INTRODUCTION

The enclosed information addresses expectations of Subcontractors, Tier Subcontractors and their invitees (herein called subcontractors) visiting or performing work on Power projects.

Each subcontractor working on Power projects is obligated to comply with all Federal, State and Local safety requirements, Site Specific Safety Programs, and any Owner Safety Requirements (herein after called safety requirements). These safety requirements constitute the minimum level of performance expected from each employer and its employees or their subcontractors, or agents. In addition, subcontractors are responsible for adherence to site-specific safety requirements defined by the project safety requirements. All subcontractors shall adhere to these requirements for the performance of their work on Power projects designed to promote the project's safe completion.

SUBCONTRACTOR COMPLIANCE

In accordance with the OSHA requirements, each subcontractor shall protect the employment and places of employment of each of its employees engaged in construction work by complying with the appropriate standards prescribed in the applicable standards. Subcontractors shall hold each of their agents, vendors, tier subcontractors and suppliers responsible for compliance with these safety requirements. Subcontractors shall include these safety requirements in contracts with all tier subcontractors, vendors and suppliers. Entry onto project, property, or the job site constitutes acknowledgement by the subcontractor, subcontractor employees or invitee of their obligation to adhere to these safety requirements.

Each subcontractor shall establish and maintain an effective safety and health program that addresses the requirements herein. The subcontractor shall be solely responsible for implementing the safety program and shall have sole responsibility for monitoring the work of its employees, subcontractors, agents, vendors and suppliers to ensure compliance. The subcontractor is responsible for procuring and compliance with the current version of Power's Subcontractor Site Safety Requirements and Procedures at http://www.powerconstruction.net/subcontractor-partners.

For projects designated to be covered by General Contractor's CCIP as identified in the Project Specific Agreement's Exhibit C, and in addition to any project specific requirements defined herein, Subcontractor shall also be held to the requirements defined in the <u>Appendix A – CCIP Safety Program</u> <u>Requirements</u> of this document.

VIOLATION OF SAFETY REQUIREMENTS

If a subcontractor or invitee is found non-compliant to any of the safety requirements, the subcontractor and employee(s) may be subject to the following (one or more):

- At a minimum, the resulting action may result in a written warning;
- Individual(s) may be removed from the project for a specified duration;
- Individual(s) may be removed from project and/or future Power projects;
- Re-training for individual(s), crew and /or foreman;
- A \$1,000 fine per occurrence;
- Additional full-time supervision and/or safety representative to the project at the subcontractor's expense;



- A meeting will be conducted with the subcontractor's supervisor and management, and the Power Project Team. The meeting should conclude in a documented agreement outlining the subcontractor's intended corrective actions and timeframe for implementation;
- Removal of unsafe condition by using other work forces, the cost of which will be reimbursed through back charges or provisions of the contract;
- Power may exercise its option to terminate all or part of the contract with the subcontractor for inadequate safety performance, or failure to fulfill any of the safety requirements of the contract;
- Any resulting damages (including damage for delay) will be paid for in accordance with the subcontract.

All costs and expenses paid or incurred by a subcontractor in the implementation and administration of the safety requirements shall be paid by said subcontractor.

When violations of the safety requirements are observed, the responsible subcontractor shall be informed orally for immediate correction. It is the sole responsibility of the subcontractor to devise and implement the correction. If Power deems it is necessary to stop work being performed due to the nature of a violation, work will be halted until the subcontractor corrects the violations. Any costs incurred by the stoppage of work due to the violation will be the sole responsibility of the violating subcontractor.

DESIGNATION OF COMPETENT PERSON

Each subcontractor shall designate a competent person as defined by OSHA 29 CFR 1926.32(f) to implement the safety requirements. A competent person from each subcontractor must be on site whenever they have employees working on site, and the name of that person shall be submitted on the Power Daily Report. Each subcontractor is required to maintain this position, and a competent person(s) will remain on-site until the completion of their work. The subcontractor shall not relinquish or defer responsibility for project safety to its own or subcontractor employees at any time under any circumstances. Where the nature or size of the contract warrants, Power may require the subcontractor to employ a full-time, on-site qualified Safety Representative.

The following trade contractors are required to provide a competent person who has completed, at a minimum, the OSHA 30-hour Outreach Training Program for Construction within the previous six years at the project full-time when said contractor has three or more employees working on-site for the duration of more than 5 sequential working days. The subcontractor must provide proof of this training to Power prior to commencing work on site.

- All structure related steel activities (erection, decking, joist, etc.)
- Miscellaneous metals (stairs, framing, supports, etc.)
- All structure related concrete activities (frame, skin, cast-in-place, pre-cast, masonry, etc.)
- Mechanical trades,
 - \circ $\,$ Mechanical pipe and HVAC $\,$
 - o Electrical
 - Plumbing
 - Sprinkler fitter



- Excavators and underground utility work
- Enclosure trades
 - Windows
 - o Stone
 - o Masonry
 - o Metal panels
 - Roofing
- Rough carpentry
 - o Doors, frames and hardware
 - Interior and exterior framing
 - Interior and exterior drywall
- Elevator and escalator installer
- Foundations
- Earth retentions systems
- Demolition

All other trades are required to provide a competent person who has completed, at a minimum, the OSHA 10-hour Outreach Training Program for Construction within the previous six years at the project full-time when said contractor has three or more employees working on-site for the duration of more than 5 working days. Based on the risk associated with the subcontractor's work, Power may require additional training for the competent person or additional competent persons for the specific project.

The subcontractor must provide proof of this training to Power prior to commencing work on site. Subcontractors may fulfill the competent person requirement for tier subcontractors granted the subcontractor competent person remains at the project full-time while the tier sub employees are working. Otherwise, the tier subcontractor is responsible for providing the competent person based on the aforementioned criteria. Each subcontractor is solely responsible for ensuring employees have the training required as part of this policy and any other federal, state or local requirement. Any questions or variance requests must be directed to Power's Safety Director for consideration.

SUBCONTRACTOR SAFETY REPRESENTATION

The subcontractor's designated Corporate Safety Representative is expected to make at a minimum monthly jobsite visits to audit implementation of the subcontractor's safety and health plan and the safety requirements. This representative will also be required to attend regular on-site safety meetings, as determined by Power. Additional on-site safety and health staffing will be defined in the individual trade scopes. The subcontractor will provide a copy of all documented inspections, observations, or reports to Power.

