PSEG Long Island

Operating Report – January 2024 LIPA Board of Trustees Meeting

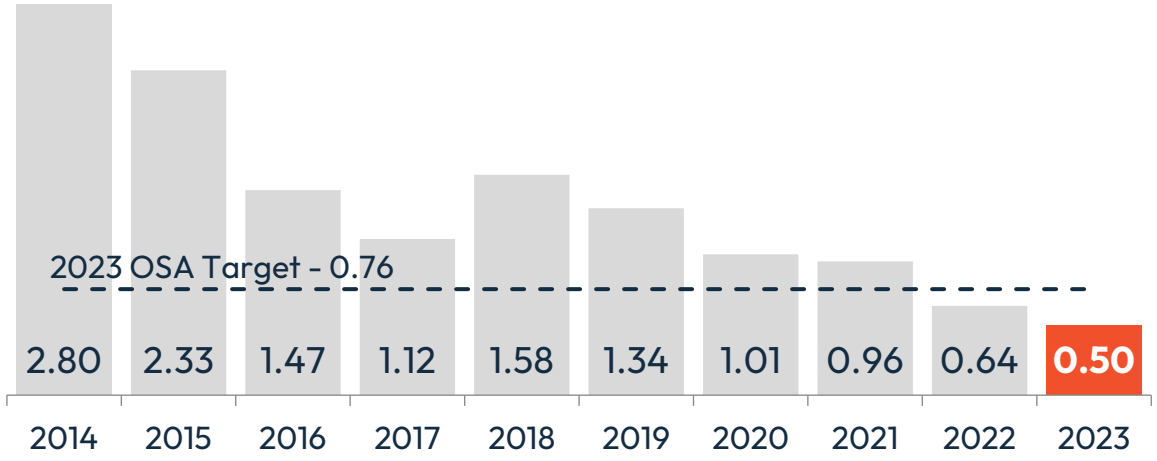
January 25, 2024

Agenda

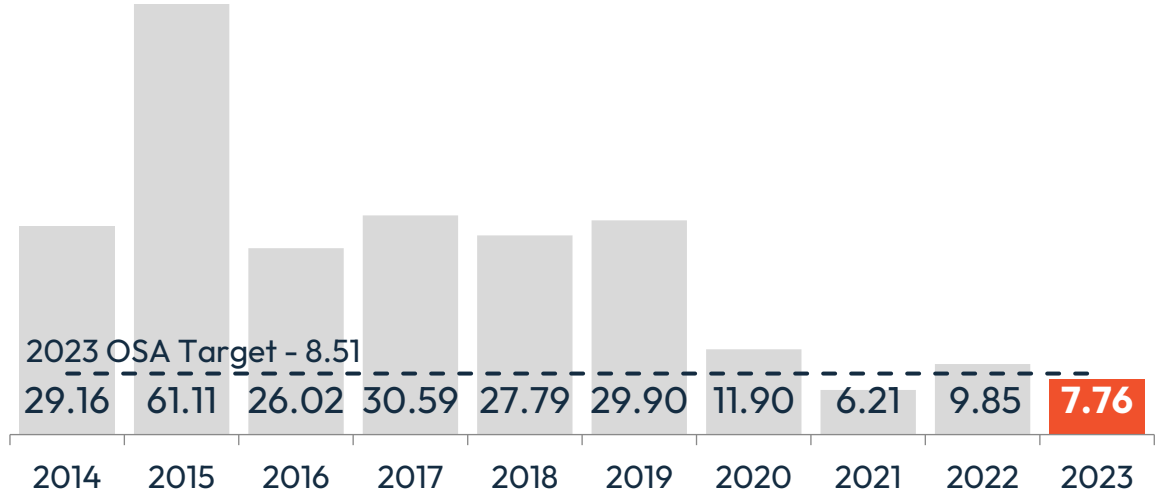
- Operations Update
- Storm Preparation & Response
- Storm Hardening & Resiliency
- Safety Overview
- Call Center Update

Safety Performance

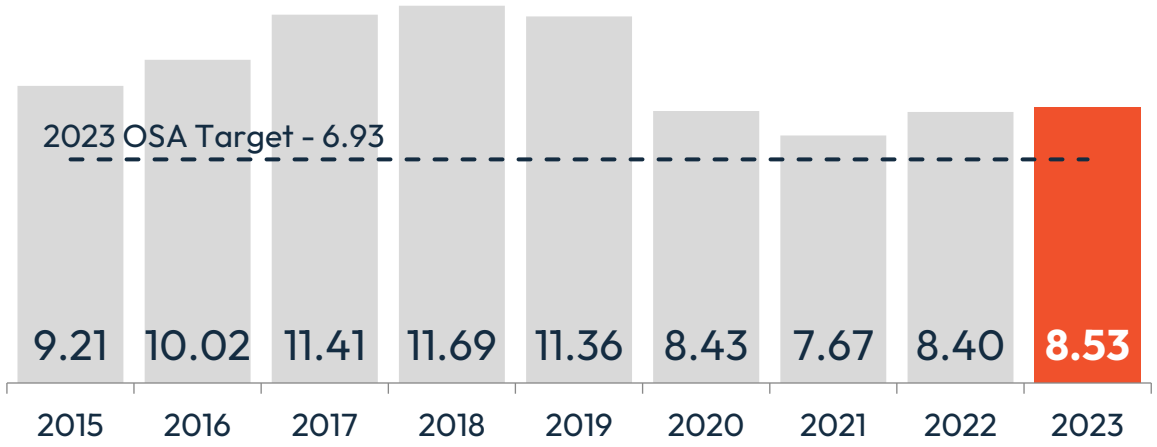
OSHA Recordable Incident Rate



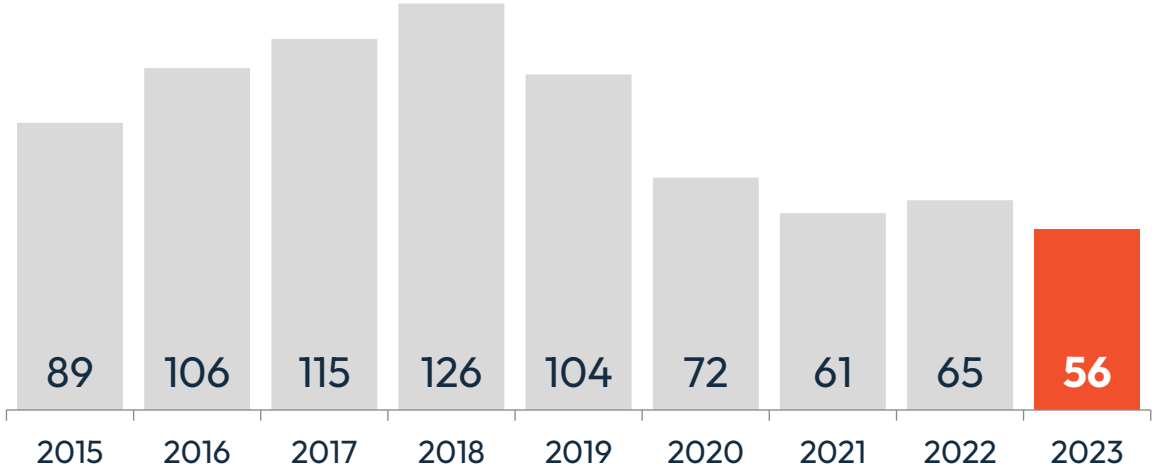
OSHA Days Away Rate (Severity)



Motor Vehicle Accident Rate



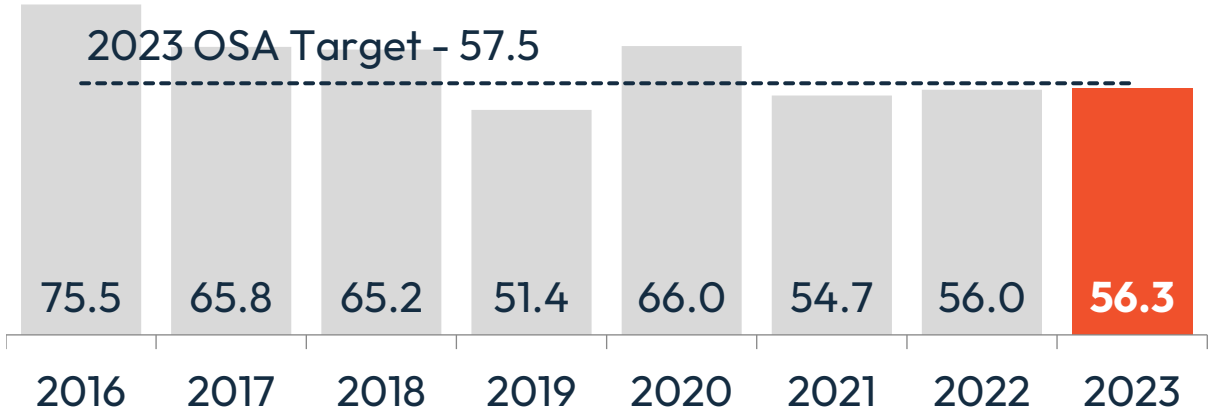
of Motor Vehicle Accidents



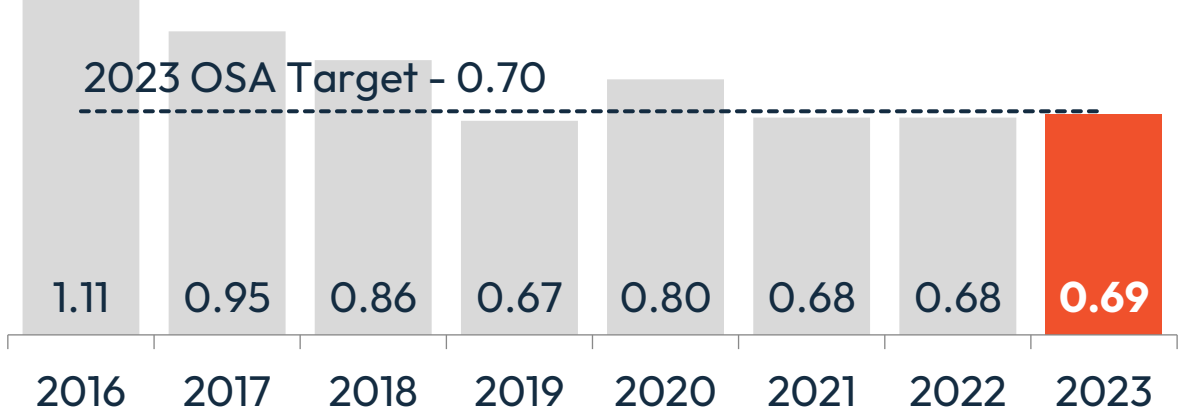
Top Decile Electric Reliability Performance

Index Performance – SAIDI, SAIFI, MAIFI

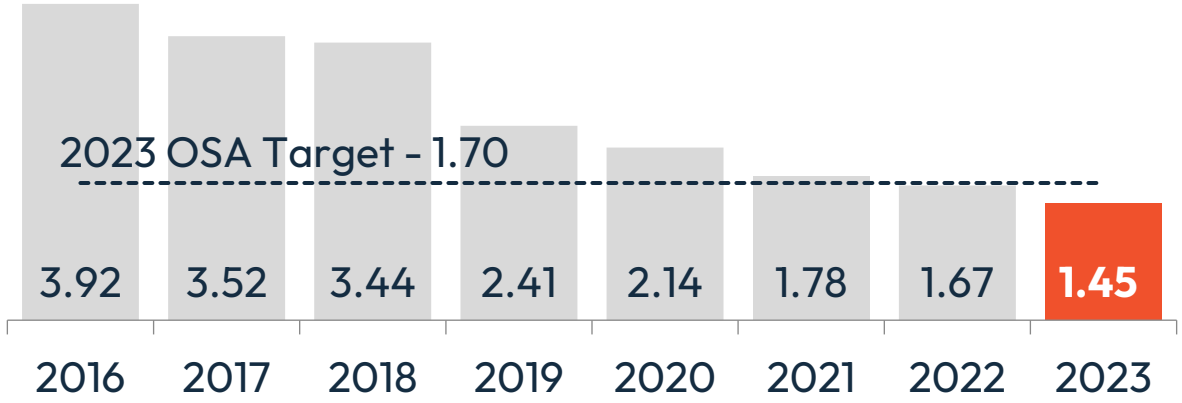
System Average Interruption Duration Index (SAIDI)



System Average Interruption Frequency Index (SAIFI)



