

State Load Despatch Center, Airoli (MSETCL) Statement I
Daily system Report for 03/Jul/2019 WEDNESDAY

I GENERATION (MUs)			II EXCHANGES (MUs)		
A) MSPGCL	Daily	Monthly	E) InterState Exchanges	Daily	Monthly
1) Thermal	120.147	353.478	1) Gujrat	-4.760	-14.502
2) Hydro	3.728	10.023	2) Madhya Pradesh	5.687	18.421
3) Gas	5.832	19.274	3) Chattisgarh	4.020	12.860
Total MSPGCL	129.707	382.775	4) Maharashtra	92.437	280.502
B) 1) APLM	54.741	161.133	5) Goa (Amona)	-0.506	-1.958
2) JSWEL	19.956	60.320	Total	96.878	295.323
3) VIPL	0.000	0.000	a) Mumbai Schedule	17.060	61.962
4) RPL(AMT)	0.000	3.657	b) Mumbai Drawl	26.073	75.211
5) WPCL	0.000	0.000	c) MSEDCL Bilateral *	1.300	7.315
6) Other IPP	2.480	7.596	Include PX	-10.526	-31.123
7) PGPL	0.000	0.000	d) Mumbai Bilateral *	17.060	61.962
C) 1) TPCL Thermal	13.031	38.111	Include PX	5.466	23.796
2) TPCL Hydro	5.261	12.941	Standby	0.000	0.000
3) TPCL Gas	4.176	10.950	H) ENERGY CATERED (MUs)		
4) AEML Thermal	9.443	28.129	1) MSEDCL	328.856	978.454
D) STATE			2) Mumbai Discoms	57.984	165.340
1) Thermal	219.798	652.424	TOTAL STATE	386.840	1143.794
(A1+C1+C4+(B1-B6))					
2) Hydro	8.989	22.964			
(A2+C2)					
3) Gas	10.008	30.224			
(A3+B7+C3)					
4) Wind	48.031	130.773			
6) SOLAR	3.136	12.088			
TOTAL STATE	289.962	848.473			

* Displayed for information, not added in total.

DETAILS OF MAHARASHTRA STATE PEAK DEMAND(MW) Statement II

PARTICULARS	A. Morning Peak at 10 Hrs	B. Day Peak at 18 Hrs	C. Evening Peak at 20 Hrs	D. Night Minimum at 4 Hrs
MSPGCL Thermal	5136	4827	5333	4727
MSPGCL Hydro	50	227	432	30
MSPGCL Gas	227	226	244	219
MSPGCL Total Generation	5413	5280	6009	4976
Central Sector Receipt	4720	4778	4241	2678
WIND	2245	2034	1927	2061
CPP / IPP Thermal	3389	3032	3649	3155
CPP / IPP Gas	0	0	0	0
SOLAR	338	112	0	0
Exchange with Mumbai	-1350	-1291	-1107	-594
MSEDCL DEMAND MET	14755	13945	14719	12276
Load Shedding	0	0	0	0
MSEDCL DEMAND	14755	13945	14719	12276
TPCL GENERATION	998	1148	1103	690
AEML GENERATION	374	372	499	373
MUMBAI DEMAND	2722	2811	2709	1657
STATE DEMAND MET	17477	16756	17428	13933
STATE DEMAND	17477	16756	17428	13933
Frequency (Hz)	50.04	49.97	49.93	50.07

FREQUENCY PARTICULARS

MAXIMUM FREQ.	MINIMUM FREQ.	AVERAGE FREQ.	FREQ. BELOW 49.2 Hz
50.14 Hz at 13.01 Hrs	49.74 Hz at 06.13 Hrs	49.98	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 03/Jul/2019

