

DELHI TRANSCO LTD.

STATE LOAD DISPATCH CENTER

PROGRESS REPORT

OCT - 2019

S. No.	CONTENTS	Page No.
1.	Salient Features of Delhi Power System	3
2.	Performance of Generating Stations within Delhi	4
3.	Details of Outage of Generating Stations within Delhi	5-8
4.	Allocation of Power to Delhi from unallocated quota of central sector	9
5.	Allocation of Power to Discoms	10
6.	Power Availability Demand Position of Delhi at the time of occurrence of Peak Demand	11
7.	Power Availability Demand Position of Delhi at the time of occurrence of Maximum Un-Restricted Demand	12
8.	Source wise scheduled drawl from grid and Availability within Delhi	13-16
9.	Shedding Details	17-21
10.	Load Curve for the Day of Peak Demand	22
11.	Load Curve for the day of occurrence of Maximum Un-Restricted Demand	23
12.	Load Curve for the day of Maximum Energy Consumed	24
13.	Load Curve for the day of Maximum Un-Restricted Energy Demand	25
14.	Load Duration Curve	26
15.	Frequency Analysis	27
16.	Voltage Profile for significant 220kV Sub-Stations	28
17.	Voltage Profile for significant 400kV Sub-Stations	29-30
18.	Tripping Details of 400/220 KV System in Delhi Power System	31-32
19.	Details of Under frequency Relay operations in Delhi Power System	33

1 **SALIENT FEATURES OF DELHI POWER SYSTEM**

Sr. No.	Features	OCT. 2018	OCT 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)	4774	4605
	Date	04.10.18	03.10.19
	Time	15.35.50	15.32.09
3	Peak Demand met (MW)	4713	4605
	Date	05.10.18	03.10.19
	Time	11.42.49	15.32.09
4	Peak Availability (MW)	4583	4530
5	Shortage (-) / Surplus (+) in MW	(-) 130	(-) 75
6	Percentage Shortage (-) / Surplus (+)	(-) 2.76	(-) 1.63
7	Maximum Energy Consume in a day (Mus)	99.609	93.633
8	Energy Consumed during the month	2500.393	2469.232
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	0.340	0.000
	BRPL	0.000	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	0.340	0.000
B)	Due to Constraints in System in Mus		
	DTL	0.083	0.102
	NDPL	0.060	0.031
	BRPL	0.448	0.158
	BYPL	0.061	0.026
	NDMC	0.000	0.000
	MES	0.000	0.000
	Other Agencies	0.003	0.018
	Total	0.655	0.335
11	Grand Total in Mus	0.995	0.335

2. PERFORMANCE OF GENERATING STATIONS WITHIN DELHI DURING OCT 2019

A) For the month of Oct 2019

All Figures in MUs

S. No	Stations	Gross Generation	Aux. Consumption	Net Generation	Availability (%)	Backing Down
1.	RPH	0.000	0.124	-0.124	0.00	0.00
2.	GT	29.195	1.563	27.632	81.94	132.13
3.	PPCL	115.585	2.496	113.089	91.69	104.99
4.	BTPS	0.000	0.495	-0.495	0.00	0.00
5.	Rithala	0.000	0.000	0.000	0.00	0.00
6.	Bawana	358.125	11.144	346.981	77.38	418.47
7.	Towmcl	15.500	1.193	13.587	--	--
8.	EDWPCL	4.446	0.933	3.513	--	--
9.	DMSWL	12.999	2.294	10.705	--	--
	TOTAL	535.85	20.242	514.888	--	655.59

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

Power Station	Effective Capacity (MW)	Net Generation in MUs for Oct 2019	Availability (%) for Oct 2019	PLF (%) for Oct 2019	Cumulative Generation in MUs upto Oct 2019 for the year 2019-20	Cumulative Availability in % upto Oct 2019 for the year 2019-20	Cumulative PLF in % upto Oct 2019 for the year 2019-20
RPH	135	-0.124	0.00	0.00	-0.883	0.00	-0.08
GT	270	27.632	81.94	14.13	336.167	85.17	24.97
PPCL	330	113.089	91.69	47.61	918.071	94.21	55.92
BTPS	705	-0.495	0.00	0.00	-4.317	0.00	0.00
Rithala	108	0.000	0.00	0.00	0.000	0.00	0.00
Bawana	1372	346.981	77.38	36.28	2494.921	84.97	36.87
Towmcl	16	13.587	--	134.55	88.436	--	--
EDWPCL	--	3.513	--	51.46	16.717	--	--
DMSWL	--	10.705	--	75.23	73.641	--	--
TOTAL	2936	514.888	--	--	3922.753	--	--

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.
		09.08.19	12.47	09.08.19	15.45	Unit tripped due to tripping of 66kV Switch yard.
		27.08.19	15.05	27.08.19	20.20	Unit tripped due to tripping of generator.
		10.09.19	19.55	11.09.19	17.44	Unit tripped due to rotating diode faulty.
		28.09.19	01.35	28.09.19	02.30	Unit tripped due to field failure.
		22.10.19	10.00	08.11.19	19.15	Hot gas path inspection.

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
		09.08.19	12.47	09.08.19	15.45	Unit tripped due to tripping of 66kV Switch yard.
		30.09.19	06.42	30.09.19	08.05	Unit tripped due to battery under voltage.
		11.10.19	09.00	19.10.19	15.30	Combustion inspection.

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	
		09.08.19	12.47	10.08.19	22.30	Unit tripped due to tripping of 66kV Switch yard.
		28.08.19	14.28	28.08.19	15.55	Gen. differential trip.
		29.08.19	10.15	29.08.19	13.15	Tripped on false alarm.

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 drum level disturbance.
		20.09.19	09.00	03.10.19	21.20	Minor inspection.

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 tripped on drum 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
		29.08.19	14.20	29.08.19	15.15	Tripped due to drum level high
		11.09.19	07.01	11.09.19	07.50	Unit tripped due to low vaccume
		19.10.19	19.35	19.10.19	20.25	AVR Fuse failure
		20.10.19	13.50	20.10.19	15.07	VT Fuse fail, Class A relay operation
		26.10.19	07.34	26.10.19	08.02	
		30.10.19	10.23	30.10.19	11.11	

(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
		06.08.19	11.51	08.08.19	21.02	
		10.08.19	00.00	27.08.19	18.19	
12.09.19	02.07	21.09.19	12.24			

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	05.08.19	20.43	
		30.08.19	13.06	10.09.19	20.43	
		21.09.19	12.24	16.10.19	18.00	Unit swapped by GT-#1
		16.10.19	18.00	20.10.19	19.45	Withdraw planned mtc
		20.10.19	19.45	31.10.19	23.59	Stopped due to low demand and high frequency

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
		05.09.19	14.40	05.09.19	19.11	
		21.09.19	13.10	21.09.19	14.10	
		26.10.19	09.09	26.10.19	10.17	Tripped due to grid disturbance

(D) 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 .
		07.08.19	07.09	07.08.19	11.37	Fault alarm appeared.
		07.09.19	06.05	07.09.19	12.10	High DP.

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.
		07.09.19	07.00	08.09.19	06.00	High intake air filter fault.

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 phae 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 .
		04.08.19	16.25	04.08.19	23.40	Tripped due to control oil leakage.
		07.08.19	12.35	07.08.19	12.35	Unit tripped due to GT Unit f#3 tripped
		11.08.19	00.05	11.08.19	11.39	Oil level very low, oil leakage.

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
		03.08.19	13.31	03.08.19	13.31	Tripped due to high DP
		17.08.19	10.00	17.08.19	18.00	Boroscopic inspection by OEM.
		29.08.19	18.00	30.08.19	01.15	Unit tripped due to generator proection.
		21.10.19	00.00	26.10.19	18.00	Attended leakage of Hydrogen from Generator cooler,Seal oil system line modification work done.

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	
		19.09.19	11.12	19.09.19	15.00	Loss of flame.
		09.10.19	14.00	20.10.19	23.59	Mastr Trip relay upgradation and diverter damper seal replacement & rectification.