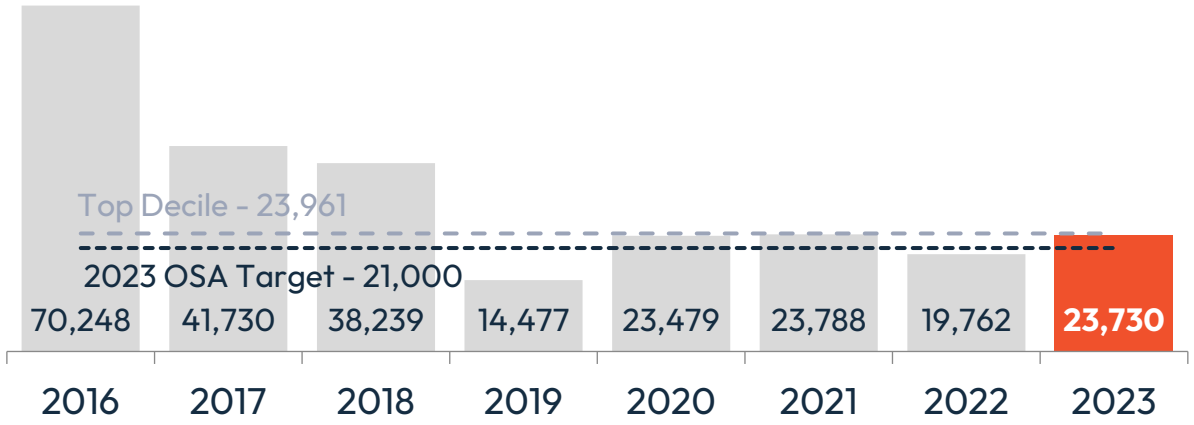
Momentary Average Interruption Frequency Index (MAIFI)



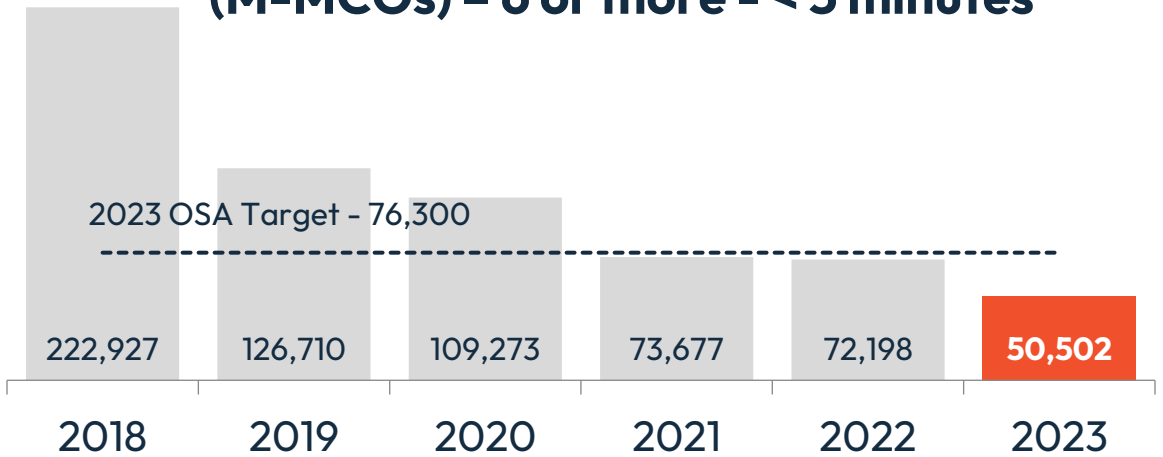
Top Decile Electric Reliability Performance

Multiple Customer Outages – Sustained, Momentary and Repeat MCO

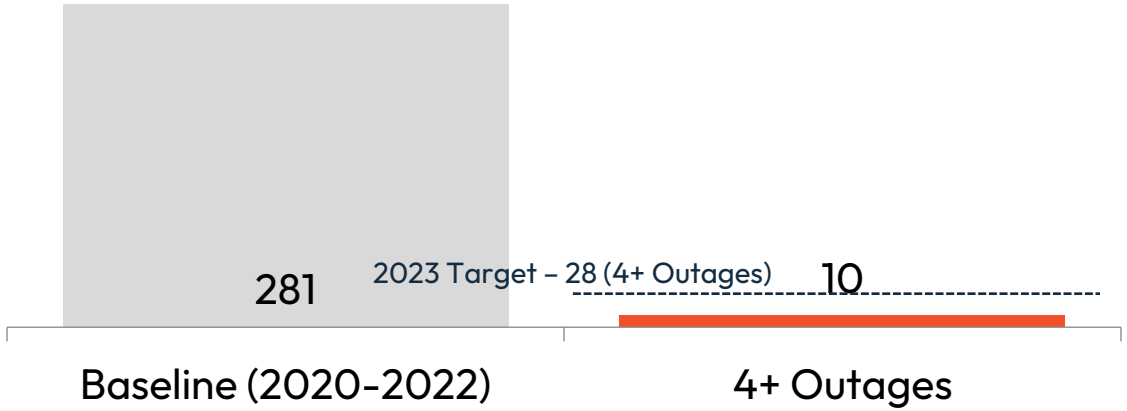
Sustained Multiple Customer Outages (S-MCOs) 4 or more - > 5 Minutes



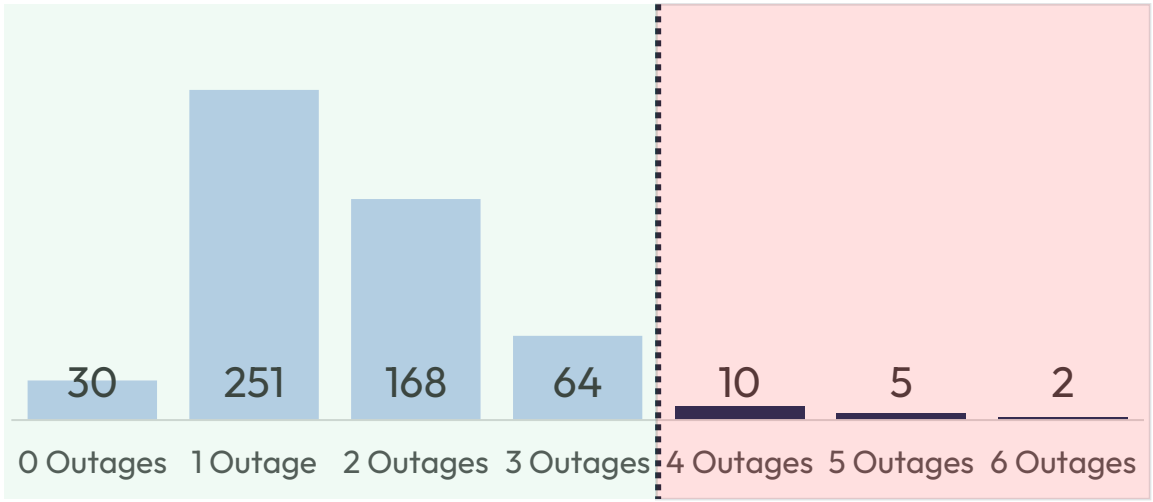
Momentary Multiple Customer Outages (M-MCOs) – 6 or more - < 5 minutes



Repeat Customer Sustained Multiple Customer Outages (S-MCOs)

