

Fitness for Work Guidelines

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The provision of this document is for establishing and maintaining guidelines for employers that identify the fitness for work condition of a wind technician working onshore. The following contains best practices that establish the key components for a fitness for work technician, including a pre-employment physical and what is needed to sustain a fit for work wind technician throughout their career.

There are no minimum physical conditioning requirements established under the Occupational Safety and Health (OSHA) standards for a wind technician. Information contained within this document are best practices from the industry to help employers and employee's best maintain their physical condition for working in the wind industry.

Definitions

Fitness: following manufacturer's guidelines for equipment use and specs and/or employers' policies for health and fitness.

Fitness for Work (FFW): within the limits of personal protective equipment (PPE), ladders, fall protection systems, and lanyards. In addition, mental and physical capability of carrying out essential job functions (i.e. climbing, rescue, etc.).

Reasonable Accommodations: modifications or changes to a job application process, position, job or workplace that will enable a qualified applicant or employee with a disability to do his or her job without creating an undue hardship to the company.

Wind Technician: employee who is required to climb a wind tower and perform work as a function of their normal job duties.

Components of a "Fitness for Work" Program

Physical Evaluation to meet fitness for work during:

Pre-employment

1. Contact your company's Human Resources department to ensure all laws pertaining to pre-employment inquiries and requirements are followed as these are governed by state and federal regulation.
2. Physical evaluation by a medical professional is recommended.
3. It is recommended to work with a local or national occupational health professional to ensure workers you are hiring can safely perform the work you may require. This may be a local physical/occupational therapist to help you identify ways to help prevent injuries, or general physicians to review individual cases and provide adequate solutions for ergonomic related injuries.
 - i. Working with a health care professional will allow you to develop minimum physical standards based on different tasks that the wind

industry requires. This will not only aid the employer in finding the right person but can help to reduce potentially serious injuries to future employees.

4. It is recommended that a physical examination program be developed and once a candidate has been identified and a conditional offer of employment has been made, these individuals are referred for a physical examination by a licensed healthcare professional chosen by the company. All applicants for the same job category should be subjected to the same examination program.

Provide your company's selected healthcare professional the bona fide physician requirements for the specific job you are hiring for. The healthcare provider will test potential candidates using a physical examination referencing the job description. A prerequisite for climbing a turbine ladder may include meeting a particular weight limit due to limitations imposed by the equipment manufacturer and/or personal fall protection equipment limitations. Consult your company's HR and/or EHS Department for specific guidance on company policies and/or procedures that govern decisions on this topic.

5. Items for the employer to consider for evaluation can include, but not be limited to the following: (Note all items should be monitored and/or approved by a 3rd party trained professional and any fitness examination should be certified/properly validated for the positions and purposes for which it is used to ensure compliance with applicable federal, state and local employment laws.)
 - i. Entering/exiting the hub or a reasonable proxy – on the ground or in the air.
 - ii. Lifting the appropriate weight as required by your company.
 - iii. Must show physical ability to climb tower ladder unassisted within a timeframe as defined by your company.
 - iv. Must show range of motion as required by the job tasks performed.
 - v. Walk a narrow beam (e.g. 8" x 8 ft.) at ground level to ensure proper balance can be maintained. This simulates walking on various bed plates.
 - vi. If your employees will be subject to additional conditions, candidates should be aware of environmental conditions such as extreme heat/cold, high winds, phobias (acrophobia, bees, bugs, snakes, spiders, etc.) and the use of additional equipment such as respirators. (Note: OSHA has established medical evaluation compliance criteria for employers to follow if the employer allows their employees to use a respirator)
6. Determine whether the candidate requires any reasonable accommodation before taking the fitness examination.
7. Once the candidate has been tested and evaluated, review the results to ensure the candidate meets the minimum requirements your company sets forth, including whether the candidate would require any reasonable accommodation to perform the job.
8. Review and analyze examination results to determine whether they are disproportionately screening out applicants based on a protected class (i.e., sex,

disability, age, etc.), and consult with legal counsel to determine whether the examination is based on reasonable and legitimate factors other than the protected class and are consistent with job requirements and business necessity.

9. Periodically review job requirements and update fitness examination components.

See Appendix A for an example of a new hire process flow document.

During Employment

Once your employees are hired, it's important that they maintain good health and fitness. There are a variety of benefits employers can offer to ensure their investment in employees is long lasting. Some of these may include:

- a) A wellness program for your employees. Most insurance providers already have programs in place in which medically trained staff will come to your site and provide confidential assessments to employees.
- b) Allowing employees to identify any areas of opportunity for improvement which will benefit the employee.
- c) Reimbursement or assistance with health club membership/fitness classes.
- d) Daily warm up and stretch program.
- e) Conduct recurring physical evaluations to ensure physical readiness is being maintained.

