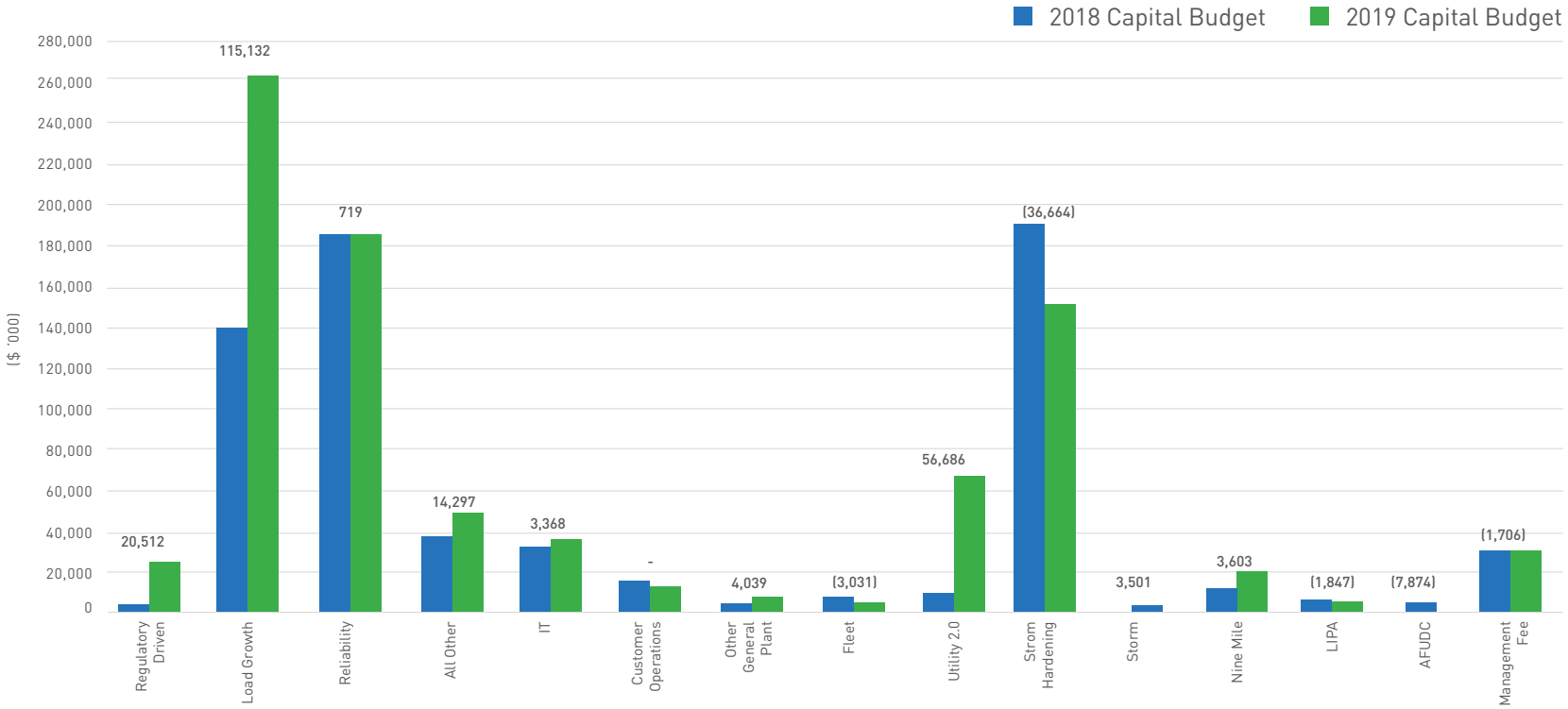
Figure 19 shows the $869 million 2019 Capital Budget as compared to the $698 million 2018 budget. **The Capital Budget is increasing by $171 million from the prior year.** Significant funding increases include**:**

- **$115 million for load growth**, with new projects such as the Nassau Hub and Belmont Racetrack, and upgrading the infrastructure on the South Fork;
- **$57 million for Utility 2.0 projects**, including replacing all conventional meters with smart meters over four years; and
- **$21 million for regulatory driven projects**, such as the Western Nassau Transmission Project, which is required to meet new reliability standards.

The 2019 Capital Budget also includes $154 million towards the $730 million FEMA-funded storm hardening program. **The 2019 hardening program will rebuild 235 miles of distribution circuits with stronger wire and poles and install 75 smart switches to minimize outages on the electric grid**.

FIGURE 19

$869 Million 2019 Capital Budget Is Up $171 Million Compared to 2018



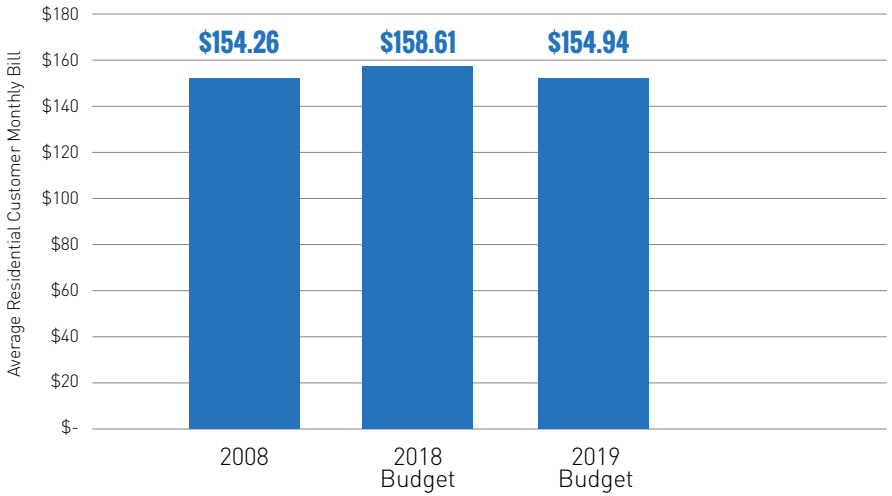
Long Island Power Authority

ELECTRIC BILLS FOR 2019

The impact of the 2019 Operating and Capital Budget can be shown in terms of residential customer bills. **Electric bills are forecast to decline by $3.67 per month in 2019, or roughly two percent from their 2018 budgeted level**. Electric bills for an average residential customer have remained roughly flat for over a decade, increasing 0.4 percent since 2008, while inflation is up 21 percent over this period, as shown in Figure 20.

FIGURE 20

Customers' Electric Bills are Flat Over Last 10 Years



CONCLUSION

It is a privilege to work with the LIPA Board of Trustees and the employees of LIPA and PSEG Long Island to fulfill our mission of providing a clean, reliable and affordable utility for our customer-owners on Long Island and in the Rockaways.

The 2019 Budget funds our customers' priorities while holding the line on other spending and reducing electric bills for our customers. This favorable result reflects the cumulative effect of decisions made over the last several years. While we have more to do, our results since 2013 and our plans for the next several years show we are headed in the right direction.

Thomas Falcone
Chief Executive Officer

December 19, 2018

This Page Intentionally Left Blank

LONG ISLAND POWER AUTHORITY
2019 BUDGET

SECTION II

Long Island Power Authority

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Revenue Requirements
(Thousands of Dollars)

Description	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year	Ref.
PSEG Long Island Operating and Managed Expenses	$ 607,590	$ 668,076	$ 637,650	$ 30,060	$ 649,882	$ 12,232	10
PSEG Long Island OPEB Expense	40,669	49,284	43,955	3,286	44,934	979	31
PILOTs - Revenue-Based Taxes	33,127	34,157	34,321	1,194	36,028	1,707	6
PILOTs - Property-Based Taxes	289,280	287,481	292,861	3,581	298,718	5,857	14
LIPA Operating Expenses	77,012	78,080	83,619	6,607	85,290	1,671	33
Total Operating & Deferred Expenses	**1,047,678**	**1,117,078**	**1,092,406**	**44,728**	**1,114,853**	**22,447**	
PSEG Long Island OPEB Expense	(40,669)	(49,284)	(43,955)	(3,286)	(44,934)	(979)	31
Suffolk Property Tax Settlement	(21,714)	(23,148)	(24,041)	(2,327)	(26,630)	(2,589)	6 & 16
Visual Benefits Assessment	(428)	(499)	(414)	14	(436)	(22)	6 & 16
Less Non-Cash Items	**(62,810)**	**(72,930)**	**(68,410)**	**(5,600)**	**(72,001)**	**(3,589)**	
Other Interest Costs	26,487	24,790	19,022	(7,464)	19,043	21	20
Plus Cash Expenditures	**26,487**	**24,790**	**19,022**	**(7,464)**	**19,043**	**21**	
Less Other Income and Deductions	**(40,258)**	**(47,765)**	**(44,242)**	**(3,983)**	**(43,334)**	**908**	16
Less Grant Income	**(38,429)**	**(38,450)**	**(28,850)**	**9,579**	**(28,688)**	**162**	18
Total Cash Needed to Fund Operations	**932,667**	**982,722**	**969,926**	**37,259**	**989,874**	**19,947**	
LIPA Debt Service	192,978	198,570	216,803	23,824	270,486	53,683	22
UDSA Debt Service	324,728	324,728	327,140	2,412	319,030	(8,110)	22
Fixed Obligation Coverage	194,340	203,405	218,306	23,965	239,369	21,064	22
Debt Service	**712,047**	**726,703**	**762,248**	**50,201**	**828,885**	**66,637**	
Power Supply Charge	**1,876,980**	**1,886,451**	**1,793,456**	**(83,524)**	**1,751,999**	**(41,457)**	8
Total Revenue Requirements	**$ 3,521,694**	**$ 3,595,876**	**$ 3,525,630**	**$ 3,936**	**$ 3,570,758**	**$ 45,127**	6

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Revenue Requirements

The Authority's annual revenue requirements are budgeted to remain essentially flat from 2018 to 2019 at $3.5 billion. Increases in property tax assessments, storm restoration costs, and debt service, including fixed obligation coverage are offset by decreases in the Power Supply Charge and other items. These costs are further detailed on the following pages herein.

Beginning in 2016, the Authority's revenue requirements have been 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 set forth on page 2, the Authority's methodology for calculating revenue requirements and fixed obligation coverage excludes certain specified non-cash items. These exclusions reflect the non-cash portion of costs amortized to expense, such as depreciation and amortization (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.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Statements of Revenues and Expenses
(Thousands of Dollars)

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year	Ref.
Revenues		**$ 3,481,613**	**$ 3,521,694**	**$ 3,595,876**	**$ 3,525,630**	**$ 3,936**	**$ 3,570,758**	**$ 45,127**	6
Power Supply Charge		1,842,587	1,876,980	1,886,451	1,793,456	(83,524)	1,751,999	(41,457)	8
Revenue Net of Power Supply Charge		**1,639,026**	**1,644,714**	**1,709,425**	**1,732,174**	**87,460**	**1,818,759**	**86,585**	
PSEG Long Island Operating and Managed Expenses									
PSEG Long Island Operating Expenses	(a)	511,547	536,312	533,709	550,564	14,252	550,533	(31)	31
PSEG Long Island OPEB Expense		41,080	40,669	49,284	43,955	3,286	44,934	979	31
PSEG Long Island Managed Expenses		99,408	65,842	134,367	87,086	21,244	99,349	12,263	10
Utility Depreciation		165,884	189,410	179,024	201,340	11,930	232,682	31,343	12
Accelerated Depreciation of Conventional Meters		-	7,679	8,738	24,778	17,099	23,696	(1,082)	12
PILOTs - Revenue-Based Taxes		31,765	33,127	34,157	34,321	1,194	36,028	1,707	6
PILOTs - Property-Based Taxes		282,833	289,280	287,481	292,861	3,581	298,718	5,857	14
LIPA Operating Expenses		93,333	77,012	78,080	83,619	6,607	85,290	1,671	33
LIPA Deferred Amortized Expenses		31,015	31,015	31,015	25,015	(6,000)	25,015	-	12
LIPA Depreciation and Amortization		111,857	111,801	111,973	112,687	886	113,693	1,007	12
Interest Expense		336,071	343,505	348,559	358,693	15,189	357,147	(1,546)	20
Total Expenses		**1,704,793**	**1,725,651**	**1,796,387**	**1,814,918**	**89,267**	**1,867,087**	**52,168**	
Other Income and Deductions		**43,638**	**40,258**	**47,765**	**44,242**	**3,983**	**43,334**	**(908)**	16
Grant Income		**39,251**	**41,778**	**41,318**	**34,078**	**(7,700)**	**39,191**	**5,113**	18
Excess of Revenues Over Expenses	(a)	**$ 17,122**	**$ 1,100**	**$ 2,122**	**$ (4,424)**	**$ (5,524)**	**$ 34,197**	**$ 38,622**	

Note: (a) PSEG Long Island 2018 Approved Operating Expenses have been reduced by $0.7 million due to carryover of O&M funding for the Utility 2.0 Super Saver program from 2018 to 2019. Thus, increasing the 2018 Approved Excess of Revenues Over Expenses from $0.4 million to $1.1 million.

