

PSEG LONG ISLAND LLC
on Behalf of and as Agent for the
LONG ISLAND LIGHTING COMPANY d/b/a LIPA

Southampton to Deerfield Transmission Project

ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN

Appendix C
Emergency Response Plan

1 OVERVIEW

The following Appendix C or “Emergency Response Plan” (ERP) for the Southampton to Deerfield Transmission Project (the Project) has been developed in accordance with PSEG Long Island safety standards, and with federal and state requirements for construction activities.

PSEG Long Island (the Certificate Holder), its employees and contractors, are committed to safety and the wellbeing of all who endeavor to work on the Project or any project within its service territory. The Project is committed to the ideal that every employee and contractor has the right and obligation to stop work if an unsafe situation is occurring. The Project is committed to proactively addressing safety on a daily basis before the work begins, and learning from the activities of the day when the work is completed.

The Appendix addresses Certificate Conditions 73, 74, 75 of Case 24-T-0113, which state:

73. The Certificate Holder shall regard DPS Staff representatives (authorized pursuant to PSL §8) as the Commission’s designated representatives in the field. In the event of any emergency resulting from specific construction or maintenance activities that violate or may violate the terms of the Certificate or any other order in this proceeding, such DPS Staff representatives may issue a stop work order for that location or activity.
74. A stop work order shall expire 24 hours after issued unless confirmed by a single Commissioner. If a stop work order is so confirmed, the Certificate Holder may seek reconsideration from the confirming Commissioner or the whole Commission.
75. Before exercising stop work authority, DPS Staff representatives will consult with DPS Staff after it has been finalized."

In addition, if an OSHA Reportable accident occurs in connection with work on the Project, the Certificate Holder shall report any such accident to DPS Staff as soon as possible. A copy of the accident report, if any, shall be provided to DPS upon completion.

The ERP focuses on life safety and emergency issues occurring during the course of the work. Preparation for, and other emergency issues such as environmental contamination, are not addressed within the appendix.

2 PERSONNEL

PSEG Long Island and the contractors performing the work for the Project will establish competent safety personnel who will be on site daily and responsible for establishing and maintaining safety procedures and protocols. The competent safety personnel will be identified to the DPS Field Inspector, and will provide regular reporting on the daily activities, hours worked, and any perceived incidents or near misses which can benefit the workers for safety training.

As noted above, ALL PERSONNEL on site will be charged with the right and obligation to stop work if an unsafe operation or activity is observed in the field.

3 PRE-PLANNING

In order to maintain a safe worksite, prior to the commencement of any activities, a Health and Safety Plan or “HASP” will be created for each contractor and each planned and permitted activity. The HASP contains a multitude of information regarding activities and safety concerns which arise from those activities. Such information includes: Stop work authority; biological and environmental hazards; vehicle traffic hazards; and more.

A key component of the HASP is the identification of not only issues to monitor, but also how to respond to incidents which occur in the field. A range of responses, and the subsequent reporting, are documented, including non-life threatening incident response, to life threatening incident response.

The HASP includes the nearest locations of emergency service providers (fire, police and ambulance); hospitals with emergency trauma care; occupational health facilities; and travel paths and times to each, including turn-by-turn descriptions to emergency rooms.

The HASP includes the safety personnel noted above, their contact information, and their operating activities within the construction zone.

The HASP includes the requirements for safety preparation for each worksite, including but not limited to: The location of an AED; the number of people required to be versed and certified in CPR and the use of AEDs; the number of people required to be versed and certified in first aid; the location of the first aid equipment; the location of fire suppression equipment; and other important information.

The HASP includes the appropriate reporting of incidents, including those described within the Certificate Conditions which may lead to a Stop Work Order, or raise to the level of an OSHA-level incident.

Each person working on the jobsite must sign and acknowledge the HASP daily at the pre-task tailboard meetings on the job site. The pre-task tailboard highlights activities with increased safety risks (i.e., crane operations, splice vault activities, etc.) as well as all activities planned for the day. The tailboards establish who will be performing the work in order to verify competency for that task.

