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1 PURPOSE

The Safety Plan provides standard safety guidelines for on-site activities and is not intended to be all inclusive, site specific safety plan shall be implemented to address the individual project needs and specific regulatory requirements.

2 BASIS

All of these practices are founded on established EHS standards and best business practices.

3 RESPONSIBILITIES

3.1 Site/Construction Manager or designee

3.1.1 Implementation and compliance with all provisions of the Safety Plan.

3.2 Personnel

3.2.1 All personnel must follow this Safety Plan, render every possible aid to safe operations, and should report all unsafe conditions or practices to the manager responsible. Failure to comply with the Safety Plan may result in disciplinary action up to and including termination.

4 SCOPE

This document applies to all employees, contractors and visitors

5 SAFE PRACTICES

5.1 General

5.1.1 Safety must be the FIRST priority.

5.1.2 Stay alert and react to potential danger.

5.1.3 Be aware and prevent hazards before they develop wherever possible.

5.1.4 Report all unsafe conditions or hazards to your supervisor or to the Safety Department.

5.1.5 All injuries, illnesses, chemical exposures, vehicle incidents, environmental/spills, good catch or near miss events, must be reported to your supervisor as soon as possible.

5.1.6 At least two competent persons must be present when performing work in a turbine.

5.1.6.1 Employees are only permitted to work alone in exceptional cases and only at the bottom of the tower, i.e. Read and record meters. Only competent and educated personnel are allowed to carry out lone working. Communication between the lone worker and a contact/base person must be established. An emergency plan must be agreed on between the lone worker and the contact/base person.

5.1.7 All work must be carried out in accordance with the latest revision of the related technical manuals and work instructions.

5.1.8 All equipment must be operated in accordance with Manufacturers operating manuals and manufacturer's specifications.

- 5.1.9 All personnel are expected to practice good housekeeping and LEAN methodology to ensure tools; equipment and generated waste. are properly contained and removed after work is complete.
- 5.1.10 Keep all egresses clear of stored material.
- 5.1.11 Keep roads, paths and pedestrian areas free of stored materials.
- 5.1.12 Emergency Response and Hazard Communication plan signs and regulations must be followed and all personnel are required to familiarize themselves with these rules before work is commenced.
- 5.1.13 All personnel must know who their safety representative is.
- 5.1.14 If an operating wind turbine must be inspected from the ground, never stand under the rotor plane.
- 5.1.15 Work must only be carried out by trained and instructed personnel.
- 5.1.16 Machinery or equipment must only be operated by trained and qualified personnel.
- 5.1.17 Do not attempt to repair or adjust any machine or attempt to lubricate any moving parts while in operation unless the equipment is designed or fitted with safeguards to protect the person performing the work.
- 5.1.18 All personnel shall be given frequent incident/hazard prevention instruction and reminders. Daily and/or weekly safety meetings for all site personnel and subcontractors will be held on a regular basis. Attendance is mandatory.
- 5.1.19 Our organization maintains a violence/harassment free workplace no threatening or aggressive behavior toward other site personnel, contractors or visitors will be tolerated.
- 5.1.20 Horseplay, fighting or other unsafe acts that could potentially injure or adversely affect the safety of others are prohibited.
- 5.1.21 Only self-retracting knives are to be utilized.
- 5.1.22 Tool tethers/lanyards shall be used when working aloft.
- 5.1.23 When climbing, remove all loose objects from pockets and place them in a closable climb bag or tool bag.

6 FITNESS FOR DUTY

6.1 Requirements

- 6.1.1 Work requirements may require personnel to climb vertically in excess of 250' and access restricted or confined work areas. Failure to do so or have the ability to do so may result in termination.
- 6.1.2 Never work aloft if you are afraid, nervous or subject to fainting or dizziness.
- 6.1.3 When working with tools, near machinery or with chemicals, personnel must tie back or otherwise confine hair that may pose a hazard.
- 6.1.4 Anyone known to be under the influence of intoxicating substances shall not be allowed on site while in that condition. Intoxication (or the use of intoxicating substances while on the job) may result in disciplinary action up to and including termination.

- 6.1.5 No person shall knowingly be permitted to work while his/her ability or alertness is so impaired by fatigue, illness, or other causes that it unnecessarily exposes him/her or other to injury.
- 6.1.6 Employees shall notify the immediate manager if using prescription medication/or over-the-counter medication that may cause drowsiness or other side effects which could influence the ability to work safely prior to beginning any work.