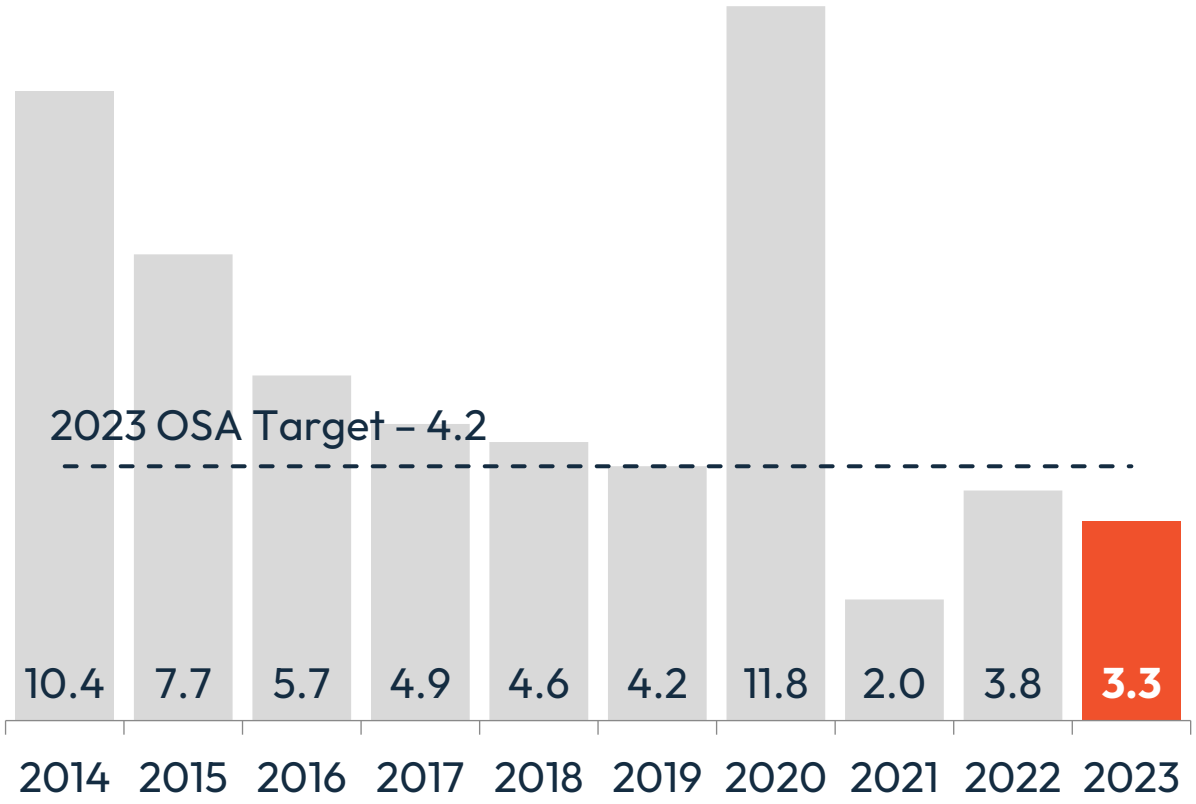


Distribution of Outages for Repeat S-MCOs

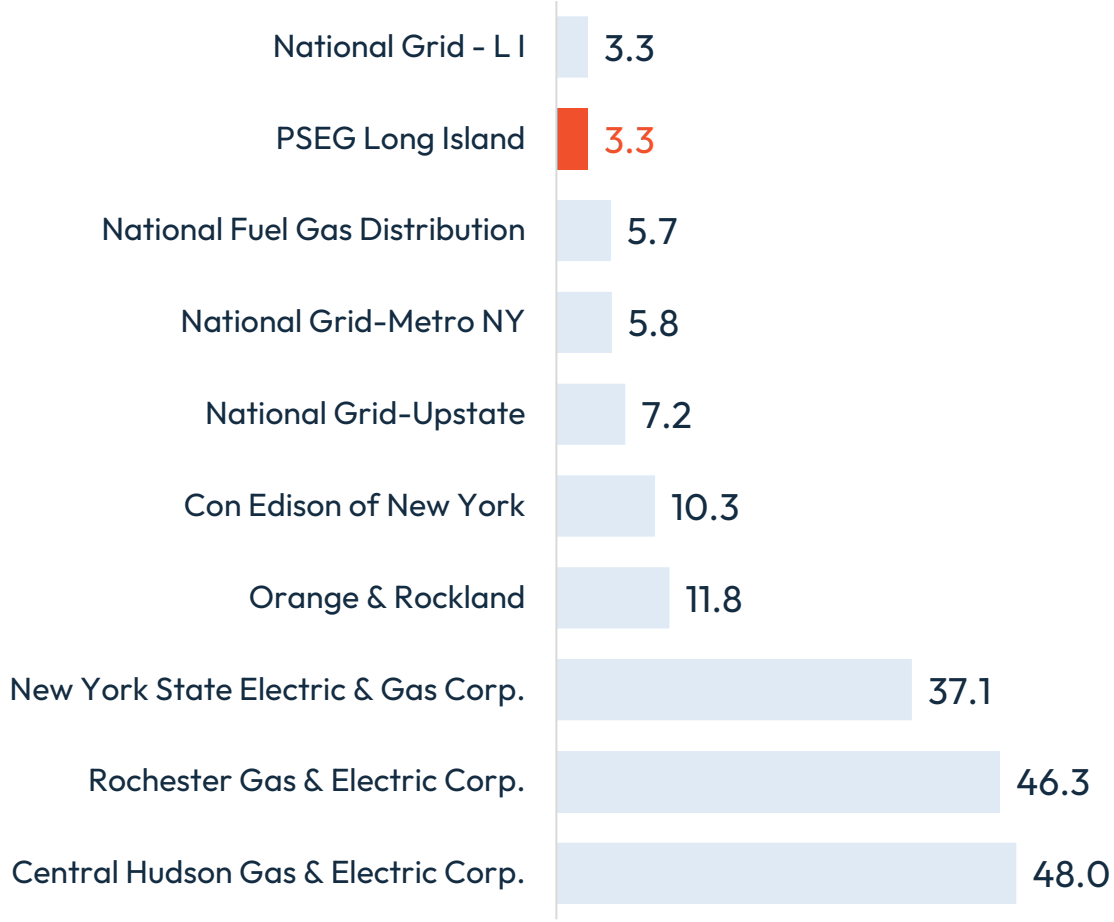


Lowest NYS DPS Electric Customer Complaint Rate

Customer Complaint Rate



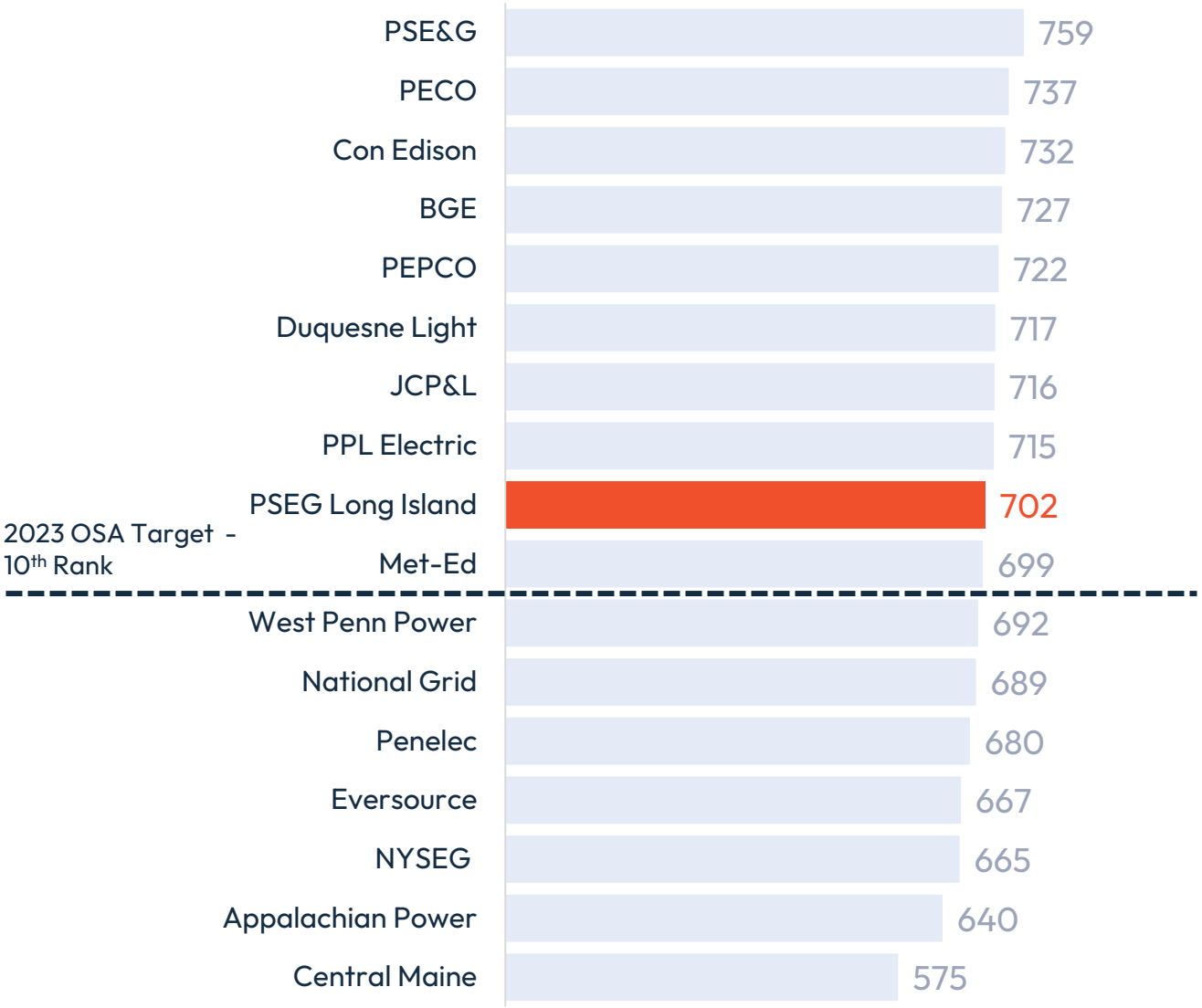
Rolling 12 Month DPS Complaint Rate per 100,000 Customers



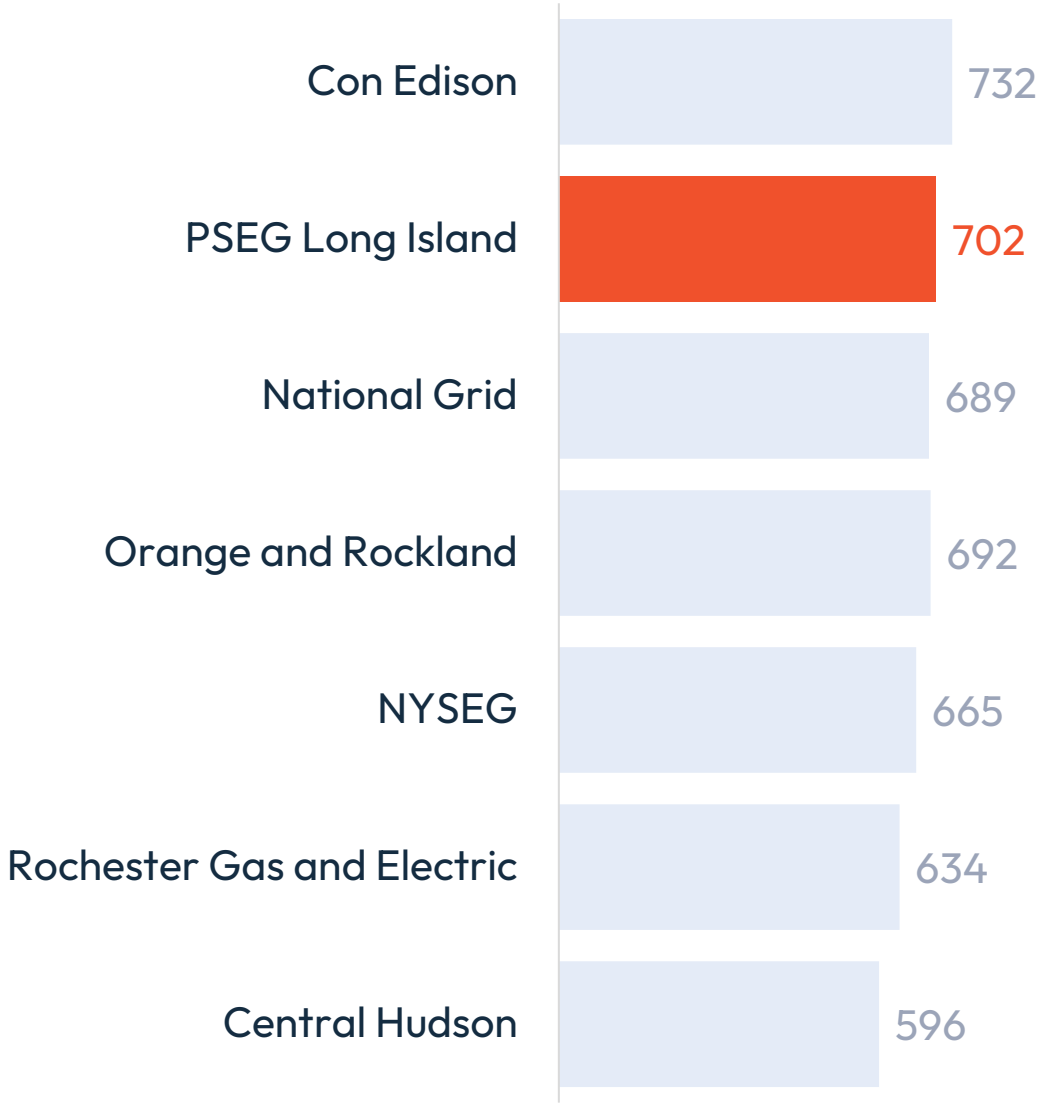
Customer Satisfaction

J.D. Power Residential

Overall Satisfaction – East Large (2023 Performance)



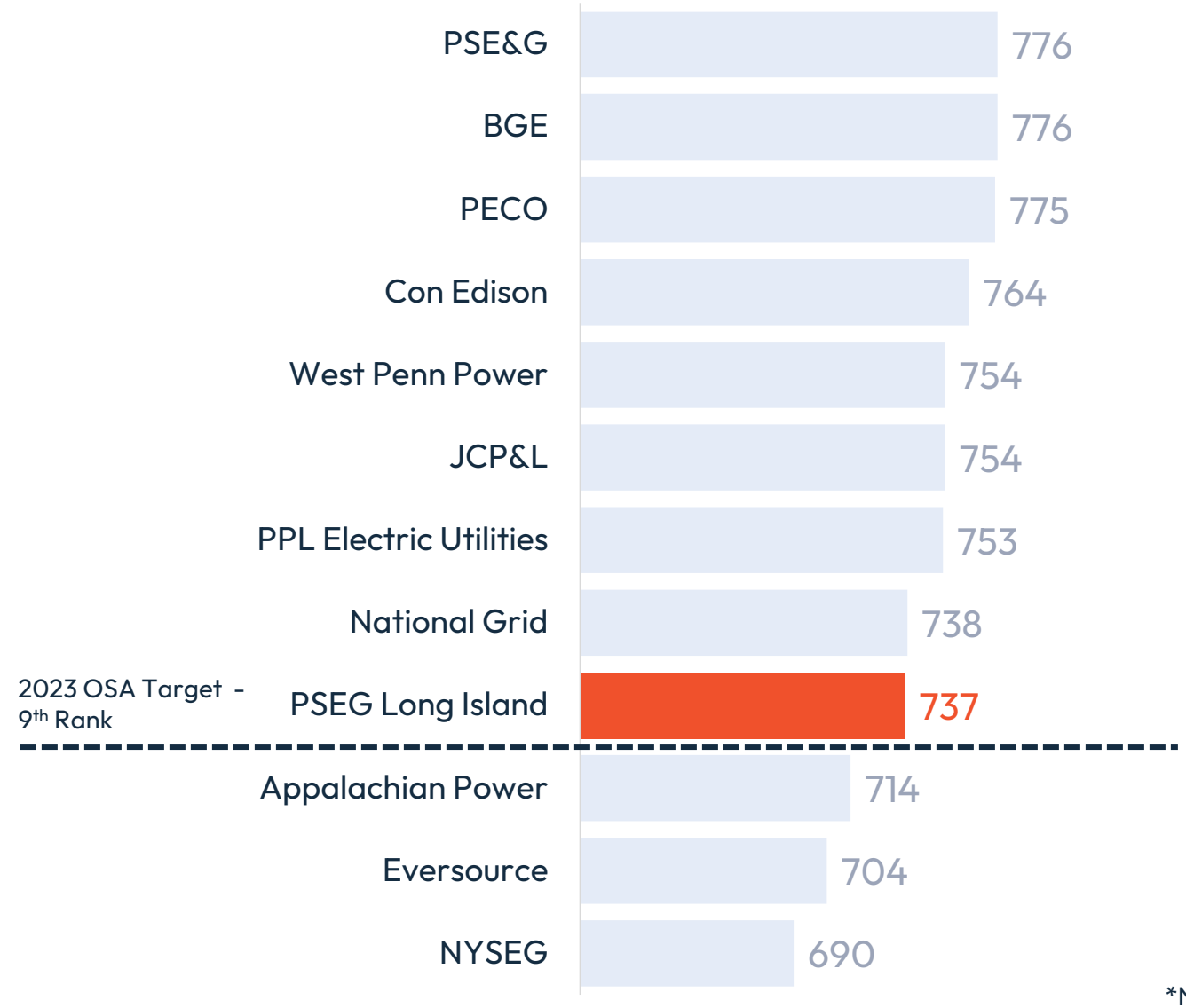
Overall Satisfaction – NY Utilities (2023 Performance)