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 reviewd to avoid fault outside the zone of Transformer Protection.
		03.08.19	11.48	03.08.19	13.44	Due tripping of GT-2
		17.08.19	10.00	17.08.19	18.00	Boroscopic inspection by OEM.
		29.08.19	18.00	30.08.19	01.15	Unit tripped due to generator proection.
		09.10.19	14.00	14.10.19	06.00	GT#4 under PO so half STG taken out from DC
		21.10.19	13.30	26.10.19	18.00	GT#3 under PO so half STG taken out from DC

4 ALLOCATION OF POWER TO DELHI

A) Time block 00.00hrs. to 24.00hrs. @ 0% allocation from Unallocated Quota from 01.09.2019

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	152	139	0	0	139
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	1723	1546	0	0	1546
NHPC							
Baira Suiil 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	2550	2326	0	0	2326
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	3949	3596	0	0	3596

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 OCTOBER 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	15.02.49	0	32	144	472	19	7	13	0	687	3772	3743	29	4459	3	4462
2	22.59.04	0	35	146	466	18	4	17	0	686	3166	3142	24	3852	0	3852
3	15.32.09	0	57	141	514	17	7	9	0	745	3860	3785	75	4605	0	4605
4	12.04.29	0	34	146	467	17	-1	18	0	681	3664	3669	-5	4345	0	4345
5	18.25.44	0	36	146	468	17	-1	17	0	683	3331	3238	93	4014	0	4014
6	18.46.07	0	34	145	463	19	0	14	0	675	3051	3075	-24	3726	0	3726
7	18.27.42	0	36	147	532	19	-1	15	0	748	3305	3289	16	4053	0	4053
8	11.55.15	0	33	147	464	19	-1	17	0	679	2705	2645	60	3384	0	3384
9	18.26.31	0	33	145	461	13	-1	13	0	664	3483	3353	130	4147	0	4147
10	18.32.05	0	34	145	604	12	7	11	0	813	3380	3341	39	4193	0	4193
11	18.27.51	0	33	145	569	16	5	17	0	785	3428	3454	-26	4213	0	4213
12	18.24.58	0	34	145	563	16	5	15	0	778	3247	3171	76	4025	0	4025
13	18.28.38	0	38	146	512	19	5	15	0	735	3065	3054	11	3800	0	3800
14	18.25.20	0	39	145	562	18	6	18	0	788	3448	3390	58	4236	0	4236
15	18.00.27	0	39	145	543	19	-1	15	0	760	3545	3326	219	4305	0	4305
16	18.27.07	0	39	145	568	17	7	15	0	791	3526	3522	4	4317	0	4317
17	11.55.08	0	39	143	473	18	5	16	0	694	3618	3538	80	4312	0	4312
18	11.00.00	0	64	146	465	17	5	6	0	703	3631	3491	140	4334	0	4334
19	18.26.17	0	38	147	549	18	8	9	0	769	3240	3234	6	4009	0	4009
20	18.23.22	0	38	147	467	17	7	16	0	692	2968	2916	52	3660	0	3660
21	18.21.43	0	39	147	530	19	8	18	0	761	3197	3152	45	3958	0	3958
22	18.37.29	0	40	146	467	18	10	17	0	698	3193	3167	26	3891	0	3891
23	18.30.29	0	40	147	476	19	-1	15	0	696	3227	3173	54	3923	0	3923
24	18.29.17	0	40	146	488	18	7	10	0	709	3245	3199	46	3954	0	3954
25	12.45.58	0	39	147	449	17	5	7	0	664	3247	3072	175	3911	0	3911
26	11.23.00	0	40	147	450	17	7	17	0	678	2802	2727	75	3480	0	3480
27	18.25.06	0	40	147	464	19	5	18	0	693	2374	2466	-92	3067	0	3067
28	18.30.00	0	41	148	446	19	6	20	0	680	2225	2404	-179	2905	0	2905
29	10.59.33	0	41	150	359	18	5	19	0	592	2561	2530	31	3153	0	3153
30	18.11.50	0	40	147	468	17	5	15	0	692	2821	2860	-39	3513	0	3513
31	18.17.33	0	40	147	465	19	-1	17	0	687	2860	2897	-37	3547	0	3547

POWER AVAILABILITY- DEMAND POSITION AT THE TIME OF MAXIMUM UNRESTRICTED DEMAND DURING OCTOBER 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	Towmd	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	15.02.49	0	32	144	472	19	7	13	0	687	3772	3743	29	4459	3	4462
2	22.59.04	0	35	146	466	18	4	17	0	686	3166	3142	24	3852	0	3852
3	15.32.09	0	57	141	514	17	7	9	0	745	3860	3785	75	4605	0	4605
4	12.04.29	0	34	146	467	17	-1	18	0	681	3664	3669	-5	4345	0	4345
5	18.25.44	0	36	146	468	17	-1	17	0	683	3331	3238	93	4014	0	4014
6	18.46.07	0	34	145	463	19	0	14	0	675	3051	3075	-24	3726	0	3726
7	18.27.42	0	36	147	532	19	-1	15	0	748	3305	3289	16	4053	0	4053
8	11.55.15	0	33	147	464	19	-1	17	0	679	2705	2645	60	3384	0	3384
9	18.26.31	0	33	145	461	13	-1	13	0	664	3483	3353	130	4147	0	4147
10	18.32.05	0	34	145	604	12	7	11	0	813	3380	3341	39	4193	0	4193
11	18.27.51	0	33	145	569	16	5	17	0	785	3428	3454	-26	4213	0	4213
12	18.24.58	0	34	145	563	16	5	15	0	778	3247	3171	76	4025	0	4025
13	18.28.38	0	38	146	512	19	5	15	0	735	3065	3054	11	3800	0	3800
14	18.25.20	0	39	145	562	18	6	18	0	788	3448	3390	58	4236	0	4236
15	18.00.27	0	39	145	543	19	-1	15	0	760	3545	3326	219	4305	0	4305
16	18.27.07	0	39	145	568	17	7	15	0	791	3526	3522	4	4317	0	4317
17	11.55.08	0	39	143	473	18	5	16	0	694	3618	3538	80	4312	0	4312
18	11.00.00	0	64	146	465	17	5	6	0	703	3631	3491	140	4334	0	4334
19	18.26.17	0	38	147	549	18	8	9	0	769	3240	3234	6	4009	0	4009
20	18.23.22	0	38	147	467	17	7	16	0	692	2968	2916	52	3660	0	3660
21	18.21.43	0	39	147	530	19	8	18	0	761	3197	3152	45	3958	0	3958
22	18.37.29	0	40	146	467	18	10	17	0	698	3193	3167	26	3891	0	3891
23	18.30.29	0	40	147	476	19	-1	15	0	696	3227	3173	54	3923	0	3923
24	18.29.17	0	40	146	488	18	7	10	0	709	3245	3199	46	3954	0	3954
25	12.45.58	0	39	147	449	17	5	7	0	664	3247	3072	175	3911	0	3911
26	11.23.00	0	40	147	450	17	7	17	0	678	2802	2727	75	3480	0	3480
27	18.25.06	0	40	147	464	19	5	18	0	693	2374	2466	-92	3067	0	3067
28	18.30.00	0	41	148	446	19	6	20	0	680	2225	2404	-179	2905	0	2905
29	10.59.33	0	41	150	359	18	5	19	0	592	2561	2530	31	3153	0	3153
30	18.11.50	0	40	147	468	17	5	15	0	692	2821	2860	-39	3513	0	3513
31	18.17.33	0	40	147	465	19	-1	17	0	687	2860	2897	-37	3547	0	3547

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

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

A (i) RPH	0.000
(ii) GT+STG	29.195
(iii) PRAGATI	115.585
(iv) RITHALA	0.000
(v) BAWANA CCGT	358.125
(vi) Timarpur – Okhla	15.500
EDWPCL	4.446
DMSWL	12.999
TOTAL	535.850
B) AVAILABILITY FROM BTPS	-0.495
C) AUXILIARY CONSUMPTION OF GENERATING STNs. EXCLUDING BTPS	20.467
D) NET GENERATION AVAILABLE WITHIN DELHI(A+B-C)	514.888

