

# Annual Report on the Board's Policy on Safety

December 16, 2020

# Topics For Discussion

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- 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

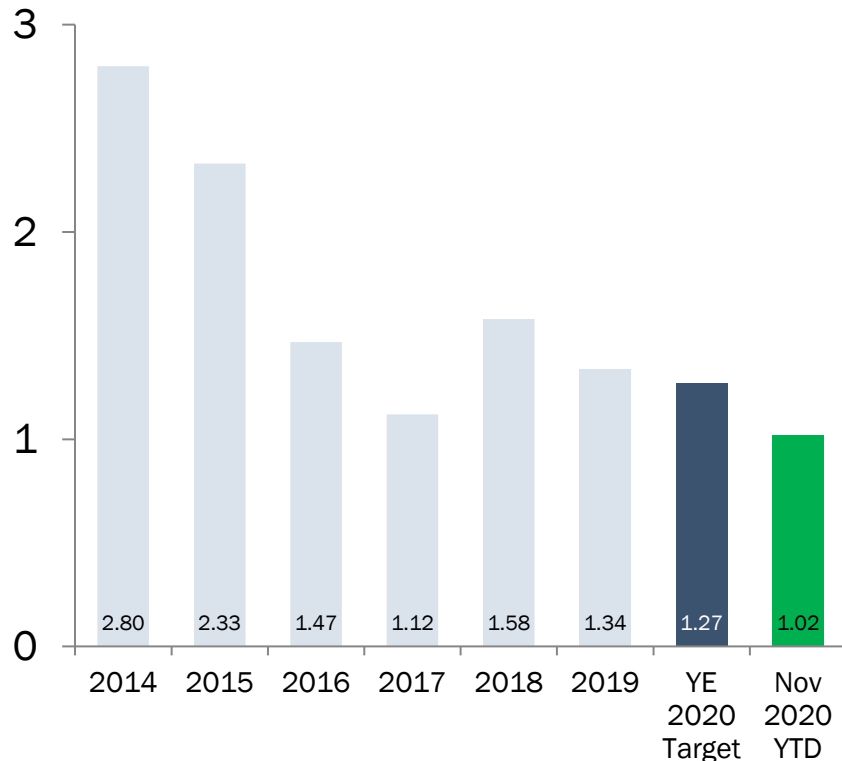
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- The **PSEG Environment, Health and Safety (EHS) Policy** and **PSEG Practice 575-1, EHS Program Guide** are the high level EHS governance documents for PSEG Long Island.
  - The PSEG annual assessment of the implementation of the EHS Program Guide 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**.

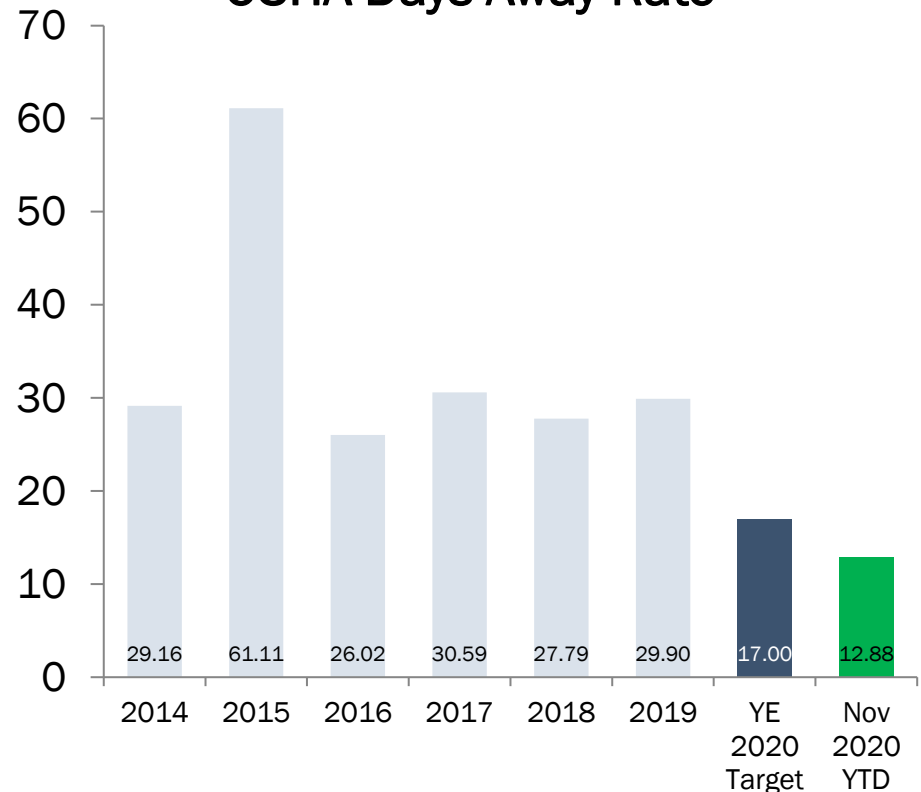
# Measuring and Verifying Safety Performance

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).

## OSHA Incidence Rate



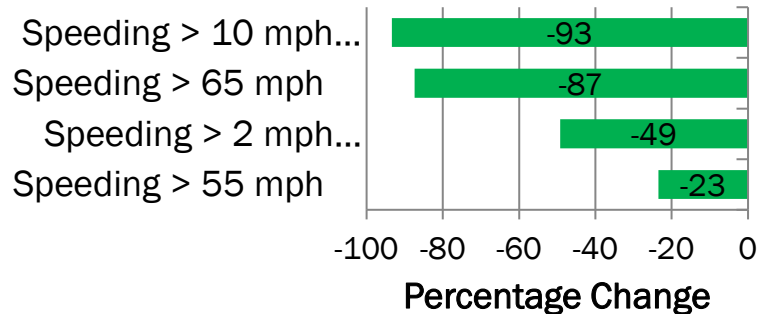
## OSHA Days Away Rate



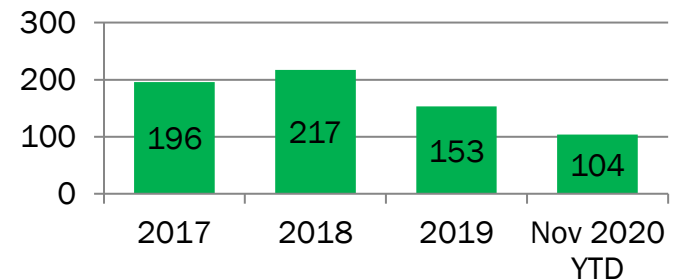
# Motor Vehicle Safety Performance

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

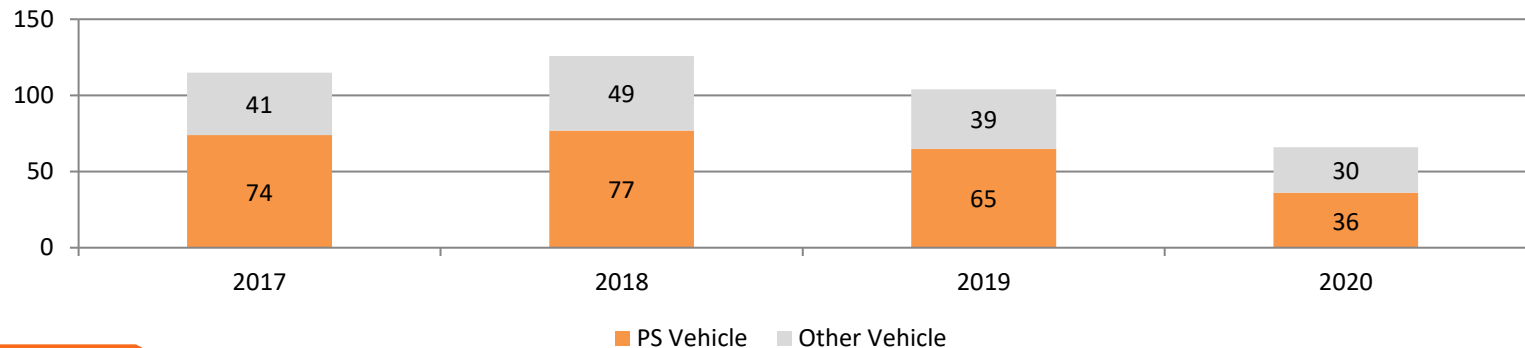
Percentage Change in Performance  
Since Program Inception (Oct 2018)



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 gloves 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** with GPS and mobile device control technology that provides a seamless connection with drivers to help ensure best practices in safety are put in place. A Professional Driver scorecard provides real time employee feedback to specific safety goals, i.e. amount of engine idling, high limit speeding (over a set MPH threshold), exceeding posted speed limits, hard braking, rapid acceleration.



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

# Schumaker & Company Safety Assessment

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## 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

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- **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**

|                                     |                                  |   |
|-------------------------------------|----------------------------------|---|
| <b>Committee or Board:</b><br>Board | <b>Date:</b><br>December 9, 2020 | <b>Board Meeting Date:</b><br>December 16, 2020 |
|-------------------------------------|----------------------------------|---|

### **For All Board Voting Items:**

**Title of Agenda Item:** Approval of the Annual Report on the Board Policy on Safety

**Consent Agenda:** ☒ Yes ☐ No

**Accompanying Presentation:** ☒ Yes ☐ No

**Recommendation from Committee:** ☐ N/A ☐ F&A; ☐ GP&P; ☒ Oversight & Clean Energy

**LIPA Presenter:** Rick Shansky (presentation at Committee)      **PSEG Long Island Presenter:** Greg Player

**Enterprise Risk Management Discussion:** ☒ Yes ☐ No

### **For Policy Reports Only:**

**Type of Policy / Report:** ☒ Operating; ☐ Governance; ☐ Compliance; ☐ Mission

**Date of Last Report:** December 18, 2019

**Compliance Since Last Report:** ☒ Yes ☐ No

**Proposed Changes to Policy:** ☐ Yes ☒ No

|  |  |
|--|--|
| <b>Requested Action:</b>   | The Board is requested to adopt a resolution: (i) approving the annual report on the Policy; and (ii) finding that LIPA has complied with the Policy.  |
| <b>Summary:<br/>(include proposed amendments to Board Policies, if applicable)</b> | <p>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.</p> <p>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.</p> |

## **FOR CONSIDERATION**

December 16, 2020

**TO:** The Board of Trustees

**FROM:** Thomas Falcone

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

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### **Requested Action**

The Board of Trustees (the “Board”) of the Long Island Power Authority (“LIPA”) is requested to adopt a resolution finding that LIPA has complied with the Board Policy on Safety (the “Policy”) for the period since the last annual review, and approving 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 **Exhibit “B”**.
- 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 red-light 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 red-light 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

**Exhibit “A”**

**RESOLUTION APPROVING THE REPORT TO THE BOARD OF TRUSTEES ON THE  
BOARD POLICY ON SAFETY**

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**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 Board has conducted an annual review of the Policy and affirms that the Policy has been complied with.

**NOW, THEREFORE, BE IT RESOLVED**, that consistent with the accompanying memorandum, the Board hereby finds that LIPA has complied with the Policy for the period since the last annual review and approves 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**

December 2020

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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.<sup>1</sup> 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 on-site 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.

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### 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**

|      | Description  | Page | Implementation |                       |
|------|--|------|----------------|-----------------------|
|      |  |      | 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 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.) | 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

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### 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.<sup>2</sup>

Specifically, LIPA requested Schumaker & Company to:<sup>3</sup>

- ◆ 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.

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### 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 field locations <sup>4</sup>
  - ◆ 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

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### 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.<sup>5</sup> 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*.

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### PSEG-LI Geographic Profile

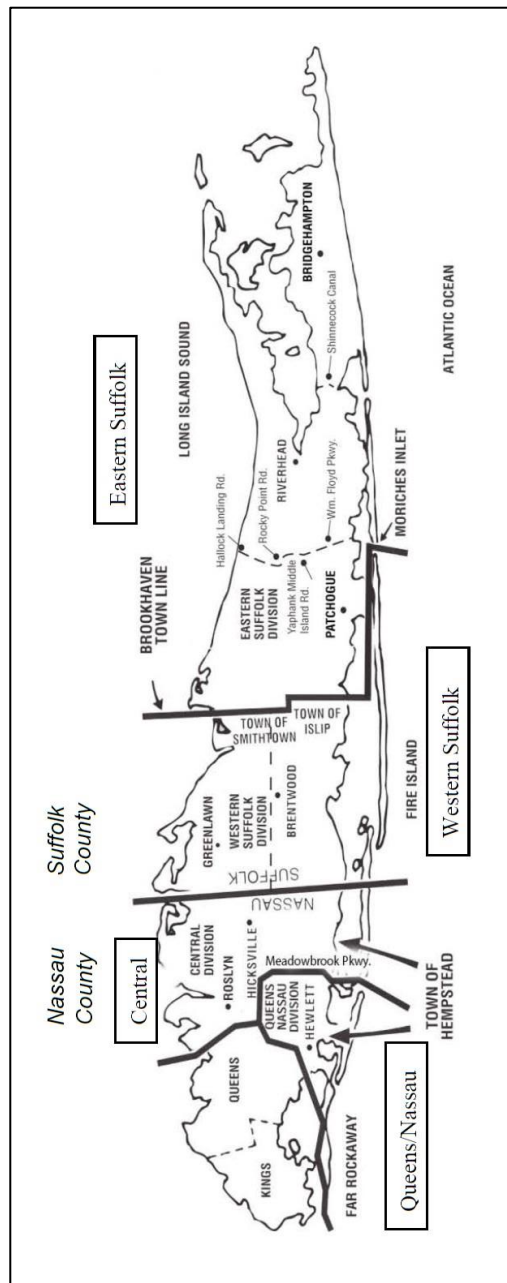
PSEG-LI serves approximately 1.1 million customers in roughly 1,230 square miles in Nassau and Suffolk counties and the Rockaway Peninsula in Queens. They operate and maintain about 1,400 miles of transmission assets and around 9,000 miles of overhead and 5,000 miles of underground distribution assets.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

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*.<sup>7</sup> 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.<sup>8</sup>

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*.

