

SPEEDTRONIC™ Mark V Annunciator Troubleshooting Chart

<I> CRT Display Alarm Message, Logic & No.		Cause	Action
L30HRX3			
L30AC_ALM			
L30AF_ALM			
L63CTSL_ALM	(Not Used)		
L63ADLA	A.A. Diff. Press Low, Auto Xfer to Dist	Problem with atomizing air system.	Investigate atomizing air system.
L63ADL_ALM	Atomizing Air Diff. Pressure Low	Atomizing air compressor not providing adequate pressure.	Check atomizing air system.
L26AAH_ALM	Atomizing Air Temp. High	Failure of atomizing precooler louvers to open and close.	Check water supply to the atomizing air precooler, isolating valve position flow restrictions.
L86S	Auto Synchronizing Lockout	Auto synchronizing self-checking system has detected a synchronizing equipment abnormality.	Investigate synchronization system to determine exact cause of problem.
L83COMF	Auto Xfer to Dist. Communicator Failure	Communication link with auto transfer to distillate system failed.	Check auto transfer to distillate components and communication system.
L52HQ_ALM	Auxiliary Hydraulic Oil Pump Motor Running	Accessory gear-driven hydraulic pump has not supplied sufficient pressure because of leaks or failure of pump.	Check hydraulic system.
L52QA_ALM	Auxiliary Lube Oil Pump Motor Running	The main accessory gear driven lube oil pump is supplying insufficient lube oil pressure due to pump failure or leaks	Examine main lube pump. Check pump output and main lube filters for leaks or plugging.
L49X_ALM	Auxiliary Motor Overload	One of the auxiliary motors is overloaded.	Check auxiliary motors to determine which motor is overloaded and the cause of the overloading.
L52QS_ALM	Auxiliary Seal Oil Pump Running	Insufficient pressure from main seal oil supply pump.	Check seal oil supply system components.

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	Battery 125 VDC Ground	Insulation failure has resulted in a ground on the 125 VDC system.	Isolate and remove ground from the system.
L27BLN_ALM	Battery Charger AC Undervoltage	Battery charger AC undervoltage.	Check battery charger AC breaker. Check voltage magnitude.
	Battery DC Undervoltage	Battery system voltage is low. Battery charger is not functioning properly, excessive drain on the batteries, or bad cells in battery.	Check battery charger for proper operation, correct excessive drain on battery, check for bad cells. The gas turbine should not be operated unless DC power is available to the emergency DC lube oil pump.
L30LOA	Bearing Drain Temperature High	High bearing drain temperature.	Check lube oil feed and drain piping.
	Bearing Metal Temperature High	Bearing or lube oil problem.	Check bearings and lube oil system.
L27VVN_ALM	Black Start Inverter Trouble	The black start inverter output voltage has gone low, ignition power has been transferred to the MCC 12 VAC.	Troubleshoot black start inverter.
L27BN_ALM	Bus Undervoltage – No Auto Synch	Bus synchronizing potential not available.	Check bus PT fuses and wiring. Do not use auto synchronizing or manual synchronizing until problem is resolved.
L28FD_SD	Chamber Flamed Out During Shutdown	Flame loss during fired shutdown period.	Investigate cause and remedy before restarting turbine. Monitor vibration on the way up.
L30SPA	Combustion Trouble	Faulty thermocouples, gas path hardware or uneven distribution of fuel to the fuel nozzles.	Analyze data for trends. At earliest shutdown check thermocouples. Perform borescope or combustion inspection. Check flow divider fuel pressures. Check for plugged nozzles.
LCOM_B_ALM	Common IO Communication Loss	<C> processor is no longer communicating.	Check <C> power supply card and cabling.