OSHA AND STATE AGENCY INSPECTIONS

If after an inspection, a subcontractor receives any citation(s), a copy of all citations shall be immediately provided to Power.

It is the responsibility of the subcontractor to notify Power and OSHA of any reportable injury under the Recordkeeping regulation (29 CFR 1904) which includes all work-related fatalities, inpatient hospitalizations, amputations or losses of an eye.



TRAINING AND MEETING REQUIREMENTS

Preconstruction Meeting

Subcontractors shall ensure that their project management and other key personnel, including their Site Supervisor and Safety Representative at a minimum, attend a pre-construction meeting with the Power project management staff where planning for safe execution of the project will be addressed.

Site Safety Orientation

Prior to starting work on the Project, all employees are required to attend a site-specific safety orientation provided by Power. The orientation will cover general safety and health rules, regulations and site-specific policies and hazards. The orientation serves as the verbal warning for safety requirements for all individuals on the project. The subcontractor shall be responsible for scheduling orientation of their employees and visitors with Power. If an individual is found on-site without having received the training, that person will be removed from the project for the remainder of the day, and the crew foreman may be disciplined.

Foreman's Site Requirements Review

The foreman identified by the subcontractor will complete a review of the safety requirements and expectations with a member of the Power project team. If the subcontractor has additional foreman or changes foreman on the project, these individuals must also complete this review.

Foremen's Meeting

Foreman's meetings will typically be conducted on site. The date and time of these meetings will be determined by the project team. Attendance is expected from each subcontractor unless excused by Power.

Safety Review

Following an incident or safety issue, Power may request a meeting be held with the parties involved to discuss the incident or issue in greater detail. Requested subcontractors shall attend and participate in the investigation, discussion, and develop an action plan.

Safety Specific Meetings

As required by and at Power's discretion, site-wide safety meetings or stand downs will be conducted and subcontractor employee attendance and participation will be required for said meetings. Power expects subcontractors to cooperate with and participate in additional training exercises conducted at the project (i.e. OSHA Training Institute visits).

INJURY CARE AND MEDICAL FACILITY

Each subcontractor is responsible to establish a medical facility for use by employees who sustain a work-related injury. The facility to be used shall be communicated to the subcontractor's employees. The subcontractor is responsible for all costs borne out of medical treatment, substance abuse testing and any other associated costs (Power is not to be charged for any treatment costs including substance abuse testing).

Each subcontractor is to provide an appropriate sized First Aid kit that is maintained and adequately stocked. The location of the kit shall be communicated with the subcontractor's employees.



Subcontractors who have three or more employees working on-site for the duration of more than 5 sequential working days shall provide and keep on-site an individual trained in first aid and CPR.

DOCUMENTATION AND REPORTING

Site Specific Safety and Health Plan

Each subcontractor shall establish and submit for review a written Site-Specific Safety and Health Plan that includes details commensurate with the work to be performed. The subcontractor's Site-Specific Safety and Health Plan shall clearly describe the subcontractor's methods for meeting its obligations to provide a safe and healthful work environment, as well as to protect other trades, vendors, visitors and members of the general public from the exposures generated by the subcontractor's work. The subcontractor's Company Safety Manual will not be accepted as a substitution for a Site-Specific Safety and Health Plan. The following will be submitted prior to the subcontractor's mobilization to the project:

- A written Project Site-Specific Safety & Health Plan (paper or electronic copy as required by the Power project team);
- Identify safety roles and responsibilities for subcontractor employees;
- Subcontractor's disciplinary action program;
- Process for managing tier subcontractors;
- Hazard Communication Program, including paper or electronic copy (as required by the Power project team) of current SDS and table of contents. A project specific SDS file shall be maintained on-site for employee review;
- Specific job hazard identification and worker training (i.e. qualified rigger training);
- Job Hazard Analysis plan;
- Silica Hazard Assessment and applicable Exposure Control Plan;
- Emergency procedures including a designated clinic with address, phone number and map.
- Competent person qualifications and training records;
- As a condition of their contract, all Subcontractors shall submit to Power or designee a Site-Specific Safety Plan within fifteen (15) days after receipt of notice to proceed and prior to start of construction activities.

The subcontractor shall be solely responsible for implementing the Site-Specific Safety and Health Plan as well as other safety requirements.

Job Hazard Analysis (JHA)

Detailed JHA's addressing hazards associated with the Subcontractor's scope of work are required as part of the subcontractor site-specific safety and health plan submittal. The Subcontractor shall also prepare additional JHA's upon request and modify as the work process and/or associated risks change. These procedures will be reviewed with all affected employees prior to starting the work or after modifications to the JHA, by the subcontractor.

Electronic Forms Process

Each subcontractor is solely responsible for providing access and the ability, to their project supervision, to upload and manage electronic documents required by Power Construction. This includes providing, at minimum, internet access and device (tablet or computer) to their project supervisor. Power Construction will provide portal access and initial use training as needed at no cost to the subcontractor



and their tier subcontractors. All subcontractors are required to utilize the electronic forms process regardless of the scope of their work, contract value, contractor processes and forms, etc. Failure to provide documentation outlined in this section in its required timeframe will be a violation of this document resulting in disciplinary action, withholding of payment, and/or work stoppage.

Daily Report and Daily Huddle Process

Each subcontractor, including tier subcontractors, must submit to Power, <u>on a daily basis</u>, a Daily Report. Subcontractor must complete all of the information required on the Daily Huddle and Daily Report through Power's Safety E-forms process outlined above. Each subcontractor will be responsible for conducting a daily huddle with each crew to identify the work activities for the day, the associated hazards of the work and the control measures to be implemented.

Toolbox Talks

Each subcontractor shall conduct weekly toolbox safety meetings relevant to the work being performed by their employees. The toolbox talk or a description of the topic discussed along with all attendees' names shall be submitted to Power utilizing the electronic forms process.

