

# PSEG Long Island Operating Report

## Report to the Board of Trustees

June 23, 2021

# PSEG Long Island is Ready for Storm Season

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- Storm Readiness
- May 2021 OSA Scorecard
- Performance Review 2021 YTD
  - Safety
  - Customer Satisfaction
  - Customer Perception
  - Electric Reliability
- Summary of Audit Reports
- Appendix

# System Testing, Enhancements and Drills

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## PSEG Long Island is more ready than ever for storm season...

- Extensive System Testing & Enhancements to Systems
  - 90% Customer Outage Test over 24 hours
  - End To End 5 Hour burst modeling Isaias
  - Multiple Telephony and Component Tests Completed
- Development of robust Business Continuity Plans & Drills
- Multiple Drills completed
  - 3 Business Continuity Drills
  - Transmission Operations Center Drill
  - Hurricane Table Top Exercise with external participants
  - Power Supply Contingency/Load Shedding Drill
- Continued infrastructure improvements and maintenance work

# Storm Readiness



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**PSEG Long Island is prepared for hurricane season and to meet peak demand during extreme heat situations**



**Enhancements and upgrades to our systems and storm processes include:**

- System Testing and Enhancements
- Storm Hardening Programs
- Electric Infrastructure Improvements
- Reliability Improvement Plans
- Business Continuity and Emergency Procedures

# PSEG Long Island OSA 2021 Balanced Scorecard

YTD Result Color  
 At or Better than YTD Plan  
 Worse than YTD Plan

YE Forecast  
 On track to meet Target  
 Meeting Target at risk  
 Not expected to meet Target

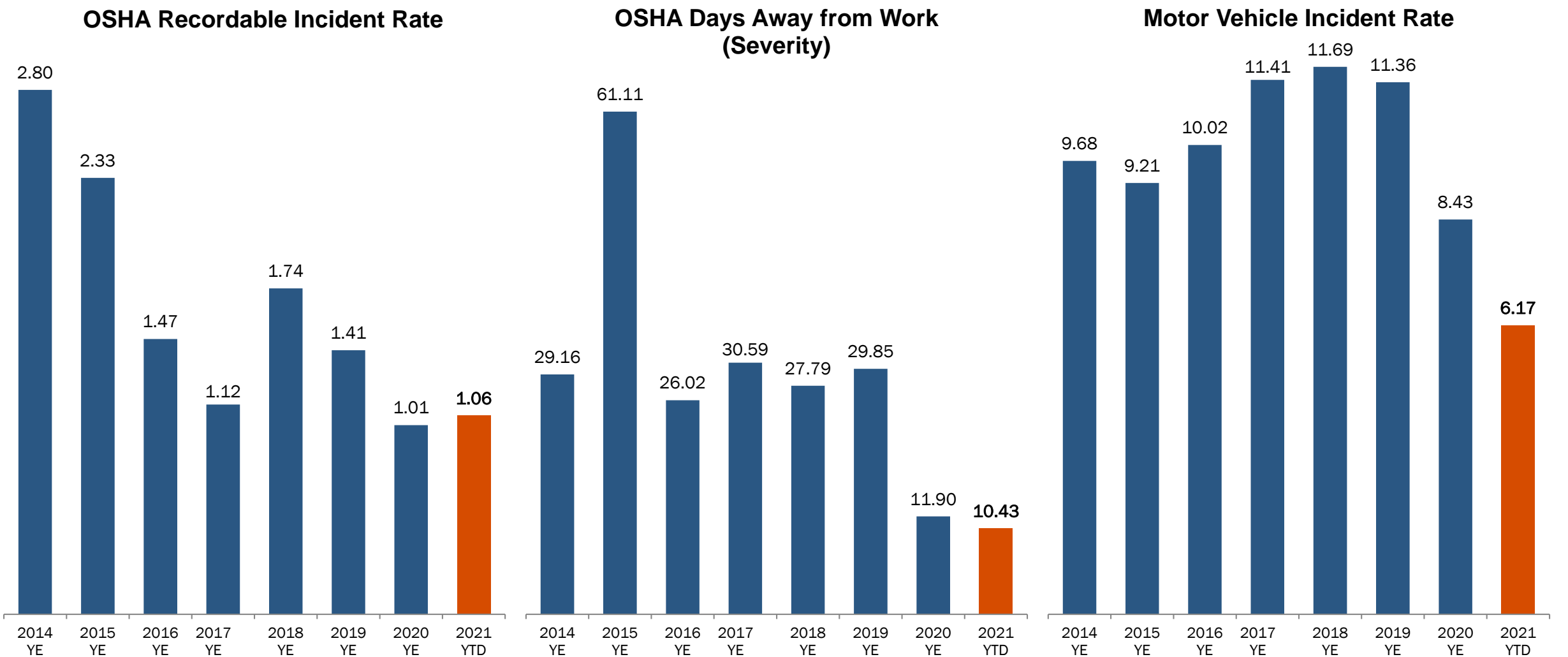
Month Status  
 At or Better than Plan  
 Worse than Plan  
 N/A