Generating unit	Generation			
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)
Koradi				
Unit 6	0.69	5.44	140	0
Unit 7	3.12	7.61	145	110
Unit 8	7.13	20.18	350	260
Unit 9	7.09	17.41	344	257
Unit 10	0.00	0.00	0	0
Total	18.02	50.64		
Bhusawal				
Unit 3	0.00	0.00	0	0
Unit 4	9.92	28.72	505	360
Unit 5	9.88	28.58	500	360
Total	19.80	57.30		
Parli				
Unit 4	0.00	0.00	0	0
Unit 5	0.00	0.00	0	0
Unit 6	0.00	0.00	0	0
Unit 7	0.00	0.00	0	0
Unit 8	0.00	0.00	0	0
Total	0.00	0.00		
Chandrapur				
Unit 3	3.83	6.05	180	140
Unit 4	3.67	11.45	169	125
Unit 5	8.44	24.74	375	315
Unit 6	8.69	23.76	445	304
Unit 7	8.11	23.77	363	300
Unit 8	9.34	27.41	425	360
Unit 9	9.20	27.11	420	360
Total	51.29	144.29		
Paras				
Unit 3	4.87	15.25	250	173
Unit 4	4.44	13.28	225	146
Total	9.31	28.53		
Khaparkheda				
Unit 1	2.66	8.86	150	75
Unit 2	0.00	3.31	0	0
Unit 3	3.69	10.86	184	132
Unit 4	3.52	10.40	175	123
Unit 5	0.00	3.85	0	0
Total	9.87	37.29		
Nasik				
Unit 3	3.97	11.94	180	158
Unit 4	4.13	12.16	202	162
Unit 5	3.76	11.33	161	152
Total	11.87	35.44		
Uran				
All Units	5.83	19.27	380	202
Total	5.83	19.27		
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	0.00	0	0

Generating unit	Generation			
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)
Total	0.00	0.00		
Koyna				
Stage 1-2	1.40	3.57	155	30
Stage 4	0.00	0.00	0	0
Stage 3	0.68	2.23	80	0
Total	2.08	5.79		
Hydro				
KDPH	0.00	0.00	0	0
VTRNA	0.24	0.24	62	0
TILLARI	0.30	0.54	60	0
BHTGR/VEER	0.00	0.00	0	0
BHIRA T.R.	0.36	1.21	40	0
RNGR+BHTSA	0.00	0.00	0	0
BHANDARDRA	0.00	0.00	0	0
ELDARY	0.00	0.00	0	0
SMLHY_PTN	0.00	0.00	0	0
GHATGHAR	0.75	2.24	250	0
Total	1.65	4.23		
Wind				
Total	48.03	130.77	0	0
Total	48.03	130.77		
CPP				
APML(Mus)	54.74	161.13	0	0
JSWEL(Mus)	19.96	60.32	0	0
VIPL(Mus)	0.00	0.00	0	0
RPLAMT(Mus)	0.00	3.66	0	0
WPCL(Mus)	0.00	0.00	0	0
Other(Mus)	2.48	7.60	0	0
Total	77.18	232.71		
SOLAR				
Total	3.14	12.09	0	0
Total	3.14	12.09		
Tata				
Trombay 5	8.18	23.89	444	310
Trombay 6	0.00	0.00	0	0
Trombay 7A	2.63	6.70	116	78
Trombay 7B	1.55	4.25	67	55
Trombay 8	4.85	14.22	222	197
TATA Hydro	5.26	12.94	452	18
Total	22.47	62.00		
AEML				
DTPS U-1&2	9.44	28.13	500	372
Total	9.44	28.13		

* Infirm Power			Summary			Summary		
Particulars	Daily (Mus)	Monthly	Particulars	Daily (Mus)	Monthly (Mus)	Particulars	Daily (Mus)	Monthly (Mus)
			MSPGCL Thermal	120.15	353.48	MSPGCL Total	129.71	382.78
			MSPGCL Thml+Gas	125.98	372.75	Koyna 1,2 & 4 Total	1.40	3.57
			MSPGCL Hydro	3.73	10.02	State Total	289.96	848.47

State Load Despatch Center,Airoli (MSETCL)

