

AMERICAN ELECTRIC POWER

AEP SAFETY AND HEALTH

SUPPLEMENTAL TERMS AND CONDITIONS

01.31.2026 – Rev 3

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1.0 INTRODUCTION

- 1.1 No aspect of operations is more important than the health and safety of people. Zero Harm is at the heart of everything we do at AEP. It means we believe all occupational illnesses and injuries are preventable because we care that everyone goes home in the same or better condition than when they came to Work.
- 1.2 These safety and health requirements shall be used in conjunction with the applicable AEP General Terms and Conditions for Work performed across the AEP System. These requirements reflect Owner's minimum expectations regarding safety and health practices and may exceed the requirements of federal, state, and local regulatory agencies. By entering into the Contract, Contractor agrees that Contractor shall perform all Work in accordance with these safety and health requirements. In addition, Contractor shall follow AEP Business Unit and/or Corporate issued safety directives.
- 1.3 If Contractor in good faith believes that any rule or procedure set forth herein will put Contractor Personnel or others at risk, or conflicts with Occupational Safety and Health Administration (OSHA), Contractor shall immediately notify Owner and shall cooperate with Owner to develop a mutually acceptable alternative procedure.
- 1.4 Contractor's safety performance will be monitored and evaluated during the performance of the Contract by Owner's Representative. If warranted by Contractor's poor safety performance, Owner may require Contractor to develop a safety improvement plan. Contractor shall provide plan within five (5) calendar days of written notification for AEP review and mutual agreement and follow said plan until completion.
- 1.5 AEP Business Units may have additional requirements within their specific Business Unit appendix, which Contractor must comply with during Work for that Business Unit.
- 1.6 In order to comply with Owner's registration requirement to the VERO Data Management System operated by Safety Management Group (SMG), Contractor shall, at no additional cost to Owner, register with VERO, by contacting SMG at admin@verodms.com.
- 1.7 Capitalized terms used but not defined in these safety and health requirements shall have the same meaning as in the applicable AEP General Terms and Conditions.
- 1.8 For Mine Safety and Health Administration (MSHA) regulated facilities, Contractor shall comply with the Federal Mine Safety and Health Acts of 1977 and any revisions, amendments, and successor legislation to the extent governing and applicable to the Work. To the extent that this Contract (and particularly within the AEP Safety and Health Supplemental Terms and Conditions herein) references an OSHA definition or

requirement(s) and there is an MSHA definition or requirement(s) that is reasonably comparable to such OSHA definition or requirement, then the comparable MSHA requirement shall control, if MSHA has jurisdiction over the referenced subject matter or location. To the extent that this Contract requires compliance to OSHA requirements for which there are no comparable MSHA requirements, or to the extent that this Contract imposes safety and health requirements for which there are no comparable OSHA or MSHA requirements, and which are applicable to the subject matter or location, Contractor shall comply with the strictest of: (i) the OSHA requirement; (ii) any applicable Owner requirement; or (iii) any applicable Contractor rule or procedure.

2.0 SAFETY & HEALTH PLANNING

2.1 Contractor shall ensure that all Contractor Personnel exercise planning and forethought regarding the safety and health aspects of all Work performed by Contractor Personnel.

2.2 Job Briefing: Prior to the commencement of Work, before any changes are made in procedures or activities, and prior to resuming Work after any significant breaks (i.e. lunch), Contractor shall complete and document a Job Briefing.

2.2.1 The Job Briefing Form shall include, at a minimum: 1) Work procedures involved 2) hazards and mitigation associated with the Work, 3) special precautions, 4) energy source controls, 5) personal protective equipment requirements, 6) other contractors or Owner personnel working within or adjacent to Contractor's Work (or as specified in the applicable Business Unit appendix), 7) task requirements for qualified and competent person(s).

2.2.1.1 Unless Contractor's Job Briefing Forms are approved in writing by Owner Representative prior to the start of Work, Contractor shall use Owner supplied Job Briefing Form.

2.2.1.2 Contractor shall take appropriate action for individuals who fail to comply with the Job Briefing, including performing Work outside the parameters of the Job Briefing.

2.2.2 Contractor shall make Job Briefing Forms available to all personnel where Work is performed and to Owner, upon request. Contractor shall review the Job Briefing Form with and obtain the signatures of any visitor(s) that arrive at the Jobsite prior to visitor(s) being allowed in the area where Work is taking place.

2.2.3 Contractor shall retain completed Job Briefing Forms pursuant to the record retention section of the Contract.

- 2.2.4 Owner expects all Contractor Personnel to continuously assess the Jobsite and Work activities for hazards throughout the day. Whenever a problem, circumstance, or result that was not covered in the Job Briefing is encountered during the Work, Contractor shall stop Work immediately, evaluate the situation and conduct a new or revised Job Briefing before resuming Work. Contractor shall immediately communicate to all affected personnel (see section 2.2.2) any changes to the Job Briefing that occur during the performance of Work.

- 2.3 Work Safety and Health Plan (WSHP): For high risk, complex, or long duration Work, Contractor may be required to submit a WSHP prior to the start of Work (see Business Unit appendix). The WSHP shall cover the Work of Contractor Personnel. Contractor shall collaborate with Owner on issues or informational "gaps" determined by Owner to be present in submitted WSHP. Contractor agrees and shall cooperate with Owner to modify and update any WSHP to accomplish the Work.
 - 2.3.1 For Vegetation Management Work, a WSHP will not typically be required. Owner will specify any Work where a WSHP is required (i.e. unique long duration projects).

 - 2.3.2 For Generation, the Pre-work hazard Analysis (PWHA) completed by the owner will determine if a WSHP is required.

- 2.4 Emergency Planning: Contractor shall have an emergency action plan that has been documented and communicated to all Contractor Personnel. The emergency action plan shall include, at a minimum, the following:
 - 2.4.1 Emergency contacts;
 - 2.4.2 Jobsite location(s) or addresses;
 - 2.4.3 Location, name, contact information, and directions to closest emergency services and medical facility;
 - 2.4.4 On Jobsite communication methods (cell phone, radio, satellite phone, etc.);
 - 2.4.5 Procedure to follow in the event of an emergency.

3.0 GENERAL PERSONNEL TRAINING AND QUALIFICATION REQUIREMENTS

- 3.1 Unless otherwise approved by Owner in writing, Contractor shall ensure that Contractor Personnel complete the training, as further described below, prior to being allowed to commence Work.

- 3.2 Work involving significant safety-related risk exposure (“High Risk Work”) requires OSHA training. This High Risk Work includes, but is not limited to, Work: on or near energized equipment; work in substations; within confined spaces; at heights requiring fall protection; during adverse weather (storms); in radiologically contaminated areas; on or near high traffic (land, air, or water) areas; in or around ash ponds; that involves excavation permits; that involves cranes, rigging, or hoisting; that involves chemicals with National Fire Protection Association (NFPA) or Hazardous Materials Identification System (HMIS) rating of 4 in any category; or that involves asbestos, heavy metals, radiation, silica, chromium, or other harmful substances that requires special training.
- 3.2.1 All Contractor Personnel who are performing High Risk Work on Owner Jobsites shall successfully complete, at a minimum, the OSHA 10-Hour for General Industry or Construction Training OSHA Electric Transmission and Distribution (ET&D) Partnership 10-Hour Training or have specific written approval from Owner’s Regional Safety and Health Director or Manager, and Business Unit Operations Manager (AEP Grade 10 or above) allowing equivalent training(s) to be accepted in lieu of OSHA training.
- 3.2.2 Before assuming a supervisory position, all Contractor Personnel Jobsite supervision for High Risk Work shall successfully complete the Occupational Safety and Health Standards for the General Industry or Construction Training (OSHA 30-Hour), OSHA Electric Transmission and Distribution (ET&D) Partnership 20-Hour Training, or have specific written approval from Owner’s Regional Safety and Health Director or Manager, and Business Unit Operations Manager (AEP Grade 10 or above) allowing equivalent training(s) to be accepted in lieu of OSHA training.
- 3.2.3 New Contractor Personnel on High-Risk Work shall complete such training within fourteen (14) calendar days of starting their first Work assignment on any Owner Jobsite. If Contractor Personnel leave before training is complete, they may not return to the Jobsite until the training is complete.
- 3.2.4 Owner may also require additional OSHA training at Contractor’s expense.
- 3.3 A minimum of two currently trained Contractor Personnel in First Aid, Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) shall be present for each Jobsite unless mutually agreed upon by Owner and Contractor based on scope and crew size.
- 3.4 All costs associated with the described training of Contractor Personnel shall be at the expense of Contractor.

- 3.4.1 Some Generation Sites may require supervision to attend Owner’s “Supervisors’ Responsibilities and Expectations Briefing” program. If required, the program must be completed within two weeks after arrival at Owner’s Site and takes approximately one hour. Owner will reimburse Contractor the cost of Contractor Personnel attending this training, if required.
- 3.4.2 For Renewables and Wind Facilities, all workers who will be working at heights shall have GWO-BST (Global Wind Organization Basic Safety Training) certifications or equivalent at a minimum. When workers are working in permit required confined spaces (blades, etc.), members of the Confined Space Rescue team shall have GWO-ART (Advanced Rescue Training) certifications or equivalent at Contractor’s expense
- 3.5 Prior to entering Owner’s Jobsite, all Contractor Personnel shall complete the AEP onboarding requirements, which may vary by Business Unit. This training takes approximately two (2) hours. All Contractor Personnel shall refresh such training every 12 months. Contractor is responsible to ensure that their onsite employees’ training is current. Contractor shall not allow employees on jobsite without current training.
- 3.6 Owner may, at its sole discretion, require Contractor to repeat any training as a step towards remedying a Contractor’s deficiency.

4.0 SAFETY & HEALTH PROFESSIONAL

- 4.1 Contractor’s Jobsite Safety & Health Professional’s sole responsibility and focus shall be safety and health oversight of the Work, specifically including, but not limited to, initiation, enforcement, maintenance, and administration of Jobsite safety and other loss prevention programs associated with Work.
- 4.2 The requirements for when Contractor shall provide one (1) or more Jobsite Safety & Health Professional(s) are in the table below, if applicable. Owner may require Contractor to assign additional Safety & Health Professional(s) if Owner determines the Work, Contractor’s performance, or other circumstances justify additional safety oversight.

<u>BUSINESS UNIT</u>	<u>SAFETY AND HEALTH PROFESSIONAL FOR NUMBER OF CONTRACTOR FULLTIME EMPLOYEES (FTES)</u>	<u>ADDITIONAL SAFETY AND HEALTH PROFESSIONAL NEEDED AFTER EACH ADDITIONAL CONTRACTOR FTES</u>
DISTRIBUTION	1 PER 20, OR TWO HOURS OF DRIVE TIME ON OWNER'S PROPERTY	50, OR TWO HOURS OF DRIVE TIME ON OWNER'S PROPERTY
VEGETATION MANAGEMENT	1 PER 25	150, OR TWO HOURS OF DRIVE TIME ON OWNER'S PROPERTY
TRANSMISSION AND FIBER	1 PER 20	20
TELECOMMUNICATIONS SITE AND TOWER	1 PER 20	20
WORKPLACE SERVICES	1 PER 40	40
GENERATION	1 PER 40	40
GENERATION SUBSTATIONS ONLY	1 PER 20	20

- 4.3 Contractors are responsible for subcontractors, and the subcontractor employees are included in the numbers in the table above.
- 4.4 Contractor shall ensure that each Jobsite Safety & Health Professional, at a minimum, has successfully completed OSHA 30-hour training and has one (1) of the following:
- 4.4.1 A professional safety certification from an industry recognized safety organization; or
 - 4.4.2 A college degree in a safety related field and at least two (2) years demonstrable safety management related experience; or
 - 4.4.3 At least five (5) years of increasing responsibility in professional, technical, safety management and/or electric utility operations experience.
- 4.5 In addition to the above, Contractor shall ensure that each Jobsite Safety & Health Professional has all of the following:
- 4.5.1 Current certification in administration of First Aid, Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) Training;

4.5.2 Incident investigation training and experience.

4.6 Owner may request verification of qualifications, resumes, or other documentation for review. Owner reserves the right to reject a Jobsite Safety and Health Professional. Failure by Owner to review the qualifications of a Safety & Health Professional does not relieve Contractor of its obligations under the Contract.

5.0 COMMUNICATION

5.1 Contractor shall ensure that all Contractor Personnel clearly understand oral and written instructions, signs and labels associated with Work.

5.2 Contractor shall provide, at a minimum, two (2) multi-lingual Contractor Personnel that speak English for each non-English-speaking crew. When large crews are used, Contractor shall provide one (1) additional multi-lingual Contractor Personnel for every ten additional (10) crew members.

5.3 Contractor shall ensure multilingual Contractor Personnel are immediately available to support nursing, EMT responses to injuries or incidents, and during Site orientations. Contractor shall make sure their multilingual Contractor Personnel are easily identifiable by such means as the color of their hardhat, clothing, etc., and inform Owner accordingly.

5.4 Contractor shall ensure, at least one (1) copy of all documents and reports, including Job Briefing Forms, are prepared in English.

