Annual Report on the Board's Policy on Safety

December 16, 2020



Topics For Discussion

- Compliance with Applicable Health and Safety Laws and Regulations
- Measuring and Verifying Safety Performance
- Notable Contractor Safety Incidents Tropical Storm Isaias
- Key 2020 PSEG Long Island Safety Initiatives
- Schumaker & Company 2020 Safety Assessment
- Continuous Improvement Initiatives



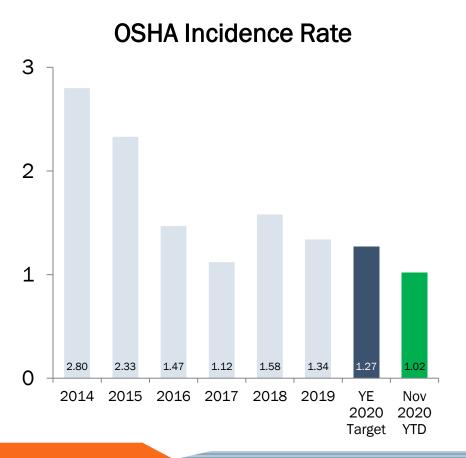
Annual Assessment of PSEG EH&S Program Guide

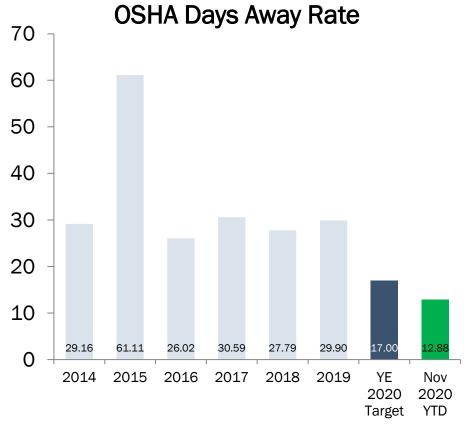
- The PSEG Environment, Health and Safety (EHS) Policy and PSEG Practice 575-1, EHS Program Guide are the high level EHS governance documents for PSEG Long Island.
 - The PSEG annual assessment of the implementation of the EHS Program Guide found that systems, procedures and practices in place satisfactorily address the objectives contained in the PSEG EHS Program Guide.
 - There is a consistent understanding of acceptable actions and behaviors to responsibly conduct business in a manner that protects the environment, and the health of employees, contractors, customers, and the public.
 - Adequate controls are in place and functioning as intended.
- PSEG Long Island conducts its operations pursuant to the PSEG Business
 Conduct Compliance Program.



Measuring and Verifying Safety Performance

PSEG Long Island participates in an OSHA benchmarking process with Utilities across the United States. The Utility Benchmarking Guide is used to set Safety Targets for the Operations Services Agreement (OSA).

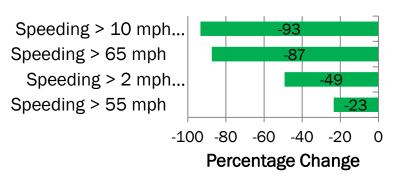




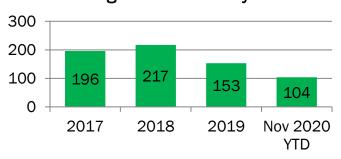
Motor Vehicle Safety Performance

The addition of automated vehicle location system (AVLS) technology reinforced by a culture of accountability mindset is delivering desired results.

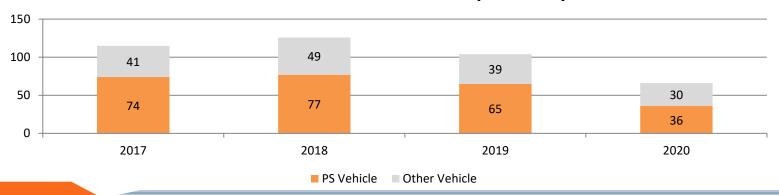
Percentage Change in Performance Since Program Inception (Oct 2018)



Red Light Violations - By Year



MVA Count with Accident Responsibility





Notable Safety Incidents – Tropical Storm Isaias

Three Electrical Contacts – PSEG Long Island Mutual Aid Contractors

- Northline, working foreman received an electrical shock while clearing tree limbs from a roadway that were entangled with live, downed primary. Employee was taken to the hospital for treatment and released
 - The crew did not identify, isolate, adequately test, ground, and/or open the energy source in the work zone
 - Taps over line breakers nearby were visible from the job site and could have been used to isolate the work zone
 - Crew members were wearing leather gloves, versus proper rubber personal protective equipment (PPE)
- Asplundh, while reinstalling a primary tap into a transformer bushing, a line worker removed his
 glove and made contact with an energized transformer primary tap. Employee was taken to the
 hospital for treatment and released
 - The crew did not walk out the branch line prior to performing work, contact distribution operations to determine all sources of energy, test the primary de-energized, or request an NRA prior to beginning work
 - Line worker admitted removing rubber glovers and failed to adhere to proper PPE requirements. Line worker initially attempted cover-up the incident by cutting his gloves, and was terminated by Asplundh
- Edison Power, an apprentice lineman was shocked by an energized neutral while repositioning himself on a rear property pole. Employee was taken to the hospital for treatment and released
 - The apprentice lineman had his hand on the neutral and reached for a guy wire that had a broken bond wire and was knocked unconscious, a pole rescue was conducted and he regained consciousness on the ground
 - He was working in the secondary position without proper rubber personal protective equipment (PPE)



2020 Key Safety Performance Initiatives



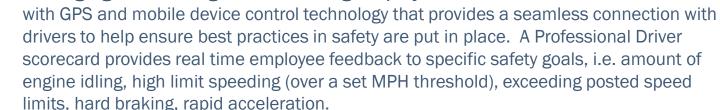
Building a Culture of Accountability using The Results Pyramid model by Partners in Leadership, a simple, memorable methodology for efficiently and effectively changing the way people think and act throughout the organization to ensure desired results are achieved.



Effectively managing the impact of the global Covid-19 pandemic on our operations and our workers, with a unique opportunity to rethink what is possible for our people, places and processes – reimagining how roles and departments function via the Responsible Reentry Process

Managing, Monitoring, and Coaching Employees to be Professional Drivers







Enhancing Incident Analysis resulting in better recommendations and implementation of recommendations at the root cause.



Schumaker & Company Safety Assessment

The 2020 Assessment revealed:

"There have been significant improvements in PSEG-LI safety indices since our last review. All of the OSHA and Motor Vehicle Accident rates have improved. PSEG-LI continued emphasis on its safety training programs and practices can be credited for much of this improvement."

"All of these activities would make PSEG-LI equal to or better than electric utilities that our project team has experience within the Northeast and Midwest United States"

The audit produced five recommendations

- PSEGLI needs to add a revision page to the Health and Safety Manual as well as display on each page the latest revision date.
- Identify local operating practices that exist between regions and establish one preferred practice across all regions for each one.
- Ensure that safety oversight and practices are extended to contractors and foreign crews during storm restoration.
- PSEG-LI should review if current training module coding is appropriate.
- PSEG-LI should revise its current Training Facilities study in light of any operational changes necessitated by COVID-19.



Continuous Improvement Initiatives – 2021

- Contractor Safety & Oversight contractor safety oversight and the reporting of third party managed contractors safety performance data will be expanded.
- COVID-19 Strategy Execution reimagining how roles and departments function via the Responsible Reentry Process.
- Prevention Through Design to prevent or reduce occupational injuries, illnesses, and fatalities through the inclusion of prevention and technological considerations in all employee work activities.
- Schumaker & Company Recommendations
- Employee Stretching 100% prior to performing physical work.
- Upgrading Safety Information System (SIMS) The new SIMS will increase functionality, user friendliness and provide easier more flexible reporting.



BOARD AGENDA SUMMARY SHEET

Committee or Board:	Date:	Board Meeting Date:
Oversight and Clean Energy	December 11, 2020	December 16, 2020

For All Board Voting Items:			
Title of Agenda Item: Recommendation to Approve the Annual Report on the Board Policy on Safety			
Consent Agenda: ⊠Yes □No Accompanying Presentation: ⊠Ye			
LIPA Presenter: Rick Shansky	PSEG Long Island Presenter: Greg Player		
Enterprise Risk Management Discussion: ⊠Yes □No			
For Policy Reports Only:			
Type of Policy / Report: \boxtimes Operating; \square Governance; \square	Compliance; ☐ Mission		
Date of Last Report: December 18, 2019 Co	mpliance Since Last Report: ⊠Yes □No		

Proposed Changes to Policy: \square Yes \boxtimes No

Requested Action:	The Committee is requested to adopt a resolution recommending: (i) approval of the annual report on the Policy; and (ii) that LIPA has complied with the Policy.
Summary: (include proposed amendments to Board Policies, if applicable)	By Resolution No. 1379, dated September 27, 2017, the Board adopted the Policy. The Policy sets objectives to ensure a safe environment for the dedicated workforce of its service provider and the public. The Policy also establishes regular performance reporting by Staff to enable the Board to assess the adequacy of the service provider's policies, procedures, and practices for safety; compliance with applicable health and safety laws and regulations; safety performance, including comparisons to peer electric utilities; and initiatives to improve the safety of the service provider's operations. The Policy was last reviewed by the Board in December 2019.
	LIPA Staff recommends that the Board find that LIPA has complied with the objectives of the Policy for the period since the last annual. LIPA Staff also recommends no changes to the Policy.

FOR CONSIDERATION

December 16, 2020

TO: The Oversight and Clean Energy Committee

FROM: Thomas Falcone

SUBJECT: Approval of the Annual Report on the Board Policy on Safety

Requested Action

The Oversight and Clean Energy Committee (the "Committee") of the Board of Trustees (the "Board") of the Long Island Power Authority ("LIPA") is requested to adopt a resolution recommending that the Board find that LIPA has complied with the Board Policy on Safety (the "Policy") for the period since the last annual review, and approve the annual report for the Policy, which resolution is attached hereto as **Exhibit "A."**

Background

By Resolution No. 1379, dated September 27, 2017, the Board adopted the Policy. The Policy sets objectives to ensure a safe environment for the dedicated workforce of its service provider and the public. The Policy also establishes regular performance reporting by Staff to enable the Board to assess the adequacy of the service provider's policies, procedures, and practices for safety; compliance with applicable health and safety laws and regulations; safety performance, including comparisons to peer electric utilities; and initiatives to improve the safety of the service provider's operations. The Policy was last reviewed by the Board in December 2019.

Compliance with the Policy

LIPA Staff recommends that the Board find that LIPA has complied with the objectives of the Policy for the period since the last annual review for the reasons set forth below.

The Policy provides the following:

"Reviewing on a periodic basis no less than every three years the policies, procedures, and practices of the Authority's service provider."

- In 2020, LIPA hired Schumaker & Company ("Schumaker") to conduct the second triennial Safety Assessment of PSEG Long Island. Schumaker observed that PSEG Long Island implemented the recommendations from the 2017 report, with one follow-up recommendation required.
- The 2020 Schumaker report contains five recommendations aimed at enhancing existing
 practices in such areas as training, safety metrics, work practices, safety oversight, and
 consolidation of training services and facilities. The 2020 Schumaker report is attached
 hereto as <u>Exhibit "B"</u>.

- Schumaker noted that continued emphasis on safety training programs and practices can be credited with much of the improvements in safety performance.
- In light of the limitations on the scope of this review as a result of COVID-19, when such restrictions are lifted, LIPA intends to engage an independent third party to perform onsite field observations of PSEG Long Island's work practices and safety management processes, including a comparison to industry best practices.

"Benchmarking against the top quartile in safety performance of the service provider to the top 25 percent of peer utilities, as measured by OSHA Recordable Incidence Rate and OSHA Days Away Rate."

 PSEG Long Island benchmarks its safety performance against a nationwide panel of electric utilities. That benchmarking helps establish programs that improve safety performance at PSEG Long Island. Since 2015 through YE 2019, there has been a 41.5% improvement in the OSHA Recordable Incident Rate and a similar 51.1% improvement in the OSHA Days Away Rate. Despite these improvements, which have resulted in median performance, continued improvement is needed to achieve first quartile performance.

"Assessing the operational factors that contribute to injuries, motor vehicle accidents and redlight violations and the efforts to improve performance, where necessary."

- PSEG Long Island has an ongoing process for assessing the factors that drive safety performance. PSEG Long Island has identified and implemented 135 safety and health improvements from 2017 to the present. These areas included partnering with Briotix Health to develop and communicate COVID-19 Job Hazard Assessments (JHA) for Utility Operations, delayed start time due to hazardous weather conditions, removal of work hazards, and reducing musculoskeletal injuries through improved work techniques and pre-job stretching.
- Motor vehicle safety continues to be an area of focus in 2020 with remedial training in Alert Driving and with Smith System trainers. The addition of the automated vehicle location system and red light ticket analytics has been credited with culture change and has been credited with the continued reduction of both motor vehicle accidents and redlight violations.
- PSEG Long Island conducted executive-level meetings with mutual aid contractors to review their investigations of the injuries and motor vehicle accidents that took place during Tropical Storm Isaias. Additionally, PSEG Long Island has established a team of Long Island and New Jersey subject-matter experts tasked with reviewing and recommending changes to the current on-boarding and oversight practices of foreign crews during restoration efforts. LIPA will monitor the progress of the year's efforts and assess the resulting recommendations and the schedule for implementation.

Enterprise Risk Management Discussion

The Board has adopted a policy on Enterprise Risk Management ("ERM"). Enterprise risks are brought to the Board's attention throughout the year. There is one risk related to the Policy. That risk is: "Employees and/or contractors don't follow safety processes and results in a serious injury/fatality, including members of the public and negative public perception."

This risk is rated as a medium level risk. To mitigate this risk, PSEG Long Island's Safety Program fosters a high level of safety awareness by PSEG Long Island employees and contractors. PSEG Long Island verifies contractor safety records, reviews and authorizes contractor detailed safety plans prior to commencement of work, and conducts various required trainings for employees, contractors, and supervisors (e.g., Substation Awareness Training). Attendance is tracked and monitored at these trainings. Safety programs also include contractor roundtables with PSEG Long Island staff to ensure adherence to policies and procedures and identify additional protocols for integration into these programs. In addition, the equipment has been installed in company vehicles to record driving data to reduce vehicle incidences.

In light of the safety incidents that occurred during Tropical Storm Isaias, LIPA anticipates that pending improvements to PSEG Long Island's oversight of its contractors will be an important element in managing safety risk, along with the other programs already in place

Annual Review of the Policy

LIPA Staff recommends no changes to the Policy.

Recommendation

Based upon the foregoing, I recommend approval of the above-requested action by adoption of a resolution in the form attached hereto.

Attachments

Exhibit "A" Resolution

Exhibit "B" 2020 Schumaker Report

RESOLUTION RECOMMENDING APPROVAL OF THE REPORT TO THE BOARD OF TRUSTEES ON THE BOARD POLICY ON SAFETY

WHEREAS, the Board Policy on Safety (the "Policy") was originally approved by the Board of Trustees Resolution No. 1739, dated September 27, 2017;

WHEREAS, the Oversight and Clean Energy Committee (the "Committee") of the Board of Trustees and affirms that the Policy has been complied with.

NOW, THEREFORE, BE IT RESOLVED, that consistent with the accompanying memorandum, the Committee recommends that the Board find that LIPA has complied with the Policy for the period since the last annual review and approve the annual report to the Board.

Dated: December 16, 2020

Schumaker & Company



PSEG LI Safety Assessment
On Behalf of Long Island Power Authority
2020 Follow up Review

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I. Executive Summary

The Long Island Power Authority (LIPA) engaged Schumaker and Company, Inc. (Consultant or Schumaker & Company) to assist LIPA in the evaluation and review of the appropriateness and effectiveness of the safety initiatives of LIPA's Service Provider, PSEG Long Island, LLC (PSEG-LI), including its Safety Standards and Procedures. Schumaker & Company was initially engaged in 2017 to perform a safety assessment. Schumaker & Company was reengaged in 2020 to conduct a follow-up assessment which resulted in this summary report. The objectives and scope of each review was very similar. In the 2017 review, PSEG-LI had only recently assumed the responsibility for LIPA operations whereas in the 2020 review, PSEG-LI had been functioning for several years. Other differences between the two studies included

- ♦ The second (2020) review also included follow-up on the original recommendations made in the 2017 review.
- ♦ The second (2020) was conducted during the COVID pandemic. Schumaker & Company's onsite time was non-existent due to the pandemic. Specific documentation was electronically received and reviewed and ZOOM interviews were conducted during the investigations. No on-site interviews or field observations were conducted

Schumaker & Company used a four-person consultant team (Team) to complete the project.

This reports documents the findings and recommendations submitted by Schumaker & Company to LIPA.

A. Project Approach/Methodology

Our process provided the Schumaker & Company project team with a structured approach that was comprehensive and logical, as well as interactive and participative with PSEG-LI and LIPA management and staff. The process was designed to establish and sustain vital, interactive working relationships among management and staff and the Schumaker & Company project team during the course of this safety program assessment and to comply with all COVID protocols.. We have refined this three-step process over many reviews, audits, and studies conducted with the same team members working on this project.

We assembled a project team with a strong working knowledge of electric utility operations, as well as current industry issues. Each individual was carefully selected according to his or her experience, technical expertise, and education in those areas for which he or she is proposed. Our consultants are mature and experienced, with advanced degrees and practical business management experience. They consistently meet high standards of professional competence within their disciplines and have the team skills needed to work collaboratively with client organizations.

Schumaker & Company brings a results-based philosophy to the safety review such as this one. These factors enable the companies to derive maximum benefit from review activities. Our project team followed a three-step study process designed to achieve vital, interactive working relationships among management and staff and our project team consultants. Specifically, the three steps were as follows:

- ♦ Step I Orientation and Project Planning
- ♦ Step II Detailed Review
- ♦ Step III Final Report Preparation

B. Summary of Recommendations

Our review did not necessarily highlight areas in which we might have thought PSEG LI was performing well, although there were many positive findings and conclusions contained in the report. Because the bulk of the safety assessment is generally aimed at identifying problems, deficiencies, and opportunities for improvement, it may give the reader the impression that the PSEG LI is seriously deficient. This is not the case, because many of the findings and conclusions contained in this report are positive and many of the recommendations may be designed primarily to continue or enhance existing practices.

