

State Load Despatch Center, Airoli (MSETCL) Statement I
Daily system Report for 26/Nov/2019 TUESDAY

I GENERATION (MUs)			II EXCHANGES (MUs)		
A) MSPGCL	Daily	Monthly	E) InterState Exchanges	Daily	Monthly
1) Thermal	133.514	2979.102	1) Gujrat	5.020	83.330
2) Hydro	10.511	230.735	2) Madhya Pradesh	10.791	228.471
3) Gas	10.294	226.371	3) Chattisgarh	7.730	174.340
Total MSPGCL	154.319	3436.208	4) Maharashtra	111.826	2933.994
B) 1) APML	71.108	1832.444	5) Goa (Amona)	-0.660	-12.870
2) JSWEL	23.072	514.068	Total	134.707	3407.265
3) VIPL	0.000	0.000	a) Mumbai Schedule	27.079	670.127
4) RPL(AMT)	0.000	49.977	b) Mumbai Drawl	27.228	734.680
5) WPCL	0.000	0.000	c) MSEDCL Bilateral *	27.388	659.597
6) Other IPP	10.181	213.922	Include PX	0.512	-5.838
7) PGPL	0.000	0.000	d) Mumbai Bilateral *	27.079	670.127
C) 1) TPCL Thermal	14.358	353.574	Include PX	8.947	208.481
2) TPCL Hydro	4.199	99.586	Standby	0.000	0.000
3) TPCL Gas	4.361	110.675	H) ENERGY CATERED (MUs)		
4) AEML Thermal	10.667	261.501	1) MSEDCL	385.344	9073.665
D) STATE			2) Mumbai Discoms	60.816	1560.016
1) Thermal	262.900	6204.588	TOTAL STATE	446.160	10633.681
(A1+C1+C4+(B1-B6))					
2) Hydro	14.710	330.321			
(A2+C2)					
3) Gas	14.655	337.046			
(A3+B7+C3)					
4) Wind	13.530	210.099			
6) SOLAR	5.655	144.362			
TOTAL STATE	311.450	7226.416			

* Displayed for information, not added in total.

DETAILS OF MAHARASHTRA STATE PEAK DEMAND(MW) Statement II

PARTICULARS	A. Morning Peak at 12 Hrs	B. Day Peak at 13 Hrs	C. Evening Peak at 19 Hrs	D. Night Minimum at 4 Hrs
MSPGCL Thermal	6038	5957	5897	4919
MSPGCL Hydro	858	724	670	132
MSPGCL Gas	420	407	424	437
MSPGCL Total Generation	7316	7088	6991	5488
Central Sector Receipt	6232	6438	5706	4598
WIND	409	401	508	559
CPP / IPP Thermal	4700	4669	4737	3803
CPP / IPP Gas	0	0	0	0
SOLAR	865	838	0	0
Exchange with Mumbai	-1354	-1486	-1190	-781
MSEDCL DEMAND MET	18168	17948	16752	13667
Load Shedding	0	0	0	0
MSEDCL DEMAND	18168	17948	16752	13667
TPCL GENERATION	1212	1011	1265	673
AEML GENERATION	501	500	499	372
MUMBAI DEMAND	3067	2997	2954	1826
STATE DEMAND MET	21235	20945	19706	15493
STATE DEMAND	21235	20945	19706	15493
Frequency (Hz)	50.01	50.00	50.03	50.03

FREQUENCY PARTICULARS

MAXIMUM FREQ.	MINIMUM FREQ.	AVERAGE FREQ.	FREQ. BELOW 49.2 Hz
50.27 Hz at 22.00 Hrs	49.79 Hz at 15.14 Hrs	50.02	0 % of Time(min)

Note : The report is based on Operational Data and is for statistical purpose only.

