

# **DELHI TRANSCO LTD.**

STATE LOAD DISPATCH CENTER

## **PROGRESS REPORT**

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SEPT - 2019

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# 1 SALIENT FEATURES OF DELHI POWER SYSTEM

Sr. No.	Features	SEPT. 2018	SEPT. 2019
1	<b>Effective Generation Capacity within Delhi in MW</b>		
	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	<b>Maximum Unrestricted Demand (MW)</b>	<b>5358</b>	<b>6626</b>
	Date	01.09.2018	11.09.2019
	Time	00.02.01	22.56.24
3	<b>Peak Demand met (MW)</b>	<b>5358</b>	<b>6626</b>
	Date	01.09.2018	11.09.2019
	Time	00.02.01	22.56.24
4	Peak Availability (MW)	5167	6598
5	Shortage (-) / Surplus (+) in MW	(-) 191	(-) 28
6	Percentage Shortage (-) / Surplus (+)	(-) 3.56	(-) 0.42
7	Maximum Energy Consume in a day (Mus)	108.921	137.676
8	Energy Consumed during the month	<b>2923.534</b>	<b>3462.777</b>
9	<b>Load Shedding in Mus</b>		
A)	Due to Grid Restrictions	0.000	0.000
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	0.039	0.000
	BRPL	0.069	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
	<b>Total due to Grid Restriction</b>	<b>0.108</b>	<b>0.000</b>
B)	Due to Constraints in System in Mus		
	DTL	0.135	0.279
	NDPL	0.129	0.170
	BRPL	0.552	0.333
	BYPL	0.117	0.011
	NDMC	0.000	0.000
	MES	0.000	0.000
	Other Agencies	0.000	0.001
	<b>Total</b>	<b>0.933</b>	<b>0.794</b>
11	<b>Grand Total in Mus</b>	<b>1.041</b>	<b>0.794</b>

2. PERFORMANCE OF GENERATING STATIONS WITHIN DELHI DURING SEPT. 2019

A) For the month of Sept 2019

All Figures in MUs

S. No	Stations	Gross Generation	Aux. Consumption	Net Generation	Availability (%)	Backing Down
1.	RPH	0.000	0.119	-0.119	0.00	0.00
2.	GT	52.374	1.959	50.415	88.22	115.89
3.	PPCL	113.899	2.669	111.230	98.75	109.12
4.	BTPS	0.000	0.903	-0.903	0.00	0.00
5.	Rithala	0.000	0.000	0.000	0.00	0.00
6.	Bawana	482.211	15.643	466.568	86.32	361.51
7.	Towmcl	14.283	1.954	12.329	--	--
8.	EDWPCL	2.863	0.839	2.024	--	--
9.	DMSWL	12.456	2.376	11.080	--	--
	<b>TOTAL</b>	<b>678.086</b>	<b>26.462</b>	<b>652.624</b>	<b>--</b>	<b>586.52</b>

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

Power Station	Effective Capacity (MW)	Net Generation in MUs for Sept 2019	Availability (%) for Sept 2019	PLF (%) for Sept 2019	Cumulative Generation in MUs upto Sept 2019 for the year 2019-20	Cumulative Availability in % upto Sept 2019 for the year 2019-20	Cumulative PLF in % upto Sept 2019 for the year 2019-20
RPH	135	-0.119	0.00	0.00	-0.759	0.00	-0.10
GT	270	50.415	88.22	26.76	308.535	85.72	26.81
PPCL	330	111.230	98.75	48.40	804.982	94.63	57.33
BTPS	705	-0.903	0.00	0.00	-3.822	0.00	0.00
Rithala	108	0.000	0.00	0.00	0.000	<b>0.00</b>	0.00
Bawana	1372	466.568	86.32	48.55	2147.940	86.26	36.97
Towmcl	16	12.329	--	123.98	74.849	---	--
EDWPCL	--	2.024	--	33.14	13.204	--	--
DMSWL	--	11.080	--	77.87	62.936	--	--
<b>TOTAL</b>	<b>2936</b>	<b>652.624</b>	<b>--</b>	<b>--</b>	<b>3407.865</b>	<b>--</b>	<b>--</b>

### 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.

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.

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 vacume 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 vacume		

**(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	Unit swapped by GT-#1
21.09.19	12.24	30.09.19	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
		05.09.19	14.40	05.09.19	19.11	
		21.09.19	13.10	21.09.19	14.10	

**(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 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 .
		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 protection.

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.

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.
		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.



#### 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)
<b>NTPC STATIONS</b>							
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
<b>TOTAL</b>	<b>10282</b>	<b>1377</b>	<b>1723</b>	<b>1546</b>	<b>0</b>	<b>0</b>	<b>1546</b>
<b>NHPC</b>							
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
<b>TOTAL</b>	<b>4073</b>	<b>272</b>	<b>480</b>	<b>458</b>	<b>0</b>	<b>0</b>	<b>458</b>
<b>NPC</b>							
Narora APS	440	64	47	40	0	0	40
RAPP (C )	440	64	56	49	0	0	49
<b>TOTAL</b>	<b>880</b>	<b>128</b>	<b>103</b>	<b>88</b>	<b>0</b>	<b>0</b>	<b>88</b>
<b>SJVNL</b>							
Nathpa Jhakri HEP	1500	149	142	135	0	0	135
<b>THDC</b>							
Tehri Hydro	1000	99	63	60	0	0	60
Koteshwar HEP	400	40	39	38	0	0	38
<b>TOTAL</b>	<b>1400</b>	<b>139</b>	<b>102</b>	<b>98</b>	<b>0</b>	<b>0</b>	<b>98</b>
<b>Total</b>	<b>18135</b>	<b>2065</b>	<b>2550</b>	<b>2326</b>	<b>0</b>	<b>0</b>	<b>2326</b>
<b>Allocation from ER and Tala HEP</b>							
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
<b>Total ER</b>	<b>4960</b>	<b>153</b>	<b>261</b>	<b>232</b>	<b>0</b>	<b>0</b>	<b>232</b>
<b>Joint Venture</b>							
Jhajjar TPS	1500	114	693	634	0	0	634
Ultra Mega Projects							
Sasan	3960	0	446	404	0	0	404
<b>Grand Total</b>	<b>28555</b>	<b>2332</b>	<b>3949</b>	<b>3596</b>	<b>0</b>	<b>0</b>	<b>3596</b>

## 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 SEPTEMBER 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	00.00.07	0	76	142	1001	12	-1	15	0	1245	4850	4626	224	6095	0	6095
2	23.05.52	0	76	142	907	19	0	19	0	1163	5030	4919	111	6193	0	6193
3	22.59.44	0	76	141	1067	19	7	18	0	1328	5005	4894	111	6333	0	6333
4	22.57.15	0	76	142	966	12	1	17	0	1214	5070	5012	58	6284	0	6284
5	14.58.28	0	76	95	856	12	8	15	0	1062	5110	5187	-77	6172	0	6172
6	15.13.25	0	76	137	676	18	7	14	0	928	5288	5214	74	6216	0	6216
7	00.01.08	0	76	141	686	15	8	16	0	942	4893	417	4476	5835	0	5835
8	23.07.15	0	76	140	804	14	8	7	0	1049	5002	5036	-34	6051	0	6051
9	23.00.59	0	76	140	811	11	8	14	0	1060	5181	5160	21	6241	0	6241
10	23.01.24	0	48	176	813	13	3	17	0	1070	5321	5206	115	6391	0	6391
11	22.56.24	0	136	291	875	13	-1	16	0	1330	5296	5268	28	6626	0	6626
12	14.51.23	0	65	144	806	17	-1	17	0	1048	5517	5577	-60	6565	0	6565
13	15.24.30	0	65	144	781	16	-1	16	0	1021	5376	5209	167	6397	0	6397
14	00.00.57	0	67	148	703	18	-1	17	0	952	5221	5219	2	6173	0	6173
15	00.00.26	0	67	149	661	19	7	17	0	920	4904	4718	186	5824	0	5824
16	22.58.02	0	68	147	755	18	4	17	0	1009	5170	5044	126	6179	0	6179
17	23.09.18	0	68	149	777	17	-1	16	0	1026	5065	5063	2	6091	0	6091
18	00.00.27	0	68	150	743	17	-1	17	0	994	4844	4581	263	5838	0	5838
19	00.05.08	0	68	151	705	19	7	16	0	966	4627	4444	183	5593	0	5593
20	22.48.29	0	71	150	482	17	0	16	0	736	4665	4594	71	5401	0	5401
21	00.00.01	0	72	150	523	19	-1	18	0	781	4463	4424	39	5244	0	5244
22	00.00.09	0	73	150	471	18	-1	15	0	726	3907	3961	-54	4633	0	4633
23	15.30.00	0	70	145	469	18	1	7	0	710	3920	3932	-12	4630	0	4630
24	16.08.03	0	69	143	486	18	2	4	0	722	4076	3971	105	4798	0	4798
25	16.19.47	0	70	143	500	18	-1	18	0	748	4242	4091	151	4990	0	4990
26	16.19.04	0	70	144	522	19	1	15	0	771	4101	4034	67	4872	0	4872
27	15.26.47	0	71	145	469	16	-1	16	0	716	4019	3883	136	4735	0	4735
28	18.54.46	0	39	147	468	18	-1	12	0	683	3683	3614	69	4366	0	4366
29	00.00.00	0	39	150	468	19	0	16	0	692	3217	3276	-59	3909	0	3909
30	18.44.39	0	35	146	617	18	-1	18	0	833	3486	3510	-24	4319	0	4319

