

# Attachment A Denton Municipal Electric Cause and Equipment Coding

Category	Code	Definition	Cause Code	Category	Code	Definition	Equipment Code	Code	Definition	Weather Code
Power Supply	000	Power supply		Generation or Transmission	010	Generation		010	Rain	
Planned Outage	100	Construction		Generation or Transmission	020	Towers, poles, and fixtures		020	Lightning	
Planned Outage	110	Maintenance		Generation or Transmission	030	Conductors and devices		030	Wind	
Planned Outage	190	Other planned		Generation or Transmission	040	Transmission substations		040	Snow	
Equipment or Installation/Design	300	Material or equipment failure		Generation or Transmission	090	Generation or transmission, other		050	Ice	
Equipment or Installation/Design	310	Installation fault		Distribution Substation	100	Power transformer		060	Sleet	
Equipment or Installation/Design	320	Conductor sag or inadequate clearance		Distribution Substation	110	Voltage regulator		070	Extreme Cold	
Equipment or Installation/Design	340	Overload		Distribution Substation	120	Lightning arrester		080	Extreme Heat	
Equipment or Installation/Design	350	Miscoordination of protection devices		Distribution Substation	130	Source side fuse		090	Weather, other	
Equipment or Installation/Design	360	Other equipment installation/design		Distribution Substation	140	Circuit breaker		100	Calm	
Maintenance	400	Decay/age of material/equipment		Distribution Substation	150	Switch				
Maintenance	410	Corrosion/abrasion of material/equipment		Distribution Substation	160	Metering equipment				
Maintenance	420	Tree growth		Distribution Substation	190	Distribution substation, other				
Maintenance	430	Tree failure from overhang or dead tree without ice/snow		Poles & Fixtures Distribution	200	Pole				
Maintenance	440	Trees with ice/snow		Poles & Fixtures Distribution	210	Crossarm or crossarm brace				
Maintenance	450	Contamination (leakage/external)		Poles & Fixtures Distribution	220	Anchor or guy				
Maintenance	460	Moisture		Poles & Fixtures Distribution	290	Poles & fixtures, other				
Maintenance	470	Borrower crew cuts tree		Overhead Line Conductors and Devices, Distribution	300	Line conductor				
Maintenance	490	Maintenance, other		Overhead Line Conductors and Devices, Distribution	310	Connector or clamp				
Weather	500	Lightning		Overhead Line Conductors and Devices, Distribution	320	Splice or deadend				
Weather	510	Wind, not trees		Overhead Line Conductors and Devices, Distribution	330	Jumper				
Weather	520	Ice, sleet, frost, not trees		Overhead Line Conductors and Devices, Distribution	340	Insulator				
Weather	530	Flood		Overhead Line Conductors and Devices, Distribution	350	Lightning arrester, line				
Weather	590	Weather, other		Overhead Line Conductors and Devices, Distribution	360	Fuse cutout (damaged, malfunction, maintenance)				
Animals	600	Small animal/bird		Overhead Line Conductors and Devices, Distribution	370	Recloser or sectionalizer (damaged, malfunction, maintenance)				
Animals	610	Large animal		Overhead Line Conductors and Devices, Distribution	390	Overhead line conductors and devices, other				
Animals	620	Animal damage - gnawing or boring		Underground Line Conductors and Devices, Distribution	400	Primary Cable				
Animals	690	Animal, other		Underground Line Conductors and Devices, Distribution	410	Splice or fitting				
Public	700	Customer caused		Underground Line Conductors and Devices, Distribution	420	Switch				
Public	710	Motor vehicle		Underground Line Conductors and Devices, Distribution	430	Elbow arrester				
Public	720	Aircraft		Underground Line Conductors and Devices, Distribution	440	Secondary cable or fittings				
Public	730	Fire		Underground Line Conductors and Devices, Distribution	450	Elbow				
Public	740	Public cuts tree		Underground Line Conductors and Devices, Distribution	460	Pothead or terminator				
Public	750	Vandalism		Underground Line Conductors and Devices, Distribution	490	Underground, other				
Public	760	Switching error or cause by construction/maintenance activities		Line Transformer	500	Transformer, bad				
Public	790	Public, other		Line Transformer	510	Transformer fuse or breaker				
Other	800	Other		Line Transformer	520	Transformer arrester				
Unknown	999	Cause Unknown		Line Transformer	590	Line transformer, other				
				Secondary and Services	600	Secondary or service conductor				
				Secondary and Services	610	Metering equipment				
				Secondary and Services	620	Security or street light				
				Secondary and Services	690	Secondary and service, other				
				No equipment damaged	999	No damaged equipment				