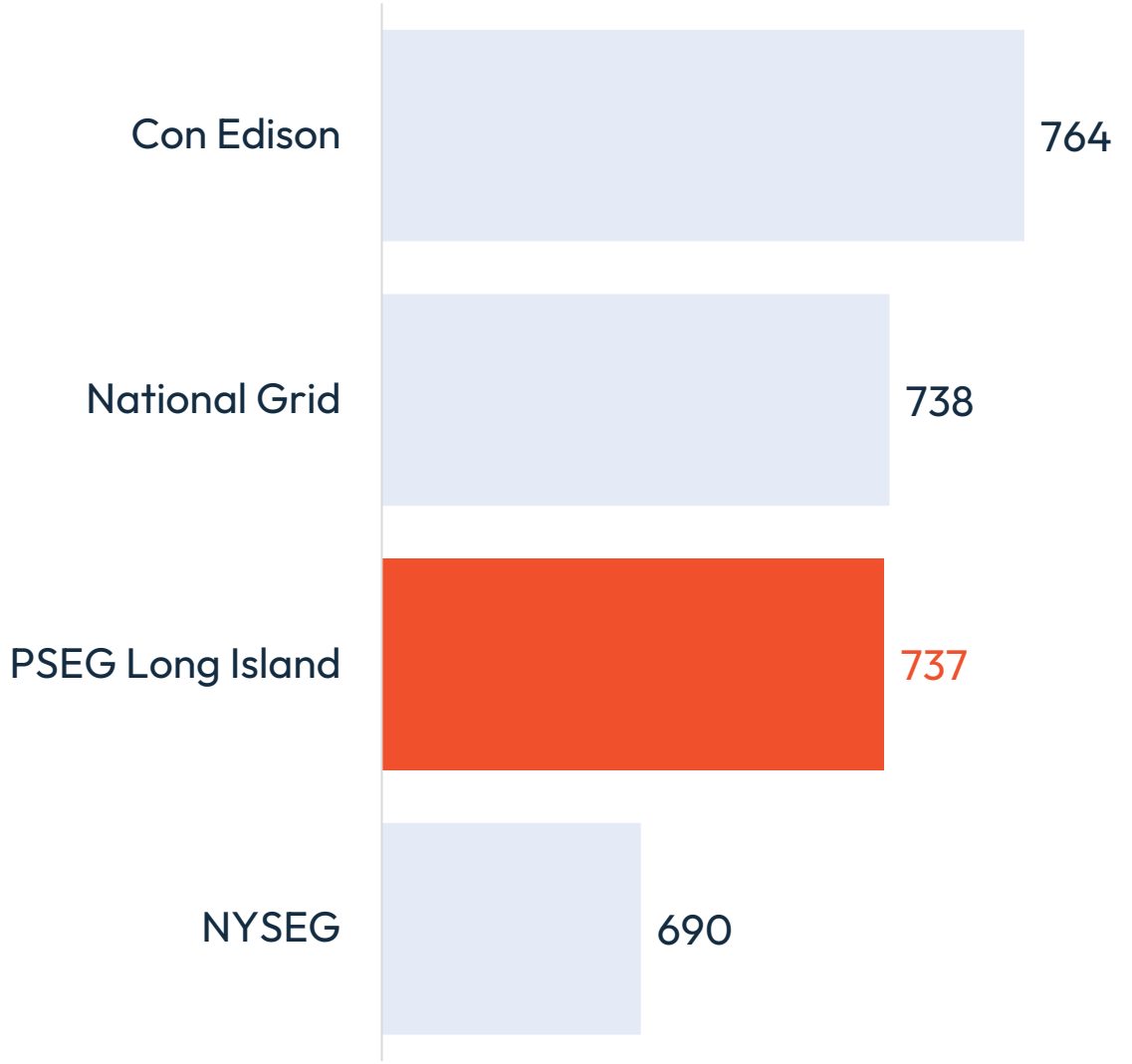
Customer Satisfaction

J.D. Power Business

Overall Satisfaction – East Large (2023 Performance)



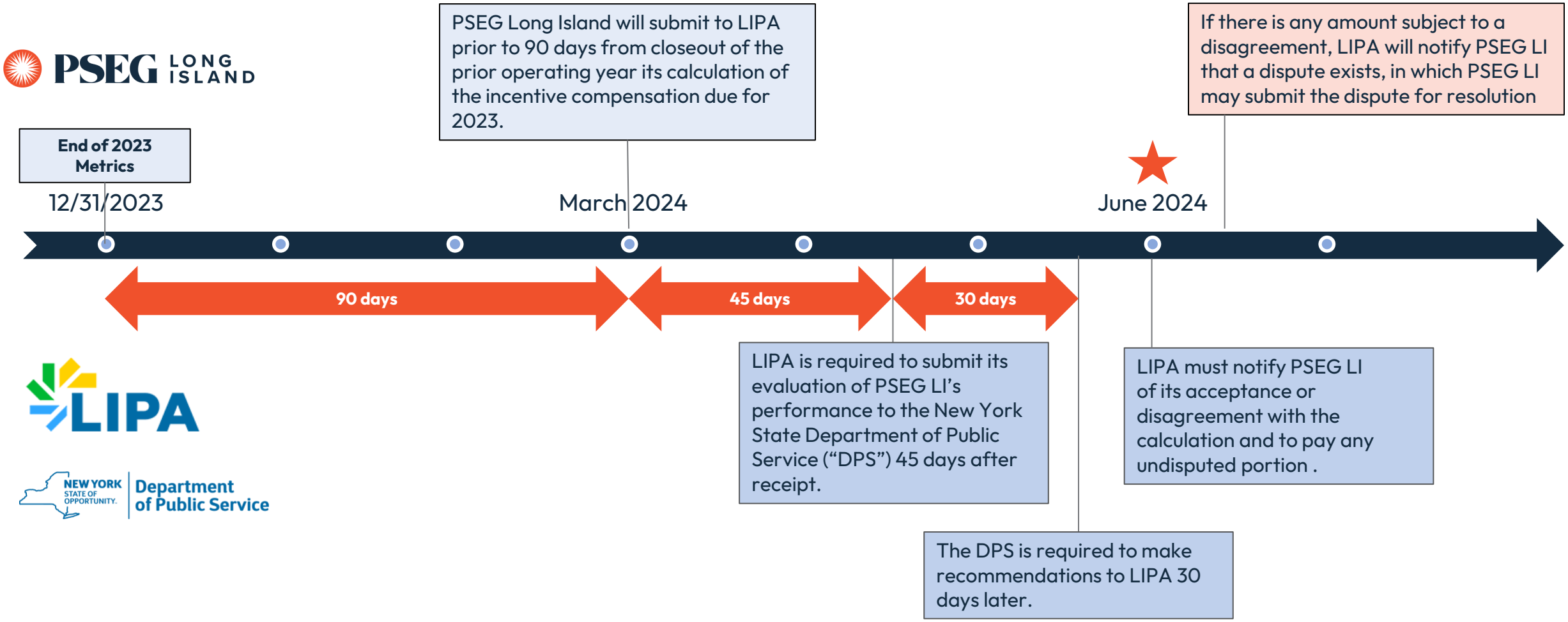
Overall Satisfaction – NY Utilities (2023 Performance)*



*No NY Mid-Size brands participated in business survey

2023 OSA Metrics Closeout Process and Timeline

For 2023, PSEG Long Island and LIPA agreed to 93 performance metrics, distributed across five scope functions. (Electric T&D , Customer Services, Information Technology, Business Services and Power Supply and Clean Energy)



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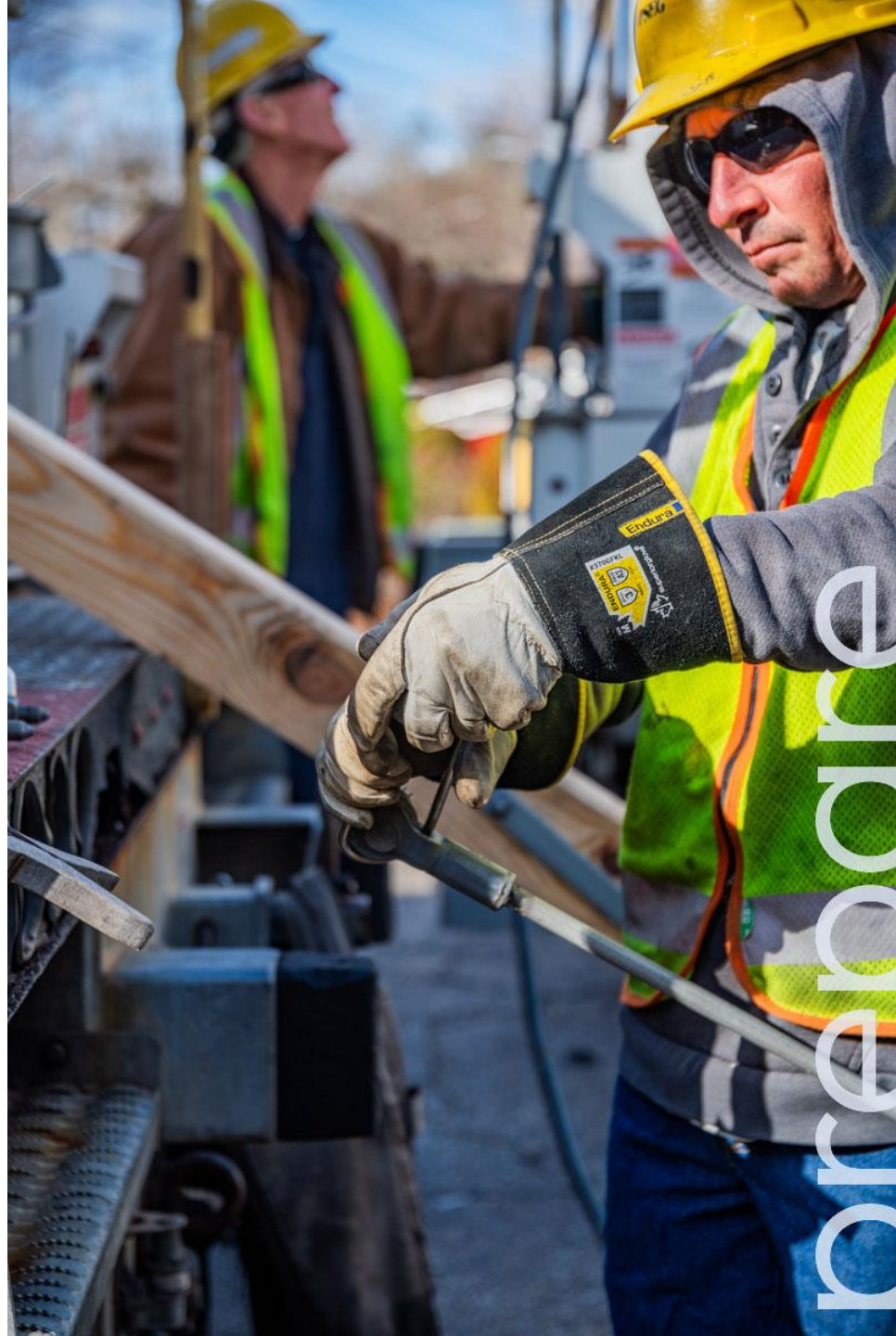
Storm Preparation & Response

Mike Sullivan
Vice President of T&D Operations



We Are Prepared.

Primary Documents Governing Storm Restoration

Emergency Restoration Plan (ERP)