**POWER AVAILABILITY- DEMAND POSITION AT THE TIME OF MAXIMUM UNRESTRICTED DEMAND DURING SEPTEMBER 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	00.00.07	0	76	142	1001	12	-1	15	0	1245	4850	4626	224	6095	0	6095
2	23.05.52	0	76	142	907	19	0	19	0	1163	5030	4919	111	6193	0	6193
3	22.59.44	0	76	141	1067	19	7	18	0	1328	5005	4894	111	6333	0	6333
4	22.57.15	0	76	142	966	12	1	17	0	1214	5070	5012	58	6284	0	6284
5	14.58.28	0	76	95	856	12	8	15	0	1062	5110	5187	-77	6172	0	6172
6	15.13.25	0	76	137	676	18	7	14	0	928	5288	5214	74	6216	0	6216
7	00.01.08	0	76	141	686	15	8	16	0	942	4893	417	4476	5835	0	5835
8	23.07.15	0	76	140	804	14	8	7	0	1049	5002	5036	-34	6051	0	6051
9	23.00.59	0	76	140	811	11	8	14	0	1060	5181	5160	21	6241	0	6241
10	23.01.24	0	48	176	813	13	3	17	0	1070	5321	5206	115	6391	0	6391
11	22.56.24	0	136	291	875	13	-1	16	0	1330	5296	5268	28	6626	0	6626
12	14.51.23	0	65	144	806	17	-1	17	0	1048	5517	5577	-60	6565	0	6565
13	15.24.30	0	65	144	781	16	-1	16	0	1021	5376	5209	167	6397	0	6397
14	00.00.57	0	67	148	703	18	-1	17	0	952	5221	5219	2	6173	0	6173
15	00.00.26	0	67	149	661	19	7	17	0	920	4904	4718	186	5824	0	5824
16	22.58.02	0	68	147	755	18	4	17	0	1009	5170	5044	126	6179	0	6179
17	23.09.18	0	68	149	777	17	-1	16	0	1026	5065	5063	2	6091	0	6091
18	00.00.27	0	68	150	743	17	-1	17	0	994	4844	4581	263	5838	0	5838
19	00.05.08	0	68	151	705	19	7	16	0	966	4627	4444	183	5593	0	5593
20	22.48.29	0	71	150	482	17	0	16	0	736	4665	4594	71	5401	0	5401
21	00.00.01	0	72	150	523	19	-1	18	0	781	4463	4424	39	5244	0	5244
22	00.00.09	0	73	150	471	18	-1	15	0	726	3907	3961	-54	4633	0	4633
23	15.30.00	0	70	145	469	18	1	7	0	710	3920	3932	-12	4630	0	4630
24	16.08.03	0	69	143	486	18	2	4	0	722	4076	3971	105	4798	0	4798
25	16.19.47	0	70	143	500	18	-1	18	0	748	4242	4091	151	4990	0	4990
26	16.19.04	0	70	144	522	19	1	15	0	771	4101	4034	67	4872	0	4872
27	15.26.47	0	71	145	469	16	-1	16	0	716	4019	3883	136	4735	0	4735
28	18.54.46	0	39	147	468	18	-1	12	0	683	3683	3614	69	4366	0	4366
29	00.00.00	0	39	150	468	19	0	16	0	692	3217	3276	-59	3909	0	3909
30	18.44.39	0	35	146	617	18	-1	18	0	833	3486	3510	-24	4319	0	4319

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

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

A (i) RPH	0.000
(ii) GT+STG	562.374
(iii) PRAGATI	113.899
(iv) RITHALA	0.000
(v) BAWANA CCGT	482.211
(vi) Timarpur – Okhla	14.283
EDWPCL	2.863
DMSWL	13.456
TOTAL	679.086
B) AVAILABILITY FROM BTPS	-0.903
C) AUXILIARY CONSUMPTION OF GENERATING STNs. EXCLUDING BTPS	25.559
D) NET GENERATION AVAILABLE WITHIN DELHI(A+B-C)	<b>652.624</b>

### 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	3.415	3.335	3.415	3.335
SALAL	54.096	53.107	54.096	53.107
SASAN	289.966	282.707	289.133	281.896
TANKAPUR	8.000	7.848	8.000	7.848
CHAMERA	19.254	18.903	19.254	18.903
CHAMERA -II	2.312	2.267	2.312	2.267
CHAMERA -III	14.134	13.874	14.134	13.874
DHAULIGANGA	24.487	23.979	24.487	23.979
SEWA -2	2.891	2.839	2.891	2.839
URI	22.337	21.983	22.337	21.983
URI-II	15.352	15.109	15.352	15.109
KOLDAM	0.000	0.000	0.000	0.000
KOTESHWAR	12.449	12.191	12.449	12.191
PARBATI3	10.522	10.330	10.522	10.330
RAMPUR	0.000	0.000	0.000	0.000
ANTA (GAS)	1.903	1.852	1.831	1.782
ANTA (RLNG)	28.190	27.537	0.012	0.012
ANTA (LIQUID)	0.011	0.010	0.000	0.000
DADRI (GAS)	15.903	15.689	12.853	12.679
DADRI (RLNG)	46.022	45.401	0.559	0.552
DADRI (LIQUID)	0.000	0.000	0.000	0.000
AURAIYA (GAS)	6.773	6.602	5.164	5.033
AURAIYA (RLNG)	42.102	41.130	0.025	0.024
AURAIYA (LIQUID)	0.000	0.000	0.000	0.000
SINGRAULI	79.415	77.163	70.877	68.882
SINGRAULI_HYDRO	0.000	0.000	0.000	0.000
RIHAND -I	66.277	64.400	62.610	60.843
RIHAND -II	57.267	55.611	54.351	52.782
RIHAND -III	89.400	87.153	86.783	84.606
UNCHAHAR-I	13.353	13.080	9.684	9.487
UNCHAHAR-II	29.795	29.176	21.106	20.671
UNCHAHAR-III	18.609	18.222	13.316	13.041
UNCHAHAR-IV	0.000	0.000	0.000	0.000
DADRI (TH)	496.872	490.184	353.400	348.723
DADRI (TH) STAGE-II	51.411	50.720	41.515	40.968
TALCHER FOR AUX. OF BTPS	0.626	0.613	0.626	0.613
NAPP	28.871	28.195	28.871	28.195
RAPP 'B'	0.000	0.000	0.000	0.000
RAPP 'C'	36.013	34.821	36.013	34.821
NATHPA JHAKRI	96.124	94.380	96.124	94.380
DULASTI	28.240	27.720	28.240	27.720
TEHRI	24.448	23.941	24.448	23.941
JHAJJAR	470.668	464.331	97.745	96.508

