

Table A5 Monitoring of electrical power generating plant				
Item		Alarm and safety action (stated by an x)		Comments
		Alarm	Automatic shut down of prime mover with alarm	
Generator	Pressure, lubricating oil inlet, low	x		If separate system
	Voltage, high	x		
	Voltage, low	x		
	Frequency, low	x		
	Disconnection of nonessential consumers	x		
Diesel engine	Temperature, lubricating oil, high	x		
	Pressure, lubricating oil inlet, low	x		When manoeuvring is dependent on electric power. Independent of safety system
	Pressure, lubricating oil inlet, low		x	
	Temperature, cooling water outlet, high	x		When manoeuvring is dependent on electric power
	Fresh water expansion tank low level	x		
	Temperature, cooling water outlet, high		x	
	Cooling water pressure or flow, low	x		
	Crankcase, explosive conditions. See Pt.4 Ch.3 Sec.1 for details		x	For engines having a power of more than 2250 kW or a cylinder bore of more than 200 mm
	Exhaust gas, high temperature, each cylinder	x		For cylinder power > 130 kW
	Exhaust gas, high temperature deviation from average, each cylinder			For cylinder power > 130 kW ¹⁾
	Exhaust gas, high temperature, after turbocharger	x		For cylinder power ≤ 130 kW if no individual exhausts temperature monitoring
	Starting air pressure, low	x		
	Double or shielded fuel oil pipes, leakage	x		Level monitoring of leakage tank or equivalent
	Overspeed		x	See Pt.4 Ch.3 Sec.1
	Turbocharger, overspeed	x		Applicable when turbocharger serves a group of cylinders > 1000 kW
Steam turbine	Temperature, lubricating oil, high	x		
	Pressure, lubricating oil inlet, low	x		Independent of safety system
	Pressure, lubricating oil inlet, low		x	
	Pressure, condenser, high	x		
	Pressure, condenser, high		x	
	Pressure, steam inlet line, low	x		
	Axial displacement rotor, large		x	Multistage turbines
	Overspeed			See Pt.4 Ch.3 Sec.3
1) Higher limits may be evaluated, if other means are provided for monitoring of critical running conditions for engine and power transmissions (torsional stress automatic monitoring of couplings at misfiring may be one component to be evaluated).				