Safety Inspections

In accordance with OSHA, each subcontractor shall perform frequent and regular safety inspections of their work area(s) by a competent person. A copy of the report or documented inspection shall be submitted to Power within 24-hours of the commencement of the inspection. Subcontractor supervisors shall take immediate action to correct violations, unsafe practices and unsafe conditions. The subcontractor will be solely responsible to review and monitor the work area or location of all their employees on a regular basis during the performance of work. In addition, each subcontractor must provide a documented inspection of the subcontractor's work area(s) by an individual not assigned to the daily operations on-site (i.e. safety representative, insurance loss control representative, etc.) at a minimum of once per month.

Incident Reporting

Subcontractors are responsible to immediately notify Power of all incidents including personal injuries and illnesses, near hits (defined as an occurrence that has the attributes of an incident, yet has no apparent damage to person or property), project property losses or damages, and incidents involving the public or their property.

Each subcontractor is required to investigate all incidents incurred by their employees, or incidents that are the result of their operations. Each subcontractor shall provide to Power a documented Incident Investigation Report within 24-hours of the occurrence.

Power may conduct an independent investigation at their own discretion or when they deem it necessary as a supplement to that required of the subcontractor. Subcontractors and their employees are expected to fully cooperate with the investigation process including completion of witness statements, photographs, completion of Power required documents and any other elements of the incident investigation process. Upon request, subcontractors involved in the incident shall participate in Incident Review Meetings.



SUBSTANCE ABUSE POLICY

The illegal use or abuse of drugs and or alcohol constitutes a threat to the safety and health of employees and the general public. The Substance Abuse Policy requires employees to report to work fit for duty, and to perform their work, free of detectable levels of drugs, alcohol or other substances, which may affect their ability to work safely. Each subcontractor shall establish and maintain an effective substance abuse program that at minimum is equivalent to Power's *Substance Abuse Policy* (copy of this policy is available upon written request). Drug and alcohol testing is required of subcontractor employees in the following situations:

- If there is reasonable suspicion that the individual is under the influence of drugs or alcohol (*immediate testing required*);
- If the individual has sustained a work-related injury requiring outside medical attention (*immediate testing required*);
- If the individual has caused or contributed to another employee being injured in a work-related incident (*immediate testing required*);
- If the individual has caused or contributed to a work-related incident resulting in, or which has the potential to result in, property damage (*immediate testing required*);
- If the individual was involved in a "near hit", defined as an occurrence that has the attributes of an incident, yet has no apparent damage to person or property (*immediate testing may be required*).

Subcontractor employees who fail to provide proof of a required <u>drug and alcohol test</u>, refuse the required test or violate the subcontractor's substance abuse policy will not be permitted on Power sites.

All costs associated with any substance abuse testing are the responsibility of the subcontractor.

SPECIFIC REQUIREMENTS

GENERAL SAFETY REQUIREMENTS

- Subcontractors must report to the Power Project Team any safety concerns, observed conditions or violations of job safety, regardless of whether they are within the observer's power or responsibility to correct.
- Subcontractors shall assure that supervisory employees have a working knowledge of applicable safety requirements as they pertain to their areas and encourage all employees to improve their accident prevention awareness.
- Smoking is prohibited at any time in any project field office or Power office. In addition, smoking will not be permitted anywhere within the building in the following situations:
 - In a build-out or addition to an occupied building (tie-in to existing structure);
 - When the window installation has begun;
 - When any temporary or permanent enclosure is installed (partial or complete) on the building;
 - When site-specific requirements prohibit smoking on the project or the campus;
 - In any other areas identified as "Non-smoking" on the project;
 - Any areas covered by the Illinois Smoke Free Law.
- The use of personal radio headsets (I-pods/MP3 players, etc.) while on-site is not allowed.



 Radios are not permitted in work areas adjacent to occupied spaces or when the project does not allow their use. Power's project supervisor will determine radio use in stand-alone buildings.

HOUSEKEEPING

Each subcontractor shall be responsible for daily and continual clean-up during and upon completion of work activities and shall leave the work areas broom swept. In addition, the following items are required as applicable:

- Subcontractor is responsible to comply with the *City of Chicago Housekeeping Ordinance*, when applicable.
- Subcontractor is responsible for dust elimination/minimization during construction and the clean-up process. Subcontractors are responsible for assuring that trash and debris remain out of the work areas. Dry-sweeping of silica-containing materials is prohibited; subcontractors must use HEPA-vacuum systems, wet-sweeping, or other methods to control potential silica hazards.
- Non-oil-based sweeping compound or other control measures must be used during sweeping operations.
- Subcontractors shall monitor their work areas daily or more frequently if needed to assure that all debris is removed from the work area to minimize hazards.
- Each subcontractor is responsible to provide resources to move their trash and debris to an area designated by Power. If debris is not removed on a timely basis, or after appropriate warning, Power will provide resources to remove the debris and the responsible subcontractor will be responsible for costs incurred.
- Grinding, sawing, sanding and cutting operations should utilize dustless tool systems where airborne particulates become present due to their work and other dust control methods are not feasible (in accordance with 29 CFR 1926.1153 and other applicable requirements).

Effective housekeeping should not be an assigned task; it is considered to be a part of each employee's responsibility. Keeping the work site clean not only produces a safer job site, but a better place to come to work each day. It is each employee's responsibility to keep their work area in order, cleaning-up during and after work is completed.

PERSONAL PROTECTIVE EQUIPMENT

Each subcontractor is solely responsible to supply their employees with the required Personal Protective Equipment.

Eye and Face Protection

- All employees shall wear safety glasses 100% of the time while on the construction site. Minimum eye protection shall include approved safety glasses <u>with side-shields</u> which meet the standards specified in ANSI/ISEA Z-87.1-2015 (this shall also include prescription eyewear).
- Additional eye and face protection in combination shall be worn when:
 - Welding, burning or cutting with torches;
 - Using abrasive wheels, portable grinders;
 - Drilling, cutting or chipping at or above shoulder level;
 - Chipping concrete, stone or metal;
 - Working with any materials subject to scaling, flaking or chipping;
 - Drilling or working under dusty conditions;
 - Using explosive actuated fastening or nailing tools at or above shoulder level;



- Working with compressed air or pneumatic tools;
- Using masonry saw;
- Additional PPE as determined by the project or task-specific requirements, Daily Huddle and/or Job Hazard Analysis.

