Working Near Overhead Powerlines

1 PURPOSE

To establish a policy for working near overhead power lines or in their vicinity on the COMPANY site. This policy is applicable to all employees and contractors. The policy is not intended to cover production-related earthworks associated with mining.

2 SCOPE

This procedure applies to all operating sites, projects, and exploration including all employees and contractors within the scope of the Integrated Management System (IMS).

3 DEFINITIONS AND ACRONYMS

Definitions

Absolute Limit of Approach Distance is the minimum safe distance a vehicle, equipment, machine, or load can approach an energized overhead power line. This distance is voltage dependent as shown in the following Table 1 of this document.

At Risk Activities Work Near Overhead Power Lines any work such as excavations, earth moving, drilling, blasting, lifting or reaching with the use of cranes and boom trucks within 75 feet of an energized overhead power line.

Overhead Element is any overhead metal element that may inadvertently get dangerously close to a high voltage line, for example: crane booms, mobile scaffolding, dump truck hoppers, etc.

Overhead Power Line is any above ground live or dead conductor that is not fully voltage sheathed or enclosed. Poles, guy wires, underground anchors and any such structural member that contributes to the structural integrity of the power line shall be included as part of the power line.

Overhead Power Line Work Supervisor is the supervisor responsible for the work who is present at the work site to monitor and control work within 75 feet of an overhead power line.

Site refers to any COMPANY location.

Acronyms

ANSI	American National Standards Institute
ASTM	American Society for Testing and Materials
FOPS	Falling Object Protection Structure
HMR	HSLP Management Representative
HSLP	Health, Safety and Loss Prevention

(CONT.)

IMS	Integrated Management System
ISEA	International Safety Equipment Association
PPE	Personal Protective Equipment
ROPS	Roll Over Protection Structure
SAE	Society of Automobile Engineers

4 ROLES AND RESPONSIBILITIES

Document Owner

HMR

Responsible Roles and Position-Holders

Electrical General Foreman or his Designee

- Authorizes all work meeting the "At Risk Activities" near overhead power lines definition within the 75 feet limit of overhead power lines.
- Shall inspect the work site before work starts.
- Signs the permit authorizing work to proceed within the 75 foot limit of overhead power lines after documenting all special requirements for the job on the.

Employees / Persons Performing the Work Near Energized Overhead Power Lines

- Shall be trained to recognize the hazards associated with overhead power lines and to understand the provision of this standard.
- Shall be properly tasked trained on any mobile equipment such as cranes, boom trucks, earth movers, etc.
- Shall know the purpose and limitations of any safety devices used during the job.

Spotter / Signalman

- Must be competent to communicate effectively through hand signals or verbally through radio or other communication forms.
- Remain vigilante to this assignment not allowing themselves to become distracted.
- Position themselves in full view of the operator when hand signals are used.
- Notify operator when electrical lines are approached.

Overhead Power Line Work Supervisor

- Responsible for signing the "Working near Overhead Power Lines Permit" and accepting responsibility for the safe execution of the work as stated on the permit.
- Remains on the work site and oversees all workers and equipment activities.

5 DIRECTION

General

A "Working near Overhead Power Lines Permit" is required any time "At Risk Activities" are to be performed within 75 feet of an energized overhead power line.

De-energizing and grounding of lines (where possible) shall be the primary means of preventing injury from contact between cranes or machinery and power lines.

Evaluate alternative work methods that do not require use of cranes, boom trucks, or over head elements in the proximity of energized overhead power lines.

Vehicles, equipment, booms, scaffolding, personnel etc. shall adhere to the appropriate **"Absolute Distance of Approach"** of any energized power line, except for specialized overhead power line crews with appropriate equipment and properly trained to handle this type of work safely.

ABSOLUTE DISTANCE OF APPROACH	
Line Voltage	**Minimum**
Up to 50,000 volts	10 feet
50,000 to 115,000 volts	12 feet
115,000 to 230,000 volts	16 feet
230,000 to 500,000 volts	25 feet

All work requiring a **"Working near Overhead Power Lines Permit"** must be performed in daylight hours and shall be stopped anytime environmental conditions could potentially effect the safe completion of the work. Work shall be stopped if environmental conditions have some of the following characteristics:

- Wind speed higher than 20 miles/hr
- Heavy rain, hail and snow
- Electrical storms
- Other abnormal phenomena affecting safety

Insulating barriers, proximity warning devices, insulating boom guards, swing limit stops, non-conductive tag lines, ground rods, and similar devices may be used for protection against electrical hazards, but shall not take the place of de-energized lines or minimum absolute limit of approach distances.

When the work requires excavation, the SOP Excavation and Trenching must be adhered to, which includes an excavation and trenching permit.

Working Near Overhead Power Lines Permit

As part of the permit, an Overhead Power Line Supervisor must be assigned to the work / project. This person will be responsible for:

- Generating the permit with a complete sketch of the work area and any overhead power lines in the area.
- Posting and barricading the work area prior to requesting authorization from the Electrical General Foreman.
- Notify the Electrical General Foreman of the work / project and conduct an inspection of the work area.

The Electrical General Foreman will review the permit, add any additional safety precautions required to the permit, and once the work site is determined safe sign the permit.

The work Supervisor will sign the permit and be responsible to supervise the work and ensure the permit procedures are followed throughout the duration of the job.

The permit will remain in the work area until the job is complete.

When the work is completed, protective safety systems, i.e., warning signs and barricades must be removed.

The Overhead Power Line Supervisor will sign the permit signifying it has been closed and returning the permit to the Electrical General Foremen.

NOTE: The completed and signed permit shall be kept on file for a period of six (6) months.

Equipment Spotter / Signalman

A person shall be assigned to observe equipment when:

- It is difficult for the equipment operator to visually observe how close his equipment or its load is to the energized overhead power lines.
- The equipment is within a booms length of the energized overhead power line

The spotter / signalman must warn the operator when:

- The machine is working near a power line.
- Any part of the machine is nearing the Absolute Minimum Distance of Approach Step.