

DELHI TRANSCO LTD.

STATE LOAD DISPATCH CENTER

PROGRESS REPORT

JULY - 2019

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SALIENT FEATURES OF DELHI POWER SYSTEM

Sr. No.	Features	JUL. 2018	JUL 2019
1	Effective Generation Capacity within Delhi in MW		
	Rajghat Power House	135	135
	Gas Turbine	270	270
	Pragati Power Corporation Ltd.	330	330
	Badapur Thermal Power Station	705	0
	Rithala GT	108	0
	Bawana	1372	1372
	TOWMCL (Waste to Energy plant)	16	16
	EDWPCL (Waste to Energy plant)	10	10
	MSW BAWANA (Waste to Energy plant)	24	24
	Total	2970	2157
2	Maximum Unrestricted Demand (MW)	7016	7409
	Date	10.07.18	02.07.19
	Time	15.26.49	15.37.07
3	Peak Demand met (MW)	7016	7409
	Date	10.07.18	02.07.19
	Time	15.26.49	15.37.07
4	Peak Availability (MW)	7024	7315
5	Shortage (-) / Surplus (+) in MW	(+) 8	(-) 94
6	Percentage Shortage (-) / Surplus (+)	(+) 0.11	(-) 1.27
7	Maximum Energy Consume in a day (Mus)	140.397	146.947
8	Energy Consumed during the month	3682.297	3769.368
9	Load Shedding in Mus		
A)	Due to Grid Restrictions		
i)	Under Frequency Relay Operations	0.000	0.000
ii)	Manual Load shedding from DTL S/Stns.	0.000	0.000
iii)	Load Shedding due to low frequency / Low Voltage / TTC/ATC Violation		
	NDPL	0.000	0.073
	BRPL	0.009	0.000
	BYPL	0.000	0.000
	NDMC	0.000	0.000
	MES	0.000	0.000
iv)	Due to transmission Constraints in Central Sector	0.000	0.000
	Total due to Grid Restriction	0.009	0.073
B)	Due to Constraints in System in Mus		
	DTL	0.363	0.518
	NDPL	0.396	0.127
	BRPL	1.866	0.884
	BYPL	0.132	0.169
	NDMC	0.000	0.007
	MES	0.000	0.000
	Other Agencies	0.027	0.004
	Total	2.784	1.709
11	Grand Total in Mus	2.793	1.782

2. PERFORMANCE OF GENERATING STATIONS WITHIN DELHI DURING JULY 2019

A) For the month of July 2019

All Figures in MUs

S. No	Stations	Gross Generation	Aux. Consumption	Net Generation	Availability (%)	Backing Down
1.	RPH	0.000	0.117	-0.117	0.00	0.00
2.	GT	58.850	2.100	56.750	82.72	104.23
3.	PPCL	163.261	3.892	159.369	93.04	61.488
4.	BTPS	0.000	0.566	-0.566	--	--
5.	Rithala	0.000	0.000	0.000	0.00	--
6.	Bawana	373.298	11.849	361.449	92.11	522.92
7.	Towmcl	14.782	2.132	12.650	--	--
8.	EDWPCL	2.837	0.769	2.068	--	--
9.	DMSWL	12.777	2.312	10.465	--	--
	TOTAL	625.805	23.737	602.068	--	--

B) For the Year 2019-20 (Upto July 2019)

Power Station	Effective Capacity (MW)	Net Generation in MUs for July 2019	Availability (%) for July 2019	PLF (%) for July 2019	Cumulative Generation in MUs upto July 2019 for the year 2019-20	Cumulative Availability in % upto July 2019 for the year 2019-20	Cumulative PLF in % upto July 2019 for the year 2019-20
RPH	135	-0.117	0.00	0.00	-0.524	0.00	-0.15
GT	270	56.750	82.72	29.23	213.741	84.72	27.28
PPCL	330	159.369	93.04	67.22	568.809	94.05	60.73
BTPS	705	-0.566	--	--	-2.381	--	--
Rithala	108	0.000	0.00	0.00	0.00	0.00	0.00
Bawana	1372	361.449	92.11	37.50	1314.876	84.91	33.84
Towmcl	16	12.650	--	128.32	50.666	--	--
EDWPCL	--	2.068	--	32.84	10.900	--	--
DMSWL	--	10.465	--	73.94	40.799	--	--
TOTAL	2936	602.068	--	-	2196.886	--	--

3 DETAILS OF OUTAGES OF GENERATING STNS. WITHIN DELHI W.E.F. APRIL 2019

(A) RPH

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	67.5	08.05.15	13.40	Contd.		Not in operation due to not meeting pollution norms.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	67.5	21.05.15	10.20	Contd.		Not in operation due to not meeting pollution norms.

(B) Gas Turbine

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	30	12.06.19	08.28	12.06.19	12.15	unit tripped due to Electrical trouble normal shut down.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	30	01.06.19	16.45	01.06.19	20.00	Unit tripped on Electrical trouble Normal shut down alarms.
		01.07.19	22.06	01.07.19	23.40	Electrical trouble normal shutdown
		02.07.19	01.30	02.07.19	22.20	Electrical trouble normal shutdown

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
3	30	12.04.19	02.25	12.04.19	04.40	Machine tripped due to fault occurred in high vibration pick up.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
4	30	Nil				

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
5	30	27.05.19	11.08	27.05.19	12.54	Tripped due to Electrical trouble

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
6	30	30.04.19	01.18	30.04.19	02.05	Machine tripped due to malfunctioning of IP pack
		02.05.19	16.08	02.05.19	17.37	Tripped due to failue of communication I/O pack.
		19.06.19	17.58	19.06.19	19.18	Unit tripped on heavy jerk.
		21.07.19	16.16	21.07.19	17.55	Electrical trouble.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG -1	30	09.04.19	08.00	28.05.19	20.32	Major overhauling.
		01.06.19	21.15	02.06.19	19.15	Machine out due ot axial shift problem.
		03.06.19	12.00	12.06.19	17.45	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG -2	30	11.05.19	17.55	11.05.19	20.05	Unit tripped due to Class A channel I&2 trip.
		05.06.19	02.14	05.06.19	04.01	Unit tripped due to durm level disturbance.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG -3	30	05.04.19	01.15	05.04.19	02.15	Machine triped on durm level very high.
		02.05.19	23.45	03.05.19	05.15	Tripped due to faulty relay.
		07.06.19	21.55	08.06.19	02.04	Unit tripped due to Hotwell level very high. Lube oil Press. LOW and Class A trip relay alarm also appeared.
		19.06.19	17.58	19.06.19	20.48	Unit tripped on heavy jerk.
		12.07.19	10.50	12.07.19	12.08	Low vaccume pressure
		15.07.19	16.55	15.07.19	17.29	Tripped due to drum level very high.
		21.07.19	16.16	21.07.19	18.50	Unit tripped with Unit #6

(C) PRAGATI

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	104	01.04.19	00.00	05.04.19	08.04	Stopped due to low demand and high frequency
		24.04.19	00.00	25.04.19	00.14	
		25.04.19	00.47	01.05.19	16.54	Not scheduled due to available in Open cycle.
		03.05.19	04.15	10.05.19	13.52	Stopped due to low demand and high frequency
		17.05.19	22.30	29.05.19	12.32	
		19.06.19	18.02	19.06.19	18.25	Grid disturbance
		21.06.19	10.05	21.06.19	11.15	Stopped to attend hot point by DTL.
		17.07.19	08.08	19.07.19	09.15	Stopped due to low demand and high frequency
		19.07.19	09.15	19.07.19	18.00	Change Air Filters
19.07.19	18.00	20.07.19	11.11	Stopped due to low demand and high frequency		

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	104	05.04.19	17.03	22.04.19	21.19	Stopped due to low demand and high frequency
		10.05.19	15.56	10.05.19	17.00	GT-2 swapped with GT-1
		10.05.19	17.00	10.05.19	18.00	DC reduced for un wrapping inlet air filters.
		10.05.19	18.00	20.05.19	14.39	Stopped due to low demand and high frequency
		18.06.19	00.08	19.06.19	14.37	
		25.07.19	15.30	31.07.19	23.59	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG	122	01.04.19	00.00	01.04.19	08.15	Unit stopped for MI
		14.04.19	16.50	15.04.19	04.45	Attending governing system.
		03.05.19	01.34	03.05.19	04.02	Internal fault
		17.05.19	22.30	20.05.19	17.57	Stopped due to low demand and high frequency
		19.07.19	04.55	19.07.19	06.27	Tripped due to grid disturbance
		30.07.19	09.10	30.07.19	10.06	Internal fault

(E) BAWANA CCGT POWER STATION

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	216	01.05.19	10.00	01.05.19	12.00	Transformer testing by PGCIL
		01.05.19	12.00	02.05.19	18.00	
		26.06.19	10.09	26.06.19	11.22	Machine Tripped on Guillotine damper feedback close .

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	216	21.06.19	17.30	21.06.19	21.42	Machine stopped for attending oil leakage in trip oil line.

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG-1	254	01.05.19	00.00	01.05.19	12.00	Transformer testing by PGCIL
		15.05.19	07.42	18.05.19	12.00	Dislodging of R phase CT of excitation transformer from its base plate and filling on transformer enclosure was cause of tripping.
		11.06.19	13.35	11.06.19	15.41	Machine Tripped on closure of HPMS-39.
		26.06.19	10.09	26.06.19	12.02	Machine Tripped on Guillotine damper feedback close .

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
3	216	29.04.19	20.18	29.04.19	21.37	Malfunctioning of compressor bleed valve brought machine on FSNL.
		02.05.19	12.16	02.05.19	12.54	Machine came on FSNL itself due to problem in excitation.
		27.05.19	11.58	27.05.19	13.41	Gas leakage

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
4	216	01.04.19	00.00	04.04.19	13.00	Unit kept out due to leakage of pressure.
		04.04.19	13.00	08.04.19	20.00	

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG-2	254	01.04.19	00.00	04.04.19	13.00	Replacement of R phase bushing of STGT Transformer.
		15.05.19	07.44	15.05.19	13.21	Unit tripped on instantaneous high set element of stand by E/F protection of generator transformer
		27.05.19	11.58	27.05.19	14.00	Gas leakage.
		03.07.19	22.30	04.07.19	16.30	Oil leakage in JOP Line.
		26.07.19	12.15	26.07.19	13.33	STG#2 tripped at 12:15 hrs.Fault in B-phase of ICT-2 of 400 KV, DTL led to heavy fault current which led to tripping of STG#2.Settings of overhead differential relays have been reviewed to avoid fault outside the zone of Transformer Protection.

