

## Appendix D: Cause Code Cross Reference

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This appendix contains a high level cross reference for cause codes. Table D-1 is a cross reference between System, Component, Sub-Component and Unit Type of the applicable Cause Code ranges. Changes for 2020 are hi-lited in green in Table D-1.

In order to fit within a reasonable amount of space the unit types have been abbreviated. Use the table below to find your unit type.

UNIT TYPE NAME ABBREVIATIONS	
Unit Type	Abbreviation
CC GT units	CCGT
CC steam units	CCST
Co-Generator GT units	CoGT
Co-Generator steam units	CoST
Co-Generator Block	CoB
Combined Cycle Block	CCB
Fluidized Bed	FBC
Fossil-Steam	FS
Gas Turbine/Jet Engine (Simple Cycle Operation)	GT/JE
Geothermal	GEO
Internal Combustion/Reciprocating Engines	IC/RE
Miscellaneous	MISC
Multi-boiler/Multi-turbine	MB/MT
Nuclear	NU
Pumped Storage/Hydro	PS/H

**TABLE D-1: CROSS REFERENCE OF CAUSE CODE RANGES BETWEEN SYSTEM, COMPONENT, SUB-COMPONENT AND UNIT TYPE**

System Name	Component Name	Sub-Component Name	CCGT	CCST	CoGT	CoST	CoB	CCB	FBC	FS	GT/JE	GEO	IC/RE	MISC	MB/MT	NU	PS/H
Balance of Plant	Auxiliary Systems	Auxiliary Steam	3830-3839	3830-3839	3830-3839	3830-3839	3830-3839	3830-3839	3830-3839	3830-3839	3830-3839	3830-3839		3830-3839	3830-3839	3830-3839	3830-3839
Balance of Plant	Auxiliary Systems	Closed Cooling Water Systems	3820-3829	3820-3829	3820-3829	3820-3829	3820-3829	3820-3829	3820-3829	3820-3829	3820-3829	3820-3829		3820-3829	3820-3829	3820-3829	3820-3829
Balance of Plant	Auxiliary Systems	Fire Protection System	3860-3869	3860-3869	3860-3869	3860-3869	3860-3869	3860-3869	3860-3869	3860-3869	3860-3869	3860-3869		3860-3869	3860-3869	3860-3869	3860-3869
Balance of Plant	Auxiliary Systems	Instrument Air	3850-3859	3850-3859	3850-3859	3850-3859	3850-3859	3850-3859	3850-3859	3850-3859	3850-3859	3850-3859		3850-3859	3850-3859	3850-3859	3850-3859
Balance of Plant	Auxiliary Systems	Low-pressure Gas Compression System	3870-3879	3870-3879	3870-3879	3870-3879	3870-3879	3870-3879	3870-3879	3870-3879	3870-3879			3870-3879	3870-3879		
Balance of Plant	Auxiliary Systems	Miscellaneous (Auxiliary Systems)	3898-6399	3898-6399	3898-6399	3898-6399	3898-6399	3898-6399	3898-3899	3898-3899	3898-3899	3898-3899		3898-6399	3898-6399	3898-3899	3898-3899
Balance of Plant	Auxiliary Systems	Open Cooling Water System	3800-3809	3800-3809	3800-3809	3800-3809	3800-3809	3800-3809	3800-3809	3800-3809		3800-3809		3800-3809	3800-3809	3800-3809	
Balance of Plant	Auxiliary Systems	Seal Air Fans	3880-3889	3880-3889	3880-3889	3880-3889	3880-3889	3880-3889	3880-3889	3880-3889		3880-3889		3880-3889	3880-3889	3880-3889	
Balance of Plant	Auxiliary Systems	Service Air	3840-3849	3840-3849	3840-3849	3840-3849	3840-3849	3840-3849	3840-3849	3840-3849	3840-3849	3840-3849		3840-3849	3840-3849	3840-3849	3840-3849
Balance of Plant	Auxiliary Systems	Service Water (Open System)	3810-3819	3810-3819	3810-3819	3810-3819	3810-3819	3810-3819	3810-3819	3810-3819	3810-3819	3810-3819		3810-3819	3810-3819	3810-3819	3810-3819
Balance of Plant	Auxiliary Systems												3850-3998				
Balance of Plant	Circulating Water Systems		3210-3299	3210-3299	3210-3299	3210-3299	3210-3299	3210-3299	3210-3299	3210-3299		3210-3299		3210-3299	3210-3299	3210-3299	
Balance of Plant	Condensate System	Low/Intermediate Pressure Heater and Deaerators	3339-3345	3339-3345	3339-3345	3339-3345	3339-3345	3339-3345	3339-3345	3339-3345				3339-3345	3339-3345	3339-3345	
Balance of Plant	Condensate System	Miscellaneous (Condensate System)	3360-3399	3360-3399	3360-3399	3360-3399	3360-3399	3360-3399	3360-3399	3360-3399		3360-3399		3360-3399	3360-3399	3360-3399	
Balance of Plant	Condensate System	Polishers/Chemical Addition	3350-3352	3350-3352	3350-3352	3350-3352	3350-3352	3350-3352	3350-3352	3350-3352				3350-3352	3350-3352	3350-3352	
Balance of Plant	Condensate System	Pumps, Piping, and Valves	3300-3330	3300-3330	3300-3330	3300-3330	3300-3330	3300-3330	3300-3330	3300-3330		3300-3330		3300-3330	3300-3330	3300-3330	
Balance of Plant	Condensing System	Condenser Casing or Shell and Internals	3120-3129	3120-3129	3120-3129	3120-3129	3120-3129	3120-3129	3120-3129	3120-3129		3120-3129		3120-3129	3120-3129	3120-3129	
Balance of Plant	Condensing System	Condenser Controls	3150-3159	3150-3159	3150-3159	3150-3159	3150-3159	3150-3159	3150-3159	3150-3159		3150-3159		3150-3159	3150-3159	3150-3159	
Balance of Plant	Condensing System	Condenser Tubes and Support Equipment	3110-3119	3110-3119	3110-3119	3110-3119	3110-3119	3110-3119	3110-3119	3110-3119		3110-3119		3110-3119	3110-3119	3110-3119	