Return to Work evaluation

Here are some suggestions to consider for re-evaluation of fitness for work upon an employee's return from absence due to injury/illness whether work related or not, which may impact their ability to perform the essential functions of the job:

- a) Post-injury physical evaluation
- b) Documentation of physical readiness

Note: both a) and b) should be completed by a health care professional, and only in compliance with applicable federal, state and local law.

The ultimate goal is to ensure the employee is fit for return to work.

Educate your Managers

A best practice is to train managers on the components of fit for work as part of their health and safety responsibilities. They should understand how climbing can affect health and how health can affect safe climbing. This should include training in the 'soft skills' needed when dealing with issues and the need to respect medical confidentiality. As with any safety and health management issues, managers should lead by example and follow the company's policy when it comes to employees being fit for work.

Raising Wind Techs' Awareness

Establish a short e-learning tool for annual review and/or periodic discussions with technicians on the importance of being ready to perform the job without any outside interference makes for a safe and productive employee. Encourage employees to take advantage of the company resources that are available should the need arise.

Raising awareness should include:

- a) Company expectations on being fit for work
- b) Potential risks of climbing, performing work when unfit
- c) Speaking up when personal conditions may prevent the tech from working at heights
- d) Employee wellness programs
- e) Employee Assistance Program (EAP)

Doing these simple things can help a wind tech professional extend their longevity and contribute to their overall health and wellness.

FFW: Self-Certifying your Wind Technicians to Climb a Wind Turbine

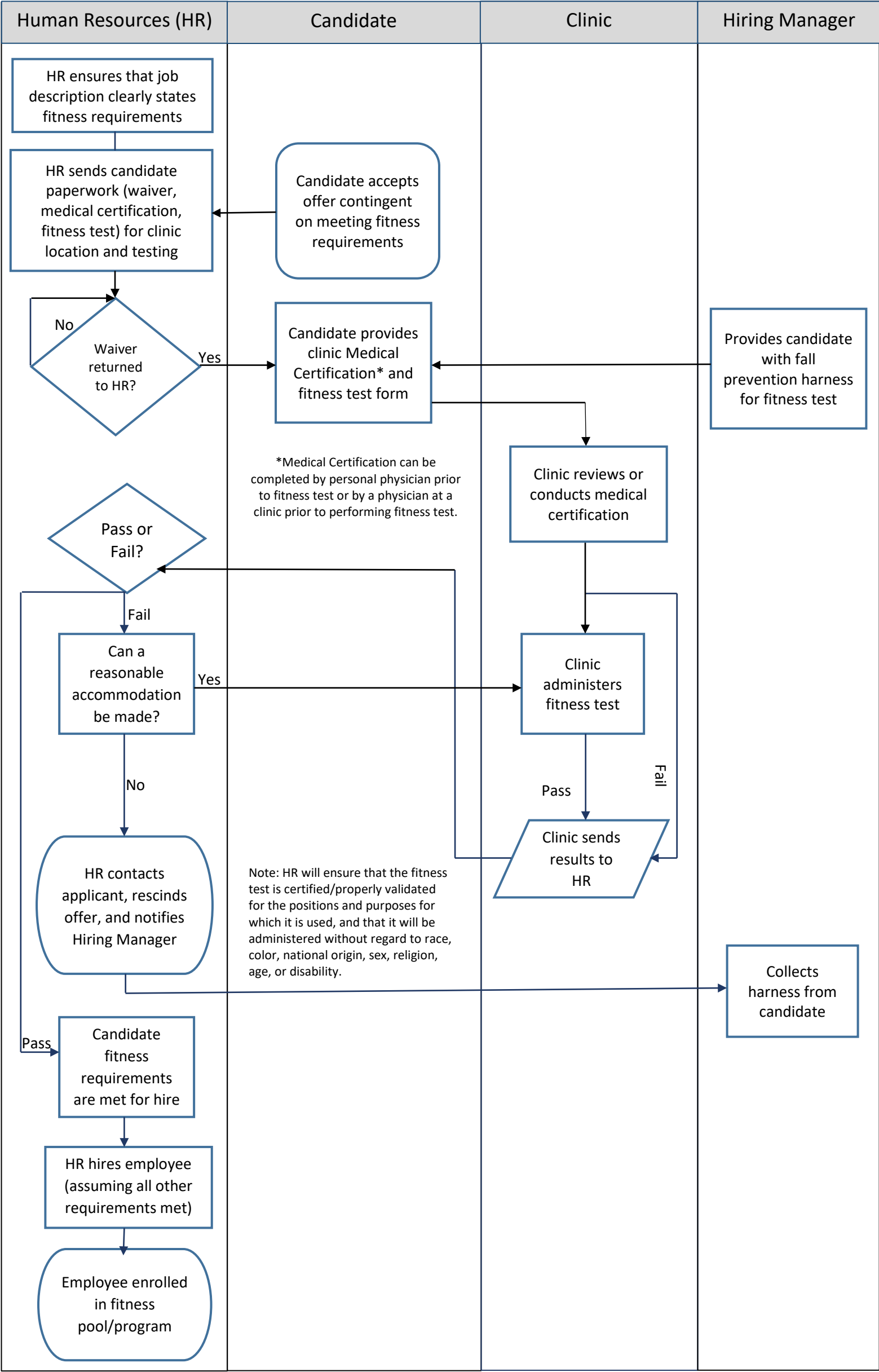
Climbing a wind turbine requires good physical fitness and to be free from health conditions that may compromise personal safety or the safety of rescue personnel. The following is a self-assessment tool designed to assist a wind technician in determining if they are “Fit for Work” (e.g. can climb a wind tower safely). You may take into consideration the following (as well as any treatment plans or accommodations that you may use to address the following):