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	2.312	2.242	2.312	2.242
SALAL	21.064	20.528	21.064	20.528
SASAN	294.030	285.545	292.669	284.223
TANKAPUR	7.562	7.349	7.562	7.349
CHAMERA	8.699	8.477	8.699	8.477
CHAMERA -II	8.805	8.576	8.805	8.576
CHAMERA -III	6.967	6.790	6.967	6.790
DHAULIGANGA	12.346	12.001	12.346	12.001
SEWA -2	1.615	1.573	1.615	1.573
URI	16.259	15.880	16.259	15.880
URI-II	11.999	11.719	11.999	11.719
KOLDAM	0.000	0.000	0.000	0.000
KOTESHWAR	8.092	7.865	8.092	7.865
PARBATI3	4.126	4.021	4.126	4.021
RAMPUR	0.000	0.000	0.000	0.000
ANTA (GAS)	0.701	0.680	0.439	0.426
ANTA (RLNG)	30.575	29.628	0.011	0.010
ANTA (LIQUID)	0.000	0.000	0.000	0.000
DADRI (GAS)	17.170	16.801	14.912	14.592
DADRI (RLNG)	47.585	46.590	0.715	0.700
DADRI (LIQUID)	0.000	0.000	0.000	0.000
AURAIYA (GAS)	4.829	4.692	4.377	4.253
AURAIYA (RLNG)	46.711	45.255	0.196	0.190
AURAIYA (LIQUID)	0.000	0.000	0.000	0.000
SINGRAULI	90.491	87.239	80.936	78.032
SINGRAULI_HYDRO	0.000	0.000	0.000	0.000
RIHAND -I	68.346	65.895	67.403	64.984
RIHAND -II	83.093	80.131	80.901	78.021
RIHAND -III	89.719	87.124	86.101	83.612
UNCHAAR-I	14.036	13.628	9.455	9.180
UNCHAAR-II	31.820	30.914	20.987	20.390
UNCHAAR-III	19.635	19.076	13.213	12.837
UNCHAAR-IV	0.000	0.000	0.000	0.000
DADRI (TH)	513.641	502.831	161.730	158.340
DADRI (TH) STAGE-II	256.431	251.033	177.518	173.793
TALCHER FOR AUX. OF BTPS	0.979	0.955	0.979	0.955
NAPP	29.698	28.774	29.698	28.774
RAPP 'B'	0.000	0.000	0.000	0.000
RAPP 'C'	37.925	36.373	37.925	36.373
NATHPA JHAKRI	44.116	42.988	44.116	42.988
DULASTI	27.821	27.104	27.821	27.104
TEHRI	15.698	15.258	15.698	15.258

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
JHAJJAR	484.529	474.330	0.483	0.473
KHELGAON	29.123	28.566	24.492	24.023
KHELGAON-II	94.836	93.024	83.692	82.091
FARAKA	9.169	8.972	7.186	7.031
TALA	14.333	13.993	14.333	13.993
DVC	172.139	171.189	171.189	169.844
TUTICORIN - BRPL	6.818	6.744	6.744	6.687
MADHYA PRADESH	0.000	0.000	0.000	0.000
UTTAR PRADESH	0.000	0.000	0.000	0.000
WEST BENGAL	0.000	0.000	0.000	0.000
SCLTPS (UP)	0.000	0.000	0.000	0.000
HARYANA	0.000	0.000	0.000	0.000
SEIL PROJECT(ANDHRA PRADESH)	0.000	0.000	0.000	0.000
MEGHALAYA	8.825	8.779	8.779	8.708
ANDHRA	0.325	0.322	0.322	0.320
KARNATAKA	3.251	3.201	3.201	3.174
PUNJAB	0.000	0.000	0.000	0.000
METHON POWER(NDPL)LT-06	168.740	167.824	167.824	166.464
DVC MEJIA (LT-08)(BYPL)	52.922	52.639	52.639	52.200
Acme_RUMS	10.552	10.461	10.461	10.377
Arinsun_RUMS	10.610	10.520	10.520	10.435
Mahindra_RUMS	2.868	2.843	2.843	2.820
URS	0.245	0.243	0.245	0.243
JAMMU & KASHMIR	17.433	17.203	17.203	17.061
HIMACHAL PRADESH	24.119	23.709	23.709	23.544
DIKACHU	0.449	0.444	0.444	0.441
GUJRAT	0.000	0.000	0.000	0.000
JP NIGREE	0.000	0.000	0.000	0.000
NAGALAND	0.000	0.000	0.000	0.000
HIMACHAL PRADESH LT-59 DVC	2.599	2.557	2.557	2.536
HARYANA (LT-05)	27.581	27.307	27.307	27.105
ILF TNEB	0.000	0.000	0.000	0.000
ODHISHA	0.000	0.000	0.000	0.000
ORISSA MT-20 JITPL -DVC	5.112	5.053	5.053	5.013
RAJASTHAN	0.000	0.000	0.000	0.000
MANIPUR	0.310	0.309	0.309	0.307
RAJASTHAN(SOLAR) BRPL-LT36	3.670	3.604	3.604	3.575
RAJASTHAN(SOLAR) BYPL - LT-35	3.506	3.443	3.443	3.416
RAJASTHAN(SOLAR) TPDDL LT-31	3.515	3.452	3.452	3.424
HP TPDDL 2019_11	2.777	2.731	2.731	2.710
TO TAMILNAIDU	-0.196	-0.199	-0.199	-0.201
TO ANDHRA	-0.521	-0.527	-0.527	-0.534
TO UTTAR PRADESH	-0.146	-0.149	-0.149	-0.151
TO WEST BENGAL	0.000	0.000	0.000	0.000
TO ASSAM	-0.049	-0.050	-0.050	-0.050
TO VLCPP 1800	0.000	0.000	0.000	0.000
TO BIHAR	-0.148	-0.149	-0.149	-0.151
TO TELENGANA	0.000	0.000	0.000	0.000
TO GOA	0.000	0.000	0.000	0.000
TO CHATTISHGARH	0.000	0.000	0.000	0.000
TO DADAR & NAGAR HAVELI	0.000	0.000	0.000	0.000
BTPS TO MP	0.000	0.000	0.000	0.000
TO HIMACHAL PRADESH	-57.717	-58.822	-58.822	-59.643
TO GUJRAT	0.000	0.000	0.000	0.000
POWER EXCHANGE(IEX)	257.410	255.338	257.410	255.338
TO POWER EXCHANGE (IEX)	-56.687	-57.460	-56.687	-57.460
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)	-32.577	-33.007	-32.577	-33.007
TO SHARE PROJECT (PUNJAB)	-32.599	-33.030	-32.599	-33.030
TOTAL	3112.021	3040.942	2008.063	1961.176

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	1314.783	1281.518	718.893	699.360
NTPC - ER	133.128	130.562	115.370	113.145
NHPC	129.576	126.259	129.576	126.259
NPC	67.623	65.147	67.623	65.147
SASAN	294.030	285.545	292.669	284.223
KOTESHWAR	8.092	7.865	8.092	7.865
NATHPA JHAKRI	44.116	42.988	44.116	42.988
TALCHER FOR AUX. OF BTPS	0.979	0.955	0.979	0.955
TEHRI	15.698	15.258	15.698	15.258
TALA	14.333	13.993	14.333	13.993
JHAJJAR	484.529	474.330	0.483	0.473
RAJASTHAN SOLAR(BRPL)T-36	3.670	3.604	3.604	3.575
RAJASTHAN SOLAR(BYPL)T-35	3.506	3.443	3.443	3.416
RAJASTHAN SOLAR(TPDDL)T-31	3.515	3.452	3.452	3.424
HP TPDDL 2019_11	2.777	2.731	2.731	2.710
DVC	172.139	171.189	171.189	169.844
TUTICORIN BRPL	6.818	6.744	6.744	6.687
MADHYA PRADESH	0.000	0.000	0.000	0.000
UTTAR PRADESH	0.000	0.000	0.000	0.000
WEST BENGAL	0.000	0.000	0.000	0.000
SCLTPS (UP)	0.000	0.000	0.000	0.000
HARYANA	0.000	0.000	0.000	0.000
SEIL PROJECT(ANDHRA PRADESH)	0.000	0.000	0.000	0.000
MEGHALAYA	8.825	8.779	8.779	8.708
ANDHRA	0.325	0.322	0.322	0.320
KARNATAKA	3.251	3.201	3.201	3.174
PUNJAB	0.000	0.000	0.000	0.000
METHON POWER (NDPL)-LT-06	168.740	167.824	167.824	166.464
DVC MEJIA (LT-08)(BYPL)	52.922	52.639	52.639	52.200
Acme_RUMS	10.552	10.461	10.461	10.377
Arinsun_RUMS	10.610	10.520	10.520	10.435
Mahindra_RUMS	2.868	2.843	2.843	2.820
URS	0.245	0.243	0.245	0.243
JAMMU & KASHMIR	17.433	17.203	17.203	17.061
HIMACHAL PRADESH	24.119	23.709	23.709	23.544
DIKACHU	0.449	0.444	0.444	0.441
GUJRAT	0.000	0.000	0.000	0.000
JP NIGREE (MP)	0.000	0.000	0.000	0.000
NAGALAND	0.000	0.000	0.000	0.000
HIMACHAL PRADESH LT-59 DVC	2.599	2.557	2.557	2.536
HARYANA (LT -05)	27.581	27.307	27.307	27.105
ILF TNEB	0.000	0.000	0.000	0.000
ODISHA	0.000	0.000	0.000	0.000
ORISSA MT-20 JITPL -DVC	5.112	5.053	5.053	5.013
RAJASTHAN	0.000	0.000	0.000	0.000
MANIPUR	0.310	0.309	0.309	0.307
POWER EXCHANGE(IEX)	257.410	255.338	257.410	255.338
POWER EXCHANGE(PX)	0.000	0.000	0.000	0.000
TOTAL	3292.661	3224.335	2189.822	2145.405

