

State Load Despatch Center, Airoli (MSETCL) Statement I
Daily system Report for 04/May/2024 SATURDAY

I GENERATION (MUs)			II EXCHANGES (MUs)		
A) MSPGCL	Daily	Monthly	E) InterState Exchanges	Daily	Monthly
1) Thermal	180.662	709.687	1) Gujrat	0.131	7.822
2) Hydro	20.520	54.273	2) Madhya Pradesh	4.609	25.233
3) Gas	6.853	27.604	3) Chattisgarh	3.000	10.290
Total MSPGCL	208.035	791.564	4) Maharashtra	186.062	714.987
B) 1) APLM	66.419	252.578	5) Goa (Amona)	-2.207	-8.255
2) JSWEL	27.580	110.678	Total	191.595	750.077
3) VIPL	0.000	0.000	a) Mumbai Schedule	38.101	152.968
4) RPL(AMT)	25.748	118.412	b) Mumbai Drawl	41.375	165.949
5) SWPGPL	12.364	48.642	c) MSEDCL Bilateral *	84.649	334.614
6) Other IPP	17.885	74.450	Include PX	0.000	0.000
7) PGPL	0.000	0.000	d) Mumbai Bilateral *	38.101	152.968
C) 1) TPCL Thermal	14.089	51.659	Include PX	0.000	0.000
2) TPCL Hydro	5.036	20.068	Standby	0.000	0.000
3) TPCL Gas	3.221	14.682	H) ENERGY CATERED (MUs)		
4) AEML Thermal	9.756	40.954	1) MSEDCL	535.374	2083.645
D) STATE			2) Mumbai Discoms	73.477	293.311
1) Thermal	354.503	1407.060	3) Other Discoms	11.325	44.742
(A1+C1+C4+(B1-B6))			TOTAL STATE	620.176	2421.698
2) Hydro	25.556	74.341			
(A2+C2)					
3) Gas	10.074	42.286			
(A3+B7+C3)					
4) Wind	19.020	71.869			
6) SOLAR	19.428	76.066			
TOTAL STATE	428.581	1671.622			

* 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 8 Hrs
MSPGCL Thermal	6677	7503	7835	6895
MSPGCL Hydro	504	462	1298	408
MSPGCL Gas	278	280	285	292
MSPGCL Total Generation	7458	8244	9418	7596
Central Sector Receipt	9711	8898	7844	8057
WIND	344	529	1039	986
CPP / IPP Thermal	5125	6195	6739	5608
CPP / IPP Gas	0	0	0	0
SOLAR	2432	1687	0	708
Exchange with Mumbai	-2111	-1951	-1839	-1606
MSEDCL DEMAND MET	22454	23091	22689	20864
Load Shedding	0	0	0	0
MSEDCL DEMAND	22454	23091	22689	20864
TPCL GENERATION	819	1166	1180	559
AEML GENERATION	495	497	252	315
MUMBAI DEMAND	3425	3614	3271	2480
OTHER DISCOM DEMAND	506	512	511	485
STATE DEMAND MET	26384	27216	26472	23828
STATE DEMAND	26384	27216	26472	23828
Frequency (Hz)	49.94	49.99	49.97	49.99

FREQUENCY PARTICULARS

MAXIMUM FREQ.	MINIMUM FREQ.	AVERAGE FREQ.	FREQ. BELOW 49.4 Hz
50.21 Hz at 03:28 Hrs	49.78 Hz at 11:21 Hrs	49.99	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 04/May/2024

