

State Load Despatch Center, Airoli (MSETCL) Statement I
Daily system Report for 02/Mar/2022 WEDNESDAY

I GENERATION (MUs)			II EXCHANGES (MUs)		
A) MSPGCL	Daily	Monthly	E) InterState Exchanges	Daily	Monthly
1) Thermal	143.764	295.976	1) Gujrat	-5.620	-11.790
2) Hydro	20.845	33.748	2) Madhya Pradesh	7.640	15.978
3) Gas	3.556	7.135	3) Chattisgarh	6.680	13.430
Total MSPGCL	168.165	336.859	4) Maharashtra	171.462	338.856
B) 1) APLM	74.826	149.337	5) Goa (Amona)	-1.154	-2.477
2) JSWEL	19.702	37.648	Total	179.008	353.997
3) VIPL	0.000	0.000	a) Mumbai Schedule	28.964	56.110
4) RPL(AMT)	25.264	50.748	b) Mumbai Drawl	31.753	61.788
5) SWPGPL	6.333	12.617	c) MSEDCL Bilateral *	90.112	170.639
6) Other IPP	40.684	81.790	Include PX	0.000	0.000
7) PGPL	0.000	0.000	d) Mumbai Bilateral *	28.964	56.110
C) 1) TPCL Thermal	10.214	20.560	Include PX	0.000	0.000
2) TPCL Hydro	4.335	7.343	Standby	0.000	0.000
3) TPCL Gas	0.000	0.000	H) ENERGY CATERED (MUs)		
4) AEML Thermal	8.445	16.331	1) MSEDCL	490.134	975.530
D) STATE			2) Mumbai Discoms	54.747	106.023
1) Thermal	329.232	665.007	3) Other Discoms	8.698	17.459
(A1+C1+C4+(B1-B6))			TOTAL STATE	553.579	1099.012
2) Hydro (A2+C2)	25.180	41.091			
3) Gas (A3+B7+C3)	3.556	7.135			
4) Wind	8.526	15.068			
6) SOLAR	8.077	16.713			
TOTAL STATE	374.571	745.014			

* 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 20 Hrs	D. Night Minimum at 1 Hrs
MSPGCL Thermal	5919	5899	5933	5969
MSPGCL Hydro	1059	290	1773	495
MSPGCL Gas	152	141	144	149
MSPGCL Total Generation	7130	6330	7850	6613
Central Sector Receipt	9418	9661	6511	6637
WIND	221	190	270	302
CPP / IPP Thermal	7053	7012	7065	6672
CPP / IPP Gas	0	0	0	0
SOLAR	1211	1232	0	0
Exchange with Mumbai	-1831	-1847	-1309	-1159
MSEDCL DEMAND MET	22811	22181	19977	18749
Load Shedding	0	0	0	0
MSEDCL DEMAND	22811	22181	19977	18749
TPCL GENERATION	698	671	774	404
AEML GENERATION	297	279	501	284
MUMBAI DEMAND	2826	2797	2584	1847
OTHER DISCOM DEMAND	391	397	410	316
STATE DEMAND MET	26028	25375	22971	20912
STATE DEMAND	26028	25375	22971	20912
Frequency (Hz)	50.00	49.97	49.96	50.00

FREQUENCY PARTICULARS

MAXIMUM FREQ.	MINIMUM FREQ.	AVERAGE FREQ.	FREQ. BELOW 49.4 Hz
50.24 Hz at 06:03 Hrs	49.76 Hz at 14:13 Hrs	50	0 % of Time(min)