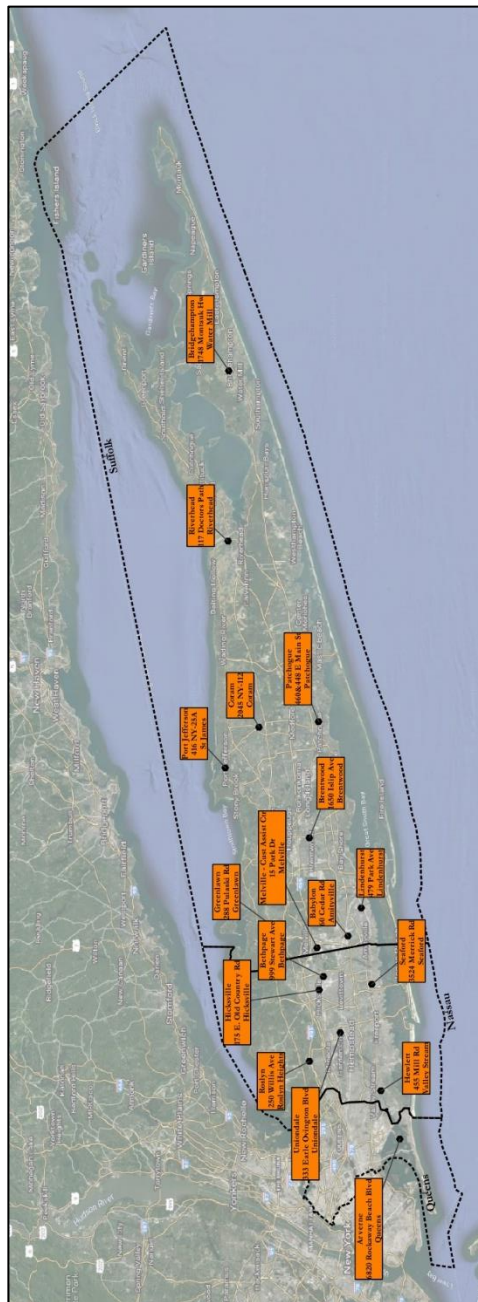


**Exhibit III-1  
PSEG-LI Operational Divisions  
September 20**



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





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

**Arverne<sup>9</sup>**



**Bethpage<sup>10</sup>**



**Brentwood<sup>11</sup>**



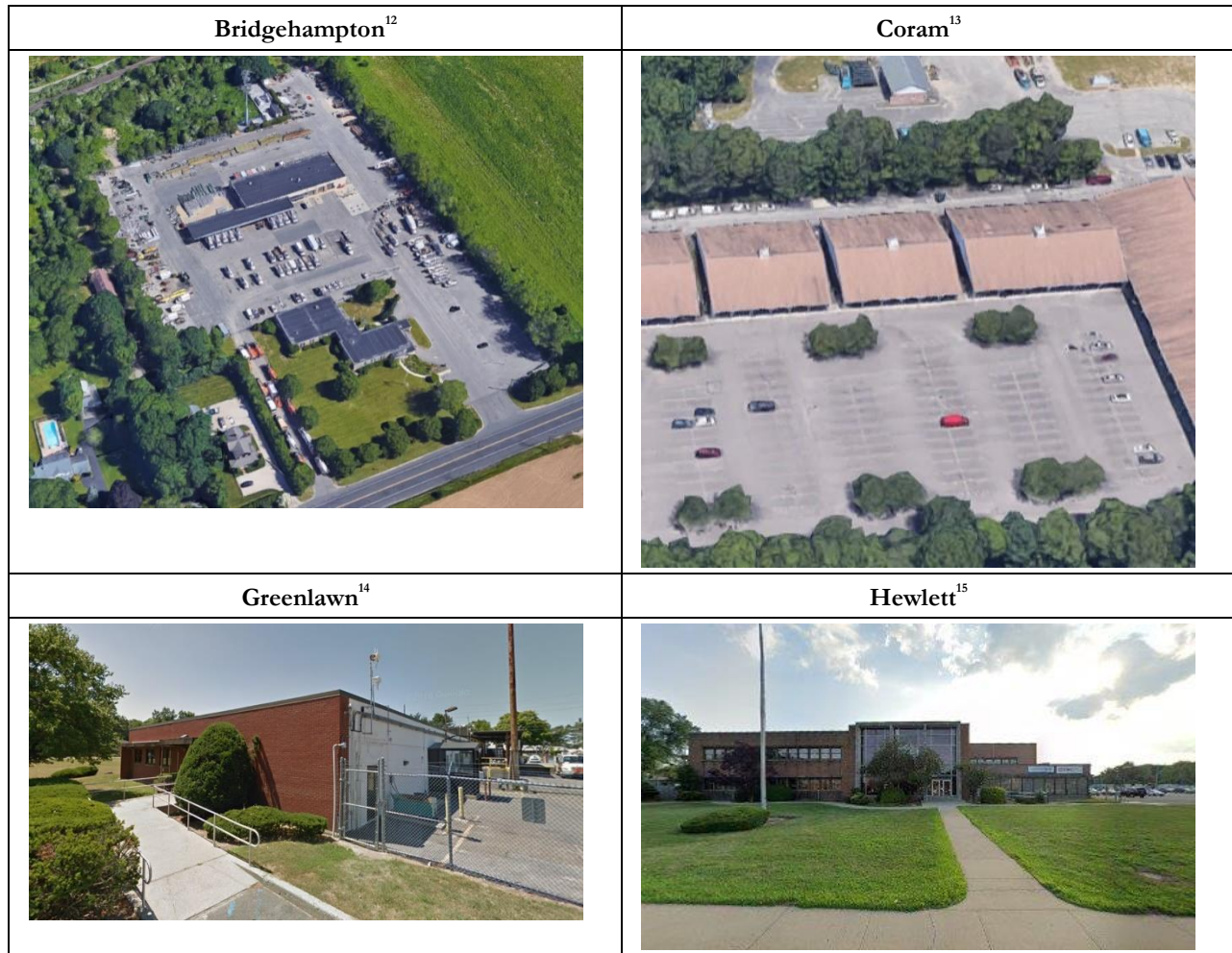
Source: See endnote for each image

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



Source: See endnote for each image

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

**Hicksville<sup>16</sup>**



**Lindenhurst<sup>17</sup>**



**Melville - Cust Assist Ctr<sup>18</sup>**



**Patchogue<sup>19</sup>**



Source: See endnote for each image

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

Port Jefferson<sup>20</sup>Riverhead<sup>21</sup>Roslyn<sup>22</sup>Seaford<sup>23</sup>

Source: See endnote for each image

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**Exhibit III-8  
PSEG-LI Facilities  
Uniondale  
November 2020**

**Uniondale<sup>24</sup>**



Source: See endnote for each image

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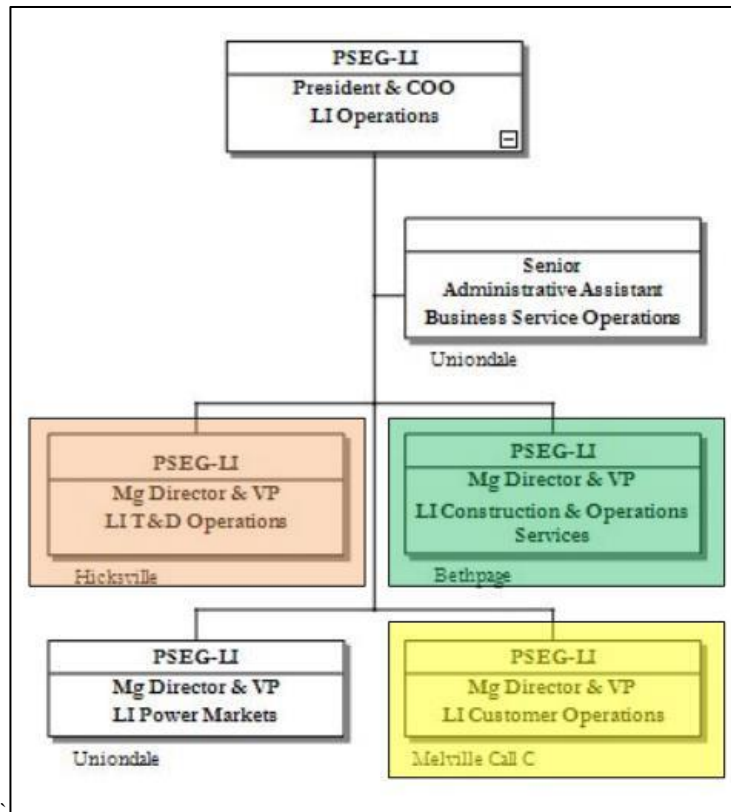
## **PSEG-LI Safety Organization Profile**