7 PERSONAL PROTECTIVE EQUIPMENT

7.1 Requirements

- 7.1.1 All personnel must wear personal protective equipment that meets or exceeds requirements of the hazard exposed too. Required PPE included but is not limited to:
 - 7.1.1.1 Safety footwear approved to meets local regulations and requirements;
 - 7.1.1.2 Full body harness with fall arrester;
 - 7.1.1.3 Type 1 or 2 helmet with a chinstrap to climb and a minimum Type 1 helmet for crane and construction activities;
 - 7.1.1.4 Safety glasses with side shield that meet regulatory requirements;
 - 7.1.1.5 Task suitable gloves
 - 7.1.1.6 Reflective safety vest as required.
- 7.1.2 Maintain respirator qualifications and be capable of wearing a respirator at all times. (As appropriate to job scope)
- 7.1.3 Suitable reflective work wear or vest shall be used in poor weather conditions, at night and on all construction sites.

8 MATERIAL HANDLING

8.1 Lifting and Rigging

- 8.1.1 When lifting or moving heavy objects (>50#), always seek assistance from competent personnel and utilize appropriate lifting techniques, tools and/or equipment where necessary. If the appropriate tools and/or equipment aren't readily available, the job must be stopped.
- 8.1.2 When working around heavy equipment, be sure a method of communication is established and that the operator can always see you.
- 8.1.3 Work under a suspended load is strictly forbidden.
- 8.1.4 Slings containing hooks shall be self-locking type
- 8.1.5 All tool bags must have closeable tops

9 ERGONOMICS

9.1 Body Mechanics

- 9.1.1 Personnel shall be mindful of their body position when performing tasks in the potentially hazardous work environment of the nacelle, hub, tower and roof.

- 9.1.2 Personnel shall properly warm up prior to starting strenuous activities.

10 ENTERING AND LEAVING A WIND TURBINE

10.1 Entering

- 10.1.1 Switch off any remote control (Service Key) or take appropriate measures to isolate the turbine. Special precautions must be taken if the work requires the remote control to be switched on.
- 10.1.2 Before climbing the ladder system or using the service lift, stop the turbine according to the wind turbine-specific manual or work instruction.
- 10.1.3 Close the trap doors of the platform when passing through them.
- 10.1.4 Note the location of the emergency stop buttons in the wind turbine
- 10.1.5 Do not stay in the nacelle while the wind turbine is in operation, unless there is a special task to be performed.

10.2 Leaving

- 10.2.1 When leaving the wind turbine, the access door to the turbine must be locked to prevent unauthorized persons from accessing the turbine.
- 10.2.2 Before descent:
- 10.2.2.1 Close and lock the nacelle skylights and service hatches.
- 10.2.2.2 Make sure that all tools are gathered and accounted for.
- 10.2.2.3 Ensure the red emergency stop buttons are off.
- 10.2.2.4 Remove all flammable materials, oil and greased soiled rags.

11 PRE-JOB PLANNING

11.1 Prior to Work

- 11.1.1 A JSA is required for each task and shall be well planned, documented and supervised to ensure quality and eliminate risk and prevent injury.
- 11.1.2 A Pre-Task Plan will be developed and utilized whenever an established Work Instruction does not exist or when deviating from Work Instruction.
- 11.1.3 All personnel shall be aware of hazards present and promptly report deficiencies to their work team and supervisor or manager.
- 11.1.4 Be alert to conditions and work processes in surrounding areas so that you can foresee and avoid danger. Be aware of other personnel and equipment.
- 11.1.5 Always have an escape route and an established rescue plan.

12 HAZARDOUS MATERIALS

12.1 Chemicals

- 12.1.1 Prior to handling or working with any chemical substances, review SDS for special storage, compatibility, and PPE instructions and follow the precautions.
- 12.1.2 Properly label and store chemicals.
- 12.1.3 Properly dispose of all chemicals.
- 12.1.4 SDS must be readily available in a manner which aids in quick reference.

12.2 Compressed Gasses

- 12.2.1 Compressed Air/Gas tanks must be separated between empty and full containers in an upright and secured position out of the way of moving traffic.
- 12.2.2 Remove regulators, close valves tight and cap after use and during storage.
- 12.2.3 When tanks must be moved, they must be capped and properly secured to the transport vehicle vertically or horizontally on a temporary basis.

13 CONTROL OF HAZARDOUS ENERGY

13.1 Requirements

- 13.1.1 All persons performing work on machines must be fully protected from unexpected energization, startup or the uncontrolled release of energy, which could cause injury to those persons and/or damage to equipment.
- 13.1.2 Any person who operates a valve, switch or other energy isolating device to which a lock or "do not operate" tag is attached will be subject to disciplinary action up to and including immediate termination, and may be subject to criminal prosecution.
- 13.1.3 Anyone working on the equipment must work under his or her personal lock and tag. Only the person who applies the lock/tag is authorized to remove it.
- 13.1.4 All lockout points must consist of positive energy isolation devices such as disconnect switches, circuit breakers, block valves, and blocking pins.