4 ALLOCATION OF POWER TO DELHI

A) Time block 00.00hrs. to 24.00hrs. @ 0% allocation from Unallocated Quota from 25.02.2019

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	134	0	0	134
Rihand-I	1000	150	100	89	0	0	89
Rihand Stage -II	1000	150	126	115	0	0	115
Rihand Stage -III	1000	150	132	120	0	0	120
ANTA GPS	419	63	44	41	0	0	41
Auriya GPS	663.36	99	72	68	0	0	68
Dadri GPS	829.78	129	91	86	0	0	86
Dadri NCTPS (Th)	840	0	756	668	0	0	668
Dadri NCTPS (Th) Stage-II	980	147	728	665	0	0	665
Unchahaar-I TPS	420	20	24	21	0	0	21
Unchahaar-II TPS	420	63	47	41	0	0	41
Unchahaar-III TPS	210	31	29	25	0	0	25
Unchahaar-IV TPS	500	75	0	0	0	0	0
TOTAL	10282	1377	2298	2073	0	0	2073
NHPC							
Baira Suil HPS	180	0	20	19	0	0	19
Salal HPS	690	0	80	77	0	0	77
Tanakpur HEP	94	0	12	12	0	0	12
Chamera HEP	540	0	43	41	0	0	41
Chamera-II HEP	300	54	40	38	0	0	38
Chamera-III HEP	231	35	29	28	0	0	28
URI-I HEP	480	0	53	51	0	0	51
URI-II HEP	240	0	32	31	0	0	31
Sewa HEP	120	18	16	15	0	0	15
Dhaulti Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
Parbati-III HEP	520	66	66	63	0	0	63
Singrauli small hydro	8	0	1.53	1	0	0	1
TOTAL	4073	272	480	458	0	0	458
NPC							
Narora APS	440	64	47	40	0	0	40
RAPP (C)	440	64	56	49	0	0	49
TOTAL	880	128	103	88	0	0	88
SJVNL							
Nathpa Jhakri HEP	1500	149	142	135	0	0	135
THDC							
Tehri Hydro	1000	99	63	60	0	0	60
Koteshwar HEP	400	40	39	38	0	0	38
TOTAL	1400	139	102	98	0	0	98
Total	18135	2065	3126	2852	0	0	2852
Allocation from ER and Tala HEP							
Farakka	1600	0	22	20	0	0	20
Kahalgaon	840	0	51	45	0	0	45
Tala HEP	1020	153	30	29	0	0	29
Kahalgaon-II	1500	0	157	139	0	0	139
Total ER	4960	153	261	232	0	0	232
Joint Venture							
Jhajjar TPS	1500	114	693	634	0	0	634
Ultra Mega Projects							
Sasan	3960	0	446	404	0	0	404
Grand Total	28555	2332	4525	4122	0	0	4122

5 ALLOCATION OF POWER TO DISCOMS

A) ALLOCATION OF POWER TO VARIOUS LICENCEES AS PER ORDER OF DERC AND DECISION OF GNCTD FOR ALLOCATION OF CENTRAL SECTOR STATIONS (DADRI THERMAL & BTPS) AND STATE SECTOR GENERATING STATIONS w.e.f. 06.08.2013.

(Allocation In %)

(A) 10.00hrs. to 17.00hrs.

SOURCES	LICENSEES					
	NDMC	MES	NDPL	BRPL	BYPL	TOTAL
1. Central Sector without Dadri (Th)	0	0	29.18	43.58	27.24	100.00
2. Dadri (Th)	16.63	0	24.22	36.86	22.39	100.00
3. BTPS	17.73	7.09	21.81	33.2	20.17	100.00
4. RPH	0	0	29.025	44.133	26.842	100.00
5. GT	0	0	29.02	44.16	26.82	100.00
6. Pragati	30.3	0	20.22	30.78	18.7	100.00
7. DVC	0	0	29.18	43.58	27.24	100.00
8. BAWANA CCGT*	7.30	1.82	20.688	30.888	19.304	80.00

(B) 00.00hrs. to 10.00hrs. and 17.00hrs. to 24.00hrs.

SOURCES	LICENSEES					
	NDMC	MES	NDPL	BRPL	BYPL	TOTAL
1. Central Sector without Dadri (Th)	0	0	29.18	43.58	27.24	100.00
2. Dadri (Th)	16.53	0	24.22	36.86	22.39	100.00
3. BTPS	17.73	7.09	21.81	33.2	20.17	100.00
4. RPH	0	0	29.025	44.133	26.842	100.00
5. GT	0	0	29.02	44.16	26.82	100.00
6. Pragati	30.3	0	20.22	30.78	18.7	100.00
7. DVC	0	0	29.18	43.58	27.24	100.00
8. BAWANA CCGT*	7.30	1.82	20.688	30.888	19.304	80.00

* 20% POWER OF BAWANA CCGT ALLOCATED TO HARYANA (10%) & PUNJAB (10%)

6 POWER AVAILABILITY-DEMAND POSITION AT THE TIME OF PEAK DEMAND MET DURING JULY 2019

Date	Time of peak demand	Generation within Delhi									Import from the Grid	Schedule from the Grid	OD(-)/UD(+)	Demand met	Shedding	Un-Restricted Demand
		RP H	GT	PPCL	Bawana	Tow mcl	East Delhi	DMS WL	BTPS	Total						
(1)	(2)	(3)	(4)	(5)	(7)	(8)				(9)= (3) to (8)	(10)	(11)	(12)= (11) - (10)	(13)= (11)+ (12)	(14)	(15)= (13)+ (14)
1	15.29.02	0	128	278	582	10	3	8	0	1009	6232	6148	84	7241	0	7241
2	15.35.07	0	153	281	589	13	7	17	0	1060	6349	6255	94	7409	0	7409
3	15.18.46	0	160	260	488	13	8	10	0	939	6146	6189	-43	7085	10	7095
4	00.00.26	0	159	260	676	14	7	10	0	1126	5759	5508	251	6885	0	6885
5	00.01.01	0	102	257	470	17	2	18	0	866	5266	5314	-48	6132	0	6132
6	23.23.09	0	62	258	470	15	3	15	0	823	5186	5109	77	6009	28	6037
7	23.18.32	0	59	279	613	17	-1	16	0	983	5283	5295	-12	6266	0	6266
8	22.58.31	0	59	280	603	18	1	7	0	968	5407	5006	401	6375	113	6488
9	00.00.53	0	68	288	613	13	-2	9	0	989	5191	5044	147	6180	0	6180
10	23.06.35	0	60	291	596	18	3	6	0	974	5642	5451	191	6616	0	6616
11	23.09.32	0	119	280	612	18	2	17	0	1048	5803	5763	40	6851	0	6851
12	22.51.03	0	136	281	592	19	6	16	0	1050	5739	5722	17	6789	0	6789
13	00.00.02	0	133	275	527	18	7	13	0	973	5684	5597	87	6657	0	6657
14	00.00.11	0	75	287	534	17	6	18	0	937	5557	5697	-140	6494	0	6494
15	00.16.22	0	77	257	468	18	6	17	0	843	5131	5194	-63	5974	0	5974
16	15.11.45	0	32	257	467	17	6	18	0	797	4239	4116	123	5036	0	5036
17	00.00.41	0	35	256	469	19	8	17	0	804	4064	3959	105	4868	0	4868
18	15.51.39	0	29	148	472	18	4	18	0	689	4012	3996	16	4701	0	4701
19	22.58.08	0	37	140	619	17	-1	13	0	825	4902	4708	194	5727	0	5727
20	00.00.00	0	64	146	621	16	-1	12	0	858	4651	4519	132	5509	0	5509
21	23.09.54	0	37	148	472	18	-1	17	0	691	4542	4585	-43	5233	0	5233
22	23.04.57	0	75	147	586	18	0	16	0	842	4985	5034	-49	5827	10	5837
23	22.36.24	0	74	144	603	16	0	17	0	854	5632	5611	21	6486	0	6486
24	15.18.54	0	73	254	597	17	0	17	0	958	5659	5557	102	6617	0	6617
25	00.00.01	0	76	256	474	18	0	16	0	840	4793	4898	-105	5633	0	5633
26	00.04.14	0	66	148	469	19	-1	16	0	717	4403	4596	-193	5120	0	5120
27	23.00.00	0	38	146	468	18	0	9	0	679	3986	4065	-79	4665	0	4665
28	23.10.57	0	38	140	467	14	0	6	0	665	4436	4315	121	5101	0	5101
29	22.49.16	0	37	144	564	19	-1	8	0	771	4838	4755	83	5609	0	5609
30	22.54.07	0	38	143	613	17	0	14	0	825	4826	4662	164	5651	0	5651
31	22.58.21	0	38	136	595	17	0	16	0	802	4971	4828	143	5773	0	5773

