

State Load Despatch Center, Airoli (MSETCL) Statement I
Daily system Report for 24/Mar/2018 SATURDAY

I GENERATION (MUs)			II EXCHANGES (MUs)		
A) MSPGCL	Daily	Monthly	E) InterState Exchanges	Daily	Monthly
1) Thermal	147.999	3403.464	1) Gujrat	-2.568	-19.575
2) Hydro	17.754	332.776	2) Madhya Pradesh	17.659	469.718
3) Gas	10.010	184.405	3) Chattisgarh	6.780	149.580
Total MSPGCL	175.763	3920.645	4) Maharashtra Net	112.733	2718.626
B) 1) APML	38.668	1060.004	5) Goa (Amona)	-0.682	-16.258
2) JSWEL	19.392	450.027	Total	133.922	3302.091
3) VIPL	12.166	241.390	a) Mumbai Schedule	22.009	524.768
4) RPL(AMT)	17.794	397.239	b) Mumbai Drawl	22.375	575.960
5) WPCL	3.708	96.023	c) MSEDCL Bilateral *	30.133	876.165
6) PGPL	0.000	0.000	Include PX	0.442	187.904
7) Other IPP	14.284	293.792	d) Mumbai Bilateral *	22.009	524.768
C) 1) TPCL Thermal	15.843	372.383	Include PX	2.222	117.491
2) TPCL Hydro	3.425	97.600	Include Standby	0.000	0.000
3) TPCL Gas	4.448	91.637	H) ENERGY CATERED (MUs)		
4) R-INFRA Thermal	11.325	264.138	1) MSEDCL	404.441	9434.506
D) STATE			2) Mumbai Discoms	57.416	1401.735
1) Thermal	281.179	6578.460	TOTAL STATE	461.857	10836.241
(A1+C1+C4+(B1-B6))					
2) Hydro	21.179	430.376			
(A2+C2)					
3) Gas	14.458	276.042			
(A3+B6+C3)					
4) Wind	6.925	166.819			
6) SOLAR	4.194	82.436			
TOTAL STATE	327.935	7534.133			

* 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 16 Hrs	C. Evening Peak at 20 Hrs	D. Night Minimum at 4 Hrs
MSPGCL Thermal	6155	6166	6183	6071
MSPGCL Hydro	1312	1522	644	100
MSPGCL Gas	410	397	417	433
MSPGCL Total Generation	7877	8085	7244	6604
Central Sector Receipt	6077	6255	5307	5193
WIND	340	168	305	224
CPP / IPP Thermal	4564	4566	4432	4186
CPP / IPP Gas	0	0	0	0
SOLAR	557	381	0	0
Exchange with Mumbai	-1122	-1036	-1018	-713
MSEDCL DEMAND MET	18293	18419	16270	15494
Load Shedding	0	0	0	0
MSEDCL DEMAND	18293	18419	16270	15494
TPCL GENERATION	1197	1201	1191	701
R-INFRA GENERATION	501	500	504	377
MUMBAI DEMAND	2820	2737	2713	1791
STATE DEMAND MET	21113	21156	18983	17285
STATE DEMAND	21113	21156	18983	17285
Frequency (Hz)	49.95	49.92	49.92	49.99

FREQUENCY PARTICULARS

MAXIMUM FREQ.	MINIMUM FREQ.	AVERAGE FREQ.	FREQ. BELOW 49.2 Hz
50.21 Hz at 18.01 Hrs	49.76 Hz at 21.06 Hrs	49.96	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 24/Mar/2018

