

DELHI TRANSCO LTD.

STATE LOAD DISPATCH CENTER

PROGRESS REPORT

JUNE 2013

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	5-10
4.	Allocation of Power to Delhi from unallocated quota of central sector	11
5.	Allocation of Power to Discoms	12
6.	Power Availability Demand Position of Delhi at the time of occurrence of Peak Demand	13
7.	Power Availability Demand Position of Delhi at the time of occurrence of Maximum Un-Restricted Demand	14
8.	Source wise scheduled drawl from grid and Availability within Delhi	15-17
9.	Shedding Details	18-21
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.	Details of Capacitors Installations in Delhi	31-36
19.	Tripping Details of 400/220 KV System in Delhi Power System	37-39
20.	Details of Under frequency Relay operations in Delhi Power System	40

SALIENT FEATURES OF DELHI POWER SYSTEM

Sr. No.	Features	JUNE 2013	JUNE 2012
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	705
	Rithala GT	108	108
	Bawana	685	469
	TOWMCL	16	--
	Total	2249	2017
2	Maximum Unrestricted Demand (MW)	5714	5472
	Date	06.06.2013	22.06.2012
	Time	15.38.41	15.49.32
3	Peak Demand met (MW)	5653	5389
	Date	06.06.213	26.06.2012
	Time	15.38.41	15.56.34
4	Peak Availability (MW)	5359	5341
5	Shortage (-) / Surplus (+) in MW	(-)355	(+)48
6	Percentage Shortage (-) / Surplus (+)	(-) 6.28	(+) 0.89
7	Maximum Energy Consume in a day (Mus)	104.187	104.435
8	Energy Consumed during the month	2762.186	2945.912
9	Load Shedding in Mus		
A)	Due to Grid Restrictions		
i)	Under Frequency Relay Operations	0.020	0.127
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	0.363	2.159
	BRPL	0.692	3.114
	BYPL	0.133	0.129
	NDMC	0.000	0.000
	MES	0.000	0.000
iv)	Due to transmission Constraints in Central Sector	1.905	0.000
	Total due to Grid Restriction	3.113	5.529
B)	Due to Constraints in System in Mus		
	DTL	4.210	2.077
	NDPL	0.667	1.198
	BRPL	5.340	4.642
	BYPL	0.873	0.880
	NDMC	0.008	0.000
	MES	0.000	0.000
	Other Agencies	1.086	0.859
	Total	12.184	9.656
11	Grand Total in Mus	15.297	15.185

2. PERFORMANCE OF GENERATING STATIONS WITHIN DELHI DURING JUNE 2013

A) For the month of June 13

All Figures in MUs

S. No	Stations	Gross Generation	Aux. Consumption	Net Generation	Availability (%)	Backing Down
1.	RPH	57.689	8.267	49.422	61.83	3.18
2.	GT	100.100	3.124	96.976	87.43	65.7315
3.	PPCL	175.422	5.038	170.384	80.33	14.6948
4.	BTPS	395.950	31.231	364.719	99.35	90.5845
5.	Rithala	0.222	0.158	0.064	87.22	57.446
6.	Bawana	95.428	4.718	90.710	93.82	357.4448
7.	Towmcl	8.851	1.401	7.450	--	--
	TOTAL	833.662	53.937	779.725	--	589.0816

B) For the Year 2013-14 (Upto June 2013)

Power Station	Effective Capacity (MW)	Net Generation in MUs for June 2013	Availability (%) for June 2013	PLF (%) for June 2013	Cumulative Generation in MUs upto June 2013 for the year 2013-14	Cumulative Availability in % upto June 2013 for the year 2013-14	Cumulative PLF in % upto June 2013 for the year 2013-14
RPH	135	49.422	61.83	58.14	169.255	66.64	65.42
GT	270	96.976	87.43	52.58	327.976	88.45	57.66
PPCL	330	170.384	80.33	73.83	574.937	87.11	81.98
BTPS	705	364.719	99.35	79.63	1129.228	96.79	81.79
Rithala	108	0.064	87.22	0.45	-0.211	88.19	0.15
Bawana	685	90.710	93.82	19.17	277.164	74.71	19.12
Towmcl	16	7.450	--	--	16.496	--	--
TOTAL	2249	779.725	--	--	2494.845	--	306.12

3
(A)

**DETAILS OF OUTAGES OF GENERATING STNS. WITHIN DELHI W.E.F. APRIL 2012
RPH STATION**

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	67.5	03.04.13	18.35	03.04.13	19.45	Unit tripped due to drum level very low.
		04.04.13	08.55	04.04.13	09.45	Unit tripped due to drum level low.
		14.04.13	10.20	14.04.13	15.40	Unit desynchronised to attend the CW line leakage.
		19.04.13	08.25	19.04.13	16.40	Unit desynchronised to attend the Boiler window repairing.
		19.04.13	17.00	19.04.13	17.30	Unit tripped due to bay no. 20 tripped.
		03.05.13	20.00	05.05.13	03.30	Unit desynchronised to attend the Boiler tube leakage.
		05.05.13	11.40	05.05.13	13.40	Unit tripped due to drum level low.
		05.05.13	15.55	05.05.13	20.15	Dark out due to Reactor on bay no. 9 had been blasted.
		19.05.13	07.10	24.05.13	04.40	Unit desynchronised due to shortage of coal fuel and to attend the CW line leakage.
		25.05.13	01.50	25.05.13	03.20	Unit tripped due to Furnace pr. very high.
		01.06.13	12.40	01.06.13	13.55	Unit tripped due to drum level low.
		02.06.13	11.55	02.06.13	13.05	Unit tripped due to Furnace pr. very high.
		06.06.13	17.10	06.06.13	20.05	Dark out due to 22K 9F, unit tripped.
		16.06.13	18.35	19.06.13	13.50	Unit desynchronised as per system operation.
21.06.13	22.50	24.06.13	14.50	Unit desynchronised to attend the Boiler tube leakage.		

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	67.5	03.04.13	04.10	03.04.13	05.35	Unit tripped due to turbine trip.
		05.04.13	20.00	06.04.13	04.05	Unit desynchronised to attend the economiser tube leakage.
		14.04.13	10.10	14.04.13	18.15	Unit desynchronised to attend the CW line leakage.
		04.05.13	09.20	06.05.13	03.25	Unit desynchronised to attend the Economiser tube leakage.
		11.05.13	17.15	11.05.13	18.00	Unit tripped due to turbine trip.
		11.05.13	23.20	11.05.13	23.45	
		19.05.13	07.15	19.05.13	20.55	Unit desynchronised to attend the CW line leakage.
		24.05.13	05.50	01.06.13	00.25	Unit desynchronised due to shortage of coal fuel.
		01.06.13	19.20	07.06.13	14.20	Unit tripped due to Boiler tube leakage.
		11.06.13	07.15	11.06.13	08.30	Unit tripped due to birdage, bay No. 1 to 9 tripped.
		18.06.13	14.20	18.06.13	15.00	Unit tripped due to turbine trip.

(B) **Gas Turbine**

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	30	01.04.13	0:00	01-04-13	5:45	Stopped due to low demand and high frequency
		03.04.13	16:30	10-04-13	11:25	
		18.04.13	23:20	19-04-13	12:01	Machine stopped to rectify the faulty Controller
		19.04.13	12:15	22-04-13	5:47	Stopped due to low demand and high frequency
		29.04.13	11:31	29-04-13	23:37	
		07.05.13	1:45	13-05-13	14:25	Machine came on FSNL during charging of 160 MVA Trf.
		13.05.13	16:48	13-05-13	17:10	
		18.05.13	13:25	21-05-13	21:10	Stopped due to low demand and high frequency
		30.05.13	21:45	17-06-13	22:55	
		17.06.13	23:15	18-06-13	20:15	
		28.06.13	10:52	28-06-13	22:00	
		28.06.13	22:00	29-06-13	17:00	Machine not available due to problem in Diesel Engine
29.06.13	17:00	30-06-13	23:59	Stopped due to low demand and high frequency		

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	30	01-04-13	0:00	01-04-13	5:35	Stopped due to low demand and high frequency
		03-04-13	12:02	09-04-13	5:50	
		10-04-13	17:25	11-04-13	11:45	
		28-04-13	21:40	28-04-13	23:45	
		07-05-13	16:30	13-05-13	17:20	
		17-05-13	16:20	28-06-13	22:00	Machine not available due to problem in Gas Valve
		28-06-13	22:00	29-06-13	17:00	
		29-06-13	17:00	30-06-13	23:59	Stopped due to low demand and high frequency

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
3	30	01-04-13	0:00	01-04-13	7:30	Stopped due to low demand and high frequency
		17-04-13	10:40	22-04-13	8:10	
		28-04-13	21:46	29-04-13	10:55	
		04-05-13	0:05	06-05-13	14:00	
		07-05-13	1:50	07-05-13	12:00	
		11-05-13	19:30	14-05-13	17:15	
		14-05-13	18:23	14-05-13	21:00	
		14-05-13	21:00	17-05-13	15:45	
		06-06-13	17:04	06-06-13	19:00	Machine came on FSN1 due to tripping of 160 MVA Tr-I & II at IP Extension end.
		06-06-13	22:47	07-06-13	11:55	Stopped due to low demand and high frequency
		09-06-13	8:09	09-06-13	9:50	Machine came on FSNL due to tripping of 160 MVA Tr-I & II Buchholtz relay operated after that tripped on Lube oil temp high as the aux supply failed .
		11-06-13	12:45	12-06-13	7:56	Stopped due to low demand and high frequency
		14-06-13	8:45	17-06-13	20:50	
		23-06-13	23:40	24-06-13	8:16	
		28-06-13	9:40	28-06-13	21:13	
30-06-13	9:18	30-06-13	23:59			