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System Name	Component Name	Sub-Component Name	CCGT	CCST	CoGT	CoST	CoB	CCB	FBC	FS	GT/JE	GEO	IC/RE	MISC	MB/MT	NU	PS/H
Balance of Plant	Condensing System	Miscellaneous (Condensing System)	3170-3199	3170-3199	3170-3199	3170-3199	3170-3199	3170-3199	3170-3199	3170-3199		3170-3199		3170-3199	3170-3199	3170-3199	
Balance of Plant	Condensing System	Vacuum Equipment	3130-3149	3130-3149	3130-3149	3130-3149	3130-3149	3130-3149	3130-3149	3130-3149		3130-3149		3130-3149	3130-3149	3130-3149	
Balance of Plant	Electrical		3600-3690	3600-3690	3600-3690	3600-3690	3600-3690	3600-3690	3600-3690	3600-3690	3600-3690	3600-3690	3600-3690	3600-3690	3600-3690	3600-3690	3600-3690
Balance of Plant	Extraction Steam		3520-3549	3520-3549	3520-3549	3520-3549	3520-3549	3520-3549	3520-3549	3520-3549				3520-3549	3520-3549	3520-3549	
Balance of Plant	Feedwater System		3401-3499	3401-3499	3401-3499	3401-3499	3401-3499	3401-3499	3401-3499	3401-3499				3401-3499	3401-3499	3401-3499	
Balance of Plant	Heater Drain Systems		3501-3509	3501-3509	3501-3509	3501-3509	3501-3509	3501-3509	3501-3509	3501-3509				3501-3509	3501-3509	3501-3509	
Balance of Plant	Miscellaneous (Balance of Plant)		3950-3999	3950-3999	3950-3999	3950-3999	3950-3999	3950-3999	3950-3999	3950-3999	3950-3999	3950-3999	3970-3989	3950-3999	3950-3999	3950-3999	3950-3999
Balance of Plant	Power Station Switchyard		3700-3730	3700-3730	3700-3730	3700-3730	3700-3730	3700-3730	3700-3730	3700-3730	3700-3730	3700-3730	3700-3730	3700-3730	3700-3730	3700-3730	3700-3730
Balance of Plant	Waste Water (zero discharge) Systems		3290-3295	3290-3295	3290-3295	3290-3295	3290-3295	3290-3295	3290-3295	3290-3295		3290-3295		3290-3295	3290-3295	3290-3295	
Boiler	Bed Material Preparation System (FBC only)								160-174					160-174	160-174		
Boiler	Bed Material Removal System								930-950					930-950	930-950		
Boiler	Bed Solids Recirculation								951-989					951-989	951-989		
Boiler	Boiler Air and Gas Systems	Air Supply							1400-1451	1400-1450				1400-1451	1400-1451		
Boiler	Boiler Air and Gas Systems	Flue Gas							1455-1530	1455-1530				1455-1530	1455-1530		
Boiler	Boiler Air and Gas Systems	Flue Gas Recirculation							1535-1580	1535-1580				1535-1580	1535-1580		
Boiler	Boiler Air and Gas Systems	Miscellaneous (Boiler Air and Gas Systems)							1590-1599	1590-1599				1590-1599	1590-1599		
Boiler	Boiler Control Systems								1700-1799	1700-1799				1700-1799	1700-1799		
Boiler	Boiler Design Limitations								1900-1910	1900-1910				1900-1910	1900-1910		
Boiler	Boiler Fuel Supply from Bunkers to Boiler	Burners							358-410	358-410				358-410	358-410		