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	9.66	222.73	423	398
Unit 9	9.62	240.16	411	389
Unit 10	9.62	290.11	410	400
Total	28.90	753.00		
Bhusawal				
Unit 3	4.58	43.78	200	160
Unit 4	11.46	271.62	495	450
Unit 5	11.43	274.82	495	460
Total	27.48	590.22		
Parli				
Unit 4	0.00	0.00	0	0
Unit 5	0.00	0.00	0	0
Unit 6	1.50	121.68	247	0
Unit 7	5.70	111.43	252	180
Unit 8	5.44	129.88	239	212
Total	12.63	363.00		
Chandrapur				
Unit 3	0.00	0.00	0	0
Unit 4	0.00	0.00	0	0
Unit 5	9.24	255.52	475	323
Unit 6	0.00	0.00	0	0
Unit 7	0.00	50.03	0	0
Unit 8	11.42	208.92	485	470
Unit 9	11.36	269.71	485	460
Total	32.01	784.19		
Paras				
Unit 3	6.04	118.64	253	250
Unit 4	6.01	140.17	252	250
Total	12.05	258.81		
Khaparkheda				
Unit 1	0.00	0.00	0	0
Unit 2	4.79	45.43	200	195
Unit 3	4.97	72.68	213	190
Unit 4	5.06	98.20	214	205
Unit 5	11.55	247.28	512	430
Total	26.37	463.60		
Nasik				
Unit 3	0.00	3.83	0	0
Unit 4	4.12	98.51	177	162
Unit 5	4.44	88.32	195	162
Total	8.56	190.66		
Uran				
All Units	10.01	184.40	436	389
Total	10.01	184.40		
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)	0.00	0.82	0	0

Generating unit	Generation			
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)
Total	0.00	0.82		
Koyna				
Stage 1-2	4.26	83.60	475	40
Stage 4	6.77	115.61	1000	0
Stage 3	2.56	42.68	240	0
Total	13.60	241.89		
Hydro				
KDPH	0.47	11.69	36	0
VTRNA	1.03	28.02	61	0
TILLARI	0.42	5.45	60	0
BHTGR/VEER	0.00	0.00	0	0
BHIRA T.R.	0.16	4.70	80	0
RNGR+BHTSA	0.33	7.33	14	13
BHANDARDRA	0.47	9.19	32	13
ELDARY	0.20	1.25	9	8
SMLHY_PTN	0.54	16.52	23	22
GHATGHAR	0.55	6.74	125	0
Total	4.16	90.88		
Wind				
Total	6.92	166.82	0	0
Total	6.92	166.82		
CPP				
APML(Mus)	38.67	1060.00	0	0
JSWEL(Mus)	19.39	450.03	0	0
VIPL(Mus)	12.17	241.39	0	0
RPLAMT(Mus)	17.79	397.24	0	0
WPCL(Mus)	3.71	96.02	0	0
Other(Mus)	14.28	293.79	0	0
Total	106.01	2538.48		
SOLAR				
Total	4.19	82.44	0	0
Total	4.19	82.44		
Tata				
Trombay 5	10.30	241.30	490	312
Trombay 6	0.00	0.00	0	0
Trombay 7A	2.82	56.59	120	108
Trombay 7B	1.63	35.05	69	65
Trombay 8	5.54	131.08	246	200
TATA Hydro	3.42	97.60	326	0
Total	23.72	561.62		
R-INFRA				
DTPS U-1&2	11.32	264.14	504	375
Total	11.32	264.14		

* Infirm Power			Summary			Summary		
Particulars	Daily (Mus)	Monthly	Particulars	Daily (Mus)	Monthly (Mus)	Particulars	Daily (Mus)	Monthly (Mus)
			MSPGCL Thermal	148.00	3403.46	MSPGCL Total	175.76	3920.64
			MSPGCL Thml+Gas	158.01	3587.87	Koyna 1,2 & 4 Total	11.04	199.21
			MSPGCL Hydro	17.75	332.78	State Total	327.94	7534.13

State Load Despatch Center,Airoli (MSETCL)