Head Protection

 All employees, vendors, delivery personnel and other visitors to the project shall wear hard hats that meet ANSI/ISEA Z-89.1-2014, 100% of the time while on the construction site (including while wearing face shields, welding helmets, etc.). Hard hats should be worn facing forward, with the bill in front (unless manufacturer permits the hardhat to be worn with bill facing back and situation dictates the hard hat to be worn with the bill facing back).

Foot Protection

• All personnel on the construction site shall wear hard-soled work shoes. No one is permitted to wear sneakers, tennis shoes or athletic shoes of any type, sandals, high heels or open toed shoes on the construction site. Additional foot protection may be required depending on work activity as dictated by subcontractor's JHA.

Respiratory Protection

If respiratory protection is required to protect employees from exposures to airborne contaminants, subcontractors must adhere to the following:

- Compliance with the applicable standards (respiratory, specific contaminants, etc.);
- Annual medical clearance for employee;
- Annual fit-testing for employee;
- Training for employee on respirator;
- Written respiratory protection program;
- Validation of respirator selection based on sampling or historical data (subcontractor is solely responsible for air sampling).

Atmospheric Hazards, Air Monitoring, and Sampling

Subcontractors are required to provide air monitoring and/or air sampling for atmospheric hazards generated by their operations. The subcontractor must provide evidence of and results from air monitoring and/or air sampling to Power Construction. The subcontractor creating the atmospheric hazard is solely responsible for implementing control measures (i.e. smoke eaters, HEPA machines) to protect fellow workers, building occupants, building systems, and any other potentially affected entities.

Hearing Protection

• Hearing protection is required in accordance with OSHA standards.

Clothing

Subcontractor employees must meet the following as it relates to clothing on Power projects:

- Long pants and shirts that are free of damage, inappropriate wording or symbols, and cover the shoulders and mid-section;
- High-visibility material when exposed to vehicles and equipment traffic;
- Flaggers must wear the required reflective vests when flagging traffic (ANSI/ISEA 107 classification);



- Hand and forearm protection as required by job hazard analysis, project, or task-specific requirement;
- Protective clothing as required based on the job hazard analysis;
- Any other additional PPE in accordance with project or task -specific requirements or job hazard analysis.

FALL PROTECTION AND ACCESS REQUIREMENTS

As part of the planning process, subcontractors are required to identify the means necessary to safely access the work areas included in their scope of work. These methods, including fall protection measures, should be identified in site specific safety and health plans, Job Hazard Analysis', Daily Huddles and other documentation. If a subcontractor intends to take temporary or permanent ownership of any equipment, a *Hold Harmless and Equipment Lease Agreement* shall be executed.

Overhead Protection

Subcontractor is responsible for identifying overhead protection and falling object prevention and providing protective measures for protecting the workers on the job as well as the public. Overhead protection must be in place prior to the start of any overhead work that exposes any employee or members of the general public to falling objects such as tools, equipment, material, debris (including hot work), etc. on the project or in the vicinity.

Protective measures include but are not limited to:

- Storing material at least 10' away from the building perimeter and 6' from interior openings;
- Secure tools and materials to prevent them from falling during work (i.e. tool tethers) and while not on site in accordance with ANSI/ISEA 121-2018;
- Use restricted access zones, toe boards, screens, nets, canopies or catch platforms to catch or deflect falling objects.

Ladders, Stairways, and Ramps

The building frame subcontractor should provide access to the building through the following as soon as reasonably possible:

- Minimize the use of ladders for temporary access;
- Install the permanent access systems (i.e. stairs) within 2 floors of the working floor;
- Install temporary stair tower or similar methods when permanent systems cannot be installed or completed;
- Temporary ramps shall be constructed in accordance with the applicable standard and account for its intended use (i.e. loads, equipment, slip resistance, weather, etc.). If used as a replacement, temporary pedestrian ramps and walkways should be of similar materials as the ramp or walkway it is replacing. Wooden ramps should be avoided whenever possible.
- Provide inspection, maintenance and repair of all access systems.

All ladders and stairways shall be inspected, constructed and used in accordance with 29 CFR 1926 Subpart X, applicable ANSI requirements and local codes. In addition, the following items are required as applicable:



- Portable extension, straight and typical step ladders constructed of conductive materials (metal) are not permitted (drywall step ladders and trench box ladders may be used if no electrical hazard is present);
- Job-made ladders must meet ANSI standards;
- Each subcontractor shall provide ladder training for all employees using ladders;
- Stairs and platforms must be used to provide access to office, equipment and material storage trailers;
- Stairways must be kept free of flammable materials, stored materials or debris.

Scaffolds

All scaffolds shall be erected, used, and dismantled in accordance with 29 CFR 1926 Subpart L and local codes (i.e. City of Chicago Scaffold Ordinance). In addition, the following items are required as applicable:

- Documentation of training is required for the use of any scaffold as determined by the City of Chicago and/or OSHA. This documentation must be submitted to Power project management upon request.
- The designated competent person must complete the scaffold inspection prior to allowing workers on the scaffold each shift and submit any documentation to Power at the end of each shift.
- Scaffolds of any type must be erected in accordance with manufacturer's specifications and requirements.
- Hallway / Narrow Frame (Baker scaffolds) with a working deck above 6', shall adhere to the following:
 - Fall protection required (i.e. guardrails);
 - Outriggers installed;
 - \circ Wheels locked to prevent movement when occupied;
 - Proper access.
- The working level of a scaffold shall be fully decked, or additional fall protection is required.
- Subcontractors using scaffolds shall adequately guard, barricade or protect areas located below the scaffold.
- Use of existing or newly installed roof davit or tie back anchors must follow the workflow located in <u>Appendix B – Roof Davit Considerations.</u>

Aerial Lifts

All aerial lifts (scissor or boom) shall be used in accordance with OSHA standards, ANSI requirements and manufacturer recommendations. In addition, the following items are required as applicable:

- Any employee who is operating or using an aerial lift (scissor or boom) shall be properly trained in the operation, use, and emergency procedures involved with the lift. Documentation shall be made available to Power upon request;
- Employees shall be correctly fall-protected in boom lifts (i.e. fall restraint);
- Employees working in aerial lifts must remain on the platform of the lift in accordance with OSHA requirements and interpretations.