Shift Engineer

Shift Incharge

Daily and Progressive Generation,Maximum,Minimum for 26/Nov/2019

Generating unit	Generation			
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)
Koradi				
Unit 6	0.00	0.00	0	0
Unit 7	0.00	0.00	0	0
Unit 8	12.72	295.46	600	455
Unit 9	13.52	261.29	660	460
Unit 10	12.35	270.08	555	460
Total	38.59	826.83		
Bhusawal				
Unit 3	0.00	0.00	0	0
Unit 4	9.58	242.96	450	360
Unit 5	0.00	229.63	0	0
Total	9.58	472.58		
Parli				
Unit 4	0.00	0.00	0	0
Unit 5	0.00	0.00	0	0
Unit 6	5.47	75.50	250	190
Unit 7	5.48	75.82	250	196
Unit 8	5.48	76.63	249	193
Total	16.43	227.94		
Chandrapur				
Unit 3	3.90	89.87	180	148
Unit 4	3.51	27.37	162	110
Unit 5	8.38	198.26	365	300
Unit 6	10.20	222.34	470	360
Unit 7	0.00	0.00	0	0
Unit 8	10.21	259.74	490	360
Unit 9	10.26	220.81	475	360
Total	46.45	1018.38		
Paras				
Unit 3	0.00	0.00	0	0
Unit 4	0.00	0.00	0	0
Total	0.00	0.00		
Khaparkheda				
Unit 1	0.00	0.00	0	0
Unit 2	0.00	0.00	0	0
Unit 3	4.23	43.42	195	158
Unit 4	4.14	55.92	190	160
Unit 5	9.93	231.89	460	365
Total	18.30	331.23		
Nasik				
Unit 3	0.00	0.00	0	0
Unit 4	0.00	68.64	0	0
Unit 5	4.16	33.50	191	159
Total	4.16	102.14		
Uran				
All Units	10.29	226.37	445	403
Total	10.29	226.37		
PGPL				
Unit 1	0.00	0.00	0	0
Unit 2	0.00	0.00	0	0
Total	0.00	0.00		
PENCH (MS)				
Pench (MS)	0.05	6.34	13	0

Generating unit	Generation			
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)
Total	0.05	6.34		
Koyna				
Stage 1-2	2.44	77.32	380	30
Stage 4	4.99	81.88	500	0
Stage 3	1.95	35.31	160	0
Total	9.37	194.52		
Hydro				
KDPH	0.00	1.01	0	0
VTRNA	0.00	0.00	0	0
TILLARI	0.00	1.61	0	0
BHTGR/VEER	0.00	0.00	0	0
BHIRA T.R.	0.27	7.08	80	0
RNGR+BHTSA	0.40	8.22	17	16
BHANDARDRA	0.00	0.19	0	0
ELDARY	0.00	5.96	0	0
SMLHY_PTN	0.14	4.46	7	6
GHATGHAR	0.33	7.69	125	0
Total	1.14	36.22		
Wind				
Total	13.53	210.10	0	0
Total	13.53	210.10		
CPP				
APML(Mus)	71.11	1832.44	0	0
JSWEL(Mus)	23.07	514.07	0	0
VIPL(Mus)	0.00	0.00	0	0
RPLAMT(Mus)	0.00	49.98	0	0
WPCL(Mus)	0.00	0.00	0	0
Other(Mus)	10.18	213.92	0	0
Total	104.36	2610.41		
SOLAR				
Total	5.66	144.36	0	0
Total	5.66	144.36		
Tata				
Trombay 5	9.68	230.22	486	296
Trombay 6	0.00	0.00	0	0
Trombay 7A	2.78	70.21	116	115
Trombay 7B	1.58	40.47	67	65
Trombay 8	4.67	123.36	196	193
TATA Hydro	4.20	99.59	411	0
Total	22.92	563.84		
AEML				
DTPS U-1&2	10.67	261.50	501	372
Total	10.67	261.50		

* Infirm Power			Summary			Summary		
Particulars	Daily (Mus)	Monthly	Particulars	Daily (Mus)	Monthly (Mus)	Particulars	Daily (Mus)	Monthly (Mus)
			MSPGCL Thermal	133.51	2979.10	MSPGCL Total	154.32	3436.21
			MSPGCL Thml+Gas	143.81	3205.47	Koyna 1,2 & 4 Total	7.43	159.20
			MSPGCL Hydro	10.51	230.74	State Total	311.45	7226.42

State Load Despatch Center,Airoli (MSETCL)

