

Wind Tech 1

Certification Overview

The ACP Workforce Certifications Program is an industry-developed certification framework developed in collaboration with industry leaders to establish aligned, portable, and competency-based certifications for clean energy technicians. ACP currently offers certifications for Wind Tech 1, Solar Tech 1, and Battery Energy Storage System (BESS) Tech 1.

Core Competencies

The Wind Tech 1 Certification tests competency in:

- Basic safety
- Basic system theory and operation
- Electrical, mechanical, and hydraulic fundamentals
- Visual inspection and maintenance
- Proper care and usage of personal protective equipment (PPE) and technical tooling
- Record keeping and documentation

Scenarios

Competency is determined via three hands-on scenarios. General equipment needed to perform this assessment includes PPE, general tools (e.g., torque wrench, screwdriver and hand tools), cleaning equipment, lubricants, containers to collect oil, and documentation materials.

Scenario 1: Site & Turbine Inspection & Cleaning

Pre-Work Preparations

1. Demonstrate Pre-Work Tasks

Inspections

2. Perform site walk-through to identify hazards
3. Inspect safety barriers, warning signage, electrical equipment, and access points for turbines.
4. Inspection each turbine
5. Inspect the internal components (as applicable) to check for oil leakage, debris, and lubrication
6. Ensure all access hatches, ladders and platforms are in working order

Cleaning

7. Safely using cleaning equipment
8. Ensure proper disposal of waste

Post-Work Review

9. Communicate Work Completion

Scenario 2: Torque & Tensioning

Pre-Work Preparation

1. Demonstrate pre-work tasks
2. Review the service manual or maintenance procedure and determine the torque or tensioning requirements from the manufacturer's guidelines

Torque & Tensioning

3. Torque and/or tension bolts
4. Ensure all bolts are properly seated, with no signs of overtightening or damage.
5. [If applicable] Ensure that the annotation of tensioned bolts is properly marked with the date of tensioning.

Post-Work Review

6. Communicate work completion

Scenario 3: Lubrication Filter Swap

Pre-Work Preparation

1. Demonstrate pre-work tasks
2. Describe the importance of filter maintenance
3. Identify the correct filter type
4. Describe the importance of consistent sampling practices and identifying sampling ports on equipment

Lubrication Filter Swap Procedure

5. Remove old filter safely
6. Inspect filter housing and seals
7. Install new filter
8. Demonstrate properly labeling and preparing fluid samples for shipment to a fluid analysis laboratory
9. Dispose of the old filter and lubricant according to environmental and safety regulations.
10. [If Applicable] Restart the lubrication system and monitor for any abnormalities

Post-Work Review

11. Communicate work completion

About the ACP Institute of Safety, Workforce, and Operational Performance

The American Clean Power Association (ACP) is the leading voice of today's multi-tech clean energy industry, representing companies across wind, solar, battery energy storage (BESS), and other large-scale clean energy technologies. The Institute of Safety, Workforce, and Operational Performance (ISWOP) integrates standards development and certification operation into a unified function that supports workforce competency, safety, and operational excellence across the sector.

Learn more, visit CleanPower.org/workforce-training-and-education.