

State Load Despatch Center, Airoli (MSETCL) Statement I
Daily system Report for 11/Feb/2022 FRIDAY

I GENERATION (MUs)			II EXCHANGES (MUs)		
A) MSPGCL	Daily	Monthly	E) InterState Exchanges	Daily	Monthly
1) Thermal	155.088	1643.922	1) Gujrat	-5.866	-91.866
2) Hydro	10.616	142.131	2) Madhya Pradesh	3.521	63.375
3) Gas	6.986	77.984	3) Chattisgarh	7.320	73.940
Total MSPGCL	172.690	1864.037	4) Maharashtra	137.867	1535.697
B) 1) APLM	67.072	756.135	5) Goa (Amona)	-1.555	-16.970
2) JSWEL	14.675	158.991	Total	141.287	1564.176
3) VIPL	0.000	0.000	a) Mumbai Schedule	21.232	197.349
4) RPL(AMT)	26.920	302.938	b) Mumbai Drawl	23.687	231.399
5) SWPGPL	8.018	88.661	c) MSEDCL Bilateral *	71.582	745.962
6) Other IPP	40.406	439.989	Include PX	0.000	0.000
7) PGPL	0.000	0.000	d) Mumbai Bilateral *	21.232	197.129
C) 1) TPCL Thermal	10.573	99.775	Include PX	0.000	0.000
2) TPCL Hydro	3.338	41.109	Standby	0.000	0.220
3) TPCL Gas	4.214	37.304	H) ENERGY CATERED (MUs)		
4) AEML Thermal	7.218	107.324	1) MSEDCL	464.376	5069.016
D) STATE			2) Mumbai Discoms	49.032	516.914
1) Thermal	329.970	3597.735	3) Other Discoms	8.395	91.159
(A1+C1+C4+(B1-B6))			TOTAL STATE	521.803	5677.089
2) Hydro (A2+C2)	13.954	183.240			
3) Gas (A3+B7+C3)	11.200	115.288			
4) Wind	16.646	121.799			
6) SOLAR	8.744	94.848			
TOTAL STATE	380.514	4112.910			

* Displayed for information, not added in total.

DETAILS OF MAHARASHTRA STATE PEAK DEMAND(MW) Statement II

PARTICULARS	A. Morning Peak at 11 Hrs	B. Day Peak at 13 Hrs	C. Evening Peak at 20 Hrs	D. Night Minimum at 2 Hrs
MSPGCL Thermal	6955	6555	6816	5610
MSPGCL Hydro	498	608	488	285
MSPGCL Gas	276	273	277	302
MSPGCL Total Generation	7729	7436	7581	6197
Central Sector Receipt	7460	7600	5633	5129
WIND	695	432	272	1137
CPP / IPP Thermal	7061	6721	7050	5433
CPP / IPP Gas	0	0	0	0
SOLAR	1056	1237	0	0
Exchange with Mumbai	-1184	-1382	-1140	-608
MSEDCL DEMAND MET	22566	21815	19122	17084
Load Shedding	0	0	0	0
MSEDCL DEMAND	22566	21815	19122	17084
TPCL GENERATION	873	827	964	576
AEML GENERATION	485	309	283	284
MUMBAI DEMAND	2542	2518	2387	1468
OTHER DISCOM DEMAND	382	354	404	283
STATE DEMAND MET	25490	24686	21913	18835
STATE DEMAND	25490	24686	21913	18835
Frequency (Hz)	49.97	49.89	49.98	50.00

FREQUENCY PARTICULARS

MAXIMUM FREQ.	MINIMUM FREQ.	AVERAGE FREQ.	FREQ. BELOW 49.4 Hz
50.15 Hz at 08.34 Hrs	49.64 Hz at 12.21 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 11/Feb/2022