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L86CB1	Compressor Bleed Valve Position Trouble	Compressor bleed valves have not operated properly. They are in the wrong position or required an excessive amount of time to move from one position to the other.	Investigate problem. The problem should be corrected before restarting. The Master Reset switch must be pressed before restarting.
L86TCI	Compressor Inlet Thermocouples Disagree	Bad thermocouple signal. Thermocouples in the inlet have failed, shorted or open.	Check thermocouples and wiring and replace faulty thermocouple(s).
L26CTH_ALM	Control Panel Temp High	Air conditions not maintaining proper temperature.	Check air conditioners.
L12HF	Control Speed Signal Loss - HP	Machine tripped due to loss of speed signal.	Check wiring to speed pickups.
L12HFD_C	Control Speed Signal Trouble - HP	HP speed pickup voting mismatch in <C>.	Check and recalibrate HP speed pickups.
L12HFD_P	Control Speed Signal Trouble - HP	HP speed pickup voting mismatch in <P>.	Check and recalibrate HP speed pickups.
L12LF	Control Speed Signal Trouble - LP	LP speed pickup voting mismatch.	Check and recalibrate LP speed pickups.
L30CD	Cooldown Trouble	Unit failed to go on cooldown, or the cooldown cycle was aborted prior to cooldown timer timeout.	Check ratchet system. Monitor vibration when cooldown cycle is reinitiated.
L52FC_ALM	Cooling Fan Motor Breaker Open	Cooling fan motor did not start.	Check cooling fan motor module in PECC.
L71WL_ALM	Cooling Water Level Low	Cooling water tank level low.	Check cooling water system for leaks.
L63QQ3H_ALM	Coupling Oil Filter Diff Pressure High	Clogged filter.	Replace filter.
L3CP_ALM	Customer Start Inhibit	Customer contact input not enabled.	Check customer's permissive.
L4CT_ALM	Customer Trip	Customer trips input to the L4CT logic have caused an automatic trip of the unit.	Determine which of the customer trip devices caused the trip and correct.
	Customer-Specific Alarms <C>		

<I> CRT Display Alarm Message, Logic & No.		Cause	Action
	Customer-Specific Alarms <Q>		
L27QEL_ALM	DC Motor Undervoltage (Lube Oil)	DC power not supplied to emergency DC lube pump.	Check power to DC lube pump (MCC breaker on). The gas turbine should not be operated unless DC power is available to the emergency DC lube pump.
L30DIAG_C	Diagnostic Alarm <C>	The microprocessor self-checking program has uncovered a control panel problem.	Call up diagnostic display.
L30DIAG_Q	Diagnostic Alarm <Q>	The microprocessor self-checking program has uncovered a control panel problem.	Call up diagnostic display.
L26DWH_ALM	Diesel Engine Cooling Water Temp High	Diesel cooling water temperature is high.	Check diesel cooling water system.
L2DWZ2	Diesel Failure to Break Turbine Away	Diesel was unable to accelerate to maximum rpm.	Check diesel. Check diesel maximum torque solenoid.
L48DSX	Diesel Failure to Start	Diesel has failure to start.	Check diesel fuel tank.
L4DEY_ALM	Diesel Failure to Stop	Diesel should stop automatically after a 5 minute cooldown period.	Check diesel stop solenoid 20DV.
L63QDN_ALM	Diesel Lube Oil Pressure Low	Diesel lube oil pressure is low.	Check diesel lube oil system.
L83DT1	Diesel Test Mode Selected	Indication that diesel test pushbutton permissive has been activated.	Test mode should be deselected once the test is complete.
L63LF2H_ALM	Distillate Fuel Filter Differential Pressure High	Clogged filter.	Replace filter.
L26FD1H_ALM	Distillate Fuel Temperature High	Possible cooling system problem.	Check temperature sensor and cooling system.
L12H	Electrical Overspeed Trip - HP	The speed control system has not limited HP turbine speed within the trip limits.	Isolate problem and correct.

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L12L	Electrical Overspeed Trip - LP	The speed control system has not limited LP turbine speed within the trip limits.	Isolate problem and correct.
L72QEZ_ALM	Emergency Lube Oil Pump Motor Running	Loss of AC power to main lube oil pumps.	Determine cause of AC power loss.
L72ES_ALM	Emergency Seal Oil Pump Running	Generator seal oil pressure is low.	Check main and auxiliary seal oil supply system components.
L59E_ALM	Exciter Overvoltage	Excessive field volts have been detected.	Check exciter.
L94EK	Exciter Rect Cooling Trouble - Trip 52G	Breaker has tripped and machine is at FSNL because of problem with exciter rectifier cooling.	Investigate exciter rectifier cooling system.
L26SFH_ALM	Exciter Rectifier Bridge Temp High	Possible cooling system problem.	Check exciter rectifier cooling system.
L86TXT_C	Exhaust Overtemperature Trip <C>	Turbine has tripped due to high median exhaust temperature.	Investigate.
L86TXT	Exhaust Overtemperature Trip	The temperature control system has not limited exhaust temperature within the trip limits.	Isolate problem and correct.
L63TK_ALM	Exhaust Frame Cooling Air Pressure Low	Exhaust frame blower motor not operating. Air passages blocked.	Check motor operation. Inspect cooling air flow passages.
L90TKL	Exhaust Frame Cooling System Trouble - Unload	Exhaust frame cooling fans 88TK-1,2 problem or system problem.	Investigate exhaust frame cooling system.
L63EAH_ALM	Exhaust Pressure High Alarm	Exhaust pressure has risen above recommended levels.	Inspect exhaust filter and ducting for blockage.
L63ETH	Exhaust Pressure High Trip	Exhaust pressure has risen above the trip level.	Inspect exhaust filter and ducting for blockage.
L63ETHX_ALM	Exhaust Pressure Switch Trouble	Bad signal from exhaust pressure switch.	Check switches and switch wiring.