Annexure-2

Hourly Load Data As on 26/Nov/2019

TIME SR. NO.	MSPGCL GEN.			TOTAL	WIND	CPP / IPP		SOLAR	CS SHARE	CS RECPT	Mum. NET EXCH.	MSEDCL DEM. MET	LOAD SHEDDI NG	MSEDCL DEM. WITH LS	MUMBAI DEMAND	STATE DEMAND	FREQ. (Hz)
	THM	HY	GAS			THM	GAS										
1	4920	57	435	5412	559	3772	0	0	4950	4887	-1153	13477	0	13477	2198	15675	50.04
2	4917	57	435	5409	594	3798	0	0	4952	4742	-968	13575	0	13575	2018	15593	50.00
3	4918	52	445	5415	596	3769	0	0	4630	4771	-851	13700	0	13700	1900	15600	50.01
4	4919	132	437	5488	559	3803	0	0	4456	4598	-781	13667	0	13667	1826	15493	50.03
5	5130	122	437	5689	557	3963	0	0	4765	4967	-765	14411	0	14411	1812	16223	50.05
6	5961	52	445	6458	673	4301	0	0	5068	5074	-857	15649	0	15649	1904	17553	49.98
7	6006	728	438	7172	739	4382	0	3	5544	5667	-859	17104	0	17104	2050	19154	49.99
8	5975	1007	439	7421	766	4395	0	105	5498	5644	-801	17530	0	17530	2211	19741	50.02
9	5951	1012	445	7408	782	4430	0	352	5662	5644	-949	17667	0	17667	2474	20141	50.03
10	5922	459	441	6822	634	4384	0	577	6049	6014	-1117	17314	0	17314	2782	20096	49.97
11	5981	486	415	6882	477	4633	0	760	6009	6326	-1239	17839	0	17839	2991	20830	50.01
12	6038	858	420	7316	409	4700	0	865	6062	6232	-1354	18168	0	18168	3067	21235	50.01
13	5957	724	407	7088	401	4669	0	838	6271	6438	-1486	17948	0	17948	2997	20945	50.00
14	5911	626	417	6954	360	4707	0	815	6088	6255	-1394	17697	0	17697	2903	20600	50.02
15	5955	808	403	7166	361	4661	0	657	6465	6567	-1435	17977	0	17977	2941	20918	49.98
16	5868	741	415	7024	323	4703	0	453	6484	6610	-1217	17896	0	17896	2982	20878	50.00
17	5870	831	406	7107	295	4716	0	210	6128	6127	-1204	17251	0	17251	2963	20214	50.02
18	5864	521	422	6807	329	4713	0	20	5897	6012	-1159	16722	0	16722	2915	19637	50.04
19	5897	670	424	6991	508	4737	0	0	5563	5706	-1190	16752	0	16752	2954	19706	50.03
20	5747	305	436	6488	666	4684	0	0	5493	5419	-1186	16071	0	16071	2840	18911	50.03
21	5134	98	430	5662	760	4464	0	0	5399	5370	-1349	14907	0	14907	2730	17637	50.03
22	4888	53	431	5372	720	4092	0	0	5318	5384	-1282	14286	0	14286	2559	16845	50.07
23	4902	58	430	5390	698	3971	0	0	5393	5312	-1359	14012	0	14012	2454	16466	50.07
24	4883	54	441	5378	764	3914	0	0	5082	4941	-1273	13724	0	13724	2342	16066	50.06
MUs	133.51	10.51	10.29	154.32	13.53	104.36	0.00	5.65	133.23	134.71	-27.23	385.34	0.00	385.34	60.81	446.16	50.02

NOTE : ALL VALUES IN MW

Mumbai Net Exch is shown with reference to MSETCL system and (-) sign indicates MSETCL periphery to Mumbai system.

State Load Despatch Center,Airoli (MSETCL) Statement-VI
Details of Generating Unit Outages/Trippings for 26/Nov/2019