An example HASP is included within this Appendix.

4 EMERGENCY RESPONSE

4.1 Life Safety

In the event of a life-threatening emergency or incident (fire, injury, or other), work shall be stopped at that location, 911 dialed with information regarding the incident location, the incident issues, and how personnel can assist on site until emergency responders arrive.

As noted in the HASP, the appropriate personnel shall administer lifesaving assistance and first aid until

assistance arrives. Upon clearing of the incident, those on site will secure the location to allow for incident investigation by the appropriate authorities.

The Certificate Holder shall cooperate and coordinate with federal and state agencies to investigate the incident, and provide the necessary reporting as described in the Certificate Conditions above.

4.2 Utility Emergency (Dig In)

In the event of an unintended impact to underground utilities (Dig Ins), the Certificate Holder and its contractors will comply with NYS Code Rule 753 which contains emergency requirements 753-3.14.

The code states that, in the case of a Dig In, the contractor will immediately evacuate the area and stop work, contact 911, and await emergency services.

A report of the Dig In will be provided to the DPS in accordance with the Certificate Conditions, including the resolution of the utility impact.

ATTACHMENT 1 – EXAMPLE HASP

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Introduction

The following document has been prepared to assist Field Construction Coordinators (FCCs) and others in communicating our standards for Safety and Health Plans to contractors and to help in the evaluation of a safety plan. It may be provided to contractors as an example of the issues to cover in a plan as well as the level of detail to provide. However, since each project is different, Safety and Health Plans must address the safety issues unique to that project. The level of detail provided in the plan should be commensurate with the complexity of the project activities and site conditions. Safety and Health Plans should be considered a tool for planning, hazard assessment and control, injury prevention, and communicating with the workforce. As the job progresses, changes to the plan to capture safety improvements should be encouraged.

Please note that guidance is provided in *italics* and examples are provided in regular black print.

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ABC CONSTRUCTION SAFETY AND HEALTH WORK PLAN

1.0 Scope of Work

A brief description of the project should be provided.

Example: The project will include the construction of new structures and the installation of equipment and associated controls and equipment. The project will also include the installation of a new transformer and switchgear.

2.0 Project Personnel

2.1 Roles and Responsibilities:

The names of the key personal working on the project must be provided with a description of the roles and responsibilities of each person. A description of who will be responsible for health and safety of the employees and subcontractor employees should be included. For multi-employer work sites, the General Contractor (GC) is responsible for all employees and subcontractors. This section should include a statement addressing this responsibility.

Example: ABC Construction Co. as the General Contractor (GC) will be responsible for the safety of its employees and the employees of subcontractors. ABC will ensure that all employees on site will have the skills and qualifications necessary to perform their job safely and effectively and in accordance with all regulatory requirements. Key project personal are listed below.

Project Manager – Mary T. Brady

The Project Manager will have the responsibility for monitoring and enforcing the GC's and Owner's safety requirements. The Project Manager has full authority to immediately correct any safety hazard as they deem appropriate. The Project Manager shall:

- Serve as the Competent Person and delegate other qualified employees as necessary to serve as a Competent Person;
- Meet with the foreman of each trade at the start of each day to review the specific tasks of the workers;
- Walk the site with the foreman to investigate potential safety hazards
- Where hazards are observed, take prompt corrective action;

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- Have the authority to order a work stoppage in the event of a serious safety issue.

General Foreman – (Competent Person) – John M. Ramirez

- Be in charge of the day-to-day details of this project-specific safety plan;
- Ensure that work is performed in accordance with the company work procedures, the owner requirements and the Safety & Health Plan;
- Walk the job site at the end of each day to ensure a safe environment;
- Where hazards are observed, take prompt corrective action;
- Have the authority to order a work stoppage in the event of a serious safety issue..