Annexure-2

Hourly Load Data As on 03/Jul/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	4980	35	207	5222	1812	3531	0	0	3519	3193	-871	12887	0	12887	1926	14813	49.97
2	4849	35	228	5112	1948	3209	0	0	3113	2990	-703	12556	0	12556	1789	14345	49.99
3	4808	30	229	5067	2051	3173	0	0	3217	2922	-660	12553	0	12553	1712	14265	50.03
4	4727	30	219	4976	2061	3155	0	0	3242	2678	-594	12276	0	12276	1657	13933	50.07
5	4746	35	230	5011	1788	2996	0	0	3406	3264	-604	12455	0	12455	1649	14104	50.01
6	4906	122	228	5256	1641	2956	0	0	4108	4257	-675	13435	0	13435	1759	15194	49.90
7	5224	115	219	5558	1446	3430	0	22	4822	4822	-789	14489	0	14489	1904	16393	49.93
8	5343	115	220	5678	1339	3470	0	117	5133	5178	-932	14850	0	14850	2101	16951	50.04
9	5331	115	230	5676	1764	3463	0	229	5067	4988	-1069	15051	0	15051	2416	17467	50.05
10	5136	50	227	5413	2245	3389	0	338	5435	4720	-1350	14755	0	14755	2722	17477	50.04
11	4786	35	217	5038	2588	3067	0	356	5178	4848	-1539	14358	0	14358	2932	17290	49.98
12	4759	65	223	5047	2732	2846	0	394	4552	4406	-1609	13816	0	13816	3039	16855	49.96
13	4708	188	223	5119	2519	2732	0	398	4135	4220	-1518	13470	0	13470	2988	16458	50.01
14	4682	180	202	5064	2392	2705	0	387	4213	4099	-1406	13241	0	13241	2868	16109	50.00
15	4717	220	228	5165	2239	2746	0	333	4235	4469	-1377	13575	0	13575	2859	16434	49.95
16	4739	130	230	5099	2163	2822	0	221	4318	4439	-1366	13378	0	13378	2857	16235	50.03
17	4792	240	217	5249	2025	2873	0	218	4267	4356	-1340	13381	0	13381	2842	16223	49.96
18	4827	227	226	5280	2034	3032	0	112	4481	4778	-1291	13945	0	13945	2811	16756	49.97
19	5098	269	226	5593	2226	3275	0	11	4719	4550	-1243	14412	0	14412	2748	17160	49.99
20	5333	432	244	6009	1927	3649	0	0	4402	4241	-1107	14719	0	14719	2709	17428	49.93
21	5406	477	291	6174	1698	3646	0	0	4120	4072	-1042	14548	0	14548	2608	17156	49.96
22	5417	417	318	6152	1665	3711	0	0	3713	3476	-930	14074	0	14074	2478	16552	49.90
23	5528	131	370	6029	1847	3721	0	0	3311	3081	-1001	13677	0	13677	2381	16058	49.95
24	5305	35	380	5720	1881	3580	0	0	3070	2831	-1057	12955	0	12955	2229	15184	49.93
MUs	120.15	3.73	5.83	129.71	48.03	77.18	0.00	3.14	99.78	96.88	-26.07	328.86	0.00	328.86	57.98	386.84	49.98

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 03/Jul/2019

Position as on 6.30 Hrs of 04/Jul/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	
FORCED OUTAGE								
TPC-G	Trombay 6	500	15/07/2015	17:08		Continued.	Economic shutdown	
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	
MSPGCL	Uran Unit 7	108	20/07/2018	12.53		Continued.	Compressor & Turbine Blade Failure.	
IPP	IEPL Unit 1	270	28/08/2018	21.26		Continued.	Poor Coal Receipt	
IPP	SWPGL U-2	135	27/11/2018	00.00		Continued.	No Schedule.	
MSPGCL	Parli Unit 6	250	12/12/2018	00.00		Continued.	Zero Schedule.(water shortage from 25/06/2019)	
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	Parli Unit 8	250	04/06/2019	00.00		Continued.	Zero Schedule (converted to AOH from 25/06/2019)	
MSPGCL	Koyana Unit 5	80	17/06/2019	08.20		Continued.	needle stuck up problem.	
MSPGCL	Koyana Unit 6	80	17/06/2019	08.40		Continued.	needle stuck up problem.	
IPP	Adani U-4	660	19/06/2019	16.09		Continued.	MS Drain Bonnet Leakage.	
MSPGCL	Parli Unit 7	250	25/06/2019	09.45		Continued.	Water Shortage	
MSPGCL	Bhusawal Unit 3	210	28/06/2019	18.35		Continued.	Zero schedule.	
IPP	RPL(AMT) U-2	270	29/06/2019	00.00		Continued.	Zero schedule.	
IPP	RPL(AMT) U-5	270	29/06/2019	03.00		Continued.	Zero Schedule.	
MSPGCL	Koradi Unit 10	660	30/06/2019	11.54		Continued.	Air heater problem	
IPP	RPL(AMT) U-1	270	30/06/2019	16.00		Continued.	Zero Schedule	
IPP	RPL(AMT) U-3	270	01/07/2019	00.00		Continued.	ZERO SCHEDULE.	
IPP	Dhariwal	300	01/07/2019	00.01		Continued.	NO SCHEDULE	
IPP	RPL(AMT) U-4	270	01/07/2019	17.45		Continued.	Zero schedule.	
MSPGCL	Khaparkhedha Unit 2	210	01/07/2019	23.28	04/07/2019	12.42	BOILER VALIDITY EXTENSION WORK.	
MSPGCL	Khaparkhedha Unit 5	500	02/07/2019	01.25		Continued.	Generator Elect. Fault	
MSPGCL	Koradi Unit 6	210	02/07/2019	11.23	03/07/2019	17.08	Air Flow Low	
MSPGCL	Uran Unit 5	108	02/07/2019	12.42	03/07/2019	19.09	Turbine bearing Vabration high	
MSPGCL	Chandrapur Unit 9	500	04/07/2019	00.54	04/07/2019	05.36	Furnace Pressure High	
MSPGCL	Chandrapur Unit 3	210	04/07/2019	06.48		Continued.	Boiler Tube Leakage	