6.0 WORK HOUR / WORKDAY LIMITATIONS

6.1 Contractor shall staff and plan in a manner that prevents Contractor Personnel from working more than sixteen (16) hours in a rolling twenty-four (24) hour period. After working sixteen (16) hours, a minimum of eight (8) hours off Work shall occur before returning to Work.

6.1.1 For emergency assistance, as defined by the Owner, the hour limitation is modified to a maximum of twenty-four (24) consecutive hours, after which a minimum of eight (8) hours off Work shall occur before returning to Work.

6.2 Contractor shall staff and plan in a manner that prevents Contractor Personnel from working more than thirteen (13) consecutive days without a twenty-four (24) hour period off Work.

6.3 Exceptions to the above requirements shall be pre-approved in writing by the Owner's Business Unit management – pay grade 10 or higher.

7.0 CONTRACTOR AND SUBCONTRACTOR QUALIFICATION STATUS

7.1 During the term of the Contract, Contractor shall maintain an approved qualification status within VERO. If during the Contract term, Contractor fails to maintain an approved qualification status within VERO, then, at Contractor's cost and expense, and in addition to any other rights and remedies the Owner may have under the Contract or under the law, the Owner shall have the following rights:

7.1.1 The right to apply a probationary period where all Work performed by Contractor is temporarily stopped until an investigation is performed;

7.1.2 The right to stop the Work under the Contract until Owner is satisfied that the cause for the non-passing grade is remedied; and/or,

7.1.3 The right to terminate the Contract for cause if, in Owner's sole opinion, the grade cannot be improved to a passing level within a reasonable time.

7.2 Contractor shall only use AEP approved contractors (found in VERO) as Subcontractors. To initiate the process to utilize a Subcontractor that is not currently qualified by Owner in VERO, the Contractor shall have the Subcontractor join VERO and obtain an approved qualification status prior to any Subcontractor Work. Any exceptions to this must be approved in writing by Owner's Regional Safety and Health Director or Manager, and Business Unit Operations Manager (AEP Grade 10 or above) prior to the start of Subcontractor Work.

7.3 Contractor shall provide a qualified and competent individual at the Site to be present whenever Contractor personnel and/or Subcontractors are present.

7.3.1 With Owner's prior written approval, Contractor may choose to use Subcontractor(s) to perform Work at a Site without the Contractor present. Contractor shall ensure that such Subcontractor(s) has appointed a qualified and competent individual at the Site to be present at all times, to direct, and observe the Work.

7.4 Owner reserves the right to require a qualified representative of the prime on site at all times.

8.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.1 Contractor Personnel shall wear, at a minimum, the following PPE while on any Jobsite: Safety glasses, goggles, or prescription safety glasses with side shields that meet the specifications of ANSI Z87.

8.1.1 Face shields, in addition to safety glasses or goggles, where employees are performing tasks that could potentially cause flying material objects such as, but not limited to, chipping, welding, grinding, cutting, drilling, chiseling, or chemical hazards to the face. The face shield shall be rated for the type and degree of hazard.

8.1.2 Hardhats that meet the specifications of ANSI Z89.1.

8.1.3 For working at heights in a wind turbine environment, a helmet with a chin strap is required.

8.1.4 Work gloves that provide protection for the type of work, when required. Specific work glove requirements may be found in specific BU Appendices.

8.1.5 Hearing protection as required by OSHA and in Owner-designated areas.

8.1.6 Footwear appropriate to the known Jobsite hazards:

8.1.6.1 Open-toed, open-heeled, and athletic footwear shall be strictly prohibited;

8.1.6.2 Protective toe footwear that meets the safety-toe specifications of ASTM F2413 with a compression rating of C75 (i.e., safety toe shoes);

8.1.6.3 Contractor Personnel shall wear footwear with a defined heel, unless waived by Owner's Representative in writing;

8.1.6.4 Additional protection such as sturdy upper portions, metatarsal guards, puncture resistant soles, etc. may be required based upon the Job Briefing for certain Work assignments or special environmental conditions.

8.1.7 Fall protection: 100% fall protection required at all times on poles, towers, wind turbines, and similar structures.

8.1.7.1 When working at heights in/on a wind turbine, the proper Personal Fall Protection Equipment (PFPE) shall be utilized for the wind turbine environment and shall include a rescue kit for each person working at heights in/on a wind turbine (provided by the Contractor).

8.1.7.2 Contractor shall provide appropriately sized cable safety sleeve and guiderail fall arrestor where applicable.

8.2 Contractor shall review arc flash potential with Owner’s Representative to determine the appropriate PPE.

8.3 Contractor shall wear additional PPE if required by Owner based upon Contractor’s PPE assessment or special environmental conditions.

8.4 Arc Flash Policy

8.4.1 Contractor Personnel who perform Work on or near energized facilities and equipment shall wear arc-rated clothing equal to or greater than Owner’s incident energy. Additional PPE, such as Fire Retardant rated face shields and balaclavas, shall be worn by Contractor Personnel, when Contractor Personnel are exposed to arc flash hazards in excess of the minimum requirements set forth in following table (Table 1).

Table 1

Minimum Head and Face Protection		
Equipment Required	Arc-Rated Faceshield with a Minimum Rating of 8 cal/cm ² *	Arc-Rated Hood or Faceshield with Balaclava
Single-phase, open air	9 – 12 cal/cm ²	13 cal/cm ² or higher**
Three phase	5 – 8 cal/cm ²	9 cal/cm ² or higher***

*These ranges assume that employees are wearing hardhats meeting the specifications in 1910.135 or 1926.100(b)(2), as applicable.

**The arc rating must be a minimum of 4 cal/cm² less than the estimated incident energy; note that 1926.960(g)(5)(v) permits this type of head and face protection, with a minimum arc rating of 4 cal/cm² less than the estimated incident energy, at any incident energy level.

***Note 1926.960(g)(5)(v) permits this type of head and face protection at any incident energy level.

- 8.4.2 Owner shall supply Contractor with appropriate system requirements based on local electrical system configuration. Contractor and Owner shall review owner's incident energy prior to start of Work.
- 8.4.3 All Contractor Personnel that are covered under these Safety and Health Supplemental Terms and Conditions shall dress in his or her arc rated clothing prior to arrival on Site.
- 8.4.4 In addition to the requirements as outlined by OSHA and per Owner's policy, the requirements for Contractor Personnel to wear the protective clothing and equipment working on or near exposed, energized part(s) includes, but is not limited to the following examples of potential arc flash exposures:
 - 8.4.4.1 When working within the minimum approach distances;
 - 8.4.4.2 When determined by incident energy analysis;
 - 8.4.4.3 When rubber gloves or rubber gloves and sleeves are required;
 - 8.4.4.3 When performing hot-stick work;
 - 8.4.4.4 When bonding or working "bare hand method";
 - 8.4.4.5 When grounding conductors or equipment;
 - 8.4.4.6 When testing lines or equipment to be de-energized;
 - 8.4.4.7 When performing switching operations;
 - 8.4.4.8 When entering enclosed/confined spaces with energized lines or equipment;
 - 8.4.4.9 When disconnecting or connecting testing meters;
 - 8.4.4.10 When a Contractor Personnel is required to physically assist with energized Work on lines or equipment where mechanical failure or human error could expose employee to a flash.
 - 8.4.4.11 When in a substation, unless labeled or identified as being different, arc flash boundary to exposed, energized parts is fifteen (15) feet. Also, specific to

equipment inside a control house and unless labeled or identified as being different, arc flash boundary to exposed parts energized from 50 V to less than 300 V is 3 feet 6 inches.

8.4.5 In addition, Contractor Personnel shall comply with the following:

8.4.5.1 All outer layers of clothing shall have the appropriate arc flash rating (including the upper and lower body). When a shirt is worn as the outer layer, it shall be long sleeves. Sleeves shall be rolled down and buttoned with the shirt tails tucked into the trousers. When an additional layer is required (such as, but not limited to, a coat or overalls) the outer layer shall have the appropriate arc flash rating.

8.4.5.2 Arc flash rated clothing shall be worn as constructed by the manufacturer. Altering arc flash rated clothing (i.e. removing sleeves or collars, etc.) is prohibited.

8.4.5.3 Clothing made from acetate, nylon, polyester, or polypropylene that is not arc flash rated shall not be worn under arc flash rated clothing or by itself while employees are exposed to arc flash hazards. Garments made from 100% natural fibers (i.e. cotton, wool) may be worn under arc flash rated clothing, but shall be free from stains or flammable products, screen printing, iron-on transfers, paint, etc.

9.0 INDUSTRIAL HYGIENE

9.1 Metals and Heavy Metals:

9.1.1 Unless directed otherwise, Contractor is responsible for personal industrial hygiene sampling when there are any contaminants that may pose an exposure hazard to Contractor Personnel (e.g. arsenic, lead, mercury, hexavalent chromium, cadmium, crystalline silica, etc.). Contractor shall provide copies of industrial hygiene test results to Owner.

9.1.2 Contractor must comply with Owner's Negative Exposure Assessment Guidelines in determining when PPE and regulated area requirements can be removed.

9.1.3 Owner requires regulated areas for all Work involving potential exposure to hexavalent chromium regardless of the type of Work conducted (General Industry or Construction). Owner's competent

person for potential hexavalent chromium exposure shall be consulted regarding the appropriate size, location, and demarcation of the regulated area.

9.1.4 Owner's respiratory protection and ventilation requirements for welding, cutting and other hot Work are defined in the Welding, Cutting and Brazing Policy (see VERO at <https://verodms.com>). Filtering face piece respirators may only be used on a voluntary basis (not OSHA required) and only in areas where there will not be an exposure above the Permissible Exposure Limits (PEL). Filtering face piece respirators include any fabric "dust mask" type respirators with filter efficiencies from 95 through 100.

9.2 Lead/Cadmium Based Paint:

9.2.1 Structural steel and equipment throughout Owner's facilities may have been coated with lead/cadmium-based materials including galvanizing. Contractor shall treat all surfaces as containing lead/cadmium unless tested otherwise prior to performing any grinding, welding, sanding, heating, sandblasting or similar activity. Owner requires that any coating containing lead at a level of 0.05% (500 ppm) or greater be treated as a lead-containing coating.

9.2.2 In nearly all cases, abatement of lead/cadmium-containing coatings is required before any hot Work may be performed. Owner has a specific Post Abatement Hot Work (see VERO at <https://verodms.com>) process that Contractors must follow to ensure either abatement is effective or that Contractor Personnel are properly protected while performing hot Work after abatement.

9.2.3 Contractor shall submit to Owner, prior to beginning Work, its written lead/cadmium compliance program.

9.2.4 Contractor shall collect all removed lead/cadmium bearing paint and contaminated materials used for the removal of lead/cadmium bearing paint. These materials shall be placed in Contractor supplied packaging meeting the applicable US Department of Transportation requirements for the material and properly labeled and stored per Owner instructions.

9.3 Asbestos Containing Material:

9.3.1 Asbestos-containing materials (ACM) may exist in the form of insulating products, siding, coatings, gaskets and similar materials throughout Owner's facilities.

- 9.3.2 Contractor shall conduct ACM awareness training to inform Contractor Personnel of the possibility of asbestos on the Jobsite and the appropriate response (STOP and report it immediately) if suspected asbestos-containing material is encountered.
- 9.3.3 Contractor shall use care and diligence in the execution of its Work to avoid the disturbance of, or damage to, asbestos-containing material not specifically identified as a part of the Work. This may include, but is not limited to, the installation of protective barriers, temporary platforms or any other means deemed necessary by Contractor to comply with this requirement. Contractor Personnel shall immediately report the observance of any ACM or presumed asbestos-containing material (PACM) that is not intact to their supervision for immediate response. Contractor shall immediately notify Owner of any disturbance of or damage to asbestos-containing material, PACM or unknown material. Contractor is responsible for ensuring that its personnel and the public are not exposed to ACM material due to Contractor's disturbance of or damage to the ACM.
- 9.4 Hazardous Materials Management:
- 9.4.1 "Hazardous waste" shall have the meaning found at 40 CFR 261.3 and shall also include polychlorinated biphenyls (PCB) as defined at 40 CFR 761.3. "Hazardous chemical" shall have the meaning found at 29 CFR 1910.1200© and 40 CFR 355.61. "Hazardous Material" shall have the meaning found at 49 CFR 171.8.
- 9.4.2 Contractor shall have procedures for proper labeling, storing, and handling of hazardous chemicals and hazardous wastes in a safe and secure manner.
- 9.4.3 Contractor shall minimize the quantities of hazardous chemicals it intends to use and hazardous waste it expects to generate. Contractor shall keep Owner informed of all hazardous chemicals that Contractor brings on Site and all hazardous wastes generated and its disposal management practices. Hazardous materials shall be packaged and transported in accordance with applicable transportation regulations.
- 9.4.4 When applicable to Contractor's Work, Contractor shall provide storage containers of adequate size and compatibility for both hazardous chemicals and hazardous wastes with adequate weather protection. Damaged or leaking containers are unacceptable.
- 9.4.5 See Owner's Representative for Safety Data Sheets for Owner generated and supplied products.