Generating unit	Generation			
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)
Koradi				
Unit 6	3.68	39.12	185	115
Unit 7	0.00	0.00	0	0
Unit 8	14.16	152.62	606	513
Unit 9	12.88	145.44	569	505
Unit 10	12.87	138.30	565	495
Total	43.58	475.48		
Bhusawal				
Unit 3	3.06	35.06	155	120
Unit 4	0.00	0.00	0	0
Unit 5	9.63	104.62	480	285
Total	12.68	139.67		
Parli				
Unit 6	3.13	42.76	187	0
Unit 7	3.69	43.23	180	144
Unit 8	3.67	41.15	180	141
Total	10.50	127.14		
Chandrapur				
Unit 3	3.54	14.19	182	118
Unit 4	3.39	7.42	170	116
Unit 5	7.44	88.05	340	273
Unit 6	7.48	84.99	340	268
Unit 7	8.35	89.42	408	289
Unit 8	10.32	113.55	475	290
Unit 9	9.95	110.49	456	311
Total	50.48	508.11		
Paras				
Unit 3	4.22	49.59	245	139
Unit 4	4.06	47.47	232	140
Total	8.27	97.06		
Khaparkheda				
Unit 1	3.16	35.31	155	120
Unit 2	3.18	5.29	155	115
Unit 3	3.70	41.73	196	127
Unit 4	3.55	32.95	178	126
Unit 5	9.87	115.31	465	280
Total	23.46	230.58		
Nasik				
Unit 3	0.00	0.00	0	0
Unit 4	3.09	36.02	166	117
Unit 5	3.02	29.86	158	117
Total	6.11	65.88		
Uran				
All Units	6.99	77.98	322	262
Total	6.99	77.98		
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)	0.24	1.94	24	0
Total	0.24	1.94		
Koyna				

Generating unit	Generation			
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)
Stage 1-2	1.72	26.06	205	35
Stage 4	0.10	23.04	90	0
Stage 3	0.26	10.55	80	0
Total	2.07	59.66		
Hydro				
KDPH	0.86	7.32	36	35
VTRNA	0.64	8.01	60	0
TILLARI	0.52	5.68	58	0
BHIRA T.R.	0.18	2.36	80	0
SMLHY_PTN	6.00	53.70	268	200
GHATGHAR	0.35	5.39	125	0
Total	8.54	82.47		
Wind				
Total	16.65	121.80	0	0
Total	16.65	121.80		
CPP				
APML(Mus)	67.07	756.14	0	0
JSWEL(Mus)	14.68	158.99	0	0
VIPL(Mus)	0.00	0.00	0	0
RPLAMT-Mus	26.92	302.94	0	0
SWPGPL-Mus	8.02	88.66	0	0
Other(Mus)	40.41	439.99	0	0
Total	157.09	1746.71		
SOLAR				
Total	8.74	94.85	0	0
Total	8.74	94.85		
Tata				
Trombay 5	6.91	59.25	473	255
Trombay 6	0.00	0.00	0	0
Trombay 7A	2.64	22.49	118	64
Trombay 7B	1.58	14.82	68	51
TATA Hydro	3.34	41.11	332	0
Trombay 8	3.66	40.53	226	132
Total	18.12	178.19		
AEML				
DTPS U-1&2	7.22	107.32	485	281
Total	7.22	107.32		

* Infirm Power			Summary			Summary		
Particulars	Daily (Mus)	Monthly	Particulars	Daily (Mus)	Monthly (Mus)	Particulars	Daily (Mus)	Monthly (Mus)
			MSPGCL Thermal	155.09	1643.92	MSPGCL Total	172.69	1864.04
			MSPGCL Thml+Gas	162.07	1721.91	Koyna 1,2 & 4 Total	1.82	49.11
			MSPGCL Hydro	10.62	142.13	State Total	380.51	4112.91

State Load Despatch Center,Airoli (MSETCL)