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Statement of Revenues and Expenses

The Authority's projection of Revenues and Expenses uses the accrual basis of accounting, which results in a net loss of ($4.4) million in 2019 and $34.2 million of net income in 2020. Further information on the components of Revenues and Expenses are included on supplemental pages herein.

The factors contributing to the projection of net loss is the amortization of certain non-cash regulatory assets to expense, including non-cash employee benefits (OPEBs) for PSEG Long Island (page 31) and other deferred expenses (page 33). In addition, this includes an increase in depreciation associated with the early retirement of conventional meters as they are replaced by smart meters.

As shown on page 22, despite these "book" net losses, the Authority is forecasting to achieve higher levels of fixed obligation coverage and an increase in the amount of cash flow available to fund its capital program in lieu of debt financing. This is consistent with the Authority's financial goals to improve its credit ratings and reduce reliance on debt funding of its capital plan over five years.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Sales and Revenues

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
Sales of Electricity (MWh)								
Residential Sales		9,088,624	9,239,265	9,431,855	8,888,795	(350,470)	8,696,999	(191,796)
Commercial Sales		9,401,246	9,625,647	9,544,368	9,463,652	(161,996)	9,514,616	50,964
Other Sales to Public Authorities/Street Lighting		557,344	533,528	547,524	537,992	4,464	538,316	324
Total Sales of Electricity (MWh)		**19,047,214**	**19,398,440**	**19,523,747**	**18,890,438**	**(508,002)**	**18,749,930**	**(140,508)**
Revenues by Sector (Thousands of Dollars)								
Residential		$ 1,821,582	$ 1,893,044	$ 1,966,730	$ 1,863,586	$ (29,458)	$ 1,888,485	$ 24,899
Commercial		1,471,332	1,500,458	1,480,635	1,517,399	16,941	1,566,141	48,742
Other Public Authorities/Street Lighting		68,404	73,723	68,907	65,881	(7,842)	65,788	(93)
ESCO Revenue		93,708	105,383	98,684	95,691	(9,692)	93,905	(1,785)
Power Supply Charge Deferral		(15,606)	-	18,894	-	-	-	-
Other Regulatory Amortizations and Deferrals		11,912	(80,100)	(64,515)	(45,650)	34,450	(72,285)	(26,635)
Miscellaneous Revenues		30,281	29,186	26,541	28,724	(462)	28,724	-
Total Revenues		**$ 3,481,613**	**$ 3,521,694**	**$ 3,595,876**	**$ 3,525,630**	**$ 3,936**	**$ 3,570,758**	**$ 45,127**
Revenues by Component (Thousands of Dollars)								
Delivery Charge (RDM Target)		$ 1,124,970	$ 1,226,328	$ 1,198,288	$ 1,305,096	$ 78,768	$ 1,378,921	$ 73,825
Power Supply Charge		1,858,193	1,876,980	1,867,557	1,793,456	(83,524)	1,751,999	(41,457)
T&D Property Tax	(a)	282,833	289,280	287,481	292,861	3,581	298,718	5,857
Energy Efficiency and Renewable Energy (DER)		52,244	56,178	57,525	63,617	7,439	66,726	3,109
New York State Assessment		10,859	10,510	9,858	9,453	(1,057)	9,642	189
Suffolk Property Tax Settlement		44,853	45,274	46,708	46,233	959	47,336	1,103
Visual Benefits Assessment (VBA)		961	948	1,019	909	(39)	901	(7)
Revenue Related PILOTS		31,765	33,127	34,157	34,321	1,194	36,028	1,707
RDM Collection/(Refund)	(b)	59,958	3,963	83,589	(32,873)	(36,836)	-	32,873
DSA Collection/(Refund)		(11,609)	29,915	28,773	31,380	1,465	24,048	(7,332)
T&D Property Tax Collection/(Refund)		-	106	-	(1,897)	(2,003)	-	1,897
Power Supply Charge Deferral		(15,606)	-	18,894	-	-	-	-
Other Regulatory Amortizations and Deferrals		11,912	(80,100)	(64,515)	(45,650)	34,450	(72,285)	(26,635)
Miscellaneous Revenues		30,281	29,186	26,541	28,724	(462)	28,724	-
Total Revenues		**$ 3,481,613**	**$ 3,521,694**	**$ 3,595,876**	**$ 3,525,630**	**$ 3,936**	**$ 3,570,758**	**$ 45,127**

Note: (a) T&D Property Tax is a component of Delivery Charge.

(b) The projected 2018 RDM collection totaling $83.6 million reflects (i) the 2017 uncollected delivery revenue totaling $14.8 million plus (ii) the projected 2018 delivery revenue shortfall. The 2019 RDM refund totaling $32.9 million reflects the 2018 estimated overcollection of delivery revenue to be refunded to customers in 2019.

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

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 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 customers. Additionally, the Authority recovers costs associated with purchasing and producing electric energy (fuel and purchased power) through the Power Supply Charge. The Authority also 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 average annual 1.7% decline in sales through 2020, 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 being higher/lower than budgeted will be returned/recovered through the Revenue Decoupling Mechanism (RDM). The sales forecast assumes historically average weather conditions over the period.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Power Supply Charge
(Thousands of Dollars)

Description	2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
Capacity							
Capacity Charges	$ 376,354	$ 401,805	$ 408,175	$ 395,312	$ (6,494)	$ 377,544	$ (17,767)
National Grid (PSA)	266,657	263,864	240,630	253,561	(10,303)	260,652	7,090
Total Capacity	**643,012**	**665,669**	**648,805**	**648,873**	**(16,796)**	**638,196**	**(10,677)**
Purchased Power							
Purchased Power	391,241	367,021	364,559	361,293	(5,728)	344,242	(17,051)
Total Purchased Power	**391,241**	**367,021**	**364,559**	**361,293**	**(5,728)**	**344,242**	**(17,051)**
Commodity							
Natural Gas	275,041	262,475	293,929	211,166	(51,310)	204,725	(6,441)
Fuel Oil	29,320	49,614	71,155	39,572	(10,042)	33,823	(5,749)
Total Commodity	**304,362**	**312,089**	**365,084**	**250,738**	**(61,352)**	**238,548**	**(12,190)**
Renewables							
Renewable Power	136,205	135,007	122,484	138,453	3,446	137,247	(1,207)
Total Renewables	**136,205**	**135,007**	**122,484**	**138,453**	**3,446**	**137,247**	**(1,207)**
Other							
Transmission	38,980	42,902	38,473	37,245	(5,658)	37,301	56
Nine Mile Nuclear Fuel	41,085	43,346	44,028	45,006	1,660	44,472	(534)
Regional Greenhouse Gas Initiative (RGGI)	12,342	20,698	15,810	18,348	(2,350)	19,419	1,072
Zero Emissions Credits	32,921	45,862	45,329	50,014	4,152	51,398	1,384
Fuel and Power Supply Management Services	19,301	19,924	19,605	19,724	(200)	20,085	361
Other	12,027	12,711	14,772	14,393	1,682	7,920	(6,472)
Total Other	**156,656**	**185,443**	**178,017**	**184,729**	**(713)**	**180,596**	**(4,134)**
Pass Through Property Taxes							
National Grid (PSA)	195,633	196,016	193,990	198,653	2,637	202,302	3,649
Fast Track Units	11,435	11,725	9,156	6,725	(5,000)	6,837	112
Nine Mile	4,044	4,010	4,355	3,992	(18)	4,032	40
Total Pass Through Property Taxes	**211,112**	**211,751**	**207,501**	**209,370**	**(2,381)**	**213,171**	**3,801**
Total Power Supply Charge	**$ 1,842,587**	**$ 1,876,980**	**$ 1,886,451**	**$ 1,793,456**	**$ (83,524)**	**$ 1,751,999**	**$ (41,457)**

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Power Supply Charge

Power Supply Charges are budgeted at $1.8 billion for 2019, a decrease of $83.5 million compared to 2018. An additional $41.5 million decrease is projected for 2020. The largest driver of the decrease is lower projected energy sales and commodity prices, including the impact of the Authority's hedge positions, which reduces the cost of Long Island generated energy and the cost of purchased power. See Table 1 below for a summary of the primary drivers of the decline.

Power supply costs projections are prepared utilizing a generation economic dispatch model that considers, among other variables, the availability and thermal efficiency of generating resources, delivered fuel prices, and environmental regulatory requirements.

In addition to the commodity costs consumed in generation and purchased power, power supply costs include the cost of emission allowances, generation and transmission cable capacity, 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, Zero Emission Credits associated with the adoption by the New York State Public Service Commission of the Clean Energy Standard, services received under energy, power and fuel management agreements, fuel hedging program costs, energy from renewable resources as well as the Authority's 18% share of the operation and maintenance expenses related to the Nine Mile Point 2 nuclear generating station, the National Grid Power Supply Agreement, and certain PILOTs.

Table 1: 2019 vs. 2018 Change in Costs

Description	Net Change	Cause
Capacity	($16.8M)	Lower contract pricing and a decrease in PSA OPEB & Pension expense; partially offset by expiration of the Empire Zone tax refund for Caithness I.
Purchased Power	($5.7M)	Lower projected natural gas prices.
Commodity (gas & oil)	($61.4M)	Lower projected energy sales and gas prices and a projected gain in financial settlements from hedging. Reduction in residual oil use based upon updated historical data. Reduction in gas transportation costs.
Renewables	$3.4M	Expected installation of additional solar projects.
Other	($0.7M)	Reduction in emissions costs and updated charges for the Y49 cable and ZEC payments.
Pass Through Property Taxes	($2.4M)	Taxes associated with the Brentwood and Shoreham PPAs are now borne by the facilities' owners.
Total	($83.5M)	

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Operating Expenses
(Thousands of Dollars)

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
PSEG Long Island Operating Expenses	(a)	$ 552,627	$ 576,981	$ 582,993	$ 594,519	$ 17,538	$ 595,468	$ 949
Capital Lease Offsets	(b)	-	(5,436)	-	-	5,436	-	-
PSEG Long Island Managed Expenses								
Uncollectible Accounts		18,960	22,923	15,971	19,867	(3,056)	20,104	237
Storm Restoration		66,574	34,854	108,111	54,854	20,000	66,472	11,618
NYS Assessment		10,859	10,510	9,858	9,453	(1,057)	9,642	189
Accretion of Asset Retirement Obligation		2,638	2,831	134	2,750	(81)	2,969	219
Miscellaneous		376	160	293	162	2	162	-
Total PSEG Long Island Managed Expenses		**99,408**	**65,842**	**134,367**	**87,086**	**21,244**	**99,349**	**12,263**
Total PSEG Long Island Operating and Managed Expenses		**652,035**	**642,823**	**717,359**	**681,605**	**38,782**	**694,817**	**13,212**
LIPA Operating Expenses								
Management Fee (including incentive)		72,565	74,604	74,102	75,584	980	77,095	1,511
Capitalized Management Fee	(c)	(9,748)	(30,632)	(26,794)	(28,926)	1,706	(29,504)	(578)
LIPA Operating Costs		30,516	33,040	30,773	36,961	3,921	37,699	738
LIPA Operating Expenses		**93,333**	**77,012**	**78,080**	**83,619**	**6,607**	**85,290**	**1,671**
PSEG Long Island & LIPA Total Operating Expenses		$ 745,368	$ 719,835	$ 795,439	$ 765,224	$ 45,389	$ 780,107	$ 14,883

Note: (a) PSEG Long Island 2018 Approved Operating Expenses have been reduced by $0.7 million due to carryover of O&M funding for the Utility 2.0 Super Saver program from 2018 to 2019.
(b) Due to the immaterial nature of this item, reclassing vehicle lease expense from PSEG Long Island's operating expenses is no longer required.
(c) Effective in 2018, a new methodology based on the PSEG Long Island company labor allocation was adopted for determination of the Capitalized Management Fee. As a result the portion of the management fee allocated to capital increased from ($9.7M) in 2017 to ($30.6M) in 2018.