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
4	30	01-04-13	0:00	03-04-13	15:50	Stopped due to low demand and high frequency
		17-04-13	10:40	27-04-13	3:15	
		04-05-13	0:02	06-05-13	14:13	
		07-05-13	13:20	07-05-13	15:55	
		11-05-13	19:32	14-05-13	9:58	
		21-05-13	13:10	21-05-13	17:10	
		30-05-13	3:05	05-06-13	11:58	
		06-06-13	17:04	06-06-13	17:15	Machine came on FSN1 due to tripping of 160 MVA Tr-I & II at IP Extension end.
		09-06-13	8:09	09-06-13	9:40	Machine came on FSNL due to tripping of 160 MVA Tr-I & II Buchholtz relay operated after that tripped on Lube oil temperature high as the auxiliary supply failed .
		11-06-13	12:45	12-06-13	7:54	Stopped due to low demand and high frequency
		14-06-13	10:20	17-06-13	23:59	
		18-06-13	0:00	19-06-13	21:45	machine not available due to non availability of 66 KV breaker.
		19-06-13	21:45	21-06-13	9:22	Machine not taken on bar due to less schedule from SLDC.
		24-06-13	14:46	24-06-13	15:30	Stopped due to low demand and high frequency
		28-06-13	9:30	28-06-13	22:00	
28-06-13	22:00	29-06-13	12:10	machine not available due to non availability of AC AOP		

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
5	30	28-04-13	9:34	06-05-13	13:25	Stopped due to low demand and high frequency
		13-05-13	16:48	14-05-13	9:27	
		14-05-13	9:47	18-05-13	10:56	
		24-05-13	18:52	25-05-13	9:55	Tripped due to R-communication link failure alarm & master protective alarm appeared.
		06-06-13	17:04	06-06-13	17:48	Machine came on FSN1 due to tripping of 160 MVA Tr-I & II at IP Extension end.
		09-06-13	8:09	09-06-13	8:54	Machine came on FSNL due to tripping of 160 MVA Tr-I & II Buchholtz relay operated after that tripped on Lube oil temperature high as the auxiliary supply failed .
		09-06-13	8:54	10-06-13	7:47	Machine not taken on load due to low schedule from SLDC
		17-06-13	12:17	17-06-13	14:00	Machine tripped on Bus under Voltage alarm as 66 KV bus became dead due to tripping of 160 MVA Tx-I & II .
		18-06-13	13:53	18-06-13	15:45	Machine tripped at IGV Control trouble and Fire Protection Alarm.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
6	30	10-04-13	12:45	10-04-13	16:30	Stopped due to low demand and high frequency
		21-04-13	12:42	22-04-13	10:15	
		28-04-13	9:32	30-04-13	0:40	
		13-05-13	13:00	13-05-13	16:48	Tripped due to heavy jerk observed in control room.
		13-05-13	16:48	14-05-13	10:38	Stopped due to low demand and high frequency
		14-05-13	18:00	21-05-13	11:05	
		29-05-13	10:42	29-05-13	12:30	Oil temp gauge which is mounted on T/F was founded tilted by at least 30 which leads to maloperation of mercury switch and relay 26 TP-I & 26TP-II operated causing the machine tripped on Electrical trouble normal shutdown
		06-06-13	17:04	06-06-13	17:52	Machine came on FSN1 due to tripping of 160 MVA Tr-I & II at IP Extension end.
		06-06-13	22:50	07-06-13	12:04	Stopped due to low demand and high frequency
		09-06-13	8:09	09-06-13	8:54	Machine came on FSNL due to tripping of 160 MVA Tr-I & II Buchholtz relay operated after that tripped on Lube oil temperature high as the auxiliary supply failed .
		09-06-13	8:54	10-06-13	7:52	Machine not taken on load due to low schedule from SLDC
		14-06-13	8:50	14-06-13	10:05	Stopped due to low demand and high frequency
		17-06-13	12:17	17-06-13	17:10	Machine tripped on Reverse Power relay operated as 66 KV bus become dead due to tripping of 160 MVA transformer I & II.
		30-06-13	9:07	30-06-13	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-1	30	01-04-13	0:00	01-04-13	9:15	Stopped due to low demand and high frequency
		01-04-13	9:30	01-04-13	11:10	Machine stopped due to inspection of high Vibration
		03-04-13	16:30	09-04-13	8:25	Stopped due to low demand and high frequency
		29-04-13	11:31	30-04-13	2:05	
		07-05-13	16:30	13-05-13	19:15	
		18-05-13	13:25	22-05-13	0:10	
		30-05-13	21:45	18-06-13	23:54	
		28-06-13	10:52	28-06-13	22:00	
		28-06-13	22:00	29-06-13	17:00	Machine not available due to Non availability of GTs
		29-06-13	17:00	30-06-13	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-2	30	01-04-13	0:00	01-04-13	11:25	Stopped due to low demand and high frequency
		16-04-13	10:40	22-04-13	11:45	
		23-04-13	12:14	23-04-13	13:09	Machine tripped due to malfunctioning of MS-14 Valve
		27-04-13	5:30	27-04-13	6:15	Machine tripped in the jerk.
		28-04-13	21:46	29-04-13	11:30	Stopped due to low demand and high frequency
		04-05-13	0:02	06-05-13	17:05	
		11-05-13	19:30	14-05-13	13:57	
		19-05-13	1:25	19-05-13	3:05	Machine Tripped on Exhaust pressure high.
		05-06-13	1:01	05-06-13	2:21	Tripped due to sudden drop in vacuum without appearing alarm in annunciation panel.
		06-06-13	17:04	06-06-13	18:55	Machine tripped as the GT#3 & 4 came on FSNL due to tripping of 160 MVA Tx-I & II at IP Extn end.
		09-06-13	8:09	09-06-13	11:52	Machine tripped as corresponding GT came on FSNL due to tripping of 160 MVA Tr-I & II on Buchholtz relay operated .
		10-06-13	11:42	10-06-13	12:50	Machine stopped to attend
		11-06-13	12:45	12-06-13	10:35	Stopped due to low demand and high frequency
		14-06-13	8:45	17-06-13	23:45	
		23-06-13	21:35	23-06-13	23:20	Machine tripped on LLVT tank v. High Alarm
28-06-13	9:40	28-06-13	23:15	Stopped due to low demand and high frequency		

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG-3	30	05-04-13	17:05	05-04-13	18:20	Machine stopped manually to attend oil Leakage from Secondary oil Pressure line
		28-04-13	9:34	30-04-13	4:25	Stopped due to low demand and high frequency
		03-05-13	17:41	03-05-13	19:04	Machine stopped due to problem in drum level indication and level problem.
		13-05-13	13:00	13-05-13	16:48	Tripped due to heavy jerk observed in control room.
		13-05-13	16:48	14-05-13	13:50	Stopped due to low demand and high frequency
		14-05-13	18:00	18-05-13	13:05	
		03-06-13	9:22	03-06-13	10:07	Machine tripped on Hot well very high alarm as the Control valve CD-34 left the auto and closed. Another Stream CD-37 tried to be taken into service, in the mean time machine tripped on hot well high alarm.
		06-06-13	17:04	06-06-13	18:30	Machine tripped as the GT#5 & 6 came on FSNL due to tripping of 160 MVA Tx-I & II at IP Extn end.
		09-06-13	8:09	09-06-13	8:54	Machine tripped as corresponding GT came on FSNL due to tripping of 160 MVA Tr-I & II on Buchholtz relay operated .
		09-06-13	8:54	10-06-13	10:14	Machine not taken on load due to low schedule from SLDC
		15-06-13	1:58	15-06-13	2:58	Tripped due to LLVT tank level high.
		17-06-13	12:17	17-06-13	15:12	Machine tripped due to both GTs tripped due to Tripping of 160 MVA Tx.

(C) PRAGATI STATION

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	104	23.05.13	14.29	23.05.13	14.56	Tripped due to Gas Fuel Pr. Low by GAIL
		15.06.13	21.55	17.06.13	9.00	No schedule to run GT#1 on Open Cycle.
		17.06.13	9.00	24.06.13	0.26	Tripped on internal fault
		25.06.13	22.00	26.06.13	2.00	
		26.06.13	2.00	26.06.13	13.42	No schedule of GT#1 in OC due to low demand, HRSG#1 not available- FW104 stuck

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	104	21.04.13	8.15	21.04.13	18.15	Stopped by DTL to attend hot spot.
		21.04.13	18.15	23.04.13	6.31	Tripped on internal fault
		26.04.13	6.45	26.04.13	8.37	
		14.05.13	13.28	14.05.13	14.13	
		06.06.13	17.10	06.06.13	18.05	Tripped due to Grid Disturbance

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG	122	17.04.13	18.37	17.04.13	19.52	Tripped on internal fault
		21.04.13	11.44	21.04.13	14.15	
		21.04.13	14.15	21.04.13	18.36	Shut down continued by DTL to attend hot spot.
		06.06.13	17.10	06.06.13	18.50	Tripped due to Grid Disturbance

(D) BADARPUR THERMAL POWER STATION

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	95	01.04.13	0:00	01.04.13	19:18	Reserve Shutdown
		12.05.13	18:18	12.05.13	21:20	Grid Disturbance
		04.06.13	22:45	05.06.13	23:45	Water Wall tube leakage
		13.06.13	10:58	13.06.13	11:32	Furnace Disturbance
		16.06.13	18:38	21.06.13	14:14	Reserve Shutdown

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	95	12.05.13	18:18	12.05.13	20:07	Grid Disturbance
		28.06.13	10:32	Contd.		Reserve Shutdown

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
3	95	03.04.13	19:55	22.04.13	13:40	Planned Shutdown
		12.05.13	18:18	12.05.13	20:20	Grid Disturbance
		26.05.13	12:41	27.05.13	12:58	Economiser Tube leakage
		13.06.13	10:40	18.06.13	12:04	Reserve Shutdown

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
4	210	09.04.13	22:17	10.04.13	2:07	MDBFP relay malfunction
		12.05.13	18:18	12.05.13	21:35	Grid Disturbance
		25.05.13	7:28	23.05.13	15:34	UAT 4A diff relay casing shorted
		11.06.13	15:35	13.06.13	7:48	Reserve Shutdown

