

HEALTH AND SAFETY REQUIREMENTS

(a) Definitions. The following definitions have the following meanings for the purposes of these Health and Safety Requirements:

(i) **“Applicable Laws”** means all foreign, federal, state and local laws, constitutions, acts, statutes, rules, regulations, requirements, directives, policies, guidance, guidelines, decisions, determinations, treaties, ordinances, judgments, codes, decrees, proclamations, injunctions and orders of any Governmental Authority, and all codes (whether codifying laws or standards), in each case applicable to the Site, the Work, the places where the Work is being or to be performed, a Project, the Facility (if any), or the Parties or their respective contractors or agents or to the Subcontractors.

(ii) **“Applicable Permits”** means all valid waivers, exemptions, variances, franchises, permissions, concessions, permits, approvals, consents, authorizations, registrations, grants, acknowledgments, agreements, licenses or similar orders of, or from, any Governmental Authority having jurisdiction over the matter in question, required to be obtained or maintained in connection with the planning, undertaking or performance of the applicable Work, the Project, the Facility (if any), or Site, as may be in effect from time to time.

(iii) **“Business Day”** means a day other than a Saturday, Sunday or Company-recognized holiday.

(iv) **“Claims”** means claims, demands, suits, allegations, or causes of action, whether at law or in equity, and whether based on statute, regulation, rule, ordinance, code, standard or common law or on theories of contract, tort, strict liability or otherwise (even if such claims may be later proven false, fraudulent, or groundless regardless of whether a lawsuit has been filed). For the avoidance of doubt, Claims includes, but is not limited to, investigations conducted by any Governmental Authority.

(v) **“Company”** means PPL Electric Utilities Corporation.

(vi) **“Contract”** means the terms and conditions of the agreement, the exhibits thereto, any and all releases and authorizations, all written amendments, modifications and supplements to the agreement or any of the exhibits thereto and any and all change orders that concern Company and Contractor.

(vii) **“Contractor Party”** or **“Contractor Parties”** means Contractor, its affiliates and Subcontractors, and their respective directors, officers, agents and employees.

(viii) **“Contract Schedule”** means a schedule for performance of the applicable Work as set forth in the applicable Scope of Work.

(ix) **“Contractor’s H&S Plan”** means a written health, safety and accident prevention plan specifically applicable to the Work, which plan complies with Good Industry Practices, all Applicable Laws and all Applicable Permits and includes a Risk Assessment and the number of safety representatives (indicating whether full-time or part-time) that will be available during the performance of the Work, which plan shall be prepared in accordance with the Contract.

(x) **“Facility”** means the facilities contemplated to be engineered, procured, maintained, repaired, replaced, constructed and/or otherwise serviced by Contractor under the Scope of Work.

(xi) **“Final Acceptance”** means Contractor’s fulfillment of all of the conditions thereto set forth in the Contract for the applicable Work, and Company’s acceptance thereof.

(xii) **“Good Industry Practices”** means in accordance with the practices, methods and procedures used by, and the degree of skill, diligence, prudence, foresight and judgment that would reasonably be expected to be observed by, first class companies conducting work similar to the applicable Work for similarly situated counterparties in the PJM Interconnection, L.L.C. region taking into account, as appropriate, the recommendations and requirements of vendors of Materials, and including the use of, and adherence to, practices and methods, applicable industry codes, standards and regulations, that, at a particular time, in the exercise of reasonable judgment in light of the facts known or that reasonably should have been known at the time a decision was made, would be reasonably expected to accomplish the desired results in respect of such Work, while safeguarding the environment, the applicable Site, the applicable Project or Facility (if any), and persons and entities from damage, loss or injury, each in a manner consistent with Applicable Laws and Applicable Permits.

(xiii) “**Governmental Authority**” means the government of the United States or any other nation, or of any political subdivision thereof, whether interstate, state, provincial, municipal or local, and any agency, authority, commission, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government, including any independent organization or independent operator of the electric transmission grid in a defined geographic region.

(xiv) “**Hazardous Materials**” means any substance that under any Applicable Law is considered to be hazardous or toxic or is or may be required to be remediated, including (i) any petroleum or petroleum products, radioactive materials, asbestos in any form that is or could become friable, transformers or other equipment that contain dielectric fluid containing polychlorinated biphenyls and processes and certain cooling systems that use chlorofluorocarbons, (ii) any chemicals, materials or substances which are now or hereafter become defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “extremely hazardous wastes,” “restricted hazardous wastes,” “toxic substances,” “toxic pollutants,” or any words of similar import pursuant to any Applicable Law, or (iii) any other chemical, material, substance or waste, exposure to which, or whose use, transport, storage, handling, or disposal, is now or hereafter prohibited, limited or regulated by any Governmental Authority, or which may be the subject of liability for Claims or losses or remediation of any kind.

(xv) “**Materials**” means all equipment, materials, supplies, systems, consumables, and other items necessary to complete all or any portion of the applicable Work, or that forms or is forming part of the Project other than the equipment, tools, supplies and materials of Contractor and/or its subcontractors not intended for incorporation into such Work or the Project.

(xvi) “**Parties**” means Company and Contractor.

