## Sample Cold Weather Critical Component (CWCC) Lists

The ERCOT Weatherization & Inspection team provides these lists as samples of potential Cold Weather Critical Components for various types of power generation and transmission facilities. The lists are not intended to be exhaustive nor mandatory but rather represent devices, equipment, components, and systems that ERCOT believes meet the definition of “weather critical component” in 16 TAC §25.55(b)(11) ("any component of a resource or transmission facility that is susceptible to fail as a result of a weather emergency, the occurrence of which failure is like to significantly hinder the ability of the resource or transmission facility to function as intended . . .”)

In accordance with 16 TAC §25.55(c)(1)(E) and 16 TAC §25.55(f)(1)(E), generation entities and Transmission Service Providers (TSPs) must create a list of *cold* weather critical components, review it annually prior to the beginning of the winter season, and update it as necessary.

| Nuclear, Coal, and Natural Gas Fired Generators with Steam Cycles | Gas Turbines Without Steam Cycles | Reciprocating Engines | Hydroelectric Facilities | Intermittent Renewable Resources | Transmission Service Provider (TSP) |
|---|---|---|---|---|---|
| Inlet air heating systems, if applicable | Inlet air heating systems, if applicable | Knock sensing line, sim(s) | Battery systems | Inverters and medium voltage transformers | Autotransformers |
| Feed, circulating, and seal water systems | Compressor bleed valves | SCR, emissions control | Water management systems | HVAC systems for inverters, control panels, etc. | Power transformers |
| Natural gas supply including duct burner systems | Instrument air systems | Main gas supply valve | SF6 breakers (controlled by the Resource) | SF6 breakers (controlled by the Resource) | SF6 breakers |
| SF6 breakers (controlled by the Resource) | SF6 breakers (controlled by the Resource) | SF6 breakers (controlled by the Resource) | Main, step-up, auxiliary, and standby transformers | Main, step-up, auxiliary, and standby transformers | Static var compensators |
| Main, step-up, auxiliary, and standby transformers | Main, step-up, auxiliary, and standby transformers | Main, step-up, auxiliary, and standby transformers | Air circulation fans | Feeder breakers | Emergency generators at substations, as applicable |
| Solid, liquid, and gaseous fuel delivery systems (controlled by the Resource) | Control house and other HVAC systems | Control house and other HVAC systems | Control house and other HVAC systems | Wind pad mounted transformer | Control house and other HVAC systems |
| Control house and other heating, ventilation, and air conditioning (HVAC) systems | Instrument air transmitters | Instrument air systems | Heating systems<br>• GPU (governor control systems) heaters<br>• Other heater | Down tower cabinet assembly heaters | Transmission voltage circuit breaker mechanisms that use pneumatic or hydraulic pressure to operate the contacts open, closed, or both |
| Coal reclaim equipment, conveyors, crushers, and storage bins | Auxiliary cooling water transmitters | Starting air compressors | | Hydraulic and lube oil system | Station batteries |
| Forced, induced draft, primary air and other fan systems | Dew point analyzer | | | HVAC for control house and battery container | Grounding transformers |
| Seal oil systems | Main gas supply valve | | | Fire suppression system | |
| Flue gas desulfurization (FGD) systems/scrubbers, fly ash and bottom ash handling systems, selective catalytic reduction (SCR) systems, and other air quality control (AQC) systems | Sprint or NOx control | | | Wind (if present)<br>• Wind vane and anemometer heating elements<br>• Pad-mounted transformer heaters<br>• Hydraulic pitch system accumulators and associated heating<br>• Gearbox oil heating and circulation systems<br>• Converter cooling system anti-freeze protection | |
| Demineralized and other water systems, caustic, and sulfuric acid | Coalescing filter | | | Solar (if present)<br>• Inverter heating and cooling systems<br>• Tracking system motors and gearboxes | |

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|---|---|---|---|---|---|
| | | | | • Solar panel snow removal systems, if applicable<br>• Battery storage thermal management systems (for solar + storage)<br>• Meteorological station heating elements | |
| Transmitters, sensing lines and other components of:<br>• Heat exchanger systems<br>• Cooling tower or other cooling systems<br>• Auxiliary cooling water systems<br>• Boiler feedwater systems<br>• Drum HP/IP/LP drum systems<br>• Deaerator systems<br>• Hotwell systems<br>• Condensate systems<br>• Steam systems<br>• Generator cooling systems | Air quality control systems | | | Energy Storage<br>• Electrolyte heating systems for flow batteries<br>• Thermal management systems for lithium-ion or other batteries<br>• Inverter and power conversion system heaters<br>• Fire suppression system components exposed to cold weather<br>• HVAC systems for battery enclosures | |
| Main and auxiliary cooling towers | | | | | |
| Instrument air systems | | | | | |
| Instrument air systems and transmitters | | | | | |
| Dew point analyzers | | | | | |
| Coalescing filters | | | | | |
| Electrohydraulic control (EHC) systems | | | | | |