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L30TXA	Exhaust Temperature High	The exhaust gas temperature is excessive.	Check all thermocouples. Replace any bad thermocouples. If problem is not thermocouples, isolate portion of Control System causing the problem.
L30TXA_C	Exhaust Temperature High <C>	High median exhaust temperature calculated in <C>.	Lower load to reduce exhaust temperature. Investigate.
L30SPTA	Exhaust Thermocouple Trouble	Faulty thermocouple.	Check thermocouples.
L86TFB	Exhaust Thermocouples Open Trip	Excessive number of thermocouples not connected.	Check and reconnect thermocouples.
L63FLZ_FLT	Failure to Establish Liquid Fuel Press.	Liquid fuel forwarding system problem.	Check that power is being supplied to liquid fuel forwarding pump/motor. Troubleshoot per system components per instructions.
L30FD_ALM	Failure to Ignite	Failure to fire within the one minute period.	Check that ac power is supplied to the ignition system.
L62TT2_ALM	Failure to Start	The master protective logic signal "L4" has not been set within 30 seconds of the start signal, has tripped the unit twice or, if the unit is operating in remote, flame was not established after two tries.	Check all signals making up the L4 logic signal to determine which caused the problem, or determine cause of lack of flame establishment.
L3Z	Failure to Synchronize	Unit did not synchronize and close generator breaker within the normal expected time (15 seconds).	Check all signals going making up the L4 logic signal to determine which caused the problem or determine the cause of lack of flame establishment.
L45FTX2_ALM L45FTX1_ALM	Fire in Zone #1 or Zone #2 Trip	Fire in the turbine or accessory compartment.	Restarting after an operation of the CO ₂ system requires that the CO ₂ system be reset, including all doors and dampers, and the CO ₂ release mechanism.

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L45FAX_ALM	Fire Protection System Inoperative	CO ₂ pressure or control problem.	Check fire protection system.
L28FD_ALM	Flame Detector Trouble	One of the detectors operating when no flame is present.	Check for proper operation of the flame detection system. Check that the flame detector quartz window are clean.
L60FSRG	FSR Gag Not at Max Limit	Manual FSR control has not been reset to a position where it will not interfere with automatic FSR control.	Raise the manual FSR control to maximum.
L3GCVFLT	Gas Control Valve Servo Trouble	The gas control valve feedback signal is abnormal.	Check LVDT.
L63HGL_SENSR	Gas Fuel Hydraulic Pressure Switch Trouble	Bad signal from hydraulic pressure switch.	Check switch and switch wiring.
L63HGL_ALM	Gas Fuel Hydraulic Trip Pressure Low	Low oil pressure in gas fuel hydraulic oil trip circuit.	Check the control oil filter and control oil piping. This alarm will actuate if the turbine is tripped with the manual emergency trip valve on the turbine or a large leak were to occur in the hydraulic trip circuit piping.
L3GFIVP	Gas Fuel Intervolve Pressure Trouble	Pressure sensed between the gas control valve and the speed ratio valve is abnormal.	Check GRV control system, intervalve vent, and pressure transducer.
L63PGFT	Gas Fuel Nozzle Purge System Pressure High	Problem with valves.	Determine cause of incorrect valve positioning.
L94PGT	Gas Fuel Nozzle Purge System Trouble Trip	Either VA13-1 or -2 or 20VG-2 are stuck open and machine has tripped. Gas may be backing through the system.	Check valves for cause. Correct positioning prior to refire.
L33PGFT	Gas Fuel Nozzle Purge Valve Fail to Close	VA13-1 or -2 are obstructed.	Check valves to remove obstruction to resume purge.
L33PGO_ALM	Gas Fuel Nozzle Purge Valve Fail to Open	No atomizing air flow; VPR44-1 stuck.	Check valve.
L63FGL_ALM	Gas Fuel Pressure Low	Gas fuel pressure to turbine has been sensed as low.	Check cause of low supply pressure.