There have been significant improvements in PSEG-LI safety indices since our last review as shown in Chapter IV Statistical Analysis. All of the OSHA and Motor Vehicle Accident rates have improved (trended downward). While the number of employees has increased slightly (Exhibit IV-6) the number of recordable incidents (Exhibit IV-7) has continued to decrease. PSEG-LI continued emphasis on its safety training programs (Chapter VI Safety Support Programs) and practices can be credited for much of this improvement. All of these activities would make PSEG-LI equal to or better than electric utilities that our project team has experience with in the Northeast and Midwest United States.

The audit produced five recommendations, which are contained in this report. The actual recommendation statements contained in the audit report are shown in *Exhibit I-1*. We have also indicated the recommendation number, page number in the report, priority, and estimated timeframe to initiate implementation efforts, and estimated benefits following implementation. The details of each recommendation can be found in the following three chapters where the associated subject matter is evaluated.

Exhibit I-1 2020 Summary of Recommendations

				Implementation	
	Description	Page	Priority	Initiation Time Frame	
V-1	PSEGLI needs to add a revision page to the Health and Safety Manual as well as display on each page the latest revision date. (Refer to Finding V-6.)	47	Medium	6-24 Months	
VI-1	Identify local operating practices that exist between regions and establish one preferred practice across all regions for each one. (Refer to Finding VI-13)	66	Medium	6-12 Months	
VI-2	Ensure that safety oversight and practices are extended to contractors and foreign crews during storm restoration (Refer to Finding VI-14.)	66	Medium	6-12 Months	
VI-3	PSEG-LI should review if current training module coding is appropriate. (Refer to Finding VI-16.)	88	Low	6-12 Months	
IV-4	PSEG-LI should revise it current Training Facilities study in light of any operational changes necessitated by COVID-19 and work with LIPA for funding. (Refer to Finding VI-17.)	88	Medium	6-12 Months	

To assist PSE&G LI and LIPA management in developing implementation plans, each recommendation has been assigned a priority of "high," "medium," or "low" according to the following criteria:

- ♦ High Designated recommendations are high priority because of their importance and urgency. These represent significant benefit potential, major improvements to service, or substantial improvements to methods or procedures.
- ♦ Medium Designated recommendations are of medium priority. In some instances, the implementation of these recommendations is expected to provide moderate improvements in efficiency of Operations and Maintenance, or management methods and performance. In other instances, implementation may provide significant longer-term benefits which are less predictable.
- ◆ Low Designated recommendations reflect a lower priority. In many instances, they should be studied further or implemented sometime during the next few years. Potential benefits are perceived to be either modest or difficult to measure.

II. Purpose and Methodology

A. Purpose

The Long Island Power Authority (LIPA) awarded a contract to Schumaker and Company, Inc. (Consultant or Schumaker & Company) to assist LIPA in the evaluation and review of the appropriateness and effectiveness of the safety initiatives of LIPA's Service Provider, PSEG Long Island, LLC (PSEG-LI), including its Safety Standards and Procedures.²

Specifically, LIPA requested Schumaker & Company to:³

- Conduct a work safety assessment of PSEG-LI utility practices and compare to other similarly sized utilities
- Provide recommendations and effectiveness measures to the existing initiatives/plans based on best practices of industries

Schumaker & Company used a four-person consultant team (Team) to complete the project.

This report documents the findings and recommendations submitted by Schumaker & Company to LIPA.

B. Methodology

The Team used the following three-phase work plan, including three on-site visits, to complete the project:

- ♦ Phase I Orientation & Planning
- ♦ Phase II Detailed Reviews and Analyses
- ♦ Phase III Draft Report and Final Report Preparation

Phase I – Orientation & Planning

During this phase the Schumaker & Company Team:

- ♦ Submitted requests for data and information to facilitate *Phase II* of the project:
 - During the first few weeks, project documents requested were a little slow at coming in due to the ongoing COVID pandemic and the occurrence of some storm events.
 - The Team did begin reviewing documents, such as the safety manual before *Phase II* began.



• Biweekly video conferences were held during the project with all participants operating from their home, office, or filed locations ⁴

All information requests and responses were handled via Schumaker & Company PMIA
application which supported the electronic exchange of documents and scheduling of ZOOM
meetings.

Phase II – Detailed Reviews and Analyses

During *Phase II*, the Team it became apparent that the COVID pandemic was not going away and in fact was going to continue to be an issue. It was decided that the project would need to be completed without the level of on-site activities that had been conducted in the previous review. Instead, Schumaker & Company consultants scheduled an extensive set of ZOOM interviews which covered PSEG-LI management and PSEG-LI safety advocates, union personnel with specific responsibilities for safety oversight. During these ZOOM interviews and our review of information responses, we were able to follow up on our previous recommendations that came out of our previous field visits.

Phase III - Draft Report and Final Report Preparation

Phase III Team activities included:

- The preparation of a draft report using the knowledge and insight gained from reviewing and analyzing Information Responses, on-site visits, and interviews
- ♦ The submission of the draft report to LIPA for review and comment
- ♦ The revision of the draft report to incorporate LIPA's comments
- ♦ The submission of the draft report to PSEG-LI for comments
- The preparation of the Final Report after incorporating PSEG-LI comments, if applicable
- The submission of the Final Report to LIPA

III. Company Profile

A. Background

The Transmission and Distribution System assets that provide electrical service to residential, commercial, and industrial residents on Long Island, New York are owned by the Long Island Power Authority (LIPA) that was created by the State of New York. Under an Operations Service Agreement (OSA), LIPA contracts with Public Service Electric & Gas - Long Island (PSEG-LI) for operational and maintenance activities required to deliver electric energy to Long Island residential and business customers.

LIPA, in accordance with the OSA, provides PSEG-LI with the opportunity to earn incentive compensation based on mutually agreed to metrics for Customer Satisfaction, Financial Performance, Electric Reliability, and Employee Safety. As part of its oversight responsibility, LIPA periodically requests a review of 2017-2019 PSEG-LI Employee Safety Performance.

This chapter provides an overview of the facility locations and organizational structure used by PSEG-LI in achieving its OSA Employee Safety Performance, *Exhibit III-7* and *Exhibit III-8*.

PSEG-LI Geographic Profile

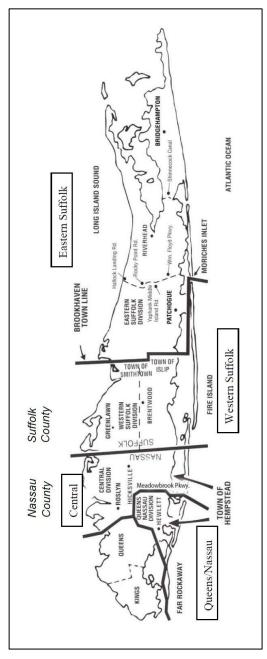
PSEG-LI serves approximately 1.1 million customers in roughly 1,230 square miles in Nassau and Suffolk counties and the Rockaway Peninsula in Queens. They operate and maintain about 1,400 miles of transmission assets and around 9,000 miles of overhead and 5,000 miles of underground distribution assets.⁶

The PSEG-LI service area is divided into four geographical divisions for field activities. These divisions are Queens Nassau, Central, Western Suffolk, and Eastern Suffolk as shown in *Exhibit III-1*. PSEG-LI has staff in seventeen (17) locations on Long Island as shown in *Exhibit III-2*. *Exhibit III-3* displays the work functions at each of the locations.⁸

Images of each of the seventeen (17) locations are given in Exhibit III-4, Exhibit III-5, Exhibit III-6, Exhibit III-7, and Exhibit III-8.

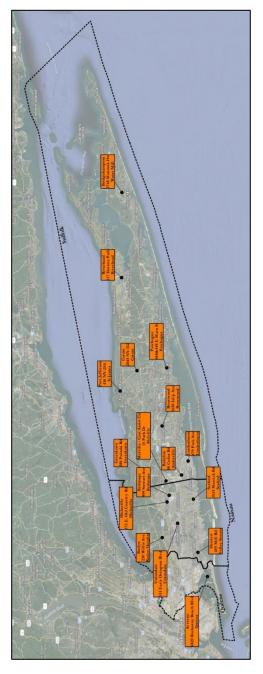


Exhibit III-1 PSEG-LI Operational Divisions September 20



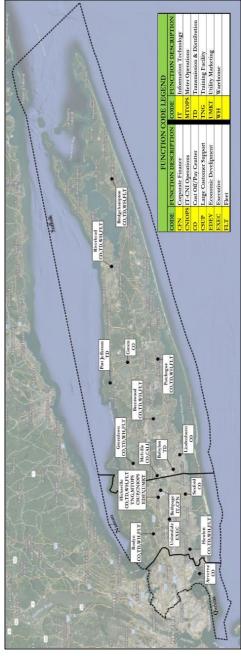
Source: https://www.psegliny.com/buildingrenovationservices/codesandstandards/redbook

Exhibit III-2 PSEG-LI Facility Location Addresses September 2020



Source: Information Response 87 and Consultant Analysis

Exhibit III-3
PSEG-LI Work Functions by Location September 2020



Source: Information Response 87 and Consultant Analysis

Exhibit III-4 PSEG-LI Facilities Arverne, Bethpage, Brentwood November 2020

Arverne⁹



Bethpage¹⁰



Brentwood¹¹



Exhibit III-5 PSEG-LI Facilities Bridgehampton, Coram, Greenlawn, Hewlett November 2020

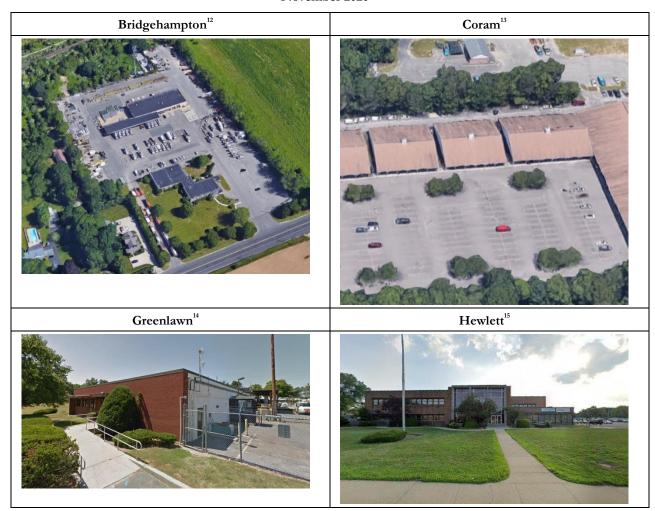


Exhibit III-6 PSEG-LI Facilities Hicksville, Lindenhurst, Melville – Cust Assist Ctr, Patchogue November 2020

Hicksville¹⁶



Melville - Cust Assist Ctr¹⁸





Lindenhurst¹⁷

Patchogue¹⁹



Exhibit III-7 PSEG-LI Facilities Port Jefferson, Riverhead, Roslyn, Seaford November 2020

Port Jefferson²⁰



Riverhead²¹



Roslyn²²



 $\mathbf{Seaford}^{23}$



Exhibit III-8 PSEG-LI Facilities Uniondale November 2020

Uniondale²⁴



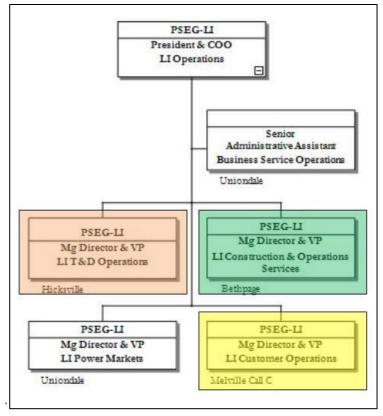
Source: See endnote for each image

PSEG-LI Safety Organization Profile

Executive Management Team

While all its employees have a responsibility to always work safely, PSEG-LI has specific organizations that are charged with implementing and supporting Safety Improvement Strategies and Initiatives approved by the companies Executive Management Team. The Executive Management Team is shown in *Exhibit III-9*. The organizations with specific Safety Teams are highlighted on the exhibit.²⁵

Exhibit III-9 PSEG-LI Executive Management Team June 2020

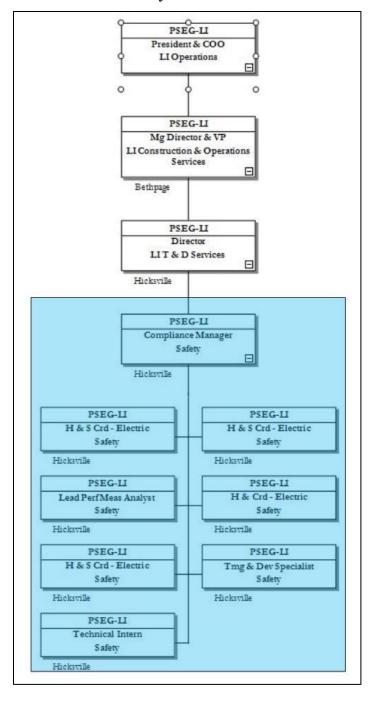


Source: Information Response 59

Functional Safety Teams

Exhibit III-10 shows the Safety Compliance Team within the Operation Services Organization. The team is responsible for tracking and reporting safety metrics, developing safety training modules, supporting safety activities within the Operations Services Organization, and coordination of safety activities with the T&D Operations and Customer Operations Safety Teams. There are eight (8) employees, including the Compliance Manager, in the group.²⁶

Exhibit III-10
PSEG-LI Operation Services Safety Compliance Team
June 2020



Source: Information Response 59

Four (4) Safety Teams, as shown in *Exhibit III-11*, support safety activities within the PSEG-LI T&D Operations Organization. The four teams have fourteen (14) employees including four (4) H&S Program Manager positions one of which is vacant.²⁷

PSEG-LI President & COO LI Operations PSEG-LI Mg Director & VP LIT&D Operations Hicksville PSEG-LI Director Tmg, Sup & Contr Services Hicksville PSEG-LI Field Eng and Ln Academy Hicksville PSEG-LI PSEG-LI PSEG-LI PSEG-LI H & S Program Manager H & S Program Management (Vacant) Brentwood PSEG-LI PSEG-LI PSEG-LI PSEG-LI H & S Crd - Electric Field Eng and Ln Acade Field Eng and Ln Academ H & S Program Managem H & S Program Management Roslyn Hicksville Hicksville Brentwood PSEG-LI PSEG-LI PSEG-LI PSEG-LI H & S Crd - Electric Working Ln Frnn A/Frwn A Emergency Service Specialist Field Eng and Ln Acaden Field Eng and Ln Academy H & S Program Managemen Field Eng and Ln Academy Brentwood Greenkun Patchogue PSEG-LI PSEG-LI Working Ln Frnn A/Frwn A Emergency Service Specialist Field Engand Ln Academy Field Eng and Ln Academy Brentupod

Exhibit III-11
PSEG-LI T&D Operations Safety Teams
June 2020

Source: Information Response 59 and Interviews 26, 27, and 30

The Customer Operations Organization Safety Team is given in *Exhibit III-12*. Customer Operations safety activities are supported by a five (5) member team including an H&S Program Manager.²⁸

PSEG-LI President & COO LI Operations PSEG-LI Mg Director & VP LI Customer Operations Melville Call C PSEG-LI Director Meter Services Hicksville PSEG-LI H&S Program Manager Meter Services H & S Melville Call C PSEG-LI PSEG-LI PSEG-LI PSEG-LI H & S Crd - Cust Operations Assoc H & S Crd Master Meter Tech Master Meter Tech Meter Services H & S Meter Services H & S Hicksville Field Operations Melville Call C Brentwood Hicksville

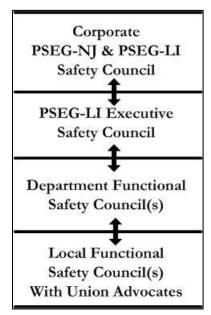
Exhibit III-12 PSEG-LI Customer Operations Safety Team June 2020

Source: Information Response 59 and Interview 28

Safety Councils

PSEG-LI continues to encourage Safety Councils from local worker locations up to and including PSEG Corporate. Local employee participation is encouraged but it is voluntary. The Safety Council Structure is presented in *Exhibit III-13*.²⁹

Exhibit III-13
PSEG-LI Safety Council Structure
April 2020



Source: Interviews 2, 26, 28, 29, and 30 and Consultant Analysis

B. Findings

Finding III-1 PSEG-LI has an adequate Safety Organizational structure to support and improve its safety performance.

PSEG-LI has roughly the same number of personnel devoted to the safety effort it had during our 2017 review. As discussed in other sections of this report, the safety metrics have continued to improve d over the last several years, as discussed in the next chapter.

C. Recommendations

None

IV. Statistics Analysis

A. Background

OSHA has established specific mathematical calculations that enable any company to report their recordable incident rates, lost time rates, and severity rates, so that they are comparable across any industry or group. The standard base rate for the calculations is based on a rate of 200,000 labor hours. This number (200,000) equates to 100 employees, who work 40 hours per week, and who work 50 weeks per year. Using this standardized base rate, any company can calculate their rate(s) and get a percentage per 100 employees.³⁰

In accordance with the Operating Service Agreement (OSA), PSEG-LI can receive additional compensation if PSEG-LI achieves annual Safety Performance Targets mutually agree to between LIPA and PSEG-LI. Annually, Safety Performance Targets for the following year are established for:

- OSHA Recordable Incident Rate;
- ♦ OSHA Days Away Rate (Severity); and
- Motor Vehicle Accident (MVA) Rate

PSEG-LI also monitors other non-incentive metrics as part of its Safety Management Process.