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Operating Expenses

Total Operating Expenses are budgeted at $765.2 million in 2019 and projected at $780.1 million in 2020.

Operating Expenses are comprised of costs associated with operating and maintaining the Authority's Transmission and Distribution system consisting of three major expense categories:

(i) PSEG Long Island Operating Expenses (expenses which PSEG Long Island must remain within 102% of budget to earn incentive compensation);

(ii) PSEG Long Island Managed Expenses (expenses which PSEG Long Island manages but are substantially outside of the control of PSEG Long Island); and

(iii) LIPA's Operating Expenses

PSEG Long Island Operating Expenses include costs related to the following major areas: Transmission and Distribution, Customer Services, Business 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 and energy reductions as well as customer-based solar and wind distributed generation, among other things. PSEG Long Island Operating Expenses for 2019 and 2020 include additional costs related to the Utility 2.0 Plan. These costs are associated with projects aimed at integrating smart meters and Distributed Energy Resources (DER) in the Authority's electric grid.

PSEG Long Island Managed Expenses include costs related to New York State assessments, uncollectible accounts, and storm preparation and restoration. The budget for storm preparation and restoration costs is increasing to $54.9 million for 2019 and $66.5 million for 2020. The budget phases in a historical three-year average level of spending on storm restoration.

LIPA Operating Expenses includes the PSEG Long Island management fee and costs related to the Authority staff and outside professional services, as detailed on page 33.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Depreciation and Amortization Expenses
(Thousands of Dollars)

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
PSEG Long Island Managed Utility Depreciation		$ 164,984	$ 185,688	$ 175,838	$ 195,531	$ 9,842	$ 221,012	$ 25,482
Accelerated Depreciation of Conventional Meters		-	7,679	8,738	24,778	17,099	23,696	(1,082)
Depreciation Expense Related to FEMA Capital Projects		900	3,722	3,186	5,809	2,087	11,670	5,861
Total PSEG Long Island Managed Utility Depreciation		**165,884**	**197,089**	**187,762**	**226,118**	**29,029**	**256,378**	**30,261**
LIPA Depreciation and Amortization								
Amortization of Acquisition Adjustment		111,375	111,375	111,375	111,375	-	111,375	-
Depreciation - LIPA		482	426	598	1,312	886	2,318	1,007
Total LIPA Depreciation and Amortization		**111,857**	**111,801**	**111,973**	**112,687**	**886**	**113,693**	**1,007**
Total Depreciation and Amortization		**277,741**	**308,890**	**299,735**	**338,804**	**29,915**	**370,072**	**31,267**
Amortization of OPEB & Pension Deferrals	(a)	**31,014**	**31,015**	**31,015**	**25,015**	**(6,000)**	**25,015**	**-**
Total Depreciation and Amortization Expenses		**$ 308,755**	**$ 339,904**	**$ 330,750**	**$ 363,819**	**$ 23,915**	**$ 395,086**	**$ 31,267**

Note: (a) Amortization of OPEB and Pension Deferrals is reduced starting in 2019 to reflect impact of the favorable resolution of previously established reserves.

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Depreciation and Amortization Expenses

Depreciation and Amortization Expenses are budgeted at $363.8 million in 2019 and projected at $395.1 million in 2020.

PSEG Long Island Managed Utility Depreciation consists of depreciation of transmission and distribution, information technology, and FEMA storm hardening assets.

The budgeted Utility depreciation for 2019 and projected for 2020 reflects increases of approximately $24.8 million and $23.7 million, respectively, resulting from the early retirement of conventional meters replaced by smart meters. Depreciation expense will increase throughout the entire smart meter implementation program, which is expected to be completed in 2022, as conventional meters are taken out of service.

LIPA Depreciation and Amortization consists primarily of the amortization of the Acquisition Adjustment budgeted at $111.4 million annually. The Acquisition Adjustment is an intangible asset resulting from the merger with the Long Island Lighting Company in 1998.

Also included is the amortization of certain regulatory assets related to pension and OPEB expenses for the former National Grid and current PSEG Long Island employees that directly serve the Authority's customers. These retirement benefit expenses are a contractual obligation of the Authority and are being amortized to align the expenses to coincide with the term of employment of the workforce contracted by the Authority under the Amended and Restated Operations Services Agreement. See the Authority's audited financial statements for more information.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

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

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
PILOTs - Revenue-Based Taxes		**$ 31,765**	**$ 33,127**	**$ 34,157**	**$ 34,321**	**$ 1,194**	**$ 36,028**	**$ 1,707**
PILOTs - Property-Based Taxes	(a)	**282,833**	**289,280**	**287,481**	**292,861**	**3,581**	**298,718**	**5,857**
Property Taxes in Power Supply Charge								
National Grid (PSA) Property Taxes		195,633	196,016	193,990	198,653	2,637	202,302	3,649
Fast Track Units		11,435	11,725	9,156	6,725	(5,000)	6,837	112
Nine Mile PILOTs		4,044	4,010	4,355	3,992	(18)	4,032	40
Total Property Taxes in Power Supply Charge		**211,112**	**211,751**	**207,501**	**209,370**	**(2,381)**	**213,171**	**3,801**
Other Taxes and Assessments								
NYS Conservation Assessment		1,795	-	-	-	-	-	-
NYS Department of Public Service		9,065	10,510	9,858	9,453	(1,057)	9,642	189
NYS Office of Real Property Services		152	160	167	162	2	162	-
Total Other Taxes and Assessments		**11,012**	**10,669**	**10,026**	**9,615**	**(1,055)**	**9,804**	**189**
Total PILOTs, State and Local Taxes and Assessments		**$ 536,721**	**$ 544,828**	**$ 539,165**	**$ 546,167**	**$ 1,340**	**$ 557,721**	**$ 11,554**

Note: (a) The 2019 PILOTS - Property Based Taxes increase of $3.6 million from 2018 Approved excludes the change in the T&D Property Tax Refund, which stems from the prior year's overcollection, of $2.0 million. The resulting net year-over-year increase is $1.6 million.

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Taxes, Payments-in-Lieu of Taxes and Assessments

Payments-In-Lieu of Taxes (PILOTs) and Assessments are budgeted at $546.2 million in 2019 and projected at $557.7 million in 2020.

Revenue-based PILOTs are calculated using 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.

Property-based PILOTs are for payments on LIPA owned properties. The LIPA Reform Act establishes a 2% cap in the increase in T&D property based PILOT payments allowable each year beginning in 2015.

Additionally, LIPA also incurs property-based taxes associated with the generating assets under contract through the National Grid Power Supply Agreement (PSA). These taxes are budgeted at $209.4 million in 2019 and projected at $213.2 million in 2020. The Authority continues to challenge the property tax assessments on the PSA generation assets, which are significantly over-assessed.

The property-based PILOTS related to the Fast Track Units are budgeted to decrease as a result of renewed power purchase agreements whereby the taxes for two property locations are now the responsibility of the owner of the generation units. These costs, as with all power supply costs, are reconciled to actual costs.

The New York State Department of Public Service (DPS) Administrative Assessment will be imposed to recover costs related to DPS' oversight of PSEG Long Island's operations. This cost is approximately $9.5 million per year.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Other Income and Deductions
(Thousands of Dollars)

Description	2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
Short-Term Investment Income	$ 3,110	$ 3,597	$ 7,038	$ 5,970	$ 2,374	$ 5,942	$ (28)
Interest from Shoreham Property Tax Settlement	24,822	23,560	23,560	22,192	(1,368)	20,706	(1,486)
Interest from Visual Benefits Assessment	543	520	520	495	(25)	465	(29)
Interest from Nuclear Decommissioning Trust Fund	5,250	3,394	4,271	5,000	1,606	5,000	-
Interest from OPEB Fund	4,724	2,889	4,521	4,182	1,293	4,913	731
Interest from PSEG Long Island Funding Accounts	734	692	1,468	1,461	769	1,476	15
Miscellaneous Income and Deductions - LIPA	2,770	3,994	3,728	2,843	(1,151)	2,843	-
Miscellaneous Income and Deductions - PSEG Long Island	1,685	1,612	2,659	2,099	487	1,989	(110)
Total Other Income and Deductions	**$ 43,638**	**$ 40,258**	**$ 47,765**	**$ 44,242**	**$ 3,983**	**$ 43,334**	**$ (908)**

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Other Income and Deductions

Other Income and Deductions are budgeted at $44.2 million for 2019 and projected at $43.3 million for 2020. The budget and projections are based on forecasted account balances and interest rates.

Other Income and Deductions consists of income and interest generated from the Authority's short-term investments, earnings on the Nine Mile Point 2 nuclear decommissioning trust fund, earnings on the unrestricted OPEB Account, carrying charges accrued on deferred balances related to the Shoreham property tax settlement, and miscellaneous sources of revenues and expenses, such as income from certain customer-requested work not included in electric rates.

Projected interest rates on short-term investments are updated to prevailing interest rates annually as part of the budget process and differences between projected and actual interest rates are reconciled annually through the Delivery Service Adjustment.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Grant Income
(Thousands of Dollars)

Description	2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
Build America Bonds Subsidy - U.S. Treasury	$ 3,841	$ 3,829	$ 3,850	$ 3,850	$ 21	$ 3,688	$ (162)
Efficiency & Renewables - RGGI Funding	34,600	34,600	34,600	25,000	(9,600)	25,000	-
Total Grant Income	**38,441**	**38,429**	**38,450**	**28,850**	**(9,579)**	**28,688**	**(162)**
Recognition of Deferred FEMA Grant / Sandy	**810**	**3,350**	**2,868**	**5,228**	**1,879**	**10,503**	**5,275**
Total Grant Income & Deferred Credit	**$ 39,251**	**$ 41,778**	**$ 41,318**	**$ 34,078**	**$ (7,700)**	**$ 39,191**	**$ 5,113**

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Grant Income

In 2019, Grant Income consists primarily of a (i) grant of $25.0 million from NYSERDA Regional Greenhouse Gas Initiative (RGGI) funds to support PSEG Long Island's energy efficiency programs and (ii) subsidy payments totaling $3.9 million from the United States Treasury equal to approximately 33% of the interest on the Authority's debt issued as Build America Bonds.