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 TAMILNAIDU	-0.196	-0.199	-0.199	-0.201
TO ANDHRA	-0.521	-0.527	-0.527	-0.534
TO UTTAR PRADESH	-0.146	-0.149	-0.149	-0.151
TO WEST BENGAL	0.000	0.000	0.000	0.000
TO VLCPP 1800 (RJ)	0.000	0.000	0.000	0.000
TO ASSAM	-0.049	-0.050	-0.050	-0.050
TO BIHAR	-0.148	-0.149	-0.149	-0.151
TO TELENGANA	0.000	0.000	0.000	0.000
TO GOA	0.000	0.000	0.000	0.000
TO CHATTISHGARH	0.000	0.000	0.000	0.000
TO DADAR & NAGAR HAVELI	0.000	0.000	0.000	0.000
BTPS TO MP	0.000	0.000	0.000	0.000
TO HIMACHAL PRADESH	-57.717	-58.822	-58.822	-59.643
TO GUJRAT	0.000	0.000	0.000	0.000
TO POWER EXCHANGE (IEX)	-56.687	-57.460	-56.687	-57.460
TO POWER EXCHANGE (PX)	0.000	0.000	0.000	0.000
TO SHARE PROJECT (HARYANA)	-32.577	-33.007	-32.577	-33.007
TO SHARE PROJECT (PUNJAB)	-32.599	-33.030	-32.599	-33.030
TOTAL	-180.640	-183.393	-181.759	-184.229
TOTAL SCHEDULED DRAWAL FROM THE GRID	3112.021	3040.942	2008.063	1961.176

TOTAL CONSUMPTION INCLUDING AUX. OF GENERATING STNs. EXCLUDING BTPS	2489.699
NET CONSUMPTION	2469.232
AVAILABILITY WITHIN DELHI	514.888
ACTUAL DRAWAL FROM THE GRID	1954.344
OVER DRAWAL(+)/UNDER DRAWAL(-) FROM THE GRID ON THE BASIS OF SCHEDULED ALLOCATION MADE BY NRLDC TO DELHI AT PERIPHERY	-6.832
LOAD SHEDDING	0.335
UNRESTRICTED DEMAND (GROSS)	2490.034
UNRESTRICTED DEMAND (NET)	2469.567
MAX. NET CONSUMPTION	93.633 ON 01.10.2019
MAX. LOAD SHEDDING	379MW ON 21.10.2019 AT 18.01HRS.
PEAK LOAD	Peak Demand during the month
DAY PEAK	4605MW AT 15.32.09HRS ON 03.10.2019
EVENING PEAK	4558MW AT 18.30.00HRS ON 03.10.2019
P.L.F. OF GENCO AND PRAGATI STNs.	RPH GT PRAGATI RITHALA BAWANA Timarpur Okhla EDWPCL DMSWL
	0.00% 15.02% 48.65% 0.00% 36.28% 134.55% 51.46% 75.23%

9 SHEDDING DETAILS DURING THE MONTH OF OCTOBER 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.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
02.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
03.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
04.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
05.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
07.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
09.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30.Oct.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31.Oct.19	0	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

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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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
09.Oct.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.Oct.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.Oct.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
12.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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.Oct.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	0.000	0.000

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.Oct.19	0.000	0.000	0.002	0.000	0.000	0.000	0.001	0.002	0.000
02.Oct.19	0.000	0.003	0.000	0.000	0.000	0.000	0.005	0.000	0.000
03.Oct.19	0.002	0.001	0.012	0.000	0.000	0.000	0.004	0.0000	0.000
04.Oct.19	0.008	0.004	0.000	0.000	0.000	0.000	0.010	0.004	0.000
05.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.000	0.000
06.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000
07.Oct.19	0.0000	0.000	0.004	0.000	0.000	0.000	0.003	0.003	0.000
08.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000
09.Oct.19	0.000	0.000	0.002	0.000	0.000	0.000	0.017	0.000	0.000
10.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000
11.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000
12.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000
13.Oct.19	0.004	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000
14.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.038	0.002	0.000
15.Oct.19	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000
16.Oct.19	0.000	0.000	0.000	0.000	0.000	0.026	0.003	0.000	0.000
17.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18.Oct.19	0.000	0.001	0.013	0.000	0.000	0.000	0.014	0.002	0.000
19.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20.Oct.19	0.000	0.000	0.002	0.000	0.000	0.000	0.003	0.000	0.000
21.Oct.19	0.006	0.015	0.006	0.000	0.000	0.000	0.000	0.000	0.000
22.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.007	0.000
23.Oct.19	0.000	0.003	0.000	0.000	0.000	0.000	0.001	0.008	0.000
24.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000
25.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.001	0.000
26.Oct.19	0.003	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000
27.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000
28.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
30.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.001	0.000
31.Oct.19	0.007	0.000	0.000	0.000	0.000	0.000	0.017	0.000	0.000
TOTAL	0.030	0.027	0.041	0.004	0.000	0.026	0.158	0.031	0.000

ALL FIGURES IN MUs

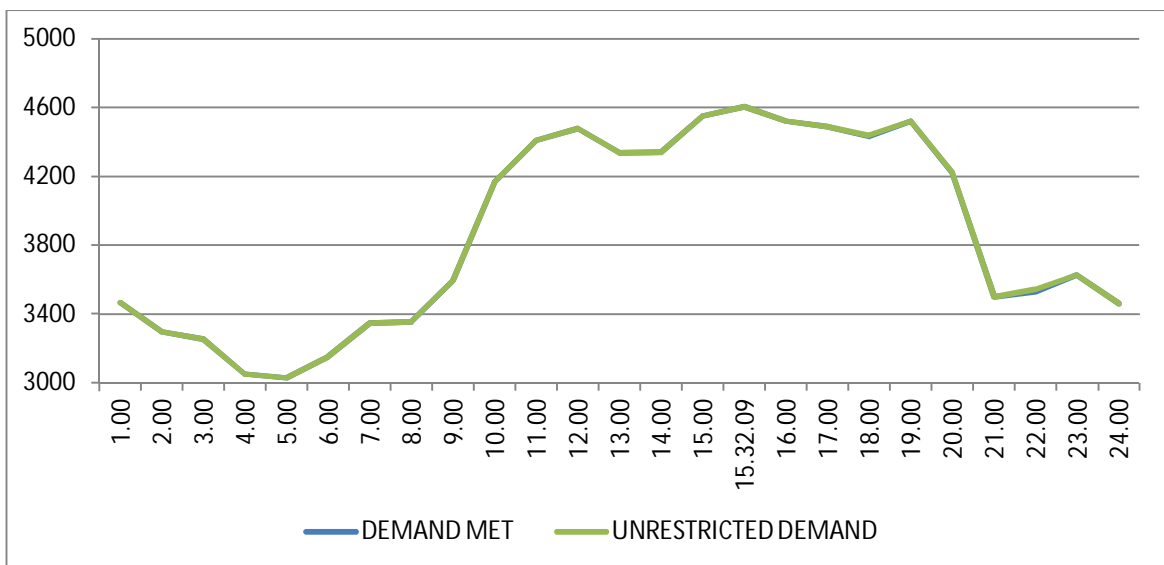
DATE	OTHER AGENCIES LIKE GENCO, BBMB, BTPS ETC.				THEFT PRONE SHEDDING			TOTAL SHEDDING DUE TO T&D CONSTS. & THEFT PRONE	GRAND TOTAL
	BSES		NDPL	NDMC	BSES		NDPL		
	BYPL	BRPL			BYPL	BRPL			
1	35	36	37	38	39	40	41	42= 26 to 41	43 = 25 + 42
01.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.005
02.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.008
03.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.019	0.019
04.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0260	0.026
05.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.003
07.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.010
08.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.005
09.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.019	0.019
10.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.005
11.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002
12.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.004
13.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.005
14.Oct.19	0.000	0.004	0.006	0.000	0.000	0.000	0.000	0.050	0.050
15.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.004
16.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.029	0.029
17.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.030
19.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.005
21.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.027	0.027
22.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.008
23.Oct.19	0.000	0.002	0.006	0.000	0.000	0.000	0.000	0.020	0.020
24.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
25.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.011
26.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.006
27.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.007
28.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
30.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
31.Oct.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.024
TOTAL	0.000	0.006	0.012	0.000	0.000	0.000	0.000	0.335	0.335