				May YTD				Month of May					
Operations Services Agreement Metrics				Base Points	Low/ High	OSA YE Target	OSA YTD Target		YTD Result	OSA Forecast	OSA Month Target	Month Result	Month Status
People	OSHA Recordable Incidence Rate	5	L	1.27	1.27	1.06	↑	1.27	1.00	+			
	OSHA Days Away Rate (Severity)	2.5	L	17.00	17.00	10.43	↑	17.00	6.52	+			
	Reduce Motor Vehicle Incidents	2.5	L	-5.8%	-5.8%	-46.2%	↑	-5.8%	0.0%	–			
Safe, Reliable	JD Power Customer Satisfaction Survey (Residential)	5	H	730 or 8th	730 or 8th	652	➡	730 or 8th	652	–			
	JD Power Customer Satisfaction Survey (Business)	5	H	789 or 6th	789 or 6th	Jul	↑	789 or 6th	Jul				
	After Call Survey (Residential)	5	H	91.5%	91.5%	95.1%	↑	91.5%	94.9%	+			
	After Call Survey (Business)	5	H	91.5%	91.5%	96.1%	↑	91.5%	96.6%	+			
	Personal Contact Survey	5	H	92.0%	92.0%	97.7%	↑	92.0%	98.2%	+			
	Average Speed of Answer	5	L	19	19	8	↑	19	7	+			
	Customer Complaint Rate	5	L	6.5	6.5	11.8	↑	6.5	2.1	+			
	SAIFI (System Average Interruption Frequency Index)	5	L	0.76	0.25	0.26	➡	0.05	0.06	–			
	CAIDI (Customer Average Interruption Duration Index)	5	L	85	85	66	↑	85	81	+			
	SAIDI (System Average Interruption Duration Index)	5	L	59.0	17.4	17.3	➡	3.6	4.5	–			
	MAIFI (Momentary Average Interruption Frequency Index)	5	L	2.56	0.80	0.59	↑	0.18	0.15	+			
	AMI Installations	5	H	95% by Sept.		194,228	↑		41,805				
	First Call Resolution (FCR)	5	H	82.8%	82.8%	82.8%	↑	82.8%	82.7%	–			
	Double Woods (Focus Areas)	1	L	9,110	9,616	8,657	↑	N/A	N/A	N/A			
Economic	Operating Budget (\$M)	N/A	L	562.0	231.4	221.4	↑	46.5	49.2	–			
	Capital Budget (\$M)	N/A	L	712.3	299.8	272.3	↑	53.7	63.6	–			
	Low to Moderate Income Program Participation (Focus Areas)	1	H	35,000	35,000	46,165	↑	N/A	N/A	N/A			
Green	Customer Self-Service	5	H	48.5%	40.1%	37.8%	↑	N/A	N/A	N/A			
	Energy Efficiency Annualized Energy Savings	5	H	1,099,976	461,949	504,292	↑	97,859	104,111	+			
	Electric Vehicles (Focus Areas)	1	H	1,000	475	791	↑	75	125	+			
	Heat Pumps (Focus Areas)	1	H	4,447	1,869	2,497	↑	319	430	+			

**Note: \*Tentative agreed upon targets by both parties as per LIPA letter on June 3, 2021 and PSEG LI response sent on June 16, 2021**