Generating unit	Generation			
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)
Koradi				
Unit 6	4.52	16.88	195	175
Unit 8	0.33	35.12	312	0
Unit 9	14.04	54.44	604	526
Unit 10	14.72	55.93	630	590
Total	33.60	162.36		
Bhusawal				
Unit 3	3.64	7.24	180	120
Unit 4	10.70	41.56	485	335
Unit 5	10.46	39.26	480	330
Total	24.80	88.06		
Parli				
Unit 6	4.90	17.83	246	142
Unit 7	4.84	17.90	241	140
Unit 8	4.66	17.39	234	145
Total	14.40	53.12		
Chandrapur				
Unit 3	3.59	14.18	165	125
Unit 4	3.73	14.74	170	125
Unit 5	9.49	30.67	455	285
Unit 6	8.75	30.61	440	232
Unit 7	9.10	35.96	457	288
Unit 8	10.73	41.56	469	425
Unit 9	11.55	44.09	500	444
Total	56.95	211.80		
Paras				
Unit 3	5.59	20.79	246	204
Unit 4	5.88	21.82	254	211
Total	11.47	42.61		
Khaparkheda				
Unit 1	3.74	14.25	170	140
Unit 2	4.71	17.43	206	153
Unit 3	4.11	15.98	176	157
Unit 4	4.47	16.40	195	165
Unit 5	11.20	43.80	495	315
Total	28.22	107.85		
Nasik				
Unit 3	3.72	14.90	177	115
Unit 4	3.96	15.38	189	125
Unit 5	3.55	13.60	165	119
Total	11.23	43.88		
Uran				
All Units	6.85	27.60	294	273
Total	6.85	27.60		
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)	0.13	1.05	50	0
Total	0.13	1.05		
Koyna				
Stage 1-2	4.81	12.56	525	30

Generating unit	Generation			
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)
Stage 4	8.95	19.62	1026	0
Stage 3	2.73	7.31	296	0
Total	16.48	39.49		
Hydro				
KDPH	0.71	2.86	30	30
VTRNA	0.96	3.66	60	0
TILLARI	0.00	0.00	0	0
BHIRA T.R.	0.00	0.00	0	0
SMLHY_PTN	2.02	7.92	88	74
GHATGHAR	0.34	0.34	250	0
Total	4.04	14.78		
Wind				
Total	19.02	71.87	0	0
Total	19.02	71.87		
CPP				
APML(Mus)	66.42	252.58	0	0
JSWEL(Mus)	27.58	110.68	0	0
VIPL(Mus)	0.00	0.00	0	0
RPLAMT-Mus	25.75	118.41	0	0
SWPGPL-Mus	12.36	48.64	0	0
Dhariwal	0.00	0.00	0	0
IEPL	5.26	21.10	261	160
Other(Mus)	7.42	32.16	0	0
JPL	5.20	21.19	242	124
Total	150.00	604.76		
SOLAR				
Total	19.43	76.07	0	0
Total	19.43	76.07		
Tata				
Trombay 5	9.17	33.96	459	268
Trombay 6	0.00	0.00	0	0
Trombay 7A	1.92	8.98	108	50
Trombay 7B	1.30	5.70	64	43
TATA Hydro	5.04	20.07	397	57
Trombay 8	4.92	17.70	226	140
Total	22.35	86.41		
AEML				
DTPS U-1&2	9.76	40.95	498	232
Total	9.76	40.95		

* Infirm Power			Summary			Summary		
Particulars	Daily (Mus)	Monthly	Particulars	Daily (Mus)	Monthly (Mus)	Particulars	Daily (Mus)	Monthly (Mus)
			MSPGCL Thermal	180.66	709.69	MSPGCL Total	208.04	791.56
			MSPGCL Thml+Gas	187.52	737.29	Koyna 1,2 & 4 Total	13.76	32.18
			MSPGCL Hydro	20.52	54.27	State Total	428.58	1671.62

State Load Despatch Center,Airoli (MSETCL)