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

Daily and Progressive Generation,Maximum,Minimum for 02/Mar/2022

Generating unit	Generation			
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)
Koradi				
Unit 6	4.28	8.42	190	155
Unit 7	0.00	0.00	0	0
Unit 8	13.07	26.39	605	434
Unit 9	13.61	25.38	604	542
Unit 10	5.17	17.43	550	0
Total	36.12	77.62		
Bhusawal				
Unit 3	0.00	0.00	0	0
Unit 4	9.34	18.28	460	300
Unit 5	7.10	14.97	350	280
Total	16.44	33.24		
Parli				
Unit 6	2.61	5.28	217	0
Unit 7	4.71	8.71	248	140
Unit 8	0.00	0.00	0	0
Total	7.32	13.99		
Chandrapur				
Unit 3	4.24	8.53	187	167
Unit 4	3.95	7.93	172	145
Unit 5	0.15	0.15	146	8
Unit 6	0.09	7.34	90	90
Unit 7	9.06	18.48	410	333
Unit 8	11.17	22.04	474	444
Unit 9	10.33	16.62	449	412
Total	39.00	81.09		
Paras				
Unit 3	5.59	11.31	250	165
Unit 4	5.59	11.19	247	156
Total	11.18	22.50		
Khaparkheda				
Unit 1	3.30	6.85	150	90
Unit 2	3.61	7.32	160	140
Unit 3	4.42	8.92	193	160
Unit 4	4.10	8.31	179	159
Unit 5	10.61	21.05	465	415
Total	26.04	52.46		
Nasik				
Unit 3	0.00	0.00	0	0
Unit 4	4.10	8.02	191	121
Unit 5	3.55	7.06	166	120
Total	7.65	15.08		
Uran				
All Units	3.56	7.14	160	138
Total	3.56	7.14		
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)	0.11	0.27	33	0
Total	0.11	0.27		
Koyna				

Generating unit	Generation			
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)
Stage 1-2	4.58	7.43	455	35
Stage 4	7.47	10.21	1005	0
Stage 3	2.83	3.86	320	0
Total	14.87	21.50		
Hydro				
KDPH	0.43	0.86	18	18
VTRNA	0.00	0.00	0	0
TILLARI	0.00	0.29	0	0
BHIRA T.R.	0.20	0.44	70	0
SMLHY_PTN	5.23	10.39	242	187
GHATGHAR	0.00	0.00	0	0
Total	5.86	11.98		
Wind				
Total	8.53	15.07	0	0
Total	8.53	15.07		
CPP				
APML(Mus)	74.83	149.34	0	0
JSWEL(Mus)	19.70	37.65	0	0
VIPL(Mus)	0.00	0.00	0	0
RPLAMT-Mus	25.26	50.75	0	0
SWPGPL-Mus	6.33	12.62	0	0
Other(Mus)	40.68	81.79	0	0
Total	166.81	332.14		
SOLAR				
Total	8.08	16.71	0	0
Total	8.08	16.71		
Tata				
Trombay 5	7.03	14.02	409	265
Trombay 6	0.00	0.00	0	0
Trombay 7A	0.00	0.00	0	0
Trombay 7B	0.00	0.00	0	0
TATA Hydro	4.34	7.34	406	17
Trombay 8	3.18	6.54	140	130
Total	14.55	27.90		
AEML				
DTPS U-1&2	8.44	16.33	501	278
Total	8.44	16.33		

* Infirm Power			Summary			Summary		
Particulars	Daily (Mus)	Monthly	Particulars	Daily (Mus)	Monthly (Mus)	Particulars	Daily (Mus)	Monthly (Mus)
			MSPGCL Thermal	143.76	295.98	MSPGCL Total	168.16	336.86
			MSPGCL Thml+Gas	147.32	303.11	Koyna 1,2 & 4 Total	12.04	17.64
			MSPGCL Hydro	20.84	33.75	State Total	374.57	745.01

State Load Despatch Center,Airoli (MSETCL)