POWER AVAILABILITY- DEMAND POSITION AT THE TIME OF MAXIMUM UNRESTRICTED DEMAND DURING JULY 2019

Date	Time of peak demand	Generation within Delhi									Import from the Grid	Schedule from the Grid	OD(-)/UD(+)	Demand met	Shedding	Un-Restricted Demand
		RP H	GT	PPCL	Bawana	Tow mcl	East Delhi	DMS WL	BTPS	Total						
(1)	(2)	(3)	(4)	(5)	(7)	(8)				(9)= (3) to (8)	(10)	(11)	(12)= (11) - (10)	(13)= (11)+ (12)	(14)	(15)= (13)+ (14)
1	15.29.02	0	128	278	582	10	3	8	0	1009	6232	6148	84	7241	0	7241
2	15.35.07	0	153	281	589	13	7	17	0	1060	6349	6255	94	7409	0	7409
3	15.18.46	0	160	260	488	13	8	10	0	939	6146	6189	-43	7085	10	7095
4	00.00.26	0	159	260	676	14	7	10	0	1126	5759	5508	251	6885	0	6885
5	00.01.01	0	102	257	470	17	2	18	0	866	5266	5314	-48	6132	0	6132
6	23.23.09	0	62	258	470	15	3	15	0	823	5186	5109	77	6009	28	6037
7	23.18.32	0	59	279	613	17	-1	16	0	983	5283	5295	-12	6266	0	6266
8	22.58.31	0	59	280	603	18	1	7	0	968	5407	5006	401	6375	113	6488
9	00.00.53	0	68	288	613	13	-2	9	0	989	5191	5044	147	6180	0	6180
10	23.06.35	0	60	291	596	18	3	6	0	974	5642	5451	191	6616	0	6616
11	23.09.32	0	119	280	612	18	2	17	0	1048	5803	5763	40	6851	0	6851
12	22.51.03	0	136	281	592	19	6	16	0	1050	5739	5722	17	6789	0	6789
13	00.00.02	0	133	275	527	18	7	13	0	973	5684	5597	87	6657	0	6657
14	00.00.11	0	75	287	534	17	6	18	0	937	5557	5697	-140	6494	0	6494
15	00.16.22	0	77	257	468	18	6	17	0	843	5131	5194	-63	5974	0	5974
16	15.11.45	0	32	257	467	17	6	18	0	797	4239	4116	123	5036	0	5036
17	00.00.41	0	35	256	469	19	8	17	0	804	4064	3959	105	4868	0	4868
18	15.51.39	0	29	148	472	18	4	18	0	689	4012	3996	16	4701	0	4701
19	22.58.08	0	37	140	619	17	-1	13	0	825	4902	4708	194	5727	0	5727
20	00.00.00	0	64	146	621	16	-1	12	0	858	4651	4519	132	5509	0	5509
21	23.09.54	0	37	148	472	18	-1	17	0	691	4542	4585	-43	5233	0	5233
22	23.04.57	0	75	147	586	18	0	16	0	842	4985	5034	-49	5827	10	5837
23	22.36.24	0	74	144	603	16	0	17	0	854	5632	5611	21	6486	0	6486
24	15.18.54	0	73	254	597	17	0	17	0	958	5659	5557	102	6617	0	6617
25	00.00.01	0	76	256	474	18	0	16	0	840	4793	4898	-105	5633	0	5633
26	00.04.14	0	66	148	469	19	-1	16	0	717	4403	4596	-193	5120	0	5120
27	23.00.00	0	38	146	468	18	0	9	0	679	3986	4065	-79	4665	0	4665
28	23.10.57	0	38	140	467	14	0	6	0	665	4436	4315	121	5101	0	5101
29	22.49.16	0	37	144	564	19	-1	8	0	771	4838	4755	83	5609	0	5609
30	22.54.07	0	38	143	613	17	0	14	0	825	4826	4662	164	5651	0	5651
31	22.58.21	0	38	136	595	17	0	16	0	802	4971	4828	143	5773	0	5773

SOURCEWISE SCHEDULED DRAWL FROM NORTHERN GRID AS WELL AS AVAILABILITY WITHIN DELHI FOR JULY 2019

A) AVAILABILITY FROM GENCO AND PRAGATI STNs. (all fig in MUs)

A (i) RPH	0.000
(ii) GT+STG	58.850
(iii) PRAGATI	163.261
(iv) RITHALA	0.000
(v) BAWANA CCGT	373.298
(vi) Timarpur – Okhla	14.782
EDWPCL	2.837
DMSWL	12.777
TOTAL	625.805
B) AVAILABILITY FROM BTPS	-0.566
C) AUXILIARY CONSUMPTION OF GENERATING STNs. EXCLUDING BTPS	23.171
D) NET GENERATION AVAILABLE WITHIN DELHI(A+B-C)	602.068

B) SOURCE WISE SCHEDULED DRAWL FROM THE NORTHERN GRID

NAME OF THE STATION	AVAILABILITY AT POWER PLANT	AVAILABILITY AT DELHI PERIPHERY	ALLOCATION MADE BY NRLDC AT POWER PLANT	ALLOCATION MADE BY NRLDC AT DELHI PERIPHERY
B/SUIL	6.207	6.038	6.207	6.038
SALAL	56.536	55.257	56.536	55.257
SASAN	263.105	255.991	262.142	255.042
TANKAPUR	7.810	7.615	7.810	7.615
CHAMERA	31.684	30.969	31.684	30.969
CHAMERA -II	28.791	28.142	28.791	28.142
CHAMERA -III	20.907	20.435	20.907	20.435
DHAULIGANGA	26.266	25.607	26.266	25.607
SEWA -2	7.242	7.080	7.242	7.080
URI	33.447	32.769	33.447	32.769
URI-II	22.882	22.421	22.882	22.421
KOLDAM	0.000	0.000	0.000	0.000
KOTESHWAR	8.722	8.502	8.722	8.502
PARBATI3	19.121	18.691	19.121	18.691
RAMPUR	0.000	0.000	0.000	0.000
MUNDRA_UMPP	0.000	0.000	0.000	0.000
ANTA (GAS)	0.037	0.036	0.030	0.029
ANTA (RLNG)	25.488	24.725	0.017	0.016
ANTA (LIQUID)	3.756	3.640	0.000	0.000
DADRI (GAS)	3.335	3.274	2.472	2.427
DADRI (RLNG)	53.376	52.443	0.210	0.206
DADRI (LIQUID)	5.124	5.029	0.000	0.000
AURAIYA (GAS)	2.699	2.628	1.709	1.665
AURAIYA (RLNG)	34.751	33.795	0.000	0.000
AURAIYA (LIQUID)	4.944	4.804	0.000	0.000
SINGRAULI	91.707	88.730	81.257	78.622
SINGRAULI_HYDRO	0.424	0.410	0.424	0.410
RIHAND -I	43.833	42.417	40.273	38.973
RIHAND -II	45.634	44.155	43.172	41.774
RIHAND -III	92.494	90.001	87.876	85.511
UNCHAHAHAR-I	14.219	13.864	10.481	10.219
UNCHAHAHAR-II	25.000	24.377	17.839	17.395
UNCHAHAHAR-III	19.572	19.082	14.544	14.180
UNCHAHAHAR-IV	0.000	0.000	0.000	0.000
DADRI (TH)	513.416	504.365	266.316	261.593
DADRI (TH) STAGE-II	511.186	502.179	375.423	368.803
NAPP	29.980	29.156	29.980	29.156

NAME OF THE STATION	AVAILABILITY AT POWER PLANT	AVAILABILITY AT DELHI PERIPHERY	ALLOCATION MADE BY NRLDC AT POWER PLANT	ALLOCATION MADE BY NRLDC AT DELHI PERIPHERY
RAPP 'B'	0.000	0.000	0.000	0.000
RAPP 'C'	37.896	36.479	37.896	36.479
NATHPA JHAKRI	111.675	109.154	111.675	109.154
DULASTI	29.788	29.116	29.788	29.116
TEHRI	11.484	11.196	11.484	11.196
JHAJJAR	478.348	469.915	138.244	135.761
KHELGAON	25.551	25.103	20.292	19.937
KHELGAON-II	101.427	99.657	80.652	79.247
FARAKA	14.847	14.551	11.336	11.111
TALA	19.657	19.218	19.657	19.218
TALCHER	0.000	0.000	0.000	0.000
DVC	243.922	242.416	242.416	240.878
TUTICORIN - BRPL	20.649	20.390	20.390	20.260
MADHYA PRADESH	77.775	76.985	76.985	76.496
UTTAR PRADESH	0.211	0.208	0.208	0.207
WEST BENGAL	0.015	0.015	0.015	0.015
SCLTPS (UP)	2.018	1.984	1.984	1.971
SKS RAIGARH(CHATTISHGARH)	0.017	0.017	0.017	0.016
SEIL PROJECT(ANDHRA PRADESH)	39.878	39.481	39.481	39.231
MEGHALAYA	29.208	29.059	29.059	28.873
ANDHRA	129.416	128.127	128.127	127.314
KARNATAKA	0.050	0.050	0.050	0.049
PUNJAB	0.251	0.249	0.249	0.247
METHON POWER(NDPL)LT-06	82.556	82.047	82.047	81.529
DVC MEJIA (LT-08)(BYPL)	4.798	4.770	4.770	4.737
Acme_RUMS	11.430	11.306	11.306	11.235
Arinsun_RUMS	10.672	10.557	10.557	10.490
Mahindra_RUMS	2.861	2.830	2.830	2.813
URS	1.329	1.321	1.329	1.321
JAMMU & KASHMIR	81.179	80.258	80.258	79.749
HIMACHAL PRADESH	490.546	482.524	482.524	479.460
KERALA	0.165	0.162	0.162	0.161
GUJRAT	0.111	0.110	0.110	0.109
NAGALAND	2.647	2.634	2.634	2.617
HIMACHAL PRADESH LT-59 DVC	8.183	8.049	8.049	7.998
HARYANA (LT-05)	56.803	56.445	56.445	56.090
GOA	5.861	5.829	5.829	5.792
ODHISHA	13.064	12.917	12.917	12.835
ORISSA MT-20 JITPL -DVC	6.300	6.230	6.230	6.190
BIHAR	0.220	0.219	0.219	0.218
MANIPUR	21.471	21.309	21.309	21.174
RAJASTHAN(SOLAR) BRPL-LT36	3.311	3.248	3.248	3.228
RAJASTHAN(SOLAR) BYPL - LT-35	3.526	3.459	3.459	3.437
RAJASTHAN(SOLAR) TPDDL LT-31	3.623	3.555	3.555	3.532
TO JHARKHAND	0.000	0.000	0.000	0.000
TO ANDHRA	-0.521	-0.527	-0.527	-0.534
TO UTTAR PRADESH	-0.496	-0.507	-0.507	-0.513
TO WEST BENGAL	-0.841	-0.848	-0.848	-0.859
TO ASSAM	-0.108	-0.109	-0.109	-0.111
TO VLCP 1800	-0.144	-0.147	-0.147	-0.149
TO ODISHA	-0.098	-0.100	-0.100	-0.101
TO TELENGANA	-0.039	-0.040	-0.040	-0.040
TO GOA	-0.341	-0.348	-0.348	-0.352
TO CHATTISHGARH	-0.097	-0.100	-0.100	-0.101
TO DADAR & NAGAR HAVELI	-0.024	-0.025	-0.025	-0.025
BTPS TO MP	0.000	0.000	0.000	0.000
TO HIMACHAL PRADESH	0.000	0.000	0.000	0.000
TO GUJRAT	-0.098	-0.099	-0.099	-0.101

NAME OF THE STATION	AVAILABILITY AT POWER PLANT	AVAILABILITY AT DELHI PERIPHERY	ALLOCATION MADE BY NRLDC AT POWER PLANT	ALLOCATION MADE BY NRLDC AT DELHI PERIPHERY
POWER EXCHANGE(IEX)	86.399	85.849	86.399	85.849
TO POWER EXCHANGE (IEX)	-92.935	-94.005	-92.935	-94.005
POWER EXCHANGE(PX)	0.000	0.000	0.000	0.000
TO POWER EXCHANGE (PX)	0.000	0.000	0.000	0.000
TO SHARE PROJECT (HARYANA)	-29.909	-30.253	-29.909	-30.253
TO SHARE PROJECT (PUNJAB)	-29.875	-30.219	-29.875	-30.219
TOTAL	4169.310	4090.296	3234.404	3179.526

