Cause		DEFINITION
13	Maintenance: Gas (SE6)	Outage associated with the replacement of Sulfur Hexafluoride (SE6) in gas insulated substation (GIS) equipment including testing of facilities in su
1	Overbaul: CB	Planned Outage associated with a full or partial overhaul of a circuit breaker, including testing of facilities in support
2	Repair/Replace: CB	Planned Outage associated with a replacement of a circuit breaker (CB), including testing of facilities in support.
19	Repair/Replace: Cable	Outage associated with the repair of underground (UG) transmission equipment, including testing of facilities in support.
26	Maintenance: CB	Planned Outage associated with the maintenance of a circuit breaker, including testing of facilities in support.
48	Maintenance: Cable	Outage associated with the maintenance of underground (UG) transmission equipment, including testing of facilities in support.
49	Maintenance: Conductor	Outage associated with the maintenance of transmission lines, excluding underground cable, including testing of facilities in support.
50	Maintenance: Transformer	Outage associated with the maintenance of a transformer, including testing of facilities in support.
65	Cut-In	Outage with potential impact to PJM with respect to its EMS model, Monitored Priorities, Ratings, Contingencies, and/or SDX Mapping. Typically co
5	Maintenance: Disc/Ground Sw	Planned Outage associated with manual or automatic substation equipment utilized in electrical grounding and the protection of other substation e
16	Testing: Doble	Planned Outage associated with power factor testing on transformers, cables, and other electric equipment.
32	Operational: Emergency	Operational Outage that are taken for the purpose of avoiding risk to human life, damage to equipment, damage to property, or similar threatening
29	Excludable Outage	Outage that is EITHER covered by another outage ticket OR created for the sole purpose of application testing and not an actual facility outage.
28	External	Outage to facilities outside the PJM Reliability Coordinator Area, but contained within the PJM EMS model.
18	Operational: Fire	Operational Outage caused by, or taken to alleviate concerns with, fire or smoke.
15	Maintenance: Gas/Oil	Outage to facilities for the purpose of replacing/testing gas/oil insulated facilities, excluding Sulfur Hexafluoride (SF6) type.
74	Operational: High System Voltage	Operational Outage taken to maintain the voltage on the transmission system within desired levels (i.e., voltage control) during periods of light load
25	Repair/Replace: Hot Spot	Outage taken to repair electrical equipment and prevent catastrophic equipment failure due to overheating.
24	Maintenance: Inspection / General Maintenance	Planned Outage associated with maintenance of electric facilities, including testing of facilities in support of maintenance.
9	Construction: Antenna	Planned Outage associated with antenna construction.
22	Repair/Replace: Lightning Arrestor	Outage associated with the repair or replacement of a lightning/surge arrestor, which protect substation equipment from the over-voltage transien
71	NERC Alert	PJM NRITF Rule: Planned Outage on any facility experiencing sag or clearance issues but not deemed to have an imminent public safety issue or em
51	Repair/Replace: Disc/Ground Switch	Outage associated with the repair or replacement of manual or automatic substation equipment utilized in electrical grounding and the protection of
52	Repair/Replace: Transformer	Outage associated with the repair or replacement of a transformer, including testing of facilities in support.
72	NERC Alert - Emergency	PJM NRITF Rule: Operational Outage on any facility experiencing sag conditions that are determined to pose a risk for an imminent public safety iss
73	NERC Alert - Near Term	PJM NRITF Rule: Planned Outage on any facility experiencing sag or clearance issues for field discrepancies where no interim solution is available, w
21	Construction: New Equipment	Planned Outage associated with construction of electric facilities, including testing of facilities in support of construction.
31	Maintenance: Normally Open	Outage to perform maintenance/repairs/testing on a piece of equipment that is Normally Open, and will remain a Normally Open piece of equipment
-1	Other	Outage for reasons not included in the above list.
14	Repair/Replace: Tap Changer	Outage to replace the mechanism utilized to adjust the turns ratio of a transformer, including testing of facilities in support.
27	Operational: Pre-contingency Switching	Operational Outage taken to keep the transmission system within System Operating Limits, excluding High System Voltage.