(xvii) “**Project**” means the facilities contemplated to be procured, constructed or improved, installed, commissioned and tested, maintained, repaired, replaced and/or otherwise serviced by Contractor or its Subcontractors under the Contract and as further identified in an Individual Release, as required by the Contract (or, if not identified, the project(s) contemplated by such Individual Release) for which Contractor or its Subcontractors will perform Work under the Contract or, in the case of any Work authorized pursuant to any General Release, as identified in, or contemplated by, the Authorization releasing such Work to be performed by Contractor or its Subcontractors.

(xviii) “**Risk Assessment**” means, with respect to the Work, an analysis for the applicable Work focusing on job tasks for the purpose of identifying hazards in order to prevent their occurrence, which analysis focuses on the relationship between the workers, the task, the tools and equipment, and the Project and Site-specific work environment in order to preplan safety in work operations.

(xix) “**Scope of Work**” means the document entitled Scope of Work for the applicable Work set forth in the applicable Contract.

(xx) “**Site**” means with respect to any Project or Work, all of those parcels of land on which the Project or the completed Work will be located, and any other places provided or made available by Company in connection with the Project or the Work (i) pursuant to the Contract, (ii) at which any Materials have been, are being or are to be, delivered or stored or (iii) where such Work has been, is being or is to be, performed by Contractor or any subcontractor.

(xxi) “**Subcontractor**” means all vendors, suppliers, material-persons, and consultants, as well as sub-subcontractors of any tier providing Materials, services, equipment, tools, supplies or other materials directly or indirectly to Contractor in connection with the Work or Project, excluding Company and Company’s vendors, suppliers, material-persons, and consultants.

(xxii) “**Work**” means the work and services to be provided by Contractor (whether directly or indirectly, including work and services provided by any Subcontractor(s)) pursuant to or as contemplated by a Contract, including a Scope of Work.

(b) Contractor’s (and Contractor shall ensure that each Subcontractor’s) work practices, training, materials and services covered by the applicable Contract shall meet or exceed all applicable safety standards and regulations as well as all other requirements of Applicable Laws, including standards, regulations and requirements of Applicable Laws established and promulgated by the federal Occupational Safety and Health Administration (“**OSHA**”). Contractor shall provide all notices and comply with all Applicable Laws bearing on the safety of persons and/or protection of property or persons from damage, injury or loss in connection with the performance of the Work.

i. Administrative

- (1) At least one representative of Contractor is required to attend or complete Safety, Environmental and Operations Onboarding. Onboarding is required for all contractors performing physical work on Company property. The information received in the safety onboarding is required to be disseminated to all Contractor employees and Subcontractors. Onboarding shall be completed prior to any construction activities commencing on the Project.
- (2) Contractor shall submit Contractor's H&S Plan for the Project in one of the following scenarios:
 - (a) if the duration of the Work is scheduled for more than four (4) weeks, Contractor's H&S Plan shall be in a format requested by Company. Contractor shall attach a Risk Assessment to Contractor's H&S Plan to identify the hazards with respect to all aspects of the Scope of Work; and
 - (b) if duration of the Work is scheduled for four (4) weeks or less, and Company requires Contractor's H&S Plan.
- (3) Contractor shall utilize the PPL Contractor Database System to log safety plans, work hours, incident reports, employees of Contractor and each Subcontractor who have attended Company safety orientation and any and all other sections of the database during the course of the Work.

ii. Tools and Equipment

- (1) Contractor shall ensure that no materials, tools, garbage, or any other devices are thrown from an elevated work area.

iii. Operation of Vehicle and Equipment

- (1) When any Contractor personnel are operating any vehicle or piece of mechanized or heavy equipment, Contractor shall ensure that the driver performs a walk-around inspection of the area to ensure that there are no obstacles.
- (2) If the operator of the vehicle or equipment has an obstructed view, including to the rear, Contractor shall ensure that any Contractor Party vehicle operator has a second person available to act as the spotter who will maintain contact with operator at all times during transport; provided that snowplowing operations and backhoe operations shall not require a spotter unless Contractor determines that a spotter is needed to safely complete those operations.
- (3) Contractor shall ensure that all Contractor personnel at any Company- owned facility comply with Company policy to park all vehicles so that their first move is forward except with respect to diagonal parking spaces.
- (4) Contractor shall ensure that all Contractor operators of equipment do not leave the controls of a crane, line truck, pole rig, forklift or any other piece of equipment while a load is suspended from the hook.

iv. Fall Protection and Climbing

- (1) Contractor shall ensure that no Contractor personnel work above 4' without fall protection/prevention measures in place. Contractor shall ensure that no Contractor personnel permit ascending or descending poles, towers or similar structures without the use of a personal fall arrest system, work-positioning equipment, or fall restraint system under any circumstances.
- (2) Contractor shall ensure that if a scissor lift or aerial work platform is being used and has a manufacturers installed anchorage point, Contractor employees must utilize proper personal fall protection equipment and be properly tied off per manufacturer's direction.

v. Personal Protective Equipment

- (1) Contractor shall ensure that proper hand protection is identified and available for use by all Contractor Party personnel prior to starting Work.

vi. Ladders

- (1) Contractor shall ensure that all Contractor personnel secure all ladders from movement during use to prevent tip-over, slippage or shifting.