Hourly Load Data As on 02/Mar/2022

Annexure-2

TIME SR. NO.	MSPGCL GEN.			TOTAL	WIND	CPP / IPP		SOLAR	CS SHARE	CS RECPT	Mum. NET EXCH.	MSEDC L DEM. MET	LOAD SHED DING	MSEDC L DEM. WITH LS	MUMBAI DEMAN D	OTHER DISCOM DEMAN D	STATE DEMAND	FREQ. (Hz)
	THM	HY	GAS			THM	GAS											
1	5969	495	149	6613	302	6672	0	0	6428	6637	-1159	18749	0	18749	1847	316	20912	50.00
2	5984	434	148	6566	399	6790	0	0	6684	6642	-1038	19058	0	19058	1726	301	21085	50.02
3	6014	294	159	6467	564	6831	0	0	6926	6699	-949	19333	0	19333	1643	279	21255	50.02
4	5826	262	149	6237	601	6577	0	0	7179	7068	-891	19311	0	19311	1581	281	21173	50.01
5	5774	262	150	6186	634	6567	0	0	7323	7298	-894	19492	0	19492	1584	299	21375	50.03
6	6072	715	160	6947	618	6935	0	0	6835	6978	-969	20192	0	20192	1679	317	22188	50.02
7	6098	1414	150	7662	781	7047	0	4	6682	6285	-786	20649	0	20649	1842	344	22835	50.04
8	6176	1587	159	7922	534	7083	0	148	6422	7052	-667	21723	0	21723	2027	349	24099	50.05
9	6282	1088	149	7519	338	7046	0	493	7305	7557	-1070	21509	0	21509	2294	374	24177	50.03
10	6293	1194	147	7634	361	7059	0	846	7844	8067	-1407	22178	0	22178	2557	382	25117	50.01
11	5902	1056	144	7102	293	7070	0	1058	8836	9044	-1609	22562	0	22562	2750	396	25708	50.01
12	5919	1059	152	7130	221	7053	0	1211	9382	9418	-1831	22811	0	22811	2826	391	26028	50.00
13	5899	290	141	6330	190	7012	0	1232	9725	9661	-1847	22181	0	22181	2797	397	25375	49.97
14	5994	315	139	6448	158	6955	0	1114	9152	9300	-1787	21816	0	21816	2676	372	24864	49.96
15	6080	857	138	7075	160	6976	0	795	9278	9278	-1819	22081	0	22081	2702	384	25167	49.86
16	6037	927	140	7104	260	6959	0	588	9265	9171	-1838	21843	0	21843	2712	401	24956	49.94
17	6001	1418	152	7571	135	6980	0	431	7709	7497	-1706	20505	0	20505	2706	403	23614	49.99
18	5991	1663	141	7795	139	7031	0	156	6598	6758	-1435	20048	0	20048	2640	396	23084	50.04
19	5952	1502	142	7596	217	7041	0	1	6294	6244	-1282	19400	0	19400	2592	417	22409	50.04
20	5933	1773	144	7850	270	7065	0	0	6687	6511	-1309	19977	0	19977	2584	410	22971	49.96
21	5960	960	155	7075	328	7068	0	0	6357	6472	-1264	19271	0	19271	2460	408	22139	50.04
22	5910	453	145	6508	355	7047	0	0	6467	6314	-1398	18447	0	18447	2297	379	21123	50.04
23	5804	476	146	6426	286	6980	0	0	6289	6547	-1426	18451	0	18451	2166	362	20979	49.98
24	5894	351	157	6402	382	6965	0	0	6732	6510	-1372	18547	0	18547	2059	340	20946	50.01
MUs	143.76	20.84	3.56	168.17	8.53	166.81	0.00	8.08	178.40	179.01	-31.75	490.13	0.00	490.13	54.75	8.70	553.58	50.00