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.Oct.19	93.633	4459	15:02:49	3	4462	4462	15:02:49	4459	3
02.Oct.19	80.305	3852	22:59:04	0	3852	3852	22:59:04	3852	0
03.Oct.19	93.004	4605	15:32:09	0	4605	4605	15:32:09	4605	0
04.Oct.19	89.129	4345	12:04:29	0	4345	4345	12:04:29	4345	0
05.Oct.19	83.206	4014	18:25:44	0	4014	4014	18:25:44	4014	0
06.Oct.19	78.322	3726	18:46:07	0	3726	3726	18:46:07	3726	0
07.Oct.19	83.596	4053	18:27:42	0	4053	4053	18:27:42	4053	0
08.Oct.19	74.623	3384	11:55:15	0	3384	3384	11:55:15	3384	0
09.Oct.19	82.374	4147	18:26:31	0	4147	4147	18:26:31	4147	0
10.Oct.19	85.959	4193	18:32:05	0	4193	4193	18:32:05	4193	0
11.Oct.19	84.571	4213	18:27:51	0	4213	4213	18:27:51	4213	0
12.Oct.19	83.359	4025	18:24:58	0	4025	4025	18:24:58	4025	0
13.Oct.19	81.513	3800	18:28:38	0	3800	3800	18:28:38	3800	0
14.Oct.19	85.364	4236	18:25:20	0	4236	4236	18:25:20	4236	0
15.Oct.19	87.741	4305	18:00:27	0	4305	4305	18:00:27	4305	0
16.Oct.19	88.638	4317	18:27:07	0	4317	4317	18:27:07	4317	0
17.Oct.19	89.000	4312	11:55:08	0	4312	4312	11:55:08	4312	0
18.Oct.19	87.339	4334	11:00:00	0	4334	4334	11:00:00	4334	0
19.Oct.19	79.770	4006	18:26:17	0	4006	4006	18:26:17	4006	0
20.Oct.19	75.603	3660	18:23:22	0	3660	3660	18:23:22	3660	0
21.Oct.19	78.766	3958	18:21:43	0	3958	3958	18:21:43	3958	0
22.Oct.19	76.812	3891	18:37:29	0	3891	3891	18:37:29	3891	0
23.Oct.19	75.688	3923	18:30:29	0	3923	3923	18:30:29	3923	0
24.Oct.19	77.001	3954	18:29:17	0	3954	3954	18:29:17	3954	0
25.Oct.19	75.746	3911	12:45:58	0	3911	3911	12:45:58	3911	0
26.Oct.19	70.017	3480	11:23:00	0	3480	3480	11:23:00	3480	0
27.Oct.19	63.715	3067	18:25:06	0	3067	3067	18:25:06	3067	0
28.Oct.19	60.894	2905	18:30:00	0	2905	2905	18:30:00	2905	0
29.Oct.19	63.448	3153	10:59:33	0	3153	3153	10:59:33	3153	0
30.Oct.19	70.579	3513	18:11:50	0	3513	3513	18:11:50	3513	0
31.Oct.19	69.517	3547	18:17:33	0	3547	3547	18:17:33	3547	0
TOTAL	2469.232	4605 03.10.19	15:32:09	0	4605 03.10.19	4605	15:32:09	4605	0

10 **LOAD PATTERN OF DELHI ON THE DAY OF PEAK DEMAND MET DURING OCTOBER 2019 ON 03.10.2019- 4605MW AT 15.32.09HRS.**

All figures in MW

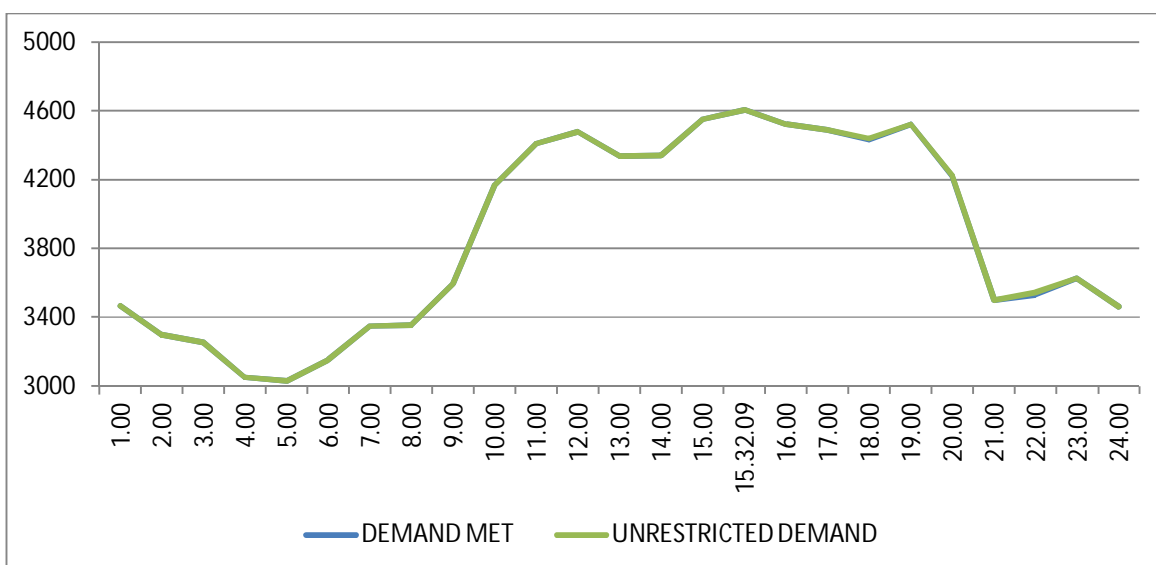
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	3464	0	3464
2.00	3298	0	3298
3.00	3253	0	3253
4.00	3050	0	3050
5.00	3027	0	3027
6.00	3150	0	3150
7.00	3347	0	3347
8.00	3353	0	3353
9.00	3592	0	3592
10.00	4167	0	4167
11.00	4409	0	4409
12.00	4476	0	4476
13.00	4336	0	4336
14.00	4339	0	4339
15.00	4550	0	4550
15.32.09	4605	0	4605
16.00	4522	0	4522
17.00	4490	0	4490
18.00	4432	7	4439
19.00	4522	0	4522
20.00	4216	4	4220
21.00	3501	0	3501
22.00	3529	12	3541
23.00	3626	0	3626
24.00	3458	0	3458
Total (IN MUS)	93.004	0.019	93.023



11 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UN-RESTRICTED DEMAND DURING OCTOBER 2019 ON 03.10.2019- 4605MW AT 15.32.09HRS.