vii. Working Near or on Electrical Facilities

- (1) Contractors must be in compliance with OSHA Minimum Approach Distances.
- (2) Contractor shall ensure that all Contractor Party personnel visually inspect all arc-flash apparel for damage before and after every use. Contractor shall ensure that no Contractor Party personnel uses defective clothing.
- (3) With respect to handling a downed overhead neutral conductor while working on the ground:
 - a) If neutral continuity is broken, Contractor shall ensure that all Contractor Party personnel use hot line tools or de-energize and ground the circuit.
 - b) If neutral continuity is maintained, Contractor shall ensure that all Contractor Party personnel use rubber gloves and tested overshoes and avoid contact with unprotected parts of the body.
- (4) Contractor shall ensure that all Contractor Party personnel establish a Flash Protection Boundary when working on or near energized facilities. This visual boundary provides an alert to Contractor personnel not constituting Qualified employees (as defined in OSHA Standard 29 CFR 1910.269(x)) when there is a potential for arc-flash or shock hazards at the Site.
 - a) Contractor shall ensure that only Qualified employees (as defined in OSHA Standard 29 CFR 1910.269(x)) wearing FR (Flash-Rated/Fire-Rated) apparel and the proper PPE (Personal Protective Equipment), can enter this boundary.
 - b) Contractor shall ensure that Contractor Party personnel not constituting Qualified employees (as defined in OSHA Standard 29 CFR 1910.269(x)) may only enter this boundary when wearing the proper FR apparel and PPE and escorted by a Qualified employee (as defined in OSHA Standard 29 CFR 1910.269(x)).
 - c) Contractor shall ensure that boundary distances extend in all directions, 360 degrees around the exposed energized parts.
- (5) When working on or near exposed energized lines or equipment >50V, qualified workers must remain outside the Minimum Approach distances or wear proper PPE while using approved work methods.
 - a) Unqualified workers must not encroach on these boundary distances.
- (6) When a Flash Protection Boundary is required, Contractor shall ensure that all Contractor Party personnel use one of two methods:
 - a) Make a substantial, visual barricade with signage or
 - b) Post an attendant to control area.
- (7) Contractor shall ensure that all Contractor Party personnel with Qualified employees (as defined in OSHA Standard 29 CFR 1910.269(x)) operating booms or other aerial devices near energized lines maintain the clearance from any conductive portions of the boom or the attached load.
 - a) When the vehicle is grounded, Contractor shall ensure that all Contractor Party workers within 15 feet of ground points (e.g., outriggers) use insulating mats or proper PPE if they will contact the vehicle or suspended load. Contractor shall ensure that unprotected parts of the body do not contact the vehicle or suspended load.

- (8) Contractor shall ensure that all Contractor Party personnel inspect all protective rubber goods and gloves for defects, both inside and out, and air test gloves before each use. Contractor shall ensure that rubber goods being used are within their test date.
- (9) Contractor shall ensure that all Contractor Party personnel wear the appropriate personal rubber protective goods ground-to-ground when working on or near energized facilities, or near enough to be exposed to the shock hazard of the energized facility.
- (10) When working on facilities <600V, Contractor shall ensure that all Contractor Party personnel cover all exposed energized parts in the immediate work area, and within arms-reach, including the extended reach of any non-insulated hand-held tools.
- (11) When working on energized facilities >600V - 15kV, Contractor shall ensure that all Contractor Party personnel cover all exposed parts and paths to ground in the immediate work area and within arms-reach including the extended reach of any non-insulated hand-held tools.
- (12) Contractor shall ensure that working on or near energized facilities 600V - 15kV is limited to: Contractors Rubber Glove & Sleeve Work Method – from a bucket truck or insulated platform with a Contractor's trained watchperson present or,
 - a) Contractors Hot Line Tool Work Method.
- (13) Contractor shall ensure that working near energized facilities 600V – 15kV while standing on the ground or from a ladder is limited to OSHA allowances. (See Table A):
 - a) Installing or removing barrier(s) in a switchgear while appropriate PPE, and with a Contractor's trained watchperson present;
 - b) Installing/removing/adjusting de-energized parts while wearing appropriate PPE, and with a Contractor's trained watchperson present; and
 - c) using a Contractor's written work method.
- (14) Contractor shall ensure that applying protective rubber goods to energized conductors (600V and above) while belted to the pole is limited to only those items that can be installed using a hot line tool.
- (15) When Contractor's policies permit, Contractor shall have a written procedure in place when working on multiple phases at one time. (e.g., three phase arm).
- (16) Contractor shall use the appropriate PPE and tools when performing a task using hot line tools. Contractor shall ensure that all Contractor Party personnel wear properly rated FR clothing for all tasks according to OSHA regulations.
- (17) Contractor shall ensure that all Contractor Party personnel wear proper PPE and the proper arc-flash protection when initially opening the doors on pad-mounted equipment containing >600V.
- (18) Contractor shall not permit any Contractor Party personnel to work inside an energized switchgear cubicle (except for testing and switching) until one of these conditions is met:
 - a) the control power source is removed or insulated,
 - b) access to the bus/conductor compartments is locked,
 - c) signs are posted alerting to the hazard and a barricade is in place, or
 - d) proper barriers are in place.