# PSEG Long Island Performance

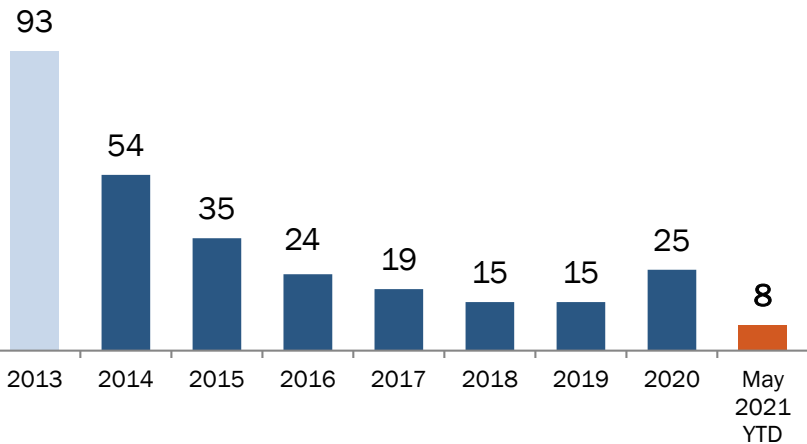
## Safety



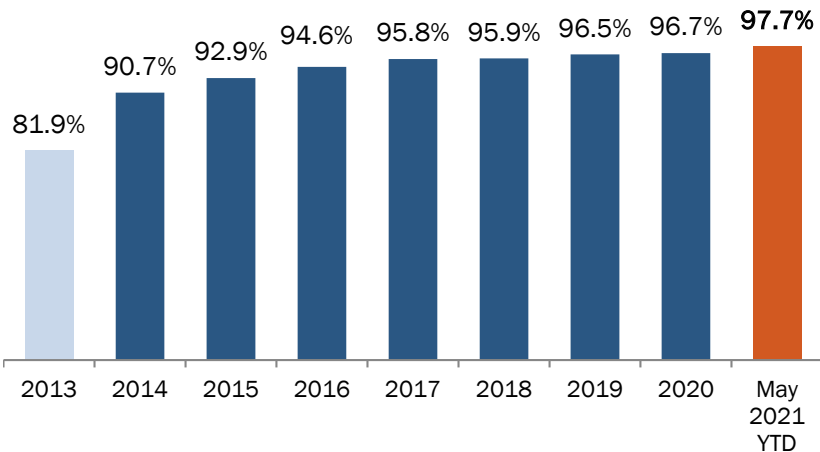
# PSEG Long Island Performance

## Customer Satisfaction

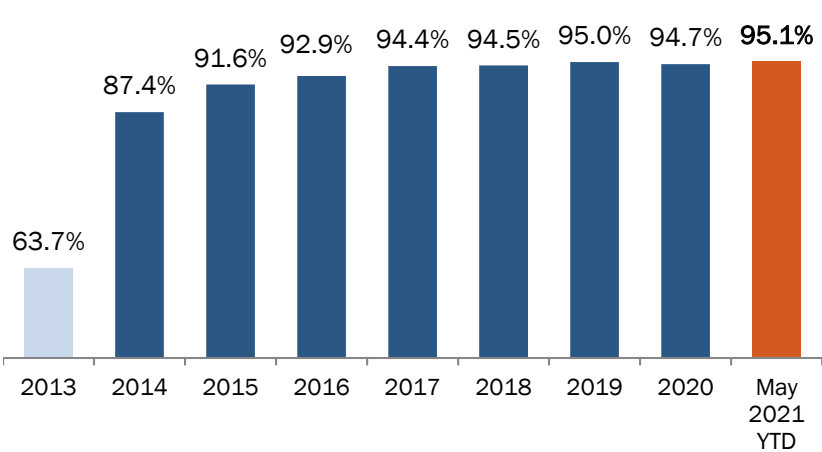
Average Speed of Answer  
(Seconds) ↓



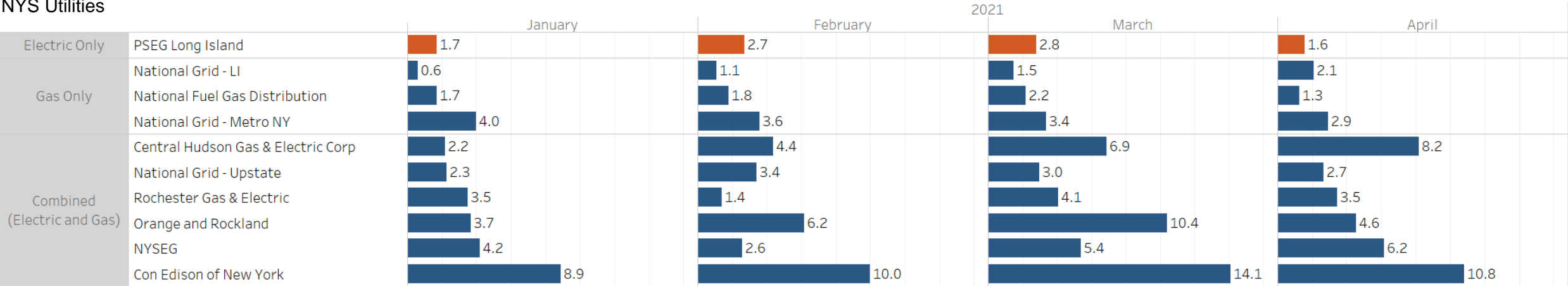
Personal Contact Survey ↑



After Call Survey – Residential ↑



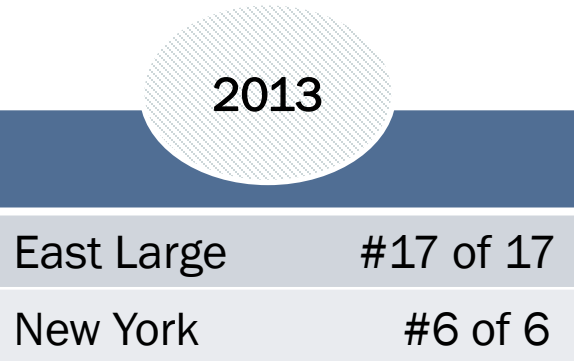
2021 Monthly Customer Complaint Rate  
NYS Utilities



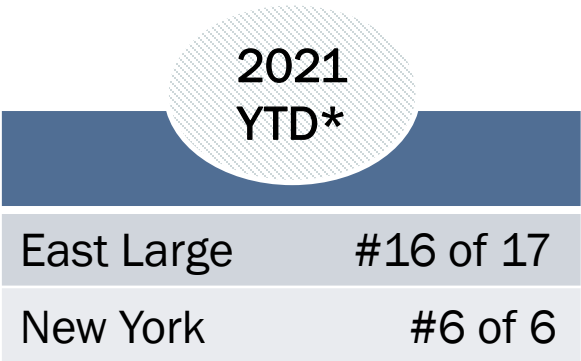
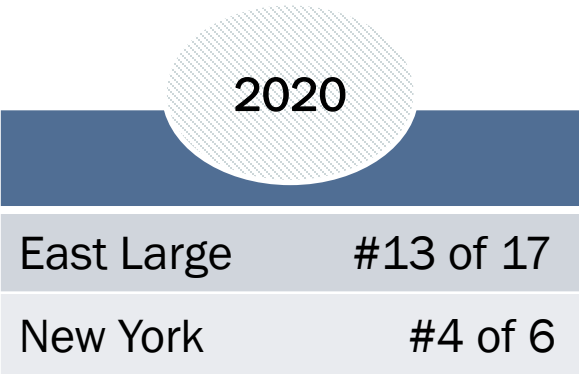
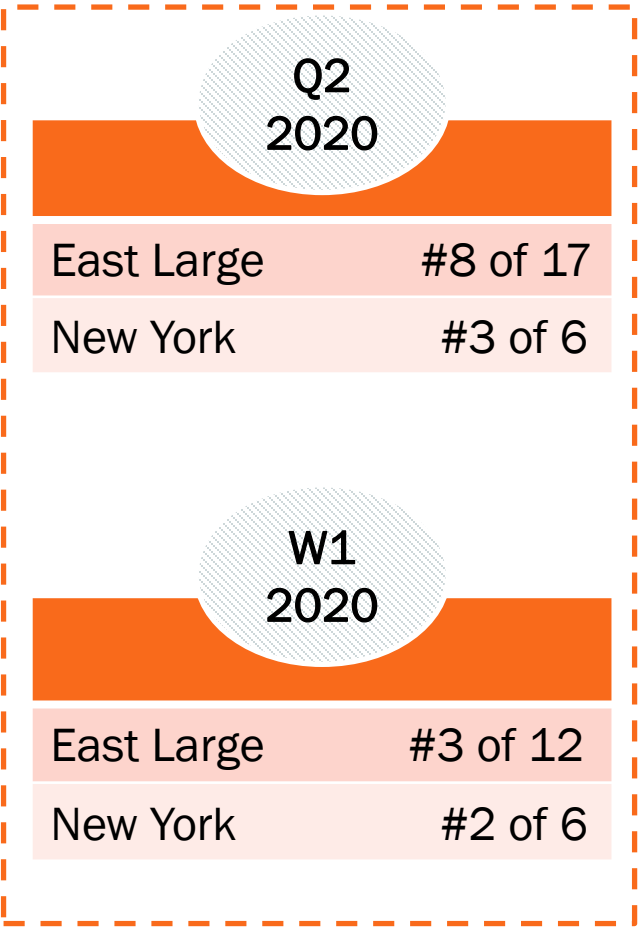
# PSEG Long Island Performance