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
KHELGAON	29.846	29.387	25.432	25.044
KHELGAON-II	96.241	94.767	85.671	84.366
FARAKA	12.787	12.558	10.472	10.286
TALA	20.734	20.311	20.734	20.311
DVC	137.696	136.834	136.834	136.222
TUTICORIN - BRPL	10.811	10.692	10.692	10.646
MADHYA PRADESH	75.163	74.527	74.527	74.207
UTTAR PRADESH	0.000	0.000	0.000	0.000
WEST BENGAL	0.075	0.075	0.075	0.074
SCLTPS (UP)	6.045	5.964	5.964	5.943
HARYANA	0.090	0.090	0.090	0.089
SEIL PROJECT(ANDHRA PRADESH)	0.000	0.000	0.000	0.000
MEGHALAYA	7.212	7.193	7.193	7.170
ANDHRA	112.645	111.686	111.686	111.206
KARNATAKA	1.337	1.316	1.316	1.310
PUNJAB	0.302	0.298	0.298	0.297
METHON POWER(NDPL)LT-06	159.231	158.233	158.233	157.583
DVC MEJIA (LT-08)(BYPL)	19.263	19.138	19.138	19.051
Acme_RUMS	10.777	10.686	10.686	10.640
Arinsun_RUMS	10.526	10.438	10.438	10.393
Mahindra_RUMS	2.817	2.793	2.793	2.781
URS	0.213	0.212	0.213	0.212
JAMMU & KASHMIR	73.822	73.139	73.139	72.827
HIMACHAL PRADESH	293.474	289.328	289.328	288.135
RATNAGIRI GAS AND POWER PVT. LTD. (RGPPL) MAHARASHTRA	0.065	0.065	0.065	0.065
UTTRAKHAD	38.246	37.798	37.798	37.640
JP NIGREE	0.000	0.000	0.000	0.000
KWHEP (HP)	5.908	5.820	5.820	5.792
HIMACHAL PRADESH LT-59 DVC	6.480	6.388	6.388	6.362
HARYANA (LT-05)	41.057	40.779	40.779	40.606
MIZORAM	1.362	1.333	1.333	1.327
ODHISHA	10.435	10.330	10.330	10.286
ORISSA MT-20 JITPL -DVC	4.399	4.349	4.349	4.330
RAJASTHAN	0.162	0.159	0.159	0.158
MANIPUR	9.260	9.226	9.226	9.187
RAJASTHAN(SOLAR) BRPL-LT36	3.549	3.499	3.499	3.484
RAJASTHAN(SOLAR) BYPL - LT-35	3.381	3.333	3.333	3.319
RAJASTHAN(SOLAR) TPDDL LT-31	3.517	3.467	3.467	3.452
HP TPDDL 2019_11	6.178	6.090	6.090	6.065
TO JHARKHAND	0.000	0.000	0.000	0.000
TO ANDHRA	0.000	0.000	0.000	0.000
TO UTTAR PRADESH	0.000	0.000	0.000	0.000
TO WEST BENGAL	0.000	0.000	0.000	0.000
TO ASSAM	0.000	0.000	0.000	0.000
TO VLCPP 1800	0.000	0.000	0.000	0.000
TO ODISHA	0.000	0.000	0.000	0.000
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	0.000	0.000	0.000	0.000
TO GUJRAT	0.000	0.000	0.000	0.000
POWER EXCHANGE(IEX)	242.365	241.454	242.365	241.454
TO POWER EXCHANGE (IEX)	-23.673	-23.914	-23.673	-23.914
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)	-29.281	-29.557	-29.281	-29.557
TO SHARE PROJECT (PUNJAB)	-29.419	-29.696	-29.419	-29.696
<b>TOTAL</b>	<b>3582.609</b>	<b>3526.986</b>	<b>2872.114</b>	<b>2833.075</b>

**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	1043.303	1023.930	734.085	720.086
NTPC - ER	138.875	136.712	121.575	119.695
NHPC	205.040	201.293	205.040	201.293
NPC	64.885	63.016	64.885	63.016
SASAN	289.966	282.707	289.133	281.896
KOTESHWAR	12.449	12.191	12.449	12.191
NATHPA JHAKRI	96.124	94.380	96.124	94.380
TALCHER FOR AUX. OF BTPS	0.626	0.613	0.626	0.613
TEHRI	24.448	23.941	24.448	23.941
TALA	20.734	20.311	20.734	20.311
JHAJJAR	470.668	464.331	97.745	96.508
RAJASTHAN SOLAR(BRPL)T-36	3.549	3.499	3.499	3.484
RAJASTHAN SOLAR(BYPL)T-35	3.381	3.333	3.333	3.319
RAJASTHAN SOLAR(TPDDL)T-31	3.517	3.467	3.467	3.452
HP TPDDL 2019_11	6.178	6.090	6.090	6.065
DVC	137.696	136.834	136.834	136.222
TUTICORIN BRPL	10.811	10.692	10.692	10.646
MADHYA PRADESH	75.163	74.527	74.527	74.207
UTTAR PRADESH	0.000	0.000	0.000	0.000
WEST BENGAL	0.075	0.075	0.075	0.074
SCLTPS (UP)	6.045	5.964	5.964	5.943
HARYANA	0.090	0.090	0.090	0.089
SEIL PROJECT(ANDHRA PRADESH)	0.000	0.000	0.000	0.000
MEGHALAYA	7.212	7.193	7.193	7.170
ANDHRA	112.645	111.686	111.686	111.206
KARNATAKA	1.337	1.316	1.316	1.310
PUNJAB	0.302	0.298	0.298	0.297
METHON POWER (NDPL)-LT-06	159.231	158.233	158.233	157.583
DVC MEJIA (LT-08)(BYPL)	19.263	19.138	19.138	19.051
Acme_RUMS	10.777	10.686	10.686	10.640
Arinsun_RUMS	10.526	10.438	10.438	10.393
Mahindra_RUMS	2.817	2.793	2.793	2.781
URS	0.213	0.212	0.213	0.212
JAMMU & KASHMIR	73.822	73.139	73.139	72.827
HIMACHAL PRADESH	293.474	289.328	289.328	288.135
RATNAGIRI GAS AND POWER PVT. LTD. (RGPPL)	0.065	0.065	0.065	0.065
UTTRAKHAND	38.246	37.798	37.798	37.640
JP NIGREE (MP)	0.000	0.000	0.000	0.000
KWHEP (HP)	5.908	5.820	5.820	5.792
HIMACHAL PRADESH LT-59 DVC	6.480	6.388	6.388	6.362
HARYANA (LT -05)	41.057	40.779	40.779	40.606
MIZORAM	1.362	1.333	1.333	1.327
ODISHA	10.435	10.330	10.330	10.286
ORISSA MT-20 JITPL -DVC	4.399	4.349	4.349	4.330
RAJASTHAN	0.162	0.159	0.159	0.158
MANIPUR	9.260	9.226	9.226	9.187
POWER EXCHANGE(IEX)	242.365	241.454	242.365	241.454
POWER EXCHANGE(PX)	0.000	0.000	0.000	0.000
<b>TOTAL</b>	<b>3664.982</b>	<b>3610.154</b>	<b>2954.487</b>	<b>2916.242</b>

**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	0.000	0.000	0.000	0.000
TO UTTAR PRADESH	0.000	0.000	0.000	0.000
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	0.000	0.000	0.000	0.000
TO ORIDSHA	0.000	0.000	0.000	0.000
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	0.000	0.000	0.000	0.000
TO GUJRAT	0.000	0.000	0.000	0.000
TO POWER EXCHANGE (IEX)	-23.673	-23.914	-23.673	-23.914
TO POWER EXCHANGE (PX)	0.000	0.000	0.000	0.000
TO SHARE PROJECT (HARYANA)	-29.281	-29.557	-29.281	-29.557
TO SHARE PROJECT (PUNJAB)	-29.419	-29.696	-29.419	-29.696
<b>TOTAL</b>	<b>-82.373</b>	<b>-83.167</b>	<b>-82.373</b>	<b>-83.167</b>
<b>TOTAL SCHEDULED DRAWAL FROM THE GRID</b>	<b>3582.609</b>	<b>3526.986</b>	<b>2872.114</b>	<b>2833.075</b>

TOTAL CONSUMPTION INCLUDING AUX. OF GENERATING STNs. EXCLUDING BTPS	3488.336
NET CONSUMPTION	<b>3462.777</b>
AVAILABILITY WITHIN DELHI	652.624
ACTUAL DRAWAL FROM THE GRID	2810.153
OVER DRAWAL(+)/UNDER DRAWAL(-) FROM THE GRID ON THE BASIS OF SCHEDULED ALLOCATION MADE BY NRLDC TO DELHI AT PERIPHERY	-22.922
LOAD SHEDDING	0.793
UNRESTRICTED DEMAND (GROSS)	3489.129
UNRESTRICTED DEMAND (NET)	3463.570
MAX. NET CONSUMPTION	137.676 ON 26.09.2019
MAX. LOAD SHEDDING	290MW ON 26.09.2019 AT 14.16HRS.
<b>PEAK LOAD</b>	Peak Demand during the month
DAY PEAK	6565MW AT 14.51.23 HRS ON 12.09.2019
EVENING PEAK	6626MW AT 22.56.24HRS ON 11.09.2019
P.L.F. OF GENCO AND PRAGATI STNs.	RPH GT PRAGATI RITHALA BAWANA Timarpur Okhla EDWPCL DMSWL
	0.00% 26.94% 47.94% 0.00% 48.85% 123.98% 33.14% 77.87%