### **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.<sup>25</sup>



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

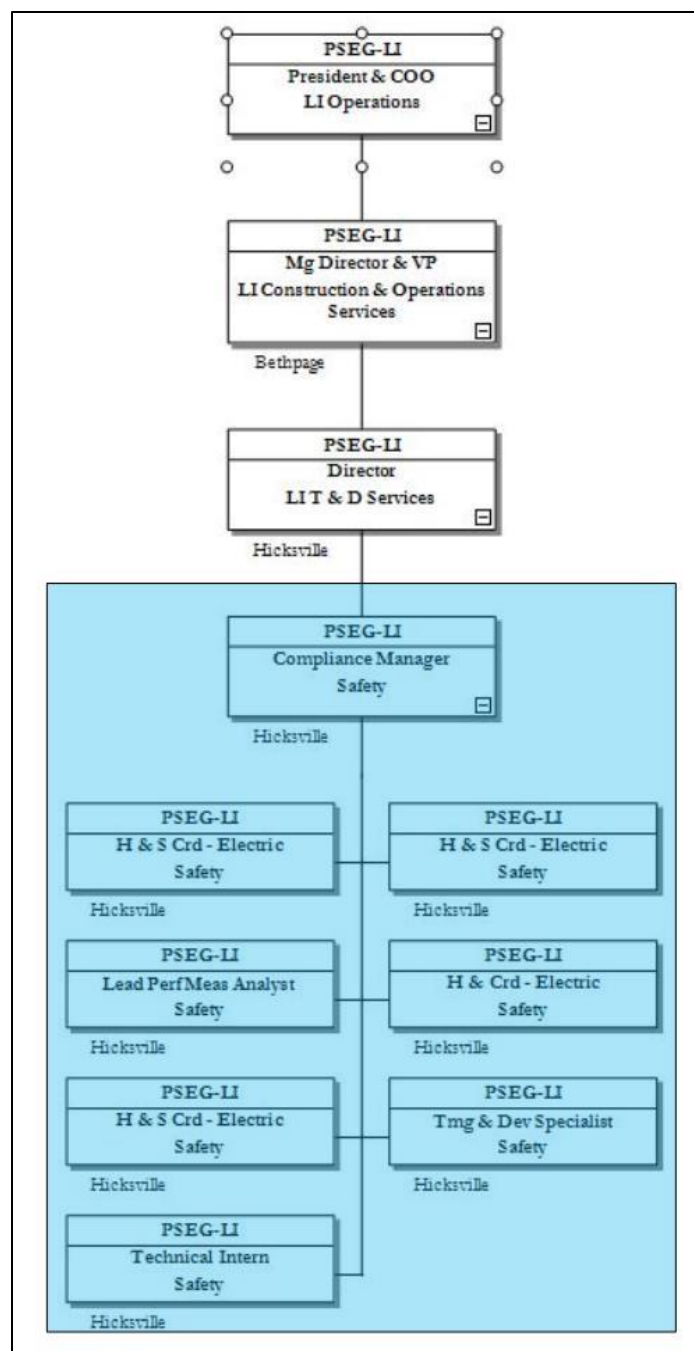


Source: Information Response 59

## 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.<sup>26</sup>

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

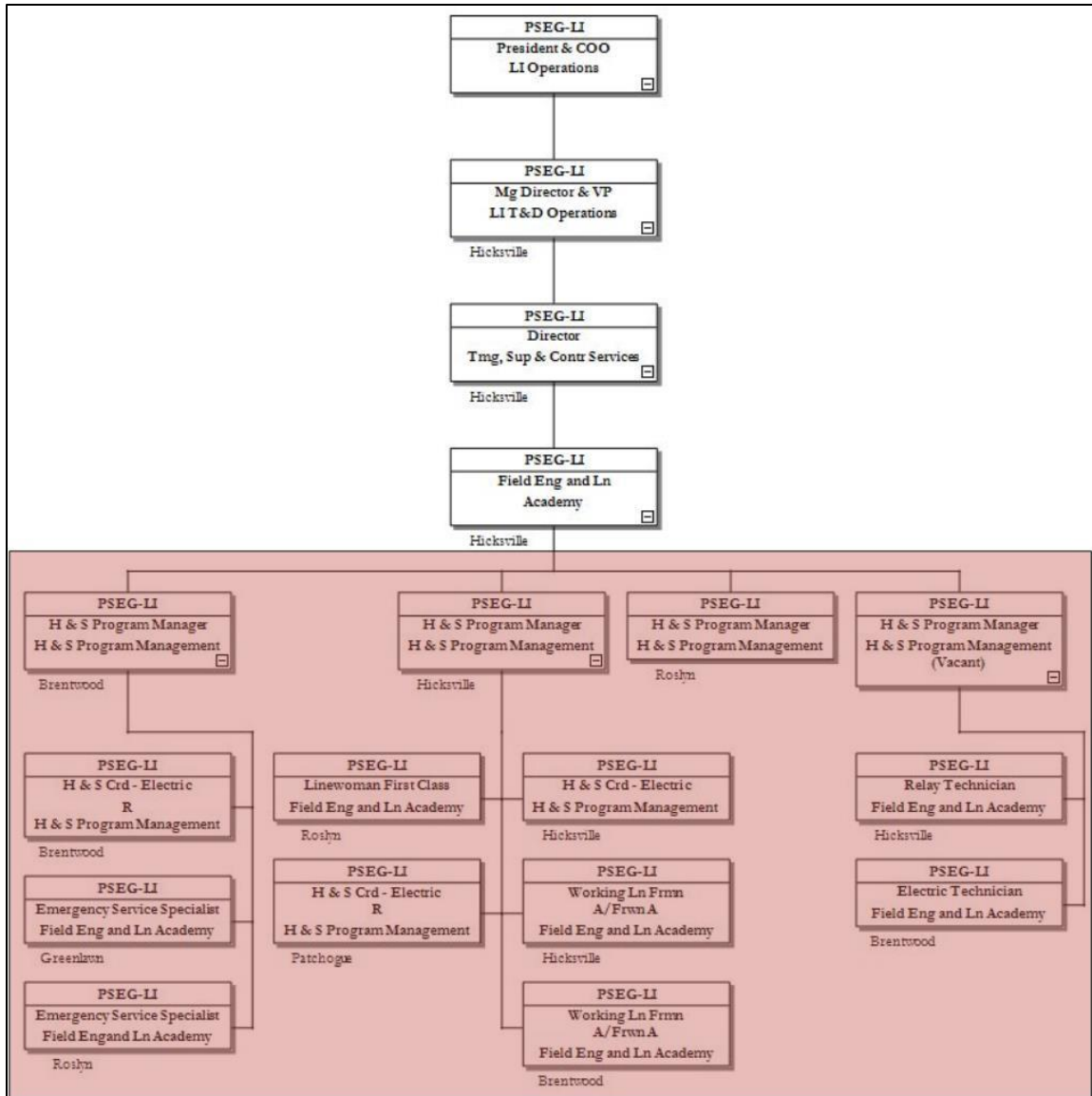


Source: Information Response 59



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.<sup>27</sup>

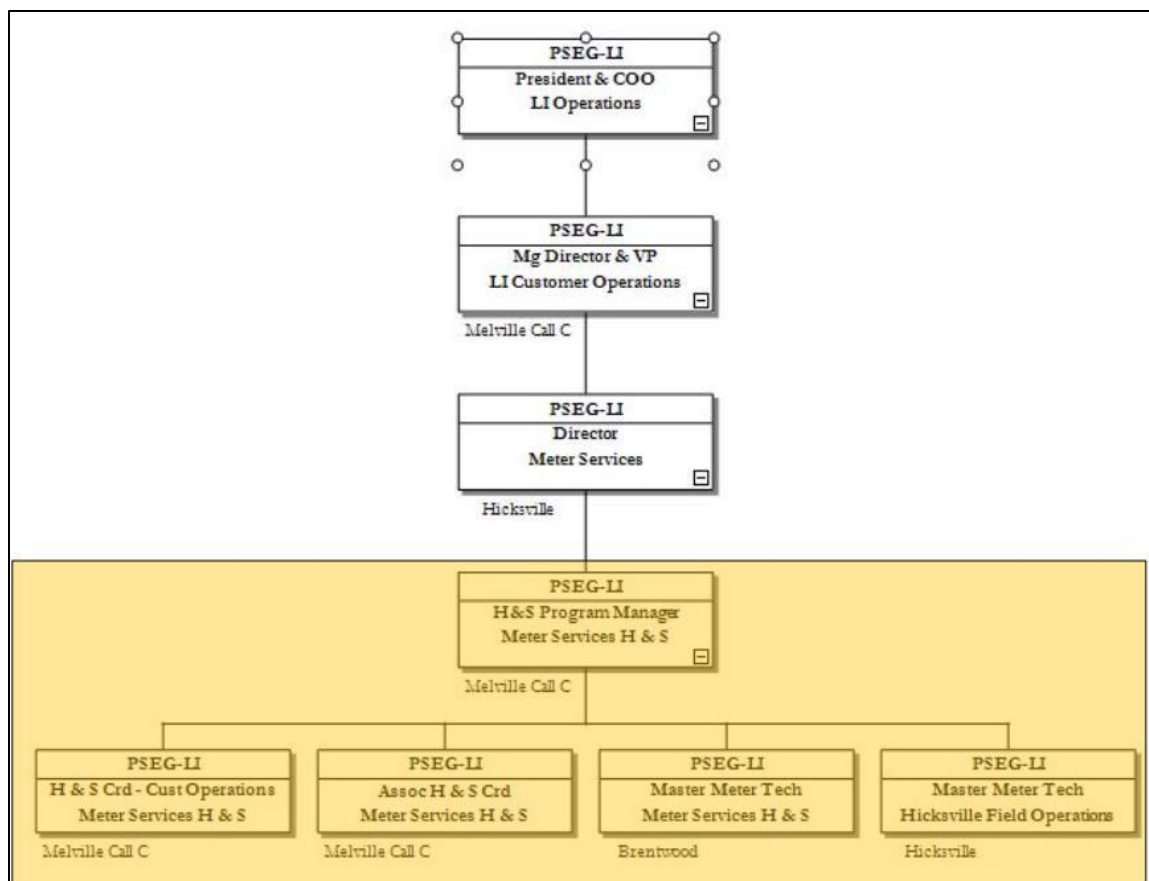
**Exhibit III-11**  
**PSEG-LI T&D Operations Safety Teams**  
**June 2020**



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.<sup>28</sup>

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



Source: Information Response 59 and Interview 28

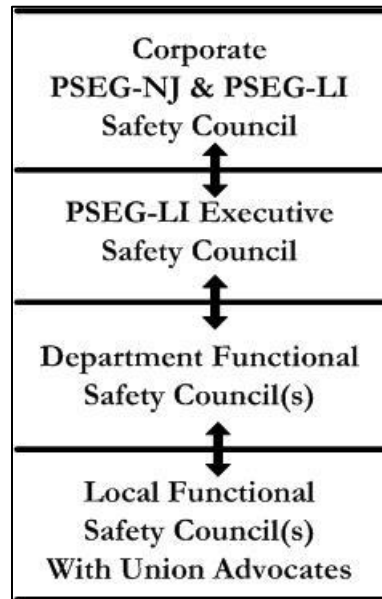
## Safety Councils

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*.<sup>29</sup>





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.<sup>30</sup>

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.

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### Incentive Compensation Metrics

#### OSHA Recordable Incident Rate

The Annual OSHA Recordable Incident Rate is defined as:

$$\text{Annual OSHA Recordable Incident Rate} = \frac{\text{Number of Recordable Incidents} \times 200,000}{\text{Total Number of Hours Worked}} \quad 31$$

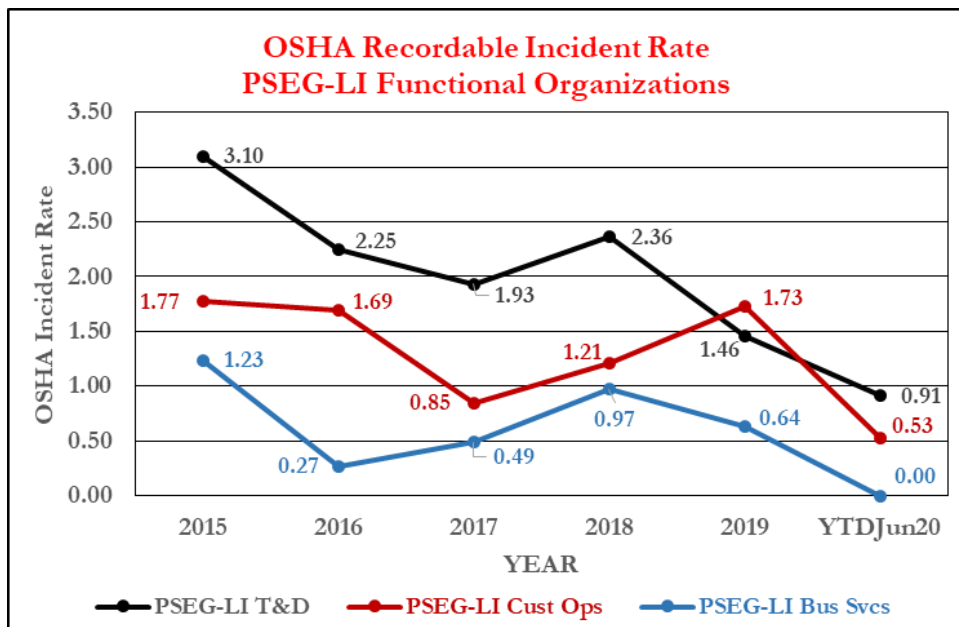
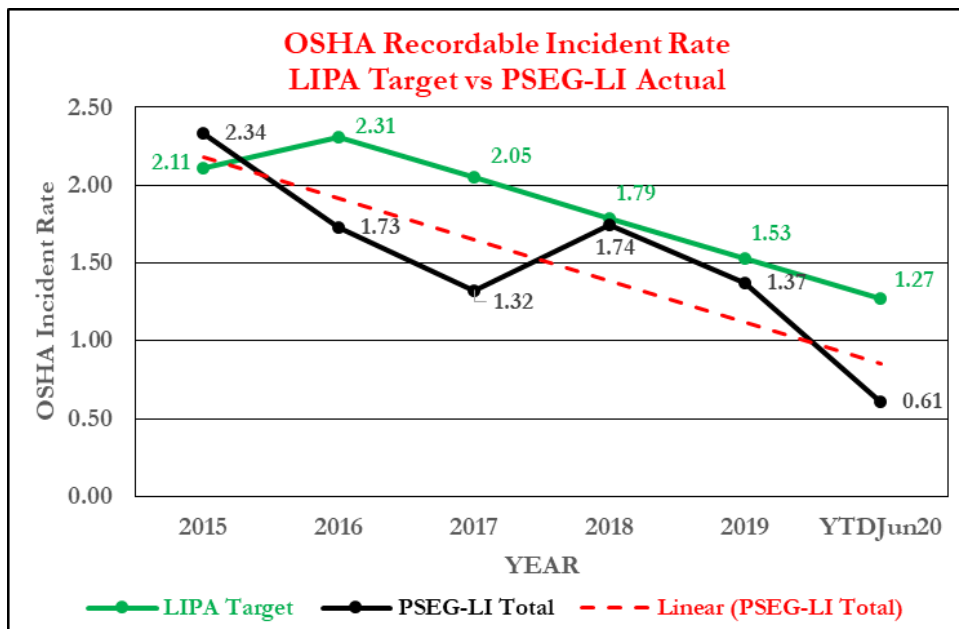
*Exhibit IV-1* provides annual LIPA OSHA Recordable Incident Rate Targets and PSEG-LI performance for 2015 through June 2020. LIPA targets ranged from 2.31 in 2016 to 1.27 for 2020. PSEG-LI performance ranged from 2.34 in 2015 to 1.32 for 2019. The YTD performance in June 2020 was 0.61. Data indicates a PSEG-LI Total Incident Rate reduction of 41.5% (2.34 to 1.37) 2015 to 2019.<sup>32</sup>