- 9.4.6 Chemicals containing 1,1,1-Trichloroethane, methylene chloride, trichloroethylene, tetrachloroethylene (perchloroethylene), 1-bromopropane (N-propyl bromide), any confirmed human carcinogen, asbestos, lead or mercury will not normally be approved by Owner.

9.5 Concrete

- 9.5.1 Contractor shall provide a concrete/chemical burn kit at Contractor's expense.

10.0 MISCELLANEOUS JOBSITE REQUIREMENTS

- 10.1 When performing excavation Work, Contractor shall comply with Owner's excavation policy, including permits.
- 10.2 Contractor shall comply with the following regarding drilled excavations:
 - 10.2.1 Drilled excavations greater than thirty (30) inches in diameter and six (6) feet deep shall be protected by a guardrail system no less than six (6) feet from the edge of the excavation.
 - 10.2.2 Contractor Personnel who enter the guardrail system shall be protected from falling by a personal fall arrest system.
 - 10.2.3 When performing drilled excavations, Contractor shall have a fall retrieval plan, which includes local EMS rescue capabilities.
- 10.3 Contractor shall comply with AEP's Confined/Enclosed Space Entry Policy including classification and monitoring tools, permits, and checklists. With prior review by Owner's Representative, Contractor may use its confined or enclosed space entry procedure in accordance with article 9.3 of the AEP Confined/Enclosed Space Entry Policy. Furthermore, through coordination with the Owner's Representative, there may be multiple permits for the same Work if there are multiple contractors in the same area or the Contractor is legally required to have documents for their own purposes. If multiple permits are used, the classifications must be the same or the higher of the two (2) classifications must be used for all permits. Contractor shall, at their own expense, provide properly calibrated and bump-tested air monitoring equipment, and test all spaces prior to entry per AEP Confined Space/Enclosed Space Policy.
- 10.4 Barricades shall be used to deter the passage of persons, vehicles, and equipment from restricted areas. Contractor shall routinely inspect and replace signage, labeling and barricade tape that is illegible, damaged, missing, etc.

- 10.5 Contractor shall comply with the following regarding the use of mobile cranes and lifting devices (for energized Work involving digger derricks and bucket trucks, see Business Unit Appendices Section 3 instead):
- 10.5.1 Operators shall perform and document daily equipment inspections. Inspections shall include all safety and operational features as per manufacturer's safe operating manual or guidance.
 - 10.5.2 Qualified observers shall be assigned if any equipment will encroach within the trigger distance of energized overhead lines and equipment; or if any part of the equipment, boom, load line or load (including rigging and lifting accessories), if operated up to the equipment's maximum working radius, could encroach the trigger distance to energized lines or equipment. All Work activities shall be stopped when the qualified observer becomes unavailable, even only temporarily.
 - 10.5.3 No person shall be permitted within the barricaded radius of a crane while the crane is in operation.
 - 10.5.4 No person shall ride on equipment when in operation.
 - 10.5.5 Cranes shall be equipped with an Anti-Two-Block device.
 - 10.5.6 Contractor shall ensure that wheel chocks are used when performing hoisting operations utilizing a capstan hoist or other hoisting device affixed to a vehicle. Wheel chocks shall also be used for all disconnected trailers or other wheel-mounted equipment with the potential to roll. Wheel chocks shall be appropriately sized for the equipment in use and positioned to prevent unintended movement.
- 10.6 All Work performed on or adjacent to existing public roads or rights-of-way shall be performed in conformance to the requirements of the Manual on Uniform Traffic Control Devices (current revision), state, local jurisdiction or AEP operating company.
- 10.7 Contractor shall keep all substation gates closed and locked at all times unless under direct observation by an attendant.
- 10.8 Upon entry or exit of a substation, Contractor shall notify the appropriate Dispatch Authority.

- 10.9 Testing of Grounds – All grounds shall be tested in accordance with state, local, and federal guidelines, and the most current ASTM F2249 Standard Specification for In-Service Test Methods for Temporary Grounding Jumper Assemblies Used on De-Energized Electrical Power Lines and Equipment.
- 10.10 All extension cords and electric hand tools shall be plugged into a Ground-Fault Circuit interrupter (GFCI) provided by the Contractor. Contractor Personnel shall not rely on the existing GFCI receptacles on the Jobsite.
- 10.11 Unless Contractor’s Welding, Cutting, and Brazing policy is approved in writing by Owner’s Regional Safety and Health Director or Manager, and Business Unit Operations Manager (AEP Grade 10 or above) prior to the start of Work, Contractor shall comply with Owner’s Welding, Cutting, and Brazing policy.
- 10.12 Unless Contractor’s Attentive Driving policy is approved in writing by Owner’s Regional Safety and Health Director or Manager, and Business Unit Operations Manager (AEP Grade 10 or above) prior to the start of Work, Contractor shall follow Owner’s Attentive Driving Policy while performing Work for Owner.
- 10.13 Backing motor vehicles should be avoided wherever possible by taking pull through opportunities. If backing cannot be avoided, employees should back upon arrival. A second employee, if present, shall be used as a Spotter while backing.
- 10.14 Contractor shall follow Owner’s Workplace Aggression and Police Escort Required Policies.
- 10.15 Generation specific:
- 10.15.1 Attachment: Clearance Permit Policy, Procedure and Form;
 - 10.15.3 Attachment: Floor and Wall Opening Permit Procedure;
 - 10.15.4 Attachment: 15 ft. Scaffold Access;
 - 10.15.4 Attachment: C.OI-730.12.02 – Electric Lines and Equipment Clearance (PC&C);
 - 10.15.5 Attachment: Arc Flash Policy
- 10.16 Contractor shall have an established Drop Zone Program for aerial work or working from heights.
- 10.17 Contractor shall follow 811 protocol per state law, including inside substations.

11.0 TOOLS

- 11.1 All tools and equipment shall be used strictly in accordance with the manufacturer's instructions, specifications, and intended purpose. Tools found to be damaged, defective, or otherwise unsafe shall be immediately removed from service.
- 11.2 Prior to the use of any fabricated or modified tools with no original equipment manufacturer, Contractor shall notify Owner and provide for Owner's review, design documentation with professional engineer stamped approval. At its sole discretion, Owner may prohibit or restrict Contractor's use of such tools.
- 11.3 Pocket knives or non-safety utility knives shall not be used for cutting/stripping unless it is impossible to utilize another tool designed for that task. Not having the proper cutting tool available on site is not an excuse for using knives. Cutting tools other than a knife, i.e. wire cutters/strippers, side cutters, snips and other cutting tools shall always be used first. A safety utility knife with an automatic retracting blade or other means of blade protection would be the second choice. The use of a company issued pocketknife or non-safety utility knife is only permitted if a safety utility knife or other cutting tool cannot be used. The second and third option (knives) can only be used in combination with wearing appropriate hand protection, as determined by the Job Briefing.
- 11.4 No handheld grinder shall be used with a switch that is capable of being locked in the "ON" position unless a hazard analysis determines it is safer. Handheld grinders 4 1/2" thru 6" shall be equipped with a safety clutch to aid in preventing kickback and potential personal injury to the user. Contractor(s) shall have a grinder control procedure established to assure that when grinders are being used for either grinding or cutting, front line supervision has determined that a grinder is the safest tool for the Work.
- 11.5 Hose safety whip checks shall be utilized on all pneumatic air hose assemblies.
- 11.6 Wind Farm and Telecommunication Towers - when working at heights where a drop hazard may be present, all tools must be appropriately tethered and properly secured/tied off 100% of the time using tethers manufactured to meet ANSI/ISEA 121 standards; including all accessories i.e., non-locking sockets
- 11.7 Tether Inspection - All drop prevention systems shall be inspected prior to use. Excessively worn or damaged tools or materials must be immediately removed from service and replaced.

12.0 REPORTING REQUIREMENTS

- 12.1 Event Reporting: Contractor shall report to Owner all Contractor Personnel safety-related events in accordance with the applicable AEP General Terms and Conditions and the requirements listed below. Safety-related events include but are not limited to the following:
- 12.1.1 near miss events
 - 12.1.2 good catches
 - 12.1.3 first aid and minor events
 - 12.1.4 OSHA recordable injuries
 - 12.1.5 flashes
 - 12.1.6 outages
 - 12.1.7 vehicle incidents
 - 12.1.8 underground utility strikes
 - 12.1.9 energy control errors (Clearance Permit, Lock Out Tag Out (LOTO), and Switching and Tagging)
 - 12.1.10 regulatory safety citations/visits
 - 12.1.11 property damage
 - 12.1.12 equipment incidents
- 12.2 After securing the scene, Contractor shall immediately notify Owner's Representative(s) (verbal notification is sufficient) of the event. Do not disturb the scene of an incident unless it is necessary to attend to injured persons or to prevent additional injury, property damage, or loss. If the incident involved a personal injury requiring more than first aid treatment, or significant equipment or estimated property damage in excess of \$10,000, Work may not resume and no items at the scene may be moved or discarded until authorized by Owner or other legal authority.
- 12.3 By 8:00 a.m. the following calendar day, Contractor shall submit a preliminary notification to Owner's Representative(s) using VERO (<https://verodms.com>).
- 12.4 Contractor shall submit a detailed written report within five (5) calendar days, unless granted an extension by Owner. This report must be submitted via VERO following Owner's report format and instructions.
- 12.5 Monthly Reporting: Contractor shall submit monthly reports to Owner that include at minimum, the following:
- 12.5.1 monthly Work hours

- 12.5.2 fatalities
- 12.5.3 OSHA recordable incidents
- 12.5.4 preventable vehicle incidents
- 12.5.5 first aid injuries
- 12.5.6 good catches and near misses
- 12.5.7 flashes
- 12.5.8 outages

12.6 Contractor shall report the above listed information by the 4th Business Day of the calendar month via VERO (<https://verodms.com>).

13.0 OWNER JOBSITE OBSERVATIONS/AUDITS

13.1 Owner or Owner’s Representative may conduct random Jobsite safety and health observations and audits. Contractor shall cooperate fully with Owner’s Representatives during a Jobsite observation or audit.

13.2 In the event Owner determines that an unsafe condition exists at the Jobsite, Owner shall have the absolute right to require corrective measures be immediately taken, or to stop Work until the unsafe condition is corrected by Contractor. Contractor may be responsible for costs and expenses associated with the corrective measures.

14.0 CONTRACTOR JOBSITE OBSERVATIONS

14.1 Contractor representatives, at a minimum, shall perform and document a Job Site Observation (JSO) based on the following table:

Contractor Representative	Minimum Frequency ¹
Front line leader (ex. Foreman/Crew Leader)	Weekly ²
Site Management (ex. General Foreman/Superintendent)	Weekly ²
Safety & Health Professional	Daily ³
Operations Manager	Monthly
Senior Management	Quarterly

Notes:

1. Minimum frequency is the frequency with which the Contractor representative performs a JSO and can be on one or more Contractor crews and/or Sites.
2. See Vegetation Management and Transmission and Fiber Construction Appendices for additional guidance.
3. MSHA regulated facilities, MSHA Surface Certified person to perform required on shift inspection, document, and sign MSHA on shift book.

15.0 PROHIBITED FROM JOBSITE

- 15.1 Firearms, alcohol, illegal drugs, or drugs taken for non-medicinal purposes are prohibited on all Owner Jobsites.
- 15.2 Contractor shall be responsible for all Contractor Personnel who are under the care of a physician and are taking medicine that may alter the employee's physical or mental ability. Contractor shall determine the necessity to modify the employee's job assignment while undergoing such treatment.
- 15.3 If prohibited firearms or suspected illegal drugs are discovered on any Owner's property or Jobsite, whoever discovers the firearms or suspected illegal drugs shall:
- 15.3.1 First, if possible, without putting themselves or others in harm's way, attempt to secure the location and ensure that others cannot come in contact with the firearms or suspected illegal drugs. Do not handle or move firearms or suspected illegal drugs from their discovered location.
- 15.3.2 Second, immediately contact Owner's Representative and jointly decide whether or not the situation requires a call to the local law enforcement authorities. Immediately call the local law enforcement authorities and report the discovered item(s) if (a) neither Owner's Representative is available; (b) there is a threat of harm to any person; or (c) there is a risk of improper removal or disposal of the firearms or illegal drugs.
- 15.3.3 Third, call local Owner's security personnel or call Owner's general Security hotline at 1-866-747-5845.
- 15.3.4 Fourth, for incidents involving Contractor personnel, Contractor shall submit a report(s) to Owner.
- 15.4 Prior to starting Work, Contractor shall provide Owner with a list of all Contractor Personnel that Contractor intends to use on Jobsite. The list shall identify the individuals by their name and the last three digits of the individual's Social Security Number.
- 15.5 Owner will identify any personnel the Contractor intends to use that are restricted from Owner's Jobsite. Owner, at its sole discretion, may deny access to any individual who has previously been removed from a Jobsite by Owner or any Contractor for any reason.
- 15.6 Contractor may request restricted Contractor Personnel to be cleared for Work performance. A letter addressing the original safety violation(s) or reason(s) for removal and including any documentation

supporting the request shall be sent to Owner for approval. Contractor Personnel shall not perform Work at any of Owner's Jobsites until approved by Owner. Said approval may be granted or withheld at Owner's sole discretion.