Incentive Compensation Metrics

OSHA Recordable Incident Rate

The Annual OSHA Recordable Incident Rate is defined as:

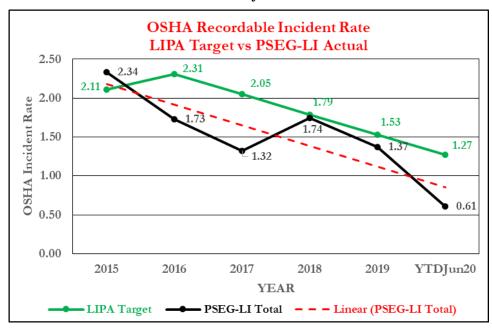
 $Annual\ OSHA\ Recordable\ Incident\ Rate\ = \frac{Number\ of\ Recordable\ Incidents\ x\ 200,000}{Total\ Number\ of\ Hours\ Worked}$

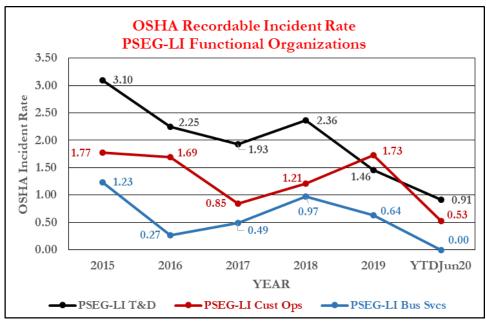
Exhibit IV-1 provides annual LIPA OSHA Recordable Incident Rate Targets and PSEG-LI performance for 2015 through June 2020. LIPA targets ranged from 2.31 in 2016 to 1.27 for 2020. PSEG-LI performance ranged from 2.34 in 2015 to 1.32 for 2019. The YTD performance in June 2020 was 0.61. Data indicates a PSEG-LI Total Incident Rate reduction of 41.5% (2.34 to 1.37) 2015 to 2019.³²

Exhibit IV-1 also provides OSHA Recordable Incident Performance for PSEG-LI functional organizations. T&D Operation performance ranged from 3.1 in 2015 to 1.42 in 2019. T&D YTD June 2020 performance was 0.91. Customer Operations rates ranged from 1.77 to 0.85 in 2017. The Customer Operations rate in YTD June 2020 was 0.53. The range of rates for Business Services was 1.23 to 0.27 in 2016. Business Services rate at YTD June 2020 was 0.00.³³



Exhibit IV-1 OSHA Recordable Incident Rate Performance 2015 – June 2020





Source: Information Responses 53 and 61

OSHA Days Away Rate (Severity)

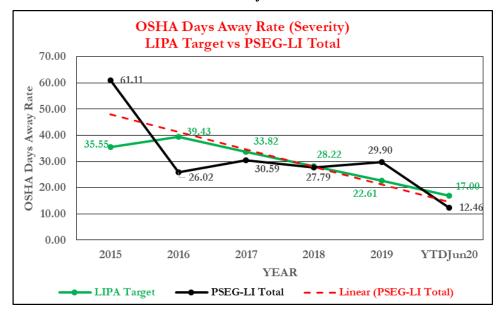
The severity of OSHA Recordable Incidents is known as the OSHA Days Away Rate and is defined as:

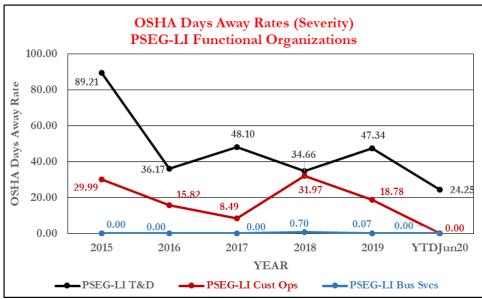
Annual OSHA Days Away Rate $=\frac{Annual \ Number\ of\ Days\ Away\ due\ to\ injury\ x\ 200,000}{Annual\ Total\ Number\ of\ Hours\ Worked}$

LIPA OSHA Days Away Target and PSEG-LI Total Performance for 2015 through YTD Jun20 is shown on *Exhibit IV-2*. LIPA targets ranged from 39.43 in 2016 to 17.00 for 2020. PSEG-LI's range of performance was 61.11 in 2015 to 26.02 in 2016. The total rate was 12.06 at the end of June, 2020. The data indicates a 51.1% reduction (61.11 to 29.90) in PSEG-LI Total Days Away Rate between 2015 and 2019.³⁵

PSEG-LI Functional Organization Days Away Rate performances are also shown on *Exhibit IV-2*. T&D Operation's performance rates ranged from 89.21 in 2015 to 34.66 in 2018. T&D's rate at the end of June 2020 was 24.25. Rates for Customer Operations ranged from 31.97 in 2018 to 8.49 in 2017. The end of June 2020 Customer Operations rate was 0.00. The range of rates for Business Services was 0.70 in 2018 to 0.00 in 2015, 2016, and 2017. The end of June 2020 Business Services rate was 0.00. The range of rates for Business Services rate was 0.00.

Exhibit IV-2 OSHA Days Away Rate (Severity) Performance 2015 – June 2020





Source: Information Responses 53 and 61

Motor Vehicle Accidents (MVA)

LIPA and PSEG-LI agreed to an OSA Incentive Target for Motor Vehicle Accidents (MVA) beginning with calendar year 2019. The target is based on the percent change in number of MVAs from the previous year and is calculated as:

Annual Percent Change in MVAs =
$$\frac{(Current\ Yr\ Num\ MVAs - Previous\ Yr\ Num\ MVAs)}{Previous\ Yr\ Num\ MVAs}\ X\ 100^{-37}$$

The percent change in number of PSEG-LI MVAs for 2016 – YTD Jun20 is given in *Exhibit IV-3* which also shows OSA Targets for 2019 and 2020. The PSEG-LI annual change ranged from +17.5 in 2016 to -17.5 in 2019 with -78.9 in YTD Jun20. LIPA Targets were -5.6 in 2019 and -1.9 for 2020.³⁸

Exhibit IV-4 gives MVAs from 2015 through the end of June 2020 by PSEG-LI Total and each Functional Organization. PSEG-LI Total MVAs ranged from a low of 90 in 2015 to a high of 126 in 2018. The YTD number of MVAs at the end of June 2020 was 24.³⁹

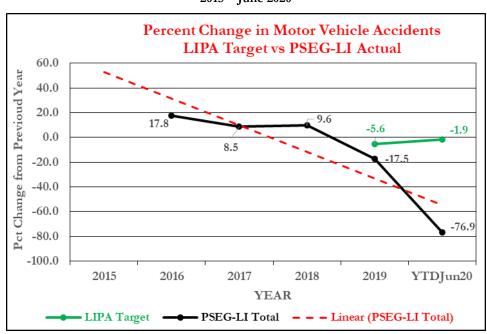
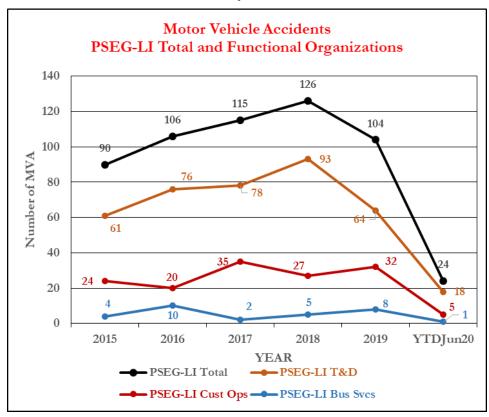


Exhibit IV-3
Percent Change in Number of Motor Vehicle Accidents from Previous Year
2015 – June 2020

Source: Information Response 91

Interviews indicated that the implementation of the GPS (Geographic Positioning System) in field vehicles and a policy of garages not making repairs to vehicles unless an incident report for the damage is provided has contributed significantly to a reduction in MVAs.⁴⁰

Exhibit IV-4 Number of Motor Vehicle Accidents (MVA) 2015 – June 2020



Source: Information Response 91

Non-Incentive Metrics

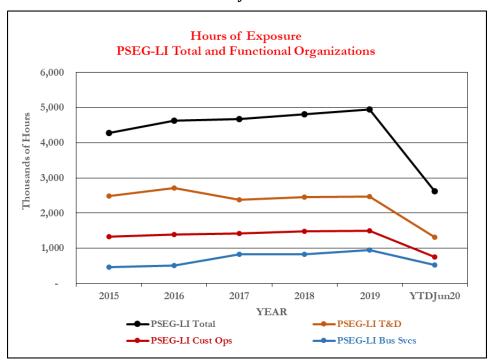
Fatalities

There have been no PSEG-LI fatalities during the years of 2015 through YTD June 2020.

Hours of Exposure

The "Hours of Exposure" is the number of work hours that employees are exposed to potential injury and is used as the Denominator in a number of safety metrics equations. *Exhibit IV-5* provides the annual "Hours of Exposure" for PSEG-LI Total and by function. PSEG-LI Totals "Hours of Exposure" ranged from a low of 4,284,168 in 2015 to a high of 4,951,158 in 2019 with 2,617,424 YTDJun20.⁴¹

Exhibit IV-5 Hours of Exposure 2015 – June 2020



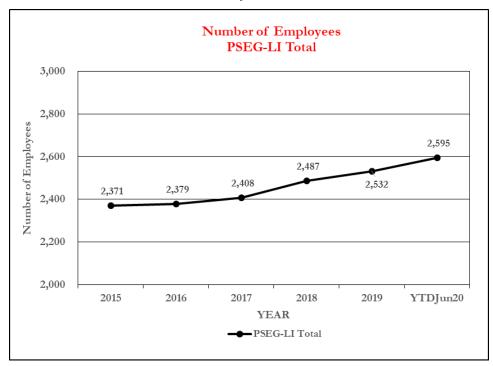
Source: Information Responses 53 and 62

Number of Employees

The "Hours of Exposure" in Exhibit IV-5 is directly related to the number of employees. Exhibit IV-6 shows the end-of-year number of PSEG-LI employees from 2015 through 2019 plus the number at the

end of June 2020. The number of employees increased by 224 (9.4%) from end-of-year 2015 to June 2020.

Exhibit IV-6 Number of Employees 2015 – June 2020

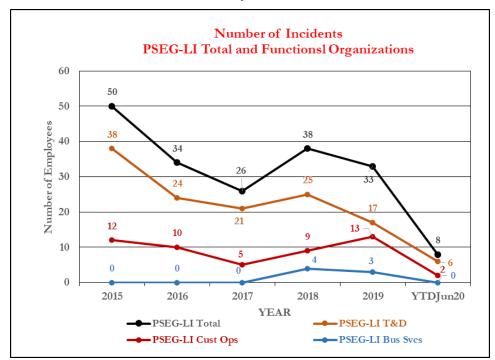


Source: Information Responses 50 and 71

Number of Recordable Incidents

The OSHA Recordable Incident Rates given in *Exhibit IV-1* are a reflection of the number of recordable incidents *Exhibit IV-7* shows the number of PSEG-LI incidents for 2015 – YTD Jun20. The PSEG-LI Total incidents varied from a high of 50 in 2015 to a low of 26 in 2017 with 8 in YTD Jun20.⁴³

Exhibit IV-7 Number of Recordable Incidents 2015 – June 2020



Source: Information Response 53 and 61

Restricted Duty Activity

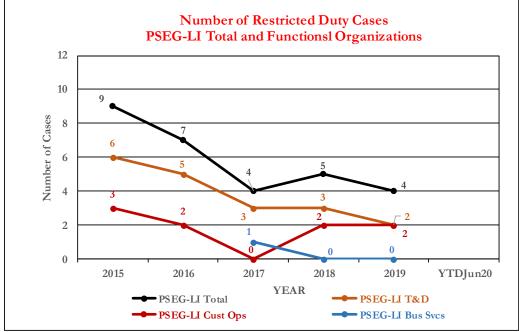
Some accidents may result in employees being able to continue to work in a different job until they medically recover to meet their normal job qualifications. These jobs are referred to as "Restricted Duty". The number of PSEG-LI Restricted Duty Cases for 2015 – 2019 is given in *Exhibit IV-8*. No data for 2020 was available. PSEG-LI Total Restricted Duty Cases declined from 9 in 2015 to 3 in 2019, a 66.7% reduction."

The Number of Restricted Workdays is given in *Exhibit IV-9* for PSEG-LI Total and Functional Organizations. No data for Business Services was available for 2015 and 2016. PSEG-LI Total Restricted Duty Workdays ranged from 1,242 in 2015 to 397 in 2017. There was a 32.9% (1,242 to 833) reduction in Restricted Workdays from 2015 to 2019. At YTD Jun20, there had been 381 Restricted Workdays.⁴⁵

Exhibit IV-8

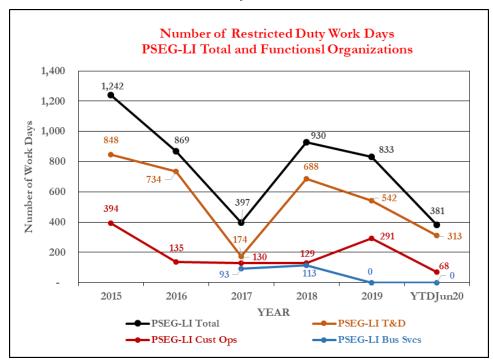
Number of Restricted Duty Cases
2015 – June 2020

Number of Restricted Duty Cases
PSEG-LI Total and Euroctional Organical Control Cont



Source: Information Responses 8 and 67

Exhibit IV-9 Number of Restricted Duty Workdays 2015 – June 2020

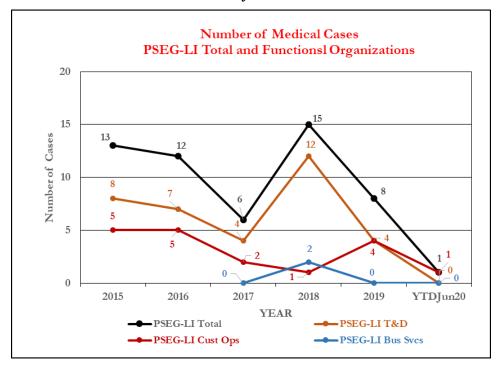


Source: Information Response 10 and 69

Medical Treatment Cases

Some recordable incidents require treatment by Medical Professionals. PSEG-LI Total and Functional Organization's Medical Cases for 2015 through YTDJun20 are shown in *Exhibit IV-10*. No data was available for Business Services for 2015 and 2016. The highest number of total cases was 15 and occurred in 2018. The lowest number of 6 occurred in 2017. There was a 38.5% reduction (13 to 8) in Medical Cases between 2015 and 2019. The total number of cases at the end of June 2020 was 1.46

Exhibit IV-10 Number of Medical Cases 2015 – June 2020



Source: Information Responses 9 and 68

B. Findings

Finding IV-1 PSEG-LI uses a Safety Management Process that results in improved Safety Performance.

All the Safety Metrics in Exhibit IV-1 through Exhibit IV-10 indicate a positive change between 2015 and the end of June 2020. Generally, in looking at all the exhibits, all of the trend lines are trending down.

C. Recommendations

None



V. Assessment of Implementation of Recommendations from Previous Audit

A. Background

The recommendations contained in the Schumaker & Company report "PSEG-LI Safety Assessment on behalf of Long Island Power Authority September 2017" serve as the background for this section. The report contained nine recommendations as shown in *Exhibit I-1*.

Exhibit V-1 Summary of 2017 Recommendations

			Implementation	
	Description	Page	Priority	Initiation Time Frame
IV-1	LIPA and PSEG-LI should consider supplementing the OSHA Safety Metrics with non-OSHA "Leading Indicator" metric(s) that indicate PSEG-LI's progress to achieve zero injuries. (Refer to Finding IV-1 and Finding IV-5.)	70	High	6-24 Months
IV-2	PSEG-LI should develop a process and procedure to assure, in a timely manner, that all material racks meet material storage standards through repair or replacement with replaced racks being secured for non-use until disposal. (Refer to Finding IV-12.)	72	Medium	6-12 Months
IV-3	PSEG-LI should develop a process to assure tools and equipment removed from operations are properly tagged and secured until disposal. (Refer to Finding IV-12 and Finding IV-13.)	73	Medium	6-12 Months
IV-4	PSEG-LI should review and/or develop a new procedure to assure the disposal of obsolete tools and equipment in a timely manner. (Refer to Finding IV-12 and Finding IV-13.)	73	High	6-12 Months
IV-5	PSEG-LI Leadership should consider offering the "Customer Service Weather Alert and Delayed Start Time Policy", with application training, to Managers of non-emergency functions as a tool to assist Managers in achieving and maintaining zero injuries and accidents. (Refer to Finding IV-15)	73	Medium	6-12 Months
IV-6	PSEG-LI should formalize a process to document the latest <u>annual</u> review date of each page within the Safety Manual. (Refer to Finding IV-32.)	73	Medium	6-12 Months
IV-7	PSEG-LI should consider the addition of clerical/administrative staffing to support the mission of the Safety organization. (Refer to Finding IV-34.)	74	High	6-12 Months
IV-8	PSEG-LI should implement the Learning Management System. (Refer to Finding IV-35.)	74	High	6-24 Months
IV-9	PSEG-LI should develop a Training and Safety Support Resource Plan to assure that PSEG-LI has adequate facility and staffing resources for skills and safety training needed to achieve and maintain the company's goal of zero injuries and request funding from LIPA for implementation. (Refer to Finding IV-33)	74	High	6-12 Months

B. Findings

Finding V-1

PSEG-LI and PSEG Enterprise recognize the value of leading indicator metrics and have expanded their use. (Refer to Item IV-1 in *Exhibit V-1*)

As described in *Exhibit V-2*, PSEG Long Island implemented a Tier II dashboard to communicate key leading indicators monthly to LIPA.

Exhibit V-2 PSEG-LI Response 2017 Recommendation IV-1 October, 2020

OSA Safety Targets are based on OSHA, Lost Time and MVA incidents. Notwithstanding, PSEG Long Island and PSEG Enterprise recognize the value of leading indicator metrics and have expanded their use. PSEG Long Island implemented a Tier II dashboard to communicate key leading indicators monthly to LIPA i.e. Drivers Training, Employee Training, Briotix Industrial Athlete Program Employee Encounters, Incident Analysis Actions, and Safety Assessments.