Fall Protection and Prevention



All individuals exposed to fall hazards greater than 6' above a lower level shall be protected by means of fall prevention or fall protection devices. Where fall hazards cannot be eliminated, 100% continuous fall protection for fall hazards greater that six (6') feet shall be implemented. Subcontractors are solely responsible for determining the methods used for fall protection, installation of methods, inspection and maintenance of methods; and training employees on the fall protection methods. In addition, the following items and scenarios are included as part of this requirement:

- Employees working above a guardrail must utilize fall protection;
- Employees utilizing a ladder in accordance with applicable requirements are not required to maintain additional fall protection except where exposed to a fall to a level below where the ladder is placed;
- Employees working in proximity to trenches and excavations will follow the parameters outlined in Subpart M;
- Subcontractors involved in roofing operations must determine the appropriate fall protection method for their operation based on feasibility;
- Each Subcontractor shall be responsible for outlining specific means and methods for meeting fall protection requirements in their Job Hazard Analysis. The JHA shall consider all factors of feasible protection including leading edge work, anchorage point below the d-ring, etc. The JHA shall detail in writing when fall protection is required, what equipment and systems will be utilized, the training users of the system have received, and how this protection is to be installed and used. Provisions for prompt rescue shall also be provided.

All other elements of the 29 CFR 1926 Subpart M are applicable to situations requiring fall protection. In addition, the following items are required as applicable:

- When cable is used as the guardrail system, the system will be 3/8" IWRC-galvanized cables (toprail and midrail), with a minimum of two wire rope clamps at each connection point. If mesh is used on this guardrail, a third cable (minimum 1/4" IWRC-galvanized cable) will be installed at the top of slab. The subcontractor will work with Power to determine the required type of guardrail system and fall protection devices to remain on the project upon subcontractor's completion. Tarps and other protective systems are not to be secured to the toprail or midrail cables. If these devices are attached to the bottom cable, the subcontractor is solely responsible for determining if the cable is adequate for supporting the loads imposed by the subcontractor's devices.
- Guardrail cables and guard rail systems are not to be used as attachment points for fall arrest or restraint unless the subcontractor accepts the responsibility for the design, installation, inspection and all other applicable requirements.
- If a subcontractor needs to remove a guardrail, the subcontractor is required to obtain a *Guardrail Removal Permit* from Power. The subcontractor is solely responsible for implementing the temporary measures used to protect their own employees and others working in the surrounding areas. The subcontractor is responsible for strict adherence to the conditions of the permit and final removal and disposal of the guardrail.
- Subcontractor work that necessitates the use of either "Controlled Access Zones", "Authorized Entry Zones", or a "Fall Protection Plan" are required to submit those plans to Power prior to beginning work (for recordkeeping purposes). The subcontractor is solely responsible for determining feasibility of fall protection systems and methods.
- When using a monitoring system, the monitor will wear a reflective vest, so the monitor can be readily identified.



• When utilizing rope-type systems (vertical or horizontal), mechanical methods must be used for securing the rope to the anchor (knots are prohibited). Components of a fall protection system shall be used per manufacturer's recommendations.

Trip and impalement hazards created by subcontractor's installation must be controlled and eliminated by the subcontractor creating the exposure. The following are examples of trip and impalement hazards that must be addressed:

- Electrical conduits pre- and post-concrete placement (eliminated when possible);
- Plumbing conduits that create a trip and impalement hazard protected pre- and post-concrete placement (eliminated when possible);
- Other mechanical conduits and sleeves that create a trip and impalement hazard protected preand post-concrete placement (eliminated when possible);
- All holes greater than 2" diameter protected with covers mechanically secured.

ELECTRICAL SAFETY

Each subcontractor is responsible for inspecting their hand and power tools and electric cords prior to each use. Damaged equipment shall be removed from service. Any repairs made to electrical components shall be done so by a qualified person.

Temporary Electric and Lighting:

Installation of temporary electric and lighting must comply with 29 CFR 1926 Subpart K and the National Electric Code.

- The electrical subcontractor must provide a Temporary Power and Lighting plan as required for each project. This plan should include, at minimum, the following items:
 - Temporary power design and supply in accordance with OSHA and other applicable requirements (outlets within 50' of work areas);
 - Temporary lighting design and supply in accordance with OSHA and other applicable requirements (including lighting control for off-hours, lighting efficiency, etc.);
 - Inspection of temporary systems;
 - Maintenance of temporary systems;
 - o Methods for protection, securing and labeling of temporary systems;
 - \circ $\;$ Emergency contacts for managing temporary systems.
- The electrical subcontractor is solely responsible for the design, installation, inspection, maintenance and repair of the temporary electric and lighting system. Any items found to be non-compliant or non-functioning must be repaired immediately.
- All elements of the temporary electrical system, including GFCI breakers and outlets, wiring, panels, and other equipment, must be tested prior to installation and periodically by the electrical subcontractor. The electrical contractor will maintain the record of the tests and provide to Power on a bi-weekly (every other week) basis.
- Temporary electric must be protected by a ground fault circuit interrupter (GFCI) at the source of power and cover plate for both temporary and permanent outlets. The electrical subcontractor responsible for temporary electric panels must post at each panel the name and contact information for the individual identified to address temporary power issues.
- Temporary lighting must be provided at minimum in accordance with OSHA and/or additional contract requirements. Any additional lighting (task lighting) required will be provided by each subcontractor.



- Open conductors must be protected in conduit, boxes or equivalent when within 8 feet of a walking surface.
- Casting of open wires directly in concrete is prohibited.
- Wire for lighting within stairwells must be protected by conduit or wiring design. Unprotected open conductors are not permitted.
- The electrical subcontractor must supply methods for electrical cord management to avoid creating a trip hazard or in areas where the cord will be damaged. Suspended cords must be secured with a non-conductive material.
- All live circuit panels must have an OSHA compliant panel cover installed. Energized panels are not to be left unattended or unprotected in accordance with NFPA 70E. Panels that are turned off must be properly locked and tagged.
- Whenever work is to be done on a piece of equipment, including building equipment and or subcontractors' equipment, OSHA's Control of Hazardous Energy standard must be followed. Each contractor whose work required working on energized equipment shall submit a plan in accordance with NFPA 70 E or a Lock-out/Tag-out program to Power prior to performing work. Work on energized equipment should be done under a lock-out/tag-out control whenever possible.