Hourly Load Data As on 11/Feb/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	5620	276	311	6207	1051	5433	0	0	5539	5285	-699	16969	0	16969	1579	308	18856	49.95
2	5610	285	302	6197	1137	5512	0	0	5471	5129	-608	17084	0	17084	1468	283	18835	50.00
3	5697	313	311	6321	1153	5675	0	0	5367	5192	-551	17517	0	17517	1411	273	19201	50.00
4	5826	315	292	6433	1199	5687	0	0	5332	4825	-524	17343	0	17343	1382	277	19002	50.00
5	5950	322	322	6594	1192	5733	0	0	5467	5218	-525	17927	0	17927	1387	285	19599	49.99
6	6211	335	292	6838	1362	6123	0	0	5648	5326	-628	18710	0	18710	1498	311	20519	49.98
7	6518	429	322	7269	1482	6464	0	1	5569	5628	-721	19794	0	19794	1658	329	21781	49.97
8	7008	686	293	7987	1191	7115	0	103	5139	5232	-754	20521	0	20521	1865	352	22739	50.03
9	7009	753	311	8073	891	7186	0	461	5864	6137	-1024	21345	0	21345	2146	378	23870	50.07
10	6900	692	289	7881	790	7168	0	828	6993	6700	-1239	21734	0	21734	2381	394	24509	50.03
11	6955	498	276	7729	695	7192	0	1056	7629	7460	-1184	22566	0	22566	2542	382	25490	49.97
12	7043	448	295	7786	627	7189	0	1275	7768	7227	-1276	22454	0	22454	2577	374	25405	49.98
13	6555	608	273	7436	432	6845	0	1237	7629	7600	-1382	21815	0	21815	2518	354	24686	49.89
14	6556	546	273	7375	268	6717	0	1187	7337	7316	-1330	21173	0	21173	2365	360	23898	50.05
15	6583	439	262	7284	207	6708	0	1071	7441	7581	-1320	21160	0	21160	2364	371	23895	50.01
16	6748	433	273	7454	141	6823	0	822	7331	7409	-1306	20983	0	20983	2367	360	23710	50.01
17	6942	445	284	7671	141	6966	0	528	6656	6108	-1295	19738	0	19738	2379	382	22498	49.97
18	6909	444	276	7629	183	7095	0	155	5849	5561	-1195	19034	0	19034	2360	395	21788	49.99
19	7123	400	286	7809	168	7211	0	20	5452	5057	-1095	18778	0	18778	2383	392	21553	49.98
20	6816	488	277	7581	272	7180	0	0	5498	5633	-1140	19122	0	19122	2387	404	21913	49.98
21	6526	440	297	7263	418	7028	0	0	5023	4678	-1178	17819	0	17819	2248	390	20457	50.01
22	6105	340	279	6724	433	6290	0	0	5573	5116	-1145	17038	0	17038	2100	380	19518	50.01
23	5981	343	300	6624	491	5970	0	0	5493	5080	-904	16918	0	16918	1901	343	19162	49.94
24	5897	338	290	6525	722	5781	0	0	5412	4789	-664	16834	0	16834	1764	319	18917	49.98
MUs	155.09	10.62	6.99	172.69	16.65	157.09	0.00	8.74	146.48	141.29	-23.69	464.38	0.00	464.38	49.03	8.40	521.80	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.

State Load Despatch Center, Airoli (MSETCL) Statement-VI

Details of Generating Unit Outages/Trippings for 11/Feb/2022

Position as on 6.30 Hrs of 12/Feb/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	Bhusawal Unit 4	500	13/01/2022	00:00		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 U2	126	07/02/2017	17.30		Continued.	No Schedule.(NO PPA)	
PGPL	PGPL U1	262	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)	
MSPGCL	Uran Unit 7	108	25/05/2020	12.51		Continued.	Turbine Blade Failure	
MSPGCL	Koradi Unit 7	210	27/04/2021	20.03		Continued.	Retired (04/08/2021 At 00.00)	
IPP	JSW (J) U1	300	02/09/2021	08.41		Continued.	Turbine vibrations high.	
MSPGCL	Ghatghar Unit-1	125	10/11/2021	23:55		Continued.	Static frequency controller disconnecting switch short circuit problem	10/03/2022
IPP	JSW (J) U3	300	15/01/2022	07:46		Continued.	non availability of load schedule.	
MSPGCL	Uran Unit 5	108	03/02/2022	16:54		Continued.	Gas shortage	
MSPGCL	Parli Unit 6	250	11/02/2022	19:24	12/02/2022	00:19	Furnace Pressure High	

State Load Despatch Center,Airoli (MSETCL)
Details of Line outages/Trippings for 11/Feb/2022