15.7 Owner may deny access to its Jobsites to any person who fails to comply with the applicable AEP General Terms and Conditions, these Supplemental Safety Terms and Conditions, or, in Owner's sole judgment, otherwise demonstrates unsafe or unacceptable behaviors. Examples of unsafe or unacceptable behaviors include, but are not limited to:

15.7.1 Unsafe job performance

15.7.2 Failure to pass drug/alcohol test

15.7.3 Refusal to submit to a drug/alcohol test

15.7.4 Displaying incompetence in performing their job

15.7.5 Employees that are determined to be unfit for project employment

15.7.6 Participating in pranks, horseplay, or practical jokes

15.7.7 Failure to report injuries and/or accident

15.7.8 Making threats, harassing, intimidating, fighting, or committing acts of aggression

15.7.9 Theft or vandalism

15.7.10 Insubordination

15.7.11 Violation of AEP's Universal Life Saving Rules

15.8 Contractor shall immediately provide Owner with the name of any Contractor Personnel removed by Contractor from Owner's property and the reason(s) for his or her removal.

15.9 If a worker(s) has a union affiliation, Contractor shall promptly notify the appropriate local union hall of such worker's removal from Owner's property and the reason(s) for his or her removal.

16.0 AEP POLICIES AND PROCEDURES

16.1 AEP Policies and Procedures that the Contractor shall comply with per the AEP General Terms and Conditions and these AEP Safety and Health Supplemental Terms and Conditions can be found in VERO (<https://verodms.com>).

16.1.1 Excavation Policy

16.1.2 Lead Exposure Control Post-Abatement Hot Work Procedures

- 16.1.3 Negative Exposure Assessment (NEA) Guidelines
- 16.1.4 Scaffolding Safety Procedure
- 16.1.5 Welding, Cutting and Brazing Policy
- 16.1.6 Confined Enclosed Space Entry Policy
- 16.1.7 Attentive Driving
- 16.1.8 Police Escort Required Policy
- 16.1.9 Workplace Aggression Policy
- 16.1.10 AEP's Universal Life Saving Rules
- 16.1.11 AEP Aircraft Deconfliction Policy and Procedure

17.0 DEFINITIONS AND ABBREVIATIONS

- 17.1 **AEP** means any one or more of the companies of the American Electric Power System as may be specified in the Contracting Instrument to the Contract and means same as Owner as defined in the applicable AEP General Terms and Conditions.
- 17.2 **AEP General Terms and Conditions** means the applicable AEP general terms and conditions referenced in the Contract which may be one of the following: AEP General Terms for Labor and Services; AEP General Terms and Conditions for Engineering, Procurement and Construction Work; Electric Transmission Texas (ETT) General Terms and Conditions for Labor and Services; OVEC/IKEC General Terms for Labor and Services; or OVEC/IKEC General Terms and Conditions for Engineering, Procurement and Construction Work (as amended from time to time).
- 17.3 **Business Unit (BU)** means for the purposes of these AEP Safety and Health Supplemental Terms and Conditions, a division of AEP that is responsible for providing a product line or service area to the affiliated companies of the American Electric Power System separately identified so each line or service area is considered a business [For purposes of these AEP Safety and Health Supplemental Terms and Conditions: AEP Distribution, AEP Vegetation Management, AEP Generation, AEP Telecom, AEP Transmission, and AEP Workplace Services].
- 17.4 **Contractor Personnel** means all employees, crews, workers, and agents of Contractor and all Subcontractors and its employees, crews, workers, and agents involved in the performance of Work.
- 17.5 **Job Briefing Form** means a document used to identify hazards, procedures, precautions, and mitigating actions to facilitate a pre-Job safety discussion and safely complete the Work as provided to Contractor by Owner, or provided by Contractor, but in accordance with all OSHA requirements.
- 17.6 **Jobsite** means a Site where the Work shall be performed.
- 17.7 **Negative Exposure Assessment Guidelines** means an exposure assessment that, with a high degree of certainty, shows exposures are expected to be less than the Permissible Exposure Limit, as defined in 17.10 (or other appropriate exposure guideline).
- 17.8 **OSHA Electric Transmission and Distribution (ET&D) Partnership** means OSHA Strategic Partnership Agreement between the Occupational Safety and Health Administration and The Electrical Transmission and

Distribution Construction Contractors, The International Brotherhood of Electrical Workers (the IBEW), and Trade Associations.

- 17.9 **Owner's Representative**, for purposes of this document, means the Jobsite or Business Unit representative identified in the contract as the point of contact for the Work.
- 17.10 **Permissible Exposure Limits (PEL)** means the minimum legal limit as set by either local, state, or federal law in the United States for exposure of an employee to a chemical substance or physical agent.
- 17.11 **Safety & Health Professional** means a trained and competent person focused on identifying workplace hazards, mitigation actions, and the prevention of workplace injuries.
- 17.12 **Site** means the definition as stated in the applicable AEP General Terms and Conditions.
- 17.13 **Work** means the definition as stated in the applicable AEP General Terms and Conditions.
- 17.14 **Generation - Pre-Work Hazard Assessment (PWHA)** - Owner's initial hazard assessment for the Work to be executed by Contractor that identifies anticipated hazards as best as can be reasonably determined by Owner that may require elimination or mitigation. The PWHA will be provided to Contractor and is intended to provide a basis for initial planning purposes only and Owner does not make any warrant or representation, express or implied, that the PWHA is accurate, complete, comprehensive, or all-inclusive, or that items not listed will not be present or pose no threat to Contractor Personnel safety or health.
- 17.15 **Job Hazard Analysis (JHA)** - A detailed 3-step analysis that helps eliminate and/or reduce risk. This 3-step process breaks each task down into basic job steps, identifies existing and potential hazards associated with each step and provides recommendations/procedures to eliminate, reduce or control hazards, and the option of assessing potential severity
- 17.16 **Global Wind Organization (GWO)** - Global Wind Organization is an international body established by leading wind turbine manufacturers and operators. GWO Training refers to the standardized training programs aimed at creating a safer work environment in the wind energy sector. The training equips technicians with essential skills and knowledge to handle the unique challenges of working on wind turbines and is recognized globally and is often a requirement for jobs in the wind industry, ensuring consistency and reliability in safety and operational standards.

18.0 REVIEW AND REVISION HISTORY

DATE	REVISION #	COMMENTS	REVIEWER
10/1/2019	0	Initial Issue	Contractor Safety Management Technical Committee
12/18/2020	01	Added Appendix G: AEP Energy Supply	Energy Supply, Energy Supply Safety & Health, Corporate Safety & Health, and AEP Legal
03/18/2025	02	Changes made to Appendix A: AEP Distribution	T&D Collaborative, Corporate Safety & Health, and OPCO Safety & Health
01/31/2026	03	Changes made to Main Document and Appendices A, B, D, and E; Appendices C,F and G removed – information included in the Main Document; Appendix D renamed Telecommunication Site and Tower; Appendix E renamed Transmission and Fiber Construction	Terms and Conditions Core Team representing all Business Units, Corporate Safety & Health, Executive Sponsor Team and AEP Legal

Appendix A: Distribution

As part of Contractor's obligations under the AEP Safety and Health Supplemental Terms and Conditions, Contractor and all Contractor Personnel shall follow the additional requirements set forth in this Appendix A: Distribution (this "Appendix") while performing Work for Owner's Distribution Operations. This Appendix supplements the corresponding sections as listed in the AEP Safety and Health Supplemental Terms and Conditions.

1.0 INTRODUCTION

2.0 SAFETY & HEALTH PLANNING

2.2 Job Briefings:

2.2.1.1 Attachment: Owner's Job Briefing Form

2.4 Emergency Planning: Emergency planning information shall be documented on the Job Briefing Form.

Contractors shall contact the Distribution Dispatch Center in any case of emergency.

3.0 GENERAL PERSONNEL TRAINING AND QUALIFICATION REQUIREMENTS

3.7 Qualified and Non-Qualified Electrical Employees

3.7.1 Qualified Electrical Employee

3.7.1.1 Owner requires that qualified electrical Contractor crew members involved in the operation, construction, maintenance, or working on or near electric power generation, control, transformation, transmission, and distribution lines and equipment will be qualified as required by OSHA in 29 CFR 1910.269 and 29 CFR 1926 Subpart V.

3.7.1.2 Owner requires that qualified electrical Contractor crew members involved in the .Operation, repairing, testing, verification, or exposure to or working on or near live parts energized at 50 volts or more) will be qualified as required by OSHA 1910 Subpart S and OSHA 1926 Subpart K.

- 3.7.1.3 Owner defines a qualified electrical employee or “Qualified Employee” as a person having been trained and having demonstrated knowledge in the construction and operation of electrical power generation, transmission and distribution equipment involved and the associated hazards. A Qualified Employee must be trained and competent in (list not all-inclusive):
- 3.7.1.3.1 The skills and techniques necessary to distinguish exposed live parts of electrical equipment;
 - 3.7.1.3.2 The skills and techniques necessary to determine the nominal voltage of exposed live parts;
 - 3.7.1.3.3 The minimum approach distances or safe working distances specified by OSHA corresponding to the voltages to which the Qualified Employee will be exposed;
 - 3.7.1.3.4 Training to recognize and avoid electrical hazards;
 - 3.7.1.3.5 Safety practices, including applicable emergency procedures (such as pole top & manhole rescue, first aid/CPR, Lock Out/Tag Out), that are related to the work, and;
 - 3.7.1.3.6 The proper use of special precautionary techniques, personal protective equipment/clothing, insulation and shielding materials, and insulated tools for working on or near exposed parts of electrical equipment.
- 3.7.1.4 Until these Qualified Employees have demonstrated proficiency in the work practices involved, they are considered to be employees undergoing on-the-job training and must be under the direct supervision of a qualified person at all times. Contractor crew members shall only perform Work at the level for which they are qualified.
- 3.7.1.5 At Owners request, Contractor shall supply documentation concerning the types of skills assessments performed, training programs and how the Contractor will ensure that their Qualified Employees demonstrate competencies. Contractor shall certify that each Qualified Employee has received training required by this section. Certification shall be made when the Qualified Employee has demonstrated proficiencies in the Work assigned.
- 3.7.1.6 Contractor shall maintain a list of Qualified Employees able to work on or near primary, able to serve as a qualified observer and able to work secondary service. Qualified list shall be available upon request from Owner during normal operation and prior to service

restoration.

- 3.7.1.7 Contractor shall ensure that its Qualified Employees have the appropriate training to perform the Work.
- 3.7.1.8 Owner, at its sole discretion based on Work observations or for other reasons, may at any time withdraw its acceptance of any previously approved or completed training and require Contractor Personnel to repeat training.

3.7.2 Non-Qualified Electrical Employee

- 3.7.2.1 Contractor shall provide training for non-qualified electrical Contractor Personnel for the purpose of entering or working within electrical areas (i.e., electrical vaults, manholes, poles). Contractor shall provide training for non-qualified electrical Contractor Personnel who will be working near energized lines or equipment energized at 50 volts or more (i.e., civil contractors, laborers, locators, pole treatment/inspection, etc.). All direct and indirect costs of this training are Contractor's sole responsibility.

- 3.7.2.2 Owner defines a non-qualified electrical employee or "Non-Qualified Employee" as a person who has not been trained or authorized to conduct electrical work. A Non-Qualified Employee must be trained and competent in (list not all-inclusive):

- 3.7.2.2.1 Understanding of electrical hazards;

- 3.7.2.2.2 Electric shock;

- 3.7.2.2.3 What is safe to touch and what is not safe to touch in specific areas they will be entering;

- 3.7.2.2.4 Hazard Reporting;

- 3.7.2.2.5 The maximum voltage of the area/equipment;

- 3.7.2.2.6 The minimum approach distances for the maximum voltage within the area, and;

- 3.7.2.2.7 Recognition and proper use of protective equipment that will be used to provide protection and in the work practices necessary for performing their specific work assignments while working near energized lines or equipment energized at 50 volts or more.

- 3.7.2.3 At Owners request, Contractor must supply documentation concerning the types of skills assessments performed, training programs and how the Contractor will ensure that their Non-Qualified Employees demonstrate competencies. Contractor shall certify that each Non-Qualified Employee has received training required by this section. Certification shall be made when the Non-Qualified Employee has demonstrated proficiencies in the Work assigned.
- 3.7.2.4 Contractor shall ensure that Non-Qualified Employees and Subcontractor(s) Non-Qualified Employees have the appropriate training and safety instruction to perform the Work. Contractor shall also ensure that Non-qualified employees do not engage in any Work prior to completing the relevant training.