68	Relay Maintenance (Impact to primary clearing)	Planned Outage for Protection System equipment maintenance/testing which either removes the primary clearance from service, or alters the perfection of the service of the perfection of the service of t
67	Relay Maintenance (No impact to primary clearing)	Planned Outage for Protection System equipment maintenance/testing which either does NOT impact the primary clearance, or leaves secondary in
70	Relay Replacement (Impact to primary clearing)	Planned Outage for Protection System equipment replacement which removes the primary clearance from service, with secondary clearance that d
69	Relay Replacement (No impact to primary clearing)	Planned Outage for Protection System equipment replacement which either does NOT impact the primary relaying, or leaves secondary intact with
11	Repair/Replace: Conductor	Outage for the purpose of repairing or replacing transmission lines, excluding underground cable (Repair/Replace Cable), including testing of faciliti
7	Repair/Replace: Insulator	Outage for the purpose of repairing or replacing transmission insulators, including testing of facilities in support.
6	Repair/Replace: Pole	Outage for the purpose of repairing or replacing transmission poles, including testing of facilities in support.
8	Repair/Replace: Tower	Outage for the purpose of repairing or replacing transmission towers, including testing of facilities in support.
53	Repair/Replace: Pole/Tower	Outage for the purpose of repairing or replacing transmission support structures (pole-type and lattice/tower-type), including testing of facilities in
17	Safety: Clearance	Outage of transmission system equipment for duration of outage, for work in proximity to, but not upon said equipment, in order to provide a minir
12	Repair/Replace: Storm Damage	Outage associated with damage caused by weather, including lightning.
10	Operational: Switching - Takeout or Restore Only	Outage of transmission system equipment during the initial takeout (outage start) or restoration (outage end), for work in proximity to, but not upo
23	Safety: Tower Painting	Planned Outage associated with painting of transmission towers for the purpose of maintenance.
54	Safety: Painting Equipment	Planned Outage associated with painting of transmission support structures (pole-type and lattice/tower-type) and/or substation equipment for the
-2		Automatic Outage caused by unknown causes.
20	Maintenance: vegetation	Outage for the purpose of removing vegetation, such as those in support of the NERC FAC-003 standard.
30		Outage associated with metering or protective relaying equipment. This includes capacitor voltage transformers(CVT or CCVT) and wave traps.
	Torma	Definition
	Terms	An energy management system (EMS) is a system of computer aided tools used by operators of electric utility grids to monitor, control, and entimize
	Livis Non Automatic Outago	An entry management system (LWS) is a system of computer-aided tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor, control, and optimized tools used by operators of electric during grids to monitor.
	Normally Open	An outage which results from the manual operation (including supervisory control) of a switching device, causing an Element to change from an in-s
	Operational Outage	A Non-Automatic Outage for the nurnose of avoiding an emergency (i.e., risk to human life, damage to equipment, damage to property) or to maint
	Outage	Cause Types that are applicable to both Operational and Planned Outage types are simply identified as Outage
		Cause Types that are applicable to both Operational and Plained Outage types are simply identified as Outage.
	PJWI NRI IF	A Non-Automatic Outage with advance notice for the number of maintenance, construction, inspection, testing, or planned activities by third partie
		that are performed in preparation or restoration of an outage of another TADS Flement are not reportable
	SDX	System Data Exchange (SDX) is an application utilized by Reliability Coordinators, Transmission Operators, and Balancing Authorities foor reporting a
	System Operating Limits	NERC Glossary Term (http://www.nerc.com/files/glossary_of_terms.pdf) indicating the value that satifies the most limiting of prescribed operating
	TADS	NERC's Transmission Availability Data System (TADS) used to quantify certain performance aspects around transmission outages/events. (See http:

upport		
combined with another Cause Type.		
ng consequences.		
ad, such as during a Minimum Generation Advisory/Alert/Warning/Event.		
onts effects induced by lighting and switching events.		
mergency condition.		
of other substation equipment, including testing of facilities in support.		
ssue or emergency condition.		
where Outage are submitted to PJM 5 business days in advance.		
nent at the conclusion of the outage.		
rformance characteristics of, for one or more pieces of equipment.		
intact with duplicate performance characteristics to that of the primary, for one or more pieces of equipment.		
does not have duplicate performance characteristics to that of the primary, for one or more pieces of equipment.		
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he purpose of maintenance.		
ize the performance of the generation and/or transmission system.		
I-Service State to a not In-Service State.		
ntain the system within operational limits and that cannot be deferred.		
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ies that may be deferred. Outages of TADS Elements of 30 minutes or less duration resulting from switching steps or sequences		
g and managing outage information, including Transmission and Generation outages.		
g criteria for a specified system configuration to ensure operation within acceptable reliability criteria.		
or//www.nerc.com/na/RAPA/tads/Pages/default.asnx)		