Source: Information Response 83-001

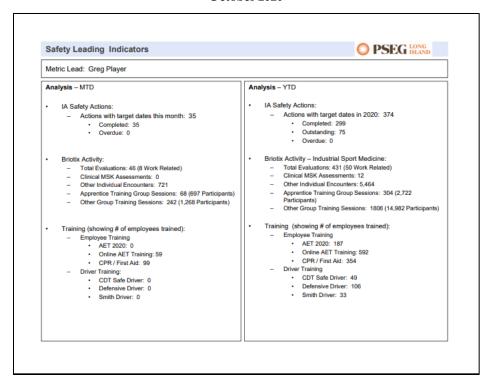
Exhibit V-3 and Exhibit V-4 provides examples of the Leading Indicators.⁴⁷

Exhibit V-3 Tier II Leading Safety Indicator Dashboard October 2020



Source: Information Response 83-002

Exhibit V-4
Supporting Documentation for Leading Safety Indicators
October 2020



Source: Information Response 83-003

Finding V-2 A PSEG-LI engineering assessment was completed, and deficiencies corrected for all Materials & Logistics storage racks system wide. (Refer to Item IV-2 in *Exhibit V-1*)

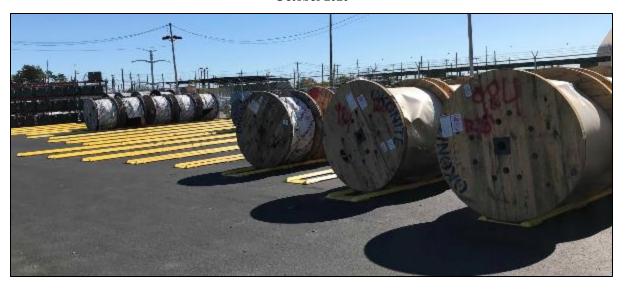
Exhibit V-5 indicates PSEG-LI's response to Recommendation IV-2 from 2017. Examples of actions taken are shown in Exhibit V-6 and Exhibit V-7.48

Exhibit V-5 PSEG-LI Response 2017 Recommendation IV-2 October 2020

An engineering assessment was completed of all Materials & Logistics storage racks system wide. The results and recommendations of that assessment were reviewed by an internal team to ensure that any unsafe conditions were addressed and made safe. Racks deemed unsafe were either immediately removed from service or had their material storage loads reduced to within rated capacity of the rack. Project funding was secured and all unsafe racks were replaced.

Source: Information Response 83-001

Exhibit V-6 Hicksville Upgraded Storage Racks October 2020



Source: Information response 83-005

Exhibit V-7 Brentwood Storage Racks October 2020



Source: Information Response 83-007

Finding V-3 PSEG-LI developed a process to assure obsolete equipment and tools are removed from service and properly tagged. (Refer to Item IV-3 in *Exhibit V-1*)

PSEG-LI's actions taken to address obsolete ladders and tools is given in *Exhibit V-8*. *Exhibit V-9* provides an extract from Chapter 13 of the Health and Safety Manual that was reviewed to insure it identified the proper method for handling defective equipment.⁴⁹

Exhibit V-8 PSEG-LI Response 2017 Recommendation IV-3 October, 2020

The ladders referenced in the assessment were immediately removed from service, properly stored and re-tagged "Out-of-Service", if determined to be damaged or obsolete. EH&S Facility and Operations Assessment Teams actively monitor for the proper tagging of unused defective equipment.

Source: Information Response 83-001

Exhibit V-9 Defective Tool Removal Procedure as of October, 2020

13.1.1 General Requirements - Hand Tools

- 1) Hand tools SHALL be used only for the purpose for which they were designed.
- 1) Hand tools SHALL be inspected before use and maintained in good condition.
- 2) Defective machinery, tools or equipment SHALL NOT be used.
 - a) The use of any machinery, tools, or equipment that is not in compliance with all applicable requirements SHALL be prohibited.
 - a) Such machinery, tools, or equipment SHALL be identified as unsafe using one of the following methods:
 - i) tagging.
 - ii) locking the controls to render them inoperable.
 - iii) physically removing the equipment from its place of operation.

Source: Information Responses 83-001 and 83-016

Finding V-4 PSEG-LI documented a procedure for the disposal of obsolete tools and equipment. (Refer to Item IV-4 in *Exhibit V-1*)

Exhibit V-10 shows the extracted purpose of the new 12 page procedure, EP-25, that was developed to standardizes the methods used for the recovery, recycling, disposal, salvage, sale of assets or inventory type material, and/or scrapping of surplus material and equipment⁵⁰.



Exhibit V-10 Purpose of Investment Recovery Procedure EP-26 as of October 31, 2020

PURPOSE

- 2.1 This document provides guidance for PSEG Long Island's Environmental Compliance Investment Recovery (IR) Process. This will include the sale of surplus and scrap material or equipment.
- 2.2 The purpose of this procedure is to standardize the methods used for the recovery, recycling, disposal, salvage, sale of assets or inventory type material, and/or scrapping of surplus material and equipment. This will serve to ensure that the company receives maximum revenue and protection of its interests in all transactions. This procedure is exclusive of fleet/transportation assets, whose disposition is addressed in CM-FL-001-0001 (Fleet Asset Disposition Procedure).

Source: Information Response 83-017

Finding V-5

PSEG-LI has daily morning operations call which includes a review of employee safety, weather and system reliability. (Refer to Item IV-5 in *Exhibit V-1*)

PSEG-LI's response to 2017 Recommendation IV-5, Morning Calls, is provided in Exhibit V-11.51

Exhibit V-11 Morning Operations Calls as of October 2020

All Electric T&D operating departments participate on the daily morning operations call which includes a review of employee safety, weather and system reliability. Decisions to alter operations due to weather is considered and determined on the call. Non-essential activities are rescheduled due to weather related safety considerations.

PSEGLI also subscribes to an industry weather service which provides updates throughout the day seven days a week via email to managers. Work assignments are modified as appropriate based on weather forecasts.

Source: Information Response 83-001



Finding V-6 PSEG-LI took steps to better document revision dates of The Health and Safety Manual but not on each page. (Refer to Item IV-6 in *Exhibit V-1*)

Actions taken by PSEG-LI concerning "Safety Manual Revision Dates" from 2017 Recommendation IV-6 are given in *Exhibit V-12*.

Exhibit V-12 Safety Manual Revision Date as of October 2020

The Health and Safety Manual review statement has been updated to include the following:

"This document shall be reviewed every $\underline{\mathbf{3}}$ years or incrementally as significant changes occur."

The manual is continuously updated and if interim changes are required they are issued as "Bulletins" until the next publication.

In 2019 the manual had undergone an entire review and revision. The chapters of the manual are separate files allowing for individual chapters to be updated as needed. The manual is also maintained online allowing employees to access the most current version at any time.

Source: Information Response 83-001

The manual is continuously updated and if interim changes are required they are issued as "Bulletins" until the next publication.

In 2019 the manual had undergone an entire review and revision. The chapters of the manual are separate files allowing for individual chapters to be updated as needed. The manual is also maintained online allowing employees to access the most current version at any time. The current safety manual does not contain a revision page with the revision dated 2019. There is no revision page in the manual and without it, it is not possible to determine when it was last reviewed. In addition, the individual pages do not display the latest revision date on the page.

However, the COVID 19 documentation has this information on each page as shown in *Exhibit VI-1*. The documentation should be standardize to include this information on each page.

Finding V-7 Health & Safety Compliance added one full time position to support both field and classroom training. (Refer to Item IV-7 in *Exhibit V-1*)

A consultant was also added to staff on a part time bases through 2020 to assist in course development and long-range planning for safety training⁵². Operational training was placed under the Director – Training Support & Contractor Services along with additions in training and safety staffing.



External resources were acquired to deliver annual safety, forklift (PIT) and other training.

This year, due in part to COVID-19, much of the instructor led training was transitioned to online computer based training reducing the required "in classroom" time of staff.

The positions that were added were a health and safety advocate in Customer Operations, specifically the meter group and Health and Safety Coordinator. The consultant is no longer employed by PSEGLI.⁵³

Currently there are a total of twenty-eight (28) full time dedicated Health and Safety Professionals at PSEG Long Island including two (2) vacancies. The following is a list of the approved positions within each line of business:

Health & Safety Compliance (PSEGLI System Wide)

- (1) Health & Safety Manager
- (3) Health & Safety Coordinators
- (1) Health & Safety Coordinator / Trainer
- (1)- Safety Training Specialist
- (1) Performance Measurement Lead

Electric Operations

- (4) Health & Safety Program Managers (1 vacancy)
- (3) Health & Safety Coordinators
- (7) Union Safety Advocates

Customer Operations

- (1)- Health & Safety Program Manager
- (2) Health & Safety Coordinators
- (2) Union Safety Advocate

Projects & Construction

(1) - Health & Safety Coordinator (Vacant)

Corporate Medical

(1) - Occupational Health Specialist

Finding V-8

A Learning Management System (LMS) was in place at the time of the last assessment and has since been fully implemented. (Refer to Item IV-8 in *Exhibit V-1*)

The Health & Safety Training Matrix has been refined and a course code system has been established within LMS. Attendance records from 2014 forward have been entered into the system⁵⁴. *Exhibit V-13* is a subset of the Health and Training Matrix. The full matrix covers all employees and all departments.

Exhibit V-13

Training Matrix as of October 31, 2020 OH/UG. SP&T COURSE Sub 'S Asbestos Supervisor 95 AET des Amarei ne Pathoge SAG006 - AE laz. Waste Mgmt. & DOT Overview. pill Response Training onmental trainir r - 40 Hours ENV420

Source: Information response 94

Finding V-9

PSEG Long Island established a core project team, steering committee and sub teams to analyze training requirements and needs including programs and facilities. (Refer to Item IV-9 in *Exhibit V-1*)

A consultant was brought on to work with the internal team to assess existing training and training resources and to make recommendations for improvements and efficiencies.

A facilities profile was developed with three options and presented to leadership. Options were being evaluated prior to the onset of COVID-19.



The company is currently finalizing a reentry strategy from COVID-19 which includes determining future strategies for how we operate in a post COVID-19 world. Upon completion of these studies the training plan and recommendations will be refreshed. The PSEG Long Island Facilities Management Organization has budgeted funds in the 2021 budget plan to accommodate a facility needs assessment.

Separate from the aforementioned initiative, a joint PSEG Long Island/PSE&G teamed examined current health, safety and regulatory training programs against best practices and developed a training matrix along with improvements and additions to the existing training programs.

This year PSEG Long Island Health and Safety began converting instructor led training to online computer-based training to accommodate needs brought about by COVID-19. Additional content has since been added and we are currently working with various vendors to link other external E-Learning to LMS. With these and future conversions to online training it is anticipated that classroom needs will be somewhat reduced from what they were prior to COVID-19⁵⁵.

Finding V-1 The Facilities Matrix is very comprehensive showing Current State,
Minimum Future State, Moderate Future State, and Major Future State.
(Refer to Item IV-9 in Exhibit V-1)

It also shows the facilities in NJ. A section of the Matrix is shown in Exhibit V-14, and Exhibit V-15

Exhibit V-14 Facilities Profile slide 1 as of October 31, 2020

	Current State	Minimum Future State	Moderate Future State	Major Future State	NJ Current
	Approximately 5,100 ft ² , distributed over nine (9) class	Approximately 27000 ft2, distributed over 20 class spaces	Approximately 38000 ft2, distributed over 27 class spaces	Approximately 38000 ft2, distributed over 27 class spaces	Size 20493 ft2 Distributed over 19 Class Spaces (Only includes electric and
	spaces				customer rooms)
	Overhead2 classrooms	Overhead	Overhead2 Classrooms (2000 ft2)	Overhead2 Classrooms (2000 ft2)	Overhead2 Classrooms (1306 ft2)
	 Underground1 classroom 	Overhead	Overhead	Overhead	Overhead
	Emergency Services 1 classroom	Underground 2 Classrooms(2000 ft2)	Underground 2 Classrooms(2000 ft2)	Underground 2 Classrooms(2000 ft2)	Underground
	· Substations2 classrooms	 Underground 1 Hands on (3000 ft2) 	 Underground	Underground	Underground 1 Hands on(2010 ft2)
	 Customer Service. 2 classrooms 	• Emergency Services	Emergency Services	Emergency Services	- Emergency Services
	Meter Services	Emergency Services1 Hands on(1500 ft2)	Emergency Services1 Hands on(1500 ft2)	Emergency Services1 Hands on(1500 ft2)	Emergency Services 0 Hands on
Classrooms		-SP&T	-SP&T	-SP&T 2 Classrooms(2000h2)	-SPWT
*Square Footage Totaled		-SP&T	-SP&T	-SP&T	-SPMT
-square Footage Totaled		Meter Services	Meter Services	Meter Services	Meter Services
l		Meter Services	Meter Services	Meter Services	Meter Services 4 Hands on (3983 ft2)
		 Unassigned Classrooms2 Classrooms(2000 ft2) 	Unassigned Classrooms2 Classrooms(2000 ft2)	Unassigned Classrooms2 Classrooms(2000 #2)	Unassigned Classrooms © Classrooms
l		Computer Rooms	Computer Rooms	Computer Rooms	Computer Rooms 2 Classrooms(1249 ft2)
		-Firet 0 Classrooms	+Fleet 1 Classrooms(1000 ft2)	-Fleet	-Fleet 0 Classrooms
		-Fleet 0 Hands On	+Fleet	•Reet1 Hands On(2000 ft2)	-Fleet
		-Human Resources 0 Classrooms	+Human Resources	+Human Resources	-Human Resources © Classrooms
		Customer Service	Customer Service	Customer Service 0 Classrooms	Customer Service2 Classrooms(1867ft2)
1	Limited and shared; approximately 1,200 ft2, distributed	Office space 7000 ft2 (40 Offices)	Instructors Meeting room 1,000 ft2 (1 Location)	Instructors Meeting room 1,000 ft2 (1 Location)	Instructors Meeting room 425 ft2 (1 Location)
Turking Officer	over 6 office spaces*	I	Office space 8000 ft2 (48 spaces)	Office space 8000 ft2 (48 spaces)	Office space \$748 ft2(46 Cubicles 14 Enclosed Offices)
Training Offices	* note that the office space for meter services is shared with class room space	I	I		1
1	mar same result space	I	I		1
	Approximately 1,500 ft ² , distributed over 2 rooms	Small Conference Rooms 8000M2 (8 locations) 20 people	Small Conference Rooms 8000ft2 (Blocations) 20 people	Small Conference Rooms 8000h2 (8 locations) 30 people	Small Conferance Rooms 4967ft2 (B locations) 20 people
1	The state of the s	Large Conferance Rooms 4000ft2 (2 locations) 40 people	Large Conferance Rooms 4000ft2 (2 locations) 40 people	Large Conferance Rooms 4000ft2 (2 locations) 40 people	Large Conferance Rooms 2631ft2 (2 locations) 40 people
Conference Rooms	I	Huddle Rooms 1200ft2 (6 Locations) 6 people	Huddle Rooms 2000ft2(30 Locations) & people	Huddle Rooms 2000ft2(10 Locations) 6 people	Huddle Rooms 452ft2 (3 Locations) 6 people
Connerence Models	I				
	1				
	Very limited, approximately 1,000 R2*	Ware House 2000 ft2	Ware House 2000 ft2	Ware House 2000 ft2	Ware house 1617 ft2
1	in general, the class rooms were double purposed as	Goset spaces 2000 ft2 (30 locations)	Closet spaces 2500 ft2 (25 locations)	Closet spaces 2500 ft2 (35 locations)	Goset spaces 2230 ft2(35 locations)
	in general, the class rooms were double purposed as storage facilities;	Closet spaces 2000 ft2 (att locations)	Code: spaces 2300 H2 (83 locations)	Contributes 2 000 H2 (an occasions)	Construção de la Construcción de Construcción
	e.g. Meter services quadrupled purposed there facilities				
	my, mener services quantified purposed there racinties				
	o Classroom	I	I		1
Storage	o Office	I	I		
I	o Conference room	l			1
	o Testing/troubleshooting				
1		I	I		1
	1				
			Approximately 300,000 ft2 (10 Acres), under cover, capable of housing a 100' pole and	Approximately 300,000 ft2 (10 Acres), under cover, capable of housing a 100' pole and	
í	I	100' pole and performing bucket truck qualifications inside.	performing bucket truck qualifications inside.	performing bucket truck qualifications inside.	1
	I	Move and relocate	Move and relocate	Move and relocate	1
		Overhead outdoor training	Overhead outdoor training	Overhead outdoor training	
Outdoor Training Area	Approximately 154(000 t ² (3.5 Acres)	Underground training	Underground training	Underground training	
	I	Substation training	Substation training	Substation training	1
1	I	Emergency Severces	Emergency Severces	Emergency Severces	1
	I	Back Hoe Training	Black Hoe Training	Back Hoe Training	[
Safe Driving Track	None noted	Include in above	Include in above	Include in above	
Auditorium	None acted	New; 200 person capacity, portable raised stage (approximately 3,000			Large Conference room 105 people(2807 ft2)
Auditorium		n')	New; 400 person capacity, portable raised stage (approximately 4,000 ft ²)	New; 600 person capacity, portable raised stage (approximately 6,000 ft ²)	
· · · · · · · · · · · · · · · · · · ·	Current simulator in a closet-sized room, does not	Transmission contral room simulator 1600 ft2	Transmission contral room simulator 1600 ft2	Transmission contral room simulator 1600 ft2	
	provide realistic simulation of environment or provide				
System Simulator	adequate training space				
	1				
				Move one control room to new facility	
Transmission Control Room	(separate location)	(remain at current locations)	(nemain at current locations)	Approximately 10,000 ft2	
		Welcome, reception, gathering, lobby	Welcome, reception, garhering, lobby	Welcome, reception, gathering, lobby	Reception 987 ft2
Common Area	N/A	Approximately 1,000 ft2	Approximately 1,000 ft2	Approximately 2,000 tt2	
t to the second	WA				Food Service 4900 ft2 distributed over 5 locations
Cafeteria Changing/Locker Rooms/	N/A Bathrooms inadequate, due to lack of numbers, and non-	Approximately 2,500 ft ²	Approximately 3,500 ft ³	Approximately 4,500 tt ²	
Facilities (Bathrooms,	seathrooms inadequate, due to tack of numbers, and non- operational status; Customer Services area is adequate	Restrooms/changing/Facilty Rooms area 2000 ft2	Restrooms/changing/Facilty Rooms area 5000 ft2	Restrooms/changing/Facilty Rooms area 7000 ft.2	Restrooms/changing/Facilities area 3760 ft2 distributed over 8 locations
Facilities (Bathrooms, Devators, Stairwells, HVAC,	operational status; Customer Services area is adequate within office building	I	I		1
meranuft, Starwett, HVAC,	men once during	I	I		1
escj		Data Center 2500 ft2 (4 location)	Data Center 2500 ft2 (4 location)	Data Center 2500 ft2 (4 location)	Oats Center 1941 ft2 distribusted over 4 location
	I	Mail Boom 500 R2 (4 location)	Mail Room 500 ft2 (e location)	Mail Room 500 ft2	Mail Room 420 ft2 one location
Additional Space (Community,	I	Print shop 1500ft2	Print shop 1500f2	Print shop 1500ft2	Print shop 156ft1 one location
Business, and Future Growth)		Gurs 2000 #2	Gam 2000 62	Museum 2000 ft/2	
Business, and Future Growth)		Gym 2000 ft2	Gym 2000 ft2	Museum 3000 ft2 Gvm 4000 ft2	

Source: Information Response #83

Exhibit V-15 Facilities Matrix Slide2 as of October 31, 2020

Inside space	Approximately 9,000 ft ²	Approximately 60,000 ft ²	Approximately 80,000 ft ²	Approximately 100,000 ft ²	90,000 ft ²
Stafffing	Overhead Trainers 5	Overhead Trainers 5			Curent Staff 23
_	Underground Trainers S	Underground Trainers 5	Underground Trainers	Underground Trainers 5	Additional Personal 12
	Electric Service Trainers 3	Electric Service Trainers 4	Electric Service Trainers	Electric Service Trainers 4	Adjunct Trainers/Contractor Support 2
	SP&T Trainers 4	Substation Trainers 4	Substation Trainers	Substation Trainers 4	
				Transmission Operations Trainers	
	Meter Services Trainers 1			Meter Services Trainers	
	Customer Service Trainers * 4	Customer Service Trainers * 4	Customer Service Trainers *	Customer Service Trainers *	
				Manager	
	Supervisors 2	Supervisors 2	Supervisors	Supervisors 2	
				2 Analyst	
1				Clerks	
1		LMS Admistrator 1		LMS Admistrator	
		Training Developer 2	Training Developer	Training Developer	
1			HR 4	HR 4	
				Facilities	
I	Total * Minus Customer 24	Total * Minus Customer 32	Total * Minus Customer 36	Total * Minus Customer 30	total 37



C. Recommendations

PSEGLI has done a very good job of implementing the recommendations from the 2017 report. There is only one follow up recommendation

Recommendation V-1

PSEGLI needs to add a last revised date to the Health and Safety Manual on each page in addition to the latest revision date. (Refer to Finding V-6.)