Hourly Load Data As on 24/Mar/2018

Annexure-2

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	6122	158	431	6711	312	4621	0	0	5217	5309	-1030	15923	0	15923	2167	18090	49.93
2	6160	113	429	6702	222	4630	0	0	5333	5001	-855	15700	0	15700	1997	17697	49.95
3	6082	99	431	6612	252	4272	0	0	5450	5206	-782	15560	0	15560	1858	17418	49.95
4	6071	100	433	6604	224	4186	0	0	5429	5193	-713	15494	0	15494	1791	17285	49.99
5	6045	105	433	6583	304	4159	0	0	5491	5526	-696	15876	0	15876	1772	17648	49.95
6	6093	217	434	6744	350	4307	0	0	5564	5602	-695	16308	0	16308	1842	18150	49.96
7	6079	941	424	7444	387	4510	0	15	5558	5682	-534	17504	0	17504	1918	19422	50.00
8	6160	1059	436	7655	295	4508	0	101	5492	5629	-596	17592	0	17592	2017	19609	50.01
9	6159	551	430	7140	301	4399	0	284	5587	5661	-764	17021	0	17021	2230	19251	49.99
10	6157	573	415	7145	535	4584	0	394	5581	5548	-993	17213	0	17213	2529	19742	49.95
11	6167	536	419	7122	539	4580	0	499	5770	5574	-1158	17156	0	17156	2753	19909	49.99
12	6155	1312	410	7877	340	4564	0	557	6030	6077	-1122	18293	0	18293	2820	21113	49.95
13	6147	1521	389	8057	242	4595	0	566	6003	5848	-1143	18165	0	18165	2807	20972	49.96
14	6134	1658	408	8200	212	4608	0	543	5703	5687	-1061	18189	0	18189	2700	20889	50.00
15	6171	1662	397	8230	181	4616	0	485	5840	5703	-1024	18191	0	18191	2724	20915	49.93
16	6166	1522	397	8085	168	4566	0	381	6318	6255	-1036	18419	0	18419	2737	21156	49.92
17	6105	1817	400	8322	197	4389	0	249	6023	5894	-1040	18011	0	18011	2724	20735	49.91
18	6161	1078	412	7651	216	4330	0	104	5787	5877	-1100	17078	0	17078	2678	19756	49.95
19	6212	450	394	7056	216	4279	0	16	5523	5553	-1164	15956	0	15956	2652	18608	49.96
20	6183	644	417	7244	305	4432	0	0	5328	5307	-1018	16270	0	16270	2713	18983	49.92
21	6265	414	421	7100	308	4262	0	0	5282	5348	-1008	16010	0	16010	2633	18643	49.95
22	6327	407	419	7153	263	4167	0	0	5186	5388	-924	16047	0	16047	2527	18574	49.96
23	6348	524	405	7277	239	4246	0	0	5347	5514	-957	16319	0	16319	2440	18759	49.96
24	6330	293	426	7049	317	4206	0	0	5518	5540	-962	16150	0	16150	2387	18537	49.92
MUs	148.00	17.75	10.01	175.76	6.93	106.01	0.00	4.19	134.36	133.92	-22.38	404.44	0.00	404.44	57.42	461.86	49.96