3.8 Qualified Observer

- 3.8.1 A qualified observer (“Qualified Observer”) is required for any period while Contractor Personnel are performing Work by utilizing insulated gloves on conductors or equipment above six hundred (600) volts to ground. The Qualified Observer must be positioned on the ground, shall be trained and prepared to perform emergency rescue procedures, if necessary (Emergency tasks that are necessary to safeguard the public are exempt from requiring Qualified Observer).
- 3.8.2 In addition to OSHA requirements, Qualified Observer shall:
 - 3.8.2.1 Understand the work being observed;
 - 3.8.2.2 Be capable of identifying nominal voltages, energized components, minimum approach distances, adequacy of cover-up, and proper safe work practices and PPE/PIPE associated with the work;
 - 3.8.2.3 Have sufficient understanding of the work, to the extent that they can identify errors that could result in injury, so they can alert the person(s) being observed before possible injury occurs;
 - 3.8.2.4 Be identified by name on Job Briefing Form;
 - 3.8.2.5 Be trained and competent to serve as a Qualified Observer.
- 3.8.3 Person in charge of Work Site, with agreement of the worker being observed shall make the final determination if an individual Contractor Personnel is suitable to be a designated “Qualified Observer”.

3.9 Additional training and qualification requirements:

3.9.1 The following list (not all-inclusive) of Work shall be used as a guide in order to help the Contactor ensure its Contractor Personnel are properly trained, competent, or qualified to perform such Work:

3.9.1.1 Digger Derrick & Bucket Truck operation

3.9.1.2 Qualified Electrical

3.9.1.3 Energy Isolation and Temporary Grounding

3.9.1.4 Confined or Enclosed Space

3.9.1.5 Horizontal Directional Drilling operation

3.9.1.6 Excavation & Trenching

3.9.1.7 Scaffolding

3.9.1.8 Personal Protective Equipment (PPE)

3.9.1.9 Department of Transportation requirements

3.9.1.10 Line Clearance Tree Trimming operation

3.9.1.11 Cranes & Rigging

3.9.2 Contractor may be required to complete Owner operating company specific training such as switching and tagging and customer service training. Owner will specify when this is required and reimburse Contractor for the cost of such training.

4.0 **SAFETY & HEALTH PROFESSIONAL**

5.0 **COMMUNICATION**

6.0 **WORK HOUR / WORK DAY LIMITATIONS**

7.0 **CONTRACTOR AND SUBCONTRACTOR QUALIFICATION STATUS**

8.0 PERSONAL PROTECTIVE EQUIPMENT

8.3 All workers within the right-of-way who are exposed to either traffic or work vehicles must wear the appropriate high visibility vest.

9.0 INDUSTRIAL HYGIENE

9.2 Lead is also present throughout Owner's underground facilities (i.e., lead splicing).

9.3.3 Prior to the commencement of Work, both Owner and Contractor shall determine the presence and form of ACM. If ACM is determined to be present, Contractor shall submit a plan to Owner, outlining the appropriate measures Contractor will take while either working around ACM or in the abatement of ACM. Said plan shall be approved by Owner prior to the commencement of Work, and in accordance with Owner's policies including the proper disposal of ACM at Owner's approved waste disposal sites.

9.5 Owner requires any Work task involving Crystalline Silica, such as concrete sawing or drilling, is evaluated by Contractor to determine Contractor Personnel protective controls.

10.0 MISCELLANEOUS JOBSITE REQUIREMENTS

10.4 Barricading

10.4.1 Hazardous voltages will exist on equipment should conductive portions inadvertently come in contact with energized conductors during the course of Work. These voltages are extremely harmful if not fatal should Contractor Personnel come in contact with the vehicle or equipment during this time. The barricade is erected to ensure that Contractor Personnel do not come in contact with the vehicle or equipment during that time. Traffic cones and ropes may be used as an alternative in special circumstances. The barricading rope shall encompass all conductive attachments that extend from the vehicle or equipment whenever possible. If this arrangement cannot be accomplished, then other measures must be taken to ensure the security of this vehicle.

10.4.2 Derricks and Aerial devices shall be barricaded to prevent Contractor Personnel on the ground from falling objects or touching the aerial device in the event of an accidental contact with energized conductors. The barricaded area shall also be extended beyond temporary ground rod or anchor, if

applicable. Contractor Personnel shall not lean across the barricade to access the vehicle while the barricade is in place. When the barricaded area needs to be entered the observer shall confirm that all Work aloft is stopped. They shall communicate with the operator who shall position the derrick or aerial device at minimum ten (10) feet from energized conductors and stop operation while the Contractor Personnel accesses the vehicle. In this situation, the Contractor Personnel accessing the vehicle shall lower the barricade to access the truck and leave it down until no further contact is necessary, Contractor Personnel shall then reinstall the barricade and communicate with the operator that it is safe to resume Work. Work will only restart after the observer has confirmed that the barricaded area is clear.

10.4.3 Before the barricade is installed, a fire extinguisher, a pair of rubber gloves and sleeves, gaffs, climbing belt and fall arrest equipment (for climbing jobs and aerial devices without rescue), handline, rubber blanket (with aerial device), fire resistant clothing, and any additional tools and equipment needed for the job shall be removed from the vehicle or equipment and placed in an accessible location outside the barricaded area.

10.4.4 Barricades shall be installed encompassing all four corners of a vehicle or equipment separated from the vehicle or equipment by non-conductive supports and demarcated by highly visible Danger rope and Danger warning signs to align with degree of hazard attached to those supports or rope.

10.4.5 The following are primary examples of vehicles and equipment where barricading is required – this list is not all inclusive:

10.4.5.1 Bucket trucks

10.4.5.2 Digger derricks

10.4.5.3 Wire puller/tensioner

10.4.5.4 Directional boring machines

10.4.5.5 Backyard machines

10.15 Additional requirements:

10.15.1 Cable Verification – Immediately prior to cutting any control cable, first Contractor employee shall have a second Contractor employee verify that it is the proper cable and that it is de-energized.

10.15.2 Guard Structures – All hotline crossings and all road crossings shall be protected by the use of a guard structure. Guard structures (including equipment used as guard structures) shall be installed prior to disconnecting the conductor and shall remain in place until the conductor is clipped in.

10.15.3 Placement of Grounds – The location of all grounds on Owner’s property shall be tracked and documented by Contractor. Grounds shall be installed and removed maintaining minimum approach distance. Grounds shall be inspected prior to each use. All Grounds shall be flagged.

10.15.4 Hose Safety Whip Checks - Hose safety whip checks shall be utilized on all pneumatic air hose assemblies.

10.15.5 Hot Boards

10.15.5.1 When working by the insulating gloves method from the pole on conductors or equipment that is energized at phase-to-ground voltages greater than as defined by Owner’s Operating Unit or phase-to-phase voltages greater than as defined by Owner’s Operating Unit, an insulated working surface shall be used. When working from the insulating work platform, care must be taken to isolate the employee from the pole by using an insulated fall protection device or rubber blanket to isolate the employee’s belt from the pole.

10.15.5.2 The purpose of the insulating platform (hot or buck board) is to isolate the Contractor Personnel from conductive objects at ground potential such as the pole, pole grounds, and other hardware. Exceptional care should be exercised to be aware that contacting anything that is grounded will defeat the insulation of the hot board.

10.15.5.3 When working from a hot board, all wires and materials that are grounded or operating at a different voltage from the line or equipment being worked on shall be covered with appropriate cover up material.

11.0 TOOLS

12.0 REPORTING REQUIREMENTS

13.0 OWNER JOBSITE OBSERVATIONS/AUDITS

14.0 CONTRACTOR JOBSITE OBSERVATIONS

15.0 PROHIBITED FROM JOBSITE

16.0 DISTRIBUTION POLICIES AND PROCEDURES

17.0 DEFINITIONS AND ABBREVIATIONS

Appendix B: Vegetation Management

As part of Contractor’s obligations under the AEP Safety and Health Supplemental Terms and Conditions, Contractor and all Contractor Personnel shall follow the additional requirements set forth in this Appendix B: Vegetation Management (this “Appendix”) while performing Work for Owner’s Forestry Business Operations. This Appendix supplements the corresponding sections as listed in the AEP Safety and Health Supplemental Terms and Conditions.

1.0 INTRODUCTION

1.2.1 Contractor shall comply with the most current (updated) ANSI Z.133 Standard.

2.0 SAFETY & HEALTH PLANNING

2.3 For Vegetation Management Work, a WSHP will not typically be required. Owner will specify any Work where a WSHP is required (i.e., unique long duration project). Furthermore, Contractor may be required to submit an annual safety plan that addresses such things as safety culture, incident and injury prevention, a “good catch” program, jobsite observation frequencies, and upcoming safety related initiatives.

3.0 GENERAL PERSONNEL TRAINING AND QUALIFICATION REQUIREMENTS

3.2 OSHA Training

3.2.1 Contractor training program/presentation that incorporates the following training will be accepted for vegetation management employees in lieu of OSHA 10 hour training.

1.5 Hours - Falls relative to vegetation management

1.0 Hour - Electrocution relative to vegetation management

1.0 Hour - Struck-By relative to vegetation management

0.5 Hour - Caught-In or Between relative to vegetation management

Note: For these four areas employees shall be able to: Identify hazards; Protect him/herself from these hazards (to include mitigation steps necessary to eliminate or control hazards as well as necessary personal protective equipment). This training shall include participatory training by applying effective training techniques.

0.5 Hour - Personal Protective and Lifesaving equipment relative to vegetation management

0.5 Hour - Health Hazards related to vegetation management

1.0 Hour - Chipper Operation (Hand-on training accepted)

2.0 Hours - Hand and Power Tools relative to vegetation management (Hands-on training accepted)

1.0 Hour – Traffic Control relative to vegetation management

1.0 Hour – Pre-Job Briefing process/expectations

Training shall be conducted by a competent person. Employees' Training Records shall be made available upon request from owner. Training (time/place) shall be communicated to AEP Regional Contractor Manager. Owner reserves the right to have an AEP representative attend training session(s).

3.2.2 Contractor training program/presentation that incorporates the following training will be accepted for vegetation management supervision in lieu of OSHA 30 hour training.

2.0 Hours - Falls relative to vegetation management

2.0 Hour - Electrocution relative to vegetation management

1.0 Hour - Struck-By relative to vegetation management

1.0 Hour - Caught-In or Between relative to vegetation management

Note: For these four areas employees shall be able to: Identify hazards; Protect him/herself

3 Hours – Managing Safety & Health - May include Injury and Illness Prevention Programs, job site inspections, accident prevention programs, management commitment and employee involvement, worksite analysis, hazard prevention and control, accident investigations, how to conduct safety meetings, and supervisory communication

2.0 Hours – Personal Protective and Lifesaving Equipment

1.0 Hour – Slip, Trip, and Fall Hazard Mitigation relative to vegetation management

1.0 Hour – Strain / Sprain Hazard Mitigation relative to vegetation management

1.0 Hour – High Energy Identification / Mitigation (AEP SIF) relative to vegetation management

1.0 Hour – Chipper Operation 1.0 Hour – Bucket Truck Operation

2.0 Hours - Hand and Power Tools relative to vegetation management (Hands-on training accepted)

1.0 Hour – Traffic Control relative to vegetation management

1.0 Hour – Tree Climbing Techniques

1.0 Hour – Tree Felling Techniques

3.0 Hours – Rescue (bucket, tree top, etc.)

1.0 Hours – Ergonomics

0.5 Hour – Brush cutting techniques

0.5 Hour – Fire Protection and Prevention

4.0 Hours – Optional – May expand on any above topic or Contractor identified training relative to vegetation management based on CFR 1910.269 or ANSI Z.133 standards

Training shall be conducted by a competent person. Employees' Training Records shall be made available upon request from owner. Training (time/place) shall be communicated to AEP Regional Contractor Manager. Owner reserves the right to have an AEP representative attend training session(s).

4.0 SAFETY AND HEALTH PROFESSIONAL

4.2.1 When Owner requires Contractor to provide Safety and Health Professional(s) in excess of the Contractor safety manager requirements stated above, such Safety and Health Professional position will only be billable for time directly associated with Contractor's Work for Owner.

4.2.2 Dedicated Safety and Health Professional means solely dedicated to working with contractor personnel on AEP property.

5.0 COMMUNICATION

6.0 WORK HOUR / WORK DAY LIMITATIONS

7.0 CONTRACTOR AND SUBCONTRACTOR QUALIFICATION STATUS

8.0 PERSONAL PROTECTIVE EQUIPMENT

8.1.2 Vegetation management Contractor Personnel are not required to use face shields in the performance of his or her Work.

9.0 INDUSTRIAL HYGIENE

10.0 MISCELLANEOUS JOBSITE REQUIREMENTS

10.5 Vegetation management Contractor Personnel shall comply with the most recent revision of the American National Standard for Arboricultural Operations – Safety Requirements (ANSI Z133) when operating mobile cranes and lifting devices as part of his or her Work.

11.0 TOOLS

12.0 REPORTING REQUIREMENTS

13.0 OWNER JOBSITE OBSERVATIONS/AUDITS

14.0 CONTRACTOR JOBSITE OBSERVATIONS

14.1 If Contractor does not have a dedicated Safety & Health Professional, then Contractor's Operations Manager must perform and document a Job Site Observation (JSO) weekly.