Position as on 6.30 Hrs of 27/Nov/2019

Generating Company	Name of Generating Unit	Capacity	Tripped Date	Tripped Time	Sync.Date	Sync. Time	Reason of Outage	Expected Date
PLANNED OUTAGE								
CPP	SWPGL U-3	135	01/11/2018	00.28		Continued.	Annual Overhaul	
MSPGCL	Chandrapur Unit 7	500	27/07/2019	00.00		Continued.	Annual Overhaul	
MSPGCL	Ghatghar Unit-1	125	25/09/2019	04.20		Continued.	Withdrawn On Shaft Seal Water Leakage.Converted to AOH From 1 Nov 2019.	
MSPGCL	Koyna Unit 7	80	31/10/2019	16.30		Continued.	Turbine Vibration(converted to Capital Overhaul for 60 Days from 09.00Hrs DT.01-11-2019)	
MSPGCL	Nasik Unit 4	210	20/11/2019	04.15		Continued.	ID Fan Problem(Converted for Zero Schedule from 05.00hrs DT. 21-11-2019 and Continued for Annual Overhaul From 01.12.2019	
FORCED OUTAGE								
IPP	SWPGL U-1	135	16/02/2016	17.09		Continued.	No PPA.	
MSPGCL	Parli Unit 4	210	01/04/2016	00.00		Continued.	Economic shutdown	
MSPGCL	Parli Unit 5	210	01/04/2016	00.00		Continued.	Economic shutdown	
PGPL	PGPL U1	262	07/02/2017	17.30		Continued.	No Schedule	
PGPL	PGPL U2	126	07/02/2017	17.30		Continued.	No Schedule	
IPP	IEPL Unit 1	270	28/08/2018	21.26		Continued.	No PPA	
IPP	SWPGL U-2	135	27/11/2018	00.00		Continued.	No Schedule.	
CPP	SWPGL U-4	135	15/12/2018	00.00		Continued.	No Schedule	
IPP	VIPL U-1	300	29/12/2018	00.30		Continued.	Coal Shortage	
IPP	VIPL U-2	300	17/01/2019	00.15		Continued.	Coal Shortage	
MSPGCL	Paras Unit 4	250	25/08/2019	00.45		Continued.	Annual Overhaul Converted Zero Schedule From 28.10.2019 18.00	
MSPGCL	Koradi Unit 7	210	27/08/2019	09.52		Continued.	Coal Flow Problem Due To Wet Coal.(Converted To Zero Schedule From 12.09.2019 At 20.00 hrs)	
IPP	RPL(AMT) U-1	270	01/09/2019	09.11		Continued.	Generator Protection operated	
MSPGCL	Bhusawal Unit 3	210	01/09/2019	17.56		Continued.	Zero Schedule from 18:00hrs of 28/09/2019	
MSPGCL	Koradi Unit 6	210	06/09/2019	15.41		Continued.	Zero Schedule By MSEDCL	
MSPGCL	Nasik Unit 3	210	09/10/2019	23.57		Continued.	Under Case 4 Bidding.	
MSPGCL	Khaparkhedha Unit 1	210	12/10/2019	00.11		Continued.	Zero Schedule	
MSPGCL	Khaparkhedha Unit 2	210	12/10/2019	00.17		Continued.	Zero Schedule	
MSPGCL	Paras Unit 3	250	23/10/2019	00.00		Continued.	Zero Schedule	
IPP	RPL(AMT) U-3	270	25/10/2019	02.00		Continued.	Zero Schedule By MSEDCL.	
IPP	RPL(AMT) U-2	270	25/10/2019	22.00		Continued.	Zero Schedule By MSEDCL.	
IPP	RPL(AMT) U-5	270	09/11/2019	03.00		Continued.	Zero Schedule By MSEDCL.	
IPP	RPL(AMT) U-4	270	12/11/2019	00.00		Continued.	Zero Schedule By MSEDCL.	

State Load Despatch Center, Airoli (MSETCL) Statement-VI
Details of Generating Unit Outages/Trippings for 26/Nov/2019

Position as on 6.30 Hrs of 27/Nov/2019

Generating Company	Name of Generating Unit	Capacity	Tripped Date	Tripped Time	Sync.Date	Sync. Time	Reason of Outage	Expected Date
MSPGCL	Uran Unit 8	108	23/11/2019	10.59		Continued.	NG Controller System Trip.	
MSPGCL	Bhusawal Unit 5	500	25/11/2019	08.49	27/11/2019	13.15	Boiler Tube Leakage	
MSPGCL	Koyana Unit 3	70	25/11/2019	12.50	27/11/2019	21.15	Cooler Leakage.	
MSPGCL	Khaparkheda Unit 3	210	27/11/2019	22.53		Continued.	Zero Schedule.	