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 24/Mar/2018

Position as on 6.30 Hrs of 25/Mar/2018

Generating Company	Name of Generating Unit	Capacity	Tripped Date	Tripped Time	Sync.Date	Sync. Time	Reason of Outage	Expected Date
PLANNED OUTAGE								
TPC-G	Trombay 6	500	15/07/2015	17.08		Continued.	Economic shutdown.	
CENT.SECTOR	Tarapur 1	160	04/06/2017	19.09		Continued.	3 months outage for refuelling.	
CENT.SECTOR	Tarapur 2	160	26/12/2017	10.51		Continued.	AOH	
MSPGCL	Chandrapur Unit 6	500	04/01/2018	13.30		Continued.	Water Shortage, converted to AOH w.e.f 01.02.2018, 00:00Hrs	
MSPGCL	Uran Unit 6	108	11/02/2018	23.43		Continued.	Annual Overhaul	
FORCED OUTAGE								
MSPGCL	Koradi Unit 6	210	09/07/2015	00.00		Continued.	EE R&M LE Work	
IPP	SWPGL U-1	135	16/02/2016	17.09		Continued.	No PPA.	
IPP	SWPGL U-2	135	29/02/2016	21.46		Continued.	No PPA	
MSPGCL	Parli Unit 5	210	01/04/2016	00.00		Continued.	Economic shutdown	
MSPGCL	Parli Unit 4	210	01/04/2016	00.00		Continued.	Economic shutdown	
RGPL	Dabhol 2A	230	24/08/2016	13.31		Continued.	Change Over.	
PGPL	PGPL U2	126	07/02/2017	17.30		Continued.	No Schedule	
PGPL	PGPL U1	262	07/02/2017	17.30		Continued.	No Schedule	
MSPGCL	Ghatghar Unit-2	125	28/07/2017	00.00		Continued.	due to common pressure shaft with unit 1.	
MSPGCL	Chandrapur Unit 3	210	03/12/2017	01.35		Continued.	Water Shortage	
MSPGCL	Chandrapur Unit 4	210	03/12/2017	14.17		Continued.	Water Shortage	
CPP	IEPL Unit 1	270	30/12/2017	23.58		Continued.	No Schedule	
IPP	Adani U-2	660	02/01/2018	15.26		Continued.	HPBP Bonnet leakage	
MSPGCL	Koradi Unit 7	210	07/01/2018	17.00		Continued.	Poor Coal Receipt.	
IPP	RPL(AMT) U-4	270	10/02/2018	16.36	24/03/2018	08.23	Generator Exciter Bearing oil Leakage (Out due to coal shortage w.e.f 15.02.2018)	
IPP	Adani U-4	660	12/02/2018	07.24		Continued.	Governing valve abnormal sound(Out due to coal shortage w.e.f 20.02.2018, 18:00hrs)	
IPP	JSW (J) U1	300	20/02/2018	12.06		Continued.	Turbine Vibration high.	
IPP	RPL(AMT) U-3	270	27/02/2018	00.01		Continued.	Coal Shortage	
MSPGCL	Khaparkheda Unit 1	210	27/02/2018	18.00		Continued.	Poor Coal Receipt	
MSPGCL	Nasik Unit 3	210	01/03/2018	20.40		Continued.	Poor coal Receipt From 06.03.2018	
MSPGCL	Chandrapur Unit 7	500	10/03/2018	23.06		Continued.	Water Shortage From 12/03/2018	
MSPGCL	Parli Unit 6	250	22/03/2018	08.15	24/03/2018	13.35	Air heater problem	
IPP	RPL(AMT) U-5	270	24/03/2018	07.36		Continued.	ID Fan Problem	
CPP	SWPGL U-4	135	24/03/2018	21.09		Continued.	ID Fan Problem	
MSPGCL	Uran Unit 8	108	25/03/2018	06.25		Continued.	Thrust Bearing Tripped	

State Load Despatch Center,Airoli (MSETCL)
Details of Line outages/Trippings for 24/Mar/2018