The Competent Person shall be the Project Manager, foreman, or any other employee designated by the Project Manager. The Competent Person is defined by OSHA as an individual who can identify hazards and has the authority to take prompt corrective action. Competent Person supervision is necessary for activities such as scaffolding work, lockout procedures, live circuit work, and welding/hot work.

Electrical Foreman – (Competent Person) - William T. Bruschi

- Licensed electrician to supervise all electrical work

Employees and Sub- Contractors:

- GC employees and all sub-contractor employees are responsible for following all safety requirements outlined in this plan.
- There shall be at least two employees trained in CPR and First Aid on-site during working hours. *[Note: This is an OSHA requirement for working around voltages above 600 volts as specified in 29 CFR 1910.269.]*
- Each employee and sub-contractor is responsible for reporting to supervision any incidents including near-miss incidents.
- Each employee and sub-contractor has the authority to refuse to work or to request that others stop work if that employee believes the conditions to be unsafe.

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2.2 Qualifications

PSEGLI expects all contractors to have the skills, qualifications and equipment necessary to perform their jobs safely, effectively, and protective of the environment and community. For example, those who work near energized lines or equipment, electrical contractor employees must already be electrically-qualified as required by OSHA in 29 CFR 1910.269. Another example is if work requires excavation, there must be someone on-site who is qualified as a competent person. Additionally, Contractors must possess all required license, such as a New York State Hoisting Engineers License, and permits necessary for the job. This section should state the qualifications and licenses necessary for the work and how the contractor ensures only qualified workers are on the job.

3.0 Hazard Identification and Risk Assessment

This section should include the initial, general risk assessment that was provided when the work was initially bid and the more specific hazard identification and risk assessment with controls that was developed when the work was awarded.

3.1 Initial Assessment

Example: The following table identifies major trade/task areas, the primary hazards, and proposed mitigation steps. Mitigation steps shall be revised as necessary to reflect project changes. Standard, minimum PPE attire in the designated construction work area shall include safety glasses with side-shields, hart hat, and EH steel-toed / composite toe shoes.

HAZARD / RISK ASSESSMENT

Prepared by: <u>Thomas J. Damon</u>		Date: <u>Feb. 28, 2005</u>	
Hazard Identification and Risk Assessment Worksheet			
This table presented the initial evaluation of the overall hazards of a substation construction job. Refer to the following Project Specific Hazard Identification and Risk Assessment Worksheet for more specific information regarding the hazards and control measures of the substation project.			
Activity:	Construction of PSEGLI / LIPA Substation	Overall Risk Rank:	Low Medium <u>High</u>

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Major Tasks	Hazard	Risk Ranking	Controls/Mitigation Steps: Engineering; Administrative; PPE
Substation Construction	Construction activities in proximity to existing 23kV lines; Construction activities adjacent to energized equipment in existing substation; Hoisting and Rigging issues; Excavation issues.		Maintain MAD to energized equipment. Use Safety Observer when needed Barricade work area. Use proper slings, and rated lifting equipment. Notify 811 Dig Safe – outside plant. PSEGLI Survey – Inside plant. Shore- up excavation when required.

3.2 Project-Specific Hazard Identification, Risk Assessment and Controls

After the job is awarded, more detailed, project-specific work tasks must be developed and the hazards associated with the tasks must be identified. To mitigate the risks associated with the hazards, controls (engineered, work practices, procedures, PPE, etc) must be put in place. This section in the Safety & Health Plan should document the identification of these project-specific tasks, hazards and controls. This information should serve as the basis of the Safety and Health Plan.

As work progresses, it may be necessary to add or change the tasks and controls. Any significant changes to the scope of work, work practices and/or site conditions shall be evaluated for new hazards and the associated risks. As necessary, new controls will be identified and documented. The safety plan must be amended for site-specific, significant changes. Any changes to the job will be reviewed and documented in a job brief. If the change is temporary and minor, the new information may be documented in the job brief only.