**9 SHEDDING DETAILS DURING THE MONTH OF SEPTEMBER 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.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
02.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
03.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
04.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
05.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
07.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
09.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25.Sept.19	0	0.000	0.000	0.0001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30.Sept.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>TOTAL</b>	<b>0</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

ALL FIGURES IN MUs

Date	Shedding due to Transmission/Grid Constraints in Central Sector Stations / TTC / ATC VIOLATION				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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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.Sept.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
<b>TOTAL</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

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.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.000
02.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.001	0.000
03.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.0004</b>	0.000
04.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000
05.Sept.19	0.000	0.005	0.000	0.000	0.000	0.000	0.013	0.000	0.000
06.Sept.19	0.041	0.013	0.000	0.000	0.000	0.003	0.000	0.000	0.000
07.Sept.19	0.000	0.005	0.000	0.000	0.000	0.000	0.023	0.000	0.000
08.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.115	0.000
09.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000
10.Sept.19	0.000	0.005	0.001	0.000	0.000	0.000	0.048	0.000	0.000
11.Sept.19	0.000	0.015	0.009	0.000	0.000	0.000	0.027	0.0005	0.000
12.Sept.19	0.000	0.000	0.000	0.000	0.000	0.005	0.004	<b>0.0003</b>	0.000
13.Sept.19	0.005	0.014	0.014	0.000	0.000	0.000	0.040	0.012	0.000
14.Sept.19	0.000	0.000	0.006	0.000	0.000	0.000	0.002	0.000	0.000
15.Sept.19	0.000	0.019	0.012	0.000	0.000	0.000	0.002	0.000	0.000
16.Sept.19	<b>0.0001</b>	0.017	0.003	0.000	0.000	0.000	0.012	0.000	0.000
17.Sept.19	0.000	0.000	0.000	0.000	0.000	0.003	0.052	0.000	0.000
18.Sept.19	0.000	0.000	0.012	0.000	0.000	0.000	0.011	0.031	0.000
19.Sept.19	<b>0.0004</b>	0.005	0.014	0.000	0.000	0.000	0.000	0.002	0.000
20.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000
21.Sept.19	0.000	0.000	0.002	0.000	0.000	0.000	0.045	0.003	0.000
22.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.004	<b>0.0001</b>	0.000
23.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.0003</b>	0.000	0.000
24.Sept.19	0.000	0.005	0.000	0.000	0.000	0.000	0.009	0.000	0.000
25.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000
26.Sept.19	0.008	0.000	0.026	0.000	0.000	0.000	0.010	<b>0.0002</b>	0.000
27.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
28.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000
29.Sept.19	0.000	0.017	0.004	0.000	0.000	0.000	0.003	0.000	0.000
30.Sept.19	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
<b>TOTAL</b>	<b>0.055</b>	<b>0.120</b>	<b>0.104</b>	<b>0.000</b>	<b>0.000</b>	<b>0.011</b>	<b>0.333</b>	<b>0.170</b>	<b>0.000</b>

ALL FIGURES IN MU<sub>s</sub>

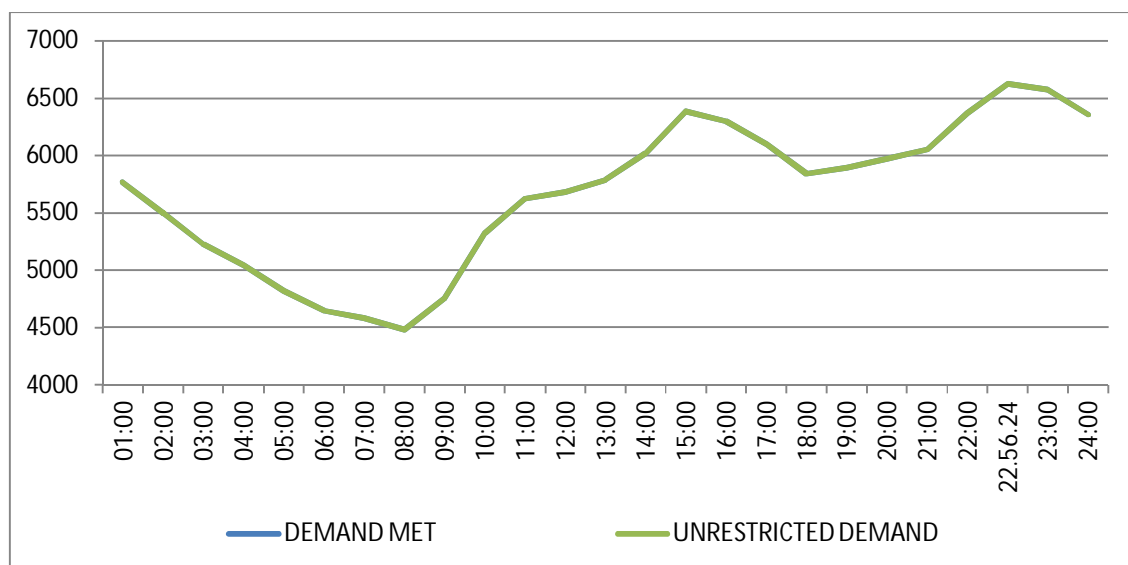
DATE	OTHER AGENCIES LIKE GENCO, BBMB, BTPS ETC.				THEFT PRONE SHEDDING			TOTAL SHEDDING DUE TO T&D CONSTS. & THEFT PRONE	GRAND TOTAL
	BSES		NDPL	NDMC	BSES		NDPL		
	BYPL	BRPL			BYPL	BRPL			
<b>1</b>	35	36	37	38	39	40	41	42= 26 to 41	43 = 25 + 42
01.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.004</b>	<b>0.004</b>
02.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.005</b>	<b>0.005</b>
03.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.000</b>	<b>0.000</b>
04.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.004</b>	<b>0.004</b>
05.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.018</b>	<b>0.018</b>
06.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.057</b>	<b>0.057</b>
07.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.028</b>	<b>0.028</b>
08.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.115</b>	<b>0.115</b>
09.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.005</b>	<b>0.005</b>
10.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.054</b>	<b>0.054</b>
11.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.052</b>	<b>0.052</b>
12.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.009</b>	<b>0.009</b>
13.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.085</b>	<b>0.085</b>
14.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.008</b>	<b>0.008</b>
15.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.033</b>	<b>0.033</b>
16.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.032</b>	<b>0.032</b>
17.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.055</b>	<b>0.055</b>
18.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.054</b>	<b>0.054</b>
19.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.021</b>	<b>0.021</b>
20.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.006</b>	<b>0.006</b>
21.Sept.19	0.000	0.000	0.001	0.000	0.000	0.000	0.000	<b>0.051</b>	<b>0.051</b>
22.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.004</b>	<b>0.004</b>
23.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.000</b>	<b>0.000</b>
24.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.014</b>	<b>0.014</b>
25.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.006</b>	<b>0.006</b>
26.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.044</b>	<b>0.044</b>
27.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.001</b>	<b>0.001</b>
28.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.002</b>	<b>0.002</b>
29.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.024</b>	<b>0.024</b>
30.Sept.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.001</b>	<b>0.001</b>
<b>TOTAL</b>	<b>0.000</b>	<b>0.000</b>	<b>0.001</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.793</b>	<b>0.793</b>