State Load Despatch Center,Airoli (MSETCL) Statement-VI
Details of Generating Unit Outages/Trippings for 03/Jul/2019

Position as on 6.30 Hrs of 04/Jul/2019

Generating Company	Name of Generating Unit	Capacity	Tripped Date	Tripped Time	Sync.Date	Sync. Time	Reason of Outage	Expected Date
MSPGCL	Nasik Unit 5	210	04/07/2019	15.27		Continued.	Zero Schedule.	

State Load Despatch Center, Airoli (MSETCL)
Details of Line outages/Trippings for 03/Jul/2019

Statement-VII

Position as on 6.30 Hrs of 04/Jul/2019

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
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	27/06/2019	19.16		Continued.	HT	Over Voltage
Chandrapur-II - Warora - I	InterState	01/07/2019	10.47		Continued.	EO	01/Jul/2019 RFC 18.35 Flashover string Replacement Work.
Dhule Khandwa II	InterState	03/07/2019	01.30	03/07/2019	11.03	T	Distance Protection
Lamboti - Solapur (PG)	InterState	04/07/2019	10.25	04/07/2019	16.19	PO	Faulty Insulator Replacement Work.
Khadka-Aurangabad (Waluj)	IntraState	29/06/2019	16.33		Continued.	HT	Over Voltage
Chandrapur-II - Nanded ckt II	IntraState	30/06/2019	04.00	03/07/2019	09.22	T	Over Voltage
Akola II - RPL(Rattanindia) Ckt-II	IntraState	01/07/2019	21.50		Continued.	T	Over Voltage
Lonikand I - Koyna stage-IV	IntraState	03/07/2019	03.20	03/07/2019	07.40	HT	Over Voltage
Lonikand I - Koyna stage-IV	IntraState	04/07/2019	03.29	04/07/2019	08.15	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		Continued.	HT	Due To CVT Porcelain Collars Of The ICT-1 Are Damaged.
400/220/33 Kv 315 MVA ICT II @Chandrapur GCR	IntraState	24/06/2019	14.14		Continued.	PO	Oil Filtration Work due to High PPM.
400/220/33 Kv 315 Mva Ict- 2 @Kharghar	IntraState	03/07/2019	15.13	03/07/2019	16.52	PO	To check/attend RPRR trip window indication
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.
Solapur (Pg) South Solapur I	InterState	03/07/2019	12.50	03/07/2019	14.30	PO	Quarterly Maintenance Work
Tillari Amona	InterState	04/07/2019	21.14		Continued.	T	Distance Protection
BOISAR BORIVALI	IntraState	24/07/2018	13.18		Continued.	HT	To Control Line Loading(H/T from Boisar end)
Balapur-Akola I	IntraState	20/06/2019	12.15	03/07/2019	16.57	PO	New Tower Erection Work And Stringing Work At Railway Crossing.
Balapur-Akola li	IntraState	20/06/2019	12.15	03/07/2019	16.58	PO	New Tower Erection Work And Stringing Work At Railway Crossing.
Miraj-Ichalkaranji I	IntraState	24/06/2019	12:14		Continued.	T	Tower Collapse.
Chandrapur GCR - Warora - I	IntraState	24/06/2019	14.01		Continued.	HT	Outage on Chandrapur ICT 2.
Chandrapur GCR - Wani	IntraState	29/06/2019	19.39	03/07/2019	15.51	HT	Outage on Chandrapur ICT 2.
Beed-Patoda Ckt 1	IntraState	03/07/2019	10.00	03/07/2019	13.34	PO	Battery Bank changing work
Patoda-Manjarsumba	IntraState	03/07/2019	10.00	03/07/2019	20.10	PO	Battery Bank changing work
Lamboti - Solapur li(Bale) Ckt- I	IntraState	03/07/2019	10.03	03/07/2019	13.24	PO	Quarterly Maintenance Work
Tembhurni - Jeur	IntraState	03/07/2019	10.25	03/07/2019	16.10	PO	Quarterly Maintenance Work
Adlabs - Pedambe	IntraState	03/07/2019	10.52	03/07/2019	18.27	PO	Line Signature analysis and Tree cutting
Nagothane-Wadkhal-I	IntraState	03/07/2019	11.47	03/07/2019	13.57	EO	To attend Hot Spot
Badnera-Akola I	IntraState	03/07/2019	13.08	03/07/2019	18.29	PO	Construction work
Badnera-Akola li	IntraState	03/07/2019	13.09	03/07/2019	18.33	PO	Construction work
Nagothane-Wadkhal II	IntraState	03/07/2019	14.14	03/07/2019	17.52	EO	To attend Hot Spot
Kalwa - Mulund 2	IntraState	03/07/2019	17.37	03/07/2019	19.08	EO	cable termination work at Mulund end
Flagship-Chinchwad	IntraState	04/07/2019	09.35	04/07/2019	18.57	HT	Load Management to Avail Outage On Chinchawad Bus Section 1 & 2.