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Example

Project Specific Hazard Identification and Risk Assessment Worksheet		
Prepared by: Thomas. J. Damon		Date: June 29, 2005
Location: LIPA / PSEGLI Substation , Street, City, State		
TASK	HAZARD	MITIGATION
1. Mobilization /Material Handling		
1. Unloading vehicles 2. Mechanical lifting equipment 3. Manual handling	1. Lifting equipment failures 2. Persons struck by equipment, vehicles 3. Back and other muscle strains slips /trips / falls	<i>Administrative Controls:</i> <ul style="list-style-type: none"> • Use proper lifting techniques. • Follow equipment maintenance requirements. • Inspect all lifting and rigging equipment before use. • NYS Hoisting Engineers License • Maintain proper distance from operating equipment • Keep walkways clear of material and mitigate slippery surfaces. • Training (Task Specific) <i>Engineering Controls:</i> <ul style="list-style-type: none"> • Barricade work area. • Use properly rated slings, and lifting equipment. <i>PPE Controls:</i> <ul style="list-style-type: none"> • Wear (PPE) task specific where required. • Wear EH rated Safety shoes
2. Excavations		
<ul style="list-style-type: none"> ▪ Mechanical Digging equipment ▪ Open pits / trenches 	Persons struck by vehicles, equipment Mechanical equipment failures Excessive noise Cave-ins, entrapment Confined space entry hazards Hazardous atmospheres Potential presence of soil	Barricade work area. Notify Dig Safe File Dig Safe number with the work plan. Shore up excavation when required PPE (Task Specific), hearing protection when necessary 85 decibels NYS Hoisting Engineers License Follow equipment maintenance requirements Training

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<ul style="list-style-type: none"> Entering excavation, if necessary 	contaminants or other waste products Nature of ground, such as non-cohesive soil, rock, fractured rock, etc. Rain Machinery moving near excavation Vibration from machinery in or near excavation Piles of excavated material beside excavation Struck by objects from above excavation Slips/trips/falls Machinery moving near excavation Vibration from machinery in or near excavation Presence of building or other structures near excavation Piles of excavated material beside excavation Struck by objects from above excavation Slips/Trips/Falls	Follow Competent Person Requirements Limit approach of vehicles and equipment to open excavation, use barriers, wheel buffers Slope and bench if necessary Egress procedures Air monitoring Ventilation Good housekeeping around excavation Place excavated materials, equipment and other materials minimum of 2' away from excavation Remove persons from the excavation when mechanically lifting and placing loads in excavation Do not lift or suspend loads over person in excavation
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3. Installation of foundations		
<ul style="list-style-type: none"> Foundation lay out Mechanical lifting equipment (refer also to section 1 above) Install forms Pour concrete foundation 	Manual handling Cuts from skill saw Strikes from vehicles, equipment Concrete/chemical burns Manual handling Strike by vehicle Slips/trips/falls	Dig safe requirements Equipment guards Training PPE (Task specific) Barricade work area. Shore excavations where required. Refer to construction drawings and specifications
4. Installation of structures		
<ul style="list-style-type: none"> Installation of ground grid Set structures on foundations Lift and install structures using Mechanical lifting equipment Working on overhead structures 	Working at heights – Falls from structures or Aerial lift equipment Equipment operation – strike by equipment Manual handling Excavation (see above) Mechanical failures, including cad welding Compression connectors	Barricade work area. NYS Hoisting Engineers License Use properly rated rigging equipment. Inspect rigging equipment before use. Use harness and fall protection equipment. Dig safe procedures Training, (task specific PPE) Equipment maintenance requirements Work area identification
5. Installation of electrical equipment		
<ul style="list-style-type: none"> Install equipment with mechanical lifting equipment. Manual Handling Install station service transformer and connections 	Equipment operation – strikes by equipment, electrical contact Manual handling Mechanical failures Overhead energized lines, equipment Working at heights Back and other muscle strains slips /trips / falls	Barricade work area. Use properly rated rigging equipment. Inspect rigging equipment before use. Training, Task specific PPE NYS Hoisting Engineers License Equipment maintenance requirements Work area identification Fall Protection devices Maintain MAD from energized lines / use protective cover-up equipment Use proper lifting techniques. Wear EH rated Safety shoes