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L3GRVFLT	Gas Ratio Valve Position Servo Trouble	The gas ratio valve feedback signal is abnormal.	Check LVDT.
L63CA3L_ALM	Gen Air Filter Cleaner Pressure Low	Generator air inlet filter cleaning system problems.	Check air inlet filter cleaning components.
L43HPA_ALM	Gen Purge System on Manual Control	Operator has selected manual control.	Change to automatic control.
L52GA_ALM	Gen. Inlet Air Dirt Separator Not Running	Generator inlet air dirt separator malfunction.	Check separator motor for proper operation. Check supply system wiring.
L63GFH_ALM	Generator Air Filter High Pressure Drop	High pressure differential across generator air inlet filters.	Inspect and clean/change filter elements, as required.
L63BQL_ALM	Generator Bearing Vacuum Low	Generator bearings are sealed by vacuum. This alarm indicates a potential problem with the sealing system.	Investigate generator bearing sealing system.
L52G_ALM	Generator Breaker Tripped	Generator breaker has been tripped by an automatic protective device or manually.	Determine device that tripped the breaker.
L63GKL_ALM	Generator Casing Hydrogen Press. Low	Low hydrogen pressure in generator.	Check hydrogen supply system.
L71WGH_ALM	Generator Casing Liquid Level High	Liquids have accumulated in bottom of generator.	Remove liquids, check for leaks and take action to prevent recurrence of problem.
L33GCC_ALM	Generator CO ₂ Door Trouble	Generator CO ₂ door is closed.	Door must be opened and the latch reset.
L86TGT_ALM	Generator Differential Trip	A generator panel protective device has tripped the 86G lockout relay.	Determine which protective device tripped the 86G and correct the abnormality that precipitated the trip.
L64F_ALM	Generator Field Ground	A ground on the generator field has been detected.	Operation of the generator with the field grounded is not recommended as a second ground could result in excessive damage to the generator field.

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L94H_ALM	Generator Hydrogen Purge Shutdown	Shutdown initiated due to one or more hydrogen system problems, e.g., hydrogen purity has fallen to shutdown level.	Check hydrogen cabinet for undervoltage. Check hydrogen control switch in maintenance/auto. Check and restore hydrogen purity. Check seal unit. If purity continues to deteriorate, a possible hazard condition may develop.
L49GH_ALM	Generator Stator Temp High	Generator stator temperature is excessive caused by lack of cooling or overload.	The generator should not be operated when the stator temperature is excessive. Check cooling system, reduce overload on generator.
L94GEN	Generator Ventilation Trouble Shutdown	Temperature in generator compartment exceeds limits. Vent fans inoperable or insufficient to handle ventilation requirements.	Check generator ventilation system for proper fan/motor operation. Check ventilation dampers for proper operation/position.
L63FU2LA	Heavy Fuel Pressure Low, Auto Xfer to Dist	Problem with heavy fuel system.	Investigate heavy fuel system.
L26FU2LA	Heavy Fuel Temp Low, Auto Xfer to Dist	Problem with heavy fuel system.	Investigate heavy fuel system.
L3FUZ	Heavy Fuel Transfer Permissive Trouble	Turbine unable to transfer to heavy fuel.	Check heavy fuel system. Be sure fuel is warm and free-flowing.
L30SPT	High Exhaust Temp. Spread Trip	Faulty thermocouples, gas path parts or uneven distribution of fuel to the fuel nozzles.	Analyze data for trends. Perform borescope or combustion inspection. Check flow divider, fuel pressures. Check for plugged nozzles.
L39VA	High Vibration Alarm	High vibration at one or more bearings.	Monitor vibration readings.
L39VTX_ALM	High Vibration Trip or Shutdown	High vibration due to bowed rotor, mechanical imbalance, bearing failure, etc.	Check that the hydraulic ratchet is operating properly. Check for mechanical failures, observe vibration level on the next startup.
L30TNH_DIFF	HP Speed Signal Differential Alarm	One of the HP speed sensors is showing a different speed than the other two.	Check HP speed pickups.