The current agreement with NYSERDA for the RGGI grant expired at the end of 2018. This grant has been extended to provide $25.0 million annually in 2019 and 2020. The Authority pays for RGGI allowances as part of its Power Supply Charge. This grant represents the return of a portion of those funds to run environmental programs.

In February 2014, the Authority signed a Letter of Undertaking with FEMA that provides for $730.0 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 at $5.2 million in 2019 and $10.5 million in 2020.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Interest Expense
(Thousands of Dollars)

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
Accrued Interest Expense on Debt Securities		$ 342,552	$ 347,542	$ 357,352	$ 372,666	$ 25,124	$ 378,775	$ 6,109
Amortization of Premium		(53,836)	(55,305)	(58,400)	(60,857)	(5,551)	(64,677)	(3,821)
Net Interest Expense on Debt Securities		**288,716**	**292,236**	**298,952**	**311,809**	**19,573**	**314,097**	**2,288**
Other Interest Expense								
Amortization of Deferred Debt Issue Costs		3,327	3,210	3,326	5,291	2,081	5,737	446
Amortization of Deferred Defeasance Costs		30,513	32,128	32,285	29,304	(2,824)	25,129	(4,175)
Other Interest Amortizations		(6,392)	(3,363)	(6,612)	(6,733)	(3,370)	(6,859)	(126)
Capital Lease Interest	(a)	-	680	-	-	(680)	-	-
Other Interest Amortizations		**27,447**	**32,655**	**28,999**	**27,862**	**(4,793)**	**24,007**	**(3,855)**
Interest Rate Swap Payments		16,899	16,234	15,819	10,388	(5,846)	10,394	6
Letter of Credit and Remarketing Fees		7,094	8,825	7,146	6,827	(1,998)	6,842	15
Interest on Customer Security Deposits		197	19	394	392	373	392	0
Bond Administration Costs and Bank Fees		1,624	1,409	1,431	1,415	6	1,415	-
Other Interest Costs		**25,813**	**26,487**	**24,790**	**19,022**	**(7,464)**	**19,043**	**21**
Subtotal - Interest Expense		**341,976**	**351,378**	**352,741**	**358,693**	**7,315**	**357,147**	**(1,546)**
Less: Capitalized Interest	(b)	**5,904**	**7,874**	**4,182**	**-**	**(7,874)**	**-**	**-**
Total Interest Expense		**$ 336,071**	**$ 343,505**	**$ 348,559**	**$ 358,693**	**$ 15,189**	**$ 357,147**	**$ (1,546)**

Note: (a) Due to the immaterial nature of this item, reclassing vehicle lease expense from PSEG Long Island's operating expenses is no longer required.
(b) Due to a change in a new accounting treatment Capitalized Interest is eliminated effective in 2019.

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Interest Expense

Interest expense is budgeted at $358.7 million in 2019 and projected at $357.1 million in 2020. The budget is based on forecasted levels of outstanding debt, associated fees, and the amortization of previously deferred debt-related charges and credits. Actual interest rates are updated to prevailing interest rates each year as part of the annual budget process and differences between projected and actual interest rates are reconciled annually through the Delivery Service Adjustment ensuring customers pay actual costs.

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 the life of the bonds.

Amortization of premiums remains at a consistent level in 2019 compared to 2018. A significant portion of the amortization of premiums is a result of the issuance of securitization bonds by the Utility Debt Securitization Authority (UDSA) on behalf of the Authority. The UDSA 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. The UDSA refinancing generated approximately $492.0 million in net present value debt service savings for LIPA customers.

The Authority will no longer capitalize interest expense beginning in 2019 due to a change in accounting requirements related to GASB Statement No. 89.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Debt Service Requirements
(Thousands of Dollars)

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year	
UDSA Debt Service		$ 264,811	$ 324,728	$ 324,728	$ 327,140	$ 2,412	$ 319,030	$ (8,110)	A
LIPA Debt Service on Fixed Rate Debt		225,591	156,543	156,543	164,947	8,404	222,999	58,052	B
LIPA Debt Service on Variable Rate Debt		23,279	23,602	29,194	34,010	10,408	34,001	(9)	C
LIPA Debt Service due to Capital Borrowings		-	12,833	12,833	17,845	5,012	13,485	(4,361)	D
Subtotal UDSA Debt Service		264,811	324,728	324,728	327,140	2,412	319,030	(8,110)	A
Subtotal LIPA Debt Service		248,870	192,978	198,570	216,803	23,824	270,486	53,683	E=B+C+D
Total Debt Service		**513,681**	**517,707**	**523,299**	**543,943**	**26,236**	**589,516**	**45,573**	F
Total Coverage Requirements		**184,338**	**194,501**	**189,609**	**218,306**	**23,804**	**239,369**	**21,064**	G
Total Debt Service plus Coverage		**$ 698,019**	**$ 712,208**	**$ 712,908**	**$ 762,248**	**$ 50,040**	**$ 828,885**	**$ 66,637**	H
LIPA Long Term Obligations	(a)	**308,276**	**293,274**	**275,453**	**267,076**	**(26,199)**	**261,446**	**(5,629)**	I
Excess Revenue Net of Requirements	(b)		(161)	13,795	-	161	-	-	J
Total Coverage		**184,338**	**194,340**	**203,405**	**218,306**	**23,965**	**239,369**	**21,064**	K=G+J
Projected Coverage Ratio on LIPA Obligations		1.33 x	1.40 x	1.43 x	1.45 x		1.45 x		L=1+K/(E+I)
Board Policy Target Coverage Ratio on LIPA Obligations			1.40 x	1.40 x	1.45 x		1.45 x		
Projected Coverage on LIPA & UDSA Obligations		1.22 x	1.24 x	1.25 x	1.27 x		1.28 x		M=1+K/(F+I)
Board Policy Target Coverage on LIPA & UDSA Obligations			1.25 x	1.25 x	1.25 x		1.25 x		

Note: (a) The 2020 Capital Lease and Long-term Obligation amounts and the associated Coverage calculation do not reflect GASB No. 87 implementation.
(b) The 2018 Approved Excess Revenue Net of Requirements changed from ($3.8) million to ($0.2) million due to (i) PSEG Long Island 2018 Approved Operating Expenses decrease of $0.7 million plus (ii) a change in the methodology in calculating LIPA's coverage from utilizing the Cash Contribution to the Pension Trust to the Non Cash Pension Accrual Expense.

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Debt Service Requirements

Debt service consists of principal and interest payments due to bondholders. Debt service payments are broken out separately for UDSA debt and Authority debt. In prior years, the Authority refinanced debt through the UDSA, which resulted 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 associated with long-term obligations such as power supply contracts and office and vehicle leases.

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).

(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. With the expectation for continued improvements, all three rating agencies have changed their outlooks since 2016. Moody's and S&P's outlook changed to Positive and Fitch's outlook changed to Stable from Negative. These outlooks offer the potential for future improvements in the Authority's credit ratings. As part of the rate plan, the Authority adopted a five-year rating target to improve its ratings to A2/A/A.

Long Island Power Authority and Subsidiaries
2019 Proposed and 2020 Projected Operating and Capital Budgets

(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 2019 budgeted debt ratio is at 90.0% (see page 39).

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 2017 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	2016	2017	2018	2019
Authority Debt + Capitalized Leases	1.20 x	1.30 x	1.40 x	1.45 x
Authority Debt + UDSA Debt + Capitalized Leases	1.15 x	1.20 x	1.25 x	1.25 x

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

(This page intentionally left blank)

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Capital Expenditures
(Thousands of Dollars)

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
Transmission and Distribution								
Regulatory Driven		$ 3,016	$ 8,130	$ 5,212	$ 25,489	$ 17,359	$ 85,500	$ 60,011
Load Growth		169,382	188,668	138,443	262,030	73,362	253,323	(8,707)
Reliability		213,762	191,845	181,984	190,518	(1,327)	188,031	(2,486)
Economic, Salvage, Tools, Equipment & Other		26,884	34,569	37,082	48,866	14,297	34,173	(14,692)
Total Transmission and Distribution Projects		**413,044**	**423,212**	**362,721**	**526,902**	**103,690**	**561,028**	**34,126**
Other PSEG Long Island Capital Expenditures								
Information Technology		22,319	36,728	31,486	35,236	(1,492)	40,683	5,447
Customer Operations		16,405	11,394	14,433	11,394	-	11,259	(135)
Other General Plant		2,635	9,196	4,906	8,944	(252)	4,534	(4,410)
Fleet		20,137	8,526	9,296	5,495	(3,031)	10,735	5,240
Utility 2.0		-	12,975	12,769	69,661	56,686	54,158	(15,503)
Budget Amendment to Carryover	(a)	-	(56,120)	-	-	56,120	-	-
Total PSEG Long Island Excluding FEMA		**474,540**	**445,911**	**435,611**	**657,632**	**211,721**	**682,397**	**24,765**
FEMA Related Projects		182,996	190,273	156,734	153,609	(36,664)	49,980	(103,629)
Storm Capitalization		-	-	-	3,501	3,501	4,243	742
Total PSEG Long Island Capital		**657,536**	**636,184**	**592,345**	**814,742**	**178,558**	**736,620**	**(78,122)**
Nine Mile Point 2		22,777	15,858	17,441	19,461	3,602	13,564	(5,896)
LIPA - Other		33	7,547	300	5,700	(1,847)	5,050	(650)
Allowance For Funds Used During Construction	(b)	5,904	7,874	4,182	-	(7,874)	-	-
Capitalized Management Fee		9,748	30,632	26,794	28,926	(1,706)	29,504	578
Total Capital Expenditures		**695,998**	**698,095**	**641,062**	**868,829**	**170,734**	**784,739**	**(84,090)**
FEMA Contribution (90% of Project Costs)	(c)	(164,697)	(171,246)	(141,060)	(138,248)	32,997	(44,982)	93,266
Deduct Allowance For Funds Used During Construction	(b)	5,904	7,874	4,182	-	(7,874)	-	-
Net Capital Expenditures		**525,397**	**518,976**	**495,820**	**730,581**	**211,605**	**739,757**	**9,176**
Funding Available from Operations (Coverage)			194,340	203,405	218,305	23,965	239,369	21,064
Contribution to OPEB Fund from Revenue Requirements			(40,669)	(46,282)	(27,509)	13,160	(27,509)	-
Deduct Net Funding of Capital Expenditures			153,672	157,123	190,797	37,125	211,860	21,064
Funding Required from New Debt			**$ 365,305**	**$ 338,697**	**$ 539,784**	**$ 174,480**	**$ 527,896**	**$ (11,888)**

Note: (a) A Budget Amendment to Carryover specific projects in the amount of $56.1 million from 2018 to 2019 is included in PSEG Long Island Excluding FEMA Capital of $657.6 million.
(b) Due to a change in accounting treatment the Allowance For Funds Used During Construction is eliminated effective in 2019.
(c) Amounts not yet reimbursed by FEMA; pending completion of individual projects.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Capital Expenditures
(Thousands of Dollars)

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
Percent of Capital Funded from Debt:								
Including FEMA spending and reimbursement			**52%**	**53%**	**62%**		**67%**	
Excluding FEMA spending and reimbursement			**68%**	**67%**	**73%**		**71%**	
Reconciliation of Utility 2.0								
Utility 2.0 Approved Filing			$ 15,475		$ 71,961			
Utility 2.0 Budget Amendment	(a)		(4,800)		-			
Utility 2.0 Meter Deployment Acceleration (2019 into 2018)			2,300		(2,300)			
Total Utility 2.0			**$ 12,975**		**$ 69,661**			

Note: (a) Subsequent to the DPS approval of the 2017 Utility 2.0 filing, the capital funding requirements for 2018 Utility 2.0 projects were reduced due to updated budget assumptions.