- (19) If there are exposed energized leads <600V in a panel, termination or junction box make the leads safe.
- (20) Contractor shall ensure that Contractor Party personnel wear the proper PPE when testing or doing any other type of work on or near energized metering equipment:
 - a) <600V, wear minimum Class-O rubber gloves,
 - b) >600V, must be de-energized,
 - c) Arc-flash apparel,
 - d) Eye and face protection, and
 - e) Tested overshoes or insulating mats in wet areas or if the floor is metal.
- (21) Contractor shall not permit Contractor Party personnel to ground through fuses, transformers, or switching devices where such personnel cannot visually verify the circuit continuity.
- (22) Contractor shall ensure that all Contractor Party personnel set circuit breakers or other automatic protective devices to non-reclose, before installing or removing conductors where an accidental contact with an adjacent energized line is possible.
- (23) Contractor shall ensure that all Contractor Party personnel wear proper arc- flash PPE and rubber gloves and sleeves when doing the following tasks:
 - a) Moving any type of energized primary cable by hand, or
 - b) Connecting (bolting) or disconnecting (unbolting) 600 amp dead-break TEE connectors.
- (24) When installing or removing cable in areas containing exposed energized facilities, Contractor shall ensure that all Contractor Party personnel install barriers and wear personal rubber protective goods and the proper arc-flash apparel.
- (25) Contractor shall ensure that no Contractor Party personnel work near cables that are known to have abnormalities, unless they are de-energized.
- (26) Contractor shall ensure that unauthorized Contractor Party workers are prevented from entering a high-voltage / power factor testing area.
- (27) Contractor shall ensure that all Contractor Party personnel stay in visual contact with the person handling the hook of the energized test lead when operating the external safety switch(es) during high voltage / power factor testing.
- (28) Contractor shall ensure that all Contractor Party personnel wear rubber gloves and tested overshoes when assisting in the DC high potential test when connecting or disconnecting the test leads and/or grounds.
- (29) Contractor shall ensure that all Contractor Party personnel upon completion testing drain the conductors or electrical equipment until the test charge drains off, unless the equipment is ready to be placed into service.
- (30) Contractor shall ensure that all Contractor Party personnel wear rubber gloves and tested over shoes while handling any energized test cable when assisting in the AC Doble test.
- (31) Contractor shall ensure that all Contractor Party personnel not constituting Qualified employees (as defined in OSHA Standard 29 CFR 1910.269(x)) assume equipment is energized, unless a Qualified employee (as defined in such OSHA Standard) proves the equipment is de-energized and grounded.
- (32) If voltages are unknown, Contractor shall ensure that all Contractor Party personnel assume the energized equipment is at the highest voltage that exists in the area.

(See Table E). Contractors shall ensure that when any Contractor Party personnel are performing Rubber Glove and Sleeve work between the substation circuit breaker and the first circuit re-closer that, in addition to complying with other requirements of the applicable Contract, such personnel wear the proper PPE.

viii. Rigging

(1) Contractor shall ensure that line hardware shall not be used for rigging unless part of the structure and designed for use.

ix. Work Area Protection

(1) Where work endangers employees or the public, Contractor shall ensure that all Contractor personnel use work area protection in compliance with Applicable Laws, including that applicable work area protection regulations to control the hazard.

(2) Contractor shall ensure that all Contractor personnel performing Work within 15 feet of any roadway or parking lot are at all times in compliance with all Levels of PPE and all work zone safety measures required under Applicable Laws, including any state or local regulations.

x. Excavations

(1) When any Contractor personnel excavate or bore in the vicinity of energized facilities, Contractor shall ensure that:

a) such personnel ground mechanical tools and equipment,

b) such personnel doing hand digging wear appropriate personal rubber protective gloves and overshoes,

c) all assisting Contractor personnel, not at the same potential as the equipment, wear appropriate personal rubber gloves and overshoes.

(2) Contractor shall ensure that trenches which are left unattended and open have warning devices, barricades or guardrails placed adjacent to the open sides.

(3) Bored holes or caissons shall not be left overnight unprotected. Contractor must barricade or cover holes to prevent access by intentional or unintentional methods in order to protect anyone from falling into said holes. Covers must be able to support at least four (4) times any anticipated load. Plywood may not be used to cover holes in right of ways or substations unless the holes are no more than six (6) inches in diameter.

(c) Contractor shall ensure that all tools, machinery, equipment, rigging and scaffolding used by any Contractor Party in performance of the Work shall be safe, serviceable, in good condition and fit for the purpose intended. Contractor agrees to replace any tool, machinery, equipment, rigging or scaffolding that in Company's judgment is unsafe or incapable of satisfactorily performing the Work. Contractor shall be responsible for initial and ongoing inspection and familiarization of its and each Subcontractor's employees with the safe use of any and all tools, machinery, equipment, rigging and scaffolding used or to be used in connection with the Work, including any and all equipment and/or tools owned by Company or an affiliate thereof.

(d) Contractor shall provide its employees with all necessary protective and safety equipment. Contractor is advised that Hazardous Materials such as asbestos or lead may be encountered.