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L63HF1H_ALM	Hydraulic Filter Differential Pressure High	Clogged filter.	Loss of fluid pressure and deterioration of fluid purity may result. Change filter.
L86HD	Hydraulic Protective Trouble	One second after the hydraulic oil trip is initiated either the liquid fuel stop valve is not closed or the hydraulic trip pressure (63HG, 63HL) has not decreased sufficiently.	Check operation of 20FL and 20HD servos.
L63HQ1L_ALM	Hydraulic Supply Pressure Low	Hydraulic supply pressure is low.	Check hydraulic supply pressure filter and differential pressure gauge, regulating valve or pump.
L27GHN_ALM	Hydrogen Control Panel Undervoltage	Ac power supply voltage low.	Check power supply for proper operations. Check wiring.
L63GL_GH_AL	Hydrogen Pressure High or Low (Gen)	High machine gas pressure or low manifold gas pressure.	Check generator hydrogen system.
L63HHL_ALM	Hydrogen Pressure Low (Skid)	Hydrogen supply skid pressure low.	Check skid components for proper operation.
L30HP	Hydrogen Purity Trouble	Bad generator hydrogen purity or purity pressure.	Check generator hydrogen system.
LWLX4MIN	Injection to Fuel Ratio Low-Four Minute Average	Steam (water) injection flow four minute average low.	Check steam (water) injection system.
LWLXHR	Injection to Fuel Ratio Low-Hourly Average	Steam (water) injection flow one hour average low.	Check steam (water) injection system.
L86GVA	Inlet Guide Vane Control Trouble Alarm	IGV control system problem.	Check IGV control system.
L4IGVT	Inlet Guide Vane Control Trouble Trip	IGV control system problem.	Check IGV control system.
L3IGVFLT	Inlet Guide Vane Position Servo Trouble	Incorrect servo operation.	Check servos.
L30TNI_DIFF	IP Speed Signal Differential Alarm	One of the IP speed sensors is showing a different speed than the others.	Check IP speed pickups.

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L71WG_ALM	Liquid Detected in Generator	Excessive liquid in bottom of generator.	Remove liquid and take corrective action to prevent recurrence of problem.
L3LFLT	Liquid Fuel Control Fault	Liquid fuel checking system has detected an abnormal servo or LVDT position or signal.	Determine abnormal condition by reading signals (L3LFLT1 to L3LFLT5).
L63LF1H_ALM	Liquid Fuel Filter Differential Pressure High	Clogged filter.	Loss of fluid pressure and deterioration of fluid purity may result. Change filter.
L30FQL_DIFF	Liquid Fuel Flow Differential Alarm	Speed pickups on flow divider disagree.	Check and recalibrate speed pickups.
L63HL_SENSR	Liquid Fuel Hydraulic Pressure Switch Trouble	Bad signal from hydraulic pressure switch.	Check switch and switch wiring.
L63HLL_ALM	Liquid Fuel Hydraulic Trip Pressure Low	Low oil pressure in liquid fuel hydraulic oil trip circuit.	Check the control oil filter and control oil piping. This alarm will actuate if the turbine is tripped with the manual emergency trip valve on the turbine or a large leak were to occur in the hydraulic trip circuit piping.
L63FLZ_ALM	Liquid Fuel Pressure Low	Liquid fuel forwarding system problem.	Check fuel forwarding system components for proper operation. Check liquid fuel forwarding piping for leaks.
L3LFP_FLT	Liquid Fuel Pump Control Trouble	Problem with one or more control devices.	Troubleshoot liquid fuel pump control components to determine problem and correct.
L33FL_ALM	Liquid Fuel Stop Valve Failure to Open	Valve or control failure.	Check operation of VSI and controls.
L26FL2LA	Liquid Fuel Temp Low, Auto Xfer to Dist	Heavy fuel temperature is low. Unit has been automatically transferred to distillate fuel operation.	Check heavy fuel supply heating equipment.
L3TFLT	Loss of Compressor Discharge Pressure Bias	Bad signal from compressor discharge pressure transmitter.	Check transmitter and associated connections for proper bias signal.
L3DWRF	Loss of External Setpoint Load Signal		