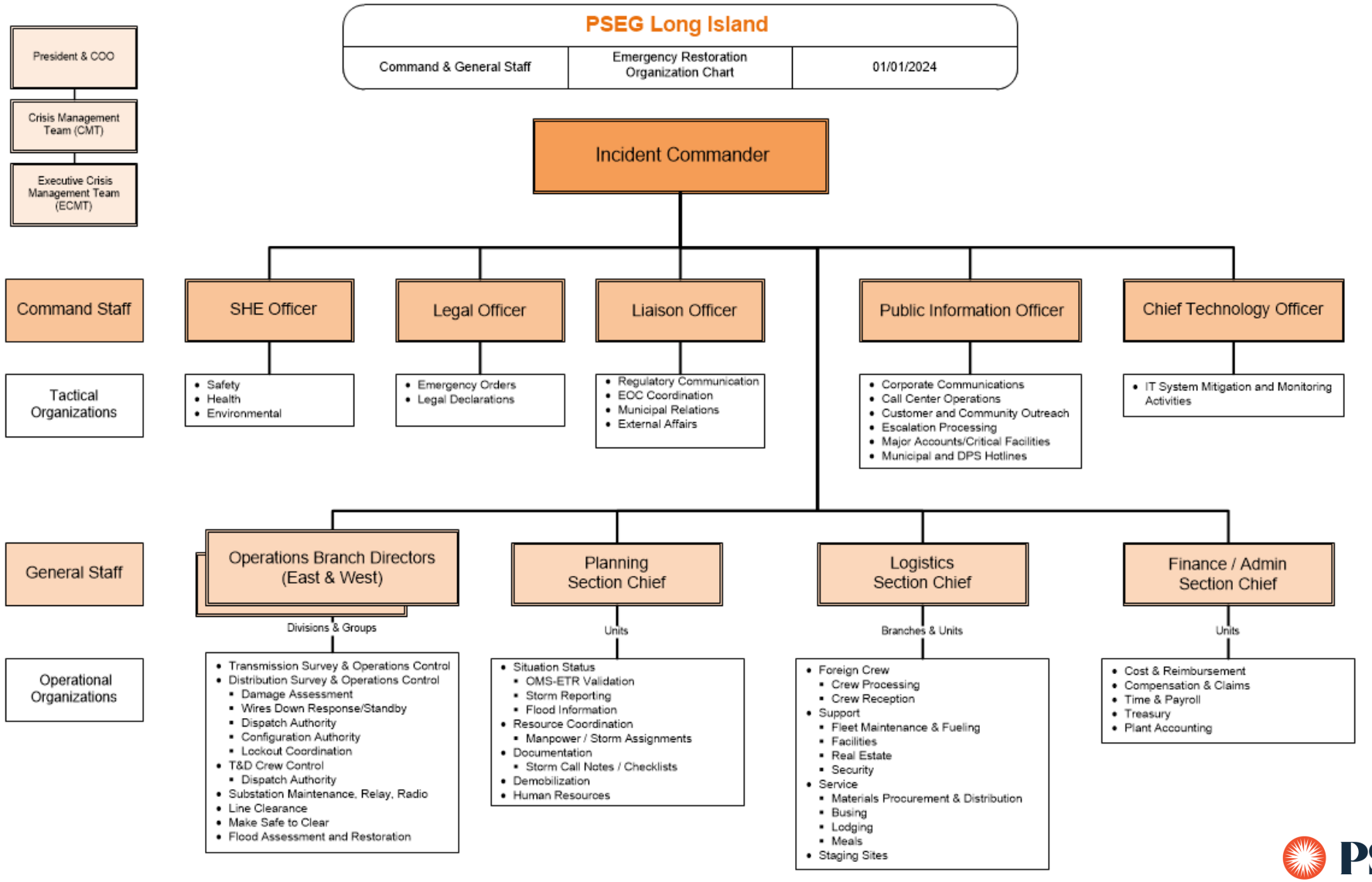
- Companywide restoration strategy and playbook
  - Include Incident Command System (ICS) structure and key storm processes and procedures
  - Damage Assessment, Dispatch & Restoration, ETR Protocols, Customer Communications, Foreign Crew Processing, etc.
  - Includes supporting plan documentation (e.g. contact lists, mutual aid agreements, etc.
  - ERP closely aligns with that of other New York State electric utilities
  - Reviewed and recommendations made by LIPA & NYS Department of Public Service (DPS)
    - Initial filing – December 15
    - Mid-year update – May/June

Emergency Response Implementation Procedures (ERIPs)

- Supporting procedural documents for conducting restoration operations (e.g., tactical operations)
- ERIPs align with broader ERP plans and strategies
- Reviewed annually and updated based upon process changes and/or enhancements

We Are Organized For Success.

PSEG Long Island's Incident Command System (ICS) Structure



We Communicate And Coordinate.

Communications and coordination is an essential component of all storm events. These efforts are performed in parallel by various groups and target both internal and external stakeholders.

Coordination

- Partner Utilities – Verizon, Altice, National Grid, Con Edison
- First Responder Groups – NYS, NYC, Nassau and Suffolk County Emergency Management
- Regulators – Long Island Power Authority (LIPA) and NYS Department of Public Service (DPS)
- Municipalities – State, City, County, Town and Village representatives; Municipal EOCs
- Life Support Equipment (LSE) and Special Needs (SN) customers
- Critical Facilities (CF) and Major Accounts

We Communicate And Coordinate.

Communication with Customers & Key Stakeholders

- Proactive communications - Email, text, robo-calls
- Targeted storm messaging
  - What to expect, restoration process, storm safety, reporting an outage, ETRs, etc.
  - Storm specific posts, Outage map and website banners
- Continue to effectively utilize technology to enhance storm response.
- Proactive pre-storm texting and emails to 800K customers enabled easy reporting of outages thru “non-voice” channels
- Customers received on-going outage communications including “outage detected”, “ETR/ETR changes” and “outage restored” messages
- High volume of outage reporting has been driven to digital and self-service channels
- Application of AMI functionality to validate status of single customer outages yielding significant reduction in unnecessary truck rolls
- Modified Social Media and Customer tools

Our Results Speak For Themselves.

2023 Storm #9 – Heavy Rain and Wind - 12/17/23 to 12/18/23

- 792 Incidents affecting 26,318 Customers
- Average Storm Restoration Time: 221.3 minutes (CAIDI)
- Outage Reporting
  - 55.2% Call Center Rep Service Level (90 second service)
  - 52.28% of outages reported thru digital channels
  - 86.29% of outages reported thru self-service channels
  - 175 truck rolls avoided because of AMI validation
- Additional Resources:
  - Mutual Aid - 229 High Voltage FTEs
  - 25 FTE Low Voltage
  - 51 FTE Wire Watchers

Our Results Speak For Themselves.

2024 Storm #1 – Heavy Rain and Wind - 1/9/24 to 1/10/24

- 629 Incidents affecting 26,118 Customers
- Average Storm Restoration Time: 194.9 minutes (CAIDI)
- Outage Reporting:
  - 99.4% Call Center Rep Service Level (90 second service)
  - 55.5% of outages reported thru digital channels
  - 82.99% of outages reported thru self-service channels
  - 55 truck rolls avoided because of AMI validation
- Additional Resources:
  - Mutual Aid – 348 HV FTEs
  - 58 FTE Low Voltage
  - 57 FTE Wire Watchers
  - 122 FTE Damage Assessors
  - National Grid Generation Damage Assessors (14 FTEs) & PSEG Long Island Retiree Contractors (9 FTEs)
- Localized Flooding - Proactive de-energization of Ocean Beach Substation affecting 1,748 accounts.

Our Results Speak For Themselves.

2024 Storm #2 – Heavy Rain and Wind - 1/12/24 to 1/13/24

- 261 Incidents affecting 9,035 Customers
- Average Storm Restoration Time: 95.2 minutes (CAIDI)
  - 96.9% Call Center Rep Service Level (90 second service)
  - 55.2% of outages reported thru digital channels
  - 80.37% of outages reported thru self-service channels
- Additional Resources:
  - Mutual Aid - 150 High Voltage FTEs
  - 25 Low Voltage
  - 51 Wire Watchers
- Flood Concerns – Transferred load at Ocean Beach Sub to avoid reoccurrence of proactive shutoff due to flooding

Our Customers and First Responders Appreciate Us.

Eaton's Neck Fire District

55 Eaton's Neck Road
Northport, NY 11768
631 757-5662

… "The Eaton's Neck Fire District and Volunteer Fire Department members also express our gratitude for the hardening of service on the neck. This will result in fewer downed power lines and more consistent electrical service to our residents. Making our lives a little safer and easier in the process." (1/12/24)

POLICE DEPARTMENT
TOWN OF SHELTER ISLAND
44 NORTH FERRY ROAD - P.O. BOX 1056
SHELTER ISLAND, NEW YORK 11964-1056

JAMES J. READ
CHIEF OF POLICE
Emergency Management Coordinator

ADMINISTRATIVE (631) 749-0600
FAX NUMBER (631) 749-0637
E-MAIL: townpolice@shelterislandtown.us

"Dear Mr. Lyons, I hope this letter finds you well. I am writing on behalf of the Shelter Island Town Emergency Management team to express our sincere gratitude for your unwavering dedication and outstanding service during the recent storms that impacted our community over the past two weeks" … (1/17/24)

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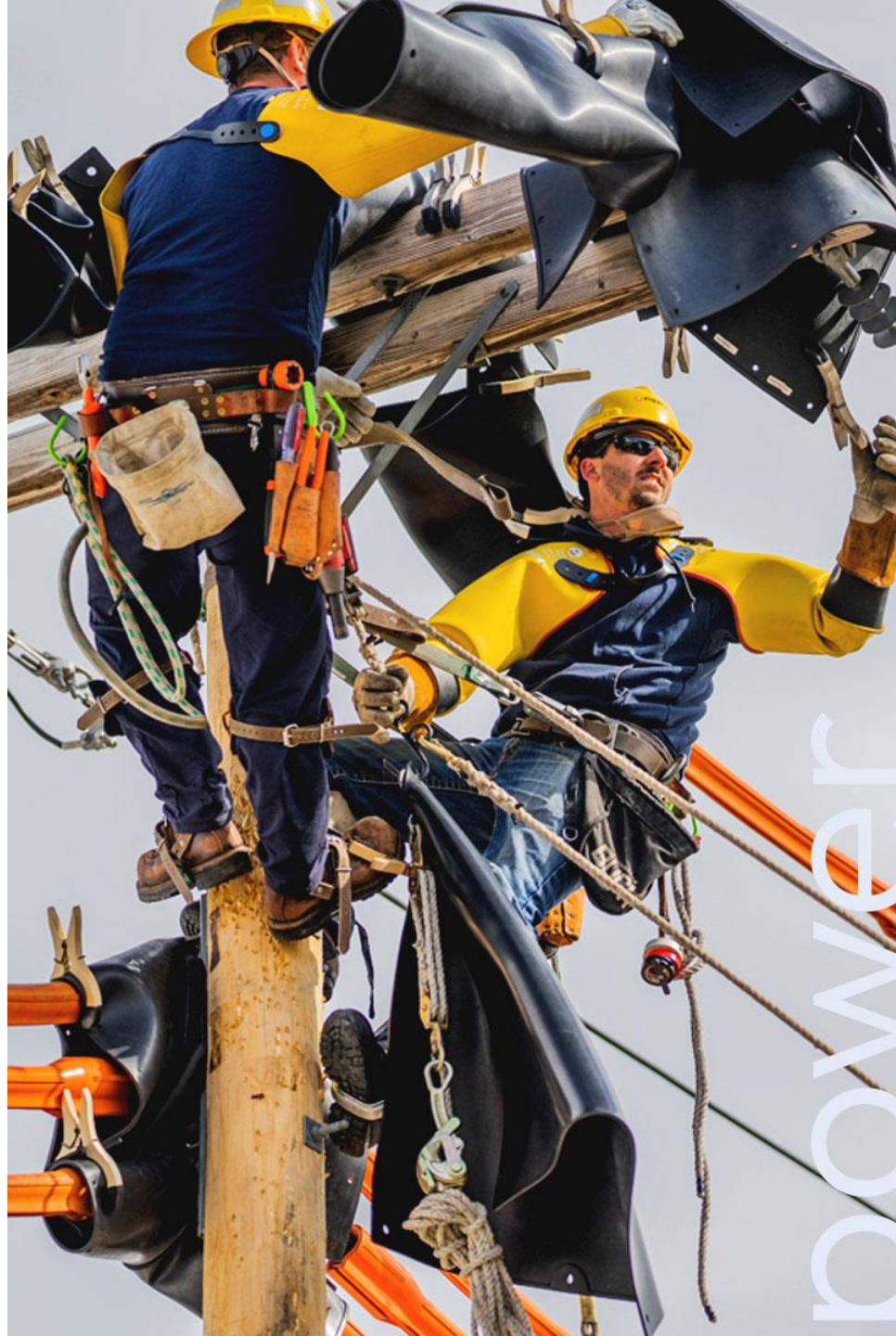
Storm Hardening & Resiliency