C) AGENCY WISE BREAKUP OF ENERGY SCHEDULED DRAWL FROM THE GRID

NAME OF THE STATION	AVAILABILITY AT POWER PLANT	AVAILABILITY AT DELHI PERIPHERY	ALLOCATION MADE BY NRLDC AT POWER PLANT	ALLOCATION MADE BY NRLDC AT DELHI PERIPHERY
NTPC - NR	1490.996	1459.954	942.044	921.826
NTPC - ER	141.825	139.311	112.281	110.295
NHPC	290.681	284.140	290.681	284.140
NPC	67.877	65.635	67.877	65.635
SASAN	263.105	255.991	262.142	255.042
KOTESHWAR	8.722	8.502	8.722	8.502
MUNDRA_UMPP	0.000	0.000	0.000	0.000
NATHPA JHAKRI	111.675	109.154	111.675	109.154
TEHRI	11.484	11.196	11.484	11.196
TALA	19.657	19.218	19.657	19.218
JHAJJAR	478.348	469.915	138.244	135.761
TALCHER	0.000	0.000	0.000	0.000
RAJASTHAN SOLAR(BRPL)T-36	3.311	3.248	3.248	3.228
RAJASTHAN SOLAR(BYPL)T-35	3.526	3.459	3.459	3.437
RAJASTHAN SOLAR(TPDDL)T-31	3.623	3.555	3.555	3.532
DVC	243.922	242.416	242.416	240.878
TUTICORIN BRPL	20.649	20.390	20.390	20.260
MADHYA PRADESH	77.775	76.985	76.985	76.496
UTTAR PRADESH	0.211	0.208	0.208	0.207
WEST BENGAL	0.015	0.015	0.015	0.015
SCLTPS (UP)	2.018	1.984	1.984	1.971
SKS RAIGARH(CHATTISHGARH)	0.017	0.017	0.017	0.016
SEIL PROJECT(ANDHRA PRADESH)	39.878	39.481	39.481	39.231
MEGHALAYA	29.208	29.059	29.059	28.873
ANDHRA	129.416	128.127	128.127	127.314
KARNATAKA	0.050	0.050	0.050	0.049
PUNJAB	0.251	0.249	0.249	0.247
METHON POWER (NDPL)-LT-06	82.556	82.047	82.047	81.529
DVC MEJIA (LT-08)(BYPL)	4.798	4.770	4.770	4.737
Acme_RUMS	11.430	11.306	11.306	11.235
Arinsun_RUMS	10.672	10.557	10.557	10.490
Mahindra_RUMS	2.861	2.830	2.830	2.813
URS	1.329	1.321	1.329	1.321
JAMMU & KASHMIR	81.179	80.258	80.258	79.749
HIMACHAL PRADESH	490.546	482.524	482.524	479.460
KERALA	0.165	0.162	0.162	0.161
GUJRAT	0.111	0.110	0.110	0.109
NAGALAND	2.647	2.634	2.634	2.617
HIMACHAL PRADESH LT-59 DVC	8.183	8.049	8.049	7.998
HARYANA (LT -05)	56.803	56.445	56.445	56.090
GOA	5.861	5.829	5.829	5.792
ODISHA	13.064	12.917	12.917	12.835
ORISSA MT-20 JITPL -DVC	6.300	6.230	6.230	6.190
BIHAR	0.220	0.219	0.219	0.218
MANIPUR	21.471	21.309	21.309	21.174
POWER EXCHANGE(IEX)	86.399	85.849	86.399	85.849
POWER EXCHANGE(PX)	0.000	0.000	0.000	0.000
TOTAL	4324.836	4247.625	3389.974	3336.889

D) AGENCY WISE BREAKUP OF ENERGY SCHEDULED BY NRLDC FOR EXPORT TO OTHER UTILITIES FROM DTL

NAME OF THE STATION	AVAILABILITY AT POWER PLANT	AVAILABILITY AT PERIPHERY	ALLOCATION MADE BY NRLDC AT POWER PLANT	ALLOCATION MADE BY NRLDC AT POWER PERIPHERY
TO JHARKHAND	0.000	0.000	0.000	0.000
TO ANDHRA	-0.521	-0.527	-0.527	-0.534
TO UTTAR PRADESH	-0.496	-0.507	-0.507	-0.513
TO WEST BENGAL	-0.841	-0.848	-0.848	-0.859
TO VLCPP 1800 (RJ)	-0.144	-0.147	-0.147	-0.149
TO ASSAM	-0.108	-0.109	-0.109	-0.111
TO ORIDSHA	-0.098	-0.100	-0.100	-0.101
TO TELENGANA	-0.039	-0.040	-0.040	-0.040
TO GOA	-0.341	-0.348	-0.348	-0.352
TO CHATTISHGARH	-0.097	-0.100	-0.100	-0.101
TO DADAR & NAGAR HAVELI	-0.024	-0.025	-0.025	-0.025
BTPS TO MP	0.000	0.000	0.000	0.000
TO HIMACHAL PRADESH	0.000	0.000	0.000	0.000
TO GUJRAT	-0.098	-0.099	-0.099	-0.101
TO POWER EXCHANGE (IEX)	-92.935	-94.005	-92.935	-94.005
TO POWER EXCHANGE (PX)	0.000	0.000	0.000	0.000
TO SHARE PROJECT (HARYANA)	-29.909	-30.253	-29.909	-30.253
TO SHARE PROJECT (PUNJAB)	-29.875	-30.219	-29.875	-30.219
TOTAL	-155.526	-157.329	-155.570	-157.363
TOTAL SCHEDULED DRAWAL FROM THE GRID	4169.310	4090.296	3234.404	3179.526

TOTAL CONSUMPTION INCLUDING AUX. OF GENERATING STNs. EXCLUDING BTPS	3792.539
NET CONSUMPTION	3769.368
AVAILABILITY WITHIN DELHI	602.068
ACTUAL DRAWAL FROM THE GRID	3167.300
OVER DRAWAL(+)/UNDER DRAWAL(-) FROM THE GRID ON THE BASIS OF SCHEDULED ALLOCATION MADE BY NRLDC TO DELHI AT PERIPHERY	-12.226
LOAD SHEDDING	1.782
UNRESTRICTED DEMAND (GROSS)	3794.321
UNRESTRICTED DEMAND (NET)	3771.150
MAX. NET CONSUMPTION	146.947 ON 03.07.2019
MAX. LOAD SHEDDING	327MW ON 25.07.2019 AT 11.00HRS.
PEAK LOAD	Peak Demand during the month
DAY PEAK	7409MW AT 15.03.07 HRS ON 02.07.2019
EVENING PEAK	6972MW AT 23.00.00HRS ON 02.07.2019
P.L.F. OF GENCO AND PRAGATI STNs.	RPH GT PRAGATI RITHALA BAWANA Timarpur Okhla EDWPCL DMSWL
	0.00% 30.27% 68.71% 0.00% 37.82% 128.32% 32.84% 73.94%

9 SHEDDING DETAILS DURING THE MONTH OF JULY 2019.

ALL FIGURES IN MUs

DATE	No. of Under Freq. Relay Operated	Shedding due to under frequency relay operation in MUs					Shedding due to Grid Restrictions (Over drawl / low freq.)				
		BSES		NDPL	NDMC	TOTAL	BSES		NDPL	NDMC	MES
		BYPL	BRPL				BYPL	BRPL			
1	2	3	4	5	6	7=3 to 6	8	9	10	11	12
01.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
02.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
03.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
04.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
05.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
07.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.056	0.000	0.000
09.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.000	0.000
12.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25.JuL.19	0	0.000	0.000	0.0001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31.JuL.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.073	0.000	0.000

ALL FIGURES IN MUs

Date	Shedding due to Transmission/Grid Constraints in Central Sector Stations / TTC / ATC VOILATION				DUE TO NEW GRID CODE REGULATION DEVIATION			Shedding due to Transmission/Grid Constraints in Central sector stations				Total	Total shedding due to grid restrictions
	BSES		NDPL	NDMC	BSES		TPDDL	BSES		TPDDL	NDMC		
	BYPL	BRPL			BYPL	BRPL		BYPL	BRPL				
	13	14	15	16	17	18	19	20	21	22	23	24=8 to 23	25=7+24
01.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
02.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
03.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
04.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
05.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
07.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.056	0.056
09.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.017
12.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.073	0.073

Date	DUE TO T&D CONSTRAINTS IN DELHI SYSTEM								
	DTL					DISCOMS			
	BSES		NDPL	NDMC	MES	BSES		NDPL	NDMC
	BYPL	BRPL				BYPL	BRPL		
26	27	28	29	30	31	32	33	34	
01.Jul.19	0.013	0.002	0.018	0.000	0.000	0.001	0.046	0.003	0.000
02.Jul.19	0.000	0.026	0.000	0.000	0.000	0.000	0.254	0.000	0.000
03.Jul.19	0.000	0.010	0.000	0.000	0.000	0.002	0.213	0.001	0.000
04.Jul.19	0.000	0.061	0.000	0.000	0.000	0.000	0.029	0.001	0.000
05.Jul.19	0.000	0.000	0.000	0.000	0.000	0.003	0.011	0.0000	0.000
06.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.056	0.019	0.000
07.Jul.19	0.000	0.004	0.000	0.000	0.000	0.000	0.004	0.000	0.000
08.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.012	0.000
09.Jul.19	0.003	0.000	0.004	0.000	0.000	0.000	0.000	0.028	0.007
10.Jul.19	0.000	0.001	0.000	0.000	0.000	0.000	0.014	0.000	0.000
11.Jul.19	0.000	0.033	0.000	0.000	0.000	0.000	0.011	0.000	0.000
12.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.016	0.000
13.Jul.19	0.000	0.000	0.002	0.000	0.000	0.000	0.022	0.001	0.000
14.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000
15.Jul.19	0.000	0.000	0.000	0.000	0.000	0.029	0.055	0.000	0.000
16.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.031	0.000	0.000
17.Jul.19	0.003	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000
18.Jul.19	0.003	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000
19.Jul.19	0.001	0.028	0.0000	0.000	0.000	0.065	0.006	0.000	0.000
20.Jul.19	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000
21.Jul.19	0.0000	0.011	0.001	0.000	0.000	0.000	0.003	0.005	0.000
22.Jul.19	0.000	0.000	0.001	0.000	0.000	0.027	0.000	0.003	0.000
23.Jul.19	0.004	0.000	0.030	0.000	0.000	0.006	0.016	0.000	0.000
24.Jul.19	0.020	0.051	0.000	0.000	0.000	0.000	0.016	0.023	0.000
25.Jul.19	0.000	0.003	0.157	0.000	0.000	0.015	0.006	0.000	0.000
26.Jul.19	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000
27.Jul.19	0.000	0.010	0.000	0.000	0.000	0.002	0.006	0.0000	0.000
28.Jul.19	0.001	0.002	0.000	0.000	0.000	0.0000	0.007	0.000	0.000
29.Jul.19	0.000	0.000	0.011	0.000	0.000	0.012	0.000	0.001	0.000
30.Jul.19	0.000	0.000	0.002	0.000	0.000	0.000	0.008	0.000	0.000
31.Jul.19	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.014	0.000
TOTAL	0.048	0.242	0.228	0.000	0.000	0.169	0.884	0.127	0.007