## Customer Perception

### Residential

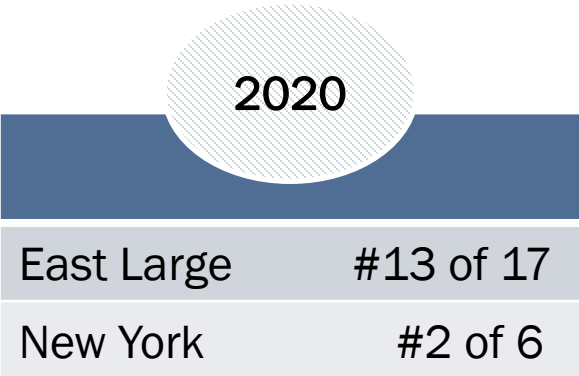
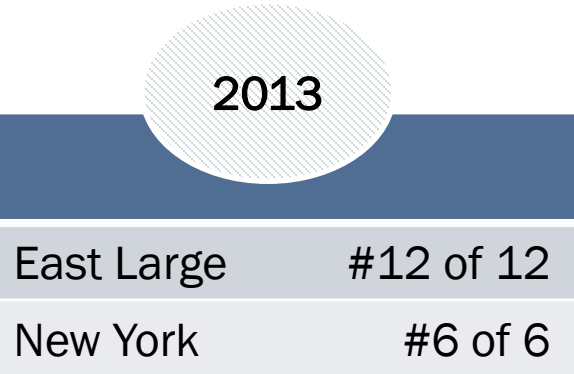


