Appendix H: Failure Mechanism Codes

GADS	
Codes	**Description**
F010	Alignment/clearance not within limits – axial
F020	Alignment/clearance not within limits – radial
F030	Arced/flashover – electrical
F040	Balance, not within limits
F050	Binding – radial related contacts (use F670 if contact is in axial direction)
F060	Broken
F070	Burned/fire damage – initiated by component (ex. burned motor)
F080	Burned/fire damage – not initiated by component (ex. pump fire damage due to motor fire)
F090	Calibration, not within limits
F100	Carbon, covered
F110	Chemical excursion damage
F120	Clogged
F130	Closed
F140	Condensation – oil
F150	Condensation – water
F160	Connection, loose
F170	Contaminated – liquid fluids (use F320 for air contamination)
F180	Contaminated – metals and solids
F190	Cooling, inadequate – liquid
F200	Cooling, inadequate – air
F210	Corrosion – general
F220	Corrosion – caustic
F230	Corrosion – fatigue
F240	Corrosion – high temperature coal ash
F250	Corrosion – high temperature oil ash
F260	Corrosion – low temperature
F270	Corrosion – waterwall fire-side
F280	Cracked
F290	Creep, high temperature
F300	Damaged, foreign object
F310	Damaged, insulation
F320	Dirty (use for air contamination or particulate/dirt buildup)
F330	Disengage, failed to
F340	Engage, failed to
F350	Erosion – coal particle
F360	Erosion – falling slag
F370	Erosion – soot blower
F380	Erosion – fly ash
F390	Erosion – cause unknown
F400	Erratic or unexplained operating behavior
F410	Erratic, circuit
F420	Error, operator
F430	Error, wiring
F440	Explosion damage – initiated by the component (ex. pump explosion)
F450	Explosion damage – not initiated by the component (ex. pipe damage due to pump explosion)

GADS	
Codes	**Description**
F460	Flameout
F470	Foaming
F480	Frozen (temperature related)
F490	Grounded electrical component
F500	Hydrogen damage
F510	Impact damage
F520	Indication, false
F530	Inspection
F540	Leaks
F550	Loose
F560	Lubrication – excessive
F570	Lubrication – lack of
F580	Maintenance – cleaning damage
F590	Maintenance – general
F600	Material defects
F610	Modification(s)
F620	Noisy
F630	Open
F640	Overload
F650	Pitting (localized corrosion)
F660	Pressure, not within limits
F670	Rubbing damage – axial related contacts (use F050 if contact is in radial direction)
F680	Secondary damage
F690	Seized (not moving)
F700	Shorted electrical component
F710	Short-term overheating
F720	Sticking
F730	Stress corrosion cracking
F740	Temperature – compressor discharge, not within limits
F750	Temperature – exhaust, not within limits
F760	Temperature – oil, not within limits
F770	Temperature – wheel spacers, not within limits
F780	Temperature – general, not within limits
F790	Testing
F800	Thermal fatigue
F810	Torn
F820	Tripped/shutdown component – automatic controls
F830	Tripped/shutdown component – manual
F840	Unknown – investigation underway (change this code once failure mechanism is determined)
F850	Vibration, not within limits
F860	Vibration fatigue, leading to failure
F870	Voltage, not within limits
F880	Welded relay contacts
F890	Weld failure – broken weld
F900	Weld failure – dissimilar metals
F910	Weld failure – weld defects
F920	Wiped

GADS	
Codes	**Description**
F930	Worn, excessively
FA00	Silica restriction
FC00	Cleaning
FD00	Water Induction
FE00	Emission/environmental restrictions
FF00	Fouling
FP00	Personnel error
FR00	Fire
FS00	Slagging
FU00	Parts Unavailable
FV00	Vibration
FW00	Wet coal/frozen coal/debris
FX00	External equipment malfunction (outside plant management control)