Statement-VII

Position as on 6.30 Hrs of 12/Feb/2022

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
500 KV LINE Outages/Trippings							
CHANDRAPUR - PADGHE HVDC POLE 1	IntraState	12/02/2022	01:15			PO	1) Replacement of B Bus Conductor by Partial Bus Outage 2) Replacement of PG Isolator 3)During Bus 2 outage 400 KV Kalwa -Padghe ckt-1 H/T for safety purpose. 6 hrs 4) During Bus 2 outage 400KV Kalwa-Padghe ckt-2 will be in service through TBC. 5.) HVDC pole -1 out durion BUS-2 outage .6) HVDC-pole 2 out for safety purpose .Shifting below lines B-bus to ABus through TBC 400KV Tarapur -ckt 2 and 400KV
CHANDRAPUR - PADGHE HVDC POLE 2	IntraState	12/02/2022	01:37	12/02/2022	06:25	PO	safety purpose. Removing of Jumper of B Bus Section-4 .HVDC- pole 2 out for 5 hrs for safety purpose.1) Replacement of B Bus Conductor by Partial Bus Outage 2) Replacement of PG Isolator 3)During Bus 2 outage 400 KV Kalwa -Padghe ckt-1 H/T for safety purpose. 6 hrs 4) During Bus 2 outage 400KV Kalwa-Padghe ckt-2 will be in service through TBC. 5.) HVDC pole -1 out durion BUS-2 outage .6) HVDC-pole 2 out for safety purpose .Shifting below lines B-bus to ABus through TBC 400KV Tarapur -ckt 2 and 400KV Nagaothane ckt-2
400 KV MAINBAY Outages/Trippings							
MAIN BAY - 404 CHD SWITCHING CKT2 @ CHANDRAPUR 2	IntraState	11/02/2022	08:57	11/02/2022	13:56	PO	Daignostic testing and allied bay maintenance work
400 KV LR Outages/Trippings							
400KV KORADI-BHUSAWAL (Koradi end)	IntraState	11/02/2022	10:10			PO	Bus-1 Y ph PG isolator hotspot attending work and CB Y ph pole hotspot attending work by maintenance unit koradi.
400 KV LINE Outages/Trippings							
DHULE - SSNNL CKT - 1	InterState	11/02/2022	08:28	11/02/2022	18:49	PO	Replacement of damaged earthwire, replacement of PID suspicious disc insulator strings and other routine maintenance work.400kV SSNNL Ckt-2 A/R switch will be kept on non auto mode.
KALWA - TALEGAON (PG)	InterState	11/02/2022	23:09	12/02/2022	00:50	EO	Hot spot attending work of R phase Line side CT conductor near the clamp (Temp. 115 deg. C)
THAPTI TANDA - WALUJ	IntraState	01/02/2022	13:01			PO	TOWER HEIGHT RAISING FOR MUMBAI -NAGPUR SAMRUDDHI HIGHWAY CROSSING . DISMANTLING OF LOC 155(DA+0) AND 156(DA+0) .ERECTION OF NEW TOWERS AT LOC 155(DD+9) AND LOC 156(DD+9) RESTRINGING FROM LOC 155 TO 156.

State Load Despatch Center, Airoli (MSETCL)
Details of Line outages/Tripping for 11/Feb/2022

Statement-VII

Position as on 6.30 Hrs of 12/Feb/2022

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
DEEPNAGAR - THAPTI TANDA	IntraState	01/02/2022	13:11			PO	TOWER HEIGHT RAISING FOR MUMBAI -NAGPUR SAMRUDDHI HIGHWAY CROSSING . DISMANTLING OF LOC 155(DA+0) AND 156(DA+0) .ERECTION OF NEW TOWERS AT LOC 155(DD+9) AND LOC 156(DD+9) RESTRINGING FROM LOC 155 TO 156.
AURANGABAD(MS) - PUNE (GIS) CKT - 2	IntraState	04/02/2022	14:43			HT	H/T TO CONTROL 400KV TALEGAON PG -CHAKAN LINE LOADING.
DEEPNAGAR - AURANGABAD (WALUJ)	IntraState	11/02/2022	09:14	11/02/2022	18:27	PO	Routine Maintenance work
PADGHE - KALWA CKT - 1	IntraState	11/02/2022	14:34			PO	1) Replacement of B Bus Conductor by Partial Bus Outage 2) Replacement of PG Isolator 3)During Bus 2 outag 400 KV Kalwa -Padghe ckt-1 H/T for safety purpose. 6 hrs 4) During Bus 2 outage 400KV Kalwa-Padghe ckt-2 will be in service through TBC. 5.) HVDC pole -1 out durion BUS-2 outage .6) HVDC-pole 2 out for safety purpose .Shifting below lines B-bus to ABus through TBC 400KV Tarapur -ckt 2 and 400KV
BUS COUPLER @ KALWA	IntraState	11/02/2022	20:18	11/02/2022	21:49	EO	1) To attend Hot Spot on R phase 29 B IPS Tube clamp(193 deg. C) 2) Y-phase CT Line side pad Nut bolt (Temp. 128 deg C) 3) CB, DCRM Timing Test
400 KV WALUJ (400 KV) - BABHALESHWAR CKT	IntraState	11/02/2022	23:06	12/02/2022	00:46	T	Distance Protection.
400 KV ICT Outages/Tripping							
400/11kv STN-4B @ DEEPNAGAR	IntraState	03/02/2022	12:57			PO	Oil Filtration and other allied works of STN - 4B at 2 x 500MW , BTPS, Deepnagar, MSPGCL
400/220/33 KV 500MVA ICT - 2 @ KORADI 2	IntraState	11/02/2022	09:42	11/02/2022	19:05	PO	33kV BPI excavation work associated with rapid restoration scheme near 33KV side of ICT2
400/220 KV 167MVA SPARE ICT @ LONIKAND 2	IntraState	11/02/2022	12:10	11/02/2022	18:45	PO	For demonstration of SFRA kits by agencies.
400 KV BR Outages/Tripping							
400KV 125MVAR BUS REACTOR @ KARAD	IntraState	11/02/2022	09:36	11/02/2022	17:40		For Bushing and Winding Tan Delta
220 KV LINE Outages/Tripping							
MULUND - GIS BHANDUP	IntraState	29/01/2022	15:44			T	cABLE FAULT
GHODBUNDER - MSETCL BOISAR	IntraState	04/02/2022	13:40			T	TRIPPED ON DIST.PROTN.
KARAD - VITA CKT- 1	IntraState	07/02/2022	08:36			PO	For tower erection of Loc.no.23-24 and stringing work between Loc.no.22-23-24-25 in respect of modification of EHV lines crossing Pune � Miraj Railway electrification work
KARAD - VITA CKT- 2	IntraState	07/02/2022	08:40			PO	For tower erection of Loc.no.23-24 and stringing work between Loc.no.22-23-24-25 in respect of modification of EHV lines crossing Pune � Miraj Railway electrification work