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 02/Mar/2022

Position as on 6.30 Hrs of 03/Mar/2022

Generating Company	Name of Generating Unit	Capacity	Tripped Date	Tripped Time	Sync.Date	Sync. Time	Reason of Outage	Expected Date
PLANNED OUTAGE								
MSPGCL	Koyna Unit 5	80	20/12/2021	08:40		Continued.	Annual Overhaul	
MSPGCL	Nasik Unit 3	210	26/01/2022	20:26		Continued.	Annual Overhaul	
FORCED OUTAGE								
IPP	SWPGPL U-1	135	16/02/2016	17.09		Continued.	No PPA.	
PGPL	PGPL U1	262	07/02/2017	17.30		Continued.	No Schedule (NO PPA)	
PGPL	PGPL U2	126	07/02/2017	17.30		Continued.	No Schedule.(NO PPA)	
IPP	IEPL Unit 1	270	28/08/2018	21.26		Continued.	No PPA	
IPP	VIPL U-1	300	29/12/2018	00.30		Continued.	Coal Shortage. (NO PPA From 20.05.2019)	
IPP	VIPL U-2	300	17/01/2019	00.15		Continued.	Coal shortage.(NO PPA From 20.05.2019)	
CENT.SECTOR	Tarapur 1	160	08/01/2020	10:37		Continued.	Refueling. While refueling preparation, some repair works identified which are being executed before refueling.	31/03/2023
MSPGCL	Uran Unit 7	108	25/05/2020	12.51		Continued.	Turbine Blade Failure	
CENT.SECTOR	Tarapur 2	160	13/07/2020	04:38		Continued.	For cleaning of clogged basket strainer of cooling water system due to heavy ingress of debris from sea. The outage extended for repair and re-fueling.	31/03/2023
MSPGCL	Koradi Unit 7	210	27/04/2021	20.03		Continued.	Retired (04/08/2021 At 00.00)	
IPP	JSW (J) U4	300	14/02/2022	16:08		Continued.	No Schedule	
IPP	RPL(AMT) U-3	270	16/02/2022	00:00		Continued.	Coal Shortage	
MSPGCL	Ghatghar Unit-1	125	17/02/2022	21:55		Continued.	SFC HEAVY FAULT	
MSPGCL	Ghatghar Unit-2	125	17/02/2022	21:55		Continued.	SFC HEAVY FAULT	
MSPGCL	Bhusawal Unit 3	210	20/02/2022	22:03		Continued.	Coal Shortage	
MSPGCL	Uran Unit 6	108	21/02/2022	00:37		Continued.	Gas shortage	
MSPGCL	Uran Unit A0	120	21/02/2022	21:57		Continued.	Gas shortage	
MSPGCL	Uran Unit 5	108	21/02/2022	21:57		Continued.	Gas shortage	
TPC-G	Trombay 7B	60	23/02/2022	02:12		Continued.	Gas shortage	
MSPGCL	Parli Unit 8	250	24/02/2022	01:00	03/03/2022	00:20	Coal Shortage	
IPP	SWPGPL U-4	135	25/02/2022	16:47		Continued.	Turbine Vibration	
MSPGCL	Chandrapur Unit 5	500	28/02/2022	23:54	02/03/2022	22:57	Boiler Tube Leakage	
MSPGCL	Parli Unit 6	250	01/03/2022	16:07	02/03/2022	08:49	ON ELECTRICAL FAULT	
MSPGCL	Chandrapur Unit 6	500	02/03/2022	00:16		Continued.	turbine bearing no.7 vibration high	
MSPGCL	Koradi Unit-10	660	02/03/2022	09:49	03/03/2022	02:15	Generator preheater problem	
MSPGCL	Koyna STG-IV Unit-4	250	03/03/2022	06:00		Continued.	BREAK PAD ASSEMBLY JAM	
MSPGCL	Bhusawal Unit 5	500	03/03/2022	06:05		Continued.	Flame Failure	

State Load Despatch Center,Airoli (MSETCL)
Details of Line outages/Tripping for 02/Mar/2022