All figures in MW

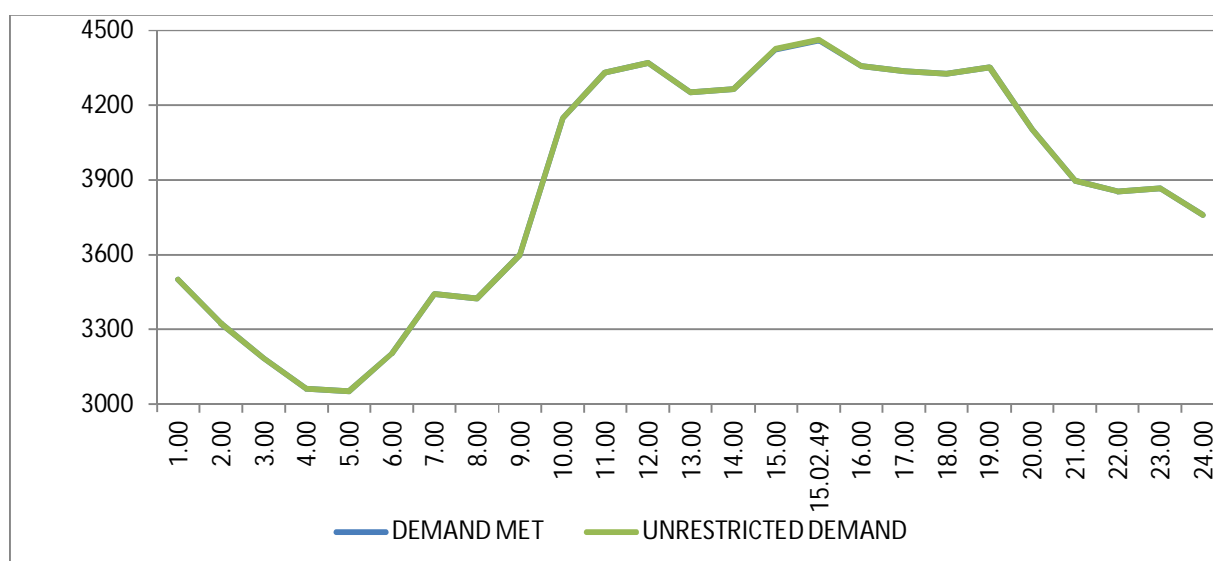
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	3464	0	3464
2.00	3298	0	3298
3.00	3253	0	3253
4.00	3050	0	3050
5.00	3027	0	3027
6.00	3150	0	3150
7.00	3347	0	3347
8.00	3353	0	3353
9.00	3592	0	3592
10.00	4167	0	4167
11.00	4409	0	4409
12.00	4476	0	4476
13.00	4336	0	4336
14.00	4339	0	4339
15.00	4550	0	4550
15.32.09	4605	0	4605
16.00	4522	0	4522
17.00	4490	0	4490
18.00	4432	7	4439
19.00	4522	0	4522
20.00	4216	4	4220
21.00	3501	0	3501
22.00	3529	12	3541
23.00	3626	0	3626
24.00	3458	0	3458
Total (IN MUS)	93.004	0.019	93.023



**12 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM ENERGY CONSUMED
DURING OCTOBER 2019 – 01.10.2019 – 93.633Mus**

All figures in MW

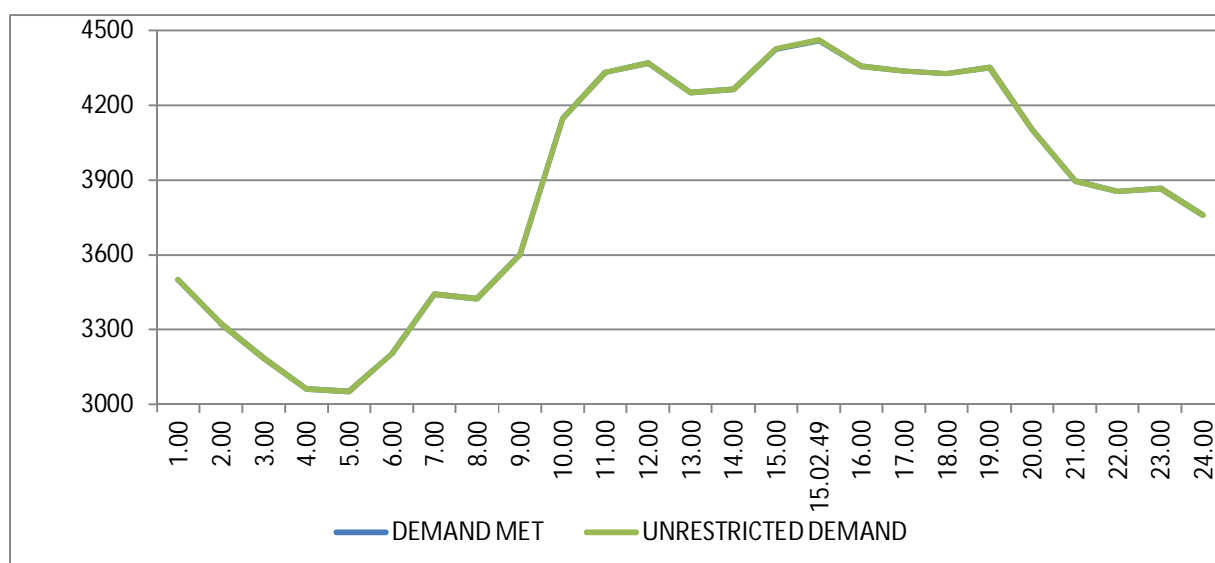
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	3500	0	3500
2.00	3325	0	3325
3.00	3184	0	3184
4.00	3061	0	3061
5.00	3050	0	3050
6.00	3201	0	3201
7.00	3441	0	3441
8.00	3424	0	3424
9.00	3598	0	3598
10.00	4147	0	4147
11.00	4333	0	4333
12.00	4369	0	4369
13.00	4251	0	4251
14.00	4264	0	4264
15.00	4424	3	4427
15.02.49	4459	3	4462
16.00	4357	0	4357
17.00	4337	0	4337
18.00	4327	0	4327
19.00	4352	0	4352
20.00	4101	0	4101
21.00	3897	0	3897
22.00	3854	0	3854
23.00	3866	0	3866
24.00	3759	0	3759
Total (IN MUS)	93.633	0.005	93.638



13 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED ENERGY DEMAND DURING OCTOBER 2019 – 01.10.2019 – 93.638 Mus

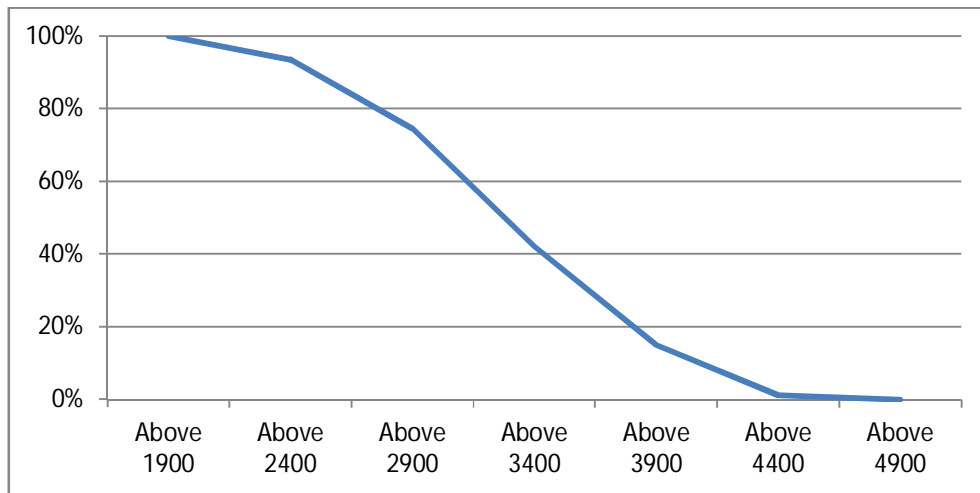
All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	3500	0	3500
2.00	3325	0	3325
3.00	3184	0	3184
4.00	3061	0	3061
5.00	3050	0	3050
6.00	3201	0	3201
7.00	3441	0	3441
8.00	3424	0	3424
9.00	3598	0	3598
10.00	4147	0	4147
11.00	4333	0	4333
12.00	4369	0	4369
13.00	4251	0	4251
14.00	4264	0	4264
15.00	4424	3	4427
15.02.49	4459	3	4462
16.00	4357	0	4357
17.00	4337	0	4337
18.00	4327	0	4327
19.00	4352	0	4352
20.00	4101	0	4101
21.00	3897	0	3897
22.00	3854	0	3854
23.00	3866	0	3866
24.00	3759	0	3759
Total (IN MUS)	93.633	0.005	93.638