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
5	210	09.05.13	0:06	09.05.13	15:57	APH 5B NDE Bearing vibration high
		11.05.13	19:48	14.05.13	12:17	Reserve Shutdown
		16.06.13	15:58	16.06.13	17:09	CW Shortage
		24.06.13	16:23	24.06.13	17:45	Furnace Disturbance
		24.06.13	18:04	24.06.13	19:03	
		27.06.13	14:20	27.06.13	18:31	AVR & Excitation System

(E)

BAWANA CCGT POWER STATION

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	216	01.04.13	00:00	01.04.13	8:39	Combustion inspection
		05.04.13	10:55	21.04.13	--	M/C under planned shut down due to CW interconnection/CW sump cleaning/Diverter Damper setting
		19.06.13	00:26	19.06.13	02:42	G.T. -1 tripped due to Hot gas temp high.
		20.06.13	20:42	05.08.13	09:10	Stopped due to low demand and high frequency

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	216	05.04.13	13:13	12.04.13	19:02	M/C under planned shut down due to CW interconnection/CW sump cleaning/Diverter Damper setting up to 12.04.13
		14.04.13	13:40	25.04.13	08:57	Stopped due to low demand and high frequency
		29.04.13	22:25	30.04.13	06:25	M/C Stopped due to gas leakage in pipe line
		07.05.13	20:38	08.05.13	0:26	CW Pump Motor Failure
		29.05.13	13:57	29.05.13	15:30	GT#2 tripped on EPB press by default
		03.06.13	10:54	03.06.13	13:53	GT #2 tripped due to its rotor earth fault
		06.06.13	22:50	10.06.13	12:38	Stopped due to low demand and high frequency
		13.06.13	08:14	20.06.13	18:33	Stopped due to low demand and high frequency
		21.06.13	08:21	21.06.13	12:54	GT #2 tripped due to difference in G-1 feedback
30.06.13	14:16	30.06.13	14:58	GT#2 Tripped on Excitation tripping		

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG	254	01.04.13	0:00	27.04.13	19:19	M/C under planned shut down due to CW interconnection/CW sump cleaning/Diverter Damper setting up to 12.04.13 after force shutdown due to bearing failure of turbine up to 25.04.13 and 25.04.13 to 27.04.13 due to generator IR value low
		29.04.13	22:25	30.04.13	6:25	M/C Stopped due to gas leakage in pipe line
		30.04.13	22:07	30.04.13	23:37	GT#2 Diverted damper is closed
		07.05.13	20:35	08.05.13	3:12	CW Pump A Motor Failure
		08.05.13	11:57	08.05.13	13:19	CW Pump B Motor winding temperature increased up to threshold limit
		29.05.13	13:57	29.05.13	16:50	STG trip on GT trip
		03.06.13	10:54	03.06.13	15:57	STG trip on GT trip
		06.06.13	22:50	10.06.13	17:50	Stopped due to low demand and high frequency
		13.06.13	08:16	19.06.13	09:10	Stopped due to low demand and high frequency
		21.06.13	08:21	21.06.13	13:00	STG trip on GT trip
		27.06.13	18:01	27.06.13	18:42	GT#2 Diverted damper is closed
		29.06.13	17:31	29.06.13	18:29	CW Pump B Discharge valve closed
30.09.13	14:16	30.06.13	15:34	STG trip on GT trip		

(E)

RITHALA POWER STATION

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	31.8	19.03.13	17:32	Contd.		No schedule have been given by SLDC on Spot gas

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	31.8	05.03.13	15:38	07.06.13	12:05	Stopped due to low demand and high frequency
		07.06.13	22:41	Contd.		

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG	31.8	27.02.13	00:01	07.06.13	17:40	Stopped due to low demand and high frequency
		07.06.13	22:38	Contd.		

4 ALLOCATION OF POWER TO DELHI

A) Allocation of power to Delhi from Unallocated quota of Central Sector Generating Stations to Delhi w.e.f. 19.01.2013

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

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocated 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	130	0	0	130
Rihand-I	1000	150	100	87	0	0	87
Rihand Stage -II	1000	150	126	109	0	0	109
Rihand Stage -III	500	75	66	57	0	0	57
ANTA GPS	419	63	44	41	0	0	41
Auriya GPS	663.36	99	72	67	0	0	67
Dadri GPS	829.78	129	91	85	0	0	85
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Dadri NCTPS (Th) Stage-II	980	147	735	639	0	0	639
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
TOTAL	9282	1227	2240	1959	0	0	1959
NHPC							
Baira Suil HPS	180	0	20	19	0	0	19
Salal HPS	690	0	80	76	0	0	76
Tanakpur HEP	94	0	12	11	0	0	11
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 HEP	480	0	53	50	0	0	50
Sewa HEP	120	18	16	15	0	0	15
Dhauri Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	3305	206	380	361	0	0	361
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B)	440	66	0	0	0	0	0
RAPP (C)	440	64	56	49	0	0	49
TOTAL	1320	194	103	89	0	0	89
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC							
Tehri Hydro	1000	99	103	89	0	0	89
Koteshwar HEP	400	40	39	37	0	0	37
TOTAL	1400	139	142	127	0	0	127
Total	16807	1915	3007	2660	0	0	2660
Allocation from ER and Tala HEP							
Farakka	1600	0	22	19	0	0	19
Kahalgaon	840	0	51	43	0	0	43
Talchar	1000	0	0	0	0	0	0
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1500	0	157	131	0	0	131

Total ER	6210	153	290	242	0	0	242
Joint Venture							
Jhajjar TPS	1000	76	231	201	0	0	201
Grand Total	24017	2144	3528	3102	0	0	3102

5 ALLOCATION OF POWER TO DISCOMS

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. 01.04.2011.

(Allocation In %)

(A) 10.00hrs. to 17.00hrs.

SOURCES	LICENSEES					
	NDMC	MES	NDPL	BRPL	BYPL	TOTAL
1. Central Sector without Dadri (Th)	0.00	0.00	29.18	43.58	27.24	100.00
2. Dadri (Th)	14.98	0.00	24.18	36.87	23.97	100.00
3. BTPS	15.94	7.09	21.88	33.37	21.72	100.00
4. RPH	0.85	0.00	28.39	42.97	27.79	100.00
5. GT	0.93	0.00	28.28	42.99	27.80	100.00
6. Pragati	26.69	0.00	20.77	31.76	20.7	100.00
7. DVC	0.00	0.00	29.18	43.58	27.24	100.00

(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)	0.00	0.00	29.18	43.58	27.24	100.00
2. Dadri (Th)	14.05	0.00	24.18	36.87	24.90	100.00
3. BTPS	15.07	7.09	21.88	33.37	22.59	100.00
4. RPH	0.00	0.00	28.39	42.97	28.64	100.00
5. GT	0.00	0.00	28.28	42.99	28.73	100.00
6. Pragati	25.76	0.00	20.77	31.76	21.71	100.00
7. DVC	0.00	0.00	29.18	43.58	27.24	100.00

6 POWER AVAILABILITY-DEMAND POSITION AT THE TIME OF PEAK DEMAND MET DURING JUNE 2013

All figures in MW

Date	Time of peak demand	Generation within Delhi								Import from the Grid	Schedule from the Grid	OD(-)/UD(+)	Demand met	Shedding	Un-Restricted Demand
		RPH	GT	PPCL	Rithala	Bawana	Towmcl	BTPS	Total						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)=(3) to (8)	(10)	(11)	(12)=(11) - (10)	(13)=(11)+ (12)	(14)	(15)= (13)+ (14)
1	00.00.53	50	120	291	0	213	15	517	1206	3546	3567	-21	4752	0	4752
2	23.34.08	51	120	289	0	195	10	514	1179	3380	3260	120	4559	0	4559
3	15.37.07	51	148	276	0	42	11	589	1117	3892	3884	8	5009	21	5030
4	16.12.30	51	148	274	0	190	9	584	1256	3827	3824	3	5083	1	5084
5	16.39.08	51	143	286	0	190	9	502	1181	4030	3917	113	5211	42	5253
6	15.38.41	51	146	270	0	188	10	586	1251	4402	4047	355	5653	61	5714
7	15.41.42	51	150	277	0	0	3	528	1009	4133	4022	111	5142	95	5237
8	15.32.42	95	152	276	0	0	11	508	1042	4042	4119	-77	5084	119	5203
9	23.28.08	98	76	580	0	-2	11	516	1279	3663	3609	54	4942	61	5003
10	15.53.27	98	146	271	0	33	13	582	1143	4083	3964	119	5226	220	5446
11	00.15.35	97	145	280	0	228	11	521	1282	3639	3594	45	4921	37	4958
12	15.29.36	93	149	279	0	191	11	378	1101	3998	3978	20	5099	59	5158
13	00.30.26	93	153	285	0	192	12	409	1144	3590	3690	-100	4734	46	4780
14	12.46.49	97	75	282	0	-1	11	429	893	3803	3626	177	4696	13	4709
15	15.56.27	97	74	286	0	0	8	443	908	3535	3521	14	4443	0	4443
16	00.00.29	97	81	143	0	-3	13	434	765	2948	3115	-167	3713	0	3713
17	16.45.14	38	38	140	0	0	12	353	581	3079	3058	21	3660	19	3679
18	16.34.45	26	116	141	0	0	16	415	714	3197	3272	-75	3911	0	3911
19	15.51.23	58	148	138	0	30	13	477	864	3294	3462	-168	4158	0	4158
20	23.13.40	69	150	140	0	222	10	438	1029	3605	3616	-11	4634	3	4637
21	22.43.00	73	187	138	0	245	12	558	1213	3714	3744	-30	4927	163	5090
22	22.15.56	40	189	134	0	202	8	578	1151	3732	3819	-87	4883	7	4890
23	22.51.06	42	167	138	0	210	11	530	1098	3874	3937	-63	4972	104	5076
24	15.23.22	51	149	288	0	239	10	532	1269	4163	4080	83	5432	21	5453
25	15.14.24	89	183	264	0	236	14	519	1305	3786	3934	-148	5091	2	5093
26	16.03.05	90	192	263	0	229	16	510	1300	3596	3549	47	4896	0	4896
27	16.02.08	91	187	283	0	202	14	383	1160	3914	3746	168	5074	30	5104
28	15.24.21	78	78	256	0	199	14	435	1060	3955	4055	-100	5015	0	5015
29	15.43.01	89	147	283	0	202	13	441	1175	3763	3401	362	4938	33	4971
30	00.00.26	82	157	297	0	212	13	495	1256	3543	3309	234	4799	15	4814