14 ELECTRICAL SAFETY PROGRAM

14.1 Requirements

- 14.1.1 Responsibility for complying with the requirements of the Electrical Safety Program ultimately rests with each individual.
- 14.1.2 Electrical Work is defined as the maintenance, service, modification, or troubleshooting of electrical systems or components.
- 14.1.3 Personnel must be qualified to perform electrical work or supervised by someone who is qualified to perform electrical work.
- 14.1.4 Metal jewelry must not be worn while working on electrical equipment.

15 WALKING AND WORKING SURFACES

15.1 Platforms and Scaffolding

- 15.1.1 Cover all floor or platform openings with adequate barriers or covers when performing work where objects or personnel could fall through an opening.
- 15.1.2 Nothing may be thrown or dropped from a turbine, tower, ladder, scaffold or other elevated platform.
- 15.1.3 Only properly erected scaffolding equipped with guardrails, toe-boards, and secured planks that has been properly inspected by a competent person shall be utilized.
- 15.1.4 Any damaged scaffolding components or other supporting structures must be tagged out and reported promptly to a supervisor or manager and repaired or replaced prior to use.
- 15.1.5 Scaffold training must be completed prior to personnel working on scaffolding and include proper use, load capacity as well as identification of hazards such as fall, electrical, falling objects, fall protection.
- 15.1.6 Retraining on platforms and scaffolding shall take place:
 - 15.1.6.1 Where changes at the worksite present a hazard which an employee has not been trained for; or
 - 15.1.6.2 Where changes in the types of scaffolds, fall protection, falling object protection, or other equipment present a hazard which an employee has not been previously trained; or
 - 15.1.6.3 Where inadequacies in an affected employee's work involving scaffolds indicate that the employee has not retained the requisite proficiency.
 - 15.1.6.4 Personnel platforms must be inspected before use in accordance with manufacturers' specifications, and shall be designed to support the task working load capacity.
 - 15.1.6.5 Personnel must be trained in the use, operation and emergency descent of a personnel lift platform prior to work.

15.2 Ladders

- 15.2.1 Only one person at a time is allowed on the turbine ladder.
- 15.2.2 Any person climbing any section of the tower ladder must utilize the installed personal fall arrest system.
- 15.2.3 Personnel working at heights must maintain 100% tie off 100% of the time when not connected to a fall arrest system.
- 15.2.4 Only ladders appropriate for the job shall be utilized. Never attempt to splice two (2) ladders together.
- 15.2.5 All ladders shall be inspected prior to use. Any defective ladders must be removed from service immediately.
- 15.2.6 Do not ascend higher than the third rung from the top of a straight or extension ladders or above the second step from the top of a stepladder.
- 15.2.7 All ladders shall be properly set up, used in the manner designed for and tie off when necessary.
- 15.2.8 Personnel shall maintain three (3) points of contact while climbing and utilize a support person at the bottom of the ladder whenever stability of the ladder is in question.

- 15.2.9 Personnel performing tasks while on the tower ladder shall utilize work position lanyards, in addition to the fall arrest lanyards.

16 EMERGENCY RESCUE EQUIPMENT

16.1 Controlled Descent Devices

- 16.1.1 Tower Rescue/Escape System (controlled descent device) shall have a rope length greater than the tower height.
- 16.1.2 All personnel except escorted visitors entering a turbine must have successfully completed approved controlled descent training.
- 16.1.3 At least one HSE approved, inspected, controlled descent device must be present at the base of the tower or higher any time personnel are working on de-energized equipment.
- 16.1.4 Additional Tower Rescue/Escape System shall be required when there are more than four workers up the tower.
- 16.1.5 New hires and visitors must be escorted by two competent people with appropriate descent and rescue training; or
- 16.1.5.1 Possess a current controlled descent and rescue training certificate for the available type of equipment on site.
- 16.1.6 When performing energized work, the controlled descent equipment must be at or above the level where work is being performed.

17 FIRE PROTECTION AND PREVENTION

17.1 Requirements

- 17.1.1 Prior to beginning any work, assess your work environment, noting the possibility of a fire occurring, the proximity of firefighting equipment, controlled descent equipment, if up tower and a safe escape route in the event of a fire.
- 17.1.2 The proper size and type of firefighting equipment shall be conspicuously located and easily accessible to permit the escape of workers.
- 17.1.3 Fire extinguishers are to be inspected and maintained monthly by a competent person and annually by a certified inspector.
- 17.1.4 Fire extinguishers are required to be up tower when working.
- 17.1.5 Smoking is prohibited on site except in designated areas. Smoking is forbidden in any Wind turbine.
- 17.1.6 A Hot Work Permit will be utilized when performing operations involving: open flames, heat producing or spark generating equipment.