(e) Contractor shall train all employees of Contractor and each Subcontractor who will be performing all or any portion of the Work in safety and health practices and to comply with the requirements of Contractor's H&S Plan, these Health and Safety Requirements, all Applicable Laws, all Applicable Permits and Good Industry Practices and shall make available to Company proof of such compliance upon Company's request. Contractor shall retain and provide copies of training programs and training rosters to Company for its review at its request. Contractor shall at its own cost (except where all of the Work is being performed on a time and materials basis, in which case the applicable rate shall apply) designate to Company and maintain a qualified, experienced safety representative for all matters concerning Contractor Party work and safety programs relating to the Work. Such safety representative shall be full-time whenever: (a) Contractor and all Subcontractors, collectively, have twenty-five (25) or more workers on Site; (b) after a review of hazards associated with the Site and/or the Work to be performed, Company determines a

full-time safety representative is needed; or (c) Company determines in its sole discretion that Contractor has failed to adequately manage safety at the Site, in which case such full-time safety representative shall even in the case where all of the Work is being performed on a time and materials basis be provided at no charge to Company. In addition, Contractor shall at all times at its own cost (except where all of the Work is being performed on a time and materials basis and in addition Company has not determined that Contractor has failed to adequately manage safety at the Site, in which case the applicable rate(s) shall apply) designate and maintain such additional qualified, experienced safety representatives (including, where appropriate, on a full-time basis) as are sufficient for ensuring compliance with these Health and Safety Requirements. Whenever any Contractor Party personnel are at the Site performing physical, construction or construction-related Work, Contractor shall ensure that there is at least one Contractor Party employee serving in a supervisory capacity at the Site who has completed OSHA – Authorized, 30-Hour Construction Safety and Health Course.

(f) Contractor shall take all reasonable precautions for the safety of all Contractor and Subcontractor personnel engaged in the Work and all Contractor and Subcontractor personnel at the Site and shall continuously maintain (during the periods for which Contractor has care, custody and control of the Site or applicable portion thereof pursuant to the Contract) adequate protection of all of the Work, the Site and persons to prevent damage, injury or loss. Contractor shall at all times exercise due care with regard to all equipment, machinery and materials to prevent damage, loss or injury to persons and property and shall use such adequate protective devices, warning signs, crossover points and barriers as may be reasonably required or appropriate under the circumstances.

(g) Company shall have the right to monitor Contractor's and each Subcontractor's safety performance, work practices, tools, equipment and materials, including its compliance with any portion of Contractor's H&S Plan, these Health and Safety Requirements, Applicable Laws, Applicable Permits, and Good Industry Practices. Company may, at any time and in its sole discretion, suspend all or any portion of the Work for safety- related reasons or require Contractor to take immediate, appropriate corrective action with respect to the cause of any such suspension and/or any other safety issue in connection with the Work. Notwithstanding anything to the contrary, (x) neither such suspension nor such corrective action shall result in or entitle Contractor to any increase in the contract price or extension of the Contract schedule and (y) Contractor, and not Company, shall be responsible for any health and safety issues at the Site and/or pertaining to the Work.

(h) Contractor shall ensure that each Contractor Party performing any cutting or welding complies with the safety provisions of the National Fire Protection Association's "National Fire Codes", and/or Factory Mutual Engineering's cutting and welding procedures and/or the "Hot Work Permit" procedures specified for the Site.

(i) Unless specifically instructed otherwise by Company, Contractor shall require all Contractor Party personnel to wear ANSI Z87 compliant eye protection with side shields, ASTM Class 75 safety shoes, ANSI Z89 compliant hard hats, long pants and shirts with a minimum of a 4 inch sleeve length.

(j) Contractor shall at all times enforce strict discipline and good order among Contractor Parties and shall not employ (or permit any Subcontractor to employ) any unfit person or anyone not skilled in the Work assigned.

(k) Contractor shall not permit the use or possession of any firearms, illegal drugs or alcohol by any Contractor Party at the Site, and Contractor shall immediately remove from the Site any Contractor Party who is under the influence of or in possession of any firearms, illegal drugs and/or alcohol. Contractor shall ensure that its and all of its Subcontractors' employees are physically and mentally fit and unimpaired by drugs or alcohol to perform the Work or applicable portions thereof.

(l) In any emergency affecting the safety of persons or property, Contractor shall act reasonably and as required to prevent threatened damage, loss or injury.

(m) Contractor shall immediately communicate all safety and health incidents to Company and investigate such incidents. Contractor shall provide Company with a written preliminary report of each such investigation's findings within twenty-four (24) hours of each such incident's occurrence. Contractor shall provide a complete report of each such investigation's findings, root and contributing causes, corrective actions, and a copy of any supportive material utilized in the investigation (photographs, drawings, witness statements, Contractor's safety or health documentation, etc.) within ten (10) Business Days or such other time period as may be otherwise agreed by Company of each such incident's occurrence. Contractor shall take immediate corrective action, which corrective action shall include appropriate additions or modifications to Contractor's H&S Plan or any other Contractor safety and/or health plans already in place. Contractor shall submit to Company a written recovery plan detailing what corrective actions Contractor will implement. Corrective action may include, but is not limited to, removal from the Site of any supervisor or employee not implementing or following the necessary safety or health measures, increasing the amount of employee safety or health training, removing safety or health hazards and/or discontinuing unsafe or non-compliant practices.

(n) Contractor must comply with (and must cause each Subcontractor to comply with) the Energy Control

Process and emergency evacuation procedures that in each case are applicable to the Project or Site where the Work is being or to be performed.

(o) Contractor shall cause the Work to be performed in a safe and responsible manner and shall at all times monitor and report its safety and health performance incidence rates to Company in accordance with the requirements of the applicable Contract and all applicable Governmental Authorities in accordance with all Applicable Laws while working on the Site. In the event that Contractor's safety performance and/or compliance do not meet any of the requirements set forth in these Health and Safety Requirements, Company may, without prejudice to its other rights and remedies hereunder, terminate the applicable Contract for cause.