7 **POWER AVAILABILITY- DEMAND POSITION AT THE TIME OF MAXIMUM UNRESTRICTED DEMAND DURING JUNE 2013**

Date	Time of peak demand	Generation within Delhi								Import from the Grid	Schedule from the Grid	OD(-)/ UD(+)	Demand met	Shedding	Un-Restricted Demand
		RPH	GT	PPCL	Rithala	Bawana	Towmcl	BTPS	Total						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)= (3) to (8)	(10)	(11)	(12)= (11) - (10)	(13)= (11)+ (12)	(14)	(15)= (13)+ (14)	
1	00.00.53	50	120	291	0	213	15	517	1206	3546	3567	-21	4752	0	4752
2	23.34.08	51	120	289	0	195	10	514	1179	3380	3260	120	4559	0	4559
3	15.37.07	51	148	276	0	42	11	589	1117	3892	3884	8	5009	21	5030
4	16.12.30	51	148	274	0	190	9	584	1256	3827	3824	3	5083	1	5084
5	16.39.08	51	143	286	0	190	9	502	1181	4030	3917	113	5211	42	5253
6	15.38.41	51	146	270	0	188	10	586	1251	4402	4047	355	5653	61	5714
7	15.41.42	51	150	277	0	0	3	528	1009	4133	4022	111	5142	95	5237
8	15.32.42	95	152	276	0	0	11	508	1042	4042	4119	-77	5084	119	5203
9	23.28.08	98	76	580	0	-2	11	516	1279	3663	3609	54	4942	61	5003
10	15.53.27	98	146	271	0	33	13	582	1143	4083	3964	119	5226	220	5446
11	00.15.35	97	145	280	0	228	11	521	1282	3639	3594	45	4921	37	4958
12	15.29.36	93	149	279	0	191	11	378	1101	3998	3978	20	5099	59	5158
13	00.30.26	93	153	285	0	192	12	409	1144	3590	3690	-100	4734	46	4780
14	12.46.49	97	75	282	0	-1	11	429	893	3803	3626	177	4696	13	4709
15	15.56.27	97	74	286	0	0	8	443	908	3535	3521	14	4443	0	4443
16	00.00.29	97	81	143	0	-3	13	434	765	2948	3115	-167	3713	0	3713
17	16.45.14	38	38	140	0	0	12	353	581	3079	3058	21	3660	19	3679
18	16.34.45	26	116	141	0	0	16	415	714	3197	3272	-75	3911	0	3911
19	15.51.23	58	148	138	0	30	13	477	864	3294	3462	-168	4158	0	4158
20	23.13.40	69	150	140	0	222	10	438	1029	3605	3616	-11	4634	3	4637
21	22.43.00	73	187	138	0	245	12	558	1213	3714	3744	-30	4927	163	5090
22	22.15.56	40	189	134	0	202	8	578	1151	3732	3819	-87	4883	7	4890
23	22.51.06	42	167	138	0	210	11	530	1098	3874	3937	-63	4972	104	5076
24	15.23.22	51	149	288	0	239	10	532	1269	4163	4080	83	5432	21	5453
25	15.14.24	89	183	264	0	236	14	519	1305	3786	3934	-148	5091	2	5093
26	16.03.05	90	192	263	0	229	16	510	1300	3596	3549	47	4896	0	4896
27	16.02.08	91	187	283	0	202	14	383	1160	3914	3746	168	5074	30	5104
28	15.24.21	78	78	256	0	199	14	435	1060	3955	4055	-100	5015	0	5015
29	15.43.01	89	147	283	0	202	13	441	1175	3763	3401	362	4938	33	4971
30	00.00.26	82	157	297	0	212	13	495	1256	3543	3309	234	4799	15	4814

SOURCEWISE SCHEDULED DRAWL FROM NORTHERN GRID AS WELL AS AVAILABILITY WITHIN DELHI FOR JUNE 2013

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

A (i) RPH	57.689
(ii) GT+STG	100.100
(iii) PRAGATI	175.422
(iv) RITHALA	0.222
(v) BAWANA CCGT	95.428
(vi) Timarpur - Okhla	8.851
TOTAL	437.712
B) AVAILABILITY FROM BTPS	360.546
C) AUXILIARY CONSUMPTION OF GENERATING STNs. EXCLUDING BTPS	22.706
D) NET GENERATION AVAILABLE WITHIN DELHI(A+B-C)	775.552

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	8.794	8.565	8.794	8.565
SALAL	52.272	50.900	52.272	50.900
SASAN	0.000	0.000	0.000	0.000
TANKAPUR	4.834	4.711	4.834	4.711
CHAMERA	30.372	29.576	30.372	29.576
CHAMERA -II	29.386	28.617	29.386	28.617
CHAMERA -III	20.885	20.338	20.885	20.338
DHAULIGANGA	13.408	13.072	13.408	13.072
SEWA -2	5.763	5.614	5.763	5.614
URI	37.381	36.402	37.381	36.402
KOTESHWAR	19.140	18.636	19.140	18.636
ANTA (GAS)	14.897	14.513	7.864	7.659
ANTA (RLNG)	13.659	13.298	0.097	0.094
ANTA (LIQUID)	1.344	1.306	0.000	0.000
DADRI (GAS)	37.202	36.221	17.022	16.570
DADRI (RLNG)	25.159	24.506	0.059	0.057
DADRI (LIQUID)	0.000	0.000	0.000	0.000
AURAIYA (GAS)	19.832	19.306	7.711	7.506
AURAIYA (RLNG)	28.924	28.173	0.357	0.348
AURAIYA (LIQUID)	0.007	0.007	0.000	0.000
SINGRAULI	97.993	95.426	89.174	86.835
RIHAND -I	51.509	50.177	43.631	42.501
RIHAND -II	81.613	79.477	71.117	69.252
RIHAND -III	38.645	37.628	34.802	33.886
UNCHAHAAR-I	16.400	15.970	12.937	12.598
UNCHAHAAR-II	18.222	17.746	14.567	14.187
UNCHAHAAR-III	19.739	19.222	15.929	15.513
DADRI (TH)	518.756	505.174	402.817	392.261
DADRI (TH) STAGE-II	508.732	495.416	439.075	427.574
NAPP	22.731	22.135	22.731	22.135
RAPP 'B'	0.000	0.000	0.000	0.000
RAPP 'C'	38.101	37.104	38.101	37.104
NATHPA JHAKRI	89.379	87.054	89.379	87.054
DULASTI	33.226	32.356	33.226	32.356
TEHRI	43.424	42.277	43.424	42.277
JHAJJAR	73.076	71.126	9.942	9.681
KHELGAON	33.086	32.219	25.149	24.486
KHELGAON-II	106.239	103.455	91.393	88.994
FARAKA	11.600	11.294	10.660	10.379
TALA	18.092	17.619	18.092	17.619
TALCHER	0.000	0.000	0.000	0.000
DVC	223.031	220.441	220.441	214.651
WEST BENGAL	29.944	29.595	29.595	28.829
GUJRAT	17.573	17.278	17.278	16.833

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
ASSAM	7.161	7.067	7.067	6.874
DVC CTPS (BRPL)	0.000	0.000	0.000	0.000
DVC CTPS (BYPL)	0.000	0.000	0.000	0.000
DVC CTPS (NDPL)	0.000	0.000	0.000	0.000
METHON POWER(NDPL)LT-06	176.588	174.538	174.538	169.970
DVC MEJIA (LT-08)(BYPL)	77.122	76.228	76.228	74.230
URS	57.815	56.299	57.815	56.299
RAJASTHAN	0.154	0.152	0.152	0.148
HIMACHAL PRADESH	53.443	52.850	52.850	51.454
TRIPURA	0.177	0.175	0.175	0.170
MADHYA PRADESH(WR)	3.918	3.848	3.848	3.745
JAMMU & KASHMIR	139.885	138.348	138.348	134.724
DVC (FOR NDPL) LT-09	7.818	7.726	7.726	7.522
HARYANA (LT-05)	17.220	17.031	17.031	16.589
ORISSA	124.565	123.112	123.112	119.885
TO HARYANA	-28.398	-28.800	-28.800	-29.575
TO UTTAR PRADESH	-20.414	-20.705	-20.705	-21.265
TO GUJRAT	-0.452	-0.461	-0.461	-0.473
TO KERALA	-15.604	-15.966	-15.966	-16.393
TO ANDHRA	-0.176	-0.179	-0.179	-0.184
TO MAHARASHTRA	-1.291	-1.322	-1.322	-1.359
TO ASSAM	-0.194	-0.197	-0.197	-0.202
TO HIMACHAL PRADESH	-0.676	-0.684	-0.684	-0.703
POWER EXCHANGE(IEX)	0.535	0.521	0.535	0.521
TO POWER EXCHANGE (IEX)	-236.374	-242.793	-236.374	-242.793
POWRER EXCHANGE(PX)	0.069	0.067	0.069	0.067
TO POWER EXCHANGE (PX)	-7.807	-8.013	-7.807	-8.013
TO SHARE PROJECT (HARYANA)	-5.346	-5.490	-5.346	-5.490
TO SHARE PROJECT (PUNJAB)	-5.692	-5.844	-5.692	-5.844
TOTAL	2798.413	2721.457	2364.766	2285.570