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System Name	Component Name	Sub-Component Name	CCGT	CCST	CoGT	CoST	CoB	CCB	FBC	FS	GT/JE	GEO	IC/RE	MISC	MB/MT	NU	PS/H
Boiler	Boiler Fuel Supply from Bunkers to Boiler	Cyclone							415-435	415-435				415-435	415-435		
Boiler	Boiler Fuel Supply from Bunkers to Boiler	Oil and Gas Systems (except light off)							440-480	440-480				440-480	440-480		
Boiler	Boiler Fuel Supply from Bunkers to Boiler	Pulverizers, Primary Air Fans, and Associated Ducts							200-350	200-350				200-350	200-350		
Boiler	Boiler Fuel Supply to Bunker	Coal Handling Equipment up Through Bunkers							10-127	10-129				10-127	10-129		
Boiler	Boiler Fuel Supply to Bunker	Solid Fuel Feed Equipment from Bunkers to Boiler (FBC only)							111-129					111-121	111-121		
Boiler	Boiler Internals and Structures								800-859	800-859				800-859	800-859		
Boiler	Boiler Overhaul and Inspections								1800-1820	1800-1820				1800-1820	1800-1820		
Boiler	Boiler Piping System	Boiler Recirculation							740-770	740-770				740-770	740-770		
Boiler	Boiler Piping System	Cold and Hot Reheat Steam							540-570	540-570				540-570	540-570		
Boiler	Boiler Piping System	Desuperheaters/Attemperators							580-620	580-620		580-620		580-620	580-620		
Boiler	Boiler Piping System	Feedwater and Blowdown							670-730	670-730				670-730	670-730		
Boiler	Boiler Piping System	Main Steam							500-530	500-530		500-530		500-530	500-530		
Boiler	Boiler Piping System	Miscellaneous (Piping)							775-799	775-799				775-799	775-799		
Boiler	Boiler Piping System	Startup Bypass							630-660	630-660				630-660	630-660		
Boiler	Boiler Tube Fireside Slagging or Fouling								1100-1200	1100-1210				1100-1200	1100-1200		
Boiler	Boiler Tube Leaks								1000-1090	1000-1090				1000-1090	1000-1090		
Boiler	Boiler Water Condition								1850-1850	1850-1850				1850-1850	1850-1850		
Boiler	External Fluidized Bed Heat Exchanger								990-999					990-999	990-999		