*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.<sup>33</sup>





**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:

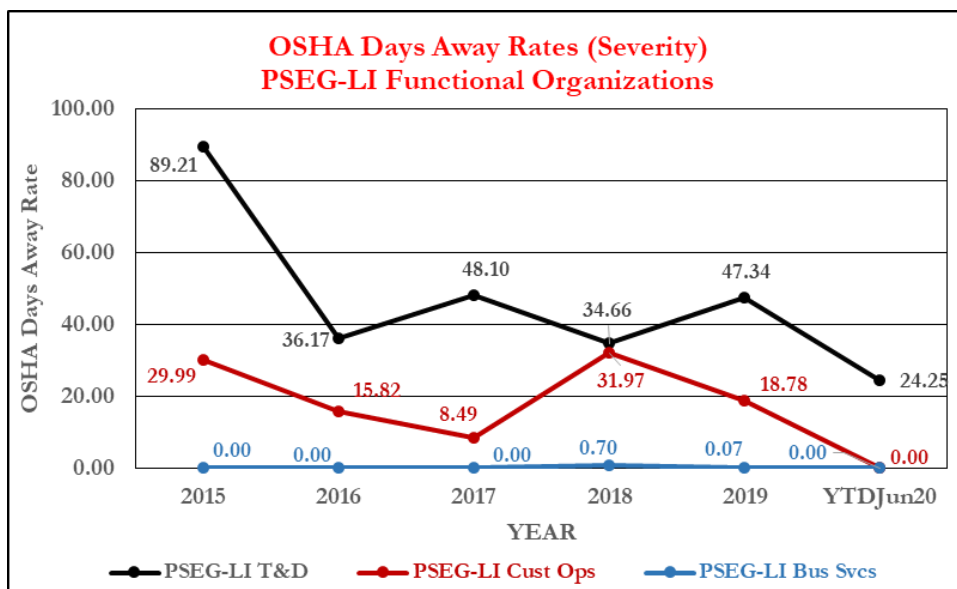
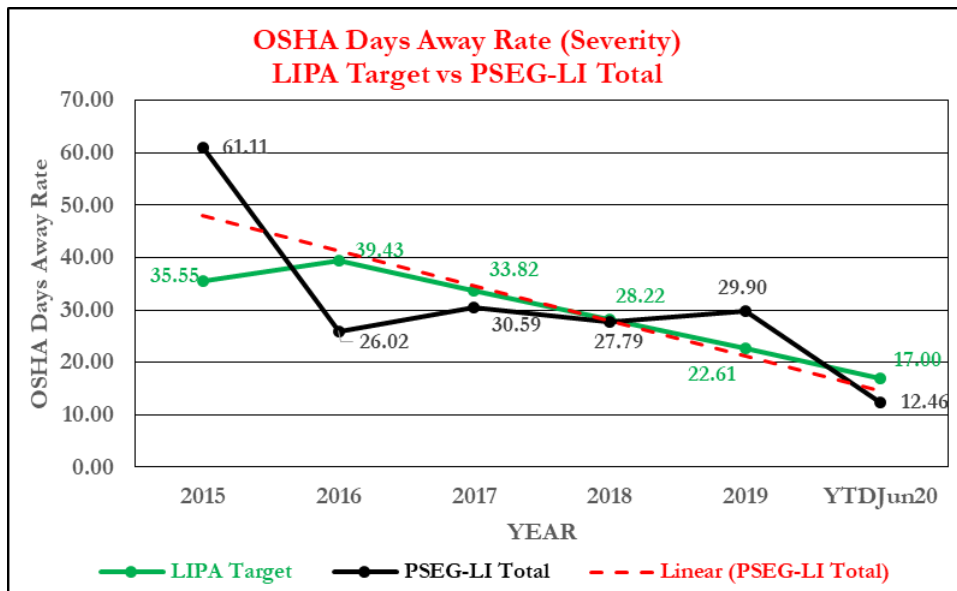
$$\text{Annual OSHA Days Away Rate} = \frac{\text{Annual Number of Days Away due to injury} \times 200,000}{\text{Annual Total Number of Hours Worked}} \quad ^{34}$$

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.<sup>35</sup>

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.<sup>36</sup>



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



Source: Information Responses 53 and 61

## Motor Vehicle Accidents (MVA)

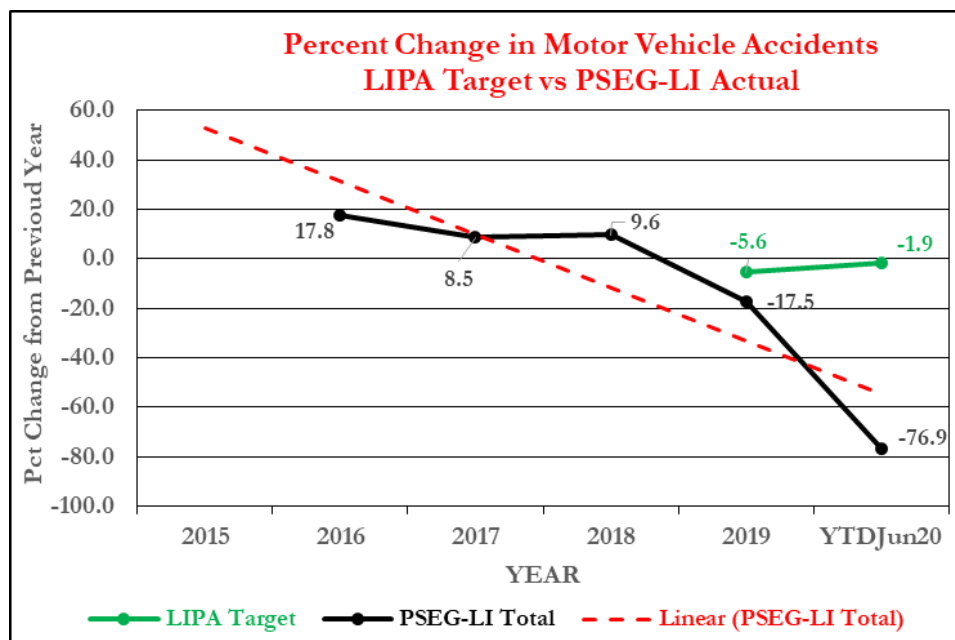
LIPA and PSEG-LI agreed to an OSA Incentive Target for Motor Vehicle Accidents (MVA) beginning with calendar year 2019. The target is based on the percent change in number of MVAs from the previous year and is calculated as:

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

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.<sup>38</sup>

*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.<sup>39</sup>

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

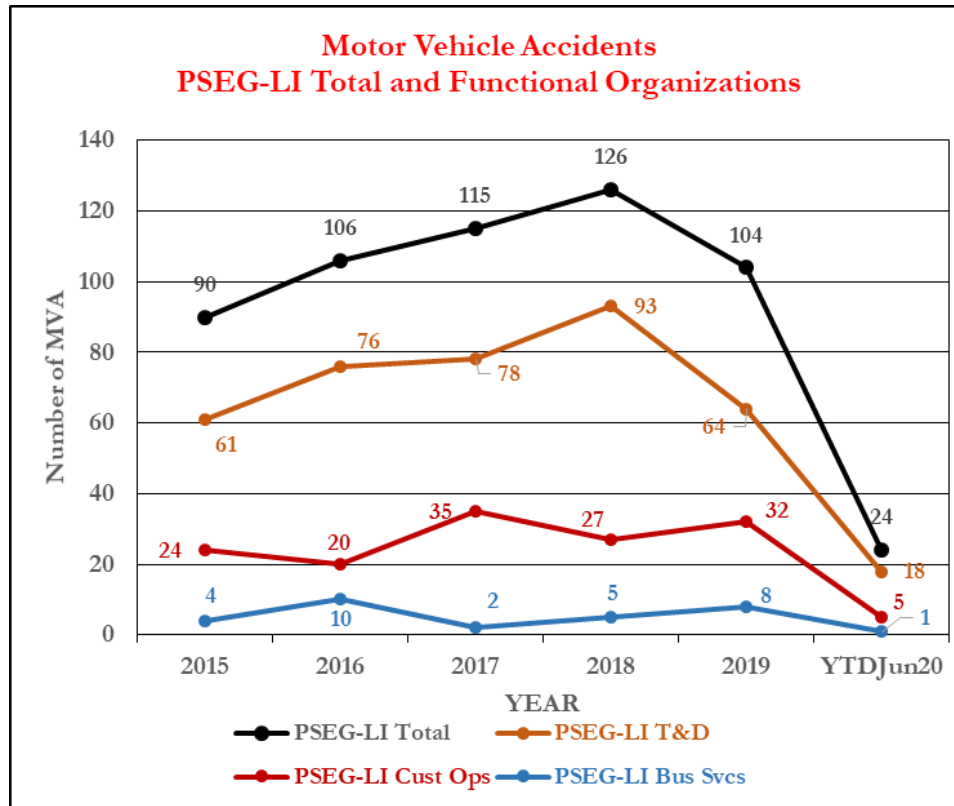


Source: Information Response 91



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.<sup>40</sup>

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



Source: Information Response 91

## Non-Incentive Metrics

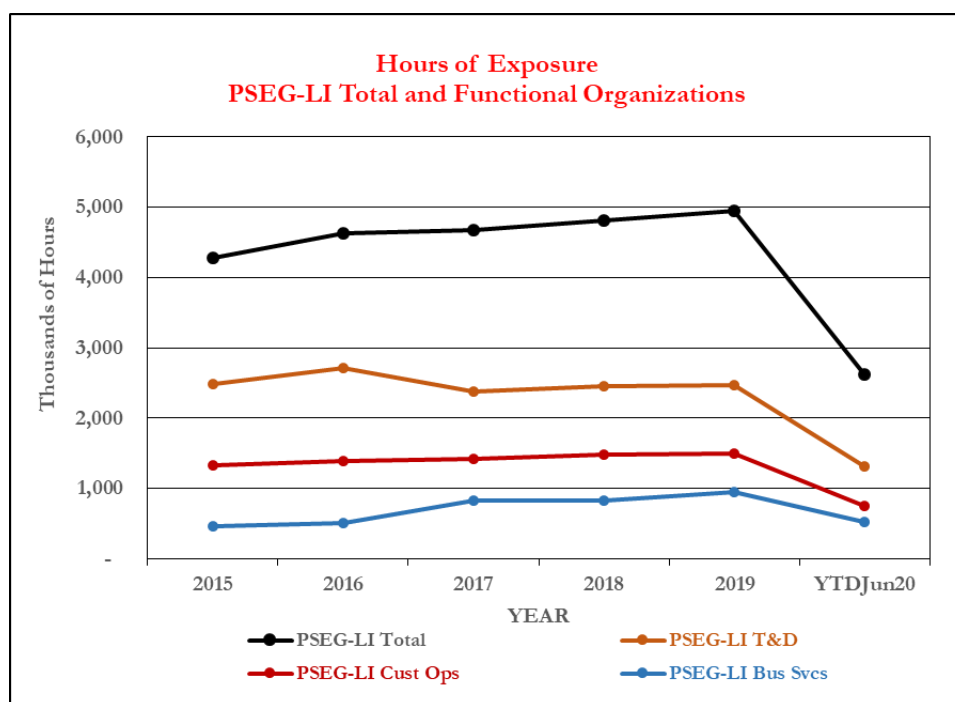
### Fatalities

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.<sup>41</sup>

**Exhibit IV-5**  
**Hours of Exposure**  
**2015 – June 2020**



Source: Information Responses 53 and 62

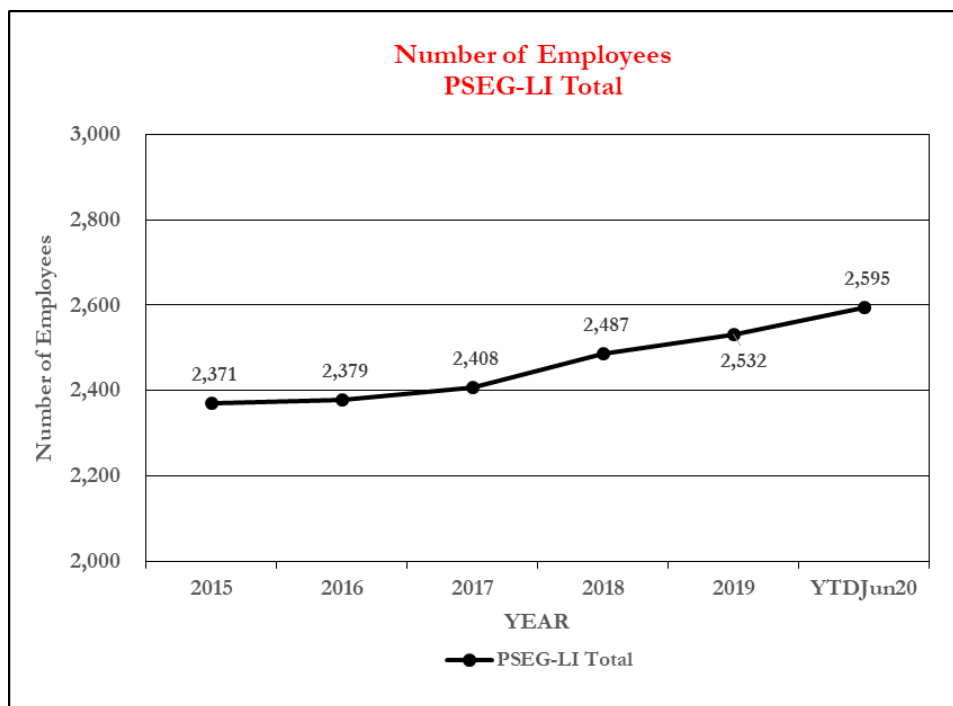
### Number of Employees

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.<sup>42</sup>

**Exhibit IV-6**  
**Number of Employees**  
**2015 – June 2020**

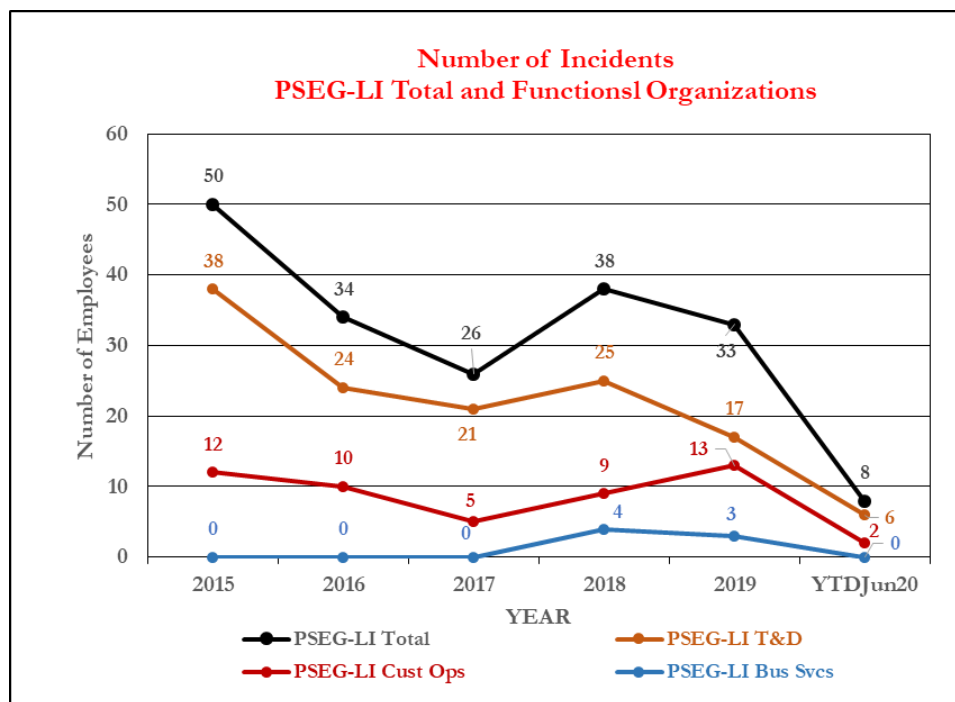


Source: Information Responses 50 and 71

## 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.<sup>43</sup>

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



Source: Information Response 53 and 61



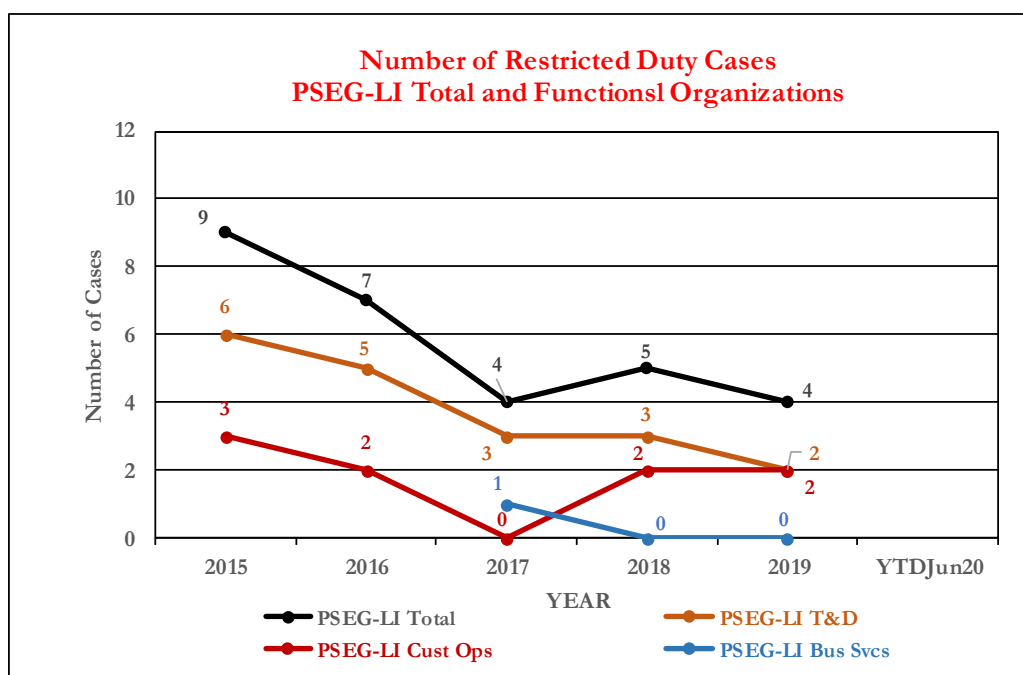


## Restricted Duty Activity

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.<sup>44</sup>

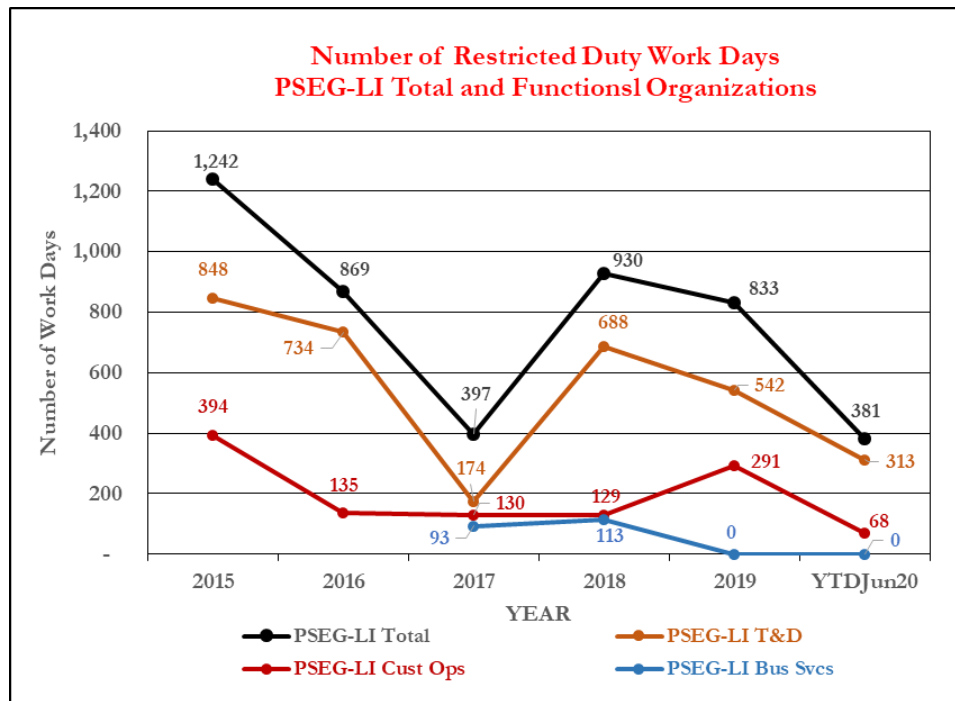
The Number of Restricted Workdays is given in *Exhibit IV-9* for PSEG-LI Total and Functional Organizations. No data for Business Services was available for 2015 and 2016. PSEG-LI Total Restricted Duty Workdays ranged from 1,242 in 2015 to 397 in 2017. There was a 32.9% (1,242 to 833) reduction in Restricted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

**Exhibit IV-8**  
**Number of Restricted Duty Cases**  
**2015 – June 2020**



Source: Information Responses 8 and 67

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



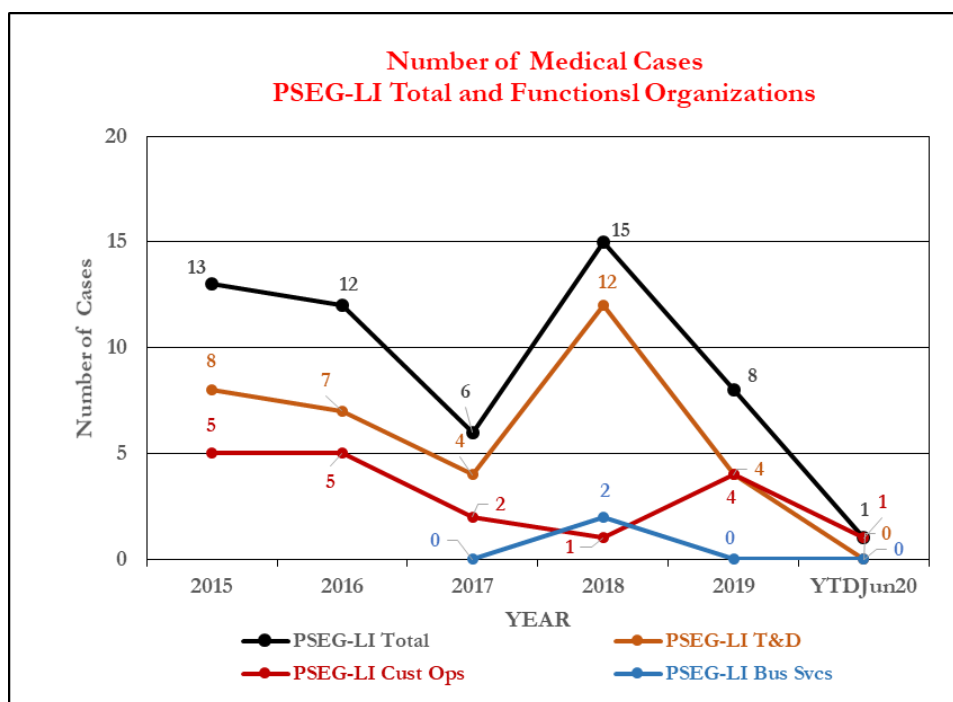
Source: Information Response 10 and 69

## 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.<sup>46</sup>



**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**

|      | Description   | Page | Implementation |                       |
|------|---|------|----------------|-----------------------|
|      |   |      | 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           |



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## 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.

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**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

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*Exhibit V-3* and *Exhibit V-4* provides examples of the Leading Indicators.<sup>47</sup>


**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**

| Safety Leading Indicators    |  |
|---|--|
| Metric Lead: Greg Player  |  |
| <b>Analysis – MTD</b> <ul style="list-style-type: none"> <li>IA Safety Actions:             <ul style="list-style-type: none"> <li>Actions with target dates this month: 35                 <ul style="list-style-type: none"> <li>Completed: 35</li> <li>Overdue: 0</li> </ul> </li> </ul> </li> <li>Briotix Activity:             <ul style="list-style-type: none"> <li>Total Evaluations: 46 (8 Work Related)</li> <li>Clinical MSK Assessments: 0</li> <li>Other Individual Encounters: 721</li> <li>Apprentice Training Group Sessions: 68 (697 Participants)</li> <li>Other Group Training Sessions: 242 (1,268 Participants)</li> </ul> </li> <li>Training (showing # of employees trained):             <ul style="list-style-type: none"> <li>Employee Training                 <ul style="list-style-type: none"> <li>AET 2020: 0</li> <li>Online AET Training: 59</li> <li>CPR / First Aid: 99</li> </ul> </li> <li>Driver Training:                 <ul style="list-style-type: none"> <li>CDT Safe Driver: 0</li> <li>Defensive Driver: 0</li> <li>Smith Driver: 0</li> </ul> </li> </ul> </li> </ul> | <b>Analysis – YTD</b> <ul style="list-style-type: none"> <li>IA Safety Actions:             <ul style="list-style-type: none"> <li>Actions with target dates in 2020: 374                 <ul style="list-style-type: none"> <li>Completed: 299</li> <li>Outstanding: 75</li> <li>Overdue: 0</li> </ul> </li> </ul> </li> <li>Briotix Activity – Industrial Sport Medicine:             <ul style="list-style-type: none"> <li>Total Evaluations: 431 (50 Work Related)</li> <li>Clinical MSK Assessments: 12</li> <li>Other Individual Encounters: 5,464</li> <li>Apprentice Training Group Sessions: 304 (2,722 Participants)</li> <li>Other Group Training Sessions: 1808 (14,982 Participants)</li> </ul> </li> <li>Training (showing # of employees trained):             <ul style="list-style-type: none"> <li>Employee Training                 <ul style="list-style-type: none"> <li>AET 2020: 187</li> <li>Online AET Training: 592</li> <li>CPR / First Aid: 354</li> </ul> </li> <li>Driver Training                 <ul style="list-style-type: none"> <li>CDT Safe Driver: 49</li> <li>Defensive Driver: 106</li> <li>Smith Driver: 33</li> </ul> </li> </ul> </li> </ul> |

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*.<sup>48</sup>

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**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

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**Exhibit V-6**  
**Hicksville Upgraded Storage Racks**  
**October 2020**



Source: Information response 83-005





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Exhibit V-7  
Brentwood Storage Racks  
October 2020



Source: Information Response 83-007

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**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.<sup>49</sup>

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**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

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

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**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

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**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 equipment<sup>50</sup>.

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

|            |  |
|------------|--|
| <b>2.</b>  | <b>PURPOSE</b>   |
| <b>2.1</b> | 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.   |
| <b>2.2</b> | 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

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**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*.<sup>51</sup>

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**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

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**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*.