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	1492.631	1453.565	1157.160	1126.841
NTPC - ER	150.925	146.969	127.203	123.859
NHPC	236.321	230.149	236.321	230.149
NPC	60.832	59.239	60.832	59.239
KOTESHWAR	19.140	18.636	19.140	18.636
MUNDRA_UMPP	0.000	0.000	0.000	0.000
NATHPA JHAKRI	89.379	87.054	89.379	87.054
TEHRI	43.424	42.277	43.424	42.277
TALA	18.092	17.619	18.092	17.619
JHAJJAR	73.076	71.126	9.942	9.681
TALCHER	0.000	0.000	0.000	0.000
DVC	223.031	220.441	220.441	214.651
WEST BENGAL	29.944	29.595	29.595	28.829
GUJRAT	17.573	17.278	17.278	16.833
ASSAM	7.161	7.067	7.067	6.874
DVC CTPS (BRPL)	0.000	0.000	0.000	0.000
DVC CTPS (BYPL)	0.000	0.000	0.000	0.000
DVC CTPS (NDPL)	0.000	0.000	0.000	0.000
METHON POWER (NDPL)-LT-06	176.588	174.538	174.538	169.970
DVC MEJIA (LT-08)(BYPL)	77.122	76.228	76.228	74.230
URS	57.815	56.299	57.815	56.299
RAJASTHAN	0.154	0.152	0.152	0.148
HIMACHAL PRADESH	53.443	52.850	52.850	51.454
TRIPURA	0.177	0.175	0.175	0.170
MADHYA PRADESH(WR)	3.918	3.848	3.848	3.745
JAMMU & KASHMIR	139.885	138.348	138.348	134.724
DVC (FOR NDPL) LT-09	7.818	7.726	7.726	7.522
HARYANA (LT -05)	17.220	17.031	17.031	16.589
ORISSA	124.565	123.112	123.112	119.885
POWER EXCHANGE(IEX)	0.535	0.521	0.535	0.521
POWER EXCHANGE(PX)	0.069	0.067	0.069	0.067
TOTAL	3120.836	3051.911	2688.300	2617.865

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 HARYANA	-28.398	-28.800	-28.800	-29.575
TO UTTRANCHAL	0.000	0.000	0.000	0.000
TO UTTAR PRADESH	-20.414	-20.705	-20.705	-21.265
TO GUJRAT	-0.452	-0.461	-0.461	-0.473
TO ANDHRA	-0.176	-0.179	-0.179	-0.184
TO KERALA	-15.604	-15.966	-15.966	-16.393
TO JAMMU & KASHMIR	0.000	0.000	0.000	0.000
TO MAHARASHTRA	-1.291	-1.322	-1.322	-1.359
TO RAJASTHAN	0.000	0.000	0.000	0.000
TO ASSAM	-0.194	-0.197	-0.197	-0.202
TO MEGHALAYA	0.000	0.000	0.000	0.000
TO HIMACHAL PRADESH	-0.676	-0.684	-0.684	-0.703
TO WEST BENGAL	0.000	0.000	0.000	0.000
TO POWER EXCHANGE (IEX)	-236.374	-242.793	-236.374	-242.793
TO POWER EXCHANGE (PX)	-7.807	-8.013	-7.807	-8.013
TO SHARE PROJECT (HARYANA)	-5.346	-5.490	-5.346	-5.490
TO SHARE PROJECT (PUNJAB)	-5.692	-5.844	-5.692	-5.844
TOTAL	-322.423	-330.454	-323.533	-332.295
TOTAL SCHEDULED DRAWAL FROM THE GRID	2798.413	2721.457	2364.766	2285.295
TOTAL CONSUMPTION INCLUDING AUX. OF GENERATING STNs. EXCLUDING BTPS				2784.892
NET CONSUMPTION				2762.186
AVAILABILITY WITHIN DELHI				775.552
ACTUAL DRAWAL FROM THE GRID				1986.634
OVER DRAWAL(+)/UNDER DRAWAL(-) FROM THE GRID ON THE BASIS OF SCHEDULED ALLOCATION MADE BY NRLDC TO DELHI AT PERIPHERY				-298.936
LOAD SHEDDING				15.297
UNRESTRICTED DEMAND (GROSS)				2800.189
UNRESTRICTED DEMAND (NET)				2777.483
MAX. NET CONSUMPTION				104.187 ON 24.06.2013
MAX. LOAD SHEDDING				1498MW ON 06.06.2013 AT 17.30HRS.
PEAK LOAD	Peak Demand during the month			SHEDDING AT PEAK TIME
DAY PEAK	5653MW AT 15.48.41HRS ON 06.06.2013			61 MW
EVENING PEAK	5064MW AT 23.00.00HRS ON 10.06.2013			73 MW
P.L.F. OF GENCO AND PRAGATI STNs.	RPH			59.35%
	GT			51.49%
	PRAGATI			73.83%
	RITHALA			0.29%
	BAWANA			19.38%
	Timarpur Okhla			76.83%

SHEDDING DETAILS DURING THE MONTH OF JUNE 2013.

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
		BYPL	BRPL				BYPL	BRPL		
1	2	3	4	5	6	7=3 to 6	8	9	10	11
01-Jun-13	4	0.001	0.000	0.001	0.000	0.002	0.000	0.000	0.000	0.000
02-Jun-13	2	0.006	0.000	0.001	0.000	0.007	0.000	0.000	0.000	0.000
03-Jun-13	2	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000
04-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
05-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.070	0.000	0.060	0.000
06-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.005	0.226	0.032	0.000
07-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08-Jun-13	1	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000
09-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10-Jun-13	6	0.001	0.006	0.002	0.000	0.009	0.018	0.068	0.075	0.000
11-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.016	0.000	0.000	0.000
12-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000
21-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.008	0.289	0.000	0.000
25-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.016	0.109	0.190	0.000
29-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30-Jun-13	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	15	0.008	0.007	0.005	0.000	0.020	0.133	0.692	0.363	0.000

ALL FIGURES IN MU_s

Date	Shedding due to Transmission/Grid Constraints in Central Sector Stations / TTC / ATC VIOLATION				TOTAL	TOTAL SHEDDING DUE TO GRID RESTRICTIONS	Due to T&D Constraints				
	BSES		NDPL	NDMC			DTL				
	BYPL	BRPL					BSES		NDPL	NDMC	MES
			BYPL	BRPL							
1	12	13	14	15	16=8to15	17=16+7	18	19	20	21	22
01-Jun-13	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
02-Jun-13	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.008	0.000	0.000	0.000
03-Jun-13	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.023	0.000	0.000	0.000
04-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.020	0.000	0.000	0.000
05-Jun-13	0.000	0.000	0.000	0.000	0.130	0.130	0.038	0.013	0.000	0.000	0.000
06-Jun-13	0.000	0.000	0.000	0.000	0.263	0.263	0.680	0.073	0.986	0.000	0.000
07-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.002	0.601	0.000	0.000
08-Jun-13	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.064	0.044	0.000	0.000
09-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.036	0.045	0.000	0.000
10-Jun-13	0.154	0.671	0.277	0.000	1.263	1.272	0.000	0.000	0.000	0.000	0.000
11-Jun-13	0.036	0.135	0.045	0.000	0.232	0.232	0.000	0.063	0.004	0.000	0.000
12-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.043	0.000	0.000
14-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.003	0.000	0.000
15-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.021	0.033	0.000	0.000
16-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000
17-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.089	0.006	0.000	0.000
18-Jun-13	0.000	0.220	0.182	0.011	0.413	0.413	0.000	0.000	0.012	0.000	0.000
19-Jun-13	0.052	0.035	0.087	0.000	0.174	0.174	0.019	0.000	0.000	0.000	0.000
20-Jun-13	0.000	0.000	0.000	0.000	0.006	0.006	0.000	0.000	0.000	0.000	0.000
21-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000
22-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.191	0.078	0.001	0.000	0.000
23-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.599	0.210	0.004	0.000	0.000
24-Jun-13	0.000	0.000	0.000	0.000	0.297	0.297	0.000	0.021	0.000	0.000	0.000
25-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000
26-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.032	0.000	0.000
27-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28-Jun-13	0.000	0.000	0.000	0.000	0.315	0.315	0.000	0.018	0.000	0.000	0.000
29-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.023	0.015	0.000	0.000
30-Jun-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000
TOTAL	0.242	1.061	0.591	0.011	3.093	3.113	1.579	0.802	1.829	0.000	0.000