Statement-VII

Position as on 6.30 Hrs of 03/Mar/2022

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
400 KV LINE Outages/Tripping							
KARAD - SOLAPUR (PG)	InterState	22/02/2022	08:50				Commissioning of 400 kv 80 MVAR Kanohar make line shunt reactor with allied equipments under LE scheme
LAMBOTI - SOLAPUR (PG)	InterState	02/03/2022	10:17	02/03/2022	19:52	T	Distance protection
CHANDRAPUR GCR - CHANDRAPUR HVDC - 1	IntraState	01/03/2022	09:52			PO	1) Capital overhauling and servicing of Mechanism Drive, SF6 gas monitoring assembly, Hydraulic pressure monitoring assembly and Poles and Interrupters. 2) Measurement of Timing, CRM and DCRM of CB. 3) Maintenance and alignments of PG-1 and PG-2 Isolators.
TBC @ NEW KOYNA	IntraState	01/03/2022	10:15			PO	Bus insulator string replacement work under scheme at the section of 1) 400KV BC & TBC 2) 400KV spare bay 3) Erection of hanger for pantograph isolator of newly erection of ICT bay
BUS 'A' @ PADGHE	IntraState	02/03/2022	12:00			PO	1) 315MVA ICT -3 A bus all phase Hanger Rod replacement work by Hot line method.
400 KV ICT Outages/Tripping							
400/220/33 KV 500MVA ICT - 2 @ DEEPNAGAR	IntraState	02/03/2022	11:46			PO	FOR O/H OF 220kv ICT NO. II (IV) own CB.
220 KV TBC Outages/Tripping							
BUS COUPLER @ URAN	IntraState	02/03/2022	12:45	02/03/2022	18:30	PO	1) Breaker cable Replacement. 2) CP TNC SW Replacement
220 KV MAINBAY Outages/Tripping							
BUS SECTINLISER @ PEGASUS	IntraState	02/03/2022	11:20	02/03/2022	22:42		220kv Bus Isolator Alignment, Bus Section (Bus section II side) Isolator alignment
220 KV LINE Outages/Tripping							
MULUND - GIS BHANDUP	IntraState	29/01/2022	15:44			T	cABLE FAULT
BOISAR II - TARAPUR	IntraState	18/02/2022	09:33	02/03/2022	15:35	PO	1. Dismantling of existing loc.no. 37, erection proposed on loc.37a & 38a. 2.Railway crossing stringing between loc.no.36 & 37a-38a-38
EKLAHARE (OCR) - NAVASARI CKT - 1	IntraState	22/02/2022	10:16			PO	GETCO WORK. SHIFTING OF EXI. 220KV NAVSARI - NASIK LINE NO 1 & 2 (D/C)CROSSING AT NHRCL PRO.CH:- 233/720 (EXI. CROSSING CH:- 233/895)
EKLAHARE (OCR) - NAVASARI CKT - 2	IntraState	22/02/2022	10:17			PO	GETCO WORK. SHIFTING OF EXI. 220KV NAVSARI - NASIK LINE NO 1 & 2 (D/C)CROSSING AT NHRCL PRO.CH:- 233/720 (EXI. CROSSING CH:- 233/895)

State Load Despatch Center,Airoli (MSETCL)
Details of Line outages/Trippings for 02/Mar/2022