State Load Despatch Center, Airoli (MSETCL)
Details of Line outages/Trippings for 26/Nov/2019

Statement-VII

Position as on 6.30 Hrs of 27/Nov/2019

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
765 KV LINE Outages/Trippings							
Koradi-III - Tirora ckt-II	IntraState	26/11/2019	10.56	26/11/2019	13.56	PO	Safety permit
705 Tie Bay @ Tirora	IntraState	27/11/2019	12.25	27/11/2019	23.05	EO	Attend CB SF6 Gas Leakage.
500 KV LINE Outages/Trippings							
Chandrapur - Padghe Hvdc Pole 2	IntraState	20/11/2019	18.09	26/11/2019	20.37	PO	Annual Maintenance & Diagnostic Testing Work.
Chandrapur - Padghe Hvdc Pole 2	IntraState	26/11/2019	20.49	27/11/2019	02.56	T	High Pressure Tap Changer Problem.
Chandrapur - Padghe Hvdc Pole 1	IntraState	26/11/2019	20.49	27/11/2019	01.52	T	High Pressure Tap Changer Problem.
Chandrapur - Padghe Hvdc Pole 2	IntraState	27/11/2019	03.04	27/11/2019	19.29	T	Protection Card Problem.
Chandrapur - Padghe Hvdc Pole 1	IntraState	27/11/2019	03.04	27/11/2019	09.46	T	Converter Breaker Phase Discrepancy Alarm.
400 KV LINE Outages/Trippings							
Karad Solapur (PG)	InterState	03/05/2017	11:49		Continued.	PO	Line Converted As 220 Kv Solapur (PG)- Jeur From LOC 403
Dhule Sar'Sarovar II	InterState	25/11/2019	17.35	26/11/2019	10.40	HT	Over Voltage
Dhule Sar'Sarovar I	InterState	26/11/2019	18.25	27/11/2019	11.17	HT	Over Voltage
Dhule Sar'Sarovar I	InterState	27/11/2019	19.25		Continued.	HT	Over Voltage
Khadka-Aurangabad (Waluj)	IntraState	25/11/2019	19.43	26/11/2019	07.13	HT	Over Voltage
Deepnagar Taptitanda	IntraState	26/11/2019	07.29	26/11/2019	17.02	PO	Faulty String replacement
Chandrapur-II - Nanded ckt II	IntraState	26/11/2019	18.55	27/11/2019	16.09	EO	To attend Hot Spot
Khadka-Aurangabad (Waluj)	IntraState	26/11/2019	20.28	27/11/2019	08.32	HT	Over Voltage
TBC @ chandrapur	IntraState	27/11/2019	11.20	27/11/2019	17.34	EO	Replacement of B-Ph Isolator Pole.
Khadka-Aurangabad (Waluj)	IntraState	27/11/2019	18.58		Continued.	HT	Over Voltage
400 KV ICT Outages/Trippings							
400/220/33 Kv 315 Mva ICT 1 @Padghe	IntraState	15/11/2018	10.07		Continued.	T	Differential Protection, Declared Faulty.
400/220/33 Kv 500 Mva Ict 1 @ CHANDRAPUR 2	IntraState	12/04/2019	17.10	26/11/2019	18.18	HT	Due To CVT Porcelain Collars Of The ICT-1 are Damaged.
400/220/33 Kv 315 MVA ICT -I @Nagothane	IntraState	26/11/2019	10.45	26/11/2019	18.56	PO	CT Replacement work
400/220/33 Kv 315 MVA ICT- 2 @Nagothane	IntraState	27/11/2019	10.17	27/11/2019	19.21	PO	33KV Bushing Clamp Replacement.
220 KV LINE Outages/Trippings							
Mudshingi Chikodi	InterState	24/09/2019	17.12		Continued.	PO	No Schedule.(close at Mudshingi end only)
Talandage - Chikodi	InterState	01/10/2019	17.10		Continued.	PO	No Schedule.(close at Chikodi end only)
EKLAHARE (OCR) Nasik Navsari II	InterState	26/11/2019	08.54	26/11/2019	19.13	PO	String Replacement work
PARLY (PG) - OLD GCR PARLI	InterState	26/11/2019	13.11	26/11/2019	15.17	EO	To attend Hot Spot
EKLAHARE (OCR) Nasik Navsari II	InterState	27/11/2019	09.12	27/11/2019	17.58	PO	Insulator Replacement Work
BOISAR BORIVALI	IntraState	24/07/2018	13.18		Continued.	HT	To Control Line Loading(H/T from Boisar end)
Boisar Versova Line	IntraState	26/11/2019	08.37	26/11/2019	17.14	PO	Testing Work
Nagothane-Wadkhal-I	IntraState	26/11/2019	08.56	26/11/2019	16.43	PO	Line Maintenance work
karad - Dasgaon	IntraState	26/11/2019	09.46	26/11/2019	15.07	PO	Overhauling of Siemens make Breaker
Kharghar - Tss Pannel	IntraState	26/11/2019	11.48		Continued.	PO	Construction Work
Abhijeet-Wardha-Ii	IntraState	26/11/2019	12.00	26/11/2019	18.04	PO	Testing Work
Topworth - Kharghar	IntraState	26/11/2019	12.11		Continued.	PO	Construction Work
Hingoli- Girawali	IntraState	26/11/2019	12.36	26/11/2019	15.55	PO	Line Maintenance work
Badnera-Akola Ii	IntraState	26/11/2019	15.36	26/11/2019	17.05	PO	Disc Replacement