Major Projects

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

			Cash Flow ($millions)				
Description	Justification	In Service Date	Project To Date Expenditures through 12/31/18	2019	2020	2021 and Beyond	Total Project Cost
Malverne: Upgrade 69/13 kV substation & distribution feeder	Meet the load growth in the town of Malverne	2019	$ 18.6	$ 6.6	$ -	$ -	$ 25.3
Southampton - Canal: Install new 69kV underground cable in an existing conduit	Meet the load growth in the South Fork	2019	$ 7.9	$ 20.0	$ 0.1	$ 1.6	$ 29.5
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	$ 23.1	$ 12.4	$ 3.5	$ 8.7	$ 47.7
Belmont New Substation: Install new 33/13kV substation & distribution feeder	Meet the load growth in Belmont Park	2020	$ 1.1	$ 19.4	$ 23.7	$ 7.0	$ 51.3
East Garden City - Valley Stream: Install new 138kV underground cable	Meet new NERC reliability requirements	2020	$ 7.8	$ 25.5	$ 85.5	$ 58.1	$ 176.9
Hempstead: Upgrade Existing Substation from 23/4 kV to 69/13 kV	Meet the load growth in the Town of Hempstead	2020	$ 23.7	$ 9.7	$ 2.4	$ 3.1	$ 38.9
Lindbergh (formerly 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	2020	$ 6.4	$ 25.0	$ 7.3	$ 26.1	$ 64.8
Ruland Rd - Plainview: Construct new Underground 69kV transmission line	Meet the load growth to support the Country Pointe Development (commercial and residential) and the new Round Swamp Substation	2020	$ 3.7	$ 15.7	$ 21.5	$ 18.7	$ 59.6
Berry St: Construct new substation with 2 transformers and 6 new distribution feeders	Meet the load growth in the towns of Farmingdale and Lindenhurst	2021	$ 29.4	$ 0.6	$ 6.5	$ 6.9	$ 43.5
Bridgehampton - Buell: Install a new 69kV underground cable (approximately 5 miles)	Meet the load growth in the South Fork	2021	$ 0.6	$ 2.7	$ 18.6	$ 25.0	$ 46.9
Kings Highway: Construct new substation with 3 transformers and 8 new distribution feeders	Meet the load growth in the towns of Smithtown, Hauppauge and Islip	2021	$ 21.8	$ 24.7	$ 12.9	$ 7.3	$ 66.7
Navy Rd: Establish new 23/13 kV substation	Meet the load growth in Montauk	2021	$ 7.7	$ 7.7	$ 7.9	$ 11.5	$ 34.7
Riverhead - Canal: Install new 138 kV underground cable	Meet the load growth in the South Fork	2021	$ 0.2	$ 7.6	$ 41.4	$ 56.1	$ 105.2
Fire Island Pines: Install new 23 kV circuit to Ocean Beach	Increase reliability to Fire Island	2022	$ 1.3	$ 3.0	$ 0.9	$ 45.9	$ 51.1
Massapequa: Establish new 69/13kV substation	Meet the load growth in the town of Massapequa	2022	$ 0.2	$ 2.1	$ 8.0	$ 21.4	$ 31.8
Transmission Operations Control Room Facility Replacement: Replace the existing Transmission Operations control room in Hicksville with a new Primary Control Center to support the addition of new substations and elements that are continuously added to the system.	Upgrade control room to support addition of new substations	2023	$ -	$ 0.2	$ 3.5	$ 80.4	$ 84.0
Substation Security Expansion Project	Enhance substation security	2023	$ 0.8	$ 1.3	$ 0.5	$ 54.2	$ 56.8

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Capital Expenditures

Capital Expenditures are budgeted at $868.8 million in 2019 and projected at $784.7 million in 2020. Net Capital Expenditures are budgeted at $730.6 million in 2019 and projected at $739.8 million in 2020. The 2019 Capital Budget includes a deferral of certain specified 2018 Capital projects into 2019, as shown on pages 48 and 49.

Transmission and Distribution projects are evaluated using a Project Prioritization and Value and Risk Evaluation protocol using the Spend Optimization Suite to determine the projects that have the highest risk for system and company performance. The projects being pursued will improve system reliability and resiliency and include increases from historical spending on the Circuit Improvement Program to address poor performing circuits and the Multiple Customer Outage Program to address customers that experience an unusual number of outages.

In February 2014, the Authority signed a Letter of Undertaking with FEMA that provides for a $730.0 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 Security.

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

Capital expenditures for 2019 and 2020 include additional costs related to the Utility 2.0 Plan. These costs are associated with projects aimed at smart meters and integrating Distributed Energy Resources (DER) in the Authority's electric grid.

Nine Mile Point 2 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.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Appendix

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

PSEG Long Island Operating Expenses
(Thousands of Dollars)

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
PSEG Long Island Operating Expenses (including Pension & OPEB)	(a)							
Transmission & Distribution		$ 210,510	$ 181,832	$ 189,580	$ 177,615	$ (4,217)	$ 181,542	$ 3,927
Customer Services		118,845	125,619	129,906	126,620	1,000	128,355	1,735
Business Services		131,949	162,824	166,820	170,975	8,151	170,975	-
Power Markets		8,671	14,373	11,374	14,156	(217)	14,156	-
Energy Efficiency & Renewable		82,652	88,794	82,086	88,794	-	88,794	-
Utility 2.0 Costs		-	4,262	3,227	19,237	14,975	18,503	(734)
Utility 2.0 Savings		-	-	-	(2,878)	(2,878)	(6,858)	(3,980)
Budget Amendment to Carryover	(b)	-	(724)	-	-	724	-	-
Total PSEG Long Island Operating Expenses		**552,627**	**576,981**	**582,993**	**594,519**	**17,538**	**595,468**	**949**
Total Non Cash OPEB Expense	(c)	**41,080**	**40,669**	**49,284**	**43,955**	**3,286**	**44,934**	**979**

Note: (a) Due to the 2018 reorganization, the budgeted amounts were reallocated from what was approved in the prior year budget document.
(b) The Budget Amendment to Carry over of $0.7 million is related to the Utility 2.0 Super Saver program.
(c) Non Cash cost of Other Post Retirement Benefits (OPEB) included in operating expenses above.

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

PSEG Long Island Operating Expenses

PSEG Long Island Operating Expenses are related to five major areas: Transmission and Distribution, Customer Services, Business Services, Power Markets and Energy Efficiency and Renewable Energy Programs. Total operating expenses are budgeted at $594.5 million for 2019 and projected at $595.5 million for 2020.

The approved operating expenses for 2018 have been decreased by $0.7 million for 2019 carryover projects related to Utility 2.0. Total operating expenses for 2019 will remain the same, however, budgeted amounts may shift between various lines of business.

The PSEG Long Island 2019 operating budget, excluding the Utility 2.0 Program, is increasing by $4.7M based on $14.3M in expected inflationary costs, which is partially offset by ($9.6M) of productivity savings.

Description	Net Change
Utility 2.0 Program, Net of savings (includes Carry Over of 2018 Super Saver Program)	$12.8M
Expected Inflationary Cost	$14.3M
PSEG Long Island Productivity Savings	($9.6M)
Total	$17.5M

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

LIPA Operating & Deferred Expenses
(Thousands of Dollars)

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
LIPA Operating Expenses								
PSEG Long Island Management Fee		$ 72,565	$ 74,604	$ 74,102	$ 75,584	$ 980	$ 77,095	$ 1,511
Capitalized Management Fee	(a)	(9,748)	(30,632)	(26,794)	(28,926)	1,706	(29,504)	(578)
Total Operating Management Fee		**62,817**	**43,972**	**47,307**	**46,658**	**2,686**	**47,591**	**933**
LIPA Operating Expenses								
Employee Salaries & Benefits Expenses		8,040	11,151	9,455	11,125	(26)	11,262	137
Insurance		1,842	2,060	1,696	2,904	844	2,985	81
Office Rent		1,703	1,737	1,757	1,811	74	1,812	1
Miscellaneous		6,416	2,955	2,299	2,696	(259)	2,755	59
Total Labor, General and Administrative		**18,001**	**17,903**	**15,206**	**18,536**	**633**	**18,814**	**278**
Engineering		243	1,533	433	1,000	(533)	1,073	73
Legal		5,208	4,500	7,129	7,845	3,345	8,022	177
Financial Services and Cash Management		1,868	1,860	2,131	4,090	2,230	4,182	92
Accounting and Audit Services		1,439	1,770	2,088	1,840	70	1,882	41
Information Technology		842	633	850	1,995	1,362	2,040	45
Risk Management		567	465	366	335	(130)	343	8
Grant Administration		312	200	203	200	(0)	200	-
Miscellaneous		2,036	4,177	2,367	1,120	(3,057)	1,145	25
Total Professional Services		**12,515**	**15,138**	**15,566**	**18,425**	**3,288**	**18,886**	**460**
LIPA Operating Expenses		**93,333**	**77,012**	**78,080**	**83,619**	**6,607**	**85,290**	**1,671**
Amortization of OPEB & Pension Deferrals		**31,014**	**31,015**	**31,015**	**25,015**	**(6,000)**	**25,015**	**-**
Total LIPA Operating and Deferred Expenses		**$ 124,348**	**$ 108,027**	**$ 109,095**	**$ 108,634**	**$ 607**	**$ 110,305**	**$ 1,671**

Note: (a) Effective in 2018, a new methodology based on the PSEG Long Island company labor allocation was adopted to determine the Capitalized Management Fee. As a result the portion of the management fee allocated to capital increased from ($9.7M) in 2017 to ($30.6M) in 2018.

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

LIPA Operating and Deferred Expenses

The Authority Operating and Deferred Expenses are budgeted at $108.6 million in 2019 and projected at $110.3 million in 2020. The 2019 plan represents an increase of $0.6 million as compared with the Approved Budget for 2018.

LIPA Operating and Deferred Expenses include the PSEG Long Island management fee, costs related to Authority staff and outside professional services, and the amortization of certain regulatory assets.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Utility Debt Securitization Authority
(Thousands of Dollars)

Description	2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
Revenues	**$ 297,679**	**$ 330,276**	**$ 330,230**	**$ 332,694**	**$ 2,419**	**$ 324,599**	**$ (8,095)**
Operating Expenses							
Uncollectible Accounts	1,345	2,213	2,015	2,029	(183)	1,980	(49)
General and Administrative Expense							
Ongoing Servicer Fees	2,146	2,265	2,250	2,250	(15)	2,250	-
Administration Fees	417	500	500	500	-	500	-
Bond Administration Fees	246	250	340	300	50	300	-
Bond Trustee Fees and Expenses	-	70	-	-	(70)	-	-
Legal Fees	5	40	-	-	(40)	-	-
Accounting Fees	135	165	150	150	(15)	200	50
Directors and Officers Insurance	303	410	267	325	(85)	339	14
Miscellaneous	2	32	-	-	(32)	-	-
Total General and Administrative Expense	**3,254**	**3,732**	**3,507**	**3,525**	**(207)**	**3,589**	**64**
Amortization of Restructuring Property	**117,844**	**166,440**	**165,533**	**174,401**	**7,961**	**169,993**	**(4,408)**
Interest Expense Accrual	187,163	201,528	200,495	196,248	(5,280)	192,041	(4,207)
Amortization of Premium	(43,663)	(45,918)	(46,136)	(44,779)	1,139	(45,706)	(927)
Amortization of Deferred Debt Issue Costs	2,465	2,518	2,521	2,361	(156)	2,200	(161)
Total Interest Expense	**145,965**	**158,127**	**156,879**	**153,831**	**(4,297)**	**148,535**	**(5,295)**
Reserve Fund Earnings	**989**	**550**	**2,306**	**1,164**	**614**	**1,136**	**(28)**
Excess of Revenues Over Expenses	**$ 30,259**	**$ 313**	**$ 4,601**	**$ 73**	**$ (241)**	**$ 1,638**	**$ 1,565**

Long Island Power Authority

Long Island Power Authority
2019 Proposed and 2020 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 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 $2.0 billion of UDSA bonds in 2013, $1.0 billion in October 2015, two additional series totaling an additional $1.1 billion in 2016, and $369.5 million in 2017.