John McCumiskey
Director of Asset Management & Reliability

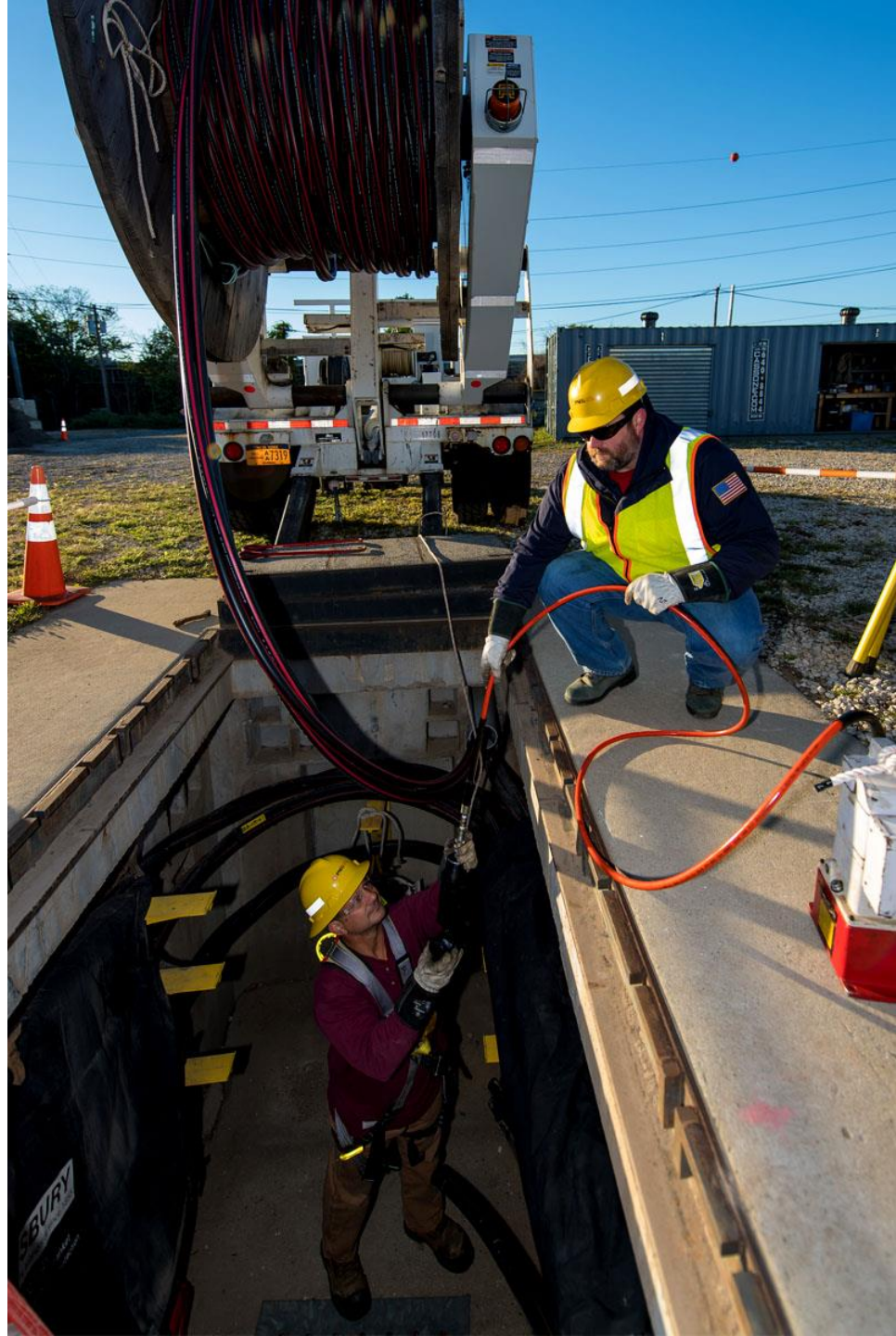


We Care For LIPA's Assets.

↗ In the last decade, PSEG Long Island has hardened **45%** of overhead mainline and **15%** of overhead branchline mileage within the 1,640 square miles of the service territory.

Transmission Circuits	**331**
Overhead Mileage	989
Underground Mileage	428
Substations	177
Distribution Circuits	**1,070**
Overhead Mainline Mileage	2,803
Overhead Branchline Mileage	6,234
LIPA Owned Poles	324,740
Verizon Owned Poles	214,465
Smart Switches (ASU* and ASUV*)	2,764
Pole Mounted Transformers	119,146
Underground Transformers	40,435
Capacitor Banks	1,538

* ASU Automatic Sectionalizing Unit
* ASUV Automatic Sectionalizing Unit Viper



Our Efforts Improve Reliability.

- Over the last 10 years, PSEG Long Island has invested significant resources into hardening the grid to make it more resilient to weather.
- Storm Hardening and Resiliency Programs
  - Power ON (FEMA Program)
  - Circuit Improvement Program (CIP)
  - Less than 500 Customer (LT5H) and Automatic Circuit Recloser (ACRV) Conversion Programs
  - Branchline Recloser Program (New in 2024)

Our Efforts Improve Reliability.

- The reliability of the grid in the storm-hardened sections is significantly improved from non-storm-hardened sections of the grid.

	2021	2022	2023
SAIFI (Storm Hardened Area)	0.17	0.19	0.18
SAIFI (Non-Hardened Area)	0.37	0.44	0.42
SAIDI (Storm Hardened Area)	6.77	8.96	9.56
SAIDI (Non-Hardened Area)	18	21.17	20.32
MAIFI (Storm Hardened Area)	1.73	1.67	1.44
MAIFI (Non-Hardened Area)	1.98	1.73	1.46

- Reliability improvements for hardened area vs. non-hardened
  - SAIFI: 56% Decrease in Frequency of Outages
  - SAIDI: 57% Decrease in Duration of Outages
  - MAIFI: 6.4% Decrease in Momentary Outages

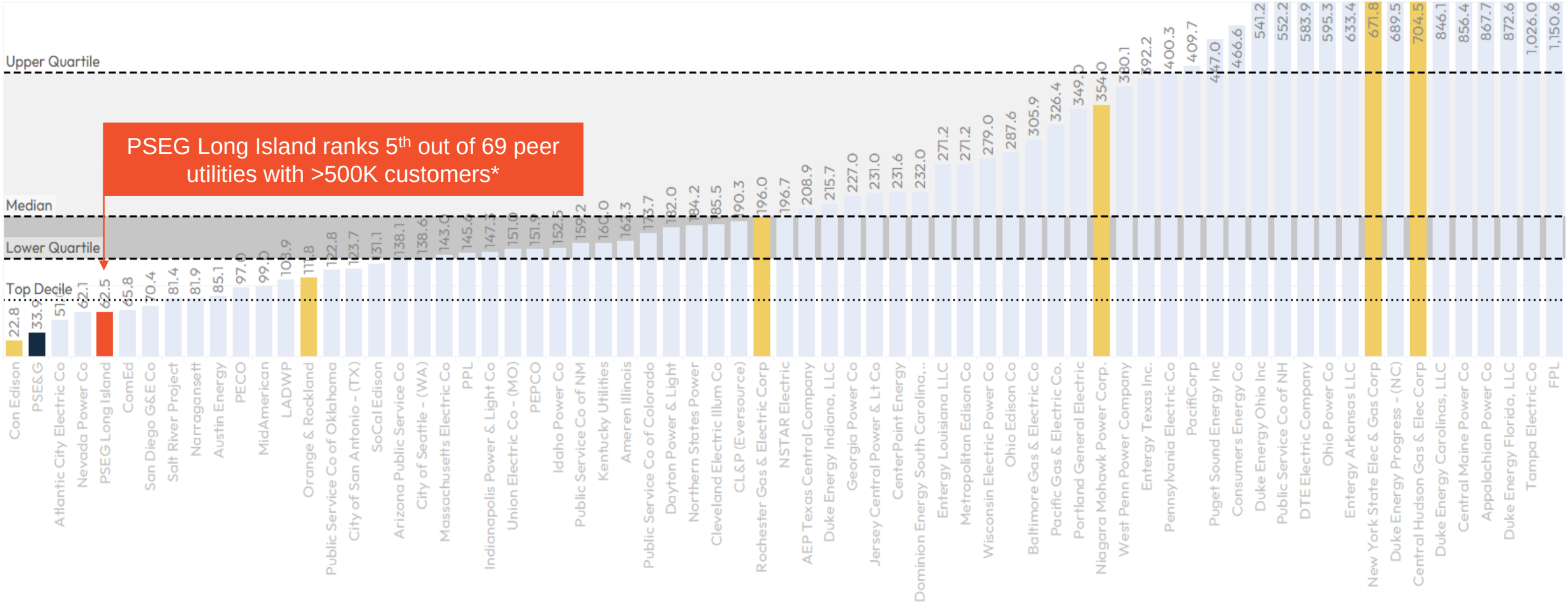
*SAIFI: System Average Interruption Frequency Index | SAIDI: System Average Interruption Duration Index | MAIFI: Momentary Average Interruption Frequency Index

PSEG Long Island Ranks Among Top In SAIDI

SAIDI – All-In (without weather exclusions) Benchmarking Performance

SAIDI - All Events (With Major Event Days)

Source: 2022 US Energy Information Administation (EIA) Reliability Benchmark



NY State Utilities

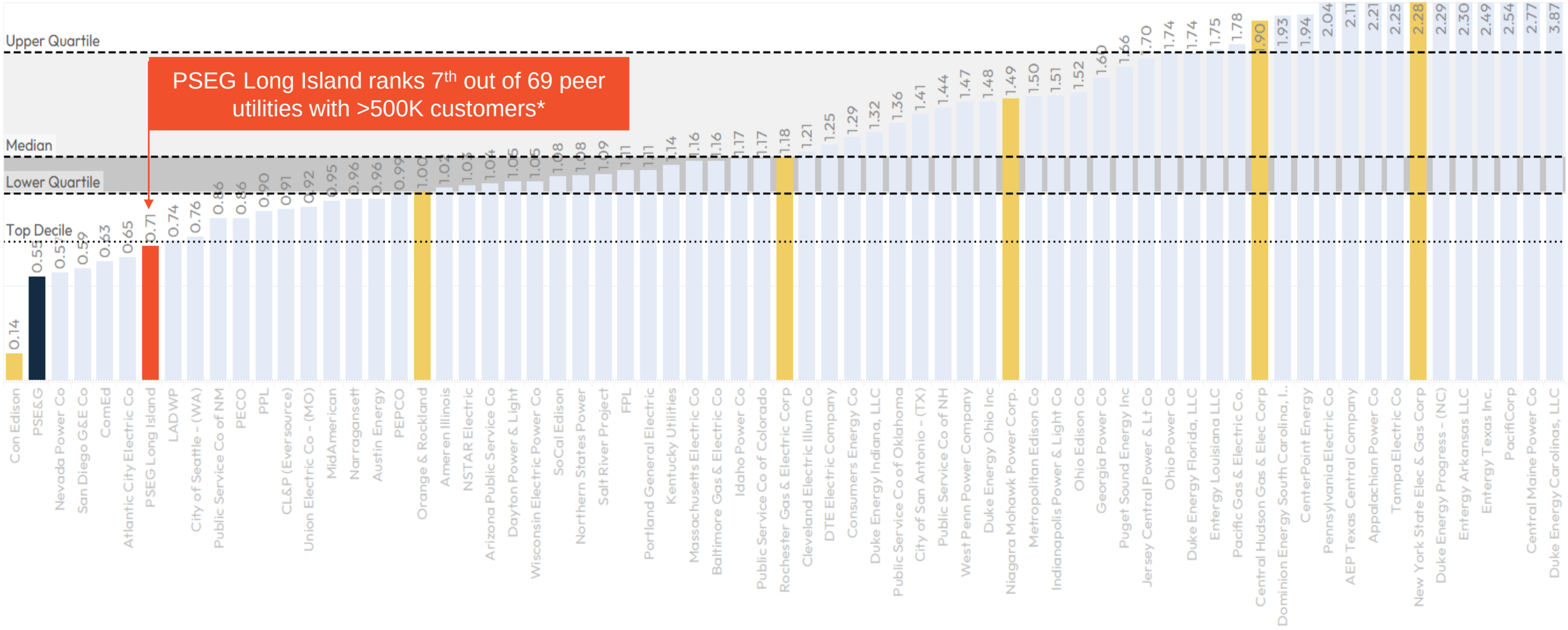
*Includes all large NY State Utilities regardless of customer count

PSEG Long Island Ranks Among Top In SAIFI

SAIFI – All-In (without weather exclusions) Benchmarking Performance

SAIFI - All Events (With Major Event Days)

Source: 2022 US Energy Information Administation (EIA) Reliability Benchmark



NY State Utilities

*Includes all large NY State Utilities regardless of customer count

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Safety Overview

Peggy Keane
VP of Construction & Operation Services

Culture is a Key Component of Safety Performance.

- 3 Tier Safety Council Structure – Strong IBEW & Management Partnership
  - **Level 1**: Local (managers, supervisors, advocates) – Monthly
  - **Level 2**: Line of Business (union, safety advocates, supervisors, managers, directors, VPs) – Bi-monthly
  - **Level 3**: Company (SLT, IBEW Leadership) – Quarterly
- **Training**: Academy (BU) , in-person, online, 3rd party training, participation on regulatory agency committees/conference attendance
- **Safety Advocates**: IBEW lead, peer to peer site safety assessment
- **Briotix**: Programs for Academy, LOB (physical conditioning workshops), ergonomic teams
- **SIMS Notifications**: Enterprise-wide communication of all safety incidents, motor vehicle accidents, and major operating incidents
- **Level 1 Investigations**: Root cause analysis of all OSHAs and any serious incidents
- **Weekly Safety Debriefs**

Culture is a Key Component of Governance.