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System Name	Component Name	Sub-Component Name	CCGT	CCST	CoGT	CoST	CoB	CCB	FBC	FS	GT/JE	GEO	IC/RE	MISC	MB/MT	NU	PS/H
Boiler	Miscellaneous (Boiler)								1980-1999	1980-1999				1980-1999	1980-1999		
Boiler	Miscellaneous Boiler Tube Problems								1300-1360	1300-1360				1300-1360	1300-1360		
Boiler	Slag and Ash Removal								860-920	860-920				860-920	860-920		
Boiler	Sorbent Supply (FBC only)	Sorbent Feed Equipment from Bunkers to Boiler (FBC only)							150-156					150-156	150-156		
Boiler	Sorbent Supply (FBC only)	Sorbent Handling System up Through Bunkers (FBC only)							130-141					130-141	130-141		
Expander Turbine	Expander Turbine		7800-7960	7800-7960	7800-7960	7800-7960	7800-7960	7800-7960			7800-7960			7800-7960	7800-7960		
External	Catastrophe		9000-9040	9000-9040	9000-9040	9000-9040	9000-9040	9000-9040	9000-9040	9000-9040	9000-9040	9000-9040	9000-9040	9000-9040	9000-9040	9000-9040	9000-9040
External	Economic		0-9199	0-9199	0-9199	0-9199	0-9199	0-9199	0-9199	0-9199	0-9199	0-9199	0-9199	0-9199	0-9199	0-9199	0-9199
External	Fuel Quality		9200-9291	9200-9291	9200-9291	9200-9291	9200-9291	9200-9291	9200-9291	9200-9291	9200-9291		9200-9291	9200-9291	9200-9291		
External	Miscellaneous (External)		9300-9340	9300-9340	9300-9340	9300-9340	9300-9340	9300-9340	9300-9340	9300-9340	9300-9340	9300-9340	9300-9340	9300-9340	9300-9340	9300-9320	9300-9350
Gas Turbine	Auxiliary Systems		5110-5190	5110-5190	5110-5190	5110-5190	5110-5190	5110-5190			5110-5190			5110-5190	5110-5190		
Gas Turbine	Exhaust Systems		5100-5109	5100-5109	5100-5109	5100-5109	5100-5109	5100-5109			5100-5109			5100-5109	5100-5109		
Gas Turbine	Fuel, Ignition, and Combustion Systems		5040-5079	5040-5079	5040-5079	5040-5079	5040-5079	5040-5079			5040-5079			5040-5079	5040-5079		
Gas Turbine	Inlet Air System and Compressors	Compressors	5010-5039	5010-5039	5010-5039	5010-5039	5010-5039	5010-5039			5010-5039			5010-5037	5010-5039		
Gas Turbine	Inlet Air System and Compressors	Ducts and Filters	5000-5009	5000-5009	5000-5009	5000-5009	5000-5009	5000-5009			5000-5009			5000-5009	5000-5009		
Gas Turbine	Miscellaneous (Gas Turbine)		5200-5299	5200-5299	5200-5299	5200-5299	5200-5299	5200-5299			4460-5299			5200-5299	5200-5299		
Gas Turbine	Turbine		5080-5099	5080-5099	5080-5099	5080-5099	5080-5099	5080-5099			5080-5099			5080-5099	5080-5099		
Generator	Controls		4700-4750	4700-4750	4700-4750	4700-4750	4700-4750	4700-4750	4700-4750	4700-4750	4700-4750	4700-4750	4700-4750	4700-4750	4700-4750	4700-4750	4700-4750