Statement-VII

Position as on 6.30 Hrs of 25/Mar/2018

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
765 KV ICT Outages/Trippings							
765/400kv 1500MVA ICT @ Akola-II	IntraState	24/03/2018	09.13	24/03/2018	18.26	PO	Routine Maintenance Work
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
Wardha (PG)-Warora II	InterState	23/03/2018	08.40	25/03/2018	21.11	PO	765 power line crossing work.
Dhule Sar'Sarovar II	InterState	23/03/2018	20.59		Continued.	HT	Over Voltage
Dabhol Nagothane II	InterState	25/03/2018	12.22	25/03/2018	18.20	T	Distance Protection
Warora -IEPL	IntraState	23/03/2018	09.18	25/03/2018	21.04	PO	765 power line crossing work.
Khadka-Aurangabad (Waluj)	IntraState	23/03/2018	18.25	25/03/2018	11.07	HT	Over Voltage
Karad-Jaigad - I	IntraState	23/03/2018	20.23	24/03/2018	09.35	HT	Over Voltage
Kalwa - Kharghar	IntraState	24/03/2018	09.26	24/03/2018	19.53	PO	Routine Maintenance Work
Pune(GIS)-A'bad(Waluj) Ckt 2	IntraState	24/03/2018	15.01	24/03/2018	16.16	PO	wrlcdc pmu work.
N.Koyna-Karad -Ckt I	IntraState	25/03/2018	09.49	25/03/2018	12.34	T	Distance Protection
404 Main Bay @ Akola	IntraState	25/03/2018	10.34	25/03/2018	13.57	EO	CBAIR PRESSURE PROBLEM.
Khadka-Aurangabad (Waluj)	IntraState	25/03/2018	18.21		Continued.	HT	Over Voltage
400 KV ICT Outages/Trippings							
400/220 KV 315MVA ICT II @ Parli	IntraState	24/03/2018	09.38	24/03/2018	21.53	PO	painting work.
400/220 kv 500 MVA ICT-III @ Kalwa	IntraState	25/03/2018	06.35	25/03/2018	17.07	PO	isolater overhauling work
220 KV LINE Outages/Trippings							
Talandage - Chikodi	InterState	01/06/2017	00.01		Continued.	PO	NO SCHEDULE.
Mudshingi - Chikodi	InterState	01/06/2017	00.06		Continued.	PO	No Schedule.
Borivali - Tarapur	InterState	25/03/2018	09.29	25/03/2018	13.25	PO	Line Maintenance work
Chandrapur GCR - Warora - I	IntraState	05/04/2015	09.13		Continued.	PO	Bunching of conductor Loc no 86 Disconnecting of jumper at Loc no 86 & 107 and de-energising the line bet.86 to 107.
Chandrapur GCR - Wani	IntraState	05/04/2015	09.15		Continued.	PO	Bunching of conductor Loc no 86 Disconnecting of jumper at Loc no 86 & 107 and de-energising the line bet.86 to 107.
Kharghar-Borivali ckt II	IntraState	07/06/2017	12:23		Continued.	T	Distance Protection
Pedambe-Nerle	IntraState	23/09/2017	00.50		Continued.	T	'B'Phase CT Burst
Mumewadi -Halkarni II	IntraState	17/11/2017	10.00		Continued.	PO	Tower erection work (temporarily line would be Mumewadi-Tillari)
Halkarni - Tillari II	IntraState	17/11/2017	12.25		Continued.	PO	Tower erection work. (temporarily line would be Mumewadi-Tillari)
Kharghar-Borivali ckt I	IntraState	12/03/2018	10.00		Continued.	PO	Cable Termination work & Line Diverted To Siemenc.
Salsette Borivli 1	IntraState	23/03/2018	09.52	24/03/2018	19.15	PO	protection panel replacement.
Pedhambe - Oni	IntraState	24/03/2018	08.20	24/03/2018	18.28	PO	Insulator cleaning work.
Belewadi-Nagar Ckt I	IntraState	24/03/2018	09.28	24/03/2018	17.31	PO	Line Maintenance work
Trombay MSETCL Tie 2	IntraState	24/03/2018	10.05	24/03/2018	12.48	EO	Attending Hot Spot
Apta - Kalwa	IntraState	24/03/2018	10.08	24/03/2018	16.35	PO	Insulator Replacement Work
Karad(400kv) -Nigade	IntraState	24/03/2018	10.11	24/03/2018	12.44	PO	breaker timing & crm.
Flagship-Nandedcity	IntraState	24/03/2018	10.27	24/03/2018	16.20	PO	Half yearly maintenance work
Kandalgaon - Pirangut	IntraState	24/03/2018	10.34	24/03/2018	18.42	PO	Line Maintenance work
BUS A @Kharghar	IntraState	24/03/2018	10.57	24/03/2018	18.03	PO	bus extension work.
Gangapur-Valve	IntraState	24/03/2018	11.11	24/03/2018	17.18	PO	Testing Work
Bus Coupler @ Babhaleshwar	IntraState	24/03/2018	12.02	24/03/2018	18.02	PO	Testing Work