ALL FIGURES IN MUs

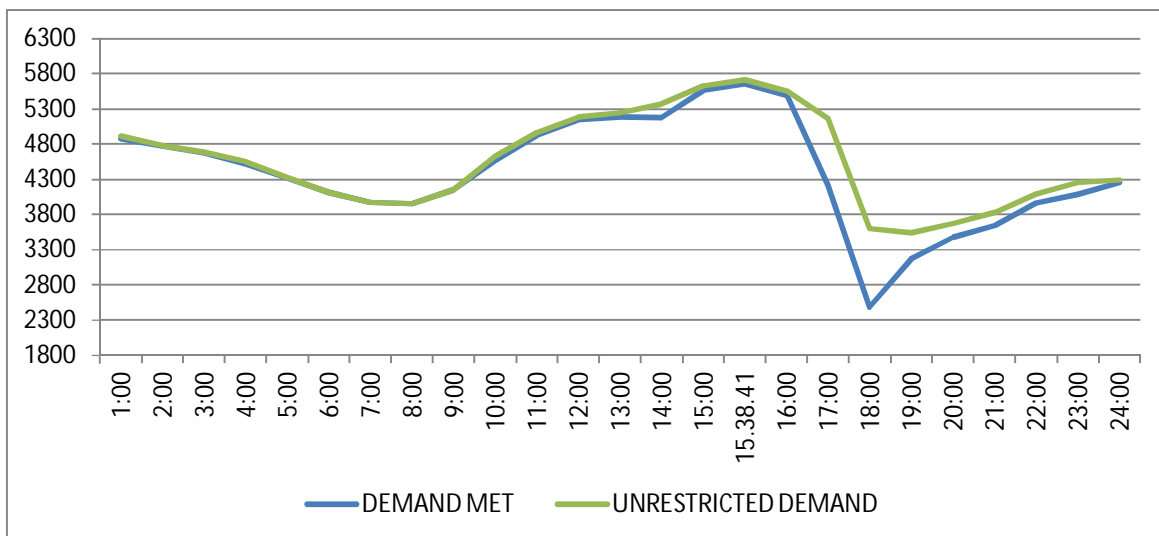
DATE	DUE TO T&D CONSTRAINTS				OTHER AGENCIES LIKE GENCO, BBMB, BTPS ETC.	THEFT PRONE SHEDDING			TOTAL SHEDDING DUE TO T&D CONSTS. & THEFT PRONE	GRAND TOTAL
	DISCOMS									
	BSES		NDPL	NDMC		BSES		NDPL		
	BYPL	BRPL				BYPL	BRPL			
1	23	24	25		26	27	28	29	30=18 to29	31=30+17
01-Jun-13	0.000	0.000	0.027	0.000	0.000	0.000	0.000	0.000	0.027	0.029
02-Jun-13	0.016	0.030	0.001	0.008	0.000	0.000	0.000	0.000	0.063	0.070
03-Jun-13	0.000	0.020	0.060	0.000	0.061	0.000	0.000	0.000	0.164	0.165
04-Jun-13	0.008	0.119	0.001	0.000	0.000	0.000	0.000	0.000	0.148	0.148
05-Jun-13	0.020	0.272	0.000	0.000	0.012	0.000	0.000	0.000	0.355	0.485
06-Jun-13	0.038	1.387	0.065	0.000	0.000	0.000	0.000	0.000	3.229	3.492
07-Jun-13	0.004	0.285	0.043	0.000	0.000	0.000	0.000	0.000	0.952	0.952
08-Jun-13	0.009	0.365	0.012	0.000	0.000	0.000	0.000	0.000	0.496	0.497
09-Jun-13	0.028	0.247	0.001	0.000	0.000	0.000	0.000	0.000	0.365	0.365
10-Jun-13	0.007	0.494	0.037	0.000	0.005	0.000	0.000	0.000	0.543	1.815
11-Jun-13	0.016	0.081	0.045	0.000	0.053	0.000	0.000	0.000	0.262	0.494
12-Jun-13	0.000	0.121	0.004	0.000	0.000	0.261	0.000	0.000	0.386	0.386
13-Jun-13	0.025	0.158	0.043	0.000	0.196	0.000	0.000	0.000	0.465	0.465
14-Jun-13	0.058	0.005	0.037	0.000	0.000	0.000	0.000	0.000	0.118	0.118
15-Jun-13	0.002	0.043	0.001	0.000	0.002	0.000	0.000	0.000	0.108	0.108
16-Jun-13	0.038	0.326	0.020	0.000	0.000	0.000	0.000	0.000	0.408	0.408
17-Jun-13	0.012	0.419	0.001	0.000	0.000	0.000	0.000	0.000	0.531	0.531
18-Jun-13	0.000	0.025	0.000	0.000	0.047	0.000	0.000	0.000	0.084	0.497
19-Jun-13	0.026	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.091	0.265
20-Jun-13	0.000	0.039	0.000	0.000	0.000	0.000	0.000	0.000	0.039	0.045
21-Jun-13	0.000	0.098	0.116	0.000	0.090	0.000	0.000	0.000	0.309	0.309
22-Jun-13	0.034	0.061	0.018	0.000	0.018	0.000	0.000	0.000	0.401	0.401
23-Jun-13	0.026	0.040	0.019	0.000	0.182	0.000	0.000	0.000	1.080	1.080
24-Jun-13	0.029	0.110	0.001	0.000	0.228	0.000	0.000	0.000	0.389	0.686
25-Jun-13	0.120	0.049	0.004	0.000	0.000	0.000	0.000	0.000	0.180	0.180
26-Jun-13	0.002	0.018	0.061	0.000	0.009	0.000	0.000	0.000	0.122	0.122
27-Jun-13	0.008	0.331	0.022	0.000	0.002	0.000	0.000	0.000	0.363	0.363
28-Jun-13	0.016	0.000	0.006	0.000	0.174	0.000	0.000	0.000	0.214	0.529
29-Jun-13	0.065	0.145	0.002	0.000	0.007	0.000	0.000	0.000	0.257	0.257
30-Jun-13	0.005	0.006	0.020	0.000	0.000	0.000	0.000	0.000	0.035	0.035
TOTAL	0.612	5.340	0.667	0.008	1.086	0.261	0.000	0.000	12.184	15.297

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-Jun-13	92.101	4752	00:00:53	0	4752	4752	00:00:53	4752	0
02-Jun-13	84.809	4559	23:24:08	0	4559	4559	23:24:08	4559	0
03-Jun-13	94.617	5009	15:37:07	21	5030	5030	15:37:07	5009	21
04-Jun-13	98.771	5083	16:12:30	1	5084	5084	16:12:30	5083	1
05-Jun-13	102.083	5211	15:39:08	42	5253	5253	15:39:08	5211	42
06-Jun-13	96.997	5653	15:38:41	61	5714	5714	15:38:41	5653	61
07-Jun-13	96.533	5142	15:41:42	95	5237	5237	15:41:42	5142	95
08-Jun-13	102.704	5084	15:32:42	119	5203	5203	15:32:42	5084	119
09-Jun-13	96.781	4942	23:28:08	61	5003	5003	23:28:08	4942	61
10-Jun-13	102.562	5226	15:53:27	220	5446	5446	15:53:27	5226	220
11-Jun-13	97.021	4921	00:15:35	37	4958	4958	00:15:35	4921	37
12-Jun-13	96.641	5099	15:29:36	59	5158	5158	15:29:36	5099	59
13-Jun-13	90.922	4734	00:30:26	46	4780	4780	00:30:26	4734	46
14-Jun-13	90.314	4696	12:46:49	13	4709	4709	12:46:49	4696	13
15-Jun-13	85.363	4443	15:56:27	0	4443	4443	15:56:27	4443	0
16-Jun-13	66.995	3713	00:00:29	0	3713	3713	00:00:29	3713	0
17-Jun-13	68.135	3660	16:45:14	19	3679	3679	16:45:14	3660	19
18-Jun-13	73.504	3911	16:34:45	0	3911	3911	16:34:45	3911	0
19-Jun-13	78.373	4158	15:51:23	0	4158	4158	15:51:23	4158	0
20-Jun-13	85.653	4634	23:13:40	3	4637	4637	23:13:40	4634	3
21-Jun-13	94.582	4927	22:43:17	163	5090	5090	22:43:17	4927	163
22-Jun-13	95.556	4883	22:15:56	7	4890	5021	22:30	4829	192
23-Jun-13	96.424	4972	22:51:06	104	5076	5076	22:51:06	4972	104
24-Jun-13	104.187	5432	15:23:22	21	5453	5453	15:23:22	5432	21
25-Jun-13	97.488	5091	15:14:24	2	5093	5093	15:14:24	5091	2
26-Jun-13	96.425	4896	16:03:05	0	4896	4896	16:03:05	4896	0
27-Jun-13	97.632	5074	16:02:08	30	5104	5104	16:02:08	5074	30
28-Jun-13	93.813	5015	15:24:21	0	5015	5015	15:24:21	5015	0
29-Jun-13	94.501	4938	15:43:01	33	4971	4971	15:43:01	4938	33
30-Jun-13	90.699	4799	00:00:26	15	4814	4814	00:00:26	4799	15
TOTAL	2762.186	5653	15:38:41	61	5714	5714	15:38:41	61	5653
		06.06.2013			06.06.2013				

10 **LOAD PATTERN OF DELHI ON THE DAY OF PEAK DEMAND MET DURING JUNE 2013 ON 06.06.2013- 5653MW at 15.38.41HRS.**

All figures in MW

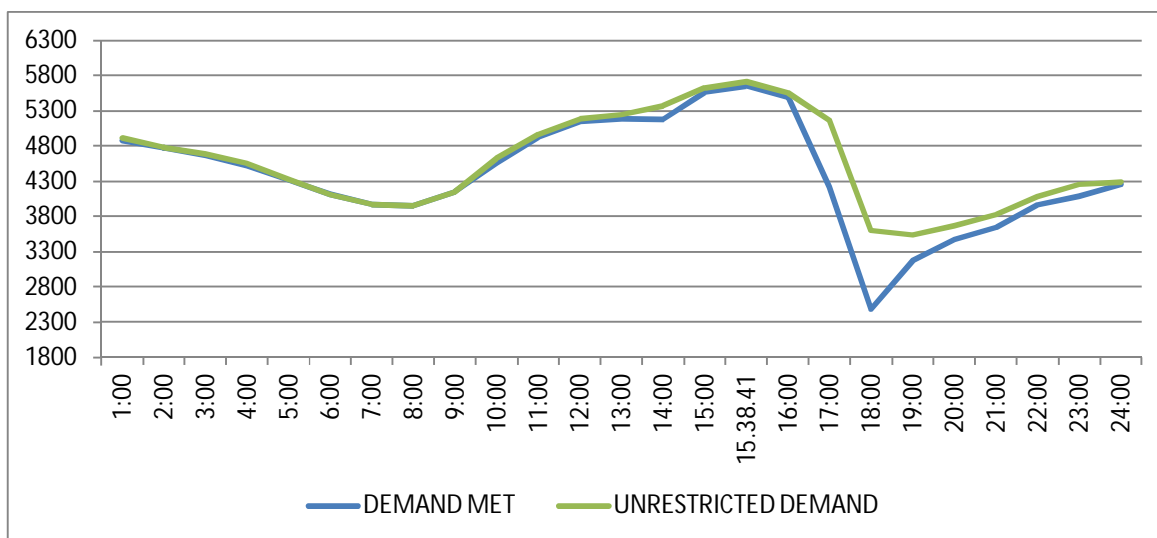
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	4879	36	4915
2:00	4774	3	4777
3:00	4673	16	4689
4:00	4520	30	4550
5:00	4319	2	4321
6:00	4107	0	4107
7:00	3974	0	3974
8:00	3953	0	3953
9:00	4147	0	4147
10:00	4562	63	4625
11:00	4922	42	4964
12:00	5147	34	5181
13:00	5180	61	5241
14:00	5178	186	5364
15:00	5567	59	5626
15.38.41	5653	61	5714
16:00	5491	61	5552
17:00	4221	945	5166
18:00	2480	1117	3597
19:00	3177	358	3535
20:00	3474	195	3669
21:00	3643	183	3826
22:00	3960	126	4086
23:00	4082	168	4250
24:00	4256	34	4290
TOTAL	96.997	3.492	100.489



11 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UN-RESTRICTED DEMAND DURING JUNE 2013 ON 06.06.2013- 5714MW at 15.38.41HRS.