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L28FDT	Loss of Flame Trip	Failure of one of the detectors to detect flame.	Check for following: fuel being supplied to the combustors, flame in all chambers, damaged crossfire tubes, or combustors. Check for proper control valve position and fuel pressure.
L63QTX	Low Lube Oil Pressure Trip	Lube oil pressure has fallen below the trip level.	Determine cause and correct before restarting unit.
L30TNL_DIFF	LP Speed Signal Differential Alarm	One of the LP speed sensors is showing a different speed than the other two.	Check HP speed pickups.
L26QA_ALM	Lube Oil Header Temp High	Lube header temperature above recommended limits.	Check for proper operation of the lube oil heat exchangers, cooling water fans (proper rotation) and temperature regulating valve.
L26QT_ALM	Lube Oil Header Temp High Trip	Lube header temperature above recommended limits.	Check for proper operation of the lube oil heat exchangers, cooling water fans (proper rotation) and temperature regulating valve.
L71QH_ALM	Lube Oil Level High	Lube oil tank level high.	Investigate cause of high level alarm and restore normal level.
L71QL_ALM	Lube Oil Level Low	Lube oil tank level low.	Check for leaks, restore normal level.
L63QA1L_ALM	Lube Oil Pressure Low	Lube system leaks or pump trouble.	Repair leaks or pump.
L63QT_SENSR	Lube Oil Pressure Switch Trouble	Bad signal from lube oil pressure switch.	Check switches and switch wiring.
L26QN_ALM	Lube Oil Tank Temperature Low	Lube tank temperature below recommended limits (see piping schematic).	Check for proper operation of the lube oil tank heaters. Starting is inhibited if the tank temperature is low.
L26QT_SENSR	Lube Oil Temperature Switch Trouble	Bad signal from lube oil temperature switch.	Check switches and switch wiring.
L63QQ1H_ALM	Main LO Filter Diff Pressure High	Clogged filter.	Loss of fluid pressure and deterioration of fluid purity may result. Change filter.

<I> CRT Display Alarm Message, Logic & No.		Cause	Action
L43MAINT	Maintenance - Forcing Mode Enable	Auto calibrate, memory changing or logic forcing mode of operation has been selected.	When done with the operation, deselect the operation.
L86MAN_SYNC	Manual Synchronizing Lockout	Manual synch lockout has been selected on <I> CRT. Breaker will not close.	Determine why manual synch has been locked out. Reset using Master Reset pushbutton on <I> CRT.
L5E_ALM	Manual Trip	The emergency stop pushbutton has been pressed.	Correct abnormality that caused the operator to push the emergency stop pushbutton.
L86MP	Master Protective Startup Lockout	Within the turbine control panel the three microprocessor controllers R, S and T are in disagreement for the proper condition of the Master Protective logic "4X".	Determine which controller is in disagreement with the other two.
L27MC1N_ALM	MCC Undervoltage	Motor control center undervoltage.	Check that power is supplied to the motor control center.
L30LTA	No. 3 Bearing Temperature High	High number 3 bearing temperature.	Check lube oil feed and drain piping.
L33BS_ALM	No. 3 Drain Valve Position Trouble	Valve incorrectly positioned.	Check drain valve operations.
L3NZFLT	Nozzle Control Servo Trouble	Problem with second stage nozzle servo.	Check servo wiring and hydraulic oil system.
L43DIAG_ALM	Off-Line Diagnostics Running	Off-line diagnostic operation has been selected.	Do not start unit until diagnostics are complete.
L3WCTIM_ALM	On Line Water Wash Inhibited	Ambient temperature is below 50 deg F.	Wait to water wash until ambient temperature is higher.
L12HBLT_ALM	Overspeed Bolt Trip - HP	The speed control system has not limited turbine speed within the trip limits.	Isolate problem and correct.
L83HOST	Overspeed Test Mode Selected - HP	HP overspeed trip being tested.	See "Overspeed Trip Checks" section of text.
L83LOST	Overspeed Test Mode Selected - LP	LP overspeed trip being checked.	See "Overspeed Trip Checks" section of text.