(p) From commencement of Work until Final Acceptance, Contractor shall diligently inspect all Work and Materials and conduct health and safety surveys of the Site to discover and determine any unsafe condition and as between Contractor and Company, Contractor shall be solely and exclusively responsible for the discovery, determination, and correction of any such condition. Without limiting any of the obligations of Contractor hereunder, including in respect of Contractor's H&S Plan, Company shall have the authority to resolve conflicts or issues regarding safety and health measures and practices at the Site and to review Contractor's safety and health measures throughout the performance of the Work for compliance with the Safety Requirements and Contractor's H&S Plan.

(q) Company reserves the right to monitor Contractor's compliance with the requirements of the applicable Contract. Contractor shall immediately correct any unsafe conditions identified by Company. In the event that Contractor fails to immediately address such unsafe conditions, Company may (a) have the unsafe condition addressed at Contractor's expense, (b) direct that the Work be stopped in the area of the unsafe condition until the unsafe condition is addressed, (c) withhold payment until the unsafe condition is addressed and/or (d) pursue any and all other remedies available to Company under the applicable Contract, including those exercisable in the case of a breach of the Contract by Contractor.

(r) Contractor waives the right to bring Claims against Company, Company's representatives or any of their respective employees, representatives or agents for any cause whatsoever because of any action taken or not taken relating to safety, security and/or health, including, but not limited to, the correction of unsafe conditions or work stoppages in connection with the requirements under the applicable Contract, Contractor's H&S Plan, or any similar plan of any other contractor or Subcontractor.

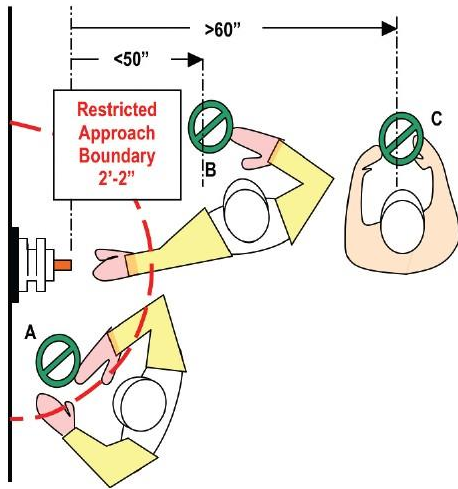
(s) Contractor shall be held responsible for its Subcontractors' compliance with Contractor's H&S Plan, the Safety Requirements, all Applicable Laws and all Applicable Permits. Contractor shall also furnish safety and health equipment and enforce the use of such equipment for its employees and the employees of its Subcontractors. Contractor shall retain, and, at Company's request, shall provide to Company for its review, copies of training programs and training rosters. Contractor shall remain solely and exclusively responsible for compliance with all safety and health requirements and for the safety of all persons and property of Contractor Parties at the Site and in connection with the Work and for all Site conditions and hazards created by any act or omission in connection with the Work of Contractor or any Subcontractor.

(t) Contractor shall deliver its proposed Contractor's H&S Plan to Company for review and comment prior to Contractor's commencement of performance of any Work hereunder and Contractor's mobilization to the Site. Company may in its sole discretion provide any comments to Contractor regarding the proposed Contractor's H&S Plan at any time. Contractor shall diligently work with Company to resolve any such comments to Contractor's and Company's mutual satisfaction and to reflect such resolution in Contractor's H&S Plan. No review or comment by Company or any agent or representative thereof, or failure of Company or any agent or representative thereof to review or comment on Contractor's H&S Plan, shall: (a) be deemed to constitute an approval of all or any portion of Contractor's H&S Plan, (b) impose any responsibility upon Company or any agent or representative thereof with respect to health and safety at the Site or for any Work, which shall be the sole responsibility of Contractor, or (c) relieve Contractor of any duties, liabilities or obligations under the applicable Contract, Applicable Laws, Applicable Permits or otherwise or be construed as limiting in any manner Contractor's obligation to undertake any action that may be necessary or required to establish and maintain safe working conditions with respect to its Work. Contractor shall implement and maintain Contractor's H&S Plan.

(u) The purpose of clauses (a) through (u) of these Health and Safety Requirements is to define Contractor's safety and health responsibilities under the applicable Contract in connection with the performance of the Work and with respect to the Site. Although Company may monitor Contractor's safety and health performance, may review safety and health performance with Contractor's safety contact person or personnel and may suspend the Work for safety-related reasons, these actions are for the primary purpose of protecting Company Party personnel and property. Contractor shall remain solely responsible for the safe performance of the Work pursuant to the applicable Contract and the Parties agree that the provisions hereof and the other provisions of the applicable Contract shall be interpreted and construed in a manner consistent with Contractor's status as an independent contractor.

SAFETY-RELATED TABLES AND ATTACHMENTS

Table A – Working near facilities >600V while standing on the ground or ladder



A) The work is inside the Restricted Approach Boundary (RAB). Class 2's and sleeves, tested overshoes, and a trained watch person are required. Exposed parts must be covered or barricaded. NO intentional contact with live parts is allowed.

B) Work is outside the RAB, but the RAB is in easy reach. Class 2's and sleeves, tested overshoes, and a trained watch person are required. No cover / barricade required.

C) Work is far enough away that encroachment on the RAB is unlikely. No rubber PPE required or watchperson.