The Authority's customer bills recover UDSA Restructuring Charges (consisting of debt service and administrative fees) 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 not 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 page is shown separately as an information item for the reader.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Projected Borrowing Requirements and Bank Facilities
(Thousands of Dollars)

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year
Total Capital Expenditures	(a)	**$ 695,998**	**$ 698,095**	**$ 641,062**	**$ 868,829**	**$ 170,734**	**$ 784,739**	**$ (84,090)**
FEMA Contribution		(164,697)	(171,246)	(141,060)	(138,248)	32,997	(44,982)	93,266
Deduct Allowance for AFUDC	(b)	(5,904)	(7,874)	(4,182)	-	7,874	-	-
Net Capital Expenditures		**525,397**	**518,976**	**495,820**	**730,581**	**211,605**	**739,757**	**9,176**
Net Coverage Funding of Capital Expenditures		(183,174)	(153,672)	(157,123)	(190,797)	(37,125)	(211,860)	(21,064)
Proceeds for Carry Over Projects		6,036	-	89,163	-	-	-	-
Projected Borrowing Requirements		**348,259**	**365,305**	**427,860**	**539,784**	**174,480**	**527,896**	**(11,888)**
Projected Cost of Issuance on Borrowing Requirements		**1,741**	**1,827**	**2,139**	**2,699**	**872**	**2,639**	**(59)**
Projected Borrowing Requirements with Cost of Issuance	(c)	**350,000**	**367,131**	**430,000**	**542,483**	**175,352**	**530,536**	**(11,947)**
Series 2014C - Floating Rate Notes		-	150,000	150,000	-	(150,000)	-	-
Series 2015C - Floating Rate Notes		-	149,000	149,000	-	(149,000)	-	-
Series 2016A - Floating Rate Notes		-	-	-	-	-	-	-
General Revenue Notes, Series 2015		-	75,000	75,000	100,000	25,000	100,000	-
Revolving Credit Agreement		-	-	-	350,000	350,000	-	(350,000)
Bonds Subject to Mandatory Refinancing & Bank Facilities		**$ -**	**$ 374,000**	**$ 374,000**	**$ 450,000**	**$ 76,000**	**$ 100,000**	**$ (350,000)**

Note: (a) This reflects a Budget Amendment to Carryover specific projects in the amount of $56.1 million from 2018 to 2019.
(b) Due to a change in a new accounting treatment Allowance For Funds Used During Construction (AFUDC) is eliminated effective in 2019.
(c) Excludes premium, if generated it would reduce short term borrowing.

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Projected Borrowing Requirements and Bank Facilities

The Authority expects to generate funds from operations of $190.8 million and $211.9 million in 2019 and 2020, respectively. The balance of the Capital Budget will be funded from the issuance of debt. In total, the Authority will fund $868.8 million of infrastructure investments in 2019 with new debt issuances of $542.5 million or approximately 62% debt financing and 38% grant and pay-as-you-go funding.

Long Island Power Authority
2019 Proposed and 2020 Projected Budgets

Capital Structure
(Thousands of Dollars)

Description		2017 Actual	2018 Approved	2018 Projected	2019 Proposed	2019 Change from Prior Year	2020 Projected	2020 Change from Prior Year	
UDSA Long Term Par Outstanding		$ 4,262,396	$ 4,139,593	$ 4,139,593	$ 4,008,832	$ (130,761)	$ 3,882,775	$ (126,057)	
LIPA Long Term Par Outstanding		2,864,214	3,167,465	3,167,465	3,557,872	390,407	4,021,701	463,829	
LIPA Short Term Par Balance		360,320	400,000	334,500	334,500	(65,500)	334,500	-	
Total Par Outstanding		**7,486,930**	**7,707,058**	**7,641,558**	**7,901,204**	**194,146**	**8,238,976**	**337,772**	
LIPA Long Term Par To Be Issued		350,000	367,131	430,000	542,483	175,352	530,536	(11,947)	
Par Amount UDSA		4,262,396	4,139,593	4,139,593	4,008,832	(130,761)	3,882,775	(126,057)	
Par Amount LIPA		3,574,534	3,934,596	3,931,965	4,434,855	500,259	4,886,736	451,881	
Total Par Amount		**7,836,930**	**8,074,189**	**8,071,558**	**8,443,687**	**369,498**	**8,769,511**	**325,824**	
Capital Lease Obligations	(a)	1,843,515	1,824,665	1,824,665	1,660,829	(163,836)	1,493,746	(167,083)	
Total Par and Capital Lease Obligations		**9,680,445**	**9,898,854**	**9,896,222**	**10,104,516**	**205,662**	**10,263,257**	**158,741**	A
Excess of Revenues Over Expenses		**17,122**	**1,100**	**2,122**	**(4,424)**	**(5,524)**	**34,197**	**38,621**	
Net Position Before Deferred Grants		472,188	462,899	474,310	469,885	6,987	504,083	34,197	
Deferred Grants	(b)	501,404	497,836	498,536	648,095	150,259	637,592	(10,503)	
Net Position		**$ 973,592**	**$ 960,735**	**$ 972,846**	**$ 1,117,980**	**$ 157,246**	**$ 1,141,675**	**$ 23,694**	B
Debt to Capital Ratio	(c)	**90.9%**	**91.2%**	**91.0%**	**90.0%**		**90.0%**		C=A/(A+B)
Debt to Asset Ratio	(c)	**105.2%**	**102.0%**	**97.3%**	**93.4%**		**90.5%**		

Note: (a) The 2020 Capital Lease and Long-term Obligation amounts and the associated Coverage calculation do not reflect GASB No. 87 (Leases) implementation.
(b) Deferred Grants are funds received from FEMA for a $730.0 million storm hardening program. LIPA has deferred recognition of the grant income to align the grant receipts with the associated depreciation expense.
(c) Debt to Capital Ratio is calculated by taking (i) debt and capitalized leases and dividing by (ii) debt, capitalized leases, and Net Position.
Debt to Asset Ratio is calculated by taking (i) total debt and capitalized leases and dividing by (ii) fixed assets and working capital.

LIPA
Long Island Power Authority

2019 Proposed and 2020 Projected Operating and Capital Budgets

Capital Structure

The Capital Structure shows the ratio of debt and net position. LIPA expects to fund its capital investment program utilizing a combination of pay-as-you-go funding from revenue, grants, and short and long-term debt financing through 2020.

After funding $3.0 billion in infrastructure investments from 2017 through 2020, total projected debt outstanding for LIPA and UDSA will rise approximately $932.6 million.

The Authority has significant capital lease obligation amortization during this period with total capital leases declining by $350 million. Combined debt and capital lease balances across the period increase from $9.7 billion at the end of 2017 to $10.3 billion at the end of 2020. The Authority's Debt to Capital Ratio improves modestly from 90.9% in 2017 to 90.0% in 2020 while the Debt to Asset Ratio declines from 105.2% in 2017 to 90.5% in 2020.

2019 Proposed and 2020 Projected Capital Expenditures
(Thousands of Dollars)

	Location	Investment Description	In Service Date	Total Project Cost	Project To Date Expenditures through 12/31/18 (a)	Proposed 2019	Projected 2020
Transmission & Distribution							
Regulatory Driven Projects							
	East Garden City	EGC- Valley Stream (N-1-1)	Dec-20	176,944	7,840	25,489 *	85,500
Total Regulatory Driven Projects				**$ 176,944**	**$ 7,840**	**$ 25,489**	**$ 85,500**
Load Growth Projects							
	West Bartlett	Establish new 69/13 kV substation	May-18	17,118	17,018	100	-
	Terryville	Conversion and reinforcement and exit feeder projects	Dec-18	2,394	1,817	577	-
	Sterling	Install new distribution feeder	Jun-19	5,250	100	5,150	-
	Malverne	Upgrade 69/13 kV substation & distribution feeder	Jun-19	25,281	18,636	6,645	-
	Pilgrim	Replace 13kV switchgear & install new feeder	Jun-19	9,499	5,240	4,259 *	-
	Southampton	Install new 69kV circuit to Canal	Jun-19	29,536	7,867	20,019 *	78
	Arverne	Underground 13kV feeder extension	Jun-19	4,851	2,171	2,680 *	-
	Park Place	Conversion and reinforcement and exit feeder projects	Jun-19	10,825	4,675	6,150	-
	Massapequa	New substation land acquisition	Aug-19	2,300	-	2,300	-
	Montauk	Land acquisition Montauk replacement substation	Sep-19	6,025	67	5,959	-
	Riverhead	Install new 13kV circuit	Dec-19	1,038	-	831	78
	Lake Success	Smart Wires - Lake Success to Stewart Manor to Whiteside	Dec-19	9,650	144	8,377 *	220
	Malverne	Reconfigure distribution circuits to Valley Stream	Dec-19	3,732	100	2,637	200
	Flowerfield	Upgrade 69/13 kV substation & distribution feeder	Jun-20	19,433	387	7,683 *	9,007
	MacArthur	Install 27 MVAR Capacitor Bank	Jun-20	2,663	1,284	395	701
	Round Swamp	Establish new 69/13kV substation	Jun-20	20,486	4,036	5,540 *	7,624
	Ruland Road	Install new 69 kV circuit to Plainview	Jun-20	59,571	3,659	15,710 *	21,487
	Hero	Upgrade substation from 23 kV to 33 kV	Jun-20	694	23	24 *	152
	Belmont	Establish new 33/13kV substation	Jun-20	51,261	1,120	19,430	23,684
	Kings Highway	Establish new 138/13 kV substation	Jun-20	66,651	21,786	24,660 *	12,928
	Hempstead	Convert station to 69/13 kV	Dec-20	38,885	23,715	9,677	2,415
	Roslyn	Expand 138/13 kV substation and feeders	Dec-20	13,942	1,256	3,650 *	6,820
	Deer Park	Install 27 MVAR Capacitor Bank	Jun-21	2,432	1,002	100	350
	Ronkonkoma	Install new 138/69 kV transformer and switchgear	Jun-21	15,300	-	625	9,675
	New South Road	Expand 69/13kV substation & distribution cables	Jun-21	17,903	2,803	2,220	4,440
	Berry Street	Establish new 69/13 kV substation and upgrade 69kV transmission lines	Jun-21	43,461	29,435	574	6,539
	Navy Road	Establish new 23/13 kV substation (Montauk substation replacement)	Jun-21	34,730	7,682	7,650 *	7,925
	Wildwood	Upgrade 69 kV circuit to Riverhead to 138 kV	Jun-21	11,191	138	249	5,686
	Bridgehampton	Install new 69kv circuit to Buell	Jun-21	46,917	556	2,705 *	18,648
	Riverhead	Install new 138 kV circuit to Canal	Jun-21	105,189	165	7,600	41,350
	Culloden Point	Upgrade substation from 23 kV to 33 kV	Jun-21	7,000	65	1,392 *	1,753
	South Fork	Upgrade transmission lines from 23 kV to 33 kV	Jun-21	1,100	39	200	400
	Ocean Beach	Install new 4kV feeder	Jun-22	3,750	-	200	400
	Lindbergh	Establish new 69/13kV substation	Jun-22	64,827	6,359	25,015	7,335
	Massapequa	Establish new 69/13kV substation	Jun-22	31,790	189	2,140 *	8,022
	East Hampton	Upgrade substation from 23 kV to 33 kV	Jun-22	5,100	45	1,050	300
	Buell	Upgrade substation from 23 kV to 33 kV	Jun-22	11,625	60	1,514	1,651
	Amagansett	Upgrade substation from 23 kV to 33 kV	Jun-22	17,090	168	5,779	2,460
	Peconic	Upgrade existing distribution banks	Dec-22	7,000	-	-	350
	Hither Hills	Upgrade substation from 23 kV to 33 kV	Jun-23	15,278	40	1,851	3,862
	Various	Distribution facilities to serve new business	Blanket	-	37,098	36,713	36,185
	Various	Residential underground development to serve new business	Blanket	-	12,060	12,000	10,600
Total Load Growth Projects				**$ 842,768**	**$ 213,003**	**$ 262,030**	**$ 253,323**
Reliability Projects							
	Lake Success	Phase Angle Regulator (PAR)	Dec-17	3,684	3,440	244	-
	Shelter Island	Replace underground failed cable	Jun-18	18,983	18,883	100	-
	Island Park	Reconfigure transmission 33kV circuits	Dec-18	2,781	2,631	150	-
	Various	Upgrade substation breaker controls for Non-Reclosure Assurance (NRA)	Dec-18	17,283	16,883	400	-