ALL FIGURES IN MUs

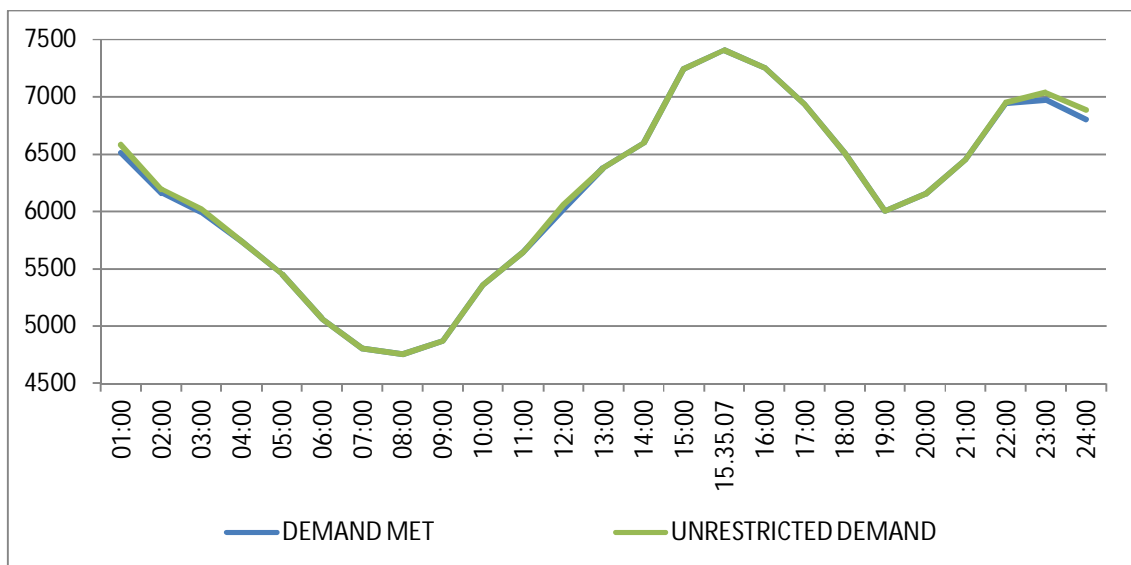
DATE	OTHER AGENCIES LIKE GENCO, BBMB, BTPS ETC.				THEFT PRONE SHEDDING			TOTAL SHEDDING DUE TO T&D CONSTS. & THEFT PRONE	GRAND TOTAL
	BSES		NDPL	NDMC	BSES		NDPL		
	BYPL	BRPL			BYPL	BRPL			
1	35	36	37	38	39	40	41	42= 26 to 41	43 = 25 + 42
01.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.083	0.083
02.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.280	0.280
03.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.226	0.226
04.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.091	0.091
05.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.014
06.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.075	0.075
07.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.008
08.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.018	0.074
09.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.042	0.042
10.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.015
11.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.044	0.061
12.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.017
13.JuL.19	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.029	0.029
14.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.003
15.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.084	0.084
16.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.031	0.031
17.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.015
18.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.005
19.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.100	0.100
20.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.006
21.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.020	0.020
22.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.031	0.031
23.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.056	0.056
24.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.110	0.110
25.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.181	0.181
26.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002
27.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.018	0.018
28.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.010
29.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.024
30.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.010
31.JuL.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.061	0.061
TOTAL	0.000	0.000	0.004	0.000	0.000	0.000	0.000	1.709	1.782

DATE	(NET CONS.)	MAXI. DEMAND MET DURING THE DAY	TIME OF OCCURRENCE OF MAX DEMAND	SHEDDING AT THIS TIME	UN-RESTRICTED DEMAND	MAXIMUM UN-RESTRICTED DEMAND DURING THE DAY	TIME OF MAX. UN-REST. DEMAND	DEMAND AT THAT TIME	SHEDDING AT THAT TIME
	In Mus.	IN MW	IN HRS.	IN MW	IN MW	IN MW	HRS.	IN MW	IN MW
1	32	33	34	35	36=33+35	37=39+40	38	39	40
01.JuL.19	144.871	7241	15:29:02	0	7241	7241	15:29:02	7241	0
02.JuL.19	145.864	7409	15:35:07	0	7409	7409	15:35:07	7409	0
03.JuL.19	146.947	7085	15:18:46	10	7095	7095	15:18:46	7085	10
04.JuL.19	138.337	6885	00:00:26	0	6885	6885	00:00:26	6885	0
05.JuL.19	126.459	6132	00:01:01	0	6132	6132	00:01:01	6132	0
06.JuL.19	122.525	6009	23:23:09	28	6037	6037	23:23:09	6009	28
07.JuL.19	119.988	6266	23:18:32	0	6266	6266	23:18:32	6266	0
08.JuL.19	129.850	6375	22:58:31	113	6488	6488	22:58:31	6375	113
09.JuL.19	126.610	6180	00:00:53	0	6180	6180	00:00:53	6180	0
10.JuL.19	129.709	6616	23:06:35	0	6616	6616	23:06:35	6616	0
11.JuL.19	136.616	6851	23:09:32	0	6851	6851	23:09:32	6851	0
12.JuL.19	138.271	6789	22:51:03	0	6789	6789	22:51:03	6789	0
13.JuL.19	133.122	6657	00:00:02	0	6657	6657	00:00:02	6657	0
14.JuL.19	125.931	6494	00:00:11	0	6494	6494	00:00:11	6494	0
15.JuL.19	118.551	5974	00:16:22	0	5974	5974	00:16:22	5974	0
16.JuL.19	106.436	5036	15:11:45	0	5036	5036	15:11:45	5036	0
17.JuL.19	102.796	4868	00:00:41	0	4868	4868	00:00:41	4868	0
18.JuL.19	100.206	4701	15:51:39	0	4701	4701	15:51:39	4701	0
19.JuL.19	108.899	5727	22:58:08	0	5727	5727	22:58:08	5727	0
20.JuL.19	112.110	5509	00:00:00	0	5509	5509	00:00:00	5509	0
21.JuL.19	105.920	5233	23:09:54	0	5233	5233	23:09:54	5233	0
22.JuL.19	117.173	5827	23:04:57	10	5837	5837	23:04:57	5827	10
23.JuL.19	128.389	6486	22:36:24	0	6486	6486	22:36:24	6486	0
24.JuL.19	132.453	6617	15:18:54	0	6617	6617	15:18:54	6617	0
25.JuL.19	116.375	5633	00:00:01	0	5633	5633	00:00:01	5633	0
26.JuL.19	110.123	5120	00:04:14	0	5120	5120	00:04:14	5120	0
27.JuL.19	101.353	4665	23:00	0	4665	4665	23:00	4665	0
28.JuL.19	98.721	5101	23:10:57	0	5101	5101	23:10:57	5101	0
29.JuL.19	110.300	5609	22:49:16	0	5609	5609	22:49:16	5609	0
30.JuL.19	115.723	5651	22:54:07	0	5651	5651	22:54:07	5651	0
31.JuL.19	118.740	5773	22:58:21	0	5773	5773	22:58:21	5773	0
TOTAL	3769.368	7409 02.07.19	15:35:07	0	7409 02.07.19	7409	15:35:07	7409	0

10 **LOAD PATTERN OF DELHI ON THE DAY OF PEAK DEMAND MET DURING JULY-2019 ON 02.07.2019- 7409MW AT 15.35.07HRS.**

All figures in MW

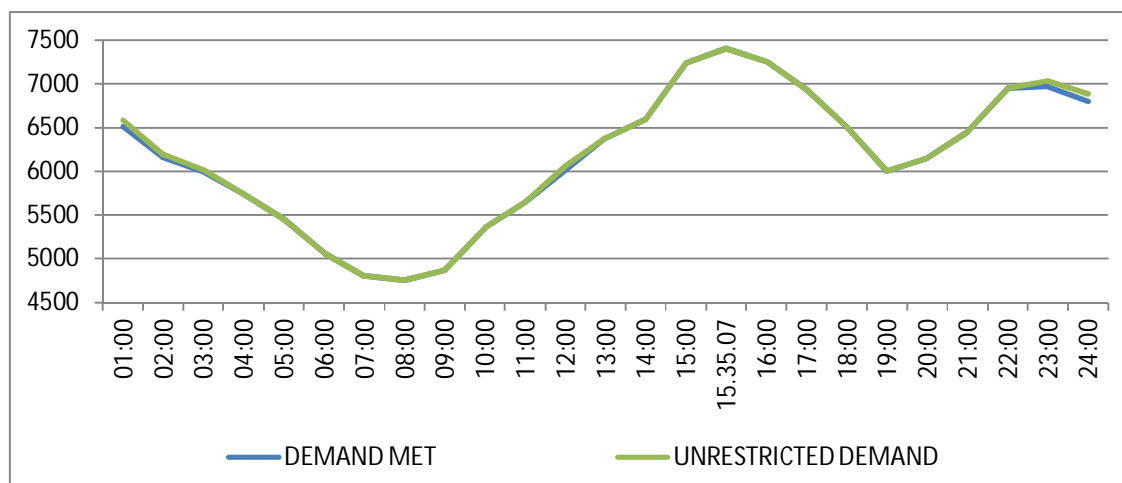
Hrs.	Demand	Load Shedding	Un-Restricted Demand
01:00	6511	73	6584
02:00	6160	32	6192
03:00	5991	28	6019
04:00	5739	0	5739
05:00	5453	0	5453
06:00	5066	0	5066
07:00	4805	0	4805
08:00	4754	0	4754
09:00	4867	0	4867
10:00	5355	0	5355
11:00	5642	0	5642
12:00	6019	42	6061
13:00	6382	0	6382
14:00	6595	0	6595
15:00	7244	0	7244
15.35.07	7409	0	7409
16:00	7254	0	7254
17:00	6935	0	6935
18:00	6505	0	6505
19:00	6004	0	6004
20:00	6150	0	6150
21:00	6451	0	6451
22:00	6946	2	6948
23:00	6972	65	7037
24:00	6801	82	6883
Total (IN MUS)	145.864	0.280	146.144



11 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UN-RESTRICTED DEMAND DURING JULY 2019 ON 02.07.2019- 7409MW AT 15.35.07HRS.