Table B – Rubber Protective Goods and Tools Required for Switching

| Working from Bucket Truck/Pole | Required Rubber Protective Goods | Required Tested Stick |
|---|---|------------------------------|
| Open/Close - OCR | Class 2 rubber gloves | Minimum 16 foot stick |
| Install/Remove or Open/Close - hot line clamp(s) for an OCR | Class 2 rubber gloves | 8 foot shotgun |
| Open/Close - bypass disconnects for OCR | Class 2 rubber gloves | Minimum 16 foot stick |
| Open/Close - load break disconnect/ fuse cutout | Class 2 rubber gloves | Minimum 16 foot stick |
| Open/Close - air disconnect switch | Class 2 rubber gloves | Minimum 8 foot stick |
| Open/Close - transformer switch | Class 2 rubber gloves | Minimum 16 foot stick |
| Install/Remove - hot line clamp for transformer switch | Class 2 rubber gloves | 8 foot shotgun |
| Open/Close – bridges disconnects | Class 2 rubber gloves | 8 foot shotgun |

| Standing on the Ground | Required Rubber Protective Goods | Required Tested Stick |
|--|---|------------------------------|
| Open/Close - fused load break cutout | Class 2 rubber gloves | Telescopic stick |
| Open/Close – gang operated load break switch – PMH cabinet | Class 2 rubber gloves, and overshoes | N/A |
| Open/Close – PMH cabinet load break fuse | Class 2 rubber gloves, and overshoes | Minimum 6 foot stick |
| Open/Close – gang operated OH air switches | Class 2 rubber gloves, and overshoes | N/A |
| Open/Close – UG elbows | Class 2 rubber gloves, and overshoes | Minimum 6 foot stick |
| Open/Close – load break blade switch (live front) | Class 2 rubber gloves, and overshoes | Minimum 6 foot stick |

Table B – Continued:

| Working in a Substation | Required Rubber Protective Goods | Required Tested Stick |
|---|---|---------------------------------------|
| Open/Close – disconnect switch <15kV | Class 2 rubber gloves and overshoes | Minimum 10 foot stick |
| Open/Close – disconnect switch >15kV | Class 2 rubber gloves and overshoes | Minimum 10 foot stick |
| Install/Remove or Open/Close – hot line camps | Class 2 rubber gloves and overshoes | Minimum 8 foot shotgun |
| Open/Close – switch energizing oil filled devices | Class 2 rubber gloves and overshoes | Minimum 10 foot stick (limited space) |

| Control Cabinets | Required Rubber Protective Goods | Required Tested Stick |
|---|---|------------------------------|
| Devices operated from a control cabinet (cap bank, SISRS, etc.) | N/A | N/A |
| Motor operated load break switch | N/A | N/A |

| Installing/Removing grounds in a Substation | Required Rubber Protective Goods | Required Tested Stick |
|--|---|------------------------------|
| Standing on the ground | Class 2 rubber gloves and overshoes | Minimum 8 foot shotgun |
| From Insulated Bucket | Class 2 rubber gloves | Minimum 8 foot shotgun |
| From Un-insulated Bucket (manlift) | Class 2 rubber gloves and overshoes | Minimum 8 foot shotgun |

Table C – Restricted Approach Boundary

| Nominal System Voltage | Restricted Approach Boundary | When working on or near exposed energized lines or equipment |
|------------------------|---|---|
| 50 – 300V | Avoid Contact | Qualified workers may encroach on these clearances using approved work methods and proper electrical PPE. |
| 301 – 750V | 1 ft. | |
| 751V – 15kV | 2 ft. – 2 in. | |
| >15 – 69kV | 3 ft. – 2 in. | Qualified workers may NOT encroach on these clearances. Must use hot-line tools. |
| 138kV | 3 ft. – 7 in. | |
| 230kV | 5 ft. – 3 in. | |
| 500kV | 11 ft. – 3 in. (8 ft. with Horne Gap Device installed) | |

Table D – Arc Flash Protection Boundaries

| Nominal System Voltage | Flash Protection Boundary |
|-------------------------------|--|
| 50 – 750V | See Attachment A (at the end of this section) |
| 751V – 69 kV | 12 ft. |
| 138 kV | 12 ft. |
| 230 kV | 13 ft. |
| 500 kV | 19 ft. |

Table E – Unqualified Electrical Worker Voltages and Minimum Distances permitted when work is NOT being performed

| Voltage kV=1,000 | Minimum Distance required to be maintained from exposed unguarded energized component |
|-----------------------------|---|
| 50V - 50kV | 10 ft. * |
| Over 50kV - Up to 69kV | 12 ft. |
| Over 69kV - Up to 138kV | 13 ft. |
| Over 138kV - Up to 230kV | 16 ft. |
| Over 230kV - Up to 500kV | 25 ft. |

*Unqualified Worker **MUST** maintain proper Flash Protection Boundary clearance when work is being performed. Refer to Attachment A.