15.0 PROHIBITED FROM JOB SITE

16.0 VEGETATION MANAGEMENT POLICIES AND PROCEDURES

16.1.10 In addition to the requirements in the AEP Safety and Health Supplemental Terms and Conditions and this Appendix, Contractor and Contractor Personnel shall follow AEP Forestry:

16.1.10.1 Vegetation Management Goals, Procedures & Guidelines for Distribution and Transmission Line Clearance Operations in the performance of Work.

17.0 DEFINITIONS AND ABBREVIATIONS

Appendix D: Telecommunication Site and Tower

As part of Contractor's obligations under the AEP Safety and Health Supplemental Terms and Conditions, Contractor and all Contractor Personnel shall follow the additional requirements set forth in this Appendix D: Telecommunication Site and Tower (this Appendix) while performing Work for Owner's Telecommunication Site and Tower. This Appendix supplements the corresponding sections, as listed in the AEP Safety and Health Supplemental Terms and Conditions.

1.0 INTRODUCTION

2.0

NONE

2.0 SAFETY & HEALTH PLANNING

2.3 Work Safety and Health Plan (WSHP)

2.3.1 General Telecommunication Site and Tower Operations and Construction Management(Requirements. Notwithstanding the foregoing in Section 2.3 of the AEP Safety and Health Supplemental Terms and Conditions, WSHP shall apply only to Telecommunication Site and Tower Work that exceeds five (5) Business Days. Each WSHP shall, at a minimum, include information regarding the following:

2.3.1.1 Project Details

2.3.1.2 Construction / Execution Plan

2.3.1.3 Emergency Planning

2.3.1.4 Environmental Protection Plans

2.3.1.5 Project Safety Management

2.3.1.6 Task Hazard Analysis

2.3.1.7 Civil Work / Excavations

2.3.1.8 Substation / Switchyards

2.3.1.9 T Line Project

2.3.1.10 Material (Delivery / Handling / Laydown Area)

2.3.1.11 Equipment

2.3.1.12 Disciplinary Program

2.3.1.13 Miscellaneous

2.3.2 Contractor shall ensure that the WSHP shall be made available, and the contents communicated to all personnel, Contractor Personnel or otherwise, on Site at any time. The WSHP shall be maintained separately from other safety documentation and be kept readily available on Site.

2.3.3 All Contractor Personnel shall participate in driving the most efficient route to the nearest medical facility identified in the Contractor's Emergency Action Plan prior to any Work occurring on a Site. If the distance to the emergency facility is too great and a helicopter is the most appropriate means

of transportation, Contractor shall contact the service provider and have an appropriate landing zone planned. Following review of Job Briefing, Contractor Personnel performing specific tasks shall complete a detailed Task Hazard Analysis (THA) at the physical work location that identifies task steps and lists the associated hazards and mitigation controls. Daily, before any Work begins or resumes, and before changing any Work procedures or activity at any Site, Contractor shall perform a documented new THA which identifies all known and potential Work Site risks. The THA shall be either handwritten with dates and original signatures or may be produced electronically – as long as the final document bears the relevant time and date stamp with original signatures. Any duplication by any means, including photocopied, pre-filled, copied and pasted, or other means of replication of any report shall not be allowed.

2.5 Additional Requirements

- 2.5.1 Contractor’s assigned supervisor, or lead shall review the THA with each Contractor Personnel crewmember prior to the start of each task and anytime the Work procedure changes. Additionally, the Contractor’s assigned supervisor, or lead shall review the THA with each Contractor Personnel crewmember after lunch and/or after any significant break in the Work.
 - 2.5.1.1 Contractor’s THA shall include:
 - 2.5.1.1.1 A detailed step-by-step plan for the task to be performed, referencing any specific requirements of the associated;
 - 2.5.1.1.2 Specific risk/hazards associated with the task on the associated project; Control measures Contractor will implement in order to eliminate or control such potential risks/hazards.
- 2.5.2 Contractor shall ensure that each Contractor Personnel crewmember performing Work shall sign their name verifying that he or she understands the THA and will adhere to it.
- 2.5.3 Using Contractor Personnel that is knowledgeable with the applicable scope of Work, Contractor shall conduct a THA review with all personnel who enter the Work zone or Site. Contractor’s review shall include a scope of Work, and any hazards present at the site.
- 2.5.4 Contractor shall provide easy access to the THA for all personnel and all contractors on Site at the start of the activity and upon any changes to the THA or upon any requests to review the THA. Contractor shall make THA’s available on the Site at all times.
- 2.5.5 Contractor shall immediately communicate to all personnel on Site, regardless of affiliation, any changes to the THA that occur throughout the performance of the Work.
- 2.5.6 Contractor shall ensure portable eye wash kits are made available on site for Contractor Personnel’s use.
- 2.5.7 Contractor shall develop, implement, and maintain a dropped object prevention plan for the duration of the project. The plan shall be sufficient to address site-specific risks and shall include, at a minimum, procedures for securing tools and materials, inspection

protocols, and mitigation measures to prevent injury or damage resulting from dropped objects.

- 2.5.8 Contractor shall provide a comprehensive, documented cable hoisting procedure upon request by Owner. The procedure shall outline equipment specifications, personnel responsibilities, safety measures, and step-by-step execution protocols to ensure safe and compliant cable hoisting operations.

3.0 **GENERAL PERSONNEL TRAINING AND QUALIFICATION REQUIREMENTS**

- 3.5.1 All Contractor Personnel shall view the Transmission safety and environmental videos prior to being on a Jobsite.

3.7 Non-Qualified Electrical Employee

- 3.7.2.1 Contractor shall provide training for non-qualified electrical employees for the purpose of entering or working within electrical areas (i.e., electrical vaults, manholes, electrical service equipment, lighting system controllers).

- 3.7.2.2 Owner defines a non-qualified electrical employee or “Non-Qualified Employee” as a person who has not been trained or authorized to conduct electrical work. A Non-Qualified Employee must be trained and competent in (list not all-inclusive):

3.7.2.3 Understanding of electrical hazards

- 3.7.2.3.1 Electric shock;
- 3.7.2.3.2 What is safe to touch and what is not safe to touch in specific areas they will be entering;
- 3.7.2.3.3 Hazard Reporting:
- 3.7.2.3.4 The maximum voltage of the area/equipment;
- 3.7.2.3.5 The minimum approach distances for the maximum voltage within the area, and;
- 3.7.2.3.6 Recognition and proper use of protective equipment that will be used to provide protection and in the work practices necessary for performing their specific work assignments while working near energized lines or equipment energized at 50 volts or more.

- 3.7.2.4 At Owners request, Contractor shall supply documentation concerning the types of skills assessments performed, training programs and how the Contractor will ensure that their Non-Qualified Employee demonstrate competencies. Contractor shall certify that each Non-Qualified Employee has received training required by this section. Certification shall be made when the Non-Qualified Employee has demonstrated proficiencies in the Work assigned.

- 3.7.2.5 Contractor shall ensure that its Non-Qualified Employees and its Subcontractor(s) Non-qualified Employees have the appropriate training and safety instruction to perform the Work. Contractor shall also ensure that its Non-Qualified Employees and its

Subcontractor(s) Non-Qualified Employees do not engage in any work prior to completing the relevant training.

- 3.8 Contractor shall submit its annual training plan to Owner for review no later than February 1 of the applicable calendar year. Contractor's Training plans shall, at a minimum, include a training calendar, learning objectives for that year, and evaluation tools that will be used to measure the success of the training.
- 3.9 All Contractor Personnel required to enter an Owner energized substation or switchyard shall complete Station Entry Training prior to entry. Contractor Personnel shall, at a minimum, be trained, competent and comfortable with the skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment, determine the nominal voltage of exposed live parts, and the minimum approach distances corresponding to the voltage to which the Contractor Personnel will be exposed. Contractor shall maintain a record of this training and shall make such records available to Owner upon Owner's request.
- 3.10 Contractor Personnel entering an energized station Site who are not station entry qualified, per OSHA standards, shall be accompanied by and under the direct supervision of a qualified supervisor. If the qualified supervisor leaves the station Site where Work is being performed, all affected Contractor Personnel shall also leave the Site.
- 3.11 A minimum of 50% of the on-site crew involved in tower structure and/or antenna system construction or maintenance required to possess current National Wireless Safety Alliance (NWSA) Tower Tech Technician (TTT1) or higher certification, including NWSA Foreman certification for the on-site supervisor. Additionally, at least one crew member on site must hold a current NWSA Antenna & Line Specialty certification, and at least one crew member on site must hold a current NWSA Advanced Rigging Concepts Specialty certification.
 - 3.11.2 Contractors performing Work on tower structures or antenna systems shall maintain active membership with NATE (The Communications Infrastructure Contractors Association) and shall be a NATE STAR Initiative Participant.
 - 3.11.3 A minimum of two (2) Contractor Personnel on Site shall possess current certification in tower rescue procedures. At all times during aerial operations, at least one (1) certified individual shall be stationed on the ground and readily available to initiate rescue protocols if necessary. Certified rescue personnel shall possess the necessary physical capability, proficiency, and readiness to effectively execute rescue operations in accordance with established procedures.
 - 3.11.4 All operators of cranes and boom trucks shall possess current NCCCO (National Commission for the Certification of Crane Operators) certification of the appropriate classification for the equipment being operated. Contractor shall maintain documentation of certification and make such records available to Owner upon request.
 - 3.11.7 All excavator operators shall possess current OSHA Competent Person Excavation & Trench Training or have specific written approval from Owner's Regional Safety and Health Director or Manager, and Business Unit Operations Manager (AEP Grade 10 or above) allowing equivalent training(s) to be accepted in lieu of OSHA training. Contractor shall maintain documentation of certification and make such records available to Owner upon request.
 - 3.11.8 All costs, fees, and expenses associated with obtaining and maintaining required certifications shall be the sole responsibility of the Contractor.

4.0 SAFETY & HEALTH PROFESSIONAL

5.0 COMMUNICATION

- 5.1 Two-way communication radios shall be made available to all Contractor Personnel on site during aerial tower construction activities and/or when requested by AEP Representatives. Upon request, one (1) radio unit shall be designated for use by the authorized AEP Representative, to ensure effective communication throughout the duration of the work.

6.0 WORK HOUR / WORK DAY LIMITATIONS

- 6.3 Exceptions to the work hour and workday limitation shall be requested by the Contractor and be pre-approved in writing by the Business Unit Operations Manager (AEP Grade 10 or above).
- 6.4 An authorized AEP Representative shall be present on site during all aerial tower construction activities. Additionally, Owner reserves the right to designate other critical activities requiring the presence of an authorized AEP Representative. Contractor shall coordinate scheduling to ensure compliance with this requirement. Any delays, disruptions, or additional costs incurred in scheduling or performing the work to align with this requirement shall be the sole responsibility of the Contractor.

7.0 CONTRACTOR AND SUBCONTRACTOR QUALIFICATION STATUS

8.0 PERSONAL PROTECTIVE EQUIPMENT

- 8.3 All Contractor Personnel are required to wear flame resistant (FR) clothing, including all outer garments such as high visibility reflective vests and harnesses, under the following circumstances:
- 8.3.1 Gate to gate in a substation;
 - 8.3.2 Aerial construction on transmission or distribution networks;
 - 8.3.3 When entering a network manhole or vault
 - 8.3.4 Anytime Owner's representative requires FR clothing to be worn;
- 8.4 Prior to and after any ariel construction, all components of personal fall protection systems and aerial rescue kits shall be inspected to verify operational integrity. Aerial rescue kits must be sufficient for the elevation where the work will be performed and shall be readily accessible;
- 8.5 In addition to AEP established RF safety policy, personal Radiofrequency Radiation Monitors are required to be worn while working near active or potentially active radiofrequency emitting components.
- 8.6 A comprehensive aerial rescue kit shall be stored in a clearly marked and readily accessible location near the tower base or designated hoisting area during all aerial tower operations. The kit shall include, at a minimum: harness, descender, chest ascender, carabiners, slings, haul kit, and appropriately sized rescue rope suitable for the elevation of the Work.
- 8.7 Contractor Personnel engaged in work at heights, and as requested by Owner, shall wear helmets equipped with chin straps that meet ANSI Z89.1 specification. Helmets shall be properly secured at all times.
- 8.8 All Contractor Personnel personal protective equipment (PPE) shall be provided by Contractor at Contractor's expense.

8.9 All Contractor Personnel shall wear Class II or greater high visibility safety vests meeting ANSI/ISEA 107 Standard while on site.

9.0 INDUSTRIAL HYGIENE

9.5 Prior to the removal of anchor epoxy coatings and/or other hazardous material coatings, not referenced in Section 9 of the Terms and Conditions main document, Contractor shall provide a written mitigation plan to protect all Personnel from airborne particulates.