Annexure-2

Hourly Load Data As on 04/May/2024

TIME SR. NO.	MSPGCL GEN.			TOTAL	WIND	CPP / IPP		SOLAR	CS SHARE	CS RECPT	Mum. NET EXCH.	MSEDC L DEM. MET	Load Shedding		MSEDC L DEM. WITH LS	MUMBAI DEMAND	OTHER DISCOM DEMAND	STATE DEMAND	FREQ. (Hz)
	THM	HY	GAS			THM	GAS						Planned	*Transmission Constraint					
1	7997	1394	290	9682	775	6708	0	0	7602	7456	-1440	22748	0	0	22748	3055	432	26236	49.94
2	7836	1806	290	9932	805	6703	0	0	6939	6960	-1331	22661	0	0	22661	2857	407	25926	49.99
3	7890	1340	290	9520	864	6756	0	0	7206	7015	-1347	22446	0	0	22446	2662	362	25470	49.99
4	7946	864	291	9102	975	6800	0	0	7165	6756	-1303	21967	0	0	21967	2519	363	24848	49.97
5	7999	722	292	9012	1079	6805	0	0	7058	6814	-1206	22118	0	0	22118	2444	387	24948	49.98
6	8048	654	294	8996	1173	6812	0	0	7020	6755	-1201	22121	0	0	22121	2457	413	24992	50.01
7	8005	366	294	8666	1181	6642	0	129	7285	6857	-1273	21751	0	2	21751	2429	450	24630	50.04
8	6895	408	292	7596	986	5608	0	708	7868	8057	-1606	20864	0	3	20864	2480	485	23828	49.99
9	6876	570	288	7734	785	5234	0	1408	8059	8241	-1771	21122	0	0	21122	2694	510	24326	49.97
10	7051	164	285	7500	552	5472	0	1957	8681	8314	-1925	21363	0	0	21363	3020	507	24890	50.00
11	6769	160	280	7208	405	5268	0	2384	9459	9167	-1997	21929	0	1	21929	3285	507	25721	49.95
12	6677	504	278	7458	344	5125	0	2432	9527	9711	-2111	22454	0	32	22454	3425	506	26384	49.94
13	6984	298	277	7558	306	5308	0	2443	9625	9077	-2059	22123	0	21	22123	3471	510	26104	50.04
14	6727	182	279	7188	394	5068	0	2435	9720	9387	-1980	22000	0	3	22000	3413	492	25906	50.03
15	7306	190	273	7770	486	5511	0	2235	9665	9295	-2029	22794	0	17	22794	3531	473	26798	50.03
16	7503	462	280	8244	529	6195	0	1687	9186	8898	-1951	23091	0	24	23091	3614	512	27216	49.99
17	7748	378	282	8408	693	6591	0	1106	8880	8597	-1901	22956	0	30	22956	3540	539	27034	50.01
18	7790	792	283	8866	903	6693	0	456	8404	8261	-2060	22589	0	24	22589	3396	529	26514	49.96
19	7853	632	281	8766	1017	6748	0	48	8110	7832	-1923	21967	0	2	21967	3256	521	25744	49.99
20	7835	1298	285	9418	1039	6739	0	0	8095	7844	-1839	22689	0	0	22689	3271	511	26472	49.97
21	7810	1750	287	9846	1076	6778	0	0	7349	7348	-1809	22751	0	0	22751	3230	489	26470	49.99
22	7825	1584	288	9696	917	6792	0	0	7370	7295	-1760	22452	0	0	22452	3162	489	26102	50.00
23	7720	1758	287	9766	874	6814	0	0	7792	7866	-1793	23060	0	0	23060	3127	467	26654	50.01
24	7572	2246	287	10104	862	6826	0	0	7786	7792	-1760	23360	0	0	23360	3139	465	26964	50.00
MUs	180.66	20.52	6.85	208.04	19.02	150.00	0.00	19.43	195.85	191.60	-41.38	535.37	0.00	0.16	535.37	73.48	11.32	620.18	49.99

NOTE : ALL VALUES IN MW

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

*Load Shedding due to Transmission Constraint :-

1)ELR carried out due to overload of 132KV BBLSR-Rahuri and 220KV BBLSR-Alephata line.