Table F – Equipment Operating Minimum Clearances

| Nominal Voltage | Uninsulated Booms | Insulated and Tested Booms |
|------------------------|---|--|
| <600 Volts | Avoid contact , or cover lines with protective rubber goods, or de-energize | Avoid contact , or cover lines with protective rubber goods |
| 600V – 15kV | Maintain 4 feet , or cover lines with protective rubber goods <u>and</u> ground vehicle* , or de-energize | Maintain 4 feet or cover lines with protective rubber goods |
| >15 - 138kV | Maintain 5 feet, or de-energize | |
| >138 - 230kV | Maintain 7 feet, or de-energize | |
| >230 - 550kV | Maintain 13 feet, or de-energize | |
| >550kV | Maintain 16 feet, or de-energize | |

Attachment A – Task Matrix

| Electrical Task on Energized Equipment | Nominal System Voltage | Restricted Approach Boundary | Flash Protection Boundary | Hazard/Risk Category |
|---|------------------------|------------------------------|---------------------------|----------------------|
| Working in protection and control switchboard panels and relayed CB enclosures. Testing and troubleshooting fused AC/DC control circuits, and secondary voltage and current circuits. | <240V | 1 ft. | 10 ft. | 1 Note 1 |
| | 241V - 600V | 1 ft. | 10 ft. | 2 Note 2 |
| OH or UG sec/ service work, working in panel boards or metering cabinets | <300V | 1 ft. | 10 ft. | 1 |
| | 301V - 600V | 1 ft. | 10 ft. | 2 |
| Install/Remove self-contained meters | <300V | 1 ft. | N/A | 2 |
| LTN secondary/ service connections, removing network protectors links | 120/208V | 1 ft. | 10 ft. | 2 |
| | 277/480V | 1 ft. | 10 ft. | 2 |
| Switching any OH device using 16 foot stick | 7.2kV-15kV | 2 ft.-2 in. | 12 ft. | 1 |
| Switching loadbreak elbows using 6 foot stick | 7.2 kV | 2 ft.-2 in. | 12 ft. | 1 |

Note 1: For <10kA short circuit current, the hazard/risk category is 0 (zero).

Note 2: For <10kA short circuit current, the hazard/risk category is 1 (one).




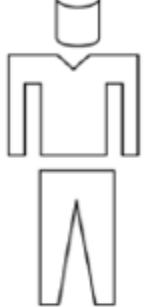
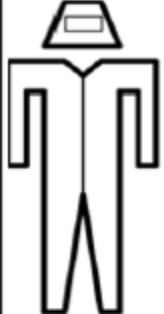
Attachment A – Task Matrix – Continued:

| Electrical Task on Energized Equipment | Nominal System Voltage | Restricted Approach Boundary | Flash Protection Boundary | Hazard/Risk Category |
|---|------------------------|------------------------------|---------------------------|----------------------|
| Switching inside pad-mounted switchgear using 6 foot stick | 7.2kV-15 kV | 2 ft.- 2 in. | 12 ft. | 1 |
| Switching overhead devices from a ground level control cabinet (cap banks, SISRS for example) | 7.2kV-15kV | N/A | N/A | 1 |
| Initial opening of energized padmounted equipment | 600V-15 kV | 2 ft.- 2 in. | 12 ft. | 2 |
| Performing Rubber Glove & Sleeve Work: A. Where restrictive reclose is not required (beyond the first recloser from the substation or beyond a single phase tap fuse) | 7.2kV-15kV | 2 ft.- 2 in. | 12 ft. | 1 |
| B. Between the breaker and the first OCR, with a restrictive reclose in effect | | | | 1 |
| C. Between the breaker and the first OCR, without a restrictive reclose | | | | 2 |

Attachment A – Task Matrix - Continued

| Electrical Task on Energized Equipment | Nominal System Voltage | Restricted Approach Boundary | Flash Protection Boundary | Hazard/Risk Category |
|--|--|--|--|-----------------------|
| Racking out circuit breakers in metal-clad switchgear: | | | | |
| Substations with transformer differential protection (Prince, Center City, and Walnut) | 15 kV | 2 ft.- 2 in. | 12 ft. | 2 |
| Substations with over-current transformer protection (Central Allentown , Elliot Heights, Hershey, S. Hershey, Hockersville, and Scranton) | 15 kV | 2 ft.- 2 in. | 18 ft. | 4 |
| Installing or removing temporary safety grounds, OH or UG and substations | 12 kV 69 kV 138 kV 230 kV 500 kV | 2 ft.-2 in. 3 ft.-2 in. 3 ft.-7 in. 5 ft.-3 in. 11 ft.-3 in. | 12 ft. 12 ft. 12 ft. 13 ft. 19 ft. | 1 1 1 1 1 |
| Opening or closing energized loops using hot-line tools and switching gang-operated devices. | | | | |
| Performing high-voltage testing. | | | | |

Attachment B – Arc Flash PPE System

| Hazard/Risk Category | 0 | 1 | 2 | 4 |
|---|---|---|---|---|
| Arc Thermal Performance Value (ATPV) | 0 | 8 | 8 | 40 |
|  |  |  |  |  |
| First Layer against the body: 100% cotton or other all natural fiber blend material | Street clothing (long or short sleeves) made of 100% natural fiber cloth | Issued FR shirt and pants or FR coveralls | Issued FR shirt and pants or FR coveralls, +face shield +hearing protection | Issued FR shirt and pants or FR coveralls, +40 Arc Flash suit +beekeeper hood +hearing protection |
| Note 1 | Note 2 | Note 2 | Note 2 | Note 2 |

Note 1: This layer is required for all Hazard/Risk Categories.

Note 2: The basic PPE set for all hazard classes is Hard Hat, Eye Protection, Work Gloves and Safety Shoes.