VI. Safety Support Programs

A. COVID-19 Safety Response

Background

PSEG-LI's COVID-19 mitigation actions as presented represent a clear response to the federal, state, and local CDC recommendations that have become a standard across the United States. The review s shows the Company, at minimum, used 40 documents and developed several procedures to control the spread of the disease.⁵⁶

Briotix Health seems to have been a strong partner in helping PSEG-LI to identify policies and procedures for reducing the effects of COVID-19. Partnering with a health consulting company was a good plan which seems to have helped safety leadership to develop specifics for utility workers.

Coronavirus JHAs (Job Hazard Analyses) were developed to determine the risk of interaction between possible infected employees, co-workers, contractors, visitors, and suppliers. The information provided steps to mitigate hazards and reduce the risk of exposure to COVID-19. In March 2020 PSEG-LI issued a lot of information reflecting safe behaviors and procedures to combat the spreading of COVID-19.⁵⁷

During interviews is became obvious that many of the decisions made by leadership to continue work in a safe manner included that of mitigation of the COVID-19 disease. These decisions included procedures for onboarding personnel during the day and night operations and contractor behavioral expectations.⁵⁸

Findings

Finding VI-1 PSEG-LI has developed documented procedures (protocols) for addressing the COVID-19 response.

Some of the documentation came from Briotix Health and was used in the development of the Job Hazard Analysis (JHA) of March 13, 2020. Examples of the 49 documents related to COVID 19 include:

- Exhibit VI-1 provides the first page of 7 for the COVID-19 JHA documented for Utility Operations. 59; the version and effective date is contained on each page (although this is not the case for all documentation) and
- ♦ Exhibit VI-2 giving a partial extract from page 1 of providing Guidance for Cleaning and Disinfection.⁶⁰



Exhibit VI-1 **COVID-19 Job Hazard Analysis** Utility Operations Page 1 of 7 as of March 13, 2020

Page 1 of 7 PS₿G Job Hazard Analysis CM-HS-JHA-CV-BASIC Operational Excellence Model **UTILITY OPERATIONS** VIRUS/ILLNESS

Purpose: Accessing Customer Residence/Location/Establishment During

Coronavirus Outbreak - BASIC PPE

Location:

Departments: Electric Operations, Gas Operations, Customer Operations

Pat Reilley, Bridget Reilley, Ken Buess, Lee Wallace, Megan Merdinger, JHA Team Members:

Michael Pokler

Job Classification:

Hard Hat, Safety Glasses, FR Clothing, Task-specific gloves, work boots PPE Required (No Active Case):

and task-specific specialty PPE

Additional PPE Required (ACTIVE CASE/SUSPECTED): Nitrile gloves (worn alone or over required non-bulky work gloves),

For Electric Operations: Nitrile gloves shall not be worn within minimum approach distances. See below for hand protection procedures.

Tools and Equipment Required:

Hand sanitizer, Lysol or similar disinfecting wipes or spray, designated 6 mil plastic bags (1 per location), Twist ties or Duct tape (to seal bags)

Job Preparation: Stay informed with latest updates: www.cdc.gov/ncov

Hazardous Materials/Exposures: Virus - Coronavirus

Special Requirements Instructions:

How is the Coronavirus Transmitted? Person-to-person spread

The virus is thought to spread mainly from person-to-person.

Between people who are in close contact with one another (within

Through respiratory droplets produced when an infected person coughs or sneezes

These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.

Spread from contact with infected surfaces or objects

It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus

Prepared by: JHA Team

Effective: March 13, 2020

CM-HS-JHA-CV-BASIC

Version: Original Draft 1Ver6

Check PSE&G OEM DocumentWarehouse to verify that this is correct revision before use

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Exhibit VI-2 COVID-19 Guidance Cleaning and Disinfection Partial Page 1 of 2 PAges as of March 13, 2020

Cleaning and Disinfection Guidance for COVID-19

Interim Clinic/Office Cleaning and Disinfection Guidance for COVID-19

Background:

In December 2019, a new respiratory disease called Coronavirus Disease 2019 (COVID-19) was detected in China. COVID-19 is caused by a virus (SARS-CoV-2) that is part of a large family of viruses called coronaviruses. To help prevent spread of COVID-19, clinics should continue to educate patients, visitors, and staff about proper hand and respiratory hygiene.

Hand hygiene:

Regular hand washing with soap and water for at least 20 seconds should be done:

- · Before eating;
- · After sneezing, coughing, or nose blowing;
- · After using the restroom;
- Before handling food;
- · After touching or cleaning surfaces that may be contaminated; and
- After using shared equipment like computer keyboards, phones and mice.

If soap and water are not available, use an alcohol-based hand sanitizer (with 60-95% alcohol).

Respiratory hygiene:

- · Covering coughs and sneezes with tissues or the corner of elbow; and
- · Disposing of soiled tissues immediately after use

Routine Clinic/Office Cleaning/Disinfection:

Soiled and frequently touched surfaces can be reservoirs for pathogens, resulting in a continued transmission to people. Therefore, for pathogenic microorganisms that can transmit disease through indirect contact (transmission through contaminated surfaces), extra attention must be paid to surfaces that are touched most often by different individuals. As part of standard infection control practices in the clinic/office, routine cleaning should be continued.

Routine cleaning and disinfection of clinic/office settings includes:

Finding VI-2 PSEG-LI acted quickly and decisively to identify the hazard of COVID-19 to protect workers. It would seem that safety leadership did more than expected to mitigate the spread of the virus.

Finding VI-3 COVID-19 protocols set by the NY-CDC prevented on-site visits by the Consulting Team to observe compliance of PSEG-LI employees.

Recommendations

None

B. Review of PSEG-LI Corrective Action Reports for 2017, 2018, and 2019

Background

PSEGLI has a rigorous process for identifying safety improvements as shown in Exhibit VI-3

Exhibit VI-3 Identification of Safety improvements as of October 31, 2020

Employees are encouraged to report unsafe conditions and to make recommendations for health and safety improvements. This is part of a our culture and there are many avenues to do this.

- Employees can and are expected to Stop the Job if the feel that anything is unsafe or if they are simply not sure of something.
- Employees can speak freely with their supervisors
- If they are not comfortable with speaking with a supervisor the can go to any of the 9 union safety advocates, any one of 17 MAST Safety Professionals or place a call or send a text anonymously to the Health and Safety compliance area through a dedicated line.
- Any employee has the ability to submit a facilities related ticket for facilities issues that need to be addressed.
- Any employee can lodge a complaint through the ethics process and safety is included among the annual ethics training
 examples that employees must complete each year.

There is also a safety council process that is structured in three levels

- Level One is a local council by department and / or yard. The Level Once Council is sponsored by an area manager and led by union personnel. They typically meet every couple of weeks to once per month.
- Level Two is a business unit council. The council is sponsored by the VP of the business unit and the members elect their leadership. This is typically represented employees with the exception of the Business Services Council which has few represented employees in comparison to other areas. The Level One Councils roll up to the Level Two Councils. Action items that can not be resolved at the local level or that impact multiple areas within the business unit are funneled up to the Level Two Council. Level Two Councils typically meet every other month. The membership of the Level Two Council consists of all of the Level One Council sponsors, Chairs and Recording Secretaries, the BU Directors Safety Advocates, A representative from Health & Safety Compliance and other key individuals.
- Level Three is an umbrella over all business units. The Level Three Council is sponsored by the President and COO of PSEG Long Island and chaired by the Manager of Health and Safety Compliance. Any items not resolved at the Level Two or which cross business units roll up to the Level Three Council. The Level Three Council also serves as an avenue to push out PSEGLI wide initiatives and Health and Safety priorities. The council is made up of all of the Vice Presidents, The directors to which the health and safety professionals report up to, The union leadership, the chairpersons and recording secretaries from each of the Level Two Councils, representatives from Human Resources and Industrial Relations, The Lead Safety Advocate and other select individuals.

The safety council structure allows for items to be pushed up to the next level and for direction to be filtered back down. This structure is very effective and does not allow for items to sit unaddressed for very long. Many changes and improvements to PPE, training, and work methods originate at the safety councils. New and improved PPE is continuously being reviewed and approved for use where appropriate. Today, employees have many more options to items such as gloves, safety glasses, work shoes and small tools than they ever had in the past.

Over the past few years we have invested in hazard recognition and Normalization of Deviance and Partners in Leadership training - all for the purpose of getting employees to identify hazards and take ownership in getting them addressed. We challenge employees to look for better and safer ways to do their jobs.

In addressing this question it is hard to determine just what ideas have originated from a safety council but it is safe to say that many of the health and safety improvements listed in the attached spreadsheet did originate at the council level and most would have been discussed at council meetings at some point. This is only a partial list and we are still collecting and compiling items from various sources in the company.

Source: Information Response #74

Findings

Finding VI-4 PSEGLI has identified and implemented 135 safety and health improvements from 2017 to present⁶¹.

A subset of the improvements made are shown in Exhibit VI-4



Exhibit VI-4 Safety and Health Improvements 2017 to 2019 as of October 31, 2020

Description

Introduced Briotix stretching program

In 2020, the company introduced a new employee communications app called "LINK" which allows us to deliver health and safety communications directly to employees including those that do not have company

T&D Electric Operations held all hands safety updates for their personnel through Covid-19

T&D Operations now sends out weekly incident summary reports to division managers

Fully implemented Contractor Authorization to Commence Work Process

Created and upgraded JHAs for work in customer homes, field work, office work and working in high heat

Introduced new PPE including; Balaclavas, FR face cover, reusable face cover, disposable face cover, anti fog

Proactive vehicle cleaning using Goldshield

Internal Contact Tracing and deep cleaning by PSEGLI or landlords

Implemented Covid-19 compliance assessments

Implanted special protocols for mutual assistance contractors coming in to assist from restricted states. SHE personnel conducted random assessments of staging and operating areas to ensure compliance

Daily Pandemic meetings were held with PSEGLI Leadership, BCP Leads and other key people. The Health & Safety Manager served as the Safety lead (ISO) and reported out at each of these meetings. Frequency adjusted to three times and twice per week over the coming months as required by the incident response

Direction provided by Corporate Medical and Corporate H&S on policy and PPE issues.

Early in the incident response a cross river team of H&S and Materials and Logistics personnel was convened to meet several times a week to review Covid related safety and PPE issues for consistency and to ensure

Source: Information Response #74

Recommendations

None



C. Culture/Leadership

When and organization has a culture where lots of material is produced to communicate safety procedures the issue becomes implantation and compliance in the field. Field observations must be increased as more information is sent out to confirm compliance. This puts a strain on not only leadership but employees and can lead to possible strict adherence only when observers are present. This part of the report will come as a result of continued findings during the interview process and documentation review.

Background

Some of the items reviewed included:

- Review the distributed safety culture presentations provided to all field and office employees such as the Driver Winter Preparedness and Winter Weather Stress and other presentations provided throughout the year
- Review the evacuation training for new members of the Call Center Building Emergency Action Team
- Review monthly safety culture presentations for all Customer Services employees
- Review effectiveness of the safety captain rotations

Findings

Finding VI-5 The culture at LIPA is one of compliance through communications.

Safety management seems to be good at acquiring, producing, and providing leadership and employees with lots of digital communications. During this time of the pandemic associated with the coronavirus it seems that safety has been very diligent in sending out requirements for reducing exposure and spreading of COVID-19. It remains to be seen if the procedures are being followed.

When and organization has a culture where lots of material is produced to communicate safety procedures the issue becomes implantation and compliance in the field. Field observations must be increased as more information is sent out to confirm compliance. This puts a strain on not only leadership but employees and can lead to possible strict adherence only when observers are present.

Recommendations

None



D. Hazard Identification

Background

Items addressed included:

 Review the effectiveness of the delayed start time due to unsafe weather conditions for Meter Services field employees on several occasions

- The view the issued Weather Advisory alerts to all Customer Service employees in advance of bad weather conditions
- Cross River Dog Bite analysis team developing a program to address dog bite prevention
- Review the Meter Reading Unsafe Meter Program and Hazard Identification Program for all Meter Services
- Safety and Health team safety audits of physical plant.

Findings

Finding VI-6 PSEGLI developed a delayed start time procedure for Customer Service.

It is shown in *Exhibit VI-5*. Delayed start times have been used many times and when implemented they are usually system wide and decided by vice president. level or higher. It is felt this practice is effective in preventing motor vehicle accidents and slips and falls⁶². The decision is communicated to field personnel using various means such as conference calls, telephone calls and face to face conversations⁶³.



Exhibit VI-5 Delayed Start Time Due to Inclement Weather Conditions as of October 31, 2020



Delayed Start Time Due to Inclement Weather Conditions

1. Introduction/Objectives:

1.1. The purpose of this procedure is to provide guidelines for delaying employee start times due to inclement weather conditions.

2. Responsibilities:

2.1. All employees are responsible for maintaining a healthy and safe work environment. To achieve this, unsafe and/or substandard work conditions must be reported to supervision. Violation of this policy may result in disciplinary action up to and including termination.

Process:

- 3.1. During inclement weather conditions, the Customer Services safety team along with management personnel shall determine if a delay in start time is warranted fo Customer Services personnel.
- 3.2. A conference call will be led by the Customer Services safety team and shall include management personnel where the weather conditions across Long Island shall be discussed.
- 3.3. If it is determined that the weather conditions pose an undo hazard or threat to the health and safety of Customer Services personnel, a delayed start time will be implemented.
- 3.4. If inclement weather is present when employees are commuting to work, employees are advised to take every precaution and are encouraged to allow extra travel time to arrive to work safely.
- 3.5. Customer Service personnel will remain indoors until the Customer Services safety team and management personnel deem the conditions are safe.

Source: Information Response 18

Delayed start times have been used many times and when implemented they are usually system wide and decided by V.P. level or higher.

Finding VI-7 The Weather Advisory Policy that was in place in 2017 is in place today



Exhibit VI-6 Weather Advisory Policy as of October 31, 2020



Weather Advisory Policy

1. Introduction/Objectives:

1.1. The purpose of this procedure is to provide guidelines for issuing weather advisory alerts to all Customer Service employees in advance of inclement weather conditions.

2. Responsibilities:

2.1. All employees are responsible for maintaining a healthy and safe work environment. To achieve this, unsafe and/or substandard work conditions must be reported to supervision. Violation of this policy may result in disciplinary action up to and including termination.

Process

- 3.1. When inclement weather is forecasted, the Customer Services Safety team shall prepare and disseminate weather advisory alerts to all Customer Services employees. These emails shall contain a description of the weather forecast and safety documents targeted at mitigating potential hazards.
- **3.2.** All Customer Services clerical and office personnel who utilize email will receive the information weather information and shall be reviewed individually and/or with their teams.
- **3.3.** For personnel who do not have access to email, the information shall be disseminated by the supervisor or safety captain of those employees.
- 3.4. The information provided in the email is intended to raise awareness to the inclement weather conditions and associated hazards in an effort to prevent injury to our employees.

Source: Information Response #19

Finding VI-8 PSEGLI developed a number of training programs and policies to address the Dog Bite Issue as shown in Exhibit VI-7 and Exhibit VI-8.

All employees in measurement services are also equipped with a dog horn and Halt. Dog bites have been in steady decline as shown in *Exhibit VI-9* which attests to the effectiveness of the program as dog bites have been reduced from 5 in 2017 to 1 in 2020⁶⁴.



Exhibit VI-7 Dog Bite Safety Awareness Program as October 31, 2020

PSEG - LONG ISLAND Safety Culture Presentation, Dog Bite Awareness Training DONATO BARRUCCO SAFETY SUPERVISOR - CUSTOMER SERVICES PSEG 10000 Regulator Market Presentation, Dog Bite Awareness Training

Exhibit VI-8 Dog Safety as of October 31, 2020

20.3 Dog Safety

20.3.1 Purpose

The purpose of this procedure is to provide guidance for employees to minimize the dangers posed by dogs when entering customer premises.

20.3.2 Scope

Covers all PSEGLong Island employees who may encounter dogs in their work environment, including but not limited to Meter Services Employees, Collections and Electric Service employees.