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System Name	Component Name	Sub-Component Name	CCGT	CCST	CoGT	CoST	CoB	CCB	FBC	FS	GT/JE	GEO	IC/RE	MISC	MB/MT	NU	PS/H
Generator	Cooling System		4610-4650	4610-4650	4610-4650	4610-4650	4610-4650	4610-4650	4610-4650	4610-4650	4610-4650	4610-4650	4610-4650	4610-4650	4610-4650	4610-4650	4610-4650
Generator	Exciter		4600-4609	4600-4609	4600-4609	4600-4609	4600-4609	4600-4609	4600-4609	4600-4609	4600-4609	4600-4609	4600-4609	4600-4609	4600-4609	4600-4609	4600-4609
Generator	Generator		4500-4580	4500-4580	4500-4580	4500-4580	4500-4580	4500-4580	4500-4580	4500-4580	4500-4590	4500-4580	4500-4580	4500-4590	4500-4580	4500-4580	4500-4590
Generator	Miscellaneous (Generator)		4800-4899	4800-4899	4800-4899	4800-4899	4800-4899	4800-4899	4800-4899	4800-4899	4800-4899	4800-4899	4800-4899	4800-4899	4800-4899	4800-4899	4800-4899
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Air and Gas Systems	Air Supply	1400-1456	1400-1456	1400-1456	1400-1456	1400-1536	1400-1536									
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Air and Gas Systems	Miscellaneous (Boiler Air and Gas Systems)	1590-1599	1590-1599	1590-1599	1590-1599	1590-1599	1590-1599									
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Control Systems		1700-1799	1700-1799	1700-1799	1700-1799	1700-1799	1700-1799									
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Design Limitations		1900-1910	1900-1910	1900-1910	1900-1910	1900-1910	1900-1910									
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Fuel Supply	Burners (Duct Burners)	358-410	358-410	358-410	358-410	358-410	358-410									
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Fuel Supply	Oil and Gas Systems (except light off)	440-480	440-480	440-480	440-480	440-480	440-480									
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Internals and Structures		800-859	800-859	800-859	800-859	800-859	800-859						801-858			
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Overhaul and Inspections		1800-1820	1800-1820	1800-1820	1800-1820	1800-1820	1800-1820									

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System Name	Component Name	Sub-Component Name	CCGT	CCST	CoGT	CoST	CoB	CCB	FBC	FS	GT/JE	GEO	IC/RE	MISC	MB/MT	NU	PS/H
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Piping System	Boiler Recirculation	740-770	740-770	740-770	740-770	740-770	740-770									
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Piping System	Feedwater and Blowdown	670-730	670-730	670-730	670-730	670-730	670-730									
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Piping System	HRSG Cold and Hot Reheat Steam	540-570	540-570	540-570	540-570	540-570	540-570									
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Piping System	HRSG Desuperheaters/Attemperators	6140-6154	6140-6154	6140-6154	6140-6154	6140-6154	6140-6154						6140-6154			
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Piping System	HRSG Main Steam	500-6135	500-6135	500-6135	500-6135	500-6135	500-6135						6110-6135			
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Piping System	HRSG Startup Bypass	6160-6184	6160-6184	6160-6184	6160-6184	6160-6184	6160-6184						6160-6184			
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Piping System	Miscellaneous (Piping)	775-799	775-799	775-799	775-799	775-799	775-799									
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Tube Leaks		6005-6090	6005-6090	6005-6090	6005-6090	6005-6090	6005-6090						6005-6090			
Heat Recovery Steam Generator (HRSG)	HRSG Boiler Water Condition		1850-1850	1850-1850	1850-1850	1850-1850	1850-1850	1850-1850									
Heat Recovery Steam Generator (HRSG)	Miscellaneous (HRSG Boiler)		1980-6100	1980-6100	1980-6100	1980-6100	1980-6100	1980-6100						6000-6100	6000-6100		