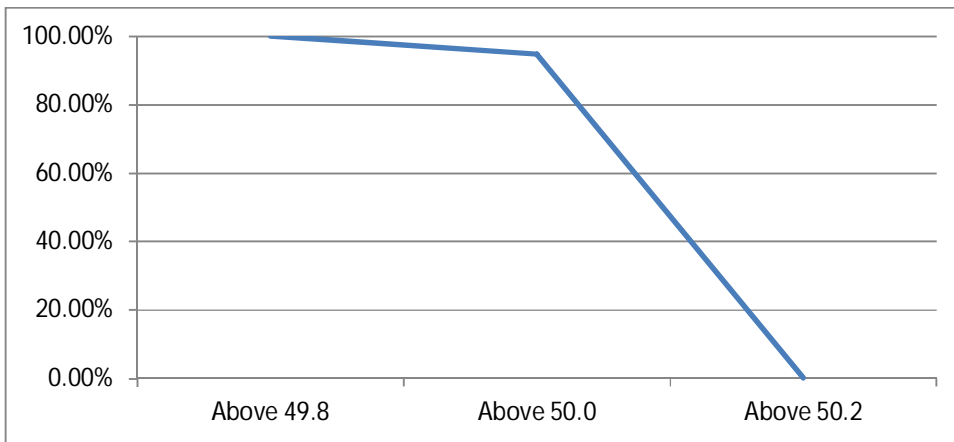
14 LOAD DURATION CURVE FOR OCTOBER 2019

Load in MW	Percentage of Time
Above 1900	100%
Above 2400	93.58%
Above 2900	74.56%
Above 3400	42.14%
Above 3900	15.05%
Above 4400	1.11%
Above 4900	0.00%



FREQUENCY ANALYSIS FOR THE MONTH OF OCTOBER 2019

Frequency Range in Hz.	Percentage of time
Above 49.8	100.00%
Above 50.0	94.76%
Above 50.2	0.23%



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

All figures in kV

Date	NARELA		GAZIPUR	
	Max	Min	Max	Min
01.Oct.19	233.95	220.92	236.65	222.98
02.Oct.19	232.78	222.85	236.91	225.69
03.Oct.19	232.53	218.21	237.3	220.79
04.Oct.19	233.04	221.56	238.33	224.4
05.Oct.19	234.07	222.98	238.2	226.08
06.Oct.19	232.66	223.5	237.04	229.95
07.Oct.19	232.14	220.79	238.2	226.08
08.Oct.19	232.53	226.72	239.1	231.11
09.Oct.19	233.3	220.27	238.59	225.05
10.Oct.19	233.43	220.92	237.94	224.4
11.Oct.19	233.3	220.27	237.56	224.4
12.Oct.19	233.43	222.98	237.56	225.43
13.Oct.19	234.07	222.08	239.1	228.27
14.Oct.19	233.3	218.98	238.97	224.66
15.Oct.19	235.36	--	237.81	225.05
16.Oct.19	235.23	222.34	236.4	224.14
17.Oct.19	234.59	221.18	237.17	223.5
18.Oct.19	234.33	222.85	237.56	226.08
19.Oct.19	235.88	225.05	238.2	226.59
20.Oct.19	235.36	228.66	238.2	232.14
21.Oct.19	236.91	--	239.49	229.82
22.Oct.19	237.56	226.59	239.1	228.79
23.Oct.19	236.91	223.63	239.1	227.5
24.Oct.19	238.2	226.08	239.62	227.37
25.Oct.19	236.91	226.21	238.46	227.88
26.Oct.19	237.3	228.14	240.14	230.21
27.Oct.19	237.94	232.4	240.14	233.17
28.Oct.19	238.33	231.24	240.78	232.66
29.Oct.19	238.33	228.14	240.91	228.66
30.Oct.19	238.59	228.14	240.39	228.01
31.Oct.19	238.46	228.14	239.88	228.92

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

All figures in kV

Date	400kV Bamnauli Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
01.Oct.19	417.86	3:05:37	395.11	18:46:40	407.29
02.Oct.19	415.98	3:43:11	397.22	18:36:53	409.9
03.Oct.19	415.74	21:24:07	389.95	14:43:06	403.73
04.Oct.19	416.92	4:00:58	396.99	14:29:00	407.81
05.Oct.19	417.15	3:59:22	398.16	18:43:34	406.62
06.Oct.19	415.04	17:00:24	402.85	19:06:07	409.43
07.Oct.19	416.21	3:16:28	399.8	11:30:39	408.7
08.Oct.19	418.32	2:55:22	403.32	18:38:54	412.1
09.Oct.19	415.74	3:55:16	396.28	9:33:06	406.23
10.Oct.19	417.86	4:01:09	397.22	14:18:00	407.7
11.Oct.19	417.15	4:01:22	397.92	9:31:09	407.35
12.Oct.19	417.86	4:02:48	399.1	10:07:07	408.41
13.Oct.19	418.32	4:02:30	400.97	18:46:22	410.28
14.Oct.19	416.68	3:33:23	393.23	11:44:44	405.82
15.Oct.19	416.21	4:02:27	395.58	10:14:37	405.67
16.Oct.19	415.51	4:01:20	393.47	14:39:12	404.75
17.Oct.19	415.04	3:59:44	392.76	11:13:35	405.1
18.Oct.19	414.81	20:58:20	389.95	18:36:30	406.65
19.Oct.19	416.68	3:12:21	396.05	11:46:32	407.41
20.Oct.19	415.98	4:01:35	405.19	18:39:57	410.45
21.Oct.19	416.92	21:12:21	401.68	11:35:00	409.5
22.Oct.19	416.92	3:32:02	399.33	9:49:13	409.51
23.Oct.19	418.09	4:00:24	398.63	9:51:56	408.43
24.Oct.19	419.03	3:09:09	398.39	11:08:15	408.5
25.Oct.19	418.32	3:19:27	399.1	6:39:28	409.69
26.Oct.19	418.56	4:00:31	401.44	9:35:51	411.49
27.Oct.19	419.03	4:00:24	408.01	5:56:14	413.96
28.Oct.19	419.03	3:29:37	406.13	6:23:28	412.74
29.Oct.19	419.73	3:19:11	397.92	9:03:51	411.85
30.Oct.19	418.32	3:16:14	398.39	10:52:45	408.7
31.Oct.19	418.32	3:20:25	399.57	9:15:19	410.42

All figures in kV

Date	400kV Bawana Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
01.Oct.19	423.25	3:04:08	402.61	18:45:11	413.95
02.Oct.19	421.84	4:00:24	406.13	18:36:50	417.29
03.Oct.19	421.84	3:38:57	400.97	11:43:54	412.58
04.Oct.19	424.19	3:47:17	404.49	19:41:30	415.28
05.Oct.19	423.01	3:32:38	405.43	9:58:41	413.12
06.Oct.19	420.9	4:02:02	409.18	19:06:34	415.27
07.Oct.19	422.55	3:17:11	406.37	11:30:48	414.27
08.Oct.19	422.78	3:19:40	409.88	18:44:03	417.83
09.Oct.19	421.37	3:49:30	404.02	11:38:46	412.54
10.Oct.19	422.78	3:55:49	405.66	14:19:28	414.02
11.Oct.19	422.08	3:48:19	404.49	18:45:21	413.55
12.Oct.19	422.08	3:59:58	406.13	10:10:13	414.64
13.Oct.19	423.72	4:02:07	407.3	11:12:13	416.79
14.Oct.19	423.72	3:33:26	402.85	18:48:39	413.1
15.Oct.19	422.08	4:00:22	404.02	19:09:08	413.18
16.Oct.19	422.55	4:00:22	404.02	18:35:47	413.08
17.Oct.19	423.25	4:00:50	403.08	11:17:10	413.83
18.Oct.19	422.08	20:58:37	407.54	10:52:18	415.05
19.Oct.19	423.25	3:08:23	406.37	11:39:19	415.47
20.Oct.19	422.78	3:01:51	411.06	12:23:18	417.46
21.Oct.19	423.95	21:11:14	410.12	11:31:56	417.2
22.Oct.19	423.72	3:53:09	408.71	9:49:09	417.18
23.Oct.19	423.95	21:11:47	406.6	11:10:09	415.91
24.Oct.19	424.89	3:16:22	406.6	11:08:18	415.42
25.Oct.19	424.42	23:48:56	406.83	10:16:06	417.61
26.Oct.19	425.59	2:57:19	409.88	9:35:54	419.25
27.Oct.19	426.53	16:06:49	415.51	6:11:50	421.75
28.Oct.19	426.06	17:02:48	413.63	6:40:40	420.32
29.Oct.19	425.36	4:01:57	407.54	9:36:51	418.89
30.Oct.19	424.42	20:58:49	408.94	12:33:33	417.58
31.Oct.19	424.89	3:17:24	409.18	11:40:22	418.23