All figures in MW

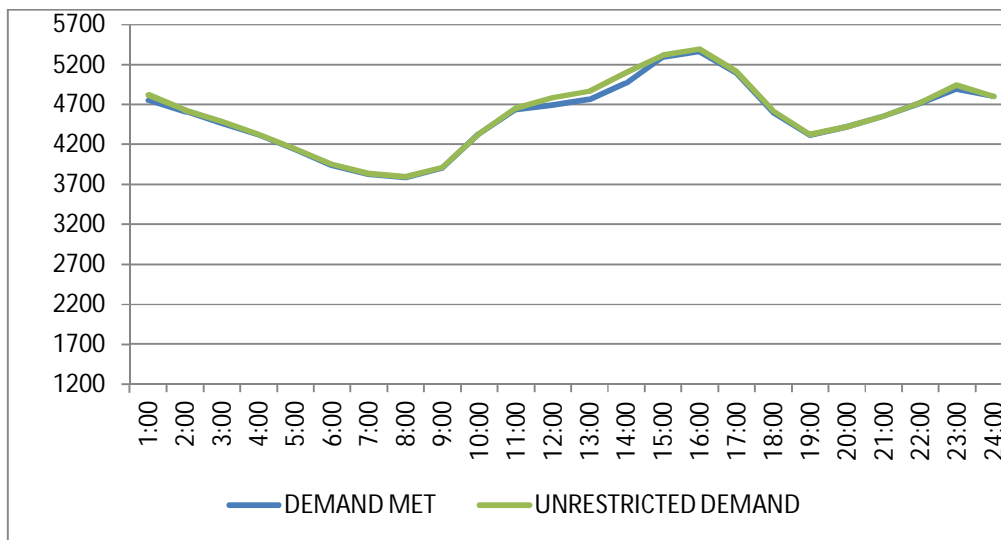
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	4879	36	4915
2:00	4774	3	4777
3:00	4673	16	4689
4:00	4520	30	4550
5:00	4319	2	4321
6:00	4107	0	4107
7:00	3974	0	3974
8:00	3953	0	3953
9:00	4147	0	4147
10:00	4562	63	4625
11:00	4922	42	4964
12:00	5147	34	5181
13:00	5180	61	5241
14:00	5178	186	5364
15:00	5567	59	5626
15.38.41	5653	61	5714
16:00	5491	61	5552
17:00	4221	945	5166
18:00	2480	1117	3597
19:00	3177	358	3535
20:00	3474	195	3669
21:00	3643	183	3826
22:00	3960	126	4086
23:00	4082	168	4250
24:00	4256	34	4290
TOTAL	96.997	3.492	100.489



12 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM ENERGY CONSUMED DURING JUNE 2013 – 24.06.2013 – 104.187 Mus

All figures in MW

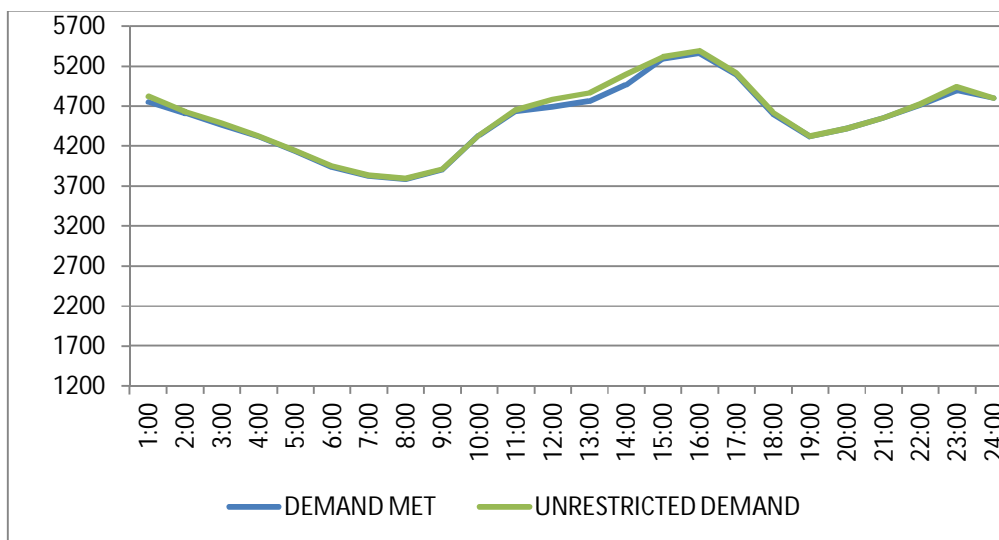
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	4749	71	4820
2:00	4613	19	4632
3:00	4464	24	4488
4:00	4315	9	4324
5:00	4140	6	4146
6:00	3933	16	3949
7:00	3826	6	3832
8:00	3791	6	3797
9:00	3909	1	3910
10:00	4334	0	4334
11:00	4637	15	4652
12:00	4693	97	4790
13:00	4765	100	4865
14:00	4969	131	5100
15:00	5291	23	5314
16:00	5364	34	5398
17:00	5099	13	5112
18:00	4601	20	4621
19:00	4321	2	4323
20:00	4422	0	4422
21:00	4549	0	4549
22:00	4718	9	4727
23:00	4897	42	4939
24:00	4802	0	4802
TOTAL	104.187	0.686	104.873



13 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED ENERGY DEMAND DURING JUNE 2013 – 24.06.2013 – 104.873 Mus

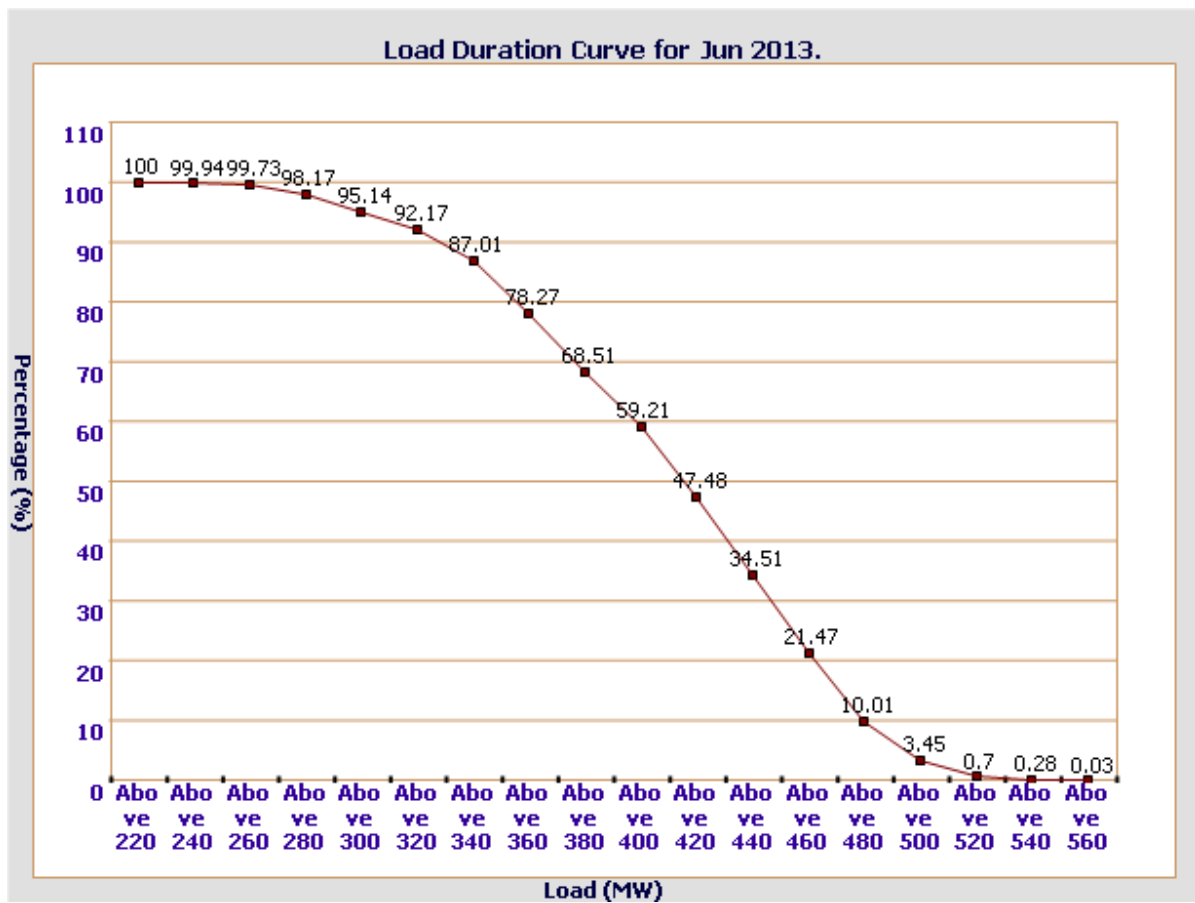
All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	4749	71	4820
2:00	4613	19	4632
3:00	4464	24	4488
4:00	4315	9	4324
5:00	4140	6	4146
6:00	3933	16	3949
7:00	3826	6	3832
8:00	3791	6	3797
9:00	3909	1	3910
10:00	4334	0	4334
11:00	4637	15	4652
12:00	4693	97	4790
13:00	4765	100	4865
14:00	4969	131	5100
15:00	5291	23	5314
16:00	5364	34	5398
17:00	5099	13	5112
18:00	4601	20	4621
19:00	4321	2	4323
20:00	4422	0	4422
21:00	4549	0	4549
22:00	4718	9	4727
23:00	4897	42	4939
24:00	4802	0	4802
TOTAL	104.187	0.686	104.873