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.Sept.19	114.025	6095	00:00:07	0	6095	6095	00:00:07	6095	0
02.Sept.19	119.617	6193	23:05:52	0	6193	6193	23:05:52	6193	0
03.Sept.19	129.007	6333	22:59:44	0	6333	6333	22:59:44	6333	0
04.Sept.19	130.130	6284	22:57:15	0	6284	6284	22:57:15	6284	0
05.Sept.19	129.642	6172	14:58:28	0	6172	6172	14:58:28	6172	0
06.Sept.19	127.375	6216	15:13:25	0	6216	6216	15:13:25	6216	0
07.Sept.19	122.221	5835	00:01:08	0	5835	5835	00:01:08	5835	0
08.Sept.19	116.918	6051	23:07:15	0	6051	6051	23:07:15	6051	0
09.Sept.19	127.757	6241	23:00:59	0	6241	6241	23:00:59	6241	0
10.Sept.19	127.235	6391	23:01:24	0	6391	6391	23:01:24	6391	0
11.Sept.19	134.054	6626	22:56:24	0	6626	6626	22:56:24	6626	0
12.Sept.19	137.676	6565	14:51:23	0	6565	6565	14:51:23	6565	0
13.Sept.19	132.536	6397	15:24:30	0	6397	6397	15:24:30	6397	0
14.Sept.19	124.555	6173	00:00:57	0	6173	6173	00:00:57	6173	0
15.Sept.19	115.048	5824	00:00:26	0	5824	5824	00:00:26	5824	0
16.Sept.19	124.781	6179	22:58:02	0	6179	6179	22:58:02	6179	0
17.Sept.19	124.740	6091	23:09:18	0	6091	6091	23:09:18	6091	0
18.Sept.19	120.666	5838	00:00:27	0	5838	5838	00:00:27	5838	0
19.Sept.19	115.130	5593	00:05:08	0	5593	5593	00:05:08	5593	0
20.Sept.19	113.874	5401	22:48:29	0	5401	5401	22:48:29	5401	0
21.Sept.19	108.012	5244	00:00:01	0	5244	5244	00:00:01	5244	0
22.Sept.19	94.111	4633	00:00:09	0	4633	4633	00:00:09	4633	0
23.Sept.19	97.808	4630	15:30	0	4630	4630	15:30	4630	0
24.Sept.19	100.024	4798	16:08:03	0	4798	4798	16:08:03	4798	0
25.Sept.19	101.744	4990	16:19:47	0	4990	4990	16:19:47	4990	0
26.Sept.19	103.710	4872	16:19:04	0	4872	4872	16:19:04	4872	0
27.Sept.19	100.235	4735	15:26:47	0	4735	4735	15:26:47	4735	0
28.Sept.19	94.560	4366	18:54:46	0	4366	4366	18:54:46	4366	0
29.Sept.19	84.654	3909	00:00	0	3909	3909	00:00	3909	0
30.Sept.19	90.932	4319	18:44:39	0	4319	4319	18:44:39	4319	0
<b>TOTAL</b>	137.676	6626 <b>11.09.19</b>	22:56:24	0	6626 <b>11.09.19</b>	6626	22:56:24	6626	0

**10 LOAD PATTERN OF DELHI ON THE DAY OF PEAK DEMAND MET DURING SEPTEMBER 2019 ON 11.09.2019- 6626MW AT 22.56.24HRS.**

All figures in MW

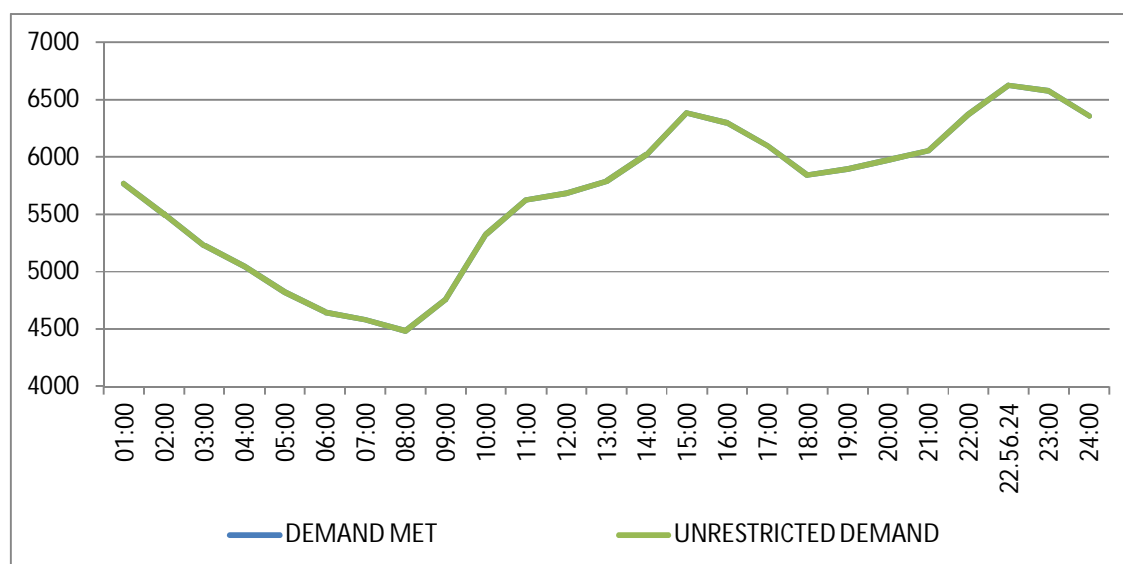
Hrs.	Demand	Load Shedding	Un-Restricted Demand
01:00	5766	0	5766
02:00	5497	0	5497
03:00	5227	0	5227
04:00	5044	0	5044
05:00	4822	0	4822
06:00	4644	0	4644
07:00	4582	0	4582
08:00	4484	0	4484
09:00	4754	0	4754
10:00	5327	0	5327
11:00	5626	0	5626
12:00	5681	0	5681
13:00	5789	0	5789
14:00	6018	5	6023
15:00	6382	0	6382
16:00	6295	0	6295
17:00	6095	0	6095
18:00	5840	0	5840
19:00	5894	0	5894
20:00	5969	0	5969
21:00	6051	0	6051
22:00	6370	0	6370
22.56.24	6626	0	6626
23:00	6576	0	6576
24:00	6360	0	6360
<b>Total (IN MUS)</b>	<b>134.054</b>	<b>0.052</b>	<b>134.106</b>



**11 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UN-RESTRICTED DEMAND DURING SEPT. 2019 ON 11.09.2019- 6626MW AT 22.56.24HRS.**

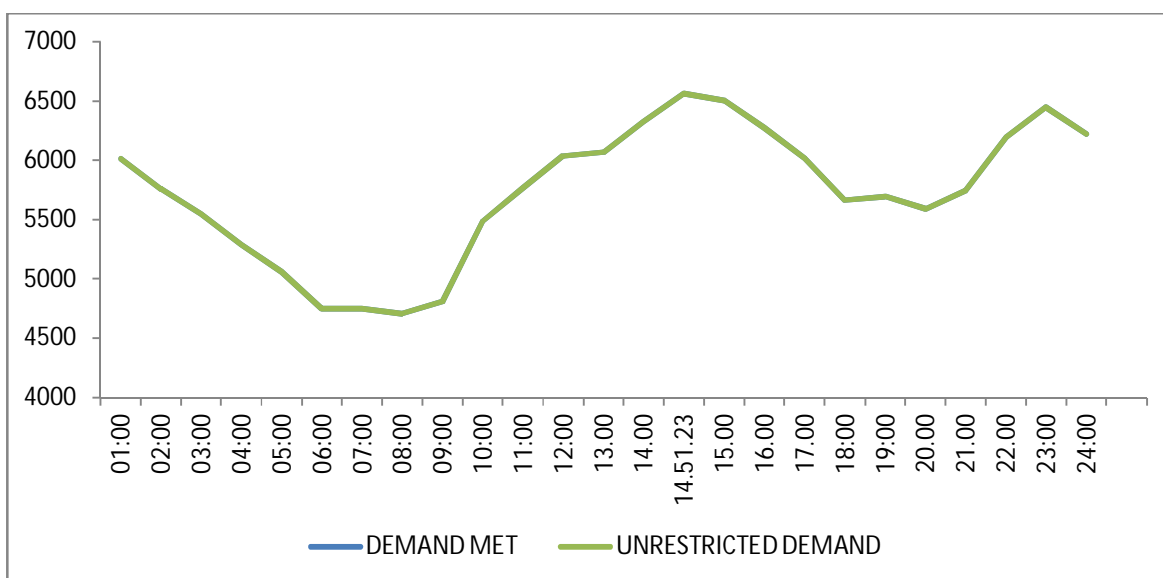
All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
01:00	5766	0	5766
02:00	5497	0	5497
03:00	5227	0	5227
04:00	5044	0	5044
05:00	4822	0	4822
06:00	4644	0	4644
07:00	4582	0	4582
08:00	4484	0	4484
09:00	4754	0	4754
10:00	5327	0	5327
11:00	5626	0	5626
12:00	5681	0	5681
13:00	5789	0	5789
14:00	6018	5	6023
15:00	6382	0	6382
16:00	6295	0	6295
17:00	6095	0	6095
18:00	5840	0	5840
19:00	5894	0	5894
20:00	5969	0	5969
21:00	6051	0	6051
22:00	6370	0	6370
22.56.24	6626	0	6626
23:00	6576	0	6576
24:00	6360	0	6360
<b>Total (IN MUS)</b>	<b>134.054</b>	<b>0.052</b>	<b>134.106</b>



**12 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM ENERGY CONSUMED DURING SEPTEMBER 2019 – 12.09.2019 – 137.676Mus All figures in MW**