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

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

*“This document shall be reviewed every **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

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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 training<sup>32</sup>. 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.<sup>53</sup>

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 system<sup>54</sup>. *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

| COURSE<br><i>Italic - Annual Bold - Initial</i> | COURSE NUMBER | Duration<br>(Hours) | OH/UG           |                 | Total Training Days | Sub Opr (station operators & management employees) | Sub Maint Tech - Rigging & Cranes | Sub maint Tech - Electrical Shop | Sub Maint Tech - Boiled Fabrication Shop | Sub Maint Tech - Technical Engineering | Relay Tech | Comm. Tech. (Radio Tech) | Sub Maint Civil Group | Sub Maint GS | Sub Maint Electric Tech | Total Count For Area | Operations              |                  |                         |                      |
|---|---------------|---------------------|-----------------|-----------------|---------------------|--|-----------------------------------|----------------------------------|--|--|------------|--------------------------|-----------------------|--------------|-------------------------|----------------------|-------------------------|------------------|-------------------------|----------------------|
|   |               |                     | OH Construction | UG Construction |                     |  |                                   |                                  |  |  |            |                          |                       |              |                         |                      | Transmission Operations | Service Dispatch | Distribution Operations | Total Count For Area |
| Haz - Mat / Environmental                       |               |                     |                 |                 |                     |  |                                   |                                  |  |  |            |                          |                       |              |                         |                      |                         |                  |                         |                      |
| NYS Asbestos Supervisor - Initial               |               |                     |                 |                 | 0                   |  |                                   | 2                                |  |  |            |                          |                       |              | 2                       | 4                    |                         |                  | 0                       |                      |
| NYS Asbestos Supervisor - Refresher             |               |                     |                 |                 | 0                   |  |                                   |                                  |  |  |            |                          |                       |              | 4                       | 4                    |                         |                  | 0                       |                      |
| NYS Asbestos O&M - Initial                      |               |                     |                 |                 | 0                   |  |                                   | 11                               |  |  |            |                          |                       |              |                         | 11                   |                         |                  | 0                       |                      |
| NYS Asbestos O&M - Refresher                    |               |                     |                 | 95              | 95                  |  |                                   | 11                               |  |  | 27         |                          |                       |              | 3                       | 80                   | 121                     |                  | 0                       |                      |
| NYS Asbestos Awareness                          | AET           |                     |                 |                 |                     |  |                                   |                                  |  |  |            |                          | 17                    | 3            | 80                      |                      |                         |                  | 0                       |                      |
| Bloodborne Pathogens                            |               |                     |                 |                 |                     |  |                                   | 13                               |  |  |            |                          | 17                    | 3            | 80                      | 113                  |                         | 136              | 136                     |                      |
| Lead Awareness                                  | SAG006 - AET  | 1                   |                 | 95              | 95                  |  | 10                                | 13                               |  |  | 30         | 12                       | 17                    | 3            | 80                      | 165                  |                         | 136              | 136                     |                      |
| Combined Haz. Waste Mgmt. & DOT Overview        |               |                     | 180             | 95              | 275                 |  |                                   |                                  |  |  |            |                          |                       |              |                         | 0                    |                         |                  | 0                       |                      |
| SPCC / Oil Handling                             |               |                     |                 |                 | 0                   | 49   |                                   | 13                               |  |  |            |                          |                       |              |                         | 62                   |                         |                  | 0                       |                      |
| Spill Response Training                         |               |                     |                 |                 | 0                   | 49   |                                   | 13                               |  |  |            |                          |                       |              |                         | 62                   |                         |                  | 0                       |                      |
| Environmental Awareness (EAC) & DOT             |               |                     | 180             | 95              | 275                 | 49   |                                   | 13                               |  |  |            |                          | 17                    | 3            | 80                      | 163                  | 20                      | 136              | 136                     |                      |
| ENV 250 Environmental training                  | SAV001        | 1                   | 180             | 95              | 275                 | 0  | 10                                |                                  | 12                                       | 5                                      |            |                          | 17                    | 3            | 80                      | 177                  |                         |                  | 0                       |                      |
| Hazard Communication                            | SAG005        | 2                   | 180             | 95              | 275                 | 49   | 10                                | 13                               | 12                                       | 5                                      | 30         | 12                       | 17                    | 3            | 80                      | 231                  | 20                      | 60               | 136                     |                      |
| Hazwoper - 40 Hours                             |               |                     |                 |                 | 0                   |  |                                   | 13                               |  |  |            |                          |                       |              |                         | 13                   |                         |                  | 0                       |                      |
| Hazwoper Initial                                |               | 8                   |                 |                 | 0                   |  |                                   | 13                               |  |  |            |                          |                       |              |                         | 13                   |                         |                  | 0                       |                      |
| Hazwoper - Refresher                            |               | 2                   |                 |                 | 0                   |  |                                   |                                  |  |  |            |                          |                       |              |                         | 0                    |                         |                  | 0                       |                      |
| Haz-Mat Transportation                          | ENV420        | 2                   |                 |                 | 0                   |  | 10                                |                                  |  |  |            |                          | 17                    | 3            | 80                      | 110                  |                         |                  | 0                       |                      |
| Universal Waste                                 |               |                     |                 |                 | 0                   |  |                                   |                                  |  |  |            |                          |                       |              |                         | 0                    |                         |                  | 0                       |                      |
| T&D Rescue                                      |               |                     |                 |                 |                     |  |                                   |                                  |  |  |            |                          |                       |              |                         |                      |                         |                  |                         |                      |
|   |               |                     |                 |                 | 0                   |  |                                   |                                  |  |  |            |                          |                       |              |                         | 0                    |                         |                  | 0                       |                      |

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-19<sup>55</sup>.

**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  | R2 Current  |
|--|---|--|---|---|---|
| <b>Classrooms</b><br>Square Footage Total  | Approximately 5,100 ft <sup>2</sup> , distributed over new (6) class spaces<br>• Overhead.....2 Classrooms<br>• Underground.....1 Classroom<br>• Emergency Services.....1 Classroom<br>• Substations.....2 Classrooms<br>• Customer Service.....2 Classrooms<br>• Meter Services.....2 Classrooms | Approximately 27,000 ft <sup>2</sup> , distributed over 20 class spaces<br>• Overhead.....2 Classrooms (2000 ft <sup>2</sup> )<br>• Overhead.....1 Hands on (2000 ft <sup>2</sup> )<br>• Underground.....2 Classrooms (2000 ft <sup>2</sup> )<br>• Underground.....1 Hands on (2000 ft <sup>2</sup> )<br>• Emergency Services.....2 Classrooms (1000 ft <sup>2</sup> )<br>• Emergency Services.....1 Hands on (1000 ft <sup>2</sup> )<br>• GP&T.....2 Classrooms (2000ft <sup>2</sup> )<br>• GP&T.....1 Hands on (2000ft <sup>2</sup> )<br>• Meter Services.....1 Classroom (1000 ft <sup>2</sup> )<br>• Meter Services.....1 Hands on (2000 ft <sup>2</sup> )<br>• Unassigned Classrooms.....2 Classrooms (2000 ft <sup>2</sup> )<br>• Computer Rooms.....4 Classrooms (4000 ft <sup>2</sup> )<br>• eWet.....0 Classrooms<br>• eWet.....0 Hands On<br>• Human Resources.....0 Classrooms<br>• Customer Service.....0 Classrooms | Approximately 38,000 ft <sup>2</sup> , distributed over 27 class spaces<br>• Overhead.....2 Classrooms (2000 ft <sup>2</sup> )<br>• Overhead.....1 Hands on (2000 ft <sup>2</sup> )<br>• Underground.....2 Classrooms (2000 ft <sup>2</sup> )<br>• Underground.....1 Hands on (2000 ft <sup>2</sup> )<br>• Emergency Services.....2 Classrooms (1000 ft <sup>2</sup> )<br>• Emergency Services.....1 Hands on (1000 ft <sup>2</sup> )<br>• GP&T.....2 Classrooms (2000ft <sup>2</sup> )<br>• GP&T.....1 Hands on (2000ft <sup>2</sup> )<br>• Meter Services.....1 Classroom (1000 ft <sup>2</sup> )<br>• Meter Services.....1 Hands on (2000 ft <sup>2</sup> )<br>• Unassigned Classrooms.....2 Classrooms (2000 ft <sup>2</sup> )<br>• Computer Rooms.....4 Classrooms (4000 ft <sup>2</sup> )<br>• eWet.....1 Classroom (1000 ft <sup>2</sup> )<br>• eWet.....1 Hands On (2000 ft <sup>2</sup> )<br>• Human Resources.....3 Classrooms (3000 ft <sup>2</sup> )<br>• Customer Service.....0 Classrooms | Approximately 38,000 ft <sup>2</sup> , distributed over 27 class spaces<br>• Overhead.....2 Classrooms (2000 ft <sup>2</sup> )<br>• Overhead.....1 Hands on (2000 ft <sup>2</sup> )<br>• Underground.....2 Classrooms (2000 ft <sup>2</sup> )<br>• Underground.....1 Hands on (2000 ft <sup>2</sup> )<br>• Emergency Services.....2 Classrooms (1000 ft <sup>2</sup> )<br>• Emergency Services.....1 Hands on (1000 ft <sup>2</sup> )<br>• GP&T.....2 Classrooms (2000ft <sup>2</sup> )<br>• GP&T.....1 Hands on (2000ft <sup>2</sup> )<br>• Meter Services.....1 Classroom (1000 ft <sup>2</sup> )<br>• Meter Services.....1 Hands on (2000 ft <sup>2</sup> )<br>• Unassigned Classrooms.....2 Classrooms (2000 ft <sup>2</sup> )<br>• Computer Rooms.....4 Classrooms (4000 ft <sup>2</sup> )<br>• eWet.....1 Classroom (1000 ft <sup>2</sup> )<br>• eWet.....1 Hands On (2000 ft <sup>2</sup> )<br>• Human Resources.....3 Classrooms (3000 ft <sup>2</sup> )<br>• Customer Service.....0 Classrooms | Size 2000 ft <sup>2</sup> . Distributed over 19 Class Spaces (Only includes electric and customer rooms)<br>• Overhead.....2 Classrooms (1200 ft <sup>2</sup> )<br>• Overhead.....1 Hands on (1000 ft <sup>2</sup> )<br>• Underground.....2 Classrooms<br>• Underground.....1 Hands on (2010 ft <sup>2</sup> )<br>• Emergency Services.....0 Classrooms<br>• GP&T.....2 Classrooms (1300ft <sup>2</sup> )<br>• GP&T.....1 Hands on (1140ft <sup>2</sup> )<br>• Meter Services.....1 Classroom (2000 ft <sup>2</sup> )<br>• Meter Services.....1 Hands on (2000 ft <sup>2</sup> )<br>• Unassigned Classrooms.....0 Classrooms<br>• Computer Rooms.....2 Classrooms (1240 ft <sup>2</sup> )<br>• eWet.....0 Classrooms<br>• eWet.....0 Hands On<br>• Human Resources.....0 Classrooms<br>• Customer Service.....2 Classrooms (1670ft <sup>2</sup> ) |
| <b>Training Office</b>   | United and shared, approximately 1,200 ft <sup>2</sup> , distributed over 6 office spaces.<br>*note that the office space for meter services is shared with class room space  | Office space 7000 ft <sup>2</sup> (40 Offices)   | Instruction Meeting room 1,000 ft <sup>2</sup> (1 Location)<br>Office space 8000 ft <sup>2</sup> (40 spaces)  | Instruction Meeting room 1,000 ft <sup>2</sup> (1 Location)<br>Office space 8000 ft <sup>2</sup> (40 spaces)  | Instruction Meeting room 425 ft <sup>2</sup> (1 Location)<br>Office space 5760 ft <sup>2</sup> (34 Cals/14 Enclaved Offices)  |
| <b>Conference Rooms</b>  | Approximately 1,500 ft <sup>2</sup> , distributed over 2 rooms  | Small Conference Rooms 8000ft <sup>2</sup> (8 locations) 20 people<br>Large Conference Rooms 4000ft <sup>2</sup> (2 locations) 40 people<br>Huddle Rooms 1200ft <sup>2</sup> (6 Locations) 6 people  | Small Conference Rooms 8000ft <sup>2</sup> (8 locations) 20 people<br>Large Conference Rooms 4000ft <sup>2</sup> (2 locations) 40 people<br>Huddle Rooms 2000ft <sup>2</sup> (10 Locations) 6 people  | Small Conference Rooms 8000ft <sup>2</sup> (8 locations) 20 people<br>Large Conference Rooms 4000ft <sup>2</sup> (2 locations) 40 people<br>Huddle Rooms 2000ft <sup>2</sup> (10 Locations) 6 people  | Small Conference Rooms 4007ft <sup>2</sup> (8 locations) 20 people<br>Large Conference Rooms 2611ft <sup>2</sup> (2 locations) 40 people<br>Huddle Rooms 657ft <sup>2</sup> (3 Locations) 6 people  |
| <b>Storage</b>   | Very limited, approximately 1,000 ft <sup>2</sup><br>In general, the class rooms were double purposed as storage facilities<br>Eg., Meter services qualified purposed these facilities as:<br>• Classroom<br>• Office<br>• Conference room<br>• Testing/Instructing                               | Ware House 2000 ft <sup>2</sup><br>Closet spaces 2000 ft <sup>2</sup> (30 locations)   | Ware House 2000 ft <sup>2</sup><br>Closet spaces 2500 ft <sup>2</sup> (35 locations)  | Ware House 2000 ft <sup>2</sup><br>Closet spaces 2500 ft <sup>2</sup> (35 locations)  | Ware House 1617 ft <sup>2</sup><br>Closet spaces 2240 ft <sup>2</sup> (35 locations)  |
| <b>Outdoor Training Area</b>   | Approximately 154,000 ft <sup>2</sup> (3.5 Acres)   | Approximately 30,000 ft <sup>2</sup> (70 Acres), under cover, capable of housing a 100 pole and performing bucket truck qualifications inside.<br>Move and relocate<br>• Overhead outdoor training<br>• Underground training<br>• Substation training<br>• Emergency Services<br>• Back Hose Training  | Approximately 30,000 ft <sup>2</sup> (70 Acres), under cover, capable of housing a 100 pole and performing bucket truck qualifications inside.<br>Move and relocate<br>• Overhead outdoor training<br>• Underground training<br>• Substation training<br>• Emergency Services<br>• Back Hose Training   | Approximately 30,000 ft <sup>2</sup> (70 Acres), under cover, capable of housing a 100 pole and performing bucket truck qualifications inside.<br>Move and relocate<br>• Overhead outdoor training<br>• Underground training<br>• Substation training<br>• Emergency Services<br>• Back Hose Training   |   |
| <b>Self Driving Track</b>  | None noted  | Include in above   | Include in above  | Include in above  |   |
| <b>Auditorium</b>  | None noted  | New 300 person capacity, portable raised stage. Approximately 3,000 ft <sup>2</sup>  | New 400 person capacity, portable raised stage. Approximately 4,000 ft <sup>2</sup>   | New 600 person capacity, portable raised stage. Approximately 6,000 ft <sup>2</sup>   | Large Conference room 100 people (2607 ft <sup>2</sup> )  |
| <b>System Simulator</b>  | Current simulator in a closet-sized room, does not provide realistic simulation of environment or provide adequate training space   | Transmission control room simulator 1600 ft <sup>2</sup>   | Transmission control room simulator 1600 ft <sup>2</sup>  | Transmission control room simulator 1600 ft <sup>2</sup>  |   |
| <b>Transmission Control Room</b>   | (separate location)   | (remain at current location)   | (remain at current location)  | Move one control room to new facility<br>Approximately 10,000 ft <sup>2</sup>   |   |
| <b>Common Area</b>   | N/A   | Welcome, reception, gathering, lobby<br>Approximately 1,000 ft <sup>2</sup>  | Welcome, reception, gathering, lobby<br>Approximately 1,000 ft <sup>2</sup>   | Welcome, reception, gathering, lobby<br>Approximately 2,000 ft <sup>2</sup>   | Reception 987 ft <sup>2</sup>   |
| <b>Cafeteria</b>   | N/A   | Approximately 1,000 ft <sup>2</sup>  | Approximately 1,000 ft <sup>2</sup>   | Approximately 4,000 ft <sup>2</sup>   | Food Service 4000 ft <sup>2</sup> distributed over 4 locations  |
| <b>Changing/Locker Rooms/<br/>Facilities (Bathrooms,<br/>Restrooms, Showers, HVAC,<br/>etc.)</b> | Restrooms inadequate, due to lack of numbers, and non-operational status. Customer Services area is adequate within office building   | Restrooms/Changing/Facility Rooms area 3000 ft <sup>2</sup>  | Restrooms/Changing/Facility Rooms area 3000 ft <sup>2</sup>   | Restrooms/Changing/Facility Rooms area 7000 ft <sup>2</sup>   | Restrooms/Changing/Facility Rooms area 1760 ft <sup>2</sup> distributed over 6 locations  |
| <b>Additional Space (Community<br/>Buildings, and Future Growth)</b>                             |   | Data Center 2500 ft <sup>2</sup> (4 locations)<br>Mail Room 500 ft <sup>2</sup><br>Print shop 1500ft <sup>2</sup><br>Gym 2000 ft <sup>2</sup>  | Data Center 2500 ft <sup>2</sup> (4 locations)<br>Mail Room 500 ft <sup>2</sup><br>Print shop 1500ft <sup>2</sup><br>Gym 2000 ft <sup>2</sup>   | Data Center 2500 ft <sup>2</sup> (4 locations)<br>Mail Room 500 ft <sup>2</sup><br>Print shop 1500ft <sup>2</sup><br>Museum 3000 ft <sup>2</sup><br>Gym 4000 ft <sup>2</sup>  | Data Center 1941 ft <sup>2</sup> distributed over 4 locations<br>Mail Room 420 ft <sup>2</sup> one location<br>Print shop 1550ft <sup>2</sup> one location  |