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System Name	Component Name	Sub-Component Name	CCGT	CCST	CoGT	CoST	CoB	CCB	FBC	FS	GT/JE	GEO	IC/RE	MISC	MB/MT	NU	PS/H
Heat Recovery Steam Generator (HRSG)	Miscellaneous HRSG Boiler Tube Problems		1300-1360	1300-1360	1300-1360	1300-1360	1300-1360	1300-1360									
Hydro Turbine/Pump	Miscellaneous (Hydro Turbine/Pump)													7200-7300			7200-7300
Hydro Turbine/Pump	Turbine													7000-7099			7000-7099
Hydro Turbine/Pump	Water Supply/Discharge													7100-7199			7100-7199
Inactive States	Inactive States		2-9991	2-9991	2-9991	2-9991	2-9991	2-9991	2-9991	2-9991	2-9991	2-9991	2-9991	2-9991	2-9991	2-9991	2-9991
Internal Combustion/Reciprocating Engines	Engine												5700-5799	5700-5799			
Internal Combustion/Reciprocating Engines	Engine Auxiliaries												5114-5849	5800-5849			
Internal Combustion/Reciprocating Engines	Engine Controls												5850-5880	5850-5880			
Internal Combustion/Reciprocating Engines	Miscellaneous (Internal Combustion/Reciprocating Engines)												4460-5999	5890-5999			
Jet Engine	Auxiliary Systems		5510-5590	5510-5590	5510-5590	5510-5590	5510-5590	5510-5590			5510-5590			5510-5590	5510-5590		
Jet Engine	Exhaust Systems		5500-5509	5500-5509	5500-5509	5500-5509	5500-5509	5500-5509			5500-5509			5500-5509	5500-5509		
Jet Engine	Fuel, Ignition, and Combustion Systems		5440-5479	5440-5479	5440-5479	5440-5479	5440-5479	5440-5479			5440-5479			5440-5479	5440-5479		
Jet Engine	Inlet Air System and Compressors	Compressors	5410-5439	5410-5439	5410-5439	5410-5439	5410-5439	5410-5439			5410-5439			5410-5430	5410-5430		
Jet Engine	Inlet Air System and Compressors	Ducts and Filters	5400-5409	5400-5409	5400-5409	5400-5409	5400-5409	5400-5409			5400-5409			5400-5409	5400-5409		



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System Name	Component Name	Sub-Component Name	CCGT	CCST	CoGT	CoST	CoB	CCB	FBC	FS	GT/JE	GEO	IC/RE	MISC	MB/MT	NU	PS/H
Jet Engine	Miscellaneous (Jet Engine)		5600-5699	5600-5699	5600-5699	5600-5699	5600-5699	5600-5699			5600-5699			5600-5699	5600-5699		
Jet Engine	Turbine		5480-5499	5480-5499	5480-5499	5480-5499	5480-5499	5480-5499			5480-5499			5480-5499	5480-5499		
Miscellaneous	Instruments and Controls		6200-6200	6200-6200	6200-6200	6200-6200	6200-6200	6200-6200						6200-6200	6200-6200		
Miscellaneous	Plant and Auxiliaries											6410-6499		6410-6499			
Nuclear Reactor	Auxiliary Systems															2840-2890	
Nuclear Reactor	Chemical and Volume Control/Reactor Water Cleanup															2805-2819	
Nuclear Reactor	Containment System															2700-2799	
Nuclear Reactor	Control Rods and Drives															2110-2160	
Nuclear Reactor	Core Cooling/Safety Injection															2600-2649	
Nuclear Reactor	Core/Fuel															2010-2090	
Nuclear Reactor	Electrical Safety Systems															2650-2699	
Nuclear Reactor	Miscellaneous (Reactor)															2900-2999	
Nuclear Reactor	Nuclear Cooling Water Systems															2820-2839	
Nuclear Reactor	Reactor Coolant System	Instruments and Controls														2330-2390	
Nuclear Reactor	Reactor Coolant System	Miscellaneous (Reactor Coolant System)														2399-2399	
Nuclear Reactor	Reactor Coolant System	Piping														2230-2260	
Nuclear Reactor	Reactor Coolant System	Pressurizer														2265-2265	
Nuclear Reactor	Reactor Coolant System	Pumps														2200-2220	
Nuclear Reactor	Reactor Coolant System	Valves														2270-2320	