HT : Hand Tripping, MT : Multiple Tripping, T : Tripping, PO : Planned Outage, EO : Emergency Outage, OO : Opportunity Outage

State Load Despatch Center, Airoli (MSETCL)
Details of Line outages/Trippings for 26/Nov/2019

Statement-VII

Position as on 6.30 Hrs of 27/Nov/2019

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
Topworth - Panvel TSS	IntraState	26/11/2019	17.24	26/11/2019	17.25	PO	New Arrangement
Bableshtar Ahamadnagar-I	IntraState	27/11/2019	03.37	27/11/2019	07.30	T	Distance Protection
Koradi-Butibori Rly Tss	IntraState	27/11/2019	06.40	27/11/2019	11.42	T	Distance Protection
Nagothane-Wadkhal II	IntraState	27/11/2019	08.28	27/11/2019	16.21	PO	Replacement of Conductor.
khaparkheda-Khaparkheda(new)-I	IntraState	27/11/2019	09.36	27/11/2019	14.53	PO	Diagnostic Testing And Routine Maintenance Work.
Karad(400kv) - Wathar	IntraState	27/11/2019	09.50	27/11/2019	16.55	PO	Overhauling of CB.
Tuljapur-Lamboti(Tap to Vairag s/st.)	IntraState	27/11/2019	10.13	27/11/2019	16.29	PO	Quarterly Maintenance Work
Eklahare (Gcr)(Nashik)- Ghatghar	IntraState	27/11/2019	10.21	27/11/2019	17.33	PO	Earthwire Replacement Work.
Ambazari-Amravati	IntraState	27/11/2019	10.23	27/11/2019	19.43	PO	1) Removing of Bunching Arrangement At Karanja And Connection With S/S Gantry, Commissioning of ICT 1&2.
Talange-Hamidwada	IntraState	27/11/2019	10.25	27/11/2019	17.02	PO	Insulator Replacement Work
Akola-Paras Ckt No-I	IntraState	27/11/2019	10.30	27/11/2019	17.49	PO	Hot Spot Observed on CTS, 29D & 29A In Copper Pad Crimping. Hence To Replace The Jumpers of CTS,29C & 29A With Al Pads Outage Is Proposed.
Ghatghar - Bapgaon	IntraState	27/11/2019	10.52	27/11/2019	17.08	PO	Earthwire Replacement Work.
Padghe - Kambha	IntraState	27/11/2019	14.17	27/11/2019	19.39	PO	Distance Relay Replacement Work.
220 KV ICT Outages/Trippings							
220/33kv 100 MVA Transformer 4 @Aarey R/S	IntraState	26/11/2019	08.41	27/11/2019	00.59	PO	LV Bushing Replacement work
220/100 Kv 100 MVA ICT II @Kandalgaon	IntraState	26/11/2019	10.28	26/11/2019	19.05	PO	Routine Maintenance Work

HT : Hand Tripping, MT : Multiple Tripping, T : Tripping, PO : Planned Outage, EO : Emergency Outage, OO : Opportunity Outage