20.3.3 Avoidance of Dog Attacks/Bites

20.3.3.1 Prior to entering a customer's yard, the employee shall review the Itron notes (if so equipped) regarding the possible presence of a dog (see Figure 20.10 for dog-related Itron codes) and search for visual clues for the presence of a dog (i.e., water dish, burned out patches of lawn, dog run, feces).

In addition, employees shall follow training guidance by rattling gate, whistling, or somehow making noise prior to entry into a customer yard so as not to startle an animal.

20.3.3.2 The most effective protection from dog attack is to have the customer confine, or otherwise positively control, the animal(s) during the employee's time on the premises. Employees shall not enter a customer's yard where dogs are present unless the dog is secured in a kennel, dog run, or in the house. If the employee is working in the house, the dog must be behind a closed or secured door, away from where the employee is working. Chains, ropes, collars, or customer hand held dogs are not acceptable. If the dog cannot be secured, do not enter the property.

20.3.3.3 Meter Services employees are required to carry a minimum of one form of dog deterrent to be with the employee during the course of their work assignment (e.g. air horn, halt spray).

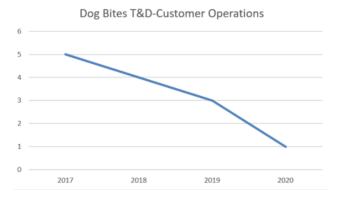
Where the presence of a dog is not initially known, or for other reasons control is not effective, secondary protection may be achieved by use of this dog deterrent equipment.

Instructions governing the use of dog repellant tools are as follows:

- It shall be used with discretion solely to repel an attacking dog who poses an immediate threat which cannot be avoided.
- It shall not be used under any other condition.
- If the repellent is used, the employee shall report to his supervisor the facts of the incident which justified its use.
- 20.3.3.4 As with any injury sustained on-the-job, report any dog bites immediately to your supervisor. Dog bites that break the skin require medical attention and proper cleansing of the wound.

In dog bite cases, the employee or supervisor shall attempt to identify the owner and obtain evidence that the dog has had required inoculations.

Exhibit VI-9 Dog Bites 2017 to 2020 as of November 21, 2020



Source: Information Request #106

Finding VI-9 PSEGLI has put into place policy and practice to train employees on identifying unsafe meters, meter pans and track and record unsafe meter locations.

Exhibit VI-10, Exhibit VI-11. The hazardous meter and meter pan program is working well and is improving with time. Conditions are found by meter readers, Automated Meter Reading trouble flags, and trouble ticket investigations. Conditions are investigated, and pictures taken and reviewed by a supervisor. Unsafe meters and pans are tagged with a yellow sticker and employees do not work on any pan or meter with a yellow tag. Customers are notified and responsible to correct any unsafe condition before any company employee can work at that pan and meter. Locations with unsafe meter and meter pans are entered into a data base and tracked for resolution. All Employees in Measurement services are trained in the identification of unsafe meters and meter pans⁶⁵

Exhibit VI-10 Long Island/Customer Partnership for Safety as of October 31, 2020

PSEG Long Island/Customer Partnership for Safety

ADAM NATHANSON



Exhibit VI-11 Anchor Meter Pan Survey as of October 31, 2020

ANCHOR METER PAN SURVEY

IDENTIFICATION OF HAZARDOUS "ANCHOR" (THREE PHASE) METER PANS

Policy: An Anchor Pan Survey (inspection) shall be performed upon request and the appropriate response entered into the hand held. (It is recommended to perform the following measures to identify a potentially hazardous "Anchor" three-phase meter pan.) Commercial accounts only.

Procedure: M/R shall identify meter pan, a distinctive rain cap should protrude over the front top of the meter pan.

M/R shall verify that the word "ANCHOR" is clearly engraved on the lower left hand front cover.

(If identified as Anchor, review the following):

M/R shall proceed with inspection in the following (number) order. (See below.) If answer to step 1, 2 or 3 is **YES**, **DO NOT** proceed to step 4.

- Does meter pan cover have a sticker indicating? "HAZARDOUS METER ENCLOSURE DO NOT OPERATE".
- Is meter glass cloudy, and/or have signs of heating, i.e. oil spots inside glass?
- 3. Does meter pan cover indicate signs of paint blistering?
- 4. Is meter pan cover hot above meter and cool below meter or the opposite?

Note:

If any of the above four conditions exist, (do not reset the meter.) The customer is responsible for the meter pan if any potential hazardous conditions are present, notify the customer of what was encountered. (If the situation warrants, call the "emergency telephone" number for follow-up with the appropriate department.) M/R should input special message into the handheld. Respond to the survey using one of the following codes:

- Y Meter pan is an Anchor
- N Meter pan is not an Anchor
- No Survey-Est (ZERO = Account estimated (skipped), could not inspect)

Finding VI-10

A significant process change since the last audit is that the Safety and health team executes a location specific safety assessment covering the physical plant, vehicles, tools and equipment.

The assessment takes a week to do. Every location is assessed annually. One region is done each month. This has resulted in identifying safety hazards and fostered improvements in the physical plant. Overall it has had a positive effect on overall safety culture.

Recommendations

None

E. Communications

Background

Items to be reviewed included:

- Review the effectiveness of the ENERGIZE Health & Wellness newsletter sent to all Customer Services employees
- Review the weekly safety calls with supervisors and safety captains
- Review bi-weekly safety calls for Customer Services MAST employees
- Review the Senior Leadership Team Weekly Safety Debrief provides the necessary information being delivered to the employees

Findings

Finding VI-11 The effectiveness of written communications such as the Health and Wellness newsletter has improved since the 2017 audit.

At that time PSEGLI health and safety team had little input to the products produced by Corporate Communications PSEG and PSEGLI. Since that time the Health and Safety Team PSEGLI participates in the safety and health products produced by the respective Corporate Communication groups and enhances their effectiveness. 66

Finding VI-12 The protocol for safety team meetings is detailed Chapter VII. COVID has required changes in the method of communications.

Despite the prohibition of gatherings/meetings all of these safety calls both the weekly and biweekly meetings are conducted via calls⁶⁷. Information emanating from Tier 2 meetings (Region Specific teams)



and senior leadership teams is passed on through E-Mail, Texts, and word of mouth by supervisors the Safety Advocates throughout the organization⁶⁸.

Finding VI-13 Local operating procedures exist within the Divisions and are not

consistent across the organization⁶⁹.

Finding VI-14 Safety Advocates continue filling their role even during storm restoration

activity. They are not required to do storm restoration work.

This is a credit to the commitment to safety by PSEGLI. Actions speak louder than words and this is the type of action that builds a positive safety culture. However, Safety Advocates do not visit contractors or foreign crews during storm restoration⁷⁰. There were several accidents with foreign crews including three flash accidents during the last storm restoration⁷¹.

Recommendations

Recommendation VI-1 Identify local operating practices that exist between regions and

establish one preferred practice across all regions for each one.

(Refer to Finding VI-13)

Recommendation VI-2 Ensure that safety oversight and practices are extended to

contractors and foreign crews during storm restoration (Refer to

Finding VI-14.)

F. Training

Background

Since 2016, PSEG-LI has made changes to its Safety Training Function and transferred responsibility for skills training to the Line Academy as shown in *Exhibit VI-12*.⁷²

Exhibit VI-12 Safety Compliance Organization Training Support as of October, 2029

Health & Safety Compliance added one full time position to support both field and classroom training. A consultant was also added to staff on a part time bases through 2020 to assist in course development and long range planning for safety training.

Operational training was placed under the Director – Training Support & Contractor Services along with additions in training and safety staffing.

External resources were acquired to deliver annual safety, forklift (PIT) and other training.

This year, due in part to COVID-19, much of the instructor led training was transitioned to online computer based training reducing the required "in class room" time of staff.

A Learning Management System (LMS) was in place at the time of the last assessment and has since been fully implemented. The Health & Safety Training Matrix has been refined and a course code system has been established within LMS. Attendance records from 2014 forward have been entered into the system.

Source: Information Response 83-001 and Interview 28

The added position referenced in Exhibit VI-12 was the Health and Safety Training & Development Specialist (TDS) responsible for;

- Developing and maintaining Safety Training Models;
- Administering the Learning Management Information System (LMS) that is used to track all training modules and employees who have completed each;
- Assists, when requested, in the development and maintenance of Skills Training modules;
- Uploads all modules into LMS and records attendance records;
- Manages internal and external training instructors and
- Coordinates PSEG-LI use of LMS with PSEG-NJ. 73

Safety Training

A major responsibility of the Safety Compliance Training Function is to assure that employees complete the annual training modules required by regulatory authorities in order to maintain their skills classification. These training modules are known as Annual Expert Training (AET). Exhibit VI-13



through Exhibit VI-17 provides a more detail description of a sampling of Safety Training Modules in LMS.⁷⁴



Exhibit VI-13 Sample PSEG-LI Safety Training Modules Page 1 of 5 as of November 2020

Item ID	Title	Description
AET-2015	Annual Expert Training 2015	Course agenda includes: CPR/AED/First-Aid, PPE, Fire Extinguisher Usage, Hazard Communication, Lead Awareness, Asbestos Awareness, Driver Vehicle Inspections, Job Briefings and Job Safety Analysis, Work Zone Protection, Situational Awareness, Hot and Cold
AET-2016	Annual Expert Training 2016	Course agenda includes: CPR/AED/First-Aid, Lead Awareness, Asbestos Awareness, Hazard Communication, Work Zone Protection, Smith System Defensive Driving-the 5 Keys, Fire Prevention/Fire Extinguisher Usage, Entering and Exiting Vehicles (3 Points of Contact)
AET 2017	Annual Expert Training 2017	Course agenda includes: CPR/AED/First-Aid, Safety Culture, Environmental Awareness, Lead Awareness, Asbestos Awareness, Hazard Communication and SDS 3E Online, Fire Extinguisher Usage, PPE and Hearing Protection
AET 2018	Annual Expert Training 2018: FLT0001LI, SAF0001LI, PPE0001LI, SAF0002LI, SAF0003LI, SAF0004LI, PPE0002LI, ENV0001LI, PPE003LI, FLS0001LI, ELE0001LI, FAL0001LI, SAF0005LI	OSHA Fatalities, PSEGLI Stats, Health & Safety Manual Overview/Updates, Driver Safety; Circle of Safety, Smith System 5 Keys, Backing and Parking, Hazard Communication, Respiratory Protection, Asbestos Awareness, Lead Awareness, Silica Awareness, Hearing Conservation, Environmental Awareness, PPE: Hard hats, eye protection, foot protection, traffic vests, FR clothing, Tick Prevention, Fire Extinguisher Usage, Lockout/Tagout (non T&D) & Ladder Safety
AET 2018 Meter Readers	AET 2018 - For Meter Readers Only	This course is only for Meter Readers for the year 2018. The modules offered include the following: Introduction (OSHA fatalities & PSEGLI stats); Health & Safety Manual Overview/Updates; Hazard Communication; Asbestos Awareness; Environmental Awareness & Tick Prevention.
AET 2019	Annual Expert Training 2019	Introduction; Health & Safety Manual; Safe & Professional Driving; Hazard Communication; Respiratory Program; Asbestos Awareness; Lead Awareness; Silica Awareness; Hearing Conservation; Environmental Awareness; PPE: Hard Hats, Eye Protection, Foot Protection, Traffic Vests, FR Clothing; Fire Extinguisher Usage; Lock Out/Tag; Ladder Safety; Cargo Securement & PSEGLI Worker Protection on LIRR Property; Briotix Health
AET 2019 Meter Readers	AET 2019 - For Meter Readers Only	not in LMS as of yet
FLT0002LI	Alert Driving	Online driver training offered through AlertDriving.com. Yearly programs have included the following- 2018: Parking & backing, defensive parking strategies, defensive driving, avoiding collisions with pedestrians & cyclists, avoiding rear-end collisions, intersections; 2019: Hazard Perception 360, 12 prioritized training lessons; 2020: 6 Motormind Lessons, 6 defensive driving lessons
FLT0005LI	Alert Driving - Forklift	Online forklift training offered through AlertDriving.com. Program includes the following lessons: 2018 & 2019: Distractions, docks & trailers, stability & load shifting, vehicle inspection, visibility, working alongside pedestrians, elevated loads, ramps & slopes, safe mindset, steering & maneuvering, dangers of overloading, working alongside vehicles
SAF0002LI	Asbestos Awareness (AET)	Asbestos awareness training and the procedures for the removal of coal tar wrap on buried electrical piping systems - this is part of AET. Course is available upon request.



Exhibit VI-14 Sample PSEG-LI Safety Training Modules Page 2 of 5 as of November 2020

Item ID	Title	Description
SAF0027LI	Asbestos Inspector Initial - New York State	NYS DOL requires certification of any individual that performs building asbestos surveys to be a NYS Inspector. Building Surveys include taking bulk samples of suspect building materials or writing a report regarding the asbestos present in the building. The law requires inspectors to take bulk samples to determine if suspect building materials do or do not contain asbestos; or the inspector may choose not to take samples and assume that the building materials are asbestos-containing material. Similarly, NYC requires that only persons certified by NYC as Investigators and by NYS as Inspectors may select and collect bulk samples for analysis. NYS DOL & EPA require inspectors to take a 4-hour refresher course every year to maintain the certification.
SAF0028LI	Asbestos Inspector Refresher - New York State	NYS DOL requires certification of any individual that performs building asbestos surveys to be a NYS Inspector. Building Surveys include taking bulk samples of suspect building materials or writing a report regarding the asbestos present in the building. The law requires inspectors to take bulk samples to determine if suspect building materials do or do not contain asbestos; or the inspector may choose not to take samples and assume that the building materials are asbestos-containing material. Similarly, NYC requires that only persons certified by NYC as Investigators and by NYS as Inspectors may select and collect bulk samples for analysis. NYS DOL & EPA require inspectors to take a 4-hour refresher course every year to maintain the certification.
FLS0002LI	Building Emergency Action Teams (BEAT)	Building Emergency Action Team (BEAT) - Employees filling Team Member roles will lead the response during evacuation and emergencies. Review of BEAT Member responsibilities during an emergency event.
IEQ0011LI	Cargo Securement	Course agenda includes: Cargo securement requirements; Importance of cargo securement; Fundamentals of cargo securement; Securement system & components; Containing, immobilizing & securing cargo; Compliant & non-compliant examples. Refresher course is suggested every 3 years. Streamlined version offered in AET Training and it is a 45 minute module.
SAF0031LI	Certified Utility Safety Professional (CUSP) Workshop & Exam	The CUSP certification program is the only program that offers utility specific safety leadership credentials to meet the unique requirements of utilities. The CUSP workshop and exam will consist of a 1.5 day refresher. The exam will be given on the afternoon of day 2. The Blue (Non-Safety Professional) or Green (Safety Professional) exam will be offered.
SAF0005LI	CPR/AED/First-Aid (AET)	This certification course which is valid for 2 years will provide the student the knowledge, skills & confidence needed to manage a medical emergency & use the AED until more qualified help is available. This course is part of AET and is required to be taken on an annual basis.
FLT0001LI	Driver Safety (AET)	Originally developed as part of AET Training and includes: Circle of Safety, Smith System 5 Keys, Backing & Parking. Courses can be scheduled upon request.
SAF0029LI	Ear Fit Dual Ear Validation System Training	Training on the utilization of the 3M Dual-Ear Validation System by 3M. The system makes it easier to measure every employee's unique level of
ENV0001L I	Environmental Awareness (AET)	An overview of general environmental awareness which is administered annually. Included in AET Training. The course is available upon request.
FLS0001LI	Fire Prevention and Extinguisher Usage (AET)	Refresher course on fire prevention and extinguishers offered in AET Training. This course is available upon request.



Exhibit VI-15 Sample PSEG-LI Safety Training Modules Page 3 of 5 as of November 2020

Item ID	Title	Description
SAF0016LI	Flagging	Course will review the purpose of traffic control, when needed, responsibilities of flagger, proper protocol, types of work zones, proper placement & flagging procedures, personal protective equipment, night flagging & Supervisor responsibilities.
SAF0008LI	Frontline Hazard ID/Incident Prevention	A Frontline course that includes the following topics: Safety & Health Management Systems, Standards, Measuring Safety, Incident Response, Training, Hazard Identification & Risk Tolerance, Planning Safe Work, Hazard Prevention & Control
SAF0009LI	Frontline Human Performance	A Frontline course - learn to apply Human Performance tools to reduce errors & manage controls. Specifically, participants will be able to: 1) Identify error likely situations during work planning 2) Establish safety by design & defense in depth aimed at eliminating consequential error 3) Predict, manage & eliminate error likely situations 4) Understand the anatomy of events & apply lessons learned from past events to prevent recurrence of similar events 5) Identify & apply appropriate Human Performance tools based on performance mode
SAF0010LI	Frontline Normalization of Deviation	Upon completion of this Frontline course, participants will be able to define normalization of deviation, factors that contribute to normalization of deviation, and how it can be avoided. Specifically, they will: 1) Gain situation awareness by identifying hazards during work planning and execution 2) Recognize factors that influence normalization of deviation and risk tolerance 3) Identify, acknowledge and eliminate normalization of deviation and risk tolerance as they occur.
SAF0011LI	Frontline Safety Leadership	A Frontline course - designed to make you a more effective leader & maximize your leadership potential. Upon completion of this course you will: 1) Understand how leadership is defined & measured along with what is required to be an effective leader 2) Use your influence to align your team & create a successful culture 3) Achieve performance by establishing & being responsible for expectations of excellence.
SAF0014LI	Frontline Standards & Operations	A Frontline Course - Upon completion of this course, participants will understand the purpose of standards & operations & how standards & operations fits into safety & health management systems. Specifically, they will understand: 1) The relationship between incident prevention & standards & operations 2) How to communicate & adhere to standards while avoiding normalization of deviation 3) Know the role & functions of
SAF0001LI	Hazard Communication (AET)	Provide employees with effective information and training on hazardous chemicals in their work area, safety data sheets and labeling. This is part of the AET training. Training is also available upon request.
PPE0002LI	Hearing Conservation (AET)	Hearing protection awareness. This class was originally a part of AET 2018. Course is available upon request.
FAL0001LI	Ladder Safety (AET)	A review of ladder safety and the associated OSHA requirements for both portable and fixed ladders. This course is part of AET Training and is available upon request.
SAF0003LI	Lead Awareness (AET)	Understanding of exposure to lead, its related health effects, air monitoring requirements and exposure limits. This is a part of AET. Course is available upon request.
SAF0032LI	LIRR-PSEGLI Worker Protection on LIRR Property	not in LMS as of yet
ELE0001LI	Lockout/Tagout (AET)	OSHA lock out / tag out (control of hazardous energy sources) awareness level. This is a part of AET Training. The course is available upon request. Note: This course is not intended to meet the requirements or cover transmission and distribution system switching, tagging, or control.