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 24/Mar/2018

Statement-VII

Position as on 6.30 Hrs of 25/Mar/2018

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
Pophali - Nerale	IntraState	24/03/2018	13.10	24/03/2018	14.50	T	on overload.
Gadchandur - Virur-li	IntraState	24/03/2018	14.50	24/03/2018	21.10	PO	stringing work.
Nanded- Bhokar I	IntraState	24/03/2018	16.05	24/03/2018	21.19	PO	stringing work of 220kv kumbhargaon - krushnoor line crossing.
Boisar II - Tarapur	IntraState	25/03/2018	09.09	25/03/2018	16.02	PO	Line Maintenance work
Urse-Chinchwad	IntraState	25/03/2018	10.16	25/03/2018	17.43	PO	Attending Hot Spot
Uran - Jnpt	IntraState	25/03/2018	12.35	25/03/2018	17.27	T	Distance Protection
Tata Borivli MSETCL Borivli 5	IntraState	25/03/2018	12.52	25/03/2018	14.56	T	Differential protection
Kalwa - Borivali	IntraState	25/03/2018	13.45	25/03/2018	18.19	PO	CT REPLACEMENT
Mahad-Kandalgaon	IntraState	25/03/2018	14.42	25/03/2018	15.45	T	Distance Protection
Adlabs - Pedambe	IntraState	25/03/2018	14.43	25/03/2018	17.50	T	Distance Protection
Dasturi-Kandalgaon Line	IntraState	25/03/2018	14.43	25/03/2018	15.30	T	Distance Protection
Kandalgaon - Koyna	IntraState	25/03/2018	14.44	25/03/2018	15.25	T	Distance Protection
Mahindra Vehicle-Bridgestone	IntraState	25/03/2018	17.00	25/03/2018	18.08	PO	REMOVING HANGING FLEX FROM LINE.
220 KV ICT Outages/Trippings							
220/100 Kv 200 MVA ICT III @Borivali	IntraState	21/09/2014	09.16		Continued.	T	Failed on internal Fault(repaired and ready for commissioning)
220/100 Kv 200 MVA ICT-IV@Kalwa	IntraState	24/11/2017	01.58		Continued.	T	Buchholz PRV Operated(Failed on Internal Fault)
220/66 Kv 150 Mva Ngef Ict 1 @Gadchandur	IntraState	04/03/2018	02.55		Continued.	T	Differential protection
220/33kv 100 MVA Transformer 4 @Versova R/S	IntraState	23/03/2018	09.06	24/03/2018	00.45	PO	replacement of radiators.
220/100 Kv 100 MVA ICT II @Kandalgaon	IntraState	24/03/2018	09.00	24/03/2018	17.10	PO	Routine Maintenance Work
220/33kv 125 Mva Transformer 2 @Aarey R/S	IntraState	25/03/2018	10.08	25/03/2018	19.26	PO	Routine Maintenance Work
132 KV LINE Outages/Trippings							
Mansar Pench	InterState	25/03/2018	21.25		Continued.	T	Y-PHASE BUS P T BURST.
Naldurg - Ujani	IntraState	22/03/2018	17.55	24/03/2018	09.12	HT	Distance Protection
Ujani - AUSA	IntraState	24/03/2018	14.10	24/03/2018	14.30	T	Distance Protection
Umri - Kundalwadi	IntraState	24/03/2018	16.38	24/03/2018	16.55	T	Distance Protection
Kanhan-Mansar	IntraState	25/03/2018	21.25		Continued.	T	Y-PHASE BUS PT BRUST. 16 MW LOAD AFFECTED.

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