### Scores Pre Isaias



\*2 quarters of results to date

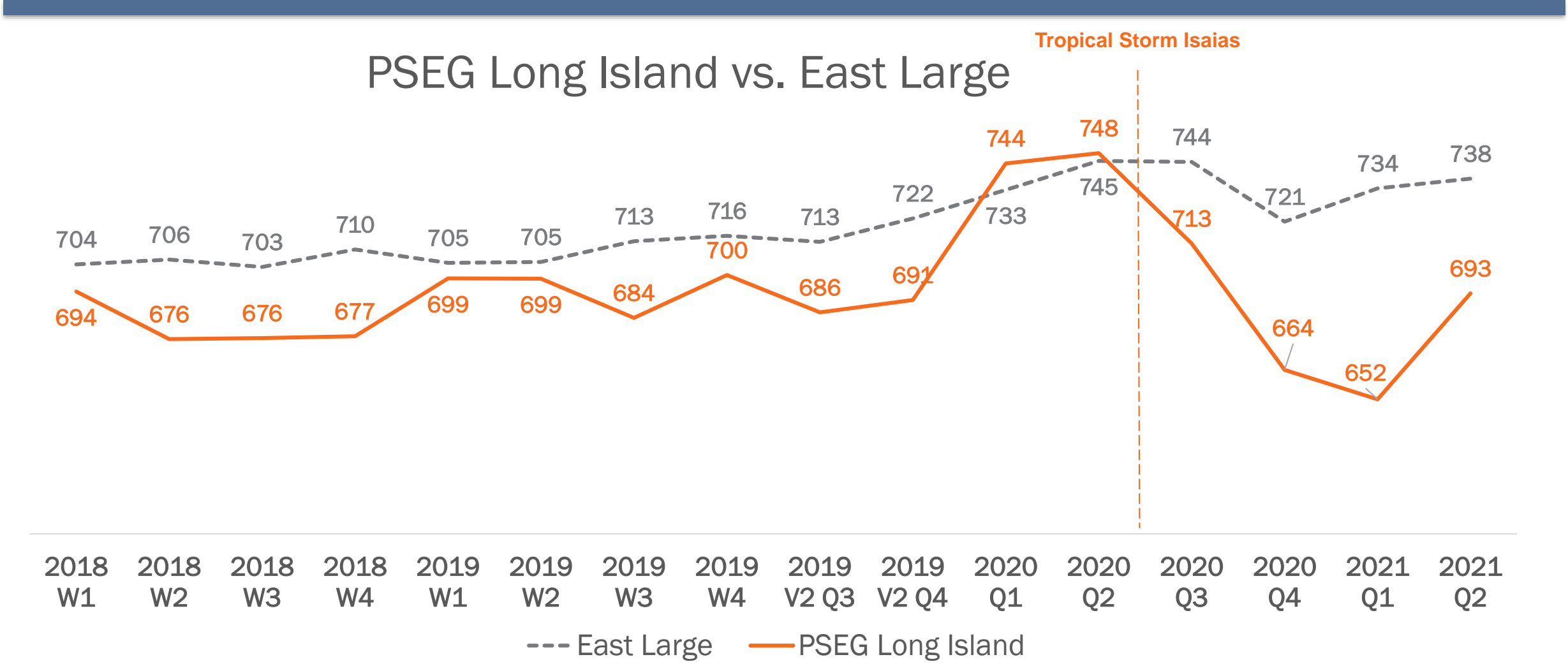
### Business





# PSEG Long Island Performance

Customer Perception

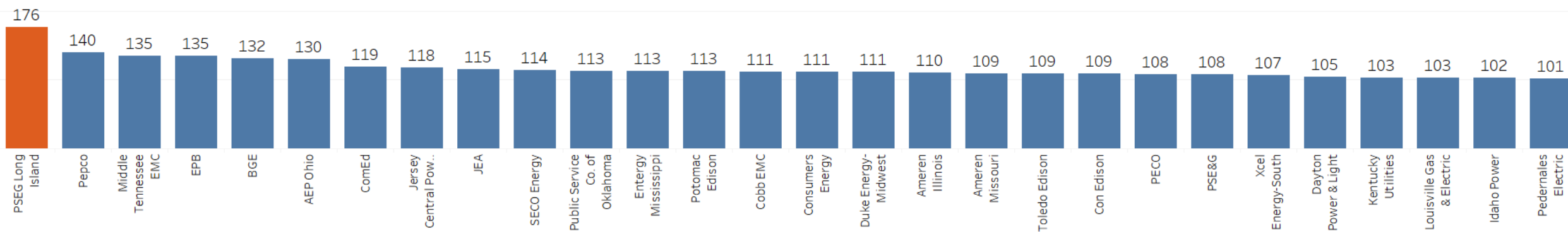


# PSEG Long Island Performance

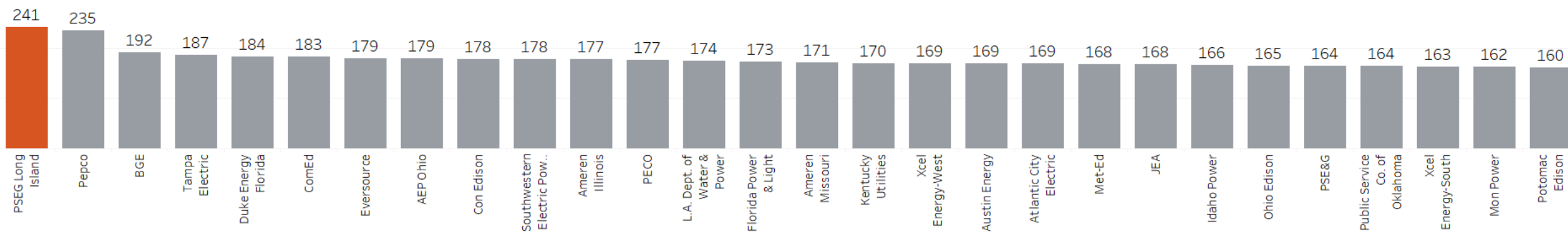
## Customer Perception

Through 2020, PSEG Long Island remains the top improved utility in JD Power Residential and Business when compared to baseline LIPA scores from 2013 – far surpassing initial contract targets