Source: Information Response #83

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

| Inside space                     | Approximately 5,000 ft <sup>2</sup> | Approximately 27,000 ft <sup>2</sup> | Approximately 38,000 ft <sup>2</sup> | Approximately 100,000 ft <sup>2</sup> | 90,000 ft <sup>2</sup> |
|----------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------|------------------------|
| <b>Staffing</b>                  |                                     |                                      |                                      |                                       |                        |
| Overhead Trainers                | 5                                   | 5                                    | 5                                    | 5                                     | 5                      |
| Underground Trainers             | 5                                   | 5                                    | 5                                    | 5                                     | 5                      |
| Electric Service Trainers        | 3                                   | 3                                    | 3                                    | 3                                     | 3                      |
| GP&T Trainers                    | 4                                   | 4                                    | 4                                    | 4                                     | 4                      |
| Transmission Operations Trainers | 3                                   | 3                                    | 3                                    | 3                                     | 3                      |
| Meter Services Trainers          | 3                                   | 3                                    | 3                                    | 3                                     | 3                      |
| Customer Service Trainers *      | 4                                   | 4                                    | 4                                    | 4                                     | 4                      |
| Manager                          | 1                                   | 1                                    | 1                                    | 1                                     | 1                      |
| Supervisors                      | 2                                   | 2                                    | 2                                    | 2                                     | 2                      |
| Analyst                          | 2                                   | 2                                    | 2                                    | 2                                     | 2                      |
| Clerks                           | 2                                   | 2                                    | 2                                    | 2                                     | 2                      |
| LMS Administrator                | 1                                   | 1                                    | 1                                    | 1                                     | 1                      |
| Training Developer               | 2                                   | 2                                    | 2                                    | 2                                     | 2                      |
| HR                               | 1                                   | 1                                    | 1                                    | 1                                     | 1                      |
| Facilities                       | 4                                   | 4                                    | 4                                    | 4                                     | 4                      |
| Total * Minus Customer           | 24                                  | 24                                   | 22                                   | 34                                    | 37                     |

Source: Information Response #83

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## 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

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### A. COVID-19 Safety Response

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#### 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 shows the Company, at minimum, used 40 documents and developed several procedures to control the spread of the disease.<sup>56</sup>

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.<sup>57</sup>

During interviews it 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.<sup>58</sup>

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#### 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.<sup>59</sup>; 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.<sup>60</sup>



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

|   |   |  |
|---|---|--|
|  <b>PSEG</b><br><i>Operational Excellence Model</i>  | <b>Job Hazard Analysis</b><br><b>UTILITY OPERATIONS</b>   | Page 1 of 7<br><b>CM-HS-JHA-CV-BASIC</b><br><b>VIRUS/ILLNESS</b>                     |
| <b>Purpose:</b><br><br><b>Location:</b><br><b>Departments:</b><br><b>JHA Team Members:</b><br><br><b>Job Classification:</b><br><b>PPE Required (No Active Case):</b><br><br><b>Additional PPE Required (ACTIVE CASE/SUSPECTED):</b><br><br><b>Tools and Equipment Required:</b><br><br><b>Job Preparation:</b><br><b>Hazardous Materials/Exposures:</b><br><b>Special Requirements Instructions:</b> | Accessing Customer Residence/Location/Establishment During Coronavirus Outbreak – BASIC PPE<br><br>Various<br>Electric Operations, Gas Operations, Customer Operations<br>Pat Reilley, Bridget Reilley, Ken Buess, Lee Wallace, Megan Merdinger, Michael Pokler<br><br>ALL<br>Hard Hat, Safety Glasses, FR Clothing, Task-specific gloves, work boots and task-specific specialty PPE<br><br>Nitrile gloves (worn alone or over required non-bulky work gloves),<br><b>For Electric Operations:</b> Nitrile gloves shall not be worn within minimum approach distances. See below for hand protection procedures.<br><br>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)<br><br>Stay informed with latest updates: <a href="http://www.cdc.gov/ncov">www.cdc.gov/ncov</a><br><br>Virus - Coronavirus<br><br><b>How is the Coronavirus Transmitted?</b><br><b>Person-to-person spread</b><br>The virus is thought to spread mainly from person-to-person. <ul style="list-style-type: none"> <li>Between people who are in close contact with one another (within about 6 feet).</li> <li>Through respiratory droplets produced when an infected person coughs or sneezes.</li> </ul> These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.<br><b>Spread from contact with infected surfaces or objects</b><br>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 spreads. |  |
| JHA   |   |  |
| Prepared by: JHA Team<br>CM-HS-JHA-CV-BASIC<br>Check <a href="#">PSEG OEM Document Warehouse</a> to verify that this is correct revision before use   |   | Effective: March 13, 2020<br>Version: Original Draft 1 Ver6<br>Copyright © 2020 PSEG |

Source: Information Response 73-001

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

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## 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:**

Source: Information Response 73-002

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- 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 our culture and there are many avenues to do this.

- Employees can and are expected to Stop the Job if they 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 they 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 One 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 present<sup>61</sup>.**

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

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## C. Culture/Leadership

When an 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

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### 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 an 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.

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### Recommendations

None





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## D. Hazard Identification

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### 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 falls<sup>62</sup>. The decision is communicated to field personnel using various means such as conference calls, telephone calls and face to face conversations<sup>63</sup>.



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




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**Delayed Start Time Due to Inclement Weather Conditions**

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**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.

**3. 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 for 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 undue 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

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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**

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




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**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.

**3. 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

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**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 2020<sup>64</sup>.



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



Source: Information Response #20

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

|                 |  |
|-----------------|--|
| <b>20.3</b>     | <b>Dog Safety</b>  |
| <b>20.3.1</b>   | <b>Purpose</b>   |
|                 | The purpose of this procedure is to provide guidance for employees to minimize the dangers posed by dogs when entering customer premises.  |
| <b>20.3.2</b>   | <b>Scope</b>   |
|                 | 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.  |
| <b>20.3.3</b>   | <b>Avoidance of Dog Attacks/Bites</b>  |
| <b>20.3.3.1</b> | 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.   |
| <b>20.3.3.2</b> | 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. |
| <b>20.3.3.3</b> | 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 repellent tools are as follows:  |
|                 | 1) It shall be used with discretion solely to repel an attacking dog who poses an immediate threat which cannot be avoided.  |
|                 | 2) It shall not be used under any other condition.   |
|                 | 3) If the repellent is used, the employee shall report to his supervisor the facts of the incident which justified its use.  |
| <b>20.3.3.4</b> | 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.  |

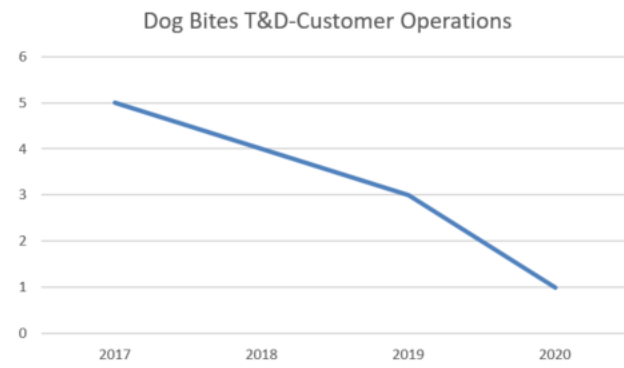
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Source: Information Response 20





**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 pans<sup>65</sup>

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

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**PSEG Long Island/Customer  
Partnership for Safety**

ADAM NATHANSON



Source: Information Response 21

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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.

1. Does meter pan cover have a sticker indicating? "HAZARDOUS METER ENCLOSURE DO NOT OPERATE".
2. 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:

|          |   |
|----------|---|
| <b>Y</b> | Meter pan is an Anchor  |
| <b>N</b> | Meter pan is not an Anchor  |
| <b>0</b> | No Survey-Est (ZERO = Account estimated (skipped), could not inspect) |

Source: Information Response 21

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**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.

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## Recommendations

None

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## E. Communications

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### 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

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### 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.<sup>66</sup>

**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 calls<sup>67</sup>. 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 organization<sup>68</sup>.

**Finding VI-13**      **Local operating procedures exist within the Divisions and are not consistent across the organization<sup>69</sup>.**

**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 restoration<sup>70</sup>. There were several accidents with foreign crews including three flash accidents during the last storm restoration<sup>71</sup>.

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## 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.)**

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## F. Training

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### 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*.<sup>72</sup>

**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.<sup>73</sup>

### **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.<sup>74</sup>

**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:<br>FLT0001LI, SAF0001LI, PPE0001LI,<br>SAF0002LI, SAF0003LI, SAF0004LI,<br>PPE0002LI, ENV0001LI, PPE003LI,<br>FLS0001LI, ELE0001LI, FAL0001LI,<br>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<br>Meter<br>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<br>Meter<br>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.  |

Source: Information Response 83-019





**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   |
| ENV0001LI | 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.  |

Source: Information Response 83-019

**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.  |

Source: Information Response 83-019



**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  |
| DWC0001LI | 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  |

Source: Information Response 83-019

**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 Blower | Snow Blower Safety                 | Snow Blower Safety  |
| IEQ0013LI   | Snow Removal Operations            | Includes classroom & hands-on training on safe practices and operation of snow plows, snow blowers & snow shoveling.  |
| ENV0002LI   | Tick Prevention                    | Prevention tips and proper use of repellants. This course is part of AET Training and is 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.<sup>75</sup>



**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               |

Source: Information Response 83-018

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**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

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**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   |

Source: Information Response 83-018

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**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   |

Source: Information Response 83-018

**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   |

Source: Information Response 83-018





**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   |

Source: Information Response 83-018

**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   |

Source: Information Response 83-018



**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   |

Source: Information Response 83-018

**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   |

Source: Information Response 83-018



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

| <b>Course Name</b>                                     | <b>Course Code</b> |
|--|--------------------|
| 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

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

| <b>Course Name</b>               | <b>Course Code</b> |
|----------------------------------|--------------------|
| Net Detented & Additive Metering | RES0001LI          |
| Network Training                 | RES0002LI          |
| New Business Installation        | RES0003LI          |

Source: Information Response 83-018

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**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   |

Source: Information Response 83-018



**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 |

Source: Information Response 83-018

**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.<sup>76</sup>





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

**Hicksville Training Facilities**



**Bethpage Classroom Training**



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

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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*.<sup>77</sup>

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**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.