- **Governance**: Enterprise
  - PSEG Environment, Health and Safety (EHS) Policy
  - PSEG Practice 575-1 (EHS Program Guide - EHS governance documents for PSEG Long Island – 14 elements from ISO 14000)
- **Benchmarking**: Benchmarking process with Utilities across the United States. The Utility Benchmarking Guide is used to set annual safety targets
- **Contractor Safety**
  - ISNet World (participation requirement for prime and subcontractors)
  - Quarterly Contractor Safety Meetings
  - Incident Analysis
  - Dual Safety Inspection Program
  - Safety Onboarding for Storm participation

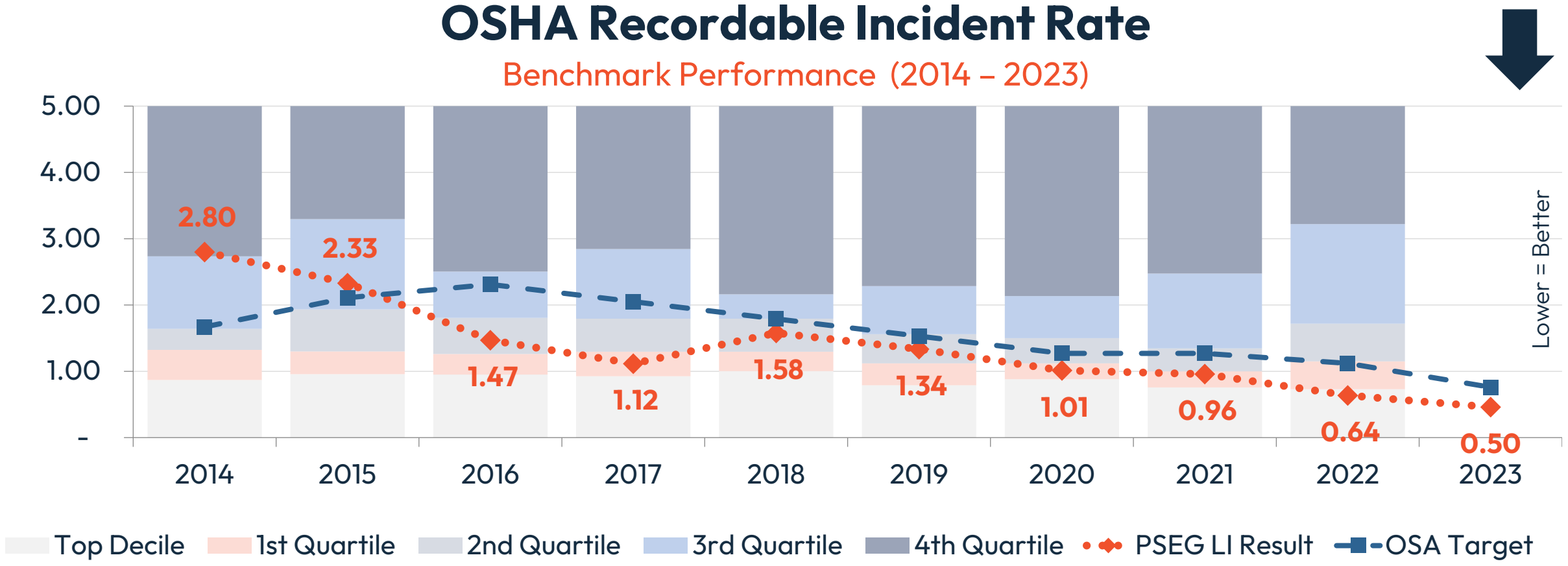
Culture is a Key Component of Continuous Improvement.

- **Motor Vehicle Safety**: managing, monitoring, coaching employees to be professional drivers
  - Automated Vehicle Location System (AVLS)
  - Professional Driver Scorecard
  - Smith Drivers Training
  - Alert Driver Training
  - National Safety Drivers Training
  - Classroom & Practical Forklift Training
  - CDL training – requirement to maintain license

- **Despite missing top decile performance in Motor Vehicle Accident Rate – PSEG LI has reduced # of accidents by 56% from peak**

Safety Performance

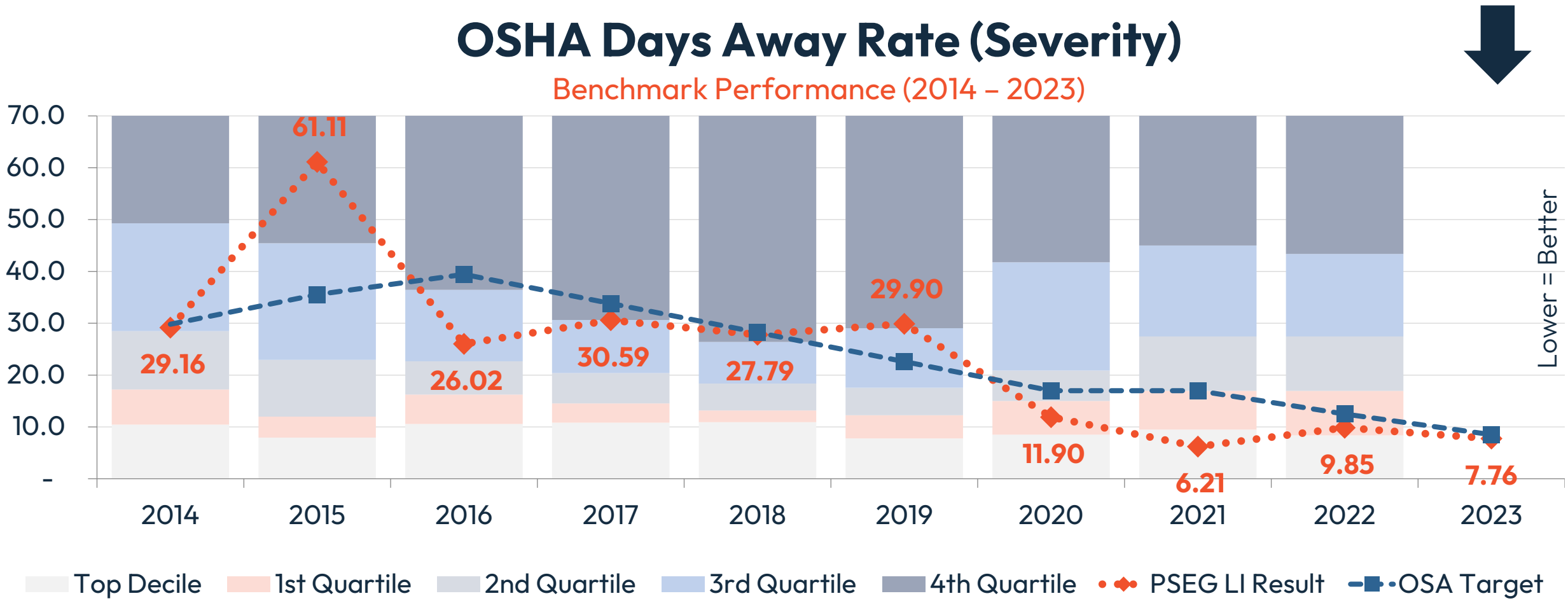
OSHA Recordable Incident Rate



PSEG Long Island is a top 10% performer among peer utilities nationally in Recordable Incidents

Safety Performance

OSHA Days Away Rate (Severity)



PSEG Long Island is a top 10% performer among peer utilities nationally in Severity Days Away

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Call Center Update

Lou Debrino
VP of Customer Operations

Call Center Update

↗ 2023 Key Accomplishments

- 31% improvement in Service Level (80/30)
- 50% reduction in Abandonment Rate
- 52% improvement in Average Speed of Answer
- Recruited and retained 58 call agents
- Enhanced recruitment process with reinstatement of onsite interviews and training
- Hired experienced Contact Center Director
- Hired additional Call Center Trainer to increase training capacity
- Engaged support of 3rd party call agents to assist with lower skilled calls
- Fully trained 32 agents as TOD Subject Matter Experts to support TOD launch
- Introduced 4 Kiosks to expand customer payment channels
- Successfully launched NICE CCaaS Call Center system on 11/8/23

Metric	2022	2023
Service Level (80/30) Agent	29.2%	41.8%
Service Level (80/30) Agent/IVR	71.6%	77.1%
Average Speed of Answer	9.08 mins	4.55 mins
Abandonment Rate	24.4%	11.7%

Planned initiatives yielded service improvements and enhanced customer experience

Call Center Update

2024 - Q1 Key Activities

- 27 trainees graduating to phones in Q1
  - Class A (9 Agents): 2/12
  - Class B (18 Agents): 3/18
- 21 agents to begin training on 1/29
- Initiating recruitment of 25 agents for April class
- Hiring 2nd Call Center Manager to improve span of control and further enhance operations
- Hiring 3rd Call Center Trainer to further increase training capacity
- Finalizing performance criteria and goals for Telecommuting Agreement
- Continue to realign staffing to call volume for improved productivity
- Explore use of part-time agents to support high call volume periods
- Launched Paymentus credit card service in January to enhance credit payment experience
- Reassigned Quality Assurance (QA) team to Call Center Management
- Aligning Call Center training team with Customer Operations Training Academy

Continued focus on increasing staffing and productivity to drive improved service level

Call Center Update

Date	Contacts	AHT	SL%	SL Seconds	ASA – Average	Phone FTE Req	Actual FTE	Attrition	New Hire FTE
Jan-24	98,353	468	30	30	5.00	121	102	0	0
Feb-24	95,483	466	30	30	5.00	130	106	5	9
Mar-24	104,420	464	30	30	5.00	133	104	2	0
Apr-24	96,880	455	40	30	4.38	121	120	2	18
May-24	107,359	449	40	30	4.38	132	119	2	0
Jun-24	102,871	403	60	30	1.85	134	138	2	21
Jul-24	105,053	399	60	30	1.85	137	136	2	0
Aug-24	111,462	400	80	30	0.52	155	159	2	25
Sep-24	115,045	400	80	30	0.52	147	157	2	0
Oct-24	111,882	403	80	30	0.52	144	155	2	0
Nov-24	93,120	403	80	30	0.52	149	153	2	19*
Dec-24	87,162	401	80	30	0.52	142	151	2	0
Total	**1,229,090**	**425**				**137**	**133**		

*Time-of-Day Class

↗ 2024 Staffing

- Service Level dependent on call volume, staffing and Average Handle Time (AHT)
- Increased Service Level aligns with timing of agents “go live” on phones
- Assumption based on 10% Average Handle Time reduction from December 2023
  - Focus on maintaining First Call Resolution while decreasing AHT
  - AHT impacted by change in call mix and redirection of calls to self-service

Service Level to Continue to Improve Steadily throughout 2024

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Thank *you*

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Appendix

Summary of Storm Hardening Activities

Storm Hardening Program Progress 2021 Through 2025										
Programs	2021		2022		2023		2024		2025	
	Units Completed	Rolling Total Percent Hardened	Units Completed	Rolling Total Percent Hardened	Units Completed	Rolling Total Percent Hardened	Units Completed	Rolling Total Percent Hardened	Units Completed	Rolling Total Percent Hardened
Power On! Mainline (Miles)	111.01	37.86%	80.41	40.75%	62.62	43.50%	24.1	44.24%	23	45.31%
Power On! Branchline (Miles)	0	0	0	0.00%	23.3	0.37%	46.75	1.12%	47	1.88%
Hazard Tree Removal (Units)	7,115	14.23%	14,060	42.35%	11,000	64.35%	11,000	86.35%	11,000	100.00%
Trim To Sky Distribution Trim (# of Circuits)	10	1.14%	215	25.71%	207	49.37%	198	72.00%	233	98.63%
CIP Mainline (Miles)	12.87	0.46%	8.08	0.75%	0	0.75%	0	0.75%	0	0.75%
CIP Branch (Miles)	266.56	4.28%	389.16	10.52%	279	14.99%	330.65	20.30%	330.65	25.59%

Storm Hardening Programs – Cost Summary

Plan vs Actual Costs (Millions)

Programs	2021		2022		2023		2024		2025		Total ($M)
	Plan	Actual	Plan	Actual	Plan	Budget	Plan	Forecast	Plan	Forecast	
Power On! Mainline (Miles)	$70.0	$63.5	$70.0	$71.0	$75.0	$75.0	$75.0	$75.0	$75.0	$75.0	$359.6
Power On! Branchline (Miles)	$1.8	$7.8	$11.6	$13.2	$10.6	$10.6	$11.7	$11.7	$12.9	$12.9	$56.2
Hazard Tree Removal (Units)	$0.5	$0.4	$1.4	$2.2	$1.5	$2.3	$2.5	$2.5	$2.8	$2.8	$10.3
Trim To Sky Distribution Trim (# of Circuits)	$0.3	$0.3	$3.3	$3.8	$0.1	$0.1	$0.4	$0.4	$0.5	$0.5	$5.0
CIP Mainline (Miles)	$9.9	$7.3	$9.5	$9.6	$10.0	$10.0	$10.6	$10.6	$5.3	$5.3	$42.8
CIP Branch (Miles)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$25.3	$25.3	$25.3
Program Totals:	$82.4	$79.4	$95.8	$99.9	$97.2	$98.0	$100.2	$100.2	$121.7	$121.7	$499.1

Program Scope and Units

• Power On!	Mainline, Branchline	Miles
• Hazard Tree Removal	Transmission, Mainline, Branchline	Number Whole Trees/Large Limbs
• Trim To Sky Distribution Trim	Mainline	Circuits
• Incremental Trim	Mainline, Branchline	Miles
• LT5H (ASUV 500 Customer/Segment)	Mainline	Units
• Transmission Load Pocket Hardening	Transmission	Projects