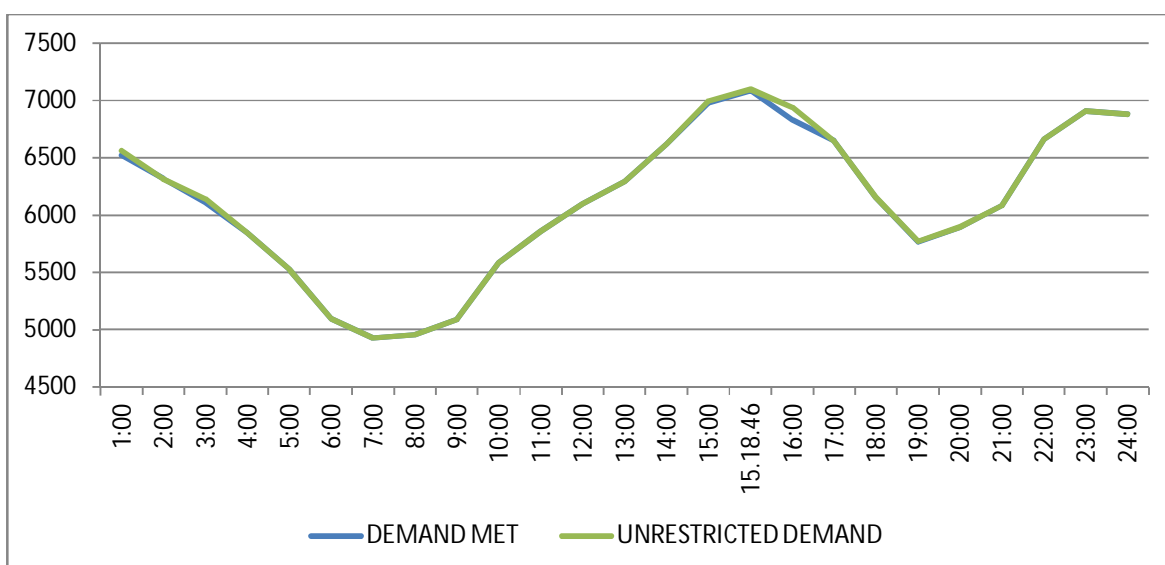
All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
01:00	6511	73	6584
02:00	6160	32	6192
03:00	5991	28	6019
04:00	5739	0	5739
05:00	5453	0	5453
06:00	5066	0	5066
07:00	4805	0	4805
08:00	4754	0	4754
09:00	4867	0	4867
10:00	5355	0	5355
11:00	5642	0	5642
12:00	6019	42	6061
13:00	6382	0	6382
14:00	6595	0	6595
15:00	7244	0	7244
15.35.07	7409	0	7409
16:00	7254	0	7254
17:00	6935	0	6935
18:00	6505	0	6505
19:00	6004	0	6004
20:00	6150	0	6150
21:00	6451	0	6451
22:00	6946	2	6948
23:00	6972	65	7037
24:00	6801	82	6883
Total (IN MUS)	145.864	0.280	146.144



12 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM ENERGY CONSUMED DURING JULY 2019 – 03.07.2019 – 146.947Mus All figures in MW

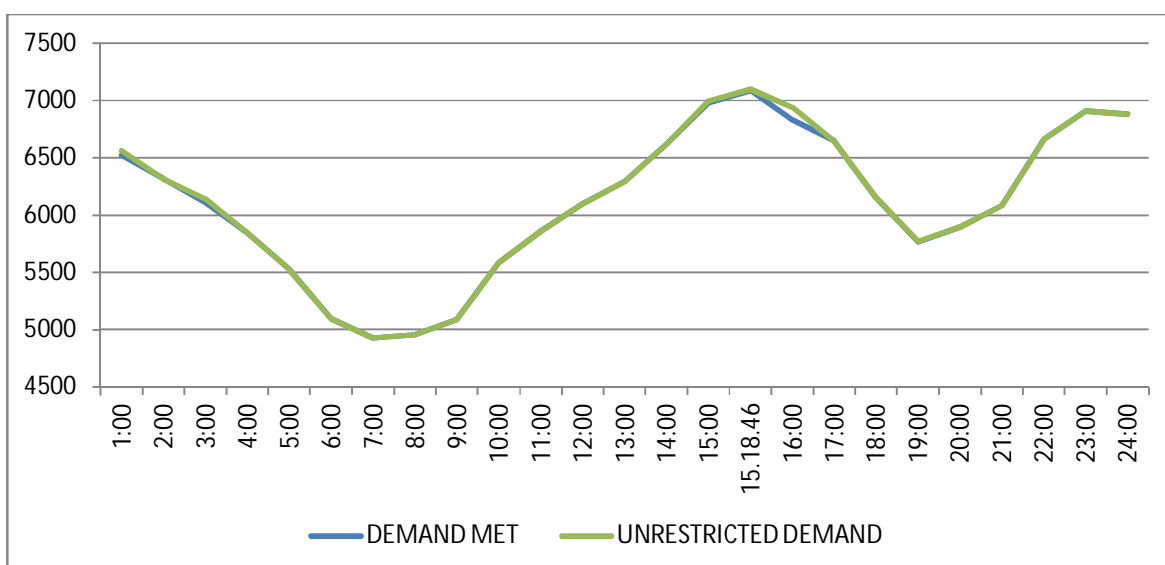
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	6524	35	6559
2:00	6315	0	6315
3:00	6105	36	6141
4:00	5845	0	5845
5:00	5524	0	5524
6:00	5098	0	5098
7:00	4927	0	4927
8:00	4954	0	4954
9:00	5094	0	5094
10:00	5585	0	5585
11:00	5858	0	5858
12:00	6096	0	6096
13:00	6294	0	6294
14:00	6619	0	6619
15:00	6975	19	6994
15.18.46	7085	10	7095
16:00	6829	111	6940
17:00	6645	3	6648
18:00	6153	3	6156
19:00	5764	7	5771
20:00	5893	0	5893
21:00	6081	0	6081
22:00	6664	0	6664
23:00	6909	0	6909
24:00	6877	0	6877
Total (IN MUS)	139.207	0.062	139.269



13 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED ENERGY DEMAND DURING JULY 2019 – 03.07.2019 – 147.173 Mus

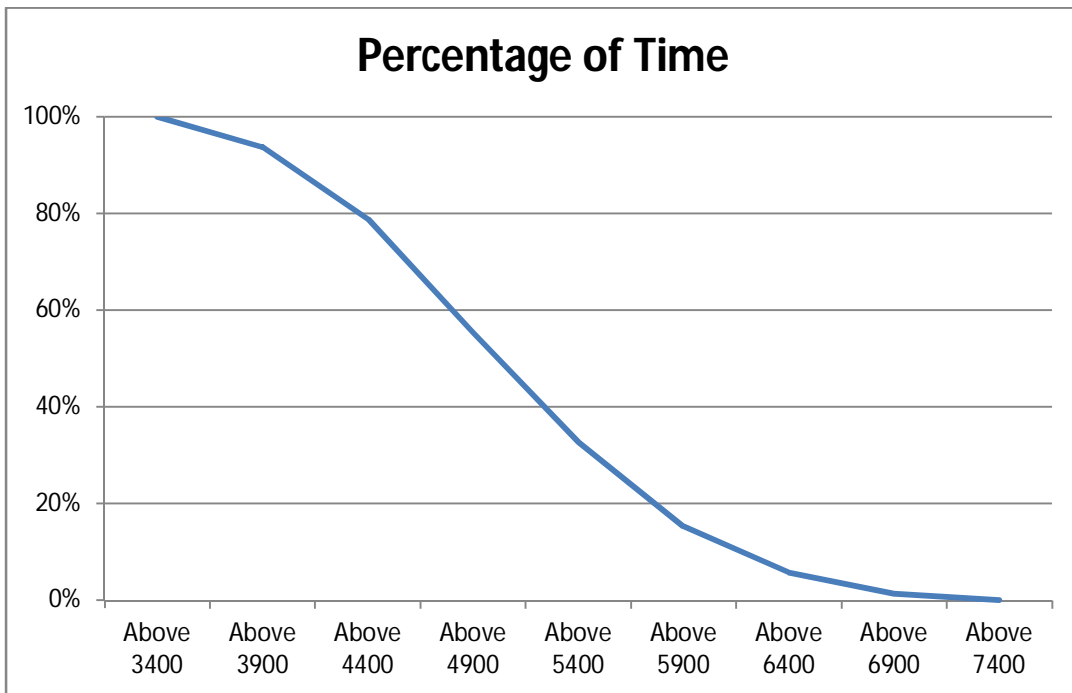
All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	6524	35	6559
2:00	6315	0	6315
3:00	6105	36	6141
4:00	5845	0	5845
5:00	5524	0	5524
6:00	5098	0	5098
7:00	4927	0	4927
8:00	4954	0	4954
9:00	5094	0	5094
10:00	5585	0	5585
11:00	5858	0	5858
12:00	6096	0	6096
13:00	6294	0	6294
14:00	6619	0	6619
15:00	6975	19	6994
15.18.46	7085	10	7095
16:00	6829	111	6940
17:00	6645	3	6648
18:00	6153	3	6156
19:00	5764	7	5771
20:00	5893	0	5893
21:00	6081	0	6081
22:00	6664	0	6664
23:00	6909	0	6909
24:00	6877	0	6877
Total (IN MUS)	139.207	0.062	139.269



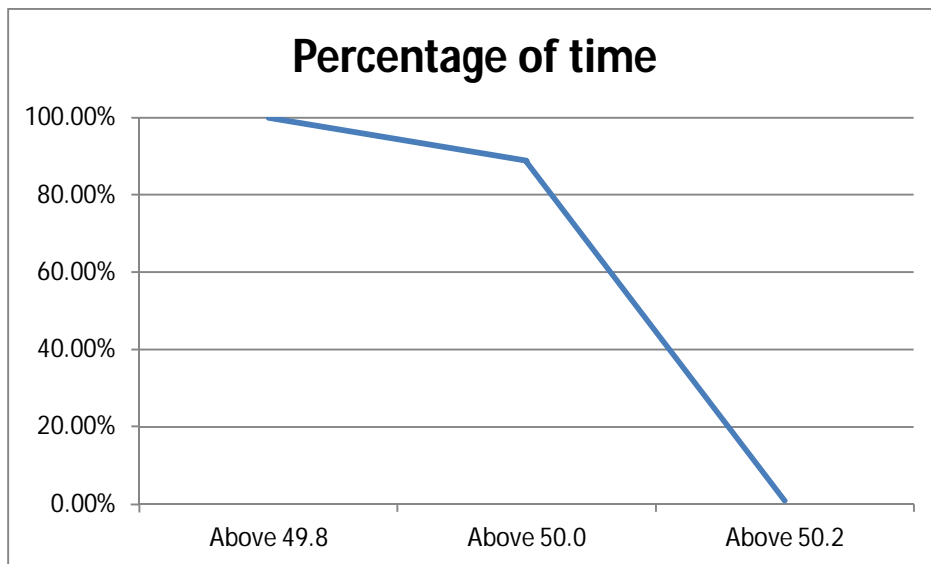
14 **LOAD DURATION CURVE FOR JULY 2019**