Appendix D: Cause Code Cross Reference

System Name	Component Name	Sub-Component Name	CCGT	CCST	CoGT	CoST	CoB	CCB	FBC	FS	GT/JE	GEO	IC/RE	MISC	MB/MT	NU	PS/H
Nuclear Reactor	Reactor Vessel and Internals															2170-2199	
Nuclear Reactor	Steam Generators and Steam System															2400-2599	
Performance	Performance		9997-9999	9997-9999	9997-9999	9997-9999	9997-9999	9997-9999	9997-9999	9997-9999	9997-9999	9997-9999	9997-9999	9998-9999	9997-9999	9997-9999	9997-9999
Personnel or Procedural Errors	Personnel or Procedural Errors		9900-9960	9900-9960	9900-9960	9900-9960	9900-9960	9900-9960	9900-9960	9900-9960	9900-9960	9900-9960	9900-9960	9900-9960	9900-9960	9900-9960	9900-9960
Pollution Control Equipment	CO Reduction		8840-8845	8840-8845	8840-8845	8840-8845	8840-8845	8840-8845	8840-8845	8840-8845	8840-8845			8840-8845			
Pollution Control Equipment	Continuous Emissions Monitoring Systems (CEMS)		8700-8790	8700-8790	8700-8790	8700-8790	8700-8790	8700-8790	8700-8790	8700-8790	8700-8790	8700-8790		8700-8790	8700-8790		
Pollution Control Equipment	Dry Scrubbers	Dry Scrubber							8528-8534	8528-8534				8528-8534	8529-8534		
Pollution Control Equipment	Dry Scrubbers	Miscellaneous (Dry Scrubber)							8544-8549	8544-8549				8544-8549	8544-8549		
Pollution Control Equipment	Dry Scrubbers	Piping, Ducting, and Dampers							8522-8527	8522-8527				8522-8527	8522-8527		
Pollution Control Equipment	Dry Scrubbers	Reagent/Slurry Supply							8500-8521	8500-8521				8500-8521	8500-8521		
Pollution Control Equipment	Dry Scrubbers	Waste Disposal and Recovery							8535-8543	8535-8543				8535-8543	8535-8543		
Pollution Control Equipment	Miscellaneous (Pollution Control Equipment)								8565-8699	8565-8699	8656-8656			8565-8699	8565-8699		
Pollution Control Equipment	NOx Reduction Systems	Catalytic Air Heaters	8830-8835	8830-8835	8830-8835	8830-8835	8830-8835	8830-8835	8830-8835	8830-8835	8830-8835			8830-8835	8830-8835		
Pollution Control Equipment	NOx Reduction Systems	Selective Catalytic Reduction Systems	8810-8825	8810-8825	8810-8825	8810-8825	8810-8825	8810-8825	8810-8825	8810-8825	8810-8825			8810-8825	8810-8825		
Pollution Control Equipment	NOx Reduction Systems	Selective Non-Catalytic Reduction Systems	8800-8809	8800-8809	8800-8809	8800-8809	8800-8809	8800-8809	8800-8809	8800-8809	8800-8809			8800-8809	8800-8809		
Pollution Control Equipment	Precipitators								8550-8590	8550-8590				8550-8590	8550-8590		
Pollution Control Equipment	Wet Scrubbers	Chemical Supply							8000-8099	8000-8099		8000-8099		8000-8099	8000-8099		
Pollution Control Equipment	Wet Scrubbers	Miscellaneous (Wet Scrubber)							8400-8499	8400-8499		8400-8499		8400-8499	8400-8499		