1. Cardiovascular disorders e.g. angina, heart disease, arrhythmias, valve disease, high blood pressure
2. Neurological disorders e.g. epilepsy, stroke, blackouts, vertigo, severe deafness, dizziness
3. Endocrine disorders e.g. diabetes
4. Respiratory disorders e.g. chronic bronchitis, emphysema, asthma
5. Psychiatric disorders e.g. psychosis, depression, claustrophobia, acrophobia (fear of heights), drug dependency
6. Active Locomotive disorders e.g. present joint or limb problems, arthritis, acute or chronic back disorders. (This does not include joint or limb problems that have healed such as from sports injuries that are not active and don't inhibit your ability to climb).
7. Vision disorders e.g. vision in one eye only, conditions which impair distance judgment
8. Medication side effects e.g. tranquilizers, sedatives, pain killers, anti-histamines, anti-depressants, use of illegal substances that may affect balance, concentration or alertness.
9. Loss of driving license due to any ongoing disabling medical condition
10. Poor physical fitness e.g. shortness of breath when climbing stairs or performing exercise

See Appendix B for an example of a Pre-Climb Fitness Self-Certification form.

Appendix A

New Hire Fitness Assessment Process Flow



Appendix B

Company X Pre-Climb Fitness Self-Certification

Wind Farm Name/Location

All personnel climbing wind towers or other structures must realize the top priority is safety. Climbing up a vertical ladder is a very physically demanding task requiring good physical conditioning. Heart rates can be expected to rise to close to maximum during the task, especially for inexperienced or unfit climbers. The task requires substantial hand, arm, back and leg strength. Additionally, the added weight of wearing appropriate safety equipment, which includes a PFAS, appropriate clothing, hard hat, work gloves and safety shoes, will add to the physical demand.

Personnel who climb wind turbines or other structures who are not in good physical fitness or free from health conditions, may compromise the safety of themselves and/or the safety of rescue personnel. Company X requires that all persons who climb a wind turbine or other structure be in good physical condition. Personnel must self-assess and determine if they have any medical condition(s) or circumstances which, if not properly treated or accommodated, may contribute additional risk to the person who is climbing. The following medical or physical conditions are representative of conditions that could impair your ability to safely climb. Please review and take these conditions, as well as any treatment plans or accommodations, into consideration when self-certifying your fitness:

- Cardiovascular disorders e.g. angina, heart disease, arrhythmias, valve disease, high blood pressure
- Neurological disorders e.g. epilepsy, stroke, blackouts, vertigo, severe deafness, dizziness
- Endocrine disorders e.g. diabetes
- Respiratory disorders e.g. chronic bronchitis, emphysema, asthma
- Psychiatric disorders e.g. psychosis, depression, claustrophobia, acrophobia (fear of heights), drug dependency
- Active Locomotive disorders e.g. present joint or limb problems, arthritis, acute or chronic back disorders. (This does not include joint or limb problems that have healed such as from sports injuries that are not active and don't inhibit your ability to climb).
- Vision disorders e.g. vision in one eye only, conditions which impair distance judgment
- Medication side affects e.g. tranquilizers, sedatives, pain killers, anti-histamines, anti-depressants, use of illegal substances that may affect balance, concentration or alertness.
- Loss of driver's license due to any ongoing disabling medical condition
- Poor physical fitness e.g. shortness of breath when climbing stairs or performing exercise

In general, if the participant has any medical condition(s) that, if not properly treated or accommodated, may impair his/her ability to safely complete the climb, these should be disclosed, confidentially if necessary, so that the Company can assess whether the participant may safely perform the essential functions of the job. Please respect our right not to compromise on safety.

Your signature below represents that you, the participant, certify that you are free of any medical or physical condition(s) which, if not properly treated or accommodated, may impact your ability to safely climb, and are in good health condition.

Participant Signature

Date

Participant Name (Print)

Company X Representative (Witness)

Date

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