* Includes carry over from 2018. See "Carry Over" table for details
(a) Project to date expenditures includes projects that began prior to 2018

Long Island Power Authority

2019 Proposed and 2020 Projected Capital Expenditures
(Thousands of Dollars)

Location	Investment Description	In Service Date	Total Project Cost	Project To Date Expenditures through 12/31/18 (a)	Proposed 2019	Projected 2020
Valley Stream	Replace Phase Angle Regulator (PAR) transformer	Dec-18	4,026	3,526	500	-
Various	Telecom connectivity and radio room upgrades	Apr-19	175	-	175	-
Elwood	Install bus tie breaker	Jun-19	3,307	2,889	418	-
Far Rockaway	Storm hardening 33kV substation (damaged by Sandy)	Jun-19	13,292	10,952	2,340	-
Rockaway Beach	Install new battery house and elevate batteries	Jun-19	690	370	320	-
Valley Stream	Corrosion protection system upgrade for feeder 138-901	Jun-19	1,560	224	1,336	-
Hicksville	Upgrade monitoring and alarm system for the oil storage areas	Jul-19	200	-	200	-
Various	Telecom alarm monitoring system	Sep-19	200	-	200	-
Hewlett	Upgrade copper to fiber for distribution automation	Nov-19	270	-	270	-
Barrett	Procure new spare 220 MVA phase shifter transformer	Dec-19	8,000	2,167	5,833	-
Hicksville	Purchase two mobile units	Dec-19	3,295	170	3,125 *	-
Northport	Phase shifter replacement load tap changer controls	Dec-19	500	-	500	-
Various	Telecom communication cabinets upgrade	Dec-19	465	-	465	-
Glenwood	Feeder 69-477 terminal alarms	Dec-19	201	81	120	-
Fire Island Pines	Install new 23 kV circuit to Davis Park	Jun-20	4,226	1,054	1,386 *	1,140
Far Rockaway	Land rights acquisition (Phase 2)	Dec-20	8,169	7,343	-	826
Various	Upgrade corrosion protection system for pipe type cable	Dec-21	17,500	-	4,500	4,000
Fire Island Pines	Install new 23 kV circuit to Ocean Beach	Jun-22	51,135	1,322	3,007 *	886
East Garden City	Switchgear replacement	Dec-22	14,450	-	250	5,193
Northport	Replace radiators for banks 1 to 4	Dec-23	7,040	-	1,040	1,680
Various	Substation rack replacement	Dec-25	36,600	-	100	1,500
Various	Distribution system improvements - services, branch lines & customer requests	Program	-	13,220	16,000	14,500
Various	Distribution breaker replacement program	Program	-	473	745	745
Various	Underground distribution cable upgrade program	Program	-	9,170	13,000	10,200
Various	Distribution protection and controls upgrade program	Program	-	-	486	410
Various	Mechanical relay replacement program	Program	-	336	1,171	1,245
Various	Pipe type cable low pressure trip program	Program	-	418	1,326	1,366
Various	Pipe type cable terminal pressure monitoring upgrade program	Program	-	676	1,446	-
Various	Protection lease line upgrades	Program	-	855	1,400	1,600
Various	Replacement of aging and non-functional Joslyn type ASUs	Program	-	1,887	3,000	3,200
Various	Remote terminal unit replacement/upgrade program	Program	-	399	1,262	1,362
Various	Substation battery replacement program	Program	-	464	468	482
Various	Protection and controls upgrade program	Program	-	700	1,045	1,100
Various	Substation control power transformer replacement program	Program	-	-	262	262
Various	Transfer trip/SCADA communication network upgrade program	Program	-	-	200	200
Various	Transformer major component replacement program	Program	-	724	504	720
Various	Transformer monitoring program	Program	-	(3)	950	950
Various	Transmission breaker replacement program	Program	-	1,067	2,500	2,700
Various	Transmission cables cathodic replacement program	Program	-	187	363	374
Various	Update substation distribution breaker racking system	Program	-	709	1,000	1,050
Various	Substation lightning & grounding upgrade program	Program	-	208	790	790
Various	Upgrade supervisory controllers for Capacitor Banks	Program	-	499	491	2,213
Various	Distribution storm hardening program - Install communication repeaters	Program	-	-	3,500	10,000
Various	Transformer load tap changer replacements	Program	-	600	486	410
Various	Distribution automation repeater upgrades	Blanket	-	-	248	-
Various	Accidents	Blanket	-	11,969	10,208	10,446
Various	Cap and pin insulator replacement program	Program	-	-	158	175
Various	Distribution feeder reliability improvement program (Minor Extensions)	Blanket	-	25,043	25,966	26,454
Various	Distribution pole reinforcement	Blanket	-	3,852	2,202	2,570
Various	Distribution pole replacements	Blanket	-	13,609	13,518	13,935
Various	Substation equipment failures	Blanket	-	7,005	3,690	2,726
Various	Distribution transformers - add/replace	Blanket	-	23,889	18,305	18,128
Various	Multiple customer outage program	Blanket	-	5,518	7,677	7,060
Various	Public works	Blanket	-	8,500	7,623	8,793
Various	Transmission pole replacement	Blanket	-	807	1,599	1,866
Various	Residential underground cable program	Blanket	-	3,942	7,747	10,904
Various	System spares	Blanket	-	3,596	9,425	10,769
Various	Transmission system failures	Blanket	-	1,002	1,920	2,240
Various	Transmission pipe type cable pump house	Program	-	1,336	860	860
Total Reliability Projects			**$ 218,032**	**$ 214,590**	**$ 190,518**	**$ 188,031**

* Includes carry over from 2018. See "Carry Over" table for details
(a) Project to date expenditures includes projects that began prior to 2018

2019 Proposed and 2020 Projected Capital Expenditures
(Thousands of Dollars)

	Location	Investment Description	In Service Date	Total Project Cost	Project To Date Expenditures through 12/31/18 (a)	Proposed 2019	Projected 2020
Tools, Equipment, Other, Economic, Salvage							
	Various	Two way radio system upgrade project	Dec-19	47,668	23,061	12,388	3,500
	Farmingville	Bald Hill repeater cabinet upgrade	Dec-19	85	-	85	-
	Hicksville	Electrical shop building - door replacement	Jun-20	608	8	200	400
	Jones Beach	Jones Beach Energy & Nature Center	Dec-20	9,000	-	3,500	3,500
	Hicksville	Transmission operations control room facility replacement	May-23	84,000	-	150	3,500
	Various	LIRR program	Program	-	1,916	1,000	1,000
	Various	Feeder relay upgrade	Program	-	176	494	500
	Various	Substation security upgrade project	Program	-	832	1,252	500
	Various	Long Island Railroad right of way transmission pole replacement program	Program	-	12,541	19,270	9,040
	Various	Dusk to dawn lighting	Blanket	-	645	3,403	5,822
	Various	Eye wash station additions	Blanket	-	-	-	100
	Various	Capital tools	Blanket	-	3,249	2,880	3,200
	Various	Transfer distribution facilities to new telephone poles	Blanket	-	3,277	3,524	3,112
	Hicksville	Transmission control room - map board MUX	Blanket	-	-	720	-
Total Tools, Equipment, Other, Economic, Salvage				**$ 141,361**	**$ 45,706**	**$ 48,866**	**$ 34,173**
Grand Total Transmission & Distribution				**$ 1,379,105**	**$ 481,138**	**$ 526,902**	**$ 561,028**

* Includes carry over from 2018. See "Carry Over" table for details
(a) Project to date expenditures includes projects that began prior to 2018

2019 Proposed and 2020 Projected Capital Expenditures
(Thousands of Dollars)

Information Technology Projects by Business Unit	Investment Description	In Service Date	Total Project Cost	Project To Date Expenditures through 12/31/18 (a)	Proposed 2019	Projected 2020
Transmission & Distribution						
	LI SCADA Network Upgrade to MPLS	2019	9,542	6,035	3,507	-
	DSCADA	2019	6,231	2,079	4,152 *	-
	CGI CAD Upgrade	2019	12,908	10,288	2,620 *	-
	EMS Upgrade LCP	2019	6,373	1,582	4,791 *	-
	Storm Damage Assessment & Repair Mobile App	2019	2,108	1,148	960	-
	New Business/BRS	2019	627	369	258 *	-
	T&D Mobile App Continuous Improvement & New Features	2020	Blanket	-	-	1,200
	Transformer Monitoring and Data collection in T&D - Transformers	2020	Blanket	-	-	950
	NERC Compliance Protection test records Database for document and process control	2020	750	-	-	750
	Transmission Control Charts Replacement and ACC solution required	2020	500	-	-	500
	TOA Application for Transmission Ops	2020	300	-	-	300
	Mutual Aid crew management and Storm Dashboard	2020	500	-	-	500
	CYME Interfaces and connectivity	2020	250	-	-	250
	GIS Field Smart Designer (AUTP)	2021	4,000	-	-	2,200
	Team Center Upgrade	2020	2,200	-	-	2,200
	OMS Enhancements and work management continuous improvement	2020	Blanket	-	-	500
	Distribution Automation Database Replacement	2020	400	-	-	400
	Telecom DA Repeater Site JMUX Upgrade	2020	Blanket	-	-	400
	P6 Analytics Portfolio Dashboard Reporting and risk scenarios Solution	2021	1,500	-	-	750
	Drone Vegetation management and LIRR Inspections	2020	Blanket	-	-	500
	Relay and Substation database consolidation and reports	2021	850	-	-	600
	Electric Service Database Consolidation and reports	2021	850	-	-	600
	Automatic upload to NJUNS	2020	650	-	-	650
	T&D Data Lake & Analytics	2020	Blanket	-	-	750
	GIS Validation	2021	950	-	-	450
	T&D Training technologies Virtual Reality/Augmented Reality	2023	2,000	-	-	500
	GIS Upgrade	2023	9,250	-	-	750
	Primavera Upgrade	2022	4,000	-	-	1,500
Total Transmission & Distribution			**$ 66,739**	**$ 21,501**	**$ 16,288**	**$ 17,200**
Customer Service						
	Customer 360/ Customer Analytics	2019	Blanket	-	1,360 *	-
	Customer 360/ Customer Analytics Enhancements Blanket	2020	Blanket	-	-	2,000
	CRM Modernization - Salesforce	2020	11,834	1,617	7,217 *	3,000
	Salesforce Continuous Improvement Program	2020	Blanket	-	-	1,000
	Rate Change 2018 and VDER	2019	548	474	74	-
	Rate Change Enhancements Blanket	2020	Blanket	-	-	750
	Mobile App	2019	1,194	294	900	-
	Mobile App Enhancements Blanket	2020	Blanket	-	-	500
	Pinpoint Project to Eliminate SSN#s	2019	1,253	408	845 *	-
	New Business Portal	2019	842	190	652 *	-
	myAccount Enhancement Blanket	2019	Blanket	1,811	1,000	1,500
	Interactive Voice Response (IVR) Blanket (Continuous Improvement)	2019	Blanket	823	1,000	750
	Call Center Technology	2020	Blanket	-	-	1,000
	Enhance / New Payment Processing Options	2022	3,098	-	-	1,000
	Collection CAS Continuous Improvement Program	2020	Blanket	-	-	500
	AMI System Enhancements Continuous Improvement Program	2020	Blanket	-	-	1,431
	Voice Assistant (Multi channel)	2020	Blanket	-	-	500
	Kubra Enhancement Continuous Improvement Program	2020	Blanket	-	-	750
	Robotic Process Automation	2020	Blanket	-	-	250
	CAS Continuous Improvement	2020	Blanket	-	-	500
	Call Center LCP Software Upgrades	2020	Blanket	-	-	500
Total Customer Service			**$ 18,769**	**$ 5,617**	**$ 13,048**	**$ 15,931**