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 03/Jul/2019

Statement-VII

Position as on 6.30 Hrs of 04/Jul/2019

Name of Line	Inter State / Intra State	Tripped Date	Tripped Time	Sync. Date	Sync. Time	Outage Type	Reason of Outage
Chinchwad- Parvati	IntraState	04/07/2019	10.54	04/07/2019	18.51	HT	Load Management to Avail Outage On Chinchwad Bus Section 1 & 2.
Badnera-Akola I	IntraState	04/07/2019	11.17	04/07/2019	19.30	PO	Tower Erection Work.
Badnera-Akola li	IntraState	04/07/2019	11.18		Continued.	PO	Tower Erection Work.
Boisar Versova Line	IntraState	04/07/2019	13.29		Continued.	T	Distance Protection
Mahindra Vehicle-Bridgestone	IntraState	04/07/2019	14.35	04/07/2019	23.44	PO	Safety of Stringing of 132 KV M/C Line To Tapping Point.
Shivajinagar-Gangapur	IntraState	04/07/2019	15.34	04/07/2019	18.20	EO	Insulator Erection Work At Gangapur End.
Nerul-Trombay	IntraState	04/07/2019	19.13	04/07/2019	19.32	EO	HT Due Tree Fallen At LOC 723, 724.
220kv Halkarni- Tillary	IntraState	04/07/2019	21.14	04/07/2019	23.15	T	Distance Protection
220 KV ICT Outages/Trippings							
220/22kv 100MVA T/F-I @ Nalasopara	IntraState	30/06/2019	02.50		Continued.	T	Diff operated, bucholz tripped, CTR Operated.
220/132 Kv 200 Mva Bbl Ptr 4 @Phursungi	IntraState	04/07/2019	10.15	04/07/2019	14.35	PO	Attending DC Leakage In CTR System.
220/100 Kv 100mva Bharat Bijlee Ptr No 4 @Chinchwad	IntraState	04/07/2019	10.53	04/07/2019	18.40	HT	Load Management to Avail Outage On Chinchwad Bus Section 1 & 2.
220/132 Kv 100mva Cgl Ptr No 6 @Chinchwad	IntraState	04/07/2019	10.53	04/07/2019	18.45	HT	Load Management to Avail Outage On Chinchwad Bus Section 1 & 2.
220/132 Kv 200mva Cgl Ptr No 3 @Chinchwad	IntraState	04/07/2019	11.08	04/07/2019	18.08	HT	Load Management to Avail Outage On Chinchwad Bus Section 1 & 2.
220/100 Kv 200 Mva Vijai Ict 3 @Trombay	IntraState	04/07/2019	14.30	04/07/2019	17.18	EO	Attending Oil Leakage
220/132 kv 200 MVA ICT- I @ Nanded	IntraState	04/07/2019	18.24	04/07/2019	20.15	PO	Oil Top Up Work.
132 KV LINE Outages/Trippings							
Amalner - Nardhana	IntraState	23/06/2019	20.02		Continued.	T	DISTANCE PROTECTION NRD--> Y, PHASE, IY=8.33KA, IB=8.309KA, 45.86KM 5 NO TOWERS COLLAPSED TOWER NO 9 TO 13 FROM AMALNER

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