Hrs.	Demand	Load Shedding	Un-Restricted Demand
01:00	6013	0	6013
02:00	5761	0	5761
03:00	5547	0	5547
04:00	5293	0	5293
05:00	5059	0	5059
06:00	4750	0	4750
07:00	4749	0	4749
08:00	4708	0	4708
09:00	4811	0	4811
10:00	5484	0	5484
11:00	5770	0	5770
12:00	6036	0	6036
13:00	6071	0	6071
14:00	6328	0	6328
14.51.23	6565	0	6565
15:00	6503	0	6503
16:00	6272	0	6272
17:00	6017	0	6017
18:00	5663	0	5663
19:00	5693	0	5693
20:00	5589	0	5589
21:00	5743	0	5743
22:00	6195	0	6195
23:00	6447	0	6447
24:00	6219	0	6219
<b>TOTAL</b>	<b>137.676</b>	<b>0.009</b>	<b>137.685</b>

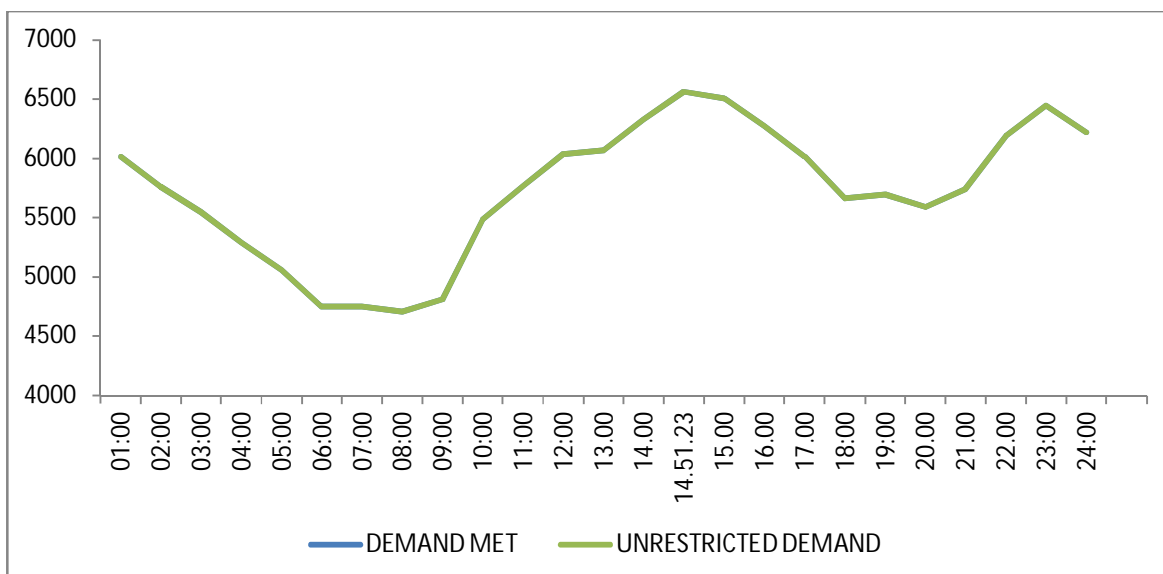




**13 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED ENERGY DEMAND DURING SEPTEMBER 2019 – 12.09.2019 – 137.685 Mus**

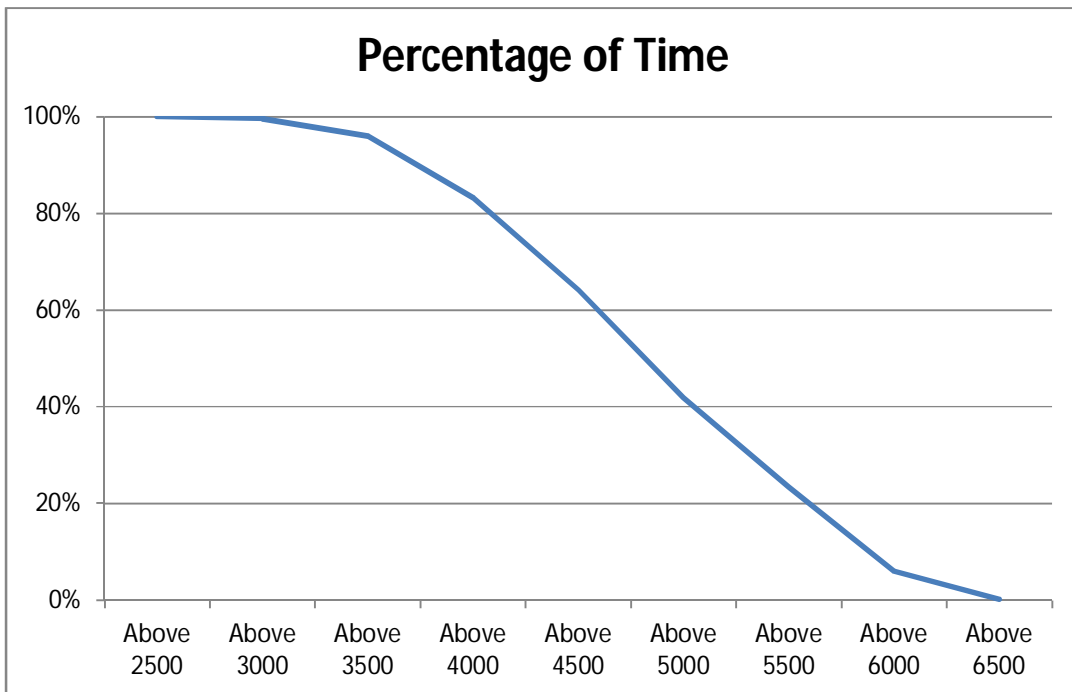
All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
01:00	6013	0	6013
02:00	5761	0	5761
03:00	5547	0	5547
04:00	5293	0	5293
05:00	5059	0	5059
06:00	4750	0	4750
07:00	4749	0	4749
08:00	4708	0	4708
09:00	4811	0	4811
10:00	5484	0	5484
11:00	5770	0	5770
12:00	6036	0	6036
13:00	6071	0	6071
14:00	6328	0	6328
14.51.23	6565	0	6565
15:00	6503	0	6503
16:00	6272	0	6272
17:00	6017	0	6017
18:00	5663	0	5663
19:00	5693	0	5693
20:00	5589	0	5589
21:00	5743	0	5743
22:00	6195	0	6195
23:00	6447	0	6447
24:00	6219	0	6219
<b>TOTAL</b>	<b>137.676</b>	<b>0.009</b>	<b>137.685</b>



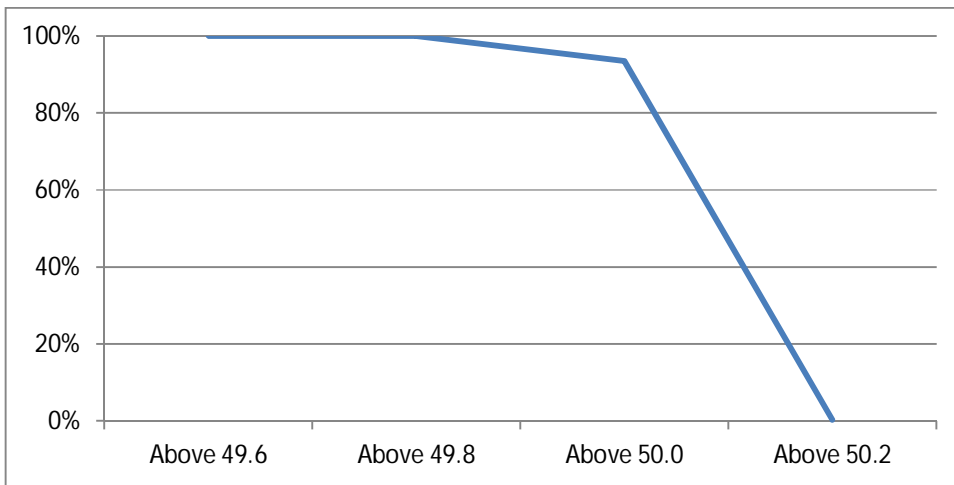
14 **LOAD DURATION CURVE FOR SEPTEMBER 2019**

<b>Load in MW</b>	<b>Percentage of Time</b>
Above 2500	100%
Above 3000	99.65%
Above 3500	96.00%
Above 4000	83.19%
Above 4500	64.10%
Above 5000	41.81%
Above 5500	23.44%
Above 6000	5.97%
Above 6500	0.20%



**FREQUENCY ANALYSIS FOR THE MONTH OF SEPTEMBER**

<b>Frequency Range in Hz.</b>	<b>Percentage of time</b>
Above 49.6	100%
Above 49.8	99.93%
Above 50.0	93.47%
Above 50.2	0.38%