Appendix D: Cause Code Cross Reference

System Name	Component Name	Sub-Component Name	CCGT	CCST	CoGT	CoST	CoB	CCB	FBC	FS	GT/JE	GEO	IC/RE	MISC	MB/MT	NU	PS/H
Pollution Control Equipment	Wet Scrubbers	Piping, Ducting, Dampers, and Fans							8200-8299	8200-8299		8200-8299		8200-8299	8200-8299		
Pollution Control Equipment	Wet Scrubbers	Waste Disposal and Recovery							8300-8399	8300-8399				8300-8399	8300-8399		
Pollution Control Equipment	Wet Scrubbers	Wet Scrubber							8100-8199	8100-8199		8100-8199		8100-8199	8100-8199		
Regulatory, Safety, Environmental	Other Operating Environmental Limitations		9660-9694	9660-9694	9660-9694	9660-9694	9660-9694	9660-9694	9660-9690	9660-9690	9663-9694		9665-9695	9660-9696	9660-9696	9660-9690	9676-9696
Regulatory, Safety, Environmental	Regulatory		9504-9590	9504-9590	9504-9590	9504-9590	9504-9590	9504-9590	9504-9590	9504-9590	9504-9590	9504-9590	9504-9590	9504-9590	9504-9590	9500-9590	9504-9590
Regulatory, Safety, Environmental	Safety		9700-9720	9700-9720	9700-9720	9700-9720	9700-9720	9700-9720	9700-9720	9700-9720	9700-9720	9700-9720	9700-9720	9700-9720	9700-9720	9700-9720	9700-9720
Regulatory, Safety, Environmental	Stack Emission		9600-9658	9600-9658	9600-9658	9600-9658	9600-9658	9600-9658	9600-9656	9600-9656	9603-9658		9605-9655	9600-9658	9600-9656		
Steam Turbine	Controls		4290-4314	4290-4314	4290-4314	4290-4314	4290-4314	4290-4314	4290-4314	4290-4314		4290-4314		4290-4314	4290-4314	4290-4314	
Steam Turbine	High Pressure Turbine		4000-4099	4000-4099	4000-4099	4000-4099	4000-4099	4000-4099	4000-4099	4000-4099				4000-4099	4000-4099	4000-4099	
Steam Turbine	Intermediate Pressure Turbine		4100-4199	4100-4199	4100-4199	4100-4199	4100-4199	4100-4199	4100-4199	4100-4199				4100-4199	4100-4199	4100-4199	
Steam Turbine	Low Pressure Turbine		4200-4250	4200-4250	4200-4250	4200-4250	4200-4250	4200-4250	4200-4250	4200-4250		4200-4250		4200-4250	4200-4250	4200-4250	
Steam Turbine	Lube Oil		4280-4289	4280-4289	4280-4289	4280-4289	4280-4289	4280-4289	4280-4289	4280-4289		4280-4289		4280-4289	4280-4289	4280-4289	
Steam Turbine	Miscellaneous (Steam Turbine)		4400-4499	4400-4499	4400-4499	4400-4499	4400-4499	4400-4499	4400-4499	4400-4499		4400-4499		4400-4499	4400-4499	4400-4499	
Steam Turbine	Piping		4270-4279	4270-4279	4270-4279	4270-4279	4270-4279	4270-4279	4270-4279	4270-4279		4270-4279		4270-4279	4270-4279	4270-4279	
Steam Turbine	Valves		4260-4269	4260-4269	4260-4269	4260-4269	4260-4269	4260-4269	4260-4269	4260-4269		4260-4269		4260-4269	4260-4269	4260-4269	