State Load Despatch Center,Airoli (MSETCL) Statement-VI
Details of Generating Unit Outages/Trippings for 04/May/2024

Position as on 6.30 Hrs of 05/May/2024

Generating Company	Name of Generating Unit	Capacity	Tripped Date	Tripped Time	Sync.Date	Sync. Time	Reason of Outage	Expected Date
FORCED OUTAGE								
MSPGCL								
MSPGCL	Uran Unit A0	120	07/09/2022	16:30		Continued.	TURBINE TRIPPED ON HIGH VIBRATIONS	31/08/2024
MSPGCL	Koradi Unit 8	660	04/05/2024	01:08		Continued.	Boiler Tube Leakage	08/05/2024
MSPGCL	Bhusawal Unit 5	500	05/05/2024	00:00		Continued.	Boiler tube leakage attending work.	07/05/2024
MSPGCL	Uran Unit 8	108	05/05/2024	02:13	05/05/2024	17:32	filter replacement work	05/05/2024
MSPGCL	Nasik Unit 3	210	05/05/2024	20:20		Continued.	Boiler Tube Leakage	08/05/2024
MSPGCL	Koyna STG-IV Unit-3	250	05/05/2024	21:43		Continued.	Ruptured bolt problem	
MSPGCL	Ghatghar Unit-1	125	05/05/2024	21:45		Continued.	AVR fault	06/05/2024
Total Capacity MSPGCL		1973						
AEML								
AEML	AEML Unit 2	250	04/05/2024	19:05		Continued.	Boiler Tube Leakage	07/05/2024
Total Capacity AEML		250						
IPP								
IPP	JPL Unit 1	150	04/05/2024	00:08	04/05/2024	02:14	Tripped due to turbine thrust bearing temperature malfunction.	
Total Capacity IPP		150						
CENT.SECTOR								
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.	31/08/2024
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.	30/09/2024
Total Capacity CENT.SECTOR		320						
Total Capacity FORCED OUTAGE		2693						
UNIT UNDER ZERO SCHEDULE / RSD								
MSPGCL								
MSPGCL	Uran Unit 5	108	02/05/2024	15:30		Continued.	Unit is under zero schedule.	
MSPGCL	Uran Unit 6	108	02/05/2024	17:28	05/05/2024	23:04	Zero schedule.	
Total Capacity MSPGCL		216						
Total Capacity UNIT UNDER ZERO SCHEDULE / RSD		216						
FORCED OUTAGE DUE TO NO PPA								
IPP								
IPP	PGPL U1	262	07/02/2017	17.30		Continued.	No Schedule (NO PPA)	

State Load Despatch Center,Airoli (MSETCL) Statement-VI
Details of Generating Unit Outages/Trippings for 04/May/2024

Position as on 6.30 Hrs of 05/May/2024

Generating Company	Name of Generating Unit	Capacity	Tripped Date	Tripped Time	Sync.Date	Sync. Time	Reason of Outage	Expected Date
IPP	PGPL U2	126	07/02/2017	17.30		Continued.	No Schedule.(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)	
Total Capacity IPP		988						
Total Capacity FORCED OUTAGE DUE TO NO PPA		988						

* Other generator generating power instead of contracted genertaor with tri-party agreement in between generatos & discom (Case-IV bidding)

State Load Despatch Center,Airoli (MSETCL)
Details of Line outages/Trippings for 04/May/2024