Source: Information Response 83-001

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## 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.<sup>78</sup>

**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”<sup>79</sup>

**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.<sup>80</sup>

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## 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

|                      |  |
|----------------------|--|
| <b>Finding VII-1</b> | 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

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

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

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

<sup>4</sup> / Interviews 1 - 2

<sup>5</sup> / <https://www.lipower.org/mission/>

<sup>6</sup> / <https://callmepower.com/nv/utility/pseglvny#Service%20Map> and LIPA-Annual-Disclosure-Report-FY-2018

<sup>7</sup> / <https://www.psegliny.com/buildingrenovationservices/codesandstandards/redbook>

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<sup>9</sup> / [https://geo3.gggpht.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](https://geo3.gggpht.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)

<sup>10</sup> / <https://images1.cityfeet.com/i2/riKQokL2OxZXn9B27u6EKoQC2dPNEAnNQsqkV5z75s/110/999-stewart-ave-bethpage-photo-5-of-8.jpg>

[illegible]

<sup>12</sup> / <https://www.google.com/maps/place/Bridgehampton+PSEG+Garage/@40.9275913,-72.32626,342a,35y,39.39t/data=!3m1!1e3!4m13!1m7!3m6!1s0x89e8bec1cb0b94d5b0:0xb88fa9a62826366!2s1748+Montauk+Hwy,+Water+Mill,+NY+11976!3b!18m2!3d40.9293577!4d-72.3262337!3m4!1s0x89e8bec04b3415119:0xf331f647130b65ae!8m2!3d40.929601!4d-72.3249795?hl=en>

<sup>13</sup> / <https://www.google.com/maps/place/PSEG+Long+Island/@40.8782778,->

73.0096163,288a,35y,39.43t/data=13m11e3!4m13!1m7!3m6!1s0x89e846b0faaff47:0xa5a11578185bf0e1!2s2045+NY-112,+Coram,+NY+1172!3b!18m2!3d40.8804473!4d-73.0084266!3m4!1s0x89e846bd020b5b:0xbd58c243a30d67!8m2!3d40.8804213!4d-73.0085217!8l=en

<sup>14</sup> / <https://www.google.com/maps/@40.8591993,->

73.3860957,3a,80y,199.83h,93.78t/data=!3m7!1e13!m5!1s\_pUkAJsFpxBrOWSmbX61DQ!2e0!6s%2F%2Fgeo2.ggpht.com%2Fcbk%3Fpanoid%3D\_pUkAJsFpxBrOWSmbX61DQ%26output%3Dthumbnai!%26cb\_client%3Dsearch.revgeo\_and\_fetch.gps%26thumb%3D2%26w%3D96%26h%3D64%26yaw%3D286.3475%26pitch%3D0%26thumbfov%3D100!7i13312!8i6656?hl=en

[illegible]

73.7055466!3m4!1s0x89c264575a2ee8d3:0x5236e2b3ccfbf4ae!8m2!3d40.6442084!4d-73.7055466?hl=en

<sup>16</sup> / [https://www.google.com/maps/place/175+E+Old+Country+Rd,+Hicksville,+NY+11801/@40.7662539,-73.5123998,3a,75y,160.41h,90t/data=!3m7!1e1!3m5!1sK4JpKeIYYfuM5vaCYPgm2A!2e0!6s%2F%2Fgeo2.ggpht.com%2Fcbk%3Fpanoid%3DK4JpKeIYYfuM5vaCYPgm2A%26output%3Dthumbnail%26cb\\_client%3Dsearch.gws-prod.gps%26thumb%3D2%26w%3D86%26h%3D86%26yaw%3D160.414%26pitch%3D0%26thumbfov%3D100!7i16384!8i192!4m1!3m1!1s0x89c280555a7c2347:0x97a3e4272348776f!2s175+E+Old+Country+Rd,+Hicksville,+NY+11801!3b1!8m2!3d40.7654746!4d-73.5120166!3m4!1s0x89c280555a7c2347:0x97a3e4272348776f!8m2!3d40.7654746!4d-73.5120166?hl=en](https://www.google.com/maps/place/175+E+Old+Country+Rd,+Hicksville,+NY+11801/@40.7662539,-73.5123998,3a,75y,160.41h,90t/data=!3m7!1e1!3m5!1sK4JpKeIYYfuM5vaCYPgm2A!2e0!6s%2F%2Fgeo2.ggpht.com%2Fcbk%3Fpanoid%3DK4JpKeIYYfuM5vaCYPgm2A%26output%3Dthumbnail%26cb_client%3Dsearch.gws-prod.gps%26thumb%3D2%26w%3D86%26h%3D86%26yaw%3D160.414%26pitch%3D0%26thumbfov%3D100!7i16384!8i192!4m1!3m1!1s0x89c280555a7c2347:0x97a3e4272348776f!2s175+E+Old+Country+Rd,+Hicksville,+NY+11801!3b1!8m2!3d40.7654746!4d-73.5120166!3m4!1s0x89c280555a7c2347:0x97a3e4272348776f!8m2!3d40.7654746!4d-73.5120166?hl=en)

<sup>17</sup> / <https://www.google.com/maps/place/479+Park+Ave,+Lindenhurst,+NY+11757/@40.6852883,-73.3542031,237m/data=!3m1!1e3!4m1!1s0x89e9d3423a7ffadd:0x69bcdaec3bc7e93!2s479+Park+Ave,+Lindenhurst,+NY+11757!3b1!8m2!3d40.6855857!4d-73.3541086!3m4!1s0x89e9d3423a7ffadd:0x69bcdaec3bc7e93!8m2!3d40.6855857!4d-73.3541086?hl=en>

<sup>18</sup> / [https://www.google.com/maps/place/15+Park+Dr,+Melville,+NY+11747/@40.7686927,-73.4309482,3a,75y,347.77h,90t/data=!3m8!1e1!3m6!1sQWw2xqeAOtziTHSGWRzGfg!2e0!5s20180701T000000!6s%2F%2Fgeo1.ggpht.com%2Fcbk%3Fpanoid%3DQWw2xqeAOtziTHSGWRzGfg%26output%3Dthumbnail%26cb\\_client%3Dmaps\\_sv.tactile.gps%26thumb%3D2%26w%3D203%26h%3D100%26yaw%3D347.76892%26pitch%3D0%26thumbfov%3D100!7i13312!8i6656!4m7!3m6!1s0x89e82a460c75d6fb:0x55384953f2e5f03!8m2!3d40.769456!4d-73.4310043!14m1!1BCgIgARICCA!Phl=en](https://www.google.com/maps/place/15+Park+Dr,+Melville,+NY+11747/@40.7686927,-73.4309482,3a,75y,347.77h,90t/data=!3m8!1e1!3m6!1sQWw2xqeAOtziTHSGWRzGfg!2e0!5s20180701T000000!6s%2F%2Fgeo1.ggpht.com%2Fcbk%3Fpanoid%3DQWw2xqeAOtziTHSGWRzGfg%26output%3Dthumbnail%26cb_client%3Dmaps_sv.tactile.gps%26thumb%3D2%26w%3D203%26h%3D100%26yaw%3D347.76892%26pitch%3D0%26thumbfov%3D100!7i13312!8i6656!4m7!3m6!1s0x89e82a460c75d6fb:0x55384953f2e5f03!8m2!3d40.769456!4d-73.4310043!14m1!1BCgIgARICCA!Phl=en)

<sup>19</sup> / [https://www.google.com/maps/place/PSEG+Long+Island/@40.7669476,-72.997939,3a,75y,171.28h,90t/data=!3m7!1e1!3m5!1s7EQd8flvZLBtbzvaFMIE3Q!2e0!6s%2F%2Fgeo1.ggpht.com%2Fcbk%3Fpanoid%3D7EQd8flvZLBtbzvaFMIE3Q%26output%3Dthumbnail%26cb\\_client%3Dsearch.gws-prod.gps%26thumb%3D2%26w%3D86%26h%3D86%26yaw%3D171.28082%26pitch%3D0%26thumbfov%3D100!7i16384!8i192!4m1!3m1!1s0x89e8492a40b69ba1:0xc667b45f8710a86f2s448+E+Main+St+%23460,+East+Patchogue,+NY+11772!3b1!8m2!3d40.7668713!4d-72.9984075!3m4!1s0x89e8492a412835cb:0xa6a3be23a45da360!8m2!3d40.7666839!4d-72.9978868?hl=en](https://www.google.com/maps/place/PSEG+Long+Island/@40.7669476,-72.997939,3a,75y,171.28h,90t/data=!3m7!1e1!3m5!1s7EQd8flvZLBtbzvaFMIE3Q!2e0!6s%2F%2Fgeo1.ggpht.com%2Fcbk%3Fpanoid%3D7EQd8flvZLBtbzvaFMIE3Q%26output%3Dthumbnail%26cb_client%3Dsearch.gws-prod.gps%26thumb%3D2%26w%3D86%26h%3D86%26yaw%3D171.28082%26pitch%3D0%26thumbfov%3D100!7i16384!8i192!4m1!3m1!1s0x89e8492a40b69ba1:0xc667b45f8710a86f2s448+E+Main+St+%23460,+East+Patchogue,+NY+11772!3b1!8m2!3d40.7668713!4d-72.9984075!3m4!1s0x89e8492a412835cb:0xa6a3be23a45da360!8m2!3d40.7666839!4d-72.9978868?hl=en)

<sup>20</sup> / <https://www.google.com/maps/place/416+NY-25A,+St+James,+NY+11780/@40.9454529,-73.0846352,214a,35y,39.46t/data=!3m1!1e3!4m5!3m4!1s0x89e84078c1cb0c9f:0x57d6d782484888be!8m2!3d40.9452076!4d-73.086066>

<sup>21</sup> / <https://www.google.com/maps/place/PSEG+Long+Island/@40.9408813,-72.6501387,134a,35y,236.32h,44.99t/data=!3m1!1e3!4m5!3m4!1s0x89e88b1ae8cde00f:0xa7b4754910b4db99!8m2!3d40.9402337!4d-72.6519425>

<sup>22</sup> / <https://www.google.com/maps/@40.7840689,-73.6486031,207m/data=!3m1!1e3>

<sup>23</sup> / <https://www.google.com/maps/place/3524+Merrick+Rd,+Seaford,+NY+11783/@40.6627514,-73.5008764,240a,35y,39.48t/data=!3m1!1e3!4m5!3m4!1s0x89c27f22b3f5ff57:0x6e857f9738a08a85!8m2!3d40.6648796!4d-73.5010173>

<sup>24</sup> / <https://www.google.com/maps/place/333+Earle+Ovington+Blvd,+Uniondale,+NY+11553/@40.7217135,-73.5946291,411a,35y,39.36t/data=!3m1!1e3!4m1!1s0x89c27d90bb5927f5:0xa743f0a7f14cce97!2s333+Earle+Ovington+Blvd,+Uniondale,+NY+11553!3b1!8m2!3d40.7247357!4d-73.5936418!3m4!1s0x89c27d90bb5927f5:0xa743f0a7f14cce97!8m2!3d40.7247357!4d-73.5936418>

<sup>25</sup> / Information Réponse 59

<sup>26</sup> / Information Response 59 and Interview 28

<sup>27</sup> / Information Réponse 59 and Interviews 26, 27, and 30

<sup>28</sup> / Information Réponse 59 and Interview 28

<sup>29</sup> / Interviews 26, 28, 29, and 30

<sup>30</sup> / <http://www.ehsdb.com/safety-formulas.php>

<sup>31</sup> / <http://www.ehsdb.com/safety-formulas.php>

<sup>32</sup> / Information Responses 53 and 61 and Consultant Analysis

<sup>33</sup> / Information Responses 53 and 61 and Consultant Analysis

<sup>34</sup> / <http://www.ehsdb.com/safety-formulas.php>

<sup>35</sup> / Information Responses 53 and 61 and Consultant Analysis

<sup>36</sup> / Information Responses 53 and 61 and Consultant Analysis

<sup>37</sup> / Consultant Analysis

<sup>38</sup> / Information Response 91 , 100820 email from PSEG-LI RE: [EXTERNAL] OSA Targets for Motor Vehicle Accidents?, and Consultant Analysis

<sup>39</sup> / Information Response 91 and Consultant Analysis

<sup>40</sup> / Interviews 27 and 28

<sup>41</sup> / Information Responses 53 and 6 and Consultant Analysis

<sup>42</sup> / Information Responses 50 and 71 and Consultant Analysis

<sup>43</sup> / Information Response 53 and 61 and Consultant Analysis

<sup>44</sup> / Information Responses 8 and 67 and Consultant Analysis

<sup>45</sup> / Information Response 10 and 69 and Consultant Analysis

<sup>46</sup> / Information Responses 9 and 68 and Consultant Analysis

<sup>47</sup> / Information Responses 83-002 and 83-004

<sup>48</sup> / Information Responses 83-001, 83-005, and 83-007

<sup>49</sup> / Information Responses 83-001 and 83-016

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