Load in MW	Percentage of Time
Above 3400	100%
Above 3900	93.78%
Above 4400	78.86%
Above 4900	55.31%
Above 5400	32.66%
Above 5900	15.26%
Above 6400	5.70%
Above 6900	1.31%
Above 7400	0.10%



FREQUENCY ANALYSIS FOR THE MONTH OF JULY 2019

Frequency Range in Hz.	Percentage of time
Above 49.8	99.93%
Above 50.0	88.74%
Above 50.2	0.77%



16 VOLTAGE PROFILE OF 220 KV SUB-STATIONS IN DELHI DURING JULY 2019

All figures in kV

Date	NARELA		GAZIPUR	
	Max	Min	Max	Min
01.JuL.19	228.01	216.66	230.85	216.92
02.JuL.19	228.92	214.6	230.59	213.7
03.JuL.19	226.72	216.53	228.27	214.6
04.JuL.19	228.53	216.02	229.82	215.37
05.JuL.19	228.66	220.92	228.92	219.76
06.JuL.19	228.14	218.47	230.72	219.5
07.JuL.19	229.3	218.98	232.53	220.27
08.JuL.19	230.08	216.66	230.85	215.37
09.JuL.19	229.3	220.15	231.49	220.27
10.JuL.19	231.75	217.7	232.4	214.73
11.JuL.19	230.72	216.02	230.21	214.08
12.JuL.19	229.95	217.95	231.11	214.47
13.JuL.19	229.3	217.57	228.92	214.99
14.JuL.19	229.82	220.27	230.59	218.6
15.JuL.19	232.78	220.4	233.82	202.35
16.JuL.19	234.98	221.82	232.66	220.92
17.JuL.19	233.3	220.53	233.3	218.34
18.JuL.19	233.17	222.85	235.11	220.79
19.JuL.19	231.37	218.98	233.04	218.34
20.JuL.19	228.92	219.89	229.82	218.86
21.JuL.19	229.3	219.76	231.24	218.34
22.JuL.19	228.79	218.86	229.43	217.31
23.JuL.19	228.53	217.05	230.59	215.63
24.JuL.19	228.79	214.99	231.11	214.6
25.JuL.19	229.95	220.92	231.49	221.44
26.JuL.19	229.95	221.44	232.78	219.63
27.JuL.19	233.04	223.63	235.62	224.14
28.JuL.19	231.37	221.44	233.82	223.11
29.JuL.19	229.43	216.41	233.04	215.76
30.JuL.19	229.95	218.86	231.37	218.34
31.JuL.19	229.43	218.6	232.4	218.6

17 VOLTAGE PROFILE OF 400 KV SUB-STATIONS IN DELHI DURING JULY 2019

All figures in kV

Date	400kV Bamnauli Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
01.JuL.19	413.63	18:43:17	386.67	14:52:26	399.14
02.JuL.19	412.7	08:02:29	383.15	15:02:10	398.64
03.JuL.19	408.94	08:01:53	384.32	22:19:55	397.01
04.JuL.19	410.82	18:02:18	385.26	00:04:36	399.73
05.JuL.19	410.12	07:06:20	393.23	14:18:31	400.81
06.JuL.19	411.99	08:03:34	393.23	15:24:35	401.61
07.JuL.19	414.34	08:03:08	393.23	22:43:00	404.42
08.JuL.19	413.17	08:00:46	383.85	14:27:42	400.47
09.JuL.19	414.34	04:59:15	392.3	14:55:26	403.76
10.JuL.19	414.81	03:17:08	382.92	14:58:50	400.08
11.JuL.19	412.23	05:01:02	383.85	15:26:03	400.79
12.JuL.19	413.63	07:03:06	385.03	15:32:42	399.76
13.JuL.19	412.23	08:01:44	385.03	22:14:27	398.99
14.JuL.19	413.4	08:00:59	390.19	22:13:41	401.81
15.JuL.19	415.51	16:02:23	392.06	14:27:53	402.75
16.JuL.19	415.74	08:00:24	394.41	22:11:18	404.04
17.JuL.19	415.04	04:02:29	391.59	14:49:30	403.58
18.JuL.19	419.26	05:02:12	398.16	14:24:24	406.72
19.JuL.19	414.81	05:01:16	390.89	22:39:28	403.66
20.JuL.19	411.06	07:03:29	393.23	10:52:40	402.44
21.JuL.19	412.23	06:01:44	392.3	22:11:25	403.14
22.JuL.19	410.82	05:01:26	390.19	14:26:28	401.75
23.JuL.19	411.52	06:43:20	389.95	14:29:31	401.04
24.JuL.19	412.7	08:02:24	387.37	14:52:55	400.04
25.JuL.19	411.29	05:02:28	396.05	00:07:57	403.11
26.JuL.19	413.17	04:00:41	392.06	10:49:52	405.12
27.JuL.19	418.32	04:00:35	399.1	11:22:45	406.32
28.JuL.19	413.63	03:23:58	396.05	19:53:50	406.26
29.JuL.19	411.99	03:59:53	385.26	14:41:53	401.12
30.JuL.19	413.4	08:01:55	389.72	22:27:48	401.82
31.JuL.19	412.7	08:00:40	389.01	22:27:11	401.55

All figures in kV

Date	400kV Bawana Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
01.JuL.19	409.18	18:41:26	392.3	14:52:23	400.63
02.JuL.19	411.29	08:02:27	391.12	14:56:52	400.94
03.JuL.19	407.54	08:01:26	390.42	22:18:18	399.09
04.JuL.19	412.23	18:02:14	390.19	00:03:49	402.37
05.JuL.19	410.82	18:59:24	397.92	14:18:31	403.49
06.JuL.19	411.06	08:03:35	397.22	15:18:41	404
07.JuL.19	412.46	08:01:44	397.22	22:41:46	405.59
08.JuL.19	413.17	08:01:14	390.89	14:28:00	402.3
09.JuL.19	411.52	07:02:32	397.92	00:07:17	404.55
10.JuL.19	413.63	04:02:29	391.59	14:58:48	402.83
11.JuL.19	411.52	08:02:32	393.23	15:22:09	403.49
12.JuL.19	413.63	07:02:21	391.12	14:51:47	401.77
13.JuL.19	411.29	08:01:11	393.47	22:15:12	402.13
14.JuL.19	413.4	08:02:00	397.45	14:53:56	404.71
15.JuL.19	415.74	16:03:27	398.63	14:17:45	406.76
16.JuL.19	419.03	08:00:49	401.44	22:10:31	408.92
17.JuL.19	419.26	07:31:19	399.1	14:47:33	408.56
18.JuL.19	419.73	05:01:45	401.44	14:24:42	408.81
19.JuL.19	415.04	05:01:34	397.45	22:38:48	405.83
20.JuL.19	411.99	07:00:55	399.57	22:14:28	405.48
21.JuL.19	413.4	18:03:04	399.33	13:49:50	406.11
22.JuL.19	410.82	05:02:33	396.05	14:24:10	404.16
23.JuL.19	410.35	05:30:13	395.58	22:48:36	402.89
24.JuL.19	411.52	08:02:34	393.47	14:51:59	402.97
25.JuL.19	411.99	08:02:23	400.74	00:07:07	406.4
26.JuL.19	415.51	18:00:23	399.1	10:54:15	409.54
27.JuL.19	420.9	04:01:18	405.66	11:22:05	412.22
28.JuL.19	418.32	03:02:28	402.85	19:55:30	411.24
29.JuL.19	414.81	03:59:27	394.88	14:40:24	406.19
30.JuL.19	413.87	08:02:19	398.16	22:25:11	405.91
31.JuL.19	415.04	08:03:09	398.16	22:25:40	405.96