Statement-VII

Position as on 6.30 Hrs of 05/May/2024

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
500 KV LR Outages/Trippings							
POLE-1 BASE AC FILTER Z1-Z2(200MVAR) @ PADGHE HVDC	IntraState	03/05/2024	22:59	04/05/2024	00:39	HT	E/O for grass cutting work at Padghe end.
400 KV LINE Outages/Trippings							
PADGHE - BOISAR (PG)	InterState	04/05/2024	11:48	04/05/2024	12:45	T	Distance Protection
DHULE - SSNNL CKT - 2	InterState	04/05/2024	18:52	05/05/2024	10:22	T	Line tripped on distance protection
AKOLA - WARDHA(PG) CKT - 1	InterState	04/05/2024	20:25	04/05/2024	21:13	T	Tripped at Akola end only
AKOLA - WARDHA(PG) CKT - 1	InterState	05/05/2024	14:31		Continued.	HT	for porcelain insulator replacement work
BUS REACTOR (50MVAR) @ PARLI	IntraState	27/09/2023	15:30			PO	Replacement of old 50 MVA bus reactor by new 125 MVA bus reactor.
CHANDRAPUR 2 - WARORA CKT-2	IntraState	22/04/2024	17:27			T	Tripped on distance protection.
CHANDRAPUR 2 - WARORA CKT-1	IntraState	22/04/2024	17:27			T	Tripped on distance protection.
AURANGABAD(MS) - PUNE (GIS) CKT - 1	IntraState	23/04/2024	09:38	05/05/2024	22:15	HT	For load management.
AURANGABAD(MS) - PUNE (GIS) CKT - 2	IntraState	01/05/2024	22:11			HT	For facilitating outage on 765 Kv Aurangabad - Padghe line.
PARLI - KUMBHARGAON(NANDED) CKT - 2	IntraState	03/05/2024	22:07	04/05/2024	04:01	EO	Attend broken conductor strands at Loc 103-104 and 107-108
DEEPNAGAR - AURANGABAD (WALUJ)	IntraState	04/05/2024	05:57	04/05/2024	16:49	PO	For string replacement work
DABHOL - NEW KOYNA CKT - 2	IntraState	05/05/2024	06:13	05/05/2024	21:45	T	Distance Protection
400 KV ICT Outages/Trippings							
STATION TF No 3 @ CHANDRAPUR GCR	IntraState	01/03/2023	15:07			PO	1) Oil filtration work 2) Testing of Station transformer 3) Preventive maintenance work.
400/220KV 500 MVA ICT - 3 @ VIKHROLI GIS	IntraState	10/02/2024	17:40			HT	H/T For LV only.
STATION TF - 1 @ KORADI -2	IntraState	02/05/2024	10:02	04/05/2024	17:56	PO	1)for tap changing work at Mahagenco premises.
400/220/33 KV 315MVA ICT - 3 @ KHADKA	IntraState	04/05/2024	08:10	04/05/2024	17:20	PO	For premonsoon maintenance & routine maintenance works of ICT
400/220 KV 3X105 MVA ICT - 1 @ KHARGHAR	IntraState	05/05/2024	18:33		Continued.	PO	For Diagnostic and Testing Activities
220 KV MAINBAY Outages/Trippings							
220KV BUS SECTION BAY @ PEDAMBE	IntraState	03/04/2024	15:55			T	Tripped due to Y ph CT burst
220 KV LINE Outages/Trippings							
KHARGHAR - ULWE GIS CKT-1	IntraState	19/04/2024	15:22			T	Wavetrap uncoiled at Kharghar end
KHARGHAR - NET MAGIC GIS	IntraState	03/05/2024	19:31	04/05/2024	00:42	PO	For Routine Maintenance & Testing Work
CENTURI ENKA- BHOSARI	IntraState	04/05/2024	09:18	04/05/2024	15:02	PO	LA (R,Y,B) Phs Replacement under LE scheme
TALANDGE - BIDRI	IntraState	04/05/2024	09:25	04/05/2024	16:34	PO	Replacement of Faulty insulator
NAGOTHANE - WADKHAL (GIS) CKT-1	IntraState	04/05/2024	09:58	04/05/2024	17:52	PO	Cold line cleaning, routine maintenance work.
ALKUD - MENDHEGIRI CKT - 2	IntraState	04/05/2024	13:37	04/05/2024	20:15	T	Line tripped on distance protection.
KHADKI- CENTURY ENKA	IntraState	04/05/2024	15:30	04/05/2024	19:36	PO	LA (R,Y,B) Phs Replacement under LE scheme
KHARGHAR - KHANDESHWAR CKT - 1	IntraState	04/05/2024	17:07	04/05/2024	22:24	PO	For Routine Maintenance & Testing Work
HAMIDWADA - MUMEWADI	IntraState	04/05/2024	17:27	04/05/2024	22:04	PO	Attending HOT SPOT
JEJURI (400 KV)-JEJURI- II	IntraState	04/05/2024	17:51	05/05/2024	04:44	PO	For Retrofitting of Distance protection relay to be carried out by GE.