State Load Despatch Center,Airoli (MSETCL)
Details of Line outages/Trippings for 11/Feb/2022

Statement-VII

Position as on 6.30 Hrs of 12/Feb/2022

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
TAMBATI - ADLABS	IntraState	08/02/2022	10:32			PO	CB Pole overhauling work by agency and attending B ph CT oil leakage at 220KV Tambati substation end and attending Y ph CT oil leakage at 220KV Adlab substation
PADGHE - PAL DOMBIVALI	IntraState	11/02/2022	08:05	11/02/2022	11:38	PO	Erection of new 220kV D/C tower of type 60+ 6 (1 no) between existing Loc No. 44 and related stringing work for cut point formation.
PADGHE - JAMBHUL 1	IntraState	11/02/2022	08:10	11/02/2022	12:00	PO	Erection of new 220kV D/C tower of type 60+ 6 (1 no) between existing Loc No. 44 and related stringing work for cut point formation.
URAN - ONGC URAN	IntraState	11/02/2022	10:15	11/02/2022	17:06	PO	"1. Relay testing work at ONGC end 2. bay maintenance work At Uran End."
TATA BORIVLI MSETCL BORIVLI - 4	IntraState	11/02/2022	11:20	11/02/2022	17:45	PO	UNLOADING 220 KV GIS BAYS IN VICINITY
KANDALGAON - KOYNA (POPHALI)	IntraState	11/02/2022	11:50	11/02/2022	19:35	PO	Emergency tree cutting at Loc.No.173-174,224-225,232-233,237-238,246-247,253-254,260-261,292-293,294-295,343-345 and other line maintenance work
CHAKAN-BHOSARI 1	IntraState	11/02/2022	12:55	11/02/2022	18:35	PO	Y Ph & B Ph CT has higher Tan Delta
JEJURI-LONAND	IntraState	11/02/2022	12:55	11/02/2022	14:16	T	tripped on dist. protn
CHALISGAON - SAYNE	IntraState	11/02/2022	17:30	11/02/2022	20:42	PO	replacment of Rph CT to isolator jump due to red hot temp 106deg.
INFOSYS - HINJAWADI 1	IntraState	11/02/2022	19:58	11/02/2022	22:11	EO	Attending HOTSPOT 'R' Phase Gantry to CT (CT side) and 'Y' Phase Gantry to CT at 220kV Hinjawadi-1 S/S.(images attached h/w)
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.
220/132KV 100 MVA ICT NO 2 @ MAGARPATTA	IntraState	01/12/2021	14:32			PO	Replacement of existing 100 MVA ICT 02 by new 200 MVA ICT 02
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
220/132-110KV 200MVA ICT 2 @ MIRAJ	IntraState	28/01/2022	12:10			PO	Dismantling of bus post insulator jump of 220kV Main bus by hot line unit for erection of new bus post isolator
220/22 KV 50 MVA PTR 2 @ PADGHE	IntraState	11/02/2022	09:58			PO	1. Retrofitting of REF relay for MTAMC work 2. Diagnostic testing work 3. Anticorrosive Painting work
220/100 KV 200 MVA ICT 2 @ KOLSHET	IntraState	11/02/2022	10:58	11/02/2022	16:05	PO	1)Diagnostic testing work i.e. SFRA,W/R,PI,DFR,10KV Excitation 2)oil Leakage arresting from HV B phase bushing 3)testing work 4)RMW

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