20 DETAILS OF BREAK-DOWNS DURING THE MONTH OF JULY 2019

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
1	1.7.19	17:25	220KVBAWANA- ROHINI-2 CKT-II	1.7.19	18:20	AT ROHINI-II : POLE DISCRIPENCY, AT BAWANA : 186A&B.
2	1.7.19	22:20	PATPARGANJ 220/66kV 100MVA Tx-II	1.7.19	00:00	E/F
3	2.7.19	02:27	220KV VASANT KUNJ - R.K.PURAM CKT.-I	2.7.19	04:38	AT R.K.PURAM : 86. AT VASANT KUNJ : E/F, 86.
4	2.7.19	02:27	220KV MEHRAULI - VASANT KUNJ CKT.- I	2.7.19	02:45	AT VASANT KUNJ : 96.
5	2.7.19	02:27	220KV VASANT KUNJ - R.K.PURAM CKT.-II	2.7.19	04:38	AT VASANT KUNJ : 86. AT R.K.PURAM : CKT. DID NOT TRIP.
6	4.7.19	16:58	SARITA VIHAR 220/66kV 100MVA Tx-I	4.7.19	20:28	86
7	5.7.19	18:20	220KV WAZIRABAD-GEETA COLONY CKT-I	5.7.19	19:48	AT GEETA COLONY : DIST PROT, ZONE-I, DIST 3.66KM, 86. AT WAZIRABAD : DIST PROT, ZONE-I, DIST 1.974KM.
8	5.7.19	23:50	VASANT KUNJ 66/11kV, 20MVA Tx-I	6.7.19	05:20	86
9	7.7.19	12:49	220KV OKHLA - BTPS CKT. - I	7.7.19	14:03	At BTPS : Fault Current in R ph=5.68kA
10	9.7.19	08:15	NARAINA 220/33kV 100MVA Tx-I	9.7.19	00:00	O/C.
11	9.7.19	11:15	INDRAPRASTHA POWER 220/33kV 100MVA Tx-II	9.7.19	11:20	WITHOUT INDICATION.
12	9.7.19	12:47	400kV Mundka-Jhatikara Ckt-I	9.7.19	20:51	AT MUNDKA : 86.
13	9.7.19	22:58	220kV PAPPANKALAN-I-NARAINA CKT-I	10.7.19	01:03	AT PPK-I : DIST POT, ZONE-II, DIST 8.72KM, RYB PHASE. AT NARAINA : DIST PROT, ZONE-I.
14	10.7.19	10:23	220KV PAPPANKALAN-III-NARAINA CKT-I	10.7.19	18:39	AT NARAINA : 86A, DIFFERENTIAL.
15	10.7.19	17:10	220KV WAZIRABAD - MANDOLA CKT-IV	10.7.19	18:59	AT WAZIRABAD : DIST PROT, ZONE-I, DIST 1.606KM. AT MANDOLA : DIST PROT, DIST 12KM.
16	10.7.19	18:38	220KV VASANT KUNJ - R.K.PURAM CKT.-I	10.7.19	19:45	At Vasant Kunj : 96, LBB ,50L, 87L. At R.K.Puram : Ckt. did not trip.
17	10.7.19	18:38	220KV VASANT KUNJ - R.K.PURAM CKT.-II	10.7.19	19:30	At Vasant Kunj : 96, LBB ,50L, 87L. At R.K.Puram : Ckt. did not trip.
18	10.7.19	18:38	220KV MEHRAULI - VASANT KUNJ CKT.- I	10.7.19	18:45	At Vasant Kunj : 96, At Mehrauli: Ckt. did not trip.
19	11.7.19	14:35	SARITA VIHAR 220/66kV 100MVA Tx-III	11.7.19	17:05	SPR.
20	13.7.19	12:02	220KV GOPALPUR- MANDOLACKT-II	13.7.19	12:41	AT MANDOLA : DIST PROT, DIST 13.42
21	13.7.19	16:50	220KV GOPALPUR- MANDOLACKT-II	13.7.19	00:00	AT MANDOLA : 86ABC.
22	13.7.19	18:01	220KV BAMNAULI-NAJAFGARH CKT-I	13.7.19	20:18	AT BAMNAULI : DIST PROT, DIST 6.841KM, ZONE-II, ABC HASE, 86.
23	13.7.19	20:36	220KV BAMNAULI-NAJAFGARH CKT-II	14.7.19	16:37	AT BAMNAULI : DIST PROT, DIST 7.164KM, ZONE-II, ABC PHASE, 86.
24	14.7.19	14:25	220KV WAZIRABAD - MANDOLA CKT-III	14.7.19	22:35	AT WAZIRABAD : DIST PROT, ZAONE-I, DIST 17.26KM.
25	15.7.19	15:33	220KV MAHARANI BAGH - SARITA VIHAR CKT	15.7.19	18:53	AT MAHARANI BAGH : DIST PROT, ZONE-I, DIST 6.8KM. AT SARITA VIHAR : DIST PROT, ZONE-I, DIST 3.6KM.
26	15.7.19	15:45	220KV PRAGATI - SARITA VIHAR CKT - I	15.7.19	18:53	AT SARITA VIHAR : DIST PROT, ZONE-I, DIST 2.426KM. AT PRAGATI : DIST PROT, DIST 11.45KM.
27	15.7.19	15:50	GAZIPUR 66/11kV, 20MVA Tx-I	15.7.19	19:35	DIFFERENTIAL.

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
28	17.7.19	09:54	GEETA COLONY 220/33kV 100MVA Tx-I	17.7.19	14:18	TRIPPED ON 30E, CB TRIP, 30B, OIL PESSURE, RYB PHASE, DIFFERENTIAL.
29	18.7.19	03:49	BAWANA 400/220kV 315MVA ICT-I	18.7.19	00:00	86
30	19.7.19	04:56	220kV PRAGATI - PARK STREET CKT-II	27.7.19	14:37	AT PARK STREET : DIST PROT, ZONE-I, 86ABC. AT PRAGATI : DIST PROT, ZONE-I, O/C, E/F.
31	19.7.19	13:01	TUGHLAKABAD 220/66kV 160MVA Tr.-II	19.7.19	13:46	89
32	20.7.19	14:15	220kV MEHRAULI - VASANT KUNJ CKT.-I	20.7.19	15:23	AT VASANT KUNJ : POLE DISCRIPANCY.
33	20.7.19	16:15	220kV MEHRAULI - VASANT KUNJ CKT.-I	20.7.19	18:50	AT VASANT KUNJ : POLE DISCRIPANY.
34	21.7.19	00:15	LODHI RD 220/33kV 100MVA Tx-II	21.7.19	20:39	86
35	21.7.19	15:36	KASHMIRI GATE 220/33kV 100MVA Tx-I	21.7.19	17:36	Bus Bar Protection
36	21.7.19	15:36	220kV KASHMERE GATE - DMRC CKT.-I	21.7.19	17:36	At Kashmiri Gate : 75 At DMRC : Ckt. did not trip.
37	21.7.19	15:36	220kV WAZIRABAD - KASHMERE GATE CKT-I	21.7.19	17:30	At Kashmiri Gate : 186AB, Differential. At Wazirabad : Ckt. did not trip
38	21.7.19	17:50	MASJID MOTH 220/33kV 100MVA Tx-I	21.7.19	18:05	E/F
39	21.7.19	17:50	MASJID MOTH 220/33kV 100MVA Tx-II	22.7.19	13:05	E/F, O/C
40	22.7.19	10:40	NARAINA 33/11kV, 16MVA Tx-II	22.7.19	11:45	86
41	23.7.19	12:20	220kV GOPALPUR- MANDOLACKT-II	23.7.19	00:00	AT GOPALPUR : DIST PROT, DIST 33.91KM. AT MANDOLA : DIST PROT, DIST 12.15KM.
42	23.7.19	12:49	220 KV GOPALPUR-WAZIRABAD CKT - 1	23.7.19	12:50	86
43	23.7.19	14:13	220 KV GOPALPUR-WAZIRABAD CKT - 1	23.7.19	14:15	86
44	23.7.19	15:34	220KV SHALIMARBAGH-WAZIRPUR CKT-I	23.7.19	18:18	AT WAZIRPUR : DIST PROT, ZONE-I.
45	23.7.19	15:34	220KV BAWANA-SHALIMARBAGH CKT-I	23.7.19	18:18	AT BAWANA : 86, DIST PROT, DIST 9.855KM. AT SHALIMARBAGH : DIST PROT, DIST 2.1KM, ZONE=I.
46	23.7.19	15:35	220KV PAPPANKALAN-III-PAPPANKALAN-I CKT-I	23.7.19	18:08	AT PAPAN KALAN -I : WITHOUT INDICATION.
47	24.7.19	12:25	INDRAPRASTHA POWER 220/33kV 100MVA Tx-III	24.7.19	13:30	33kV I/C-III tripped on 86, 186, PRV
48	24.7.19	12:25	INDRAPRASTHA POWER 220/33kV 100MVA Tx-II	24.7.19	00:00	33kV I/C-II tripped on O/C, RYB Phase.
49	24.7.19	12:25	INDRAPRASTHA POWER 220/33kV 100MVA Tx-I	24.7.19	00:00	33kV I/C-I tripped on O/C, E/F, 86.
50	24.7.19	13:05	INDRAPRASTHA POWER 220/33kV 100MVA Tx-II	24.7.19	13:20	33kV I/C-II tripped on O/C, B Phase.
51	25.7.19	10:58	SHALIMAR BAGH 220/33kV 100MVA Tx-III	25.7.19	11:25	Tripped on O/C, E/F
52	25.7.19	10:58	BAWANA 220/66kV 100MVA Tx	25.7.19	12:25	Tx Tripped on O/C, LBB Prot., 67 ABC-N trip, Group B, 86B, Trip Ckt supervision 195A alongwith 66kV I/C tripped on 95B & 195C.

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
53	25.7.19	10:58	BAWANA 400/220kV 315MVA ICT-V	25.7.19	17:53	ICT Tripped on 86A, 86B, E/F alongwith 220kV I/C-V tripped on E/F.
54	25.7.19	10:58	BAWANA 400/220kV 315MVA ICT-IV	25.7.19	12:16	220kV I/C-IV of ICT –IV tripped on R,Y-PH E/F, 86 Relay, Bus Bar protection, 86.2 trip, 2.86.
55	25.7.19	10:58	BAWANA 400/220kV 315MVA ICT-I	25.7.19	19:43	ICT Tripped on E/F (67 N) ,Group A, 86A & 86B. Trip Supervision Relay 95A, 95B. 220kV I/C-I tripped on Inter Trip.
56	25.7.19	10:58	220KV BAWANA-SHALIMARBAGH CKT-I	25.7.19	17:47	At 220kV Bawana: Ckt did not trip. Made off manually at 11:35 Hrs. At 220kV Shalimarbagh: Tripped Differential Protection all phase.
57	25.7.19	10:58	220KVBAWANA- ROHINI CKT-II	25.7.19	11:48	At Bawana : Put off manually At Rohini-I : Supply failed
58	25.7.19	10:58	220KVBAWANA- ROHINI CKT-I	25.7.19	11:48	At Bawana : Put off manually At Rohini-I : Supply failed
59	25.7.19	10:58	220KV BAWANA-SHALIMARBAGH CKT-II	25.7.19	13:17	At 220kV Bawana: Dist. Prot., O/C, A/R lockout, 86 relay, R Phase trip, Dist-2.15KM At 220kV Shalimarbagh: Tripped without indication
60	27.7.19	10:00	220kV SARITA VIHAR - BTPS CKT.-II	27.7.19	18:15	AT BTPS : TRIPPED WITHOUT INDICATOIN.
61	27.7.19	17:20	MASJID MOTH 220/33kV 100MVA Tr-III	27.7.19	17:30	86
62	27.7.19	17:20	MASJID MOTH 220/33kV 100MVA Tx-I	27.7.19	23:30	E/F, O/C, 86.
63	27.7.19	17:20	MASJID MOTH 220/33kV 100MVA Tx-II	27.7.19	17:30	E/F, O/C, 86.
64	27.7.19	18:03	220KV WAZIRABAD - MANDOLA CKT-I	27.7.19	18:34	AT WAZIRABAD : DIST PROT, ZONE-I, 86, DIST 10.5KM.
65	28.7.19	06:00	RAJGHAT 220/33kV 100MVA Tx-2	28.7.19	13:17	I/C-II TRIPPED ON 186X.
66	29.7.19	09:25	VASANT KUNJ 220/66kV 100MVA Tx-II	29.7.19	13:27	86, prv.
67	30.7.19	07:26	SHALIMAR BAGH 220/33kV 100MVA Tx-III	30.7.19	19:25	86, O/C, E/F

20 DETAILS OF UNDER FREQUENCY RELAY OPERATIONS IN DELHI POWER SYSTEM DURING THE MONTH OF JULY 2019

DATE	S. N.	TIME		Name of Grid	NAME OF AFFECTED FEEDERS	MODE	LOAD RELIEF IN MW
		OUT	IN				
				NIL			