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

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
1	1.10.19	11:55	GOPALPUR 220/66kV 100MVA Tx-II	1.10.19	12:10	O/C.
2	2.10.19	14:54	OKHLA 220/33kV 100MVA Tx-III	2.10.19	17:50	86
3	2.10.19	14:56	220kV DIAL- MEHRAULI CKT-I	3.10.19	10:10	AT MEHRAULI : 86, LINE DIFFERENTIAL. AT DIAL : DIST PROT, ZONE-I, DIFFERENTIAL.
4	3.10.19	13:24	220kV BAWANA - KANJHAWALA CKT-2	3.10.19	14:05	At Khanjawala : Ckt. did not trip. At Bawana : Dist prot, Zone-I, O/C, B phase.
5	3.10.19	13:24	220kV BAWANA - KANJHAWALA CKT - 1	3.10.19	13:29	At Khanjawala : 86. At Bawana : Ckt. did not trip.
6	3.10.19	13:40	GOPALPUR 220/66kV 100MVA Tx-II	3.10.19	15:30	E/F, 186.
7	3.10.19	20:55	220kV GOPALPUR- MANDOLACKT-I	4.10.19	10:47	AT GOPALPUR : DIST PROT, DIST 18.0KM, B PHASE TERIP.
8	3.10.19	21:36	R K PURAM 220/33kV 100MVA Tx-I	4.10.19	13:20	PRV.
9	3.10.19	21:55	INDRAPRASTHA POWER 220/33kV 100MVA Tx-II	4.10.19	04:35	86
10	3.10.19	23:38	LODHI RD 220/33kV 100MVA Tx-I	4.10.19	13:48	86
11	4.10.19	00:09	LODHI RD 220/33kV 100MVA Tx-II	4.10.19	16:17	DIFFERENTIAL.
12	4.10.19	12:10	PATPARGANJ 220/33kV 100MVA Tx-IV	4.10.19	12:18	86
13	4.10.19	12:10	PATPARGANJ 220/33kV 100MVA Tx-III	4.10.19	12:18	O/C
14	5.10.19	12:40	220kV MEHRAULI - VASANT KUNJ CKT.-I	5.10.19	18:43	AT MEHRAULI : DIST PROT, DIST 7.036KM, AT VASANT KUNJ : DIST PROT, ZONE-I.
15	7.10.19	09:11	220kV BAMNAULI - DIAL CKT-I	7.10.19	11:18	AT BAMNAULI : 186, LINE DIFFERENTIAL. AT MEHRAULI : LINE DIFFERENTIAL, 86.
16	7.10.19	09:12	DIAL 220/66kV 160MVA Tx-I	7.10.19	18:41	86
17	7.10.19	11:25	PATPARGANJ 220/33kV 100MVA Tx-IV	8.10.19	07:45	86
18	9.10.19	12:26	220KVBAWANA- ROHINI CKT-II	9.10.19	19:48	AT ROHINI -I : 186A&B, R PHASE. AT BAWANA : 186A&B.
19	9.10.19	13:11	220kV BAMNAULI-PAPPANKALAN-II CKT-I	9.10.19	16:54	AT BAMNAULI : DIST PROT, DIST 7.42KM. AT PAPANALAN-II : DIST PROT, DIST 11.08KM.
20	9.10.19	14:01	220kV ROHINI-SHALIMARBAGH CKT-I	9.10.19	15:12	AT ROHINI-I : E/F.
21	9.10.19	17:24	220kV BAMNAULI-PAPPANKALAN-II CKT-I	9.10.19	19:42	AT BAMNAULI : DIST PROT, DIST 21.53KM. AT PAPANALAN-II : DIST PROT, ZONE-I, DIST OKM.
22	12.10.19	13:01	220kV ROHINI-SHALIMARBAGH CKT-I	12.10.19	16:01	AT ROHINI : R PHASE, DIFFERENTIAL.
23	13.10.19	10:05	PREETVIHAR 220/33kV 100MVA Tx-II	13.10.19	11:13	86
24	13.10.19	10:05	PREETVIHAR 220/33kV 100MVA Tx-I	13.10.19	11:13	86
25	13.10.19	10:37	220kV Harsh Vihar - Preet Vihar Ckt-I	13.10.19	11:13	AT PREET VIHAR : 86.
26	13.10.19	10:37	220kV Harsh Vihar - Preet Vihar Ckt-II	13.10.19	11:13	AT PREET VIHAR : 86.
27	16.10.19	12:35	220KV GAZIPUR - MAHARANIBAGH CKT. -I	16.10.19	14:27	AT GAZIPUR : O/C.
28	17.10.19	11:16	BAWANA 400/220kV 315MVA ICT-III	17.10.19	12:29	SUPERVISION RELAY.
29	18.10.19	10:31	BAWANA 400/220kV 315MVA ICT-V	18.10.19	14:17	SPR TRIP.
30	18.10.19	13:17	220kV BAWANA-DSIIDC BAWANA CKT-I	18.10.19	15:18	AT DSIDC BAWANA : 86. AT BAWANA : DIST PROT, 86, DIST 2.2KM.

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
31	18.10.19	18:43	DSIIDC Bawana 220/66kV 160MVA Tx-I	18.10.19	19:50	86
32	18.10.19	19:34	NARELA 220/66kV 100MVA Tx-I	19.10.19	00:10	WITHOUT INDICATION.
33	19.10.19	17:55	220kV GOPALPUR- MANDOLACKT-I	20.10.19	19:45	DIST PROT, DIST 4.2KM.
34	20.10.19	11:35	PATPARGANJ 220/66kV 100MVA Tx-I	20.10.19	12:58	PRV, BUCHOLZ.
35	20.10.19	16:14	220kV DIAL- MEHRAULI CKT-I	20.10.19	00:00	AT MEHRAULI : ACTIVE GROUP -I.
36	20.10.19	16:14	220kV BAMNAULI - DIAL CKT-I	20.10.19	16:37	AT BAMNAULI I DIFFERENTIAL.
37	21.10.19	06:55	VASANT KUNJ 66/11kV, 20MVA Tx-I	21.10.19	10:45	86
38	21.10.19	11:56	NARAINA 220/33kV 100MVA Tx-III	21.10.19	12:23	TRIPPED WITHOUT INDICATION.
39	21.10.19	12:50	220kV GOPALPUR- MANDOLACKT-I	21.10.19	17:11	AT GOPALPUR : 86. AT MANDOLA : DIST PROT, DIST 16.8KM.
40	21.10.19	18:00	BAMNAULI 400/220kV 500MVA ICT-II	21.10.19	18:03	TRIPPED DURING PROTECTION WORK.
41	21.10.19	18:00	BAMNAULI 400/220kV 500MVA ICT-III	21.10.19	18:03	TRIPPED DURING PROTECTION WORK.
42	21.10.19	21:03	220kV GAZIPUR- PATPARGANJ CKT	21.10.19	21:20	AT GAZIPUR : 86
43	25.10.19	12:13	400kV Bamnauli-Jhatikara Ckt-I	25.10.19	12:46	AT BAMNAULI : FALSE TRIP COMMENT SENT FROM BAMNAULI END.
44	25.10.19	12:13	400kV Bamnauli-Jhatikara Ckt-II	25.10.19	12:46	AT BAMNAULI : FALSE TRIP COMMENT SENT FROM BAMNAULI END.
45	26.10.19	09:09	220kV GEETA COLONY- PATPARGANJ CKT -II	26.10.19	10:58	AT GEETA COLONY : DIST PROT, ZONE-II, DIST 5.463KM.
46	26.10.19	21:07	220kV GAZIPUR- PATPARGANJ CKT	26.10.19	22:03	AT PATPARGANJ : TRIPPED ON O/V.
47	27.10.19	12:07	220kV PRAGATI - SARITA VIHAR CKT - I	27.10.19	14:02	AT SARITA VIHAR : DIST PROT, ZONE-I, DIST 3.413KM. AT PRAGATI : DIST PROT, ZONE-II, III, DIST 11.95KM.
48	29.10.19	07:25	GOPALPUR 220/33kV 100MVA Tx-I	29.10.19	14:02	O/C.
49	30.10.19	15:19	VASANT KUNJ 66/11kV, 20MVA Tx-I	30.10.19	15:20	86
50	31.10.19	12:12	RAJGHAT 220/33kV 100MVA Tx-2	31.10.19	12:50	O/C, E/F.

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

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