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

**All figures in kV**

Date	NARELA		GAZIPUR	
	Max	Min	Max	Min
01.Sept.19	231.75	220.15	233.69	221.56
02.Sept.19	229.82	217.05	231.88	217.18
03.Sept.19	228.92	217.31	232.14	217.7
04.Sept.19	230.21	217.95	230.72	218.86
05.Sept.19	230.59	217.57	231.24	217.18
06.Sept.19	229.95	217.7	231.75	215.76
07.Sept.19	227.5	219.24	229.3	219.24
08.Sept.19	228.79	218.34	231.88	216.92
09.Sept.19	226.98	217.05	229.17	215.24
10.Sept.19	226.34	216.02	227.88	216.41
11.Sept.19	226.59	216.92	227.37	213.7
12.Sept.19	227.63	217.7	229.3	214.99
13.Sept.19	228.14	216.02	229.17	214.08
14.Sept.19	227.24	219.24	228.92	220.15
15.Sept.19	228.53	218.6	231.88	220.4
16.Sept.19	226.85	217.05	228.92	133.22
17.Sept.19	228.79	217.95	229.3	217.82
18.Sept.19	229.95	218.34	232.01	218.98
19.Sept.19	229.43	221.18	232.14	217.31
20.Sept.19	230.08	219.11	233.3	219.76
21.Sept.19	229.17	219.11	232.14	220.15
22.Sept.19	232.14	222.98	234.98	226.08
23.Sept.19	233.3	220.79	235.75	221.44
24.Sept.19	231.75	220.92	233.95	220.15
25.Sept.19	230.85	219.63	233.69	219.5
26.Sept.19	231.37	218.6	233.95	219.5
27.Sept.19	229.17	218.21	233.3	220.79
28.Sept.19	231.75	222.47	235.23	224.66
29.Sept.19	234.46	225.95	237.56	227.88
30.Sept.19	232.66	220.79	236.27	221.69

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

All figures in kV

Date	400kV Bamnauli Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
01.Sept.19	413.4	08:02:57	391.36	00:38:55	403.46
02.Sept.19	409.88	06:01:00	386.43	22:32:33	399.33
03.Sept.19	409.65	06:02:14	387.61	14:55:25	398.26
04.Sept.19	409.18	05:14:27	388.08	14:48:29	397.89
05.Sept.19	412.23	08:02:32	386.67	14:45:43	398.46
06.Sept.19	409.65	07:04:55	386.43	14:53:46	397.98
07.Sept.19	406.6	08:01:49	392.3	14:46:21	399.66
08.Sept.19	409.65	08:01:53	388.08	22:10:24	399.84
09.Sept.19	406.13	07:02:56	384.09	14:55:57	394.69
10.Sept.19	402.85	06:52:50	384.32	14:35:41	394.25
11.Sept.19	402.61	06:29:44	384.09	14:52:35	394.64
12.Sept.19	409.18	18:00:39	385.03	10:55:38	396.86
13.Sept.19	408.48	07:59:12	385.73	14:54:03	398.34
14.Sept.19	407.77	03:59:15	391.36	22:46:08	399.65
15.Sept.19	410.35	08:10:59	389.95	22:35:32	400.65
16.Sept.19	405.43	04:00:24	382.92	22:23:55	395.02
17.Sept.19	408.71	06:02:37	391.12	14:51:28	400.64
18.Sept.19	412.46	07:00:10	391.12	14:35:42	401.61
19.Sept.19	411.52	04:01:14	395.81	14:42:46	404.4
20.Sept.19	413.63	04:00:37	393.23	14:18:09	403.25
21.Sept.19	413.63	18:02:54	395.58	10:15:12	404.2
22.Sept.19	414.34	07:04:06	399.33	19:19:17	407.91
23.Sept.19	414.81	04:00:59	392.76	09:33:20	402.99
24.Sept.19	413.63	04:01:52	392.3	09:51:14	403.11
25.Sept.19	413.17	04:00:24	393.23	09:51:27	403.53
26.Sept.19	413.63	03:21:09	392.06	11:08:41	402.14
27.Sept.19	411.99	03:29:53	391.36	14:39:05	402.53
28.Sept.19	414.57	04:00:17	396.99	09:53:08	406.66
29.Sept.19	417.15	03:26:50	402.14	19:26:13	410.14
30.Sept.19	415.98	03:31:04	393.23	19:07:36	405.28

All figures in kV

Date	400kV Bawana Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
01.Sept.19	417.15	08:02:05	400.74	00:44:49	410.19
02.Sept.19	414.34	06:00:42	398.39	22:36:06	406.75
03.Sept.19	412.46	06:02:01	397.92	14:54:09	405.35
04.Sept.19	413.63	05:14:21	398.39	14:40:24	405.52
05.Sept.19	416.21	08:02:22	397.45	14:46:47	405.75
06.Sept.19	413.4	06:15:39	396.05	14:53:26	404.24
07.Sept.19	410.35	17:53:08	2.11	18:20:08	386.59
08.Sept.19	411.99	17:33:27	396.99	22:14:01	405.4
09.Sept.19	409.65	06:12:27	392.76	14:39:44	400.86
10.Sept.19	406.83	18:00:22	394.64	14:28:13	400.61
11.Sept.19	408.48	08:01:17	393.47	14:29:22	401.41
12.Sept.19	411.52	18:00:44	393.94	00:15:40	401.97
13.Sept.19	409.88	07:50:06	396.28	14:52:11	403.28
14.Sept.19	411.06	17:37:13	399.1	00:11:39	404.82
15.Sept.19	413.87	17:02:01	398.39	21:53:05	405.87
16.Sept.19	409.65	17:43:11	394.41	14:21:09	401.88
17.Sept.19	413.17	18:05:51	399.33	14:48:08	406.09
18.Sept.19	413.63	07:29:02	399.57	14:29:27	406.64
19.Sept.19	413.4	03:31:47	400.97	14:43:06	408.14
20.Sept.19	414.57	04:00:23	398.39	11:30:33	406.73
21.Sept.19	414.81	18:00:23	400.74	09:50:01	407.97
22.Sept.19	416.21	17:02:16	406.13	19:09:58	411.88
23.Sept.19	419.5	04:00:55	398.39	14:35:54	408.38
24.Sept.19	416.92	04:00:54	398.39	10:55:20	407.76
25.Sept.19	416.21	04:00:22	399.8	09:36:58	409.26
26.Sept.19	416.68	03:59:13	397.22	19:10:22	406.56
27.Sept.19	414.34	03:29:01	396.99	14:40:24	406.91
28.Sept.19	419.03	17:01:51	402.14	11:40:57	411.61
29.Sept.19	423.25	03:26:20	409.88	18:52:12	416.44
30.Sept.19	422.08	03:00:22	400.5	19:13:52	412.4