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		Keep walkways clear of material and mitigate slippery surfaces.
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6. Prepare (drill, hydraulic punch & press, paint, welding) electrical bus for installation

<ul style="list-style-type: none"> Assemble bus work and attach mounting hardware and connection points. 	Electrical shock from tools Flying debris Mechanical failure Chemical (paints, solvents) Welding - arcs or flash Manual handling Strikes by conductor	GFI protection Proper ventilation Training, Task specific PPE, Welding Mask Welding procedures Provide mechanical protection to equipment. NYC and Nassau County require Fire Marshal certificate of fitness certificate.
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7. Install bus work

<ul style="list-style-type: none"> Install bus work on structure Make connections to bus work. 	Equipment operation – strikes by equipment, Manual handling Mechanical failures Compression connectors Welding - arcs or flash Working at heights	Training, Task specific PPE NYS Hoisting Engineers license Equipment maintenance requirements Work area identification Welding procedures Fall Protection
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		Provide mechanical protection to equipment
8. Install conduit to equipment		
<ul style="list-style-type: none"> Excavate trench Install pipe in trench 	Mechanical failure Burns from heater Electrical shock from equipment Manual handling Trenching and excavation Strikes Cuts (saws) Fumes from heating PVC conduit	Dig safe procedures Training, Task specific PPE Use of trenching equipment Equipment maintenance requirements Work area identification GFI protection Proper ventilation
9. Install control cable and terminate		
<ul style="list-style-type: none"> Install pulling line/ Pull cable /Plug Ducts Prepare cable for termination 	Manual handling, heavy lifting Mechanical failure (electrical cable puller) Electric shock from equipment Strikes, crushing Cuts Electrical contact (metal snake) Chemical hazard - Pulling soap/lubrication Tanks - Air compressor Repetitive motion (crimping, cutting)	Training, Task specific PPE Fall protection (Mechanical cable pulling equipment Use of soap/lubrication GFI protection Work area identification Safety observer Proper handling Proper notification to dispatch control center for work on energized switch boards
10. Testing		
<ul style="list-style-type: none"> Transformer Testing Ground Grid Testing 	Contact with energized equipment	Isolate equipment to be tested Barricade test area Notify employees that testing in progress Wear Task specific PPE, Class # Rubber gloves , 8 Calorie FR clothing
11. Demobilization / Material Handling		

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<ul style="list-style-type: none"> ▪ Police the work site and pick up trash and remove debris and / or excess material. Load/unload vehicles and equipment. ▪ Clean and store tools and equipment. ▪ Clean and inspect construction vehicles and equipment. ▪ Transport vehicles and equipment to storage area. 	<p>Contact with overhead lines/equipment</p> <p>Lifting equipment failures</p> <p>Persons struck by equipment, vehicles</p> <p>Back and other muscle strains slips /trips / falls</p> <p>Manual handling</p>	<p>Off load vehicles clear of overhead lines.</p> <p>Maintain MAD to energized equipment.</p> <p>Use Safety Observer when needed, escort vehicles to/from station</p> <p>Barricade work area. Wear task specific PPE where required.</p> <p>Inspect all lifting and rigging equipment before use.</p> <p>Use properly rated slings, and lifting equipment.</p> <p>Follow equipment maintenance requirements</p> <p>NYS Hoisting Engineers License</p> <p>Maintain proper distance from operating equipment.</p> <p>Training</p> <p>Use proper lifting techniques.</p> <p>Wear EH rated Safety shoes</p> <p>Keep walkways clear of material and mitigate slippery surfaces.</p>
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Project Specific Hazard Identification and Risk Assessment Worksheet

Any significant changes to the scope of work, work practices and/or site conditions shall be evaluated for new hazards and the associated risks. As necessary, new controls will be identified and documented. This safety plan will be amended for site-specific, significant changes. Any changes to the job will be reviewed and documented in a job brief. Document any changes or any additional tasks, hazards and mitigations in the table below.