### Residential

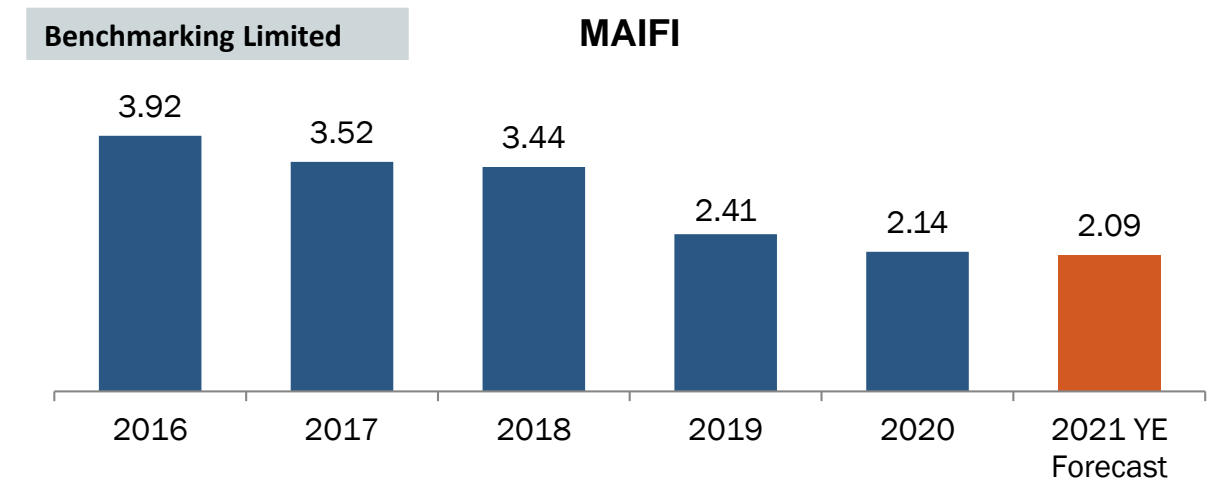
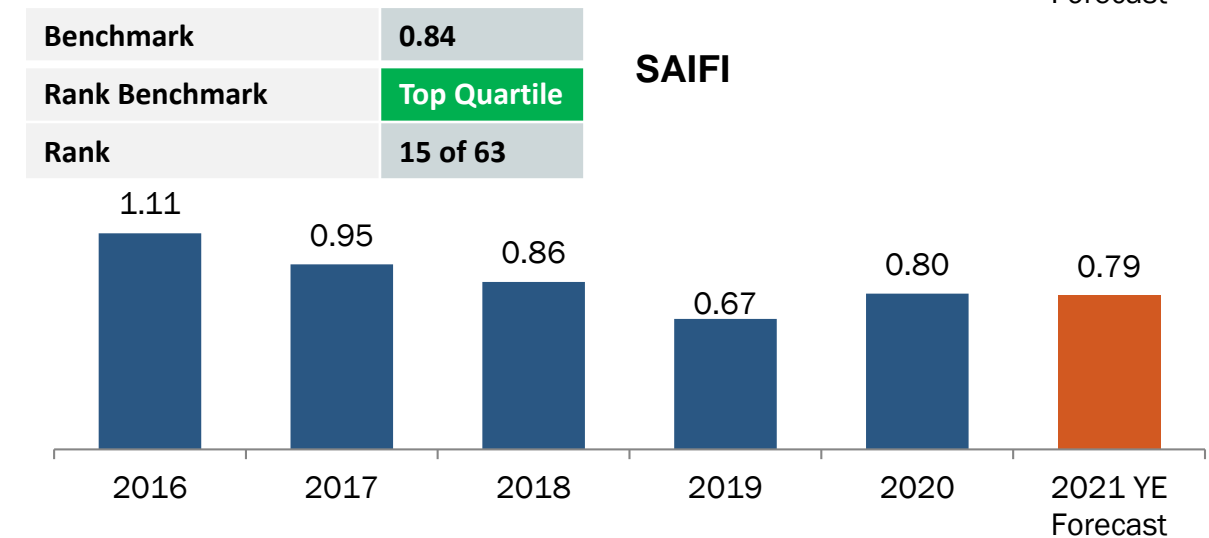
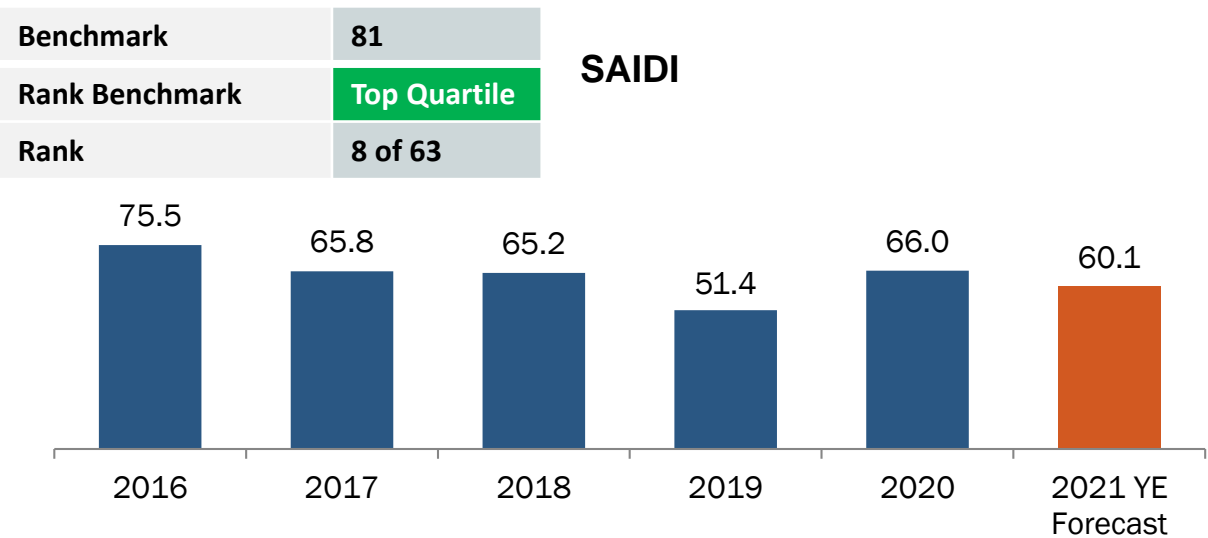
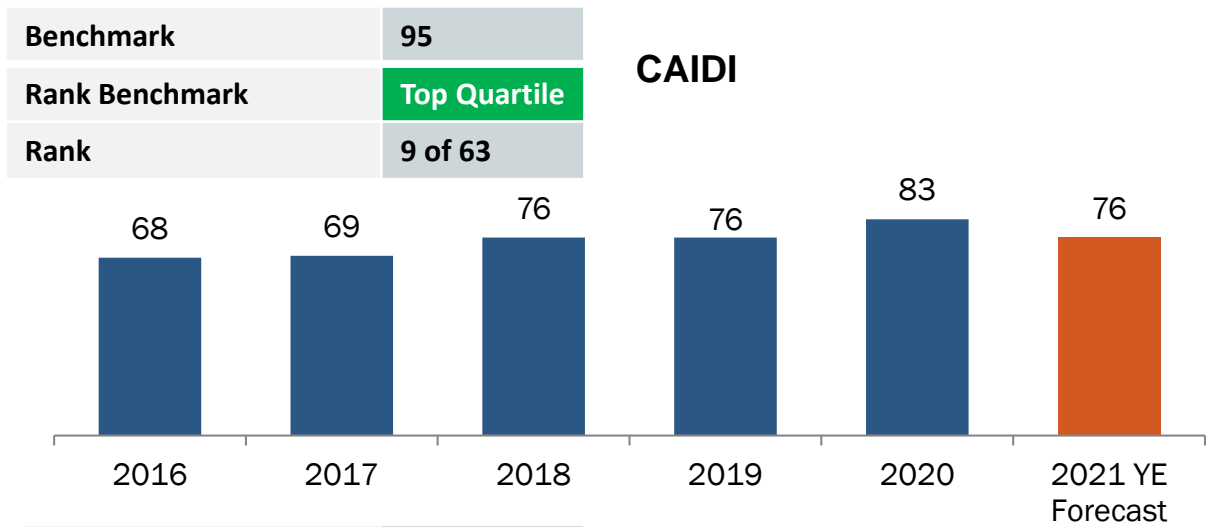