**20      DETAILS OF BREAK-DOWNS DURING THE MONTH OF SEPTEMBER 2019**

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
1	2.9.19	11:32	220kV OKHLA - BTPS CKT.- I	2.9.19	15:50	AT OKHLA : DIST PROT, ZONE-I, DIST 7.392KM. AT BTPS : DIST PROT, ZONE-I, DIST 1.2KM.
2	4.9.19	19:26	NARAINA 220/33kV 100MVA Tx-III	4.9.19	21:24	SUPERVISION RELAY.
3	5.9.19	08:00	OKHLA 220/33kV 100MVA Tx-IV	5.9.19	08:13	86
4	5.9.19	08:00	OKHLA 220/33kV 100MVA Tx-III	5.9.19	08:13	86
5	5.9.19	08:00	OKHLA 220/33kV 100MVA Tx-V	5.9.19	08:13	O/C, E/F
6	6.9.19	03:32	220kV MUNDKA-KANJHAWALA CKT	6.9.19	04:20	AT MUNDKA : DIST PROT, ZONE-II. AT KHANJAWALA : DIST PROT, ZONE-I.
7	7.9.19	11:44	220kV KANJHAWALA-NAJAFGARH CKT	7.9.19	12:23	AT KHANJAWALA : DIST PROT, ZONE-I.
8	10.9.19	13:17	400kV Dadri - Harsh Vihar Ckt. -II	10.9.19	13:47	AT HARSH VIHAR : DIST PROT, ZONE-I, DIST 6.1KM.
9	10.9.19	16:13	PAPPANKALAN-I 220/66kV 100MVA Tx-II	10.9.19	16:16	O/C
10	10.9.19	16:13	PAPPANKALAN-I 220/66KV 160MVA Tx-5	10.9.19	16:16	O/C
11	10.9.19	16:13	PAPPANKALAN-I 220/66kV 100MVA Tx-IV	10.9.19	16:16	O/C.
12	11.9.19	05:50	GOPALPUR 220/66kV 100MVA Tx-II	11.9.19	11:48	E/F
13	11.9.19	14:22	MASJID MOTH 220/33kV 100MVA Tx-I	11.9.19	17:24	86
14	11.9.19	21:30	220kV GEETA COLONY- PATPARGANJ CKT -II	11.9.19	22:55	AT GEETA COLONY : DIST PROT, ZON-II, DIST 4.2KM.
15	11.9.19	21:35	GOPALPUR 220/66kV 100MVA Tx-II	11.9.19	23:27	86
16	12.9.19	06:36	MEHRAULI 66kV PALAM CKT	12.9.19	08:23	86
17	13.9.19	06:26	NARAINA 220/33kV 100MVA Tx-III	13.9.19	06:48	O/C, B Phase, 86.
18	13.9.19	06:26	NARAINA 220/33kV 100MVA Tx-I	13.9.19	00:00	O/C, B Phase, 86.
19	13.9.19	06:26	NARAINA 220/33kV 100MVA Tx-II	13.9.19	06:48	O/C, B Phase, 86.
20	13.9.19	13:28	OKHLA 220/33kV 100MVA Tx-IV	13.9.19	13:38	86
21	13.9.19	14:54	400kV Dadri - Harsh Vihar Ckt. -II	13.9.19	15:20	AT HARSH VIHAR : DIST PROT, ZONE-I, DIST 18.9KM, 86, 186.
22	13.9.19	23:15	220kV KASHMERE GATE - DMRC CKT.-I	14.9.19	05:18	AT KASHMIRI GATE: 86.
23	14.9.19	13:56	GAZIPUR 220/66kV 100MVA Tx-II	16.9.19	21:02	GEN TRIP.
24	14.9.19	14:52	GOPALPUR 220/66kV 100MVA Tx-II	14.9.19	15:25	86
25	15.9.19	09:33	PAPPANKALAN-III 220/66kV 160MVA Tx-I	15.9.19	10:00	86
26	16.9.19	10:05	220kV KASHMERE GATE - DMRC CKT.-I	16.9.19	13:05	86
27	16.9.19	10:55	NARAINA 220/33kV 100MVA Tx-II	16.9.19	11:00	MANUALLY MADE OFF DUE TO SPARKING.
28	16.9.19	10:55	NARAINA 220/33kV 100MVA Tx-III	23.9.19	11:00	MANUALLY MADE OFF DUE TO SPARKING.
29	16.9.19	21:33	GAZIPUR 220/66kV 100MVA Tx-II	16.9.19	19:40	DIFFERENTIAL, 86.
30	18.9.19	07:02	GOPALPUR 220/66kV 100MVA Tx-II	18.9.19	08:35	86
31	18.9.19	11:08	BAWANA 220/66kV 100MVA Tx	18.9.19	18:27	86
32	18.9.19	11:08	220kV BAWANA - KANJHAWALA CKT-2	18.9.19	18:27	AT BAWANA : DIST PROT, DIST 5.261KM, R PHASE DIFFERENTIAL. AT KHANJAWALA: R PHASE DIFFERENTIAL.

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
33	18.9.19	16:20	NAJAFGARH 66/11kV, 20MVA Tx-I	18.9.19	16:45	86
34	19.9.19	00:00	220KV MUNDKA-PEERAGARHI CKT-I	19.9.19	12:10	AT PEERA GARHI :86 AT MUNDKA : DIST PROT, ZONE-I.
35	19.9.19	10:12	GAZIPUR 220/66kV 100MVA Tx-II	19.9.19	14:37	86
36	19.9.19	12:01	NARAINA 220/33kV 100MVA Tx-II	19.9.19	12:10	MADE OFF MANUALLY TO AVOID ANY DAMAGE DUE TO FIRE IN YARD.
37	19.9.19	12:01	NARAINA 220/33kV 100MVA Tx-I	19.9.19	12:15	MADE OFF MANUALLY TO AVOID ANY DAMAGE DUE TO FIRE IN YARD.
38	19.9.19	12:01	NARAINA 220/33kV 100MVA Tx-III	19.9.19	12:10	MADE OFF MANUALLY TO AVOID ANY DAMAGE DUE TO FIRE IN YARD.
39	20.9.19	19:00	PATPARGANJ 220/33kV 100MVA Tx-IV	20.9.19	19:35	E/F
40	21.9.19	18:26	DSIIDC Bawana 220/66kV 160MVA Tx-I	21.9.19	18:53	86
41	23.9.19	10:10	GOPALPUR 220/66kV 100MVA Tx-II	23.9.19	12:44	86
42	23.9.19	14:30	220kV Preet Vihar- Patparganj Ckt-I	23.9.19	19:30	AT PATPARGANJ : TRIPPED WITHOUT INDICATION.
43	23.9.19	17:10	220kV GEETA COLONY- PATPARGANJ CKT -II	23.9.19	17:18	AT GEETA COLONY : DIST PROT ,ONE-I, DSIT 1.91KM.
44	23.9.19	20:25	220kV Preet Vihar- Patparganj Ckt-II	24.9.19	01:10	AT PPG : WITHOUT INDICATOIN.
45	24.9.19	13:36	LODHI RD 220/33kV 100MVA Tx-II	24.9.19	22:52	DIFFERENTIAL.
46	24.9.19	14:52	OKHLA 66/11kV, 20MVA Tx-I	24.9.19	15:00	86
47	24.9.19	15:42	OKHLA 66/11kV, 20MVA Tx-I	24.9.19	15:46	86
48	24.9.19	16:15	OKHLA 66/11kV, 20MVA Tx-I	24.9.19	16:55	86
49	26.9.19	07:05	PARKSTREET 220/33kV 100MVA Tx-II	26.9.19	07:15	86
50	26.9.19	07:35	PARKSTREET 220/33kV 100MVA Tx-II	26.9.19	07:50	86
51	26.9.19	08:39	PARKSTREET 220/33kV 100MVA Tx-II	26.9.19	10:46	E/F.
52	26.9.19	14:16	BAWANA 400/220kV 315MVA ICT-IV	26.9.19	14:24	At Bawana: Bus bar protection operated, 96
53	26.9.19	14:16	220KV BAWANA-SHALIMARBAGH CKT-I	26.9.19	14:27	At Bawana: Bus bar protection operated, 96 At Shalimar Bagh: Ckt. did not trip.
54	26.9.19	14:16	220KVBAWANA- ROHINI CKT-II	26.9.19	14:24	At Bawana: Bus bar protection operated, 96 At Rohini : Ckt. did not trip.
55	26.9.19	14:16	220KV BAWANA-SHALIMARBAGH CKT-II	26.9.19	14:27	At Bawana: Bus bar protection operated, 96 At Shalimar Bagh: Ckt. did not trip.
56	26.9.19	14:16	220KVBAWANA- ROHINI CKT-I	26.9.19	14:24	At Bawana: Bus bar protection operated, 96 At Rohini : Ckt. did not trip.
57	29.9.19	00:19	220KV MUNDKA-NAJAFGARH CKT	29.9.19	11:30	At Mundka : Dist prot, Zone-I, B Phase, 86AB. At Najafgarh: Ckt did not trip.
58	29.9.19	00:21	220KV MUNDKA-KANJHAWALA CKT	29.9.19	01:22	At Mundka : Ckt did not trip. At Khanjawala : Dist prot, Zone-II & III, B phase, 86.
59	29.9.19	00:21	KANJHAWALA 220/66kV 160MVA Tx-I	29.9.19	01:40	86, ABC Phase, Differential
60	29.9.19	00:27	NAJAFGARH 220/66kV 100MVA Tx-IV	29.9.19	00:44	186
61	29.9.19	00:58	220KV BAWANA-DSIIDC BAWANA CKT-I	29.9.19	07:32	at bawana : dist prot, dist 6.2km.



SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
62	29.9.19	09:19	MUNDKA 400/220kV 315MVA ICT-II	Contd.		Trip Gr-A, 86, WTI trip, OTI trip, PRV trip, Diff prot, REF64 relay trip, 86A&B, Fire detective trip, Diff. trip, 30B, SPN, Buchholz, WTI alongwith its 220kV I/c-II with 86A&B.
63	30.9.19	11:07	MEHRAULI 220/66kV 100MVA Tx-I	30.9.19	17:30	TRIPPED WITHOUT INDICATION.
64	30.9.19	11:40	SHALIMAR BAGH 220/33kV 100MVA Tx-I	30.9.19	14:34	DIFFERENTIAL.

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

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