Work performed in proximity to overhead utilities

Work performed within proximity to overhead powerlines must be completed in accordance with Power's *Utility Locate and Overhead Powerline Policy and* Procedures as well as 29 CFR 1926.1400 and 1926.600.

- Prior to the start of, and during the course of any work in proximity to overhead utilities, the subcontractor shall make a thorough survey of the entire work site to determine the type and location of all utilities on the work site. The subcontractor must verify this information with Power by notifying the Project supervisor and shall coordinate construction work in the vicinity of these utilities with the appropriate utility owner.
- The subcontractor shall make employees aware of any precautions and procedures to be followed while working in the proximity of any utility. Appropriate clearance distances shall be maintained throughout the course of the work. If the subcontractor cannot maintain appropriate clearances, they must contact the involved utility and discuss alternative methods for addressing the utility and associated hazards.
- The subcontractor will be required to investigate any and all contingencies where contacting a utility could adversely affect any operation or render inoperative any protective apparatus in the surrounding area and submit a plan for protection or rerouting of critical systems. This plan shall be turned into Power prior to performing work.

FIRE PROTECTION AND HOT WORK PROCEDURES

All welding and burning work shall be done in accordance with OSHA standards and industry best practices.

- Prior to conducting any activity that generates sparks, heat, flame or other hot work, a *Hot Work Permit* must be obtained from Power.
 - The subcontractor is solely responsible for strict adherence to the requirements outlined in the permit and for providing fire extinguishers for all types of Hot Work.
 - The *Fire Watch Criteria* will dictate the type of Fire Watch required for the Hot Work operations:
 - i) Facility requirements, active fire protection systems near the work, adjacent shafts/roofs/penetrations and/or nearby flammables/combustibles will require that an



independent Fire Watch be present during and for a minimum of 60 minutes after completion of the work provided by the subcontractor;

- ii) Hot Work performed in a cavity or enclosure that is not completely visible will require that the area is monitored for 60 minutes after completion of the work by the subcontractor;
- iii) Any other types of Hot Work may not require a Fire Watch (including flooring, unless required by a site-specific policy). This will be coordinated with a Power representative once the permit is opened.
- The Hot Work Permit is valid for a single shift, opened prior to the start of Hot Work and closed upon completion of the Fire Watch.
- At minimum, a charged and inspected 10-pound dry chemical ABC fire extinguisher must be within 20 feet of any hot work operation. Each subcontractor is to provide fire extinguishers appropriate for the work they are performing.
- The area surrounding the hot work operation (minimum 35' radius) must be cleaned of flammables and combustibles prior to the start of the hot work operation. Items that cannot be removed from the area must be covered with flame retardant materials.
- The movement, storage, and use of cylinders shall be done in accordance with OSHA standards. Compressed gases and flammable liquids will not be stored within enclosed structures (i.e. buildings under construction, storage trailers; tool sheds, in stairways or building exits/entrances).
- All personnel using gas welding or burning equipment will be fully trained in the use and maintenance of the equipment.
- All containers must be FM approved or UL listed. The container must have a self-closing lid and a wire mesh flame arrester. If the can is damaged, it is to be removed from site.
- In accordance with OSHA's Hazard Communication Standard, containers will be clearly marked showing the contents, hazard level and any special use or handling requirements.
- Fire extinguishers which are provided by Power are available for general use. They are generally located at entrances, stair wells, and on each floor. If a fire extinguisher is used, return it immediately to the project trailer to replace it with a charged extinguisher.

CRANES AND RIGGING

Cranes

All crane and hoisting operations, including rigging, must be completed in accordance with 29 CFR 1926 Subpart CC and Subpart H.

- All lift service cranes shall have anti-two block devices and load moment indicators (LMI) installed and functioning properly at all times during operations.
- Pick and carry operations with rubber-tire mobile cranes is not permitted unless specifically permitted by the crane manufacturer and a Job Hazard Analysis is created and followed by the subcontractor.
- All hoisting classified as a "Critical Lift" requires additional planning and must be reviewed by the Power project team. A critical lift is defined as a lift that exceeds 75% of the rated capacity of the crane, multiple crane picks and/or high-risk lifts. A minimum lift plan must include:
 - o Completed Power *Critical Lift form* or equivalent;
 - Load analysis;
 - Lifting procedures;
 - Rigging analysis.



- A third party inspection is required for all cranes on an annual basis.
- Power's *Mobile Crane Checklist* must be completed by a competent person on a daily basis and prior to operating a mobile crane at the project.
- The subcontractor in charge of the crane shall ensure that the capacity, ground conditions, and all other conditions associated with the crane are acceptable. If the conditions are not acceptable, the subcontractor shall notify Power in writing their proposal to implement any corrections or modifications necessary.
- Power's *Tower Crane Checklist* must be completed by the subcontractor prior to erecting the tower crane; throughout the duration of tower crane use at the project; jumping the tower crane; and prior to dismantling the tower crane.
- The subcontractor responsible for providing the tower crane must provide the following:
 - Compliance with FAA requirements including all determinations, notices and required elements;
 - Concrete barriers around the tower crane base as required by the City of Chicago;
 - A physical enclosure designed to prohibit access to the tower crane by unauthorized individuals at each potential exposure point;
 - o Communication systems as required by the authority having jurisdiction;
 - A third-party inspection of the crane upon completion of the installation and annually thereafter;
 - Copy of said third party inspections;
 - Notice of re-torque completion and any other required maintenance;
 - Copy of settlement readings for the tower crane and base;
 - Copy of any other information required by the authority having jurisdiction.
- The following are additional items regarding crane use:
 - The swing radius of the crane must be barricaded or otherwise guarded;
 - Only one person is to signal the crane operator at a time (hand signals, radio, hard line, etc.);
 - Loads shall be controlled with a non-conductive tag-line, unless the use of the tagline would pose a greater hazard;
 - Cell phone use is prohibited while operating a crane (cell phone or 2-way phone is not permitted for crane signaling);
 - Subcontractor is responsible for submitting proof of training to Power for qualified rigger(s), signal person(s) and crane operator(s).

Cranes operating within the limits of the city of Chicago must comply with the <u>Rules Regarding Crane</u> <u>Operations</u> and operators be licensed in accordance with <u>municipal ordinances</u> set forth by the city.