10.0 MISCELLANEOUS SITE REQUIREMENTS

10.17 Tethering

10.17.1 Tethering Requirements for Aerial Tower Work - All tools, equipment, and loose items (ex. Cameras, Cellphones, Radios, Water Bottles) shall be tethered to an appropriate anchorage point while in use. All Contractor Personnel shall ensure they are using manufactured tethers that meet ANSI/ISEA 121 standards. Tethers shall be designed for the tool and manufacturer weight limits followed. All tools and materials that cannot reasonably be tethered shall be placed in sealable tool bags when not in use. All Contractor Personnel shall ensure that tool bags and materials are securely tied off to prevent dropped objects.

10.17.2 Tether Inspection - All drop prevention systems shall be inspected prior to use. Excessively worn or damaged tools or materials must be immediately removed from service and replaced.

10.17.3 Drop Zone Protection - Contractor shall establish a drop zone and shall prevent entry of personnel not involved with the Work being conducted. Contractor shall police the area prior to overhead construction and remove all non-essential personnel to a safe location. When materials or equipment are being lifted into position that have the potential to cause injury to occupants inside the control building it shall be vacated.

10.19 Warning Signs – Contractor shall install warning signs at locations where overhead lines have been identified. Warning signs shall be visible and considered for all directions of travel, including site ingress and egress. Warning signs shall be no less than 36" x 36" and placed at appropriate height to draw attention. Bilingual warning signs shall be posted whenever prudent.

10.20 Aerial tower and antenna system construction and maintenance activities shall be suspended when sustained wind speeds exceed twenty-five (25) miles per hour. Contractor shall monitor site-specific weather conditions and ensure compliance with this requirement prior to and during all aerial operations.

10.21 All Contractors shall define and establish a drop zone at communication tower facility when ice accumulation is present on the tower structure, defined at a minimum rate of 2:1, from the structure height. Contractor shall assess site conditions and ensure that no personnel are positioned within the drop zone during such conditions.

10.22 All Work shall cease immediately upon detection of lightning activity within a ten (10) mile radius of the Site. Work may only resume following a minimum thirty (30) minute interval after the last observed lightning strike. Contractor shall monitor weather conditions and ensure compliance with this requirement to protect personnel safety. Lightning mitigation plan shall be included in Emergency Action Plan.

- 10.23 No more than two (2) Contractor Personnel shall be attached to a single safety climb system or lifeline at any given time. Contractor shall ensure that personnel are properly spaced and that system working load limits are not exceeded during tower access and egress activities.
- 10.24 Contractor shall, at a minimum, adhere to the latest version of ANSI/TIA-322 , ANSI/TIA-222, and ANSI/TIA-10.48 standards applicable to tower construction, rigging, and maintenance activities. Contractor shall ensure that all procedures, equipment, and personnel qualifications meet or exceed these standards.
- 10.25 Any sudden release or uncontrolled movement of a tensioned rope (commonly referred to as “popping a rope”) is strictly prohibited.
- 10.26 Contractor shall maintain control of all hoisted loads through the use of tag ropes and/or other appropriate control measures to prevent unintended movement, swing or rotation. Control methods shall be suitable for the load type, site conditions, and operational requirements to ensure safe and stable handling at all times.
- 10.27 Synthetic load lines shall not be left unattended on any tower structure. At end of Workday, synthetic load lines shall be removed from the tower. The use of chase ropes is acceptable for retrieval and control purposes. Provided they are effectively managed and do not pose a hazard, chase ropes and wire ropes may be left secured on the structure.
- 10.27.1 In the event of an incident, weather event, or other hazardous situations that would otherwise prevent the removal of the synthetic load line, synthetic load line shall be removed and inspected prior to resuming Work.
- 10.28 All Lift Plan submissions must be on the latest version of the AEP Telecommunications Site and Tower Construction Lift Form. 3D Lift Plan, and other vendor specific lift plan forms will not be reviewed. Contractor must review plans for accuracy prior to submission to Reviewer. A Lift Plan is required for each configuration and must accurately depict the actual estimated forces and equipment to be used. Incomplete lift plans will be rejected. Contractors may be asked to provide additional documentation for review. All required plans should be submitted no later than one (1) week prior to the scheduled start of Work.
- 10.29 All non-engineered Construction Plans/Rigging plans must be submitted utilizing the Rigging Calc rigging plan generator. All plans, regardless of the classification, must be submitted to Reviewer. Contractor must review plans for accuracy prior to submission to Reviewer. A Construction Plan/Rigging Plan is required for each rigging configuration and must accurately depict the actual estimated forces and equipment to be used. Incomplete rigging plans will be rejected. Contractors may be asked to provide additional documentation for review. All required plans should be submitted no later than one (1) week prior to the scheduled start of Work.
- 10.30 All engineered Construction Plans/ Rigging Plans must be reviewed by Contractor for accuracy prior to submission to Reviewer. Contractors may be asked to provide additional documentation for review. All required plans should be submitted no later than one (1) week prior to the scheduled start of Work.
- 10.31 Prior to performing any Work directly on antenna(s) and/or associated cable(s), Contractor shall verify that all transmitters have been powered down. The only exception to this requirement is when making alignments to microwave dish antennas. Contractor shall tag the transmitter and verify the cable prior to disconnecting any cable from an antenna and/or transmitter.

- 10.32 To ensure effective communication and immediate hazard notification, All Contractor Personnel spotting equipment or vehicles, and during other critical tasks as deemed necessary by AEP personnel on Site shall have a working personal air horn and/or a readily available whistle on their person.
- 10.33 Capstan hoists and other base mounted hoists shall not be left unattended while supporting a suspended load. Contractor shall ensure that a qualified individual maintains control and oversight of the hoist at all times during lifting operations.
- 10.34 Contractor shall obtain written approval from Business Unit Operations Manager (AEP Grade 10 or above) prior to the use of any gin pole. Approval shall be project-specific and based on scope, equipment configuration, and associated risk factors.
- 10.35 Prior to utilizing controlled descent methods, Contractor shall submit a documented procedure outlining the scope, equipment, and safety protocols associated with the activity. Contractor shall also complete a pre-descent checklist prior to the start of Work.
- 10.36 Contractor shall obtain written approval from the Business Unit Operations Manager (AEP Grade 10 or above) prior to performing any aerial construction activities in low light conditions occurring before dawn or after dusk. Contractor shall submit a Low Light Execution Plan for review and acceptance prior to the start of Work.
- 10.37 Contractor shall obtain written approval from Business Unit Operations Manager (AEP Grade 10 or above) prior to utilizing any base-mounted hoist for personnel lifting. Approval shall be project-specific and based on equipment configuration, scope of Work, and associated risk factors.

11.0 TOOLS

- 11.5 All rigging components shall conform to the applicable ANSI B30 Standards. Prior to use, contractor shall inspect each rigging assembly to verify compliance and confirm operational integrity.
- 11.5.1 All components and equipment used for rigging and hoisting shall be limited to no more than seventy-five percent (75%) of their rated working load limit (WLL). Any exceptions to this requirement will be formally requested by the Contractor and shall require prior written approval from the Business Unit Operations Manager (Pay Grade 10 and above).

12.0 REPORTING REQUIREMENTS

13.0 OWNER JOBSITE OBSERVATIONS/AUDITS

14.0 CONTRACTOR JOBSITE OBSERVATIONS

15.0 PROHIBITED FROM JOBSITE

16.0 POLICIES AND PROCEDURES

17.0 DEFINITIONS AND ABBREVIATIONS

Appendix E: Transmission and Fiber Construction

As part of Contractor's obligations under the AEP Safety and Health Supplemental Terms and Conditions, Contractor and all Contractor Personnel shall follow the additional requirements set forth in this Appendix E: Transmission and Fiber Construction (this Appendix) while performing Work for Owner's Transmission Operations. This Appendix supplements the corresponding sections as listed in the AEP Safety and Health Supplemental Terms and Conditions.

1.0 INTRODUCTION

2.0 SAFETY & HEALTH PLANNING

2.2 Job Briefings:

2.2.1.1 Contractor shall use Owner supplied Pre-Job Briefing Form located on VERO (<https://verodms.com>).

2.3 For Work exceeding five (5) days duration, Contractor shall be required to submit a Work Safety and Health Plan (WSHP) no later than five (5) business days after the Effective Date of the Contract. WSHP shall be submitted, via email, to the Owner assigned TCR/FCR Project Manager, Environmental Representative and Safety Representative for the Work. Failure to submit the WSHP in the time frame described herein may result in revocation of contract award. The WSHP template for use is located on VERO (<https://verodms.com>). If Work is less than five (5) days in duration but considered to be 'high risk', the AEP Transmission / Fiber Construction Project Team reserves the right to require the Contractor to submit a WSHP for the project.

Note: : 'High Risk' work may include, but is not limited to: Critical Lifts, Crane Activities, Pier Foundations, Demolition, Steel Erection, Personnel Hoisting, Transferring Conductor, Energized Services, Working

2.3.1 A WSHP shall, at a minimum, include information regarding the following:

- Project Details
- Construction/Execution Plan
- Emergency Planning
- Environmental Protection Plans
- Project Safety Management
- Task Hazard Analysis
- Civil Work/Excavations
- Substation/Switchyards

- T Line Project
- Material (Delivery/Handling/Laydown Area)
- Equipment
- Disciplinary Program
- Miscellaneous

2.3.2 Contractor shall ensure that the WSHP be made available and the contents communicated to all personnel on Site at any time. The WSHP shall be maintained separately from other safety documentation and be kept readily available on Site.

2.3.3 All Contractor Personnel shall participate in driving the most efficient route to the nearest medical facility prior to any Work occurring on a Site. If the distance to the emergency facility is too great and a helicopter is the most appropriate means of transportation, Contractor shall contact the service provider and have an appropriate landing zone planned.

2.5 Following review of Job Briefing, Contractor Personnel performing specific tasks shall complete a detailed Task Hazard Analysis (THA) at the physical work location that identifies task steps task steps and lists the associated hazards and mitigation controls. Daily, before any Work begins or resumes, and before changing any Work procedures or activity at any Site, Contractor shall perform a documented new THA which identifies all known and potential Work Site risks. The THA shall be either handwritten with dates and original signatures or may be produced electronically – as long as the final document bears the relevant time and date stamp with original signatures. Any duplication by any means, including photocopied, pre-filled, copied and pasted, or other means of replication of any report **shall not be allowed.**

2.5.1 Contractor’s assigned supervisor, or lead shall review the THA with each Contractor Personnel crewmember prior to the start of each task and anytime the Work procedure changes. Additionally, the Contractor’s assigned supervisor, or lead shall review the THA with each Contractor Personnel crewmember after lunch and/or after any significant break in the Work. Contractor’s THA shall include:

- A detailed step-by-step plan for the task to be performed, referencing any specific requirements of the associated;
- Specific risk/hazards associated with the task on the associated project;
- Control measures Contractor will implement in order to eliminate or control such potential risks/hazards.

- 2.5.2 Contractor shall ensure that each Contractor Personnel crewmember performing Work shall sign their name verifying that he or she understands the THA and will adhere to it.
- 2.5.3 Using Contractor Personnel that is knowledgeable with the applicable scope of Work, Contractor shall conduct a THA review with all personnel who enter the Work zone or Site. Contractor's review shall include a scope of Work, and any hazards present at the site.
- 2.5.4 Contractor shall provide easy access to the THA for all personnel and all contractors on Site at the start of the activity and upon any changes to the THA or upon any requests to review the THA. Contractor shall make THA's available on the Site at all times.
- 2.5.5 Contractor shall immediately communicate to all personnel on Site, regardless of affiliation, any changes to the THA that occur throughout the performance of the Work.
- 2.6 Fiber Construction Site Specific Requirements - Contractor shall ensure portable eye wash kits are made available for Contractor Personnel's use.