Prepared by:

Date:

Location:

TASK	HAZARD	MITIGATION

4.0. Communication

This section should discuss the different ways safety issues and incidents are communicated to the contractor's employees and PSEGLI representatives. It should include at least the items below.

4.1 Emergencies

Methods of communicating life-threatening emergencies must be determined and communication devices tested before the start of a job. The location and directions to the job site must be readily available at the job site and at the office that may be communicating the emergency to responders. The location and directions to the closest emergency medical facility must also be available on site. This section should discuss the contractor's means of responding to an emergency. The emergency contact names and numbers should be included. Refer to Appendix A for an example.

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4.2 Incident Reporting and Analysis

This section should state the steps the contractor will take to report and investigate PSEGLI work-related incidents, including near miss incidents, injuries/illnesses, vehicle damage, switching errors, incidents that may result in adverse public impact, property damage, system interruption, and any hazardous conditions that may be observed.

4.3 Safety Meetings and Job Briefings:

This section should describe how often safety meetings will take place and who will attend. It should also state the commitment to comply with regulatory and company requirements, including the requirements for documented, signed job briefs that are available on-site and retained for 30 days after the job is complete.

4.4 Safety and Health Plan

The contents of the Safety and Health Plan must be reviewed with the work crews at a minimum, before the start of the project, whenever there is a significant change, or when new workers join the crew. The review should focus on the work tasks and associated hazards, risks and control measures. This section should include a commitment to familiarize workers with the Plan.

5.0 PSEGLI Technical Safety Requirements

The PSEGLI Safety Procedure entitled, “Contractor Safety Requirements”, presents rules and work practices that are unique to operations at PSEGLI. Contractors will be subject to all or some of these requirements depending on the work. This section should outline the applicable requirements to ensure the information is available to the workers on-site.

Examples of areas that may be addressed include:

- PPE
- Flame retardant clothing requirements
- Rubber gloves and sleeves
- Isolation of energized apparatus
- Use of safety observers
- Work zone traffic control
- Qualifying *non-electrical* workers to work near energized lines and equipment
- Fall protection
- Substation work area identification
- Notification of Control Authority

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- Pole/structure inspection
- Enclosed space assessment, entry and non-entry rescue procedures

6.0 Safety Compliance

The Safety and Health Plan should include a description of how the contractor will monitor compliance with regulatory requirements, their own standards and PSEGLI's requirements. For example, the contractor could discuss daily inspections, participation in Safety Observation Tours, reasons for a worker's dismissal, audits, and responses to compliance issues.

7.0 Environmental Compliance

Contractors must comply with all environmental regulations, permit conditions and restrictions. In accordance with company requirements, FCCs or other PSEGLI representatives are responsible to monitor environmental conditions during the project and ensure deficiencies and emergencies are handled appropriately. Although not required, it may be beneficial for the contractor to briefly address how environmental compliance will be maintained.

8.0 General Project Work Plan

In Section 3.2 above, work tasks are listed with associated hazards, risk and risk controls. In this section, the contractor should list all of the major steps in the project including administrative tasks, such site orientation meetings or equipment inspections, which may not be included in the hazard identification and risk assessment section. Refer to Appendix B.

9.0 ABC Construction Company Requirements

Contractors should add any information that they feel would be beneficial to workers on-site such as their own procedures or work instructions. It may be included in Appendix C or within the Safety and Health Plan sections.