2019 Proposed and 2020 Projected Capital Expenditures
(Thousands of Dollars)

Information Technology Projects by Business Unit	Investment Description	In Service Date	Total Project Cost	Project To Date Expenditures through 12/31/18 (a)	Proposed 2019	Projected 2020
Information Technology						
	IT Life Cycle Replacement Program - CICS DB2	2019	759	409	350	-
	Middleware Upgrade/Replacement	2020	3,500	-	1,000	2,500
	AWS Migration - Cloud-based Storage Implementation (Gateway)	2019	500	-	500	-
	AWS Migration - Cloud-based Storage Implementation (Gateway) Enhancements Blanket	Blanket	Blanket	-	-	600
	AWS Migration - Standup AWS DMZ	2019	500	-	500	-
	Oracle 11.2 end of life - Replace with Open Source	2020	949	-	449	500
	Data Storage Refresh/Replacement - Non-Mainframe Systems	2019	500	-	500	-
	Network - Life Cycle Plan to Replace Aging Firewalls and Routers Part A	2019	600	449	151	-
	Infrastructure LCP	Blanket	Blanket	-	-	502
	LCP - Laptops	2019	1,100	350	750 *	-
	LCP - Mobile Data Terminals (MDTs)	2019	1,774	74	1,700 *	-
	LI LAN - NAC	2022	1,700	-	-	500
	LI WAN - LCP to Upgrade AWS Testing Toolkit	Blanket	1,300	-	-	500
	LI LAN - ISE (Identity Service Engine)	Blanket	3,225	-	-	500
	LI LAN - Upgrade Infrastructure Support Tools	Blanket	2,900	-	-	500
	LI WAN - Internet Upgrade	Blanket	350	-	-	250
	Okta - Identity Access for employees and applications	Blanket	2,000	-	-	300
	LI WAN - Copper to Fiber Network Transformation	Blanket	700	-	-	100
	LI WAN - WAN Diversity & SDWAN Implementation	2021	2,000	-	-	500
	LI LAN - Stealthwatch and DNAC integration	2020	300	-	-	300
Total Information Technology			**$ 24,657**	**$ 1,282**	**$ 5,900**	**$ 7,552**
Grand Total Information Technology Projects			**$ 110,165**	**$ 28,400**	**$ 35,236**	**$ 40,683**

* Includes carry over from 2018. See "Carry Over" table for details
(a) Project to date expenditures includes projects that began prior to 2018

Long Island Power Authority

2019 Proposed and 2020 Projected Capital Expenditures
(Thousands of Dollars)

Utility 2.0	Investment Description	Proposed 2019	Projected 2020
Empowering Customers			
	Core AMI: Operational	50,061	47,788
	Core AMI: PMO + Change Management	2,000	2,000
	Enabled AMI: Revenue Protection	1,050	-
	Enabled AMI: Customer Experience	3,300	1,500
	Enabled AMI: Outage Management	950	-
	Enabled AMI: Rate Modernization	9,500	-
	Enabled AMI: Analytics	4,100	600
	Accelerated Meters to 2018	(2,300)	-
Total Empowering Customers		**$ 68,661**	**$ 51,888**
Evolving to the DSP			
	SGIP Interconnection	-	2,270
	Locational Value Study	1,000	-
	NWA Planning & Analysis Tool	-	-
Total Evolving to the DSP		**$ 1,000**	**$ 2,270**
Total Utility 2.0 Projects		**$ 69,661**	**$ 54,158**

* Includes carry over from 2018. See "Carry Over" table for details
(a) Project to date expenditures includes projects that began prior to 2018

2019 Proposed and 2020 Projected Capital Expenditures
(Thousands of Dollars)

Business Units	Investment Description	In Service Date	Total Project Cost	Project To Date Expenditures through 12/31/18 [(a)]	Proposed 2019	Projected 2020
Customer Service						
	Purchase Electric Meters	Blanket	-	8,629	6,915	6,966
	Install/Remove Meters	Blanket	-	8,218	3,750	3,793
	Tools/Equipment	Program	-	1,667	729	500
Total Customer Service Projects			**-**	**$ 18,513**	**$ 11,394**	**$ 11,259**
Facilities						
	Facilities Services	Program	-	4,022	6,694 *	4,534
	Shoreham Facility Upgrades	Program	-	884	2,250 *	-
Total Facilities Projects			**-**	**$ 4,906**	**$ 8,944**	**$ 4,534**
Fleet						
	Fleet	Program	-	9,655	5,495	10,735
Total Fleet Projects			**-**	**$ 9,655**	**$ 5,495**	**$ 10,735**
Grand Total PSEG Long Island Projects with Carryover					**$ 657,632**	**$ 682,397**
FEMA Related Projects					**$ 153,609**	**$ 49,980**
Storm Capitalization					**$ 3,501**	**$ 4,243**
PSEG Long Island and FEMA Related					**$ 814,742**	**$ 736,620**

* Includes carry over from 2018. See "Carry Over" table for details
(a) Project to date expenditures includes projects that began prior to 2018

2018 Carry Over Costs into 2019
(Thousands of Dollars)

	Location	Investment Description	2019 Carry Over Costs
Transmission & Distribution			
Regulatory Projects			
	East Garden City	EGC- Valley Stream (N-1-1)	3,153
Total Regulatory Projects			**$ 3,153**
Load Growth Projects			
	Arverne	Underground 13kV feeder extension	200
	Culloden Point	Culloden Pt. 23kV Conversion to 33kV	1,384
	Hero	Hero Substation 9X 23kV to 13kV Conversion	24
	Bridgehampton	Bridgehampton (9R)-Buell (9E)-New 69kV Trans Ckt	2,700
	Southampton	Canal (9C)-Southampton (9B)-New 69kV Trans Ckt	7,152
	Flowerfield	Upgrade 69/13 kV substation & distribution feeder	80
	Kings Highway	Kings Hwy Install New Substation and Associated Distribution	7,468
	Massapequa	Massapequa Install New Substation	2,140
	Pilgrim	Replace 13kV switchgear & install new feeder	2,251
	Roslyn	Expand 138/13 kV substation and feeders	32
	Round Swamp	Establish new 69/13kV substation	730
	Ruland Road	Ruland Rd. to Plainview New 69KV Circuit	9,603
	Lake Success	Smart Wires - Lake Success to Stewart Manor to Whiteside	356
	Navy Road	Navy Rd. New 23-13 kV Sub & Assoc C&R	3,825
	Navy Road	Navy Road – 2nd 23-13kV Bank & Swgr and Trans / Dist Ckts	3,825
Total Load Growth Projects			**$ 41,770**
Reliability Projects			
	Fire Island Pines	Install new 23 kV circuit to Ocean Beach	490
	Fire Island Pines	Install new 23 kV circuit to Davis Park	1,386
	Hicksville	Purchase two mobile units	170
Total Reliability Projects			**2,046**
Total Transmission & Distribution			**$ 46,969**

2018 Carry Over Costs into 2019
(Thousands of Dollars)

	Location	Investment Description	2019 Carry Over Costs
Information Technology			
IT-Transmission & Distribution			
		New Business Requirements	200
		New Business Web Portal	150
		EMS upgrade LCP	250
		CGI CAD Upgrade	500
		LI DSCADA	250
Total IT-Transmission & Distribution			**1,350**
IT-Customer Service			
		CRM Modernization - Salesforce	600
		Customer 360 - New Analytics Platform	360
		Pinpoint Project to Eliminate SSN#s	100
Total IT-Customer Service			**$ 1,060**
IT-Information Technology			
		LCP 2018 Prog - Laptops	750
		LCP 2018 Prog - Mobile Data Terminals (MDTs)	1,700
Total IT-Information Technology			**$ 2,450**
Total Information Technology			**$ 4,860**
Business Services			
Facilities			
	Hicksville	Operations 2 Renovation	2,041
	Shoreham	Shoreham Segmentation	2,250
Total Business Services			**$ 4,291**
Total Project Carry Over			**$ 56,120**

Long Island Power Authority

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

LIPA's Relationship with New York State Government

The Long Island Power Authority is a component unit of New York State. The Authority became the retail supplier of electric service in the Counties of Nassau and Suffolk (with certain limited exceptions) and a portion of Queens County known as the Rockaways (Service Area), on May 28, 1998 by acquiring the transmission and distribution system of the Long Island Lighting Company as a wholly owned subsidiary of the Authority. The Authority provides electric delivery service in the Service Area, which includes approximately 1.1 million customers. The population of the Service Area is approximately 2.9 million. In order to assist the Authority in providing electric service to its customers, the Authority entered into operating agreements to provide the Authority with the operating personnel, and a significant portion of the power supply resources, necessary for the Authority to provide electric service.

Under the Authority's business model, essentially all costs of operating and maintaining the Authority's T&D system incurred by PSEG Long Island, the Authority's Service Provider, are passed through to and paid for by the Authority.

Long Island Power Authority
2019 Proposed and 2020 Projected Operating and Capital Budgets

Budget Process

Under the terms of the LIPA Reform Act and the Amended and Restated Operations Services Agreement, the LIPA Consolidated Budget and Financial Plan are jointly developed by LIPA and its Service Provider, PSEG Long Island.

The LIPA Consolidated Budget outlines projected spending by major expense and revenue category. The budget reflects the operating and capital costs required to provide electric service in the Service Area.

Budget Development Schedule:

- April through October: LIPA and PSEG Long Island develop projections of current year spending and preliminary budget forecasts for the upcoming year and financial plan.
- June through October: PSEG Long Island provides LIPA with preliminary Capital project projections.
- October:
    - PSEG Long Island provides LIPA with a preliminary budget. This includes projections for current year spending as well as a preliminary budget for the years covered by the financial plan. The preliminary budget submission is reviewed by LIPA.
    - LIPA provides PSEG Long Island its portion of the Consolidated Budget by mid-October.
    - PSEG Long Island produces a LIPA Consolidated Budget by the end of October.
    - The LIPA Consolidated Budget is reviewed by senior level staff from both LIPA and PSEG Long Island.
- November:
    - Public Hearings are held in November to solicit comments from the public.
    - The Board of Trustees is briefed on the budget during Budget Workshops.
- December: The Board of Trustees votes on the adoption of the LIPA Consolidated Budget.

Certification

I hereby certify that, to the best of my knowledge and belief after reasonable inquiry, the budget information and financial projections contained herein for the years ending December 31, 2018 through December 31, 2020 have been developed based on reasonable assumptions and methods of estimation and that the requirements of 2 NYCRR Part 203 have been satisfied.

/s/
Thomas Falcone
Chief Executive Officer
Long Island Power Authority

Dated: December 19, 2018

This Page Intentionally Left Blank

www.lipower.org