Statement-VII

Position as on 6.30 Hrs of 03/Mar/2022

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
HINJEWADI 2 - PEGASUS	IntraState	24/02/2022	10:40			PO	1. (a) Dismantling WT with disc insulator strings � 4 No , (b) Dismantling CC/ CC structure � 4 No. (c) Dismantling LA structure � 6 No. 2. Erection of LA and BPI 3. Scaffolding for OET 4. Outdoor End Termination 5. Testing and commissioning 6. Jumper connections High bus - BPI - OET-LA (Work at 220kV Hinjewadi II & Pegasus S/s)
TATA BORIVLI MSETCL BORIVLI - 5	IntraState	25/02/2022	09:18			PO	Project work for Shifting of line on new GIS bay and HV test of new GIS
KHARGHAR - TOPWORTH	IntraState	26/02/2022	10:33			PO	Erection of inline tower at Proposed Khandeshwar GIS, Erection of inline tower and Preparation of Cable End Termination at Proposed Panvel Timber Market
KHARGHAR - TSS PANVEL	IntraState	26/02/2022	11:31			PO	Erection of inline tower at Proposed Khandeshwar GIS, Erection of inline tower and Preparation of Cable End Termination at Proposed Panvel Timber Market
PADGHE - WADA	IntraState	28/02/2022	10:01			PO	1. 245kV CGL make CB pole overhauling work 2. Retrofitting of master 86 relay for MTAMC work
BAPGAON - KALWA	IntraState	02/03/2022	09:39	02/03/2022	12:45	PO	Isolator maintenance & Diagnostic Testing work at Bapgaon SS.
GHATGHAR - BAPGAON	IntraState	02/03/2022	09:39	02/03/2022	14:30	PO	Isolator maintenance & Diagnostic Testing work at Bapgaon SS.
MAIN BUS- A @ BAPGAON	IntraState	02/03/2022	09:40	02/03/2022	16:30	PO	Isolator maintenance & Diagnostic Testing work at Bapgaon SS.
ALEPHATA-PARGAON(KATHAPUR)	IntraState	02/03/2022	14:18	02/03/2022	17:13	PO	For CT Tan Delta Measurement
WALCHANDNAGAR-LONI DEOKAR	IntraState	03/03/2022	10:21			PO	DIAGNOSTIC TESTING WORK
220 KV ICT Outages/Trippings							
220 / 110 / 22kV 250 MVA ICT 1 @ SALSETTE	IntraState	12/10/2020	11:35			T	Tripped due to Grid disturbance.
220/22 KV 50 MVA PTR 1 @ KANDALGAON	IntraState	14/12/2021	16:55			EO	For dismantailing said 50MVA T/f 1 at 220 kV K'gaon S/s
220/132 KV 200 MVA ICT 3 @ BABHLESHWAR	IntraState	20/12/2021	22:45			T	Tripped on Diferrential protection and Declare faulty
220/132 KV 100 MVA ICT 1 @ LONIKAND 2	IntraState	01/03/2022	18:17			T	Differential Protection
220/33kV 100 MVA TF 3 @ GHODBUNDER	IntraState	02/03/2022	09:40	02/03/2022	17:10	PO	Refilling of CB compressor oil.
220/132-110 KV 100MVA ICT No-02 @ OGLEWADI	IntraState	02/03/2022	10:03	02/03/2022	17:26	PO	1. NIFPS system AMC work 2. Quarterly maintenance work
220/100 KV 200 MVA ICT 1 @ PAL-DOMBIVALI	IntraState	02/03/2022	10:18	02/03/2022	17:05	PO	Diagnostic testing work of 220/100 KV ICT No.1 LVCB, LVLA replacement work.RM Work.
220/100 KV 200 MVA ICT 2 @ KOLSHET	IntraState	02/03/2022	10:30	02/03/2022	17:32	PO	1) Arresting of oil leakage from Top inspection cover plate and Top side Radiator valve. 2)RMW
250 MVA ICT-4 @ TROMBAY	IntraState	02/03/2022	12:40	02/03/2022	17:31	PO	FOR TREE TRIMMING IN VICINITY

State Load Despatch Center, Airoli (MSETCL)
Details of Line outages/Trippings for 02/Mar/2022

Statement-VII

Position as on 6.30 Hrs of 03/Mar/2022

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
220/22 KV 50 MVA PTR 1 @ KALWA	IntraState	02/03/2022	15:35	02/03/2022	15:35	PO	For replacement of C bus conductor of PTR 1
220/132-110 KV 100MVA ICT No-02 @ OGLEWADI	IntraState	02/03/2022	17:26	03/03/2022	02:12	T	tripped on differential protection
220 KV BUSBAR Outages/Trippings							
BUS SECTION - 2 @ PIGASUS	IntraState	02/03/2022	11:20	02/03/2022	22:42		220kv Bus Isolator Alignment, Bus Section (Bus section II side) Isolator alignment
110 KV LINE Outages/Trippings							
WAGHIVALI - CHEMBUR	IntraState	04/02/2022	10:30			PO	Construction of 400KV M/C Kharghar-Vikhroli Transmission line along with Dismantling, De-Stringining of existing 110KV Waghivali-Mankhurd and Waghivali-Chembur lines and shfting these lines on new Multicircuit Towers between Darave to Vashi.
WAGHIVALI - MANKHURD	IntraState	04/02/2022	10:30			PO	Construction of 400KV M/C Kharghar-Vikhroli Transmission line along with Dismantling, De-Stringining of existing 110KV Waghivali-Mankhurd and Waghivali-Chembur lines and shfting these lines on new Multicircuit Towers between Darave to Vashi.
KALWA KALYAN	IntraState	02/03/2022	07:51	02/03/2022	19:40	PO	NORMALISATION OF CAPACITY

HT : Hand Tripping, T : Tripping, PO : Planned Outage, EO : Emergency Outage