Rigging and Material Handling

- Each subcontractor is responsible for complying with rigging requirements set forth by OSHA, ASME and rigging manufacturers'. Rigging equipment must not be used beyond its rated capacity.
- Rigging shall be inspected prior to use and as necessary throughout the course of the day by the subcontractor's Qualified Rigger. If any rigging is found to be damaged, it shall be removed from service immediately.
- Stored materials are to be stacked neat and orderly. Materials must be stacked in a manner to prevent tipping, falling, shifting or rolling and maintain clear paths of travel.
- Material should be stored in a manner that allows for ease of movement (i.e. on carts or pallets) and minimizes the amount of force and personnel handling the materials.



• Subcontractor should address ergonomic risk areas during planning (i.e. Daily Huddle/Job Hazard Analysis), including workstation setup, housekeeping, body position, lifting/carrying techniques, excessive vibrations, etc.

EQUIPMENT REQUIREMENTS

All self-propelled construction equipment shall be maintained, equipped, inspected and operated in accordance with all OSHA and manufacturers' requirements (subcontractor is solely responsible for implementing these provisions).

- Seatbelts must be worn in equipment when required by OSHA, the manufacturer or when the equipment is equipped with a roll-over protective structure (ROPS).
- Cell phone use is prohibited while operating a piece of equipment.
- Personnel shall not be transported or ride on equipment or vehicles that are not equipped with seats for passengers. Riding in the back of pickup trucks or on equipment without the use of a seatbelt is prohibited.
- Bi-directional earthmoving equipment and motor vehicles with an obstructed view to the rear shall be equipped with a functioning warning horn and an automatic back-up alarm. Equipment working in the street must also be equipped with a functioning beacon light and slow-moving vehicle symbol.
- Subcontractors using equipment on the project with the potential for leaks or spills, with the potential to create an environmental impact, must maintain measures on-site to control and dispose of said materials in the event of a release.

Forklifts

- Only trained and authorized personnel will be allowed to position or operate any type of powered industrial truck (forklift). These individuals shall perform pre-operational inspections prior to each shift. Documentation shall be made available to Power upon request.
- Forklifts shall be operated in accordance with the manufacturer's specifications and requirements.

Drone Usage

• Subcontractors are not permitted to utilize drones on Power projects without prior written approval and compliance with Power's *Drone Operation Policy* (policy available upon written request). The subcontractor is solely responsible for: compliance with all federal, state, and local requirements; providing all applicable insurance coverages; any and all damages arising out of the drone use.

STEEL ERECTION

All steel erection activities shall be in compliance with 29 CFR 1926 Subpart R (with the exception of fall protection).

- A written site-specific erection plan (to include fall protection) shall be submitted to Power prior to the start of work. When special or unusual hazards will be encountered (i.e. work over existing structures, near utilities or water), the subcontractor will clearly address these issues in the site-specific erection safety plan. In addition, the subcontractor should outline provisions for the following:
 - Plan for accessing work including delivery trailers;



- Plan for securing items overhead;
- Plan for controlling access into the erection area;
- Fall protection plan including rescue procedures.
- Power's "*Authorization to Proceed with Steel Erection*" form must be completed with the steel erector prior to the commencement of steel erection.
- Multiple lifts of structural members must be done in accordance with Subpart R and crane manufacturer's requirements. The maximum number of allowed pieces per lift is five.
- If work is performed within or adjacent to occupied structures, the subcontractor will be required to make provisions for fire protection, and the safe removal of all welding fumes from the building. The methods shall be submitted to Power prior to the start of the work and will be the subcontractor's responsibility to implement and manage.

EXCAVATIONS AND CONFINED SPACES

All excavation work will conform to Power's *Utility Locate and Overhead Powerline Policy and Procedures* and the requirements of 29 CFR 1926 Subpart P.

- No excavation shall commence on site, regardless of size, depth, or equipment used unless the
 operation has been authorized by Power through an *Excavation Permit* procedure to ensure the
 dig area has been evaluated and marked for existing utilities, and that adequate cave in
 protection is provided as required.
- Each subcontractor is responsible for one-call notifications, obtaining their own dig authorization number, obtaining refreshes as required, and required to provide and coordinate secondary independent locates. All investigation and associated excavating will be done in accordance with Power's Utility Locate and Overhead Powerline Policy and Procedures.
- Independent secondary locates will be completed by subcontractors doing work that penetrates the ground. If a primary locator in unable to locate on the property, an additional independent locate will be completed.
- Once within 3-feet of a utility mark (in any direction) and at the intersection of any utilities, hand excavation is required.
- Each subcontractor is responsible for barricading and/or covering any excavation at the end-of-shift, as warranted by the size and exposure of said excavation.
- Each subcontractor engaged in excavation work must have a person designated as the "Competent Person" (as defined by OSHA) to ensure compliance with the OSHA standard for excavations. The name of that person and their qualifications will be provided to Power before work begins.
- Atmospheric testing must be performed in excavations 4' or deeper that are near hazardous areas or pose a possibility for an environmental threat (e.g. landfills, near gas pipes, areas with contaminated soil, etc.). The Competent Person must make the determination if testing is required. Excavations deemed hazardous through testing and/or soil analysis will require a job hazard analysis and emergency planning (i.e. rescue plan, emergency equipment).
- Affected subcontractor(s) must provide a written exposure control plan, including processes for training, air monitoring, rescue, access and egress, entry procedures, prior to subcontractor employees entering any confined spaces on the project. Subcontractors are solely responsible for compliance with 29 CFR 1926.1200 Subpart AA.