Prior Major Storms and Resulting Hardening Programs

Storm	Storm Information	FEMA Hardening Efforts
Super Storm Sandy October 29, 2012	• 1,171,061 Customer Impact* • 2,698 Million Customer Minutes • 51 Substations Out of Service • 455 Total Feeder Lockouts • Average Duration 2,305 minutes	• 10 substations switchgear replacement and raised foundation elevation 4 to 9 feet • 319 distribution circuits partially hardened – 877 miles overhead mainline hardened – 26,364 distribution poles replaced – 894 ASUV (Automatic Sectionalizing Unit Viper) – 44,956 poles transferred • 2,720 miles of covered "tree" wire installed • 1,486 wood transmission poles across all programs
Tropical Storm Isaias August 4, 2020	• 644,967 Customer Impact* • 954 Million Customer Minutes • 20 Substations Out of Service • 138 Total Feeder Lockouts • 93 ASU/V Lockouts • Average Duration 1,692 minutes	**Impact of FEMA Hardening Effort on Isaias** **48% decrease in incidents/mile on hardened portions of system compared to non-hardened** • 74 mainline events • 65,005 customer interruptions • 67 million customer minutes

*Accounts for customers experiencing more than 1 outage in storm window

Power On - Storm Hardening Program Details

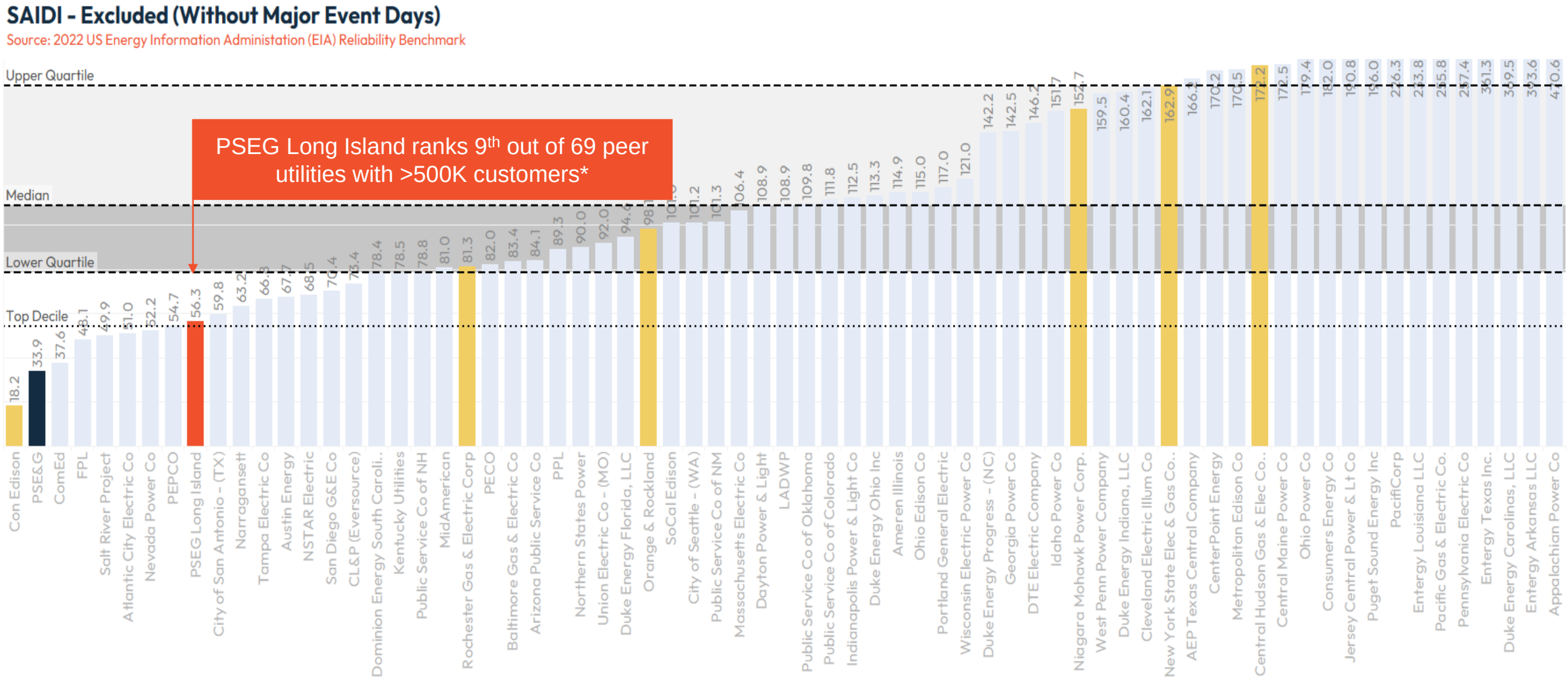
↗ Distribution System Hardening of Infrastructure

- Reduce the number of customers impacted and damage locations for storm events.
  - 2019 – 2022 focus on Mainline Distribution circuits
  - 2023 – 2025 addition of branch line distribution circuits to work plan
- Scope of Work:
  - Pole Replacements – Increase size and class with improved structural backfill
  - Pole Head Configuration – Redesign with tighter profile to better withstand tree impact
  - Wire Replacement with improved tree guard insulation
  - Addition of branch line circuits to 2023 scope of work
- Multi Year Program 2019 – 2025
  - 2019 through 2023 - mitigated 335.43 miles
    - Mainline mileage to date – 311.41 miles
    - Branch line mileage to date – 24.02 miles
  - 2024 Plan
    - Mainline mileage – 40.59 miles
    - Branch line mileage – 37.03 miles
  - In 2023, an average of 75 overhead resources supported Power On.
    - There overhead resources were available to support future storm restoration efforts and offset mutual aid needs

Years	Miles
2019	-
2020	65.25
2021	111.01
2022	80.41
2023	78.76
2024*	77.62*
Total	**413.05**

Electric Reliability

SAIDI Excluded (Without Major Event Days) Benchmarking Performance

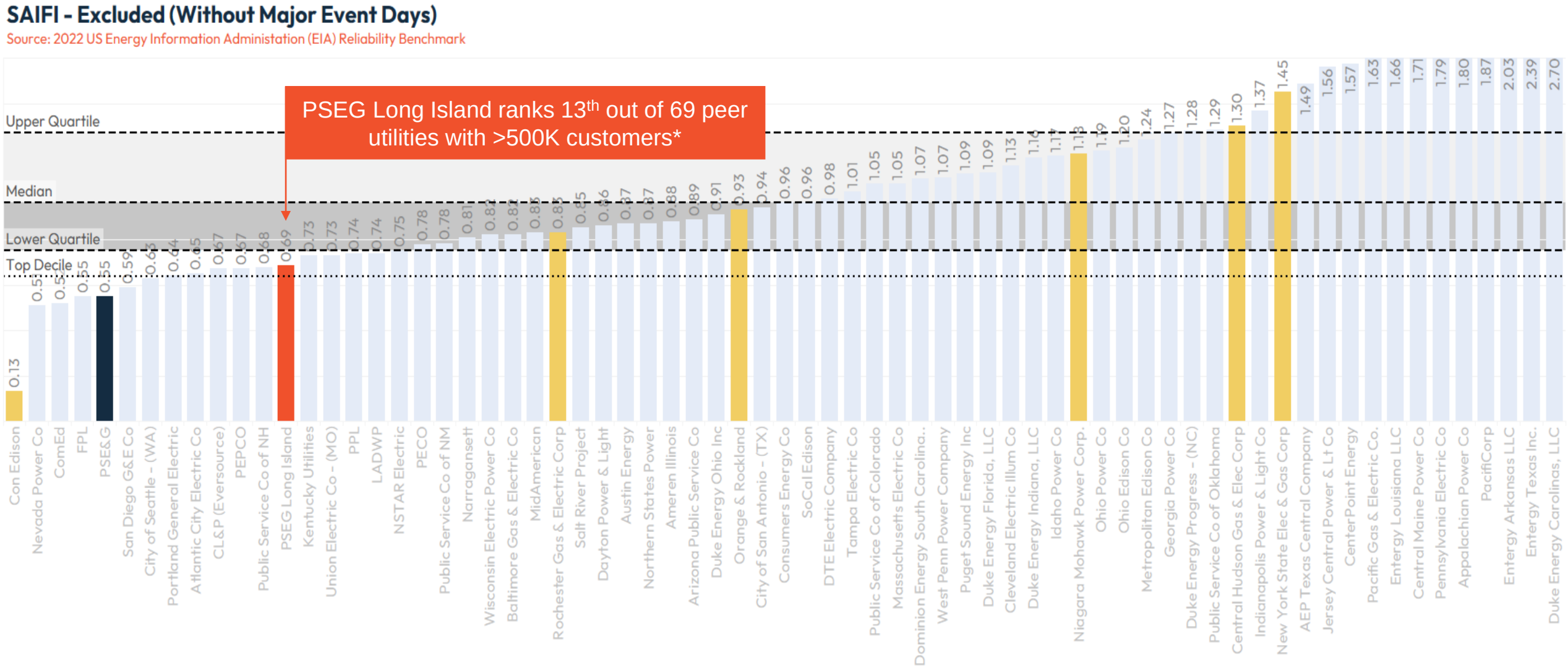


NY State Utilities

*Includes all large NY State Utilities regardless of customer count

Electric Reliability

SAIFI Excluded (Without Major Event Days) Benchmarking Performance



NY State Utilities

*Includes all large NY State Utilities regardless of customer count

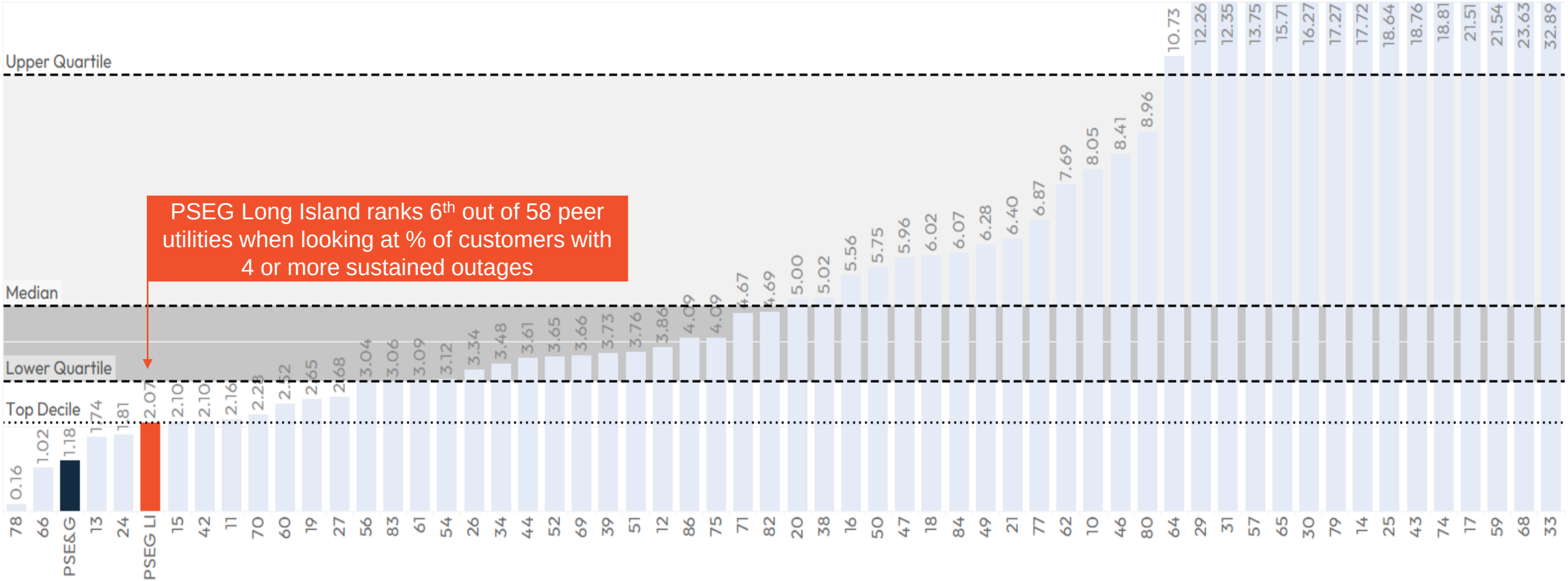
Electric Reliability

Multiple Customer Outages – Sustained MCO

Sustained Multiple Customer Outages

(CEMI4 - % of Customers w/ 4 or more outages > 5 Minutes)

Source: EEI Reliability Report



*Did not achieve 2023 target but met Board Policy of Top Decile performance