18 VEHICLE USE

18.1 Vehicles

- 18.1.1 Smoking is prohibited on site except in designated areas. Smoking is forbidden in company owned, leased or rented vehicle.
- 18.1.2 All vehicles and trailers in use shall be thoroughly checked at the beginning of the shift.

- 18.1.3 Vehicles shall have documented inspections at least monthly
- 18.1.4 The driver is responsible for the safety of all passengers and for the stability of all materials in and on the vehicle.
- 18.1.5 Observer/spotter shall be used when backing up or when visibility is limited for any reason.
- 18.1.6 Whenever a vehicle is parked, it should be backed into the parking space with the parking brake set.
- 18.1.7 Only park on designated areas
- 18.1.8 Drivers are required to obey all traffic laws.

19 CONSTRUCTION ACTIVITIES

19.1 Safety Hazards and Preventive Actions

- 19.1.1 Suitable reflective work wear or vest shall be used on all construction sites.
- 19.1.2 High visibility traffic control measures must be used when working on or close to the site roads especially when using cranes and excavators, digging trenches, or blocking part of the road.
- 19.1.3 The responsible manager for the site must check local weather forecasts every morning and inform the crew.
- 19.1.4 All personnel are required to watch out for severe incoming weather such as high winds, thunder and lightning and immediately inform the Site/Construction Manager.

20 CRANES

20.1 Mobile

- 20.1.1 All crane operators must have current certification for the type of equipment they are operating with them at all times.
- 20.1.2 Crane operators are responsible for all equipment inspections, rigging, moving, lifting and personnel involved in operations.
- 20.1.3 Loads shall never pass over personnel and no persons shall pass or work under suspended loads.
- 20.1.4 During crane operations only one trained signal person utilizing approved signals is allowed to direct the crane operator at any one time.
- 20.1.5 Any person involved in the crane operation shall call for an all stop upon identifying a hazardous condition that will harm personnel or equipment.
- 20.1.6 Use a spotter when moving the load, backing up, or whenever additional visibility is warranted.
- 20.1.7 Riding on a suspended load is strictly forbidden, failure to follow this policy is grounds for disciplinary action up to and including termination.
- 20.1.8 Ground personnel must not come in contact with the crane if overhead utility power lines are near the crane.

21 RIGGING

21.1 Inspection and Use

- 21.1.1 Before issuing and annually, qualified rigging inspectors shall inspect equipment for wear, defects and current certification tags.
- 21.1.2 Only certified rigging meeting applicable standards shall be utilized when lifting any equipment, components or personnel.
- 21.1.3 All rigging hooks must have double acting/positive locking safety latches.
- 21.1.4 Tag lines shall be utilized wherever they do not pose a hazard for personnel or the load being lifted.

22 EXCAVATIONS

22.1 Trenches

- 22.1.1 Place high visibility barricades and warning signs around excavation site. Use warning lights, flagmen, or watchman if necessary.
- 22.1.2 Slope or shore all sides to prevent cave-ins. Inspect carefully after rain and/or flooding, or other hazard-increasing occurrence.
- 22.1.3 Ensure that there is no one below when excavating near tops of cuts, banks, and cliffs.
- 22.1.4 Use hand railed bridges as walkways across excavations.
- 22.1.5 Before backfilling any excavation, ensure there is no one in it.
- 22.1.6 Perform Air Quality checks prior to entering any trench.

23 RECORD KEEPING

23.1 Incident/Accident Reporting

- 23.1.1 All incidents/Accidents/Near-Misses/Potential Hazards are to be reported to the supervisor and/or manager immediately.
- 23.1.1.1 Each incident will be documented, investigated and corrective actions taken to prevent future occurrences.

24 VISITORS

24.1 Visitors

- 24.1.1 Site/Construction Manager or designee must be informed of the visitor names, company name and purpose of visit before visitors arrive on site.
- 24.1.2 Visitors shall only be allowed access to site if permitted to do so by site management.
- 24.1.3 Visitors must go through a site orientation prior to going out on site.
- 24.1.4 Visitors must be escorted at all times and wear required PPE in order to access the site.
- 24.1.5 Visitors climbing a turbine must have two competent persons present.
- 24.1.6 Visitors are not allowed to enter restricted areas unless authorized.