

Sample Hot Weather Critical Component (HWCC) Lists

The ERCOT Weatherization & Inspection team provides these lists as samples of potential hot 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)(2)(E) and 16 TAC §25.55(f)(2)(E), generation entities and Transmission Service Providers (TSPs) must create a list of *hot* weather critical components, review it annually prior to the beginning of the summer 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)
Generator step-up, auxiliary, and standby transformers	Generator step-up, auxiliary, and standby transformers	Generator step-up, auxiliary, and standby transformers	Generator step-up, auxiliary, and standby transformers	Generator step-up, auxiliary, and standby transformers	Autotransformers and other transformers
Continuous emissions monitoring and emissions control systems	Continuous emissions monitoring and emissions control systems	Continuous emissions monitoring and emissions control systems	Water management systems	Switchgear	Relay protection systems (thermal trip relays)
Excitation systems (voltage regulators)	Switchgear	Knock sensing line, sim(s)	Battery systems	Inverters	Transmission voltage circuit breaker mechanisms
SF6 breakers (controlled by Resource)	SF6 breakers (controlled by Resource)	SF6 breakers (controlled by Resource)	SF6 breakers (controlled by Resource)	SF6 breakers (controlled by Resource)	SF6 breakers
Heating, ventilation, and air conditioning (HVAC) systems	Heating, ventilation, and air conditioning (HVAC) systems	Heating, ventilation, and air conditioning (HVAC) systems	Heating, ventilation, and air conditioning (HVAC) systems	Heating, ventilation, and air conditioning (HVAC) systems	Heating, ventilation, and air conditioning (HVAC) systems
Main and auxiliary cooling towers	Instrument air systems	Starting air compressors	Air circulation fans	Solar panel tracking systems	Diesel/propane backup generator systems
Variable frequency drive climate control	Demineralizer systems	Instrument air systems	Cooling water strainers and pumps	Main gear box and coolant tank	Gas-insulated switchgear (GIS) cooling systems
Lube oil systems	Fin fan and other coolers	Variable frequency drive systems	Lube oil systems	Backup power	Station batteries
Chiller systems	Turbine inlet air cooling systems	Cylinder head cooling systems	Penstock air vents and surge tanks		
Stator cooling systems	Air filtration systems	Crankcase ventilation system	Excitation systems (voltage regulators)	Battery and control container	
Air handling units (AHUs)	Fuel gas conditioning systems	Excitation systems (voltage regulators)		Yaw drive motor cooling systems	
Combustion air and other fans	Lubrication oil coolers	Radiator cooling fans and heat exchangers		Wind turbine blade pitch control systems	
Service water system	Excitation systems (voltage regulators)	Turbocharger and intercooler systems		Photovoltaic panel junction boxes	
Condensate system				Down tower assembly fan	
Feed, circulating, and seal water systems				DC cabling and connectors	
Hydrogen coolers				Hydraulic and lube oil systems	
Flow transmitters				Uninterruptable power supply systems	
Switchgear					
Demineralizer systems					
Instrument air systems					
Cooling water intake screens & pumps					
Steam turbine condensers					
Air-cooled condensers					
Control systems					
Boiler feedwater pumps					
Condenser & cooling water systems					
Critical buildings and rooms (i.e., reactor containment, mechanical electrical aux, electrical aux, control rooms, relay rooms, etc.)					