### Business



# PSEG Long Island Performance

Electric Reliability – EIA Reliability Data Benchmarking Comparison – Companies with >500k Customers



# Summary of Audit Reports (2014 – 2020)

## PSEG LI Audit Results

Audit Year	Unsatisfactory	Major Improvement Needed	Some Improvement Needed	Effective	Total
2014	0	0	6	0	6
2015	0	2	7	2	11
2016	0	0	12	0	12
2017	0	1	8	4	13
2018	0	0	11	4	15
2019	0	0	11	4	15
2020	0	0	8	5	13
<b>Total</b>	<b>0</b>	<b>3</b>	<b>63</b>	<b>19</b>	<b>85</b>

## LIPA Audit Results

Audit Year	Unsatisfactory	Major Improvement Needed	Some Improvement Needed	Effective	Total
2014	0	1	0	0	1
2015	0	0	2	1	3
2016	0	2	7	0	9
2017	0	0	4	1	5
2018	1	0	10	2	13
2019	0	0	5	3	8
2020	0	1	3	0	4
<b>Total</b>	<b>1</b>	<b>4</b>	<b>31</b>	<b>7</b>	<b>43</b>

## Combined Audit Results

Audit Year	Unsatisfactory	Major Improvement Needed	Some Improvement Needed	Effective	Total
2014	0	1	6	0	7
2015	0	2	9	3	14
2016	0	2	19	0	21
2017	0	1	12	5	18
2018	1	0	21	6	28
2019	0	0	16	7	23
2020	0	1	11	5	17
<b>Total</b>	<b>1</b>	<b>7</b>	<b>94</b>	<b>26</b>	<b>128</b>

# Audit Opinions/Ratings

Effective	Controls evaluated are adequate, appropriate and effective to provide reasonable assurance that risks are being managed and objectives will be met.
Some Improvement Needed	Generally, controls are adequate, appropriate and effective to provide reasonable assurance that risks are being managed and objectives will be met. However, a few specific control weaknesses were noted.
Major Improvement Needed	Numerous specific control weaknesses were noted. Controls evaluated are unlikely to provide reasonable assurance that risks are being managed and objectives will be met.
Unsatisfactory	Controls evaluated are not adequate, appropriate or effective to provide reasonable assurance that risks are being managed and objectives will be met.

# Appendix

# Storm Hardening

## Strengthening the Infrastructure

- PSEG Long Island is standing up to severe weather by storm hardening the electric infrastructure that powers our communities.
- Our storm-hardening program focuses on mainline circuits, the backbone of PSEG Long Island's distribution system. The mainline powers the many branch lines that power your home or business.

### FEMA Program

- Between 2014 and 2020, **917 miles of distribution mainline circuits** storm-hardened using FEMA funding.
- **35% reduction** in overall storm damage on storm-hardened circuits.

### Power On Program

- **59 miles of distribution mainline circuits** enhanced with stronger poles, thicker wire and upgraded equipment since April 2020



# Electric Infrastructure Improvements

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PSEG Long Island has upgraded more than **3,000 miles of wire!** PSEG Long Island works every day to strengthen and maintain the system to meet the growing energy needs of our Long Island and Rockaways customers

Across Long Island and the Rockaways, PSEG Long Island has prepared the electric infrastructure by focusing on:

- **Substation, and transmission and distribution improvements, as well as circuit and equipment inspections using drones, helicopters and infrared technology**

## **PSEG Long Island's recent infrastructure improvements include:**

- New transformers installed in Elmont, Uniondale, Culloden Point, Roslyn, Far Rockaway and Flowerfield substations to provide additional capacity during peak demand
- 4 new distribution feeder lines installed in Elmont, Uniondale, Roslyn and Flowerfield areas to accommodate load growth
- 6 distribution circuits upgraded in Kings Point, North Hills, Massapequa, Mitchel Gardens, Lake Success and Rockaway Beach to improve circuit reliability
- 37 transmission system circuit breakers added or replaced for enhanced system reliability
- **A new transmission circuit installed between the Riverhead and Canal substation (project spotlight)**
- A transmission circuit upgraded between the Wildwood and Riverhead substations