CONCRETE AND MASONRY

- All silica-generating processes must be conducted in accordance with the 29 CFR 1926.1153 Silica standard including the implementation of integrated water delivery methods, engineering controls, and other controls. Silica-generating processes will be conducted as to not expose surrounding employees and existing facilities to levels of respirable silica dust above the action level defined in 29 CFR 1926.1153. The creating employer is solely responsible for implementing the aforementioned control measures.
- Each subcontractor, prior to commencing work on the project, must complete and submit a <u>Silica Hazard Assessment</u>. Subcontractors whose work generates respirable silica must provide a project-specific written exposure control plan incorporating all required elements of the 29 CFR 1926.1153 Silica standard and submit to Power.
- All programs, training, hazard recognition, air sampling, and control methods required by OSHA
 or other entities must be implemented by the subcontractor creating the silica-related
 exposure.
- Concrete subcontractors (or masonry subcontractor when applicable) are responsible for notifying Power project team of any changes or modifications to anchor bolts and any issues related to concrete strength or performance.
- The following items must be addressed for concrete operations as part of the subcontractor's site-specific safety and health plan:
 - Falling object and overhead protection including control of perimeter shores and shores around interior openings;
 - Falling object, overhead and fall protection methods for concrete core form operations;
 - Falling object, overhead and fall protection methods for concrete decking, stripping and other leading-edge operations;
 - Post-tension stressing operation hazard control plan including access, restricted access zones, hot work, falling object and overhead protection, etc.;
 - Rebar and impalement protection plan;
 - Concrete remedial work hazards (i.e. silica);
 - Hygiene and burn prevention procedures;
 - Storage and control of materials;
 - Deck and floor loading requirements;
 - o Crane, placing boom and other equipment operations;
 - Site access planning, methods and control including deck access;
 - Lookouts and other platforms;
 - Silica control plan;
 - All other project specific concrete exposures.

DEMOLITION

All demolition activities shall follow 29 CFR 1926 Subpart T.

- Power Construction will request the assistance of the demolition contractor in completing the Demolition Planning Worksheet prior to the start of any demolition project.
- Contractor shall be responsible for exploratory work involved in their scope (i.e. utility locates, floor scanning, engineering survey, etc.)
- Area shall be inspected prior to the start of work and throughout the duration of the project for the presence of any hazards or transients.



- The following items must be addressed for demolition operations as part of the subcontractor's site-specific safety and health plan:
 - Demolition Methods (i.e. manual/mechanical);
 - Structural Stability (i.e. bracing/shoring);
 - Temporary power and lighting;
 - Dust Control Methods;
 - Falling object and overhead protection plan;
 - Site and public protection plan;
 - Disruption avoidance plan (i.e. facilities/utilities).

TRAFFIC AND PEDESTRIAN CONTROL

- Subcontractors whose work impacts pedestrian and vehicle traffic must supply Power with a written Traffic and Pedestrian Control Plan prior to starting this work.
- Signs shall conform to the requirements of 29 CFR 1926.200 and ANSI Z35.1-1968.
- Work on or adjacent to roadways must be conducted in accordance with Illinois Statutes and the current version of the Manual of Uniform Traffic Control Devices (MUTCD). IDOT Certified Flagger control must be provided in accordance with Illinois Revised Statutes Chapter 121, Par. 314.2.
- Sufficient chain link fencing or orange "barricade" fencing must be installed as appropriate to separate active construction areas or hazardous areas from active occupied work areas and to protect the public. The fence must be sufficiently supported and marked with appropriate signage.
- Signs and barricades must be removed immediately when no longer applicable or required.



Appendix A – CCIP Safety Program Requirements

SAFETY EDUCATION WORKSHOPS

Subcontractor principals, Project Managers, Superintendents, Safety Representatives and Site Supervisors are required to attend a CCIP and safety expectation workshop prior to commencing work at the project. The purpose of the workshop is to provide a clear understanding of the safety and risk management expectations for the project, review the insurance protocols for the project and address any concerns in advance of said subcontractor's mobilization. Work will not commence until a preconstruction meeting has occurred at the project with said subcontractor.

INCIDENT REPORTING AND RETURN TO WORK PROGRAM

Subcontractors must report all injuries, occupational-related illnesses, property damage and other project-related incidents to a Power supervisor immediately. All subcontractors must provide a written report with facts from the incident investigation to the Project Safety Supervisor within 24 hours. Failure to report a claim immediately and or to submit written report within 24 hours of an occurrence may result in a \$5000 penalty per occurrence.

All subcontractors understand that having a comprehensive and effective return to work program is a precursor to bidding the project. The return to work program must be able to immediately accommodate any and all reasonable medical restrictions that occur as a result of incident on the project.

- Only contractor employees involved in an incident on the Power specific project are eligible for return to work / "light duty" restrictions on the project;
- On an as-needed basis, contractors may be required to identify, in writing, potential return-towork job tasks with corresponding physical requirements that can be reviewed by a treating physician;
- Return to work coordination with Power, the carrier and all other applicable parties is required as soon as reasonably possible after an incident.

Each subcontractor is required to provide provisions to accommodate restricted duty for work-related injuries and illnesses as part of a comprehensive Return to Work Program. Subcontractors who fail to accommodate restricted duty will, at their cost, be subject to one or more of the following (per occurrence):

- Utilize a placement service for restricted duty accommodations in coordination with Power and its insurers.
- Be responsible for all costs associated with temporary total disability payments for workers on restricted duty plus administration cost.
- Subject to terms in accordance with the subcontract agreement.

SUBSTANCE ABUSE PROGRAM

Each Employer must include in its Substance Abuse policy and program the requirements for drug and alcohol testing under the following circumstances:

• <u>Pre-placement Testing</u> – A pre-placement <u>drug and alcohol screening</u> test must be administered to all job applicants and Employees who will be assigned to work at the Project. Power's



Substance Abuse Program (available upon written request) establishes the parameters of the testing protocols, non-negative/positive tests, and all other requirements for testing. The Employer will verify that the required drug and alcohol screening tests has been conducted no more than 48 hours prior to the Employee's assignment to the Project and that the results of the tests are negative, prior to the Employee beginning work on the Project. The authorized representative shall be the sole individual authorized to communicate with Power representatives regarding any testing program procedures and test results. Only the authorized representative shall provide written proof of negative results to Power. Employees who have provided proof of negative drug and alcohol tests on a project requiring pre-placement tests may utilize these test results for a period of six months from the date of the testing to comply with this requirement on each Power project the individual may be assigned (Power does not recognize or accept drug and/or alcohol testing programs or testing results from other non-Power projects or programs not sponsored by the employee's union-sponsored program). On projects where a Project Labor Agreement (PLA) has been executed and includes substance abuse testing provisions, those requirements may be used to supplement compliance with the Substance Abuse Policy and testing requirements of these safety requirements.

• The subcontractor is responsible for all costs borne out of substance abuse testing and any other associated costs (Power is not to be charged for any costs associated with substance abuse testing).



Appendix B – Roof Davit Considerations