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L30EK	Prim Exciter Rect Cooling Fan Trouble	Problem with primary exciter rectifier cooling fan.	Determine and correct problem with primary exciter rectifier cooling fan.
L4ETR_FLT	Protective Module ETR Relay Trouble	Trip due to master protective relay (4's) circuit has a problem.	Isolate <P> Protective Module and correct the problem.
L12H_P_ALM	Protective Module Overspeed Trip - HP	<P> module HP overspeed trip.	Investigate cause of overspeed.
L12L_P_ALM	Protective Module Overspeed Trip - LP	<P> module LP overspeed trip.	Investigate cause of overspeed.
L12LF_OS	Protective Speed Signal Trouble - LP	LP speed pickup voting mismatch in <P>.	Check and recalibrate LP speed pickups.
L30HRX2	Ratchet Did Not Start	Ratchet did not initiate a ratchet stroke in the prescribed time.	Check ratchet permissives.
L49HR1A_ALM	Ratchet Motor Overload	Ratchet motor overload.	Check ratchet motor overload (MCC). Check for proper operation of ratchet mechanism.
L30HRX1	Ratchet Trouble	Ratchet did not complete a prescribed motion in normal time.	Check for proper operation of ratchet mechanism.
L30RHFLT_X	Relative Humidity Sensor Fault	Humidity sensor failure.	Check sensor and wiring.
R5E_ALM	Remote Emergency Trip	Unit was tripped with the remote emergency trip pushbutton.	Investigate and correct cause of trip. Manually reset pushbutton.
L63SAL_ALM	Seal Oil Diff. Pressure Low	Low seal oil pressure across bearings.	Check seal oil system.
L63ST	Seal Oil Diff. Pressure Low Shutdown	Seal oil pressure across bearings has reached shutdown setpoint.	Correct seal oil system problem before restarting.
L71SDH_ALM	Seal Oil Drain Liquid Level High	Seal oil drain system problem.	Check generator seal oil drain system.
L63STX_ALM	Seal Oil Press. Shutdown Switch Trouble	Bad signal from seal oil pressure switch.	Check switches and switch wiring.
L30WC_LAG	Standby Cooling Water Pump Running	Either low cooling water pressure, or a problem with the main cooling water pump.	Investigate problem with cooling water system or main cooling water pump.

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L30FD_LAG	Standby Dist Fuel Fwd Pump Running	Low distillate fuel pressure or problem with main dist fuel fwd pump.	Investigate fuel forwarding system and main pump.
L4DT	Starting Device Lockout		
L3SMT	Starting Device Trip	The turbine has been tripped because the starting device has failed to start the turbine.	Note where in the start sequence the turbine tripped to aid in determining cause of trip. Check the suspect system.
	Starting Motor Breaker Did Not Pick Up	Cranking motor did not start.	Check limitamp for energizing or overload.
L4CRT	Starting Motor Breaker Did Not Pick Up	Starting motor did not start.	Checking starting motor module in PECC.
L49CR_ALM	Starting Motor Overload	Starting motor is showing an overload.	Investigate starting motor circuits.
L86CRTX	Starting Motor Protective Lockout	Cranking motor circuit electrical fault.	Clear fault and reset 88CR.
L2SFT	Startup Fuel Flow Excessive Trip	Excessive fuel for startup has been detected. For gas fuel the gas control valve is open too far.	Check the servo and feedback signals for proper operation.
L30EKR	Stby Exciter Rect Cooling Fan Running	Problem with primary exciter rectifier cooling fan.	Determine and correct problem with primary exciter rectifier cooling fan.
L60APHA_ALM	Steam Augmentation - High Pressure	High steam pressure.	Reduce steam pressure.
L60APHT	Steam Augmentation - High Pressure Trip	Steam augmentation system tripped due to high pressure.	Correct problem before restarting steam augmentation.
L60ATHT	Steam Augmentation - High Temp. Trip	Steam augmentation system tripped due to high temperature.	Correct problem before restarting steam augmentation.
L60ATHA_ALM	Steam Augmentation - High Temperature	High steam temperature.	Reduce steam temperature.
L60APLA_ALM	Steam Augmentation - Low Pressure	Low steam pressure.	Increase steam pressure.
L60ALPT_ALM	Steam Augmentation - Low Pressure Trip	Steam augmentation system tripped due to low pressure.	Correct problem before restarting steam augmentation.