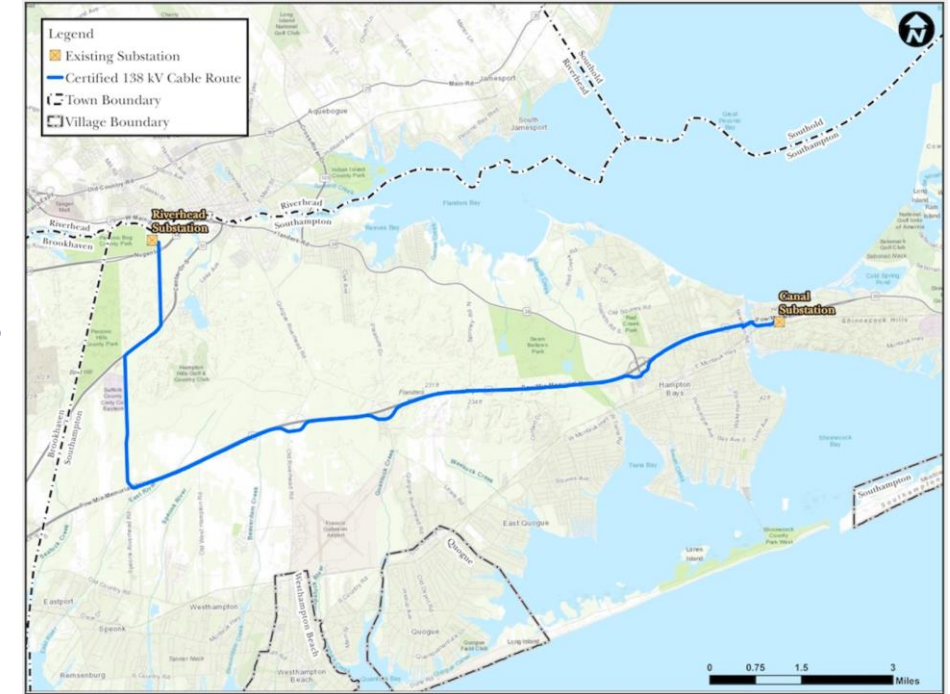


# Project Spotlight

## Riverhead to Canal Transmission Cable

### Project Costs: \$68.0M

- On April 29th, PSEG LI's Riverhead to Canal Second 138kV Underground Cable Project was placed in service
- The project took less than one year between start of construction and in-service date
- This is the new underground transmission line, approximately 16 miles in length, from the Riverhead to Canal Substation that parallels an existing circuit installed in 2000
- The new 138kV electric transmission cable will help ensure the continued reliable service to the East End of Long Island. Long Island's South Fork load is continually growing at an average rate of 2.5 percent per year



# Reliability Improvement Programs

Reliability Programs	Program Effectiveness
FEMA Hardening	<ul style="list-style-type: none"> <li>• 46% reduction in number of customer outages 1 year before versus 1 year after work completion</li> </ul>
Power On!	<ul style="list-style-type: none"> <li>• Continuation of FEMA mainline hardening on targeted circuits</li> <li>• 2020 program to directly benefit 70,531 customers</li> </ul>
Less Than 500 Customers (LT5H)	<ul style="list-style-type: none"> <li>• 3% Annual SAIFI Improvement through 2023.</li> <li>• 15% total program benefit.</li> </ul>
CIP/NOP	<ul style="list-style-type: none"> <li>• 29% reduction in the number of preventable customer outages (overhead equipment and tree) 1 year before versus 1 year after work completion</li> </ul>
Smart Grid Initiatives	<ul style="list-style-type: none"> <li>• AMI meter integration with GIS/OMS to proactively identify overloaded fuses and transformers</li> <li>• Machine learning (AI) to identify vine conditions</li> </ul>
Non Reclose Assurance (NRA) Automation	<ul style="list-style-type: none"> <li>• 59% decrease in NRA outages versus 2016</li> </ul>
Vegetation Management Program	<ul style="list-style-type: none"> <li>• 32% reduction in the number of vegetation related customer outages 1 year before versus 1 year after trim</li> </ul>
MAIFI Improvement Program	<ul style="list-style-type: none"> <li>• 68% reduction in the number of momentary customer interruptions 1 year before versus 1 year after work completion</li> </ul>



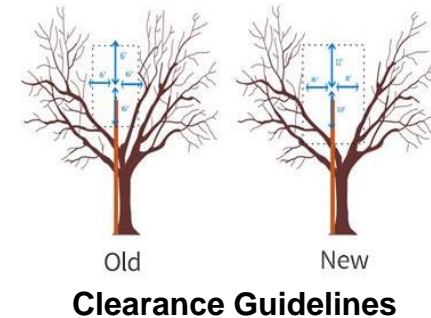
# Electric System Maintenance

## Vegetation Management

- PSEG Long Island's has vegetation management program has **reduced tree related outages by 33%**
- PSEG Long Island implemented is in the **2<sup>nd</sup> cycle of the implemented four year cycle**. Some outage-prone areas may be trimmed sooner.
- Arborists from **PSEG Long Island's Tree Trimming program** work year-round to identify and trim tree limbs in rights of way and along easements that could potentially cause outages during or after a storm.

## Hazard Tree Removal

- PSEG Long Island Arborists typically secure permission from residential and municipal customers to remove more than **8,000 hazard trees and large limbs annually as part of a Hazard Tree Program**.
- Arborists also **identify annually more than 3,000 vine locations** which will then be removed as part of **PSEG Long Island's Vine Mitigation Program**.



# Business Continuity and Emergency Procedures

- PSEG Long Island updated its **business continuity and emergency procedures** to improve response in the event of a failure of critical systems.
- Since last August, PSEG Long Island has conducted three **Restoration Contingency Exercises** and one **Hurricane Table Top Exercise** with participation from NYS Department of Public Service, LIPA and other state and local emergency service and response organizations.