Exhibit VI-16 Sample PSEG-LI Safety Training Modules Page 4 of 5 as of November 2020

Item ID	Title	Description
SAF0006LI	OSHA 30 Hour - Construction	OSHA 30 Hour Certification Course that will focus on OSHA Construction Standards. This course is appropriate for any employee with safety responsibilities. Upon completion of the course OSHA will issue a certification card.
SAF0021LI	OSHA 30 Hour - General	OSHA 30 Hour Certification Course that will focus on OSHA General Industry Standards. This course is appropriate for any employee with safety responsibilities. Upon completion of the course OSHA will issue a certification card.
PPE0003LI	Personal Protective Equipment (AET)	This overview includes: hard hats, eye protection, prescription eyewear program, foot protection, traffic vests and FR clothing. This course is part of AET and is available upon request.
IEQ0001LI	Powered Industrial Truck Forklift Training- Initial	Purpose of this training is to help you become an authorized powered industrial truck (lift truck) operator an operator who has the knowledge and skills to operate a lift truck in a safe and professional manner.
IEQ0002LI	Powered Industrial Truck Forklift Training-3 yr. Refresher	Purpose of this training is to maintain the authorized status of powered industrial truck (lift truck) operator maintain & update the knowledge and skills to operate a lift truck in a safe and professional manner.
IEQ0003LI	Powered Industrial Truck - Boom Attachment & Rigging Awareness	Boom attachment training objectives include Manufactures Equipment Description, Safety Messages and Lifting Capacity; PSEGLI Safety Rules; OSHA Attachment requirements; Boom inspection requirements; Rigging Equipment Awareness & Inspection, followed by practical demonstration of device.
IEQ0004LI	Powered Industrial Truck Forklift Training - Remedial/Supplemental	The purpose of this training course is due to an unwanted event, either the Operator has 1) been observed operating lift in an unsafe manner 2) been involved in a near miss incident or an accident 3) receives an evaluation that reveals that the operator is not
IEQ0008LI	Powered Industrial Truck/Forklift - Train The Trainer	not in LMS as of yet
DWC0001 LI	Reporting & Recording Practices for Workplace Injuries/Illnesses & Personal Illness Absences Course	Review of Supervisor & Manager's responsibilities as they pertain to worker's compensation, injury reporting, FMLA & disability administration. Training also includes Supervisor & Manager's responsibilities regarding notification & recordkeeping requirements.
PPE0001LI	Respiratory Protection (AET)	Designed to meet the standards of respiratory use - awareness level only. This is part of AET Training and is available upon request. This program only covers policies regarding the use of respirators and does not meet the requirements for employees assigned respirators.
FLT0011LI	Safe and Professional Driving (AET)	New module developed for AET 2019 to reiterate the 2018 Initiative - Safe and Professional Driving Commitment requested of all PSEG Long Island Team Members. Course is available upon request.
SAF0004LI	Silica Awareness (AET)	Full silica awareness training created in 2017 to meet the new OSHA standard. Delivered stand-alone or as part of AET Training. This course is also available on request.
SAF0007LI	SIMS Mandatory Refresher Training - How to Enter an Incident	How to enter an incident into SIMS and send an alert



Exhibit VI-17 Sample PSEG-LI Safety Training Modules Page 5 of 5 as of November 2020

Item ID	Title	Description
FLT0003LI	Smith System Driver Training	Participants in our DriverDirect courses receive training in the
		classroom & behind the wheel. Taught by certified instructors, drivers learn the concepts
		behind the 5 keys of the Smith System & how they
FLT0009LI	Smith System Train the Trainer	Driver Trainer - 4 Day Course - This course is designed to teach you how
		to properly train your company drivers in The Smith System. Course involves both
		classroom and hands-on training. You will receive
SAF0012LI	Stop the Bleed	Bleeding control basics for laypeople with no medical training in response to active
		shooter and mass casualty events.
SAF0013LI	Stop the Bleed - Train the Trainer	Train the Trainer for bleeding control basics for laypeople with no medical training in
		response to active shooter and mass casualty events.
Snow	Snow Blower Safety	Snow Blower Safety
Blower		
IEQ0013LI	Snow Removal Operations	Includes classroom & hands-on training on safe practices and operation of snow plows,
	1	snow blowers & snow shoveling.
ENV0002L	Tick Prevention	Prevention tips and proper use of repellants. This course if part of AET Training and is
I		available upon request.
SAF0022LI	Work Area Protection	Review components of Work Area Protection (WAP): Compliance for
		regulatory agencies; uniform and consistent WAP methods company- wide; purpose of

Source: Information Response 83-019

Inventory of PSEG-LI Training Modules

There are 255 Safety and Skills Training Modules in LMS. *Exhibit VI-18* through *Exhibit VI-37* give a listing of all the modules by reference course code. Modules highlighted in yellow are in the process of being uploaded to LMS.⁷⁵



Exhibit VI-18 LMS Training Modules by Course Codes AET = Annual Expert Training as of October 21, 2020

Course Name	Course Code
ABB Gas Circuit Breaker Overhaul	AET 2017
ACB-VCB Breaker Training- Substation Operations	AET 2018
Advanced Metering Infrastructure	AET 2018 Meter Readers
Aerial Lift Rescue / Bucket Rescue	AET 2019
AET 2015	AET 2019 Meter Services
AET 2016	AET 2020
AET 2017	AET 2020 Meter Services
AET 2018 - Annual Expert Training	AET 2020. Module 9
AET 2018 - For Meter Readers Only	AET 2020.Module 1
AET 2019 - Annual Expert Training	AET 2020.Module 10
AET 2019 - For Meter Services Only	AET 2020.Module 11
AET 2020 - Annual Expert Training	AET 2020.Module 12
AET 2020 - For Meter Services Only	AET 2020.Module 13
AET 2020 - Module 1: Introduction (online)	AET 2020.Module 14
AET 2020 - Module 2: Health & Safety Manual Overview/Updates	AET 2020.Module 15
AET 2020 - Module 3: Safe Driver Overview (online)	AET 2020.Module 16
AET 2020 Module 4: Pinch Points (online)	AET 2020.Module 17
AET 2020 Module 5: Slips, Trips & Falls (online)	AET 2020.Module 18
AET 2020 Module 6: Hazard Communication (online)	AET 2020.Module 19
AET 2020 Module 7: Asbestos Awareness (online)	AET 2020.Module 2
AET 2020 Module 8: Lead Awareness (online)	AET 2020.Module 3
AET 2020 Module 9: Silica Awareness (online)	AET 2020.Module 4
AET 2020 Module 10: Respiratory Awareness (online)	AET 2020.Module 5
AET 2020 Module 11: Personal Protective Equipment (online)	AET 2020.Module 6
AET 2020 Module 12: Hearing Conservation (online)	AET 2020.Module 7
AET 2020 Module13: Fire Retardant (FR) Clothing (online)	AET 2020.Module 8
AET 2020 Module 14: Lock Out/Tag Out - Hazardous Energy Control	AET-2015
AET 2020 Module 15: Fire Extinguisher Usage (online)	AET-2016
AET 2020 Module 16: Cargo Securement (online)	DOT0000LI
AET 2020 Module 17: Protection of PSEGLI Personnel on Long Island	DWC0001LI
AET 2020 Module 18: Environmental Awareness (online)	ELE0001LI
AET 2020 Module 19: Environmental Hazards: Ticks, Bees & Poisonous	ELE0004LI

Exhibit VI-19 LMS Training Modules by Course Codes DOT = Department of Transportation as of October 21, 2020

Course Name	Course Code
AET 2020 Module 16: Cargo Securement (online)	DOT0000LI

Source: Information Response 83-018

Exhibit VI-20 LMS Training Modules by Course Codes DWC= Disability & Workers Compensation as of October 21, 2020

Course Name	Course Code
AET 2020 Module 17: Protection of PSEGLI Personnel on Long Island	DWC0001LI

Exhibit VI-21 LMS Training Modules by Course Codes ELE=Electrical 1 of 2 as of October 21, 2020

Course Name	Course Code
AET 2020 Module 18: Environmental Awareness (online)	ELE0001LI
AET 2020 Module 19: Environmental Hazards: Ticks, Bees & Poisonous	ELE0004LI
Alert Driving	ELE0005LI
Alert Driving - Forklift	ELE0006LI
Alternating Current & Transformers	ELE0007LI
Apprentice Aerial Lift Training	ELE0008LI
SSM Apprentice Basic Electric Training	ELE0009LI
Apprentice Energized Secondary Training	ELE0010LI
Apprentice/Lineman/Overhead Foreman-Driver Training	ELE0011LI
Apprentice Line Worker - 2 Year Review	ELE0012LI
Apprentice Line Worker - 3 Year Review	ELE0013LI
Apprentice Primary Training 2019	ELE0014LI
Apprentice Relay Technician Orientation Module 1	ELE0015LI
Apprentice Relay Technician Orientation Module 2	ELE0016LI
Apprentice Relay Technician Orientation	ELE0017LI
Apprentice Splicer:Module1- Introductory	ELE0018LI
Apprentice Splicer:Module 2-OSHA Regulatory	ELE0019LI
Apprentice Splicer:Module 3 Basic Electric	ELE0020LI
Apprentice Splicer:Module 4 Equipment Training	ELE0021LI
Apprentice Splicer: Module 5 De- energized Secondary	ELE0022LI
Apprentice Splicer: Module 6- Energized Secondary	ELE0023LI
Apprentice Splicer:Module 7	ELE0024LI
Apprentice Splicer: Module 9-OH Transformer Theory	ELE0025LI
Apprentice Splicer:Module 10-UG Transformer Theory	ELE0026LI
Apprentice Splicer: Module 11- Basic Primary Splicing	ELE0027LI
Apprentice Splicer:Module 12 Switching/Switchgear	ELE0028LI
Apprentice Splicer:Module 13-Cable Pulling	ELE0029LI
Apprentice Splicer: Module 14- Speciality Splices	ELE0030LI
Apprentice Splicer: Module 15: 2 Year Review	ELE0031LI
Apprentice Splicer: Module 8- Secondary Storm Restoration	ELE0032LI
Apprentice Splicer:Module 16-OH Primary Restoration	ELE0034LI
Apprentice Splicer: Module 18-3 Year Review	ELE0035LI
Apprentice SSM Technician Orientation Module 1	ELE0036LI
Arc Flash & Arc Blast	ELE0037LI
Asbestos Awareness (AET)	ELE0038LI

Exhibit VI-22 LMS Training Modules by Course Codes ELE=Electrical 2 of 2 as of October 21, 2020

Course Name	Course Code
NYS Asbestos O&M - Initial	ELE0039LI
NYS Asbestos O&M - Refresher	ELE0040LI
NYS Asbestos Supervisor - Initial	ELE0041LI
NYS Asbestos Supervisor - Refresher	ELE0042LI
NYS Asbestos Inspector - Initial	ELE0043LI
NYS Asbestos Inspector - Refresher	ELE0044LI
NYS Asbestos Management Planner - Initial	ELE0045LI
NYS Asbestos Management Planner - Refresher	ELE0046LI
Basic Electricity	ELE0047LI

Source: Information Response 83-018

Exhibit VI-23 LI LMS Training Modules by Course Codes ENV=Environmental as of October 21, 2020

Course Name	Course Code
Basic Relaying Principals	ENV0001LI
Batteries & Chargers	ENV0002LI
Bite Testing Substation Batteries	ENV0003LI
Briotix Digging	ENV0004LI
Briotix Desk, Mobile Office & Vehicle Ergonomics	ENV0005LI
Briotix Pole Hole Digging	ENV0006LI
Briotix PRO Fit Strengthening Presentation	ENV0007LI
Briotix PRO Fit Stretching Education	ENV0008LI

Exhibit VI-24 LMS Training Modules by Course Codes ERG= Ergonomics as of October 21, 2020

Course Name	Course Code
Briotix Using Hot Sticks / Pulling Elbows	ERG0001LI
Briotix Cable Bending (used to be called wire bending)	ERG0002LI
Briotix Wire Jacking	ERG0003LI
Briotix Wire Pulling	ERG0004LI
Briotix Pulling Services	ERG0005LI
Briotix Ladder Usage	ERG0006LI
Briotix Hanging Grounds	ERG0007LI
Briotix Balance Training & Education	ERG0008LI
Briotix Extendo Stick Training	ERG0009LI
Briotix Wrist Injury	ERG0010LI
Briotix Operating Substation Switches	ERG0011LI
Briotix Snow Shoveling	ERG0012LI
Briotix Ground Rod Driving	ERG0013LI
Briotix Bucket Ergonomics	ERG0014LI
Briotix Slips, Trips & Falls	ERG0015LI
Briotix Elbow Discomfort Prevention	ERG0016LI
Briotix Neck Discomfort Prevention	ERG0017LI
Briotix Shoulder Discomfort Prevention	ERG0018LI
Buchholz Relay Training: Installation, Operation, Maintenance & Testing	ERG0019LI
Building Emergency Action Teams (BEAT)	ERG0020LI
CAD Training Manual for Management Team	ERG0021LI
CAD Training Manual for Management Team	ERG0022LI
Capacitors & Capacitor Banks	ERG0023LI
Cargo Securement	ERG0024LI

Source: Information Response 83-018

Exhibit VI-25 LMS Training Modules by Course Codes FAL=Fall Protection as of October 21, 2020

Course Name	Course Code
Carpal Tunnel Prevention	FAL0001LI



Exhibit VI-26 LMS Training Modules by Course Codes FLS=Fire Safety as of October 21, 2020

Course Name	Course Code
Coronavirus (COVID-19): PPE & JHAs Accessing Customer	FLS0001LI
Coronavirus (COVID-19): JHA- Precautions While Working in Close	FLS0002LI

Source: Information Response 83-018

Exhibit VI-27 LMS Training Modules by Course Codes FLT=Motor Vehicle as of October 21, 2020

Course Name	Course Code
Coronavirus (COVID-19): JHA- Precautions While Working in Close	FLT0001LI
CPR/AED/First-Aid (AET)	FLT0002LI
Crane Operator - Initial	FLT0003LI
Crane Operator - Refresher	FLT0004LI
Crane Operator Certification (Cranes 101)	FLT0005LI
Certified Utility Safety Professional (CUSP) Workshop & Exam	FLT0006LI
Certified Utility Safety Professional (CUSP) Prep Course	FLT0007LI
Damage Survey Training	FLT0008LI
Defensive Driving by CDT	FLT0009LI
DILO SF6 Multi-Analyzer Review	FLT0010LI
Doble Power Factor Training	FLT0011LI
Dog Awareness	FLT0012LI
Driver Safety (AET)	FLT0013LI
DOT Vehicle Inspection Reporting (DVIR) & Incident Reporting	FLT0014LI
Ear Fit Dual Ear Validation System Training	FLT0015LI
Electrical Burns	FLT0016LI



Exhibit VI-28 LMS Training Modules by Course Codes HRS=Human Resource Services as of October 21, 2020

Course Name	Course Code
Enclosed Space Rescue	HRS0001LI

Source: Information Response 83-018

Exhibit VI-29 LMS Training Modules by Course Codes IEQ=Industrial Equipment as of October 21, 2020

Course Name	Course Code
Environmental Awareness (AET)	IEQ0001LI
Fire Extinguisher Usage (AET)	IEQ0002LI
First Class Lineman/Overhead Foreman-Train the Trainer for Hurt Man	IEQ0003LI
Flagger Safety Training (online)	IEQ0004LI
Forklift Courses:	IEQ0005LI
Powered Industrial Truck/Forklift (Initial) - Class 1, 4 &5	IEQ0006LI
Powered Industrial Truck/Forklift (Refresher) - Class 1, 4 & 5	IEQ0007LI
Powered Industrial Truck/Forklift (Initial) - Class 1, 4 &5 (Online)	IEQ0008LI
Powered Industrial Truck/Forklift (Refresher) - Class 1, 4 & 5 (Online)	IEQ0009LI
Powered Industrial Truck/Forklift -	IEQ0010LI
Powered Industrial Truck/Forklift -	IEQ0011LI
Powered Industrial Truck - Semi- Annual Assessment (Warehouse Only)	IEQ0012LI
Powered Industrial Truck/Forklift - Train the Trainer	IEQ0013LI
Powered Industrial Truck/Forklift Attachment - Cuff Links & Beams	IEQ0014LI
Powered Industrial Truck/Forklift - Motorized Pallet Jack - Class 3	IEQ0015LI
Powered Industrial Truck/Rough Terrain Forklift, Pettibone Cary-Lift	IEQ0016LI
Powered Industrial Truck/Rough Terrain Forklift, Pettibone Cary-Lift	IEQ0017LI
Powered Industrial Truck/Rough Terrain Forklift, Sellick S120J4I-4PS -	IEQ0018LI
Frontline Hazard ID/Incident Prevention	IEQ0019LI
Frontline Human Performance	IEQ0020LI
Frontline Normalization of Deviation	IEQ0021LI
Frontline Safety Leadership	IEQ0022LI
Frontline Standards & Operations	IEQ0023LI

Exhibit VI-30 LMS Training Modules by Course Codes MAT=Materials Handling as of October 21, 2020

Course Name	Course Code
GIS-Gas Insulated Switchgear- Insight	MAT0001LI

Source: Information Response 83-018

Exhibit VI-31 LMS Training Modules by Course Codes MST= Measurements Service Training as of October 21, 2020