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Appendix A – Emergency Contact Information - Example

SAFETY AND HEALTH PLAN **EMERGENCY CONTACT INFORMATION**

Job Number:	<u>Location</u> Street: Town:
Circuit Number:	Project Manager:
Description of Work: Substation Construction	
EMERGENCY CONTACT INFORMATION	
CONTACT NAME	TELEPHONE NUMBER
Local Emergency Medical Services Police Emergency Fire Emergency	911
Local Police Non-Emergency Number	
Local Fire Dept. Non-Emergency Number	
<u>Nearest Hospital</u> Name: Location: Directions: Refer to Attached Map	
ABC Construction Safety Representative Name:	
ABC Construction Site Supervisor Name:	
PSEGLI Contact Person Name:	
PSEGLI Safety Representative Name:	
ABC Construction Environmental Representative Name:	
ABC Construction LLC. Main Office	

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Appendix B – General Project Work Plan – Example

General Project Work Plan –PSEGLI / LIPA Substation

1. Mobilization
 - Preplan and secure and organize equipment, tooling and manpower
 - Secure entry to site and stage equipment
 - Stage Trailer and secure temporary electrical service
2. Preplan and Site indoctrination
 - Meet with FCC (PSEGLI), review man-loaded schedule, and plan for outages
 - Orientation meeting on site with crew and subcontractors. Review ALL safety procedures and plans. Complete all needed Site Awareness and Competent Person designation.
 - Review company expectations and work rules. Explain our expectations for workmanship
3. Site Preparation
 - Visually inspect the poles and structures before work is started. Communicate any defects or hazardous conditions to the PSEGLI FCC as necessary
 - Inspect tools and vehicles (equipment) prior to use, note all deficiencies and report to ABC Construction Garage Supervisor.
4. Commence Work – Civil
 - Excavation for equipment foundations
 - Excavate and install conduit runs to all equipment
 - Excavate and install cable trench
 - Backfill and grade to 18” below finish grade
 - Excavate for Storm Water Basin and install piping
 - Install new Control House foundation
 - Install 2-4”and 1-3” conduits for AC power and future fiber Optics to Thornton Drive
 - Installation of Cathodic Protection equipment
5. Commence Work – Electrical
 - Install Main Ground Cable (248mcm)
 - Install 2’ by 2’ Copper Mesh
 - Test the Lothrop Ave. Substation (30 MVA)
 - Dis-assemble the Lothrop Ave. transformer and ready for riggers (transport)
 - Re-assemble the Lothrop Ave. transformer after delivery
 - Vacuum fill the transformer, re-test.
 - Installation of 115kv arrestor at cable structure and make connections
 - Installation of 115kv circuit switch (w/ integral motor operator)

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- Disconnect Switch and Switch stand
- Prepare, “Dress” 30 MVA transformer w/ 46kv and 115kv arrestors
- Install one 46 kv “wound” type transformer on “B’ phase between secondary breaker and transformer
- Install 3 – 46kv, 600 amp disconnects
- Install 3 – 46kv, 2000 amp SF6 Circuit breakers
- Install 46 kv Cable Termination structure, arrestors and substation connections
- Install 3 – 46kv “ wound” type Voltage transformer. Make up connections on single structure and secondaries for relays to control house.
- Install 46kv arrestors 2 Bus side reactor breakers
- Install 46kv arrestors ahead of shunt reactors (vendor supplied)
- Install 6 – 46kv Shunt Reactors, “Wye” connected into 2 banks
- Complete final assembly of Control House, as needed
- Install Control House Control Cables to field equipment

6. Rigging

- Prepare Lothrop Ave. Transformer and transport to site
- Rig and install Control House onto new foundation

7. Testing

- Ready and Support for Owner testing

8. Clean up

- a. Clean up and ready Site for owner acceptance

9. De-mobilization

- Release of manpower
- Return all equipment.

10. Stand Down

- Provide all documentation required to owner