State Load Despatch Center,Airoli (MSETCL)
Details of Line outages/Trippings for 04/May/2024

Statement-VII

Position as on 6.30 Hrs of 05/May/2024

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
TALANDGE - MUDSHINGI CKT - 1	IntraState	04/05/2024	18:02	05/05/2024	23:50	PO	Testing of CT having higher side C & tan delta value
EKLAHARA(GCR)(NASIK)-BABLESHWAR 1	IntraState	04/05/2024	23:16	05/05/2024	06:36	PO	Replacement of old disc insulator with porcelain long rod insulator strings, Suspension nut bolt tightening work.
BUS SECTION-5 @ TROMBAY (TATA)	IntraState	05/05/2024	00:35	05/05/2024	09:36	PO	220KV Tata Trombay Carnac 5 will remain out from 0600 hrs to 1700 hrs on 5th may, Trombay vikhroli 1/ Carnac 7 will remain in service between Trombay and Carnac and open isolated at trombay,Trombay Dharavi-6 will remain charge from Dharavi & Trombay Antop Hill-2 will kept openat both end.ST-7 not available . Station supply will be feed through ST-5. Transfer Breaker-2 will not be available. GT 7A and ST7B breaker will kept open.
TROMBAY CARNAC - 5	IntraState	05/05/2024	07:52	05/05/2024	11:40	PO	Work in vicinity
KANDALGAON - PIRANGUT	IntraState	05/05/2024	10:25		Continued.	PO	For attending hot spots at Loc No. 8,10,126,127 & 130.
KALWA SALSETTE - 4	IntraState	05/05/2024	11:41	05/05/2024	15:28	PO	Providing bird diverter in span 24-25-26
KALWA - MULUND 1	IntraState	05/05/2024	16:22	05/05/2024	21:21	PO	1. CT Tandelta and CT IR Test 2.CB CRM,Timing and IR test 2. bay Maintenance work.
220 KV ICT Outages/Trippings							
220/132 KV 200 MVA ICT 1 @ RAYMOND	IntraState	04/05/2024	08:42	05/05/2024	14:10	PO	1. Attending trouble shooting problem of BHEL Make OLTC 2. Diagnostic Testing of ICT and other equipment's 3. Complete bay maintenance work.
220/132/11 KV 200 MVA ICT 1 @ AMRAVATI	IntraState	04/05/2024	09:21	04/05/2024	14:40	PO	Replacement of Y Phase CT
220/132 KV 100 MVA ICT I	IntraState	04/05/2024	16:30	04/05/2024	20:20	PO	Testing work
220 / 110 / 33kV 250MVA ICT 8 @ DHARAVI	IntraState	05/05/2024	09:34	05/05/2024	15:09	PO	R/M, PM checks, device trials, LT cable box inspection
132 KV LINE Outages/Trippings							
MANSAR-PENCH	InterState	04/05/2024	06:24	04/05/2024	13:19	T	Distance Protection
KANHAN-PENCH	IntraState	04/05/2024	07:34	04/05/2024	16:46	PO	For earthwire replacement & routine maintenance work
KANHAN-PENCH	IntraState	05/05/2024	07:51	05/05/2024	17:19	PO	For earthwire replacement & routine maintenance work
110 KV LINE Outages/Trippings							
SALSETTE POWAI	IntraState	27/03/2023	11:04			PO	Replacement of tower number 77 & 78 for TDS project work.
KHOPOLI - DAVDI	IntraState	02/05/2024	09:45			PO	Tower erection at Location no 24 and Conductor Shifting and stringing. Dismantling of Existing tower.
110 KV BUSBAR Outages/Trippings							
ZONE 2 (BUS SECTION 2&3) @ KHOPOLI	IntraState	05/05/2024	11:52	05/05/2024	19:55	PO	R/M of Main bus side GODs

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