Course Name	Course Code
Handling Aggressive Customers	MST0901LI
Hazard Communication (AET)	MST0902LI
Refresher Training - Heavy Equipment	MST0903LI
DOT Hazardous Materials Transportation	MST1001LI
40 Hour Hazardous Waste Operations - Initial	MST1002LI
Hazardous Waste Operations - Refresher	MST1003LI
Hearing Protection (AET)	MST1004LI
How to Read a Meter	MST1005LI
Human Performance & Error Prevention Tools	MST1006LI
Job Briefings - Workshop	MST1007LI
Ladder Safety (AET)	MST1008LI
Lead Awareness (AET)	MST1009LI
Level 1 Thermography Training Class	MST1010LI
Line Construction 2019	MST1011LI
LIRR-PSEGLI Worker Protection on LIRR Property	MST1012LI
Lockout/Tagout (AET)	MST1013LI
Material & Logistics Process Overview	MST1014LI

Exhibit VI-32 LMS Training Modules by Course Codes PPE=Personal Protective Equipment as of October 21, 2020

Course Name	Course Code
MDT Training Manual PowerPoint for Management	PPE0001LI
MDT Training Manual PowerPoint for Union	PPE0002LI
Metal Coils Endorsement Class Permit Preparation @ CDT	PPE0003LI
Meter Form Types & Uses	PPE0004LI
Meter Adapter Types	PPE0005LI
Meter Pan Types	PPE0006LI
Mirror Calibration Stations	PPE0007LI

Source: Information Response 83-018

Exhibit VI-33 LMS Training Modules by Course Codes RES=Restoration Training as of October 21, 2020

Course Name	Course Code
Net Detented & Additive Metering	RES0001LI
Network Training	RES0002LI
New Business Installation	RES0003LI

Exhibit VI-34 LMS Training Modules by Course Codes RSQ=Rescue as of October 21, 2020

Course Name	Course Code
NYS Safety Excavation Code Rule 753 Certification Class	RSQ0001LI
OI-20002 General Rules for Safe Operation of the Electric Transmission	RSQ0002LI
OI-30005 Work Permits	RSQ0003LI
Operation of a Meter	RSQ0005LI
OSHA 30 Hour - General	RSQ0006LI
OSHA 30 Hour - Construction	RSQ0007LI
OH Refresher Training "LIRR Wire Down Training"	RSQ0008LI

Source: Information Response 83-018

Exhibit VI-35 LMS Training Modules by Course Codes SAF=Safety 1 of 2 as of October 21, 2020

Course Name	Course Code
One-Line Diagram Review	SAF0001LI
Personal Protective Equipment (AET)	SAF0002LI
Personal Protective Equipment	SAF0003LI
Personal Protective Equipment -	SAF0004LI
PFIELD Training Manual for Union Team	SAF0005LI
PFIELD Training Manual for Management Team	SAF0006LI
PFIELD Training Manual for Management Team	SAF0007LI
PFIELD Training Manual for Union Team	SAF0008LI
PI Logger Inspection Tours	SAF0009LI
PMH Pad Mounted Gear Training	SAF0010LI
Poison Ivy Prevention	SAF0011LI
Pole Top Rescue	SAF0012LI
Professional Driver Training West	SAF0013LI
Refresher Training for Electric Service	SAF0014LI
Remedial Driver Training: 1 on 1	SAF0015LI
Reporting & Recording Practices for Workplace Injuries/Illnesses	SAF0016LI
Resistance is Futile: Meters & Test Equipment	SAF0017LI



Exhibit VI-36 LMS Training Modules by Course Codes SAF=Safety 2 of 2 as of October 21, 2020

Course Name	Course Code
Respiratory Protection Program Awareness (AET)	SAF0018LI
Respiratory Protection N95 Masks (Non-AET)	SAF0019LI
Respiratory Protection Half Mask w/ Cartridges (Non-AET)	SAF0020LI
Respiratory Protection Program (Non- AET)	SAF0021LI
Work Area Protection	SAF0022LI
Rigging - Initial	SAF0022LI
Rigging - Refresher	SAF0023LI
Rigging & Signalman	SAF0024LI
Safe & Professional Driving (AET)	SAF0025LI
Safe Driver Training by CDT	SAF0026LI
SAP Time Entry Training	SAF0027LI
SAP Training Manual for Management Team	SAF0028LI
SAP Training Manual for Management Team	SAF0029LI
Secondary Safety Switches	SAF0030LI
SF6 Leak Detection	SAF0031LI
Silica Awareness (AET)	SAF0032LI
SIMS-How to Enter an Incident	SAF0033LI
Smith System Driver Training	SAF0034LI
Smith System Train the Trainer	SAF0035LI
Smith System: 5 Keys to Forward &	SAF0036LI
Smith System: Driving Space (online)	SAF0037LI
Snow Blower Training	SAF0038LI
Snow Removal Operations (plowing/shoveling/snow blowers)	SAF0039LI
Spotter Training	SAF0040LI
SSM Bucket Rescue	SAF0042LI
Refresher Training-SSM Electrical Print Reading Class: Modules 1-3	Snow Blower Safety

Exhibit VI-37 LMS Training Modules by Course Codes SUB=Substation as of October 21, 2020

Course Name	Course Code
SSM Enclosed Space Rescue	SUB0001LI
Stop The Bleed	SUB0002LI
Stop The Bleed - Train the Trainer	SUB0003LI
Substandard Conditions	SUB0004LI
Substandard Condition Reporting	SUB0005LI
Substation Awareness	SUB0006LI
Substation Fundamentals 1	SUB0007LI
Substation Overview	SUB0008LI
Substation Operations Initial Multi Training-2 Day	SUB0009LI
Service Section Training	SUB0010LI
Synchronizing Training	SUB0011LI
Telehandler Operator Training	SUB0012LI
Testing a Meter	SUB0013LI
Texas Ave. Safety Review	SUB0014LI
2020 PSEG Texas Ave Presentation Review	SUB0015LI
Tick Prevention (AET)	SUB0016LI
Timing Breakers	SUB0017LI
Transformer Gaskets	SUB0018LI
Transformers In-Service Test	SUB0019LI
Transformer Theory GP 1 for New Hires	SUB0020LI
Transformer Theory OH - Refresher	SUB0021LI
Transformer Theory UG - Refresher	SUB0022LI
Transformer Turns Ration (TTR)	SUB0023LI
Two Man Restoration Training	SUB0024LI
Utility Transmission & Distribution	SUB0025LI
V-Watch Personal Voltage Detector Review	SUB0026LI
V-Watch -Personal Voltage Detector - Initial/Refresher Training	SUB0027LI
Wires & Cables	SUB0028LI

Source: Information Response 83-018

Training Facilities

PSEG-LI continues to use its Training Facilities in Hicksville as shown in *Exhibit VI-39*. *Exhibit VI-39* also show its Bethpage location where it has secured classroom training facilities. The Bethpage space can be configured for 1, 2, or 3 classrooms. Additionally, PSEG-LI has contracted with third party vendors to send employees for specialty training.⁷⁶



Exhibit VI-38 PSEG-LI Training Facilities as of October, 2020

Hicksville Training Facilities





Source: Interviews 27, 28, and 29, Google Maps, and Consultant Analysis

During the last three years, PSEG-LI initiated a study of its Training Facility needs and continues with that study as shown in *Exhibit VI-39*.77

Exhibit VI-39 Status of PSEG-LI Training Facilities as of October, 2020

PSEG Long Island established a core project team, steering committee and sub teams to analyze training requirements and needs including programs and facilities.

A consultant was brought on to work with the internal team to assess existing training and training resources and to make recommendations for improvements and efficiencies.

A facilities profile was developed with three options and presented to leadership. Options were being evaluated prior to the onset of COVID-19.

The company is currently finalizing a reentry strategy from COVID-19 which includes determining future strategies for how we operate in a post COVID-19 world. Upon completion of these studies the training plan and recommendations will be refreshed. The PSEG Long Island Facilities Management Organization has budgeted funds in the 2021 budget plan to accommodate a facilities needs assessment.

Separate from the aforementioned initiative, a joint PSEG Long Island/PSE&G teamed examined current health, safety and regulatory training programs against best practices and developed a training matrix along with improvements and additions to the existing training programs.

This year PSEG Long Island Health and Safety began converting instructor led training to online computer based training to accommodate needs brought about by COVID-19. Additional content has since been added and we are currently working with various vendors to link other external E-Learning to LMS. With these and future conversions to online training it is anticipated that classroom needs will be somewhat reduced from what they were prior to COVID-19.

Findings

Finding VI-15 Effectiveness of the Training Function at PSEG-LI has improved

significantly between 2017 and 2020.

The improved effectiveness is demonstrated by the addition of a Training Specialist and contract personnel, vastly improved utilization of LMS, movement to on-line courses, and additional classrooms.⁷⁸

Finding VI-16 Assuming the prefix of training modules are reflective of the course

description, there seem to be a number of mismatches in the LMS coding

of training modules.

Examples include:

♦ ENV0001LI for "Basic Relaying Principals"

HRS0001LI for "Enclosed Space Rescue"

Finding VI-17 PSEG-LI continues to have training facility needs in the future.

Technology, move to on-line training, operational changes, and replacement of the aging workforce that retires with new employees will continue to put pressure on for training facilities.⁸⁰

Recommendations

Recommendation VI-3 PSEG-LI should review if current training module coding is

appropriate. (Refer to Finding VI-16.)

Recommendation VI-4 PSEG-LI should revise its current Training Facilities study in light

of any operational changes necessitated by COVID-19 and work

with LIPA for funding. (Refer to Finding VI-17.)



VII. Field Operations Review

A. Background

Due to the COVID Pandemic, field observations were not possible on this project.

B. Findings

Finding VII-1

Since Schumaker & Company's last audit, the PSEG-LI Safety group has been conducting site safety visits of all physical sites on a periodic basis.

C. Recommendations

None

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¹ / RFQ: UCS-13; RFQ Title: Safety Progress Assessment; Issue Date: December 19,2016

² / RFQ: UCS-13; RFQ Title: Safety Progress Assessment; Issue Date: December 19,2016

³ / RFQ: UCS-13; RFQ Title: Safety Progress Assessment; Issue Date: December 19,2016

⁴ / Interviews 1 - 2

⁵ / https://www.lipower.org/mission/

⁶ / https://callmepower.com/ny/utility/psegliny#Service%20Map and LIPA-Annual-Disclosure-Report-FY-2018

⁷/ https://www.psegliny.com/buildingrenovationservices/codesandstandards/redbook

⁸ / Information Response 87

^{9 /} https://geo3.ggpht.com/cbk?panoid=S4-xZn6mdxAt8LpLmvhW_Q&output=thumbnail&cb_client=search.gws-prod.gps&thumb=2&w=408&h=240&yaw=354.76498&pitch=0&thumbfov=100

 $^{^{10} / \} https://images1.cityfeet.com/i2/riKQokL2OxZXn9B27u6eEKoQC2dPNEAnNQsqkV5z75s/110/999-stewart-ave-bethpage-photo-5-of-8.jpg$

^{11 /} https://www.google.com/maps/place/1650+Islip+Ave,+Brentwood,+NY+11717/@40.784174,-

 $^{73.2191717,3}a,75y,272.36h,90t/data=13m7!1e1!3m5!1s\bar{b}_eOhvjKwU0XAjDiyNjW1Q!2e0!6s\%2F\%2Fgeo2.ggpht.com\%2Fcbk\%3Fpanoid\%3Db_eOhvjKwU0XAjDiyNjW1Q\%26output%3Dthumbnail\%26cb_client%3Dmaps_sv.tactile.gps\%26thumb%3D2\%26w%3D203\%26h%3D100\%26yaw%3D272.3559\%26pitch%3D0\%26thumbfov%3D100!7i16384!8i8192!4m5!3m4!1s0x89e8310d05970009:0x867d46c3e23d32bcl8m2!3d40.7840925!4d-73.2200456?hl=en$

^{72.32626,342}a,35y,39.39t/data = 13m111e314m1311m713m611s0x89e8be1cb0b94d5b:0xb88bfa9a6282636612s1748 + Montauk + Hwy, + Water + Mill, + NY + 1197613b118m213d40.929357714d-72.326233713m411s0x89e8be04b3415119:0xf331f647130b65ae18m213d40.92960114d-72.3249795?h1 = en

^{13 /} https://www.google.com/maps/place/PSEG+Long+Island/@40.8782778,-

^{73.0096163,288}a,35y,39.43t/data=!3m1!1e3!4m13!1m7!3m6!1s0x89e846b0faaaff47:0xa5a11578185bf0e1!2s2045+NY-

^{112, +} Coram, + NY + 11727!3b1!8m2!3d40.8804473!4d-73.0084266!3m4!1s0x89e846b0d020bb5b:0xbd58c243a30d676!8m2!3d40.8804213!4d-73.008521?hl=en

^{14 /} https://www.google.com/maps/@40.8591993,-

 $^{73.3860957, 3}a, 80y, 199.83h, 93.78t/data = 13m7!1e1!3m5!1s_pUkAJsFpxBrOWSmbX61DQ!2e0!6s\%2F\%2Fgeo2.ggpht.com\%2Fcbk\%3Fpanoid\%3D_pUkAJsFpxBrOWSmbX61DQ\%26output\%3Dthumbnail\%26cb_client\%3Dsearch.revgeo_and_fetch.gps\%26thumb\%3D2\%26w\%3D96\%26h\%3D64\%26yaw\%3D286.3475\%26pitch\%3D0\%26thumbfov\%3D100!7i13312!8i6656?hl=en$

 $^{^{15} / \} https://www.google.com/maps/place/455+Mill+Rd,+Valley+Stream,+NY+11581/@40.6445124,-NY+11581/Willey+Mill+Rd,+Valle$

 $^{73.7048708, 3}a, 75y, 241.51h, 90t/data = 13m7!1e1!3m5!1s6ttdDMysmZhC3s6ZrckrVA!2e0!6s\%2F\%2Fgeo3.ggpht.com\%2Fcbk\%3Fpanoid\%3D6ttdDMysmZhC3s6ZrckrVA\delta2e0!6s\%2F\delta2Fgeo3.ggpht.com\%2Fcbk\delta3Fpanoid\delta3D6ttdDMysmZhC3s6ZrckrVA\delta2e0!6s\delta2F\delta2Fgeo3.ggpht.com\delta2Fcbk\delta3Fpanoid\delta3D6ttdDMysmZhC3s6ZrckrVA\delta2e0!6s\delta2F\delta2Fgeo3.ggpht.com\delta2Fcbk\delta3Fpanoid\delta3D6ttdDMysmZhC3s6ZrckrVA\delta2e0!6s\delta2F\delta2Fgeo3.ggpht.com\delta2Fcbk\delta3Fpanoid\delta3D6ttdDMysmZhC3s6ZrckrVA!2e0!6s\delta2F\delta2Fgeo3.ggpht.com\delta2Fcbk\delta3Fpanoid\delta3D6ttdDMysmZhC3s6ZrckrVA!2e0!6s\delta2F\delta2F\delta2Fgeo3.ggpht.com\delta2Fcbk\delta3Fpanoid\delta3D6ttdDMysmZhC3s6ZrckrVA!2e0!6s\delta2F\delta2Fgeo3.ggpht.com\delta2Fcbk\delta3Fpanoid\delta3D6ttdDMysmZhC3s6ZrckrVA!2e0!6s\delta2F\delta2Fgeo3.ggpht.com\delta2Fcbk\delta3Fpanoid\delta3D6ttdDMysmZhC3s6ZrckrVA!2e0!6s\delta2F\delta2Fgeo3.ggpht.com\delta2Fcbk\delta3Fpanoid\delta3D6ttdDMysmZhC3s6ZrckrVA!2e0!6s\delta2F\delta2F\delta2F\delta2F\delta2F\delta2F\delta2F\delta2F\delta2F\delta2F\delta2F\delta3F\delta3F\delta2F\delta$

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^{16} / \ https://www.google.com/maps/place/175+E+Old+Country+Rd, + Hicksville, + NY+11801/@40.7662539, - Country+Rd, + NY+11801/@40.766259, - Country+Rd, + NY+11801/@40.766259, 
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      / Information Réponse 59
       / Information Response 59 and Interview 28
      / Information Réponse 59 and Interviews 26, 27, and 30
       / Information Réponse 59 and Interview 28
<sup>29</sup> / Interviews 26, 28, 29, and 30
^{\rm 30} / http://www.ehsdb.com/safety-formulas.php
      / http://www.ehsdb.com/safety-formulas.php
       / Information Responses 53 and 61 and Consultant Analysis
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38 / Information Response 91 , 100820 email from PSEG-LI RE: [EXTERNAL] OSA Targets for Motor Vehicle Accidents?, and Consultant Analysis
       / Information Response 91 and Consultant Analysis
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       / Information Responses 53 and 6 and Consultant Analysis
^{\rm 42} / Information Responses 50 and 71 and Consultant Analysis
^{\rm 43} / Information Response 53 and 61 and Consultant Analysis
      / Information Responses 8 and 67 and Consultant Analysis
       / Information Response 10 and 69 and Consultant Analysis
       / Information Responses 9 and 68 and Consultant Analysis
^{\rm 47} / Information Responses 83-002 and 83-004
       / Information Responses 83-001, 83-005, and 83-007
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Information Responses 83-001 and 83-016

- 50 / Information Réponse 83-001
- ⁵¹ / Information Response 83-001
- 52 / Information Réponse #83
- ⁵³ / Interview # 28
- 54 / Information Réponse #83
- ⁵⁵ / Information Réponse #83
- ⁵⁶ / Consultant Analysis
- ⁵⁷ / Consultant Analysis
- 58 / Interviews 26, 28, 29, and 30
- ⁵⁹ / Information Response 73-001
- 60 / Information Response 73-002
- ⁶¹ / Information Response #74
- ⁶² / Interview #26
- 63 / Interview #26
- 64 / Information Request #106
- ⁶⁵ / Interview #33
- 66 / Interview #28
- ⁶⁷ / Interview #33
- ⁶⁸ / Interview #33
- ⁶⁹ / Interview #30
- 70 / Interview #30 and #33
- 71 / Interview #30
- $^{72}\,/\,$ Information Response 83-001 and Interviews 27 and 28
- ⁷³ / Interview 27
- $^{74}\,/\,$ Interviews 27 and 28 and Information Response 83-019
- 75 / Information Response 83-018
- 76 / Interviews 26, 27 and 28
- 77 / Information Response 83-00 and Interviews Information Response 83-00 26, 27, and 28 27
- ⁷⁸ / Consultant conclusion
- ⁷⁹ / Consultant conclusion
- 80 / Consultant conclusion