3.0 GENERAL PERSONNEL TRAINING AND QUALIFICATION REQUIREMENTS

- 3.3 Applicable to each crew on the jobsite. The exception is to those performing Electrical Work under 600V.
- 3.7 Qualified and Non-Qualified Electrical Employees
 - 3.7.1 Qualified Electrical Employee
 - 3.7.1.1 Owner requires that qualified electrical Contractor Personnel crew members involved in the operation, construction, maintenance, or working on or near electric power generation, control, transformation, transmission, and distribution lines and equipment will be qualified as required by OSHA in 29 CFR 1910.269 and 29CFR 1926 Subpart V.
 - 3.7.1.2 Owner requires that qualified electrical Contractor Personnel crew members involved in the operation, repairing, testing, verification, or exposure to or working on or near live parts energized at 50 volts or more, will be qualified as required by OSHA 1910 Subpart S and OSHA 1926 Subpart K.
 - 3.7.1.3 Owner defines a qualified electrical employee or 'Qualified Employee' as a person having been trained and having demonstrated knowledge in the construction and operation of electrical power generation, transmission and distribution equipment involved and the associated hazards. A Qualified Employee must be trained and competent in (list not all-inclusive):

- 3.7.1.3.1 The skills and techniques necessary to distinguish exposed live parts of electrical equipment;
 - 3.7.1.3.2 The skills and techniques necessary to determine the nominal voltage of exposed live parts;
 - 3.7.1.3.3 The minimum approach distances or safe working distances specified by OSHA corresponding to the voltages to which the Qualified Employee will be exposed;
 - 3.7.1.3.4 Training to recognize and avoid electrical hazards;
 - 3.7.1.3.5 Safety practices, including applicable emergency procedures (such as pole top & manhole rescue, first aid/CPR, Lock Out/Tag Out), that are related to the work, and;
 - 3.7.1.3.6 The proper use of special precautionary techniques, personal protective equipment/clothing, insulation and shielding materials, and insulated tools for working on or near exposed parts of electrical equipment.
- 3.7.1.4 Until these Qualified Employees have demonstrated proficiency in the work practices involved, they are considered to be employees undergoing on-the-job training and must be under the direct supervision of a qualified person at all times. Contractor Personnel shall only perform Work at the level for which they are qualified.
- 3.7.1.5 At Owners request, Contractor must supply documentation concerning the types of skills assessments performed, training programs and how the Contractor will ensure that its Qualified Employees demonstrate competencies. Contractor shall certify that each Qualified Employee has received training required by this section. Certification shall be made when the Qualified Employee has demonstrated proficiencies in the Work assigned.
- 3.7.1.6 Contractor shall maintain a list of qualified personnel able to work on or near primary, able to serve as a qualified observer and able to work secondary service. Qualified list shall be available upon request from Owner during normal operation and prior to service restoration.
- 3.7.1.7 Contractor shall ensure that its Qualified Employees and its Subcontractor(s) Qualified Employees have the appropriate training to perform the Work.

3.7.1.8 Owner, at its sole discretion based on Work observations or for other reasons, may at any time withdraw their acceptance of any previously approved or completed training and require Contractor Personnel to repeat training.

3.7.2 Non-Qualified Electrical Employee

3.7.2.1 Contractor shall provide training for non-qualified electrical employees for the purpose of entering or working within electrical areas (i.e., electrical vaults, manholes, poles). Contractor shall provide training for non-qualified electrical Contractor employees who shall be working near energized lines or equipment energized at 50 volts or more (i.e., civil contractors, laborers, locators, pole treatment/inspection, etc.). All direct and indirect costs of this training are Contractor's sole responsibility.

3.7.2.2 Owner defines a non-qualified electrical employee or "Non-Qualified Employee" as a person who has not been trained or authorized to conduct electrical work. A Non-Qualified Employee must be trained and competent in (list not all-inclusive):

3.7.2.2.1 Understanding of electrical hazards;

3.7.2.2.2 Electric shock;

3.7.2.2.3 What is safe to touch and what is not safe to touch in specific areas they will be entering;

3.7.2.2.4 Hazard Reporting;

3.7.2.2.5 The maximum voltage of the area/equipment;

3.7.2.2.6 The minimum approach distances for the maximum voltage within the area, and;

3.7.2.2.7 Recognition and proper use of protective equipment that will be used to provide protection and in the work practices necessary for performing their specific work assignments while working near energized lines or equipment energized at 50 volts or more.

3.7.2.3 At Owners request, Contractor must supply documentation concerning the types of skills assessments performed, training programs and how the Contractor will ensure that their Non-Qualified Employee demonstrate competencies. Contractor shall certify that each Non-Qualified Employee has received training required by this section. Certification

shall be made when the Non-Qualified Employee has demonstrated proficiencies in the Work assigned.

3.7.2.4 Contractor shall ensure that its Non-Qualified Employees and its Subcontractor(s) Non-qualified Employees have the appropriate training and safety instruction to perform the Work. Contractor shall also ensure that its Non-Qualified Employees and its Subcontractor(s) Non-Qualified Employees do not engage in any work prior to completing the relevant training.

3.8 Contractor shall submit its annual training plan to Owner for review no later than February 1 of the applicable calendar year. Contractor's Training plans shall be at a minimum, include a training calendar, learning objectives for that year, and evaluation tools that will be used to measure the success of the training.

3.8.1 Fiber Construction Specific Requirement - OPGW Personal Protective Grounding Training Contractor and on Site Contractor Personnel shall complete, at Contractors expense, Optical Ground Wire (OPGW) Personal Protective Grounding Training (incorporated herein by reference) prior to being on Jobsite.

3.9 All Contractor Personnel required to enter an Owner energized substation or switchyard shall complete Station Entry Training prior to entry. Contractor Personnel shall, at a minimum, be trained, competent and comfortable with the skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment, determine the nominal voltage of exposed live parts, and the minimum approach distances corresponding to the voltage to which the Contractor Personnel will be exposed. Contractor shall maintain a record of this training and shall make such records available to Owner upon Owner's request.

3.10 Contractor Personnel entering an energized station Site who are not station entry qualified, per OSHA standards, shall be accompanied by and under the direct supervision of a qualified supervisor. If the qualified supervisor leaves the station Site where Work is being performed; all affected Contractor Personnel shall also leave the Site.

3.11 Telecommunications Tower

3.11.1 Minimum of 50% of the on-site crew involved in tower structure and/or antenna system construction or maintenance required to possess current NWSA TTT1 or higher certification, including Foreman certification for the on-site supervisor.

4.0 SAFETY & HEALTH PROFESSIONAL

5.0 COMMUNICATION

6.0 WORK HOUR/WORK DAY LIMITATIONS

6.3 Exceptions to work hour and workday limitation shall be requested by the Contractor and be pre-approved in writing by the Owner's Construction Manager and Project Manager.

7.0 CONTRACTOR AND SUBCONTRACTOR QUALIFICATION STATUS

8.0 PERSONAL PROTECTIVE EQUIPMENT

8.4.18. Contractor agrees that any Contractor Personnel, who may be called upon to work on or near exposed, energized part(s) shall either wear the appropriate arc-rated clothing or have them readily available on Site at all times.

8.4.19 The outermost layer of clothing on the upper body shall be 'High Visibility and Reflective'.

8.4.20 General Fiber Construction Requirements. All Contractor Personnel are required to wear flame resistant (FR) clothing under the following circumstances:

8.4.20.1 When entering a network manhole or vault

8.4.20.2 Gate to gate in a substation

8.4.20.3 Aerial construction on transmission or distribution networks

8.4.20.4 Anytime Site management requires FR clothing and/or FR harness to be worn

9.0 INDUSTRIAL HYGIENE

10.0 MISCELLANEOUS JOBSITE REQUIREMENTS

10.1.1 When excavating inside energized stations, Contractor shall secure a written approval from Owner prior to using any mechanical devices to perform such excavation inside an energized substation. Contractor shall consider Non-destructive excavation methods (i.e. hydro-vac, hand dig, etc.) for initial use in energized stations to determine location of potential utilities. Upon review, on an individual Site basis, Owner may require non-destructive excavation to be used or may approve the use of mechanical excavation methods.

10.4.1 Contractor shall ensure that all excavations are barricaded.

10.4.2 Contractor shall define Work areas and drive paths of substations and switchyards with barricades to delineate safe distances to structures, equipment, fixed objects, etc.

10.4.2.1 Fiber Construction Aerial Contractor Personnel are required to have:

10.4.2.1.1 Fire extinguisher;

10.4.2.1.2 Spare Class II gloves with leather protectors:

10.4.2.1.3 Blanket that can be kept in a bag outside the barricaded area during Mobile Operations; use cover-ups and protective Sleeves when working above the neutral; and ensure the required equipment is out of the bag and laid out for use when working in the Primary Zone. “Primary Zone” as used in this Section 10.4.2, means above the neutral.

10.4.3 Aerial devices shall be barricaded to prevent workers on the ground from falling objects or touching the aerial device in the event of an accidental contact with energized conductors. When the barricaded area needs to be entered, the observer shall confirm that all work aloft is stopped and that the bucket, work platform, or boom has been moved out to a safe distance from nearby energized conductors or sources. Work will only restart after the observer has confirmed that the barricaded area is clear. area shall also be extended beyond any temporary ground rod or anchor. When the barricaded area

10.4.3.1 Aerial devices shall be grounded when in use. Grounding shall be applied to a system ground conductor such as station equipment ground, structure ground, or a grounded structure. Where such previously mentioned grounding sources are not available, a remote temporary ground rod or an anchor shall be used. When a temporary ground rod is used, it is to be driven into the ground for its entire length, if possible, but never less than two feet in the ground to provide the best ground contact. Also, the ground rod or anchor shall be away from the immediate work area to reduce the risk of step potential and be barricaded.

10.4.3.2 Equipment with a boom, mast, bucket, bed, etc. shall be stowed and fully cradled before moving.

10.4.3.3 Before beginning equipment operations, the Contractor shall identify the Work zone to determine if any part of the equipment, boom, load line or load (including rigging and lifting accessories), if operated up to the equipment's maximum working radius in the work zone, could encroach the trigger distance to energized lines or equipment. The trigger distance for non-qualified electrical workers is defined as twenty feet (20') for less than 345kV and fifty feet (50') for 345kV and greater. For qualified electrical workers these distances are defined as fifteen feet (15') for less than 345kV and thirty feet (30') for 345kV and greater. If the trigger distance to energized lines or equipment is encroached, the Contractor shall:

10.4.3.3.1 Conduct a documented planning meeting with the operator and the other workers who will be in the area of the equipment or load to review the location of the energized lines and/or equipment. The planning meeting shall address the steps and provisions that will be implemented to prevent encroachment, including delineated work zone, positioning of equipment,

voltage with applicable minimum approach distance and available engineering controls (i.e. proximity alarms, range limiting devices, insulating protective material, barricades, etc.).

10.4.3.3.2 Assign dedicated qualified observer(s) whose sole responsibility is to watch the separation between the conductor and the equipment, load line and load (including rigging and lifting accessories), ensure that the applicable minimum approach distance is not breached through communication with the operator, and warn all persons involved in the work of impending dangers.

10.4.3.3.3 Erect and maintain an elevated warning line, barricade or line of signs, in view of the operator, equipped with flags or similar high visibility marking at the minimum approach distance.

10.4.3.4 Backing motor vehicles should be avoided wherever possible, such as by taking pull through opportunities. If backing cannot be avoided Contractor Personnel should back upon arrival. A second Contractor Personnel, if present, shall be used as a spotter while backing.

10.15 Housekeeping – Contractor shall keep all trash in appropriate containers and shall dispose of it in a proper and timely manner. Contractor shall not store materials within the working space around energized lines or equipment.

10.16 Cable Verification– Immediately prior to cutting any control cable, i.e., fiber optic cable, waveguide, or coax. Contractor Personnel shall have a second person verify that it is the proper cable, that it is de-energized, and not carrying active network traffic.

10.17 Guard Structures – All hotline crossings and all road crossing shall be protected by the use of a guard structure. Guard structures (including equipment used as guard structures) shall be installed prior to disconnecting the conductor and shall remain in place until the conductor is clipped in.

10.18 Placement of Grounds – The location of all grounds on Owner’s transmission lines and stations shall be tracked and documented by Contractor. Grounds shall be installed and removed maintaining minimum approach distance. Grounds shall be inspected prior to each use. All Grounds (each cable) shall be flagged.

10.19 Warning Signs - shall be installed at locations where overhead lines have been identified. Warning signs shall be visible and considered for all directions of travel, including site ingress and egress. Warning signs shall be no less than 36" x 36" and placed at appropriate height to draw attention. Bilingual warning signs shall be posted whenever prudent.

10.20 Fiber Construction Specific Requirements

10.20.1 Side Setting a Pole in Power - All Contractor Personnel shall adhere to Owner’s pole installation under power lines standards , as amended from time to time (incorporated herein by reference)

10.20.2 Rubber Gloves: Contractor Personnel working out of an aerial bucket shall wear rubber gloves with approved leather protectors before aerial device is un-cradled and boom lifted into air on any structure/pole with energized conductors. All conductors are considered energized unless tested and grounded on each side of Work location. When Work is required to place fiber above the neutral and working in the “Primary Zone”, rubber sleeves are required to be used in conjunction with the appropriate rubber gloves and approved leather protectors. Contractors shall comply with all Federal OSHA and State specific OSHA requirements. Non-Qualified Electrical Employees may only work above the neutral and work in the “Primary Zone” during approved outages. The Qualified Observer shall verify all personnel has the required rubber gloves with approved leather protectors and sleeves on before lifting of aerial bucket. FR clothing is required when working out of any aerial device. All rubber goods, including gloves, sleeves, and blankets, shall be inspected before each use and tested per all AEP & OSHA standards.

11.0 TOOLS

11.4 Hose safety whip checks shall be utilized on all pneumatic air hose assemblies.

12.0 REPORTING REQUIREMENTS

13.0 OWNER JOBSITE OBSERVATIONS/AUDITS

14.0 CONTRACTOR JOBSITE OBSERVATIONS

14.1.1 If Work exceeds two weeks in duration, a Contractor safety professional shall perform and document at least one project safety observation report on each Site no less than once per month.

15.0 PROHIBITED FROM JOBSITE

16.0 TRANSMISSION POLICIES AND PROCEDURES

17.0 DEFINITIONS AND ABBREVIATION