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L60ATLT_ALM	Steam Augmentation - Low Temp. Trip	Steam augmentation system tripped due to low temperature.	Correct problem before restarting steam augmentation.
L60ATLA_ALM	Steam Augmentation - Low Temperature	Low steam temperature.	Increase steam temperature.
L60WL1_ALM	Steam Flow High	Excessive steam flow.	Check steam system.
L60WQPL_ALM	Steam Flow High Lockout	Excessive steam flow.	Correct problem before restarting.
L30SJ	Steam Injection Not Selected	NOx control steam injection system inoperative.	Select Steam Injection on <I> CRT.
L60SPHA_ALM	Steam Pressure High	High steam pressure.	Reduce steam pressure.
L60SPHT_ALM	Steam Pressure High Lockout	High steam pressure.	Correct steam pressure before restarting.
L60SPLA_ALM	Steam Pressure Low	Low steam pressure.	Increase steam pressure.
L60SPLT_ALM	Steam Pressure Low Lockout	Low steam pressure.	Correct steam pressure before restarting.
L60STHA_ALM	Steam Temperature High	High steam temperature.	Reduce steam temperature.
L60STHT_ALM	Steam Temperature High Lockout	High steam temperature.	Correct steam temperature before restarting.
L60STLA_ALM	Steam Temperature Low	Low steam temperature.	Increase steam temperature.
L60STLT_ALM	Steam Temperature Low Lockout	Low steam temperature.	Correct steam temperature before restarting.
LWLXHR	Steam to Fuel Ratio Low – Hourly Average	Steam (water) injection flow one hour average low.	Check steam (water) injection system.
L63QQ2H_ALM	Trip Oil Filter Diff Pressure High	Clogged filter.	Replace filter.
L63TF1H_ALM	Turbine Air Inlet Differential Pressure Alarm	Clogged filter.	Replace filter.
L63TFH_ALM	Turbine Air Inlet Differential Pressure Shut-Down	Clogged or iced filter.	Determine cause of blockage.
L63TFH_SENSR	Turbine Air Inlet Differential Pressure Switch Trouble	Bad signal from differential pressure switch.	Check switch calibration and switch wiring.

<I> CRT Display Alarm Message, Logic & No.		Cause	Action
L30TFX	Turbine Air Inlet Trouble	Inlet filter excessive pressure drop or inlet filter motor overloaded or inlet compartment bypass door is not in proper position.	Check the following: Inlet filter for blockage. Inlet filter motor for proper operation. Inlet house bypass door.
L26BT1H_ALM	Turbine Compartment Temp High	Compartment temperature excessive.	Check cooling air fan for proper operation.
L83KU_ALM	Turbine Compressor Abrasive Cleaning Selected	Compressor being cleaned.	Turn function off when cleaning is complete.
L48	Turbine Incomplete Sequence	Failure of unit to reach complete sequence.	Check equipment which is causing the problem in the normal sequence.
L3A	Turbine Underspeed	Turbine has bogged down.	Reduce the load that will be applied to the generator before reclosing the generator breaker.
L39VD3_ALM	Vibration – Start Inhibit	Vibration protection system problem.	Check vibration protection system.
L39VDIFF	Vibration Differential Trouble	Vibration protection system problem.	Check vibration protection system.
L39VD1	Vibration Sensor Disabled	Signal from vibration sensor is faulty.	Check vibration sensors and wiring.
L39VF	Vibration Transducer Fault	Vibration detector impedance is not within normal bounds.	Check impedance of each vibration detector.
L3WFD_ALM	Water Flow Feedback Trouble	A disagreement between the water flow sensors has been detected.	Determine failed sensor and replace.
L86WN3	Water Flow High Lockout	Water injection system locked out due to excessive water flow. This is dangerous because it could extinguish flame.	Investigate water injection system.
L3WFLT_ALM	Water Flow Sensor Trouble	Water flow sensors disagree.	Recalibrate or replace faulty flow sensor.
L86WN1	Water Inj Suction Pressure High Lockout	High supply pressure.	Check water supply system.
L86WN2	Water Injection Discharge Pressure Low Lockout	Low supply pressure.	Check water supply system.

<I> CRT Display Alarm Message, Logic & No.		Cause	Action
L30WN	Water Injection Not Selected	NOx control water injection system inoperative.	Select Water Injection on <I> CRT.
L26JS2H_ALM	Water Skid Enclosure Temperature High	Failure of exhaust fan.	Check exhaust fan/motor components for proper operation.
L26ALL_ALM	Water Skid Enclosure Temperature Low	Failure of heaters.	Check heater and blower for proper operation.
L86WN4	Water System Trouble Lockout	Water injection system not ready for use.	Check water injection system components.
L3WSFLT_ALM	Water Valve LVDT Trouble	Water valve LVDTs disagree.	Recalibrate or replace faulty LVDT.
L30TWW	Water Wash Inhibit Wheelspace Temp High	Turbine not sufficiently cooled before attempting water wash.	Allow turbine to cool to specification prior to selection.
L30WSA1	Wheelspace Temp Differential High	Excessive differential between wheelspace thermocouples.	Check thermocouples for shorts, grounds or opens. Replace failures. If condition persists investigate for seal failure.
L30WSA2	Wheelspace Temperature High	High wheelspace temperature. Check thermocouples, investigate for seal failure.	