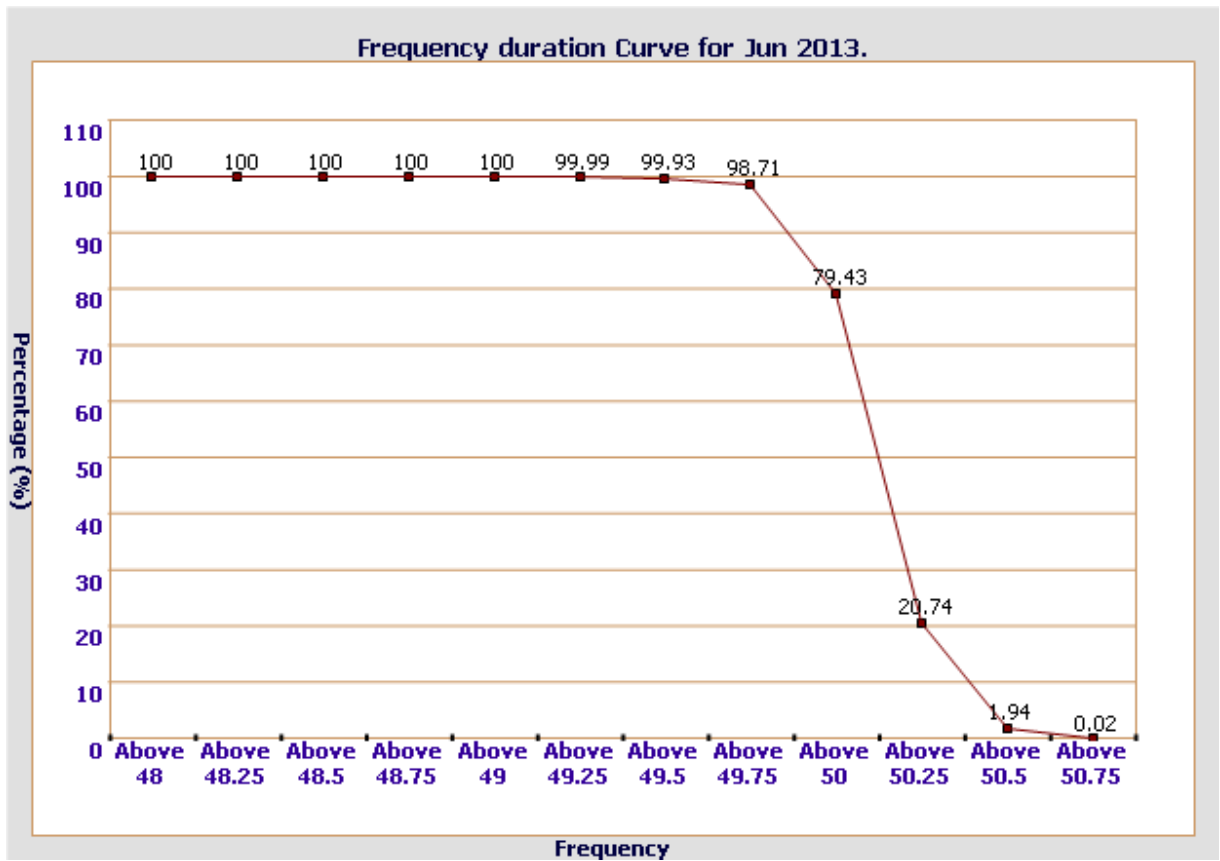
14 LOAD DURATION CURVE FOR JUNE 2013

Load in MW	Percentage of Time
Above 2200	100 %
Above 2400	99.94 %
Above 2600	99.73 %
Above 2800	98.17 %
Above 3000	95.14 %
Above 3200	92.17 %
Above 3400	87.01 %
Above 3600	78.27 %
Above 3800	68.51 %
Above 4000	59.21 %
Above 4200	47.48 %
Above 4400	34.51 %
Above 4600	21.47 %
Above 4800	10.01 %
Above 5000	3.45 %
Above 5200	0.7 %
Above 5400	0.28 %
Above 5600	0.03 %



FREQUENCY ANALYSIS FOR THE MONTH OF JUNE 2013

Frequency Range in Hz.	Percentage of time
Above 49	100 %
Above 49.25	99.99 %
Above 49.5	99.93 %
Above 49.75	98.71 %
Above 50	79.43 %
Above 50.25	20.74 %
Above 50.5	1.94 %
Above 50.75	0.02 %



16 VOLTAGE PROFILE OF 220 KV SUB-STATIONS IN DELHI DURING JUNE 2013

All figures in kV

Date	NARELA		GAZIPUR	
	Max	Min	Max	Min
1-Jun-13	223.76	211.51	219.25	203.38
2-Jun-13	222.47	212.15	216.41	200.16
3-Jun-13	223.63	208.80	218.60	--
4-Jun-13	222.34	205.96	219.89	197.71
5-Jun-13	220.92	207.51	221.05	--
6-Jun-13	224.79	206.35	224.15	198.68
7-Jun-13	218.99	206.22	219.51	195.00
8-Jun-13	219.64	209.19	221.18	197.97
9-Jun-13	219.89	208.54	217.96	201.71
10-Jun-13	219.51	208.16	217.96	198.23
11-Jun-13	220.15	209.19	217.70	--
12-Jun-13	220.92	208.54	221.70	--
13-Jun-13	221.83	--	228.79	197.97
14-Jun-13	219.64	209.19	224.02	--
15-Jun-13	223.50	211.77	225.70	204.42
16-Jun-13	225.70	217.18	229.44	208.54
17-Jun-13	226.73	211.51	222.09	201.19
18-Jun-13	--	--	--	--
19-Jun-13	225.05	212.41	218.60	201.19
20-Jun-13	223.12	211.25	218.35	198.36
21-Jun-13	222.09	210.22	218.35	--
22-Jun-13	220.54	204.29	217.18	196.03
23-Jun-13	220.54	208.29	217.96	191.13
24-Jun-13	218.22	206.61	214.48	193.33
25-Jun-13	219.89	208.54	216.67	191.39
26-Jun-13	219.89	208.29	219.89	--
27-Jun-13	220.28	208.29	230.60	193.84
28-Jun-13	222.86	209.32	220.15	191.13
29-Jun-13	222.21	209.32	234.60	201.19
30-Jun-13	223.50	209.58	221.57	203.77

17 VOLTAGE PROFILE OF 400 KV SUB-STATIONS IN DELHI DURING JUNE 2013

All figures in kV

Date	400kV Bamnauli Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
1-Jun-13	413.64	08.04.41	389.96	12.21.05	406.76
2-Jun-13	412.23	04.06.00	392.30	23.10.57	404.33
3-Jun-13	413.64	06.03.21	384.56	22.35.20	397.80
4-Jun-13	412.23	06.15.36	380.34	12.32.27	393.78
5-Jun-13	409.65	06.21.11	383.39	12.46.12	394.34
6-Jun-13	411.06	17.30.57	379.64	12.24.29	395.55
7-Jun-13	407.31	04.02.14	381.98	12.19.21	396.24
8-Jun-13	409.89	06.04.23	384.33	14.21.17	396.12
9-Jun-13	408.48	18.02.39	389.02	00.09.42	398.18
10-Jun-13	408.48	06.04.10	385.27	15.51.17	395.74
11-Jun-13	410.36	02.16.55	390.43	23.13.02	399.25
12-Jun-13	412.00	06.05.35	387.61	22.09.39	397.97
13-Jun-13	413.17	--	388.78	--	400.38
14-Jun-13	409.89	04.08.36	388.55	10.56.42	400.24
15-Jun-13	413.87	06.10.56	398.40	00.00.38	406.82
16-Jun-13	418.10	03.40.56	399.10	23.24.52	409.75
17-Jun-13	420.91	04.00.30	391.13	19.42.28	404.87
18-Jun-13	--	--	--	--	--
19-Jun-13	416.92	04.03.35	389.96	14.52.39	402.47
20-Jun-13	412.47	04.03.44	386.44	14.36.57	397.64
21-Jun-13	411.06	06.05.59	385.27	20.13.57	397.39
22-Jun-13	406.84	06.07.06	384.56	16.08.44	395.00
23-Jun-13	407.31	06.05.38	385.03	20.46.39	395.58
24-Jun-13	402.15	06.04.27	381.75	14.59.21	392.97
25-Jun-13	408.01	06.39.46	3895.50	12.10.39	396.68
26-Jun-13	409.65	04.03.03	392.92	14.50.29	398.18
27-Jun-13	409.18	06.18.09	380.58	14.28.12	398.23
28-Jun-13	414.81	04.01.40	388.55	23.12.01	401.16
29-Jun-13	412.47	18.01.09	389.96	23.07.02	399.20
30-Jun-13	413.87	03.56.42	386.44	22.05.43	400.26

All figures in kV

Date	400kV Bawana Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
1-Jun-13	418.33	08.04.41	399.34	14.57.24	408.12
2-Jun-13	416.92	06.10.28	402.15	23.09.07	410.57
3-Jun-13	418.10	06.06.31	395.12	12.14.44	405.13
4-Jun-13	417.16	06.15.36	390.89	12.45.58	402.22
5-Jun-13	413.64	06.21.01	392.77	12.46.12	401.85
6-Jun-13	422.55	17.10.16	392.77	12.20.29	405.97
7-Jun-13	413.64	04.03.04	392.77	12.23.01	404.77
8-Jun-13	415.52	06.03.02	397.93	14.21.47	405.54
9-Jun-13	415.75	18.05.49	399.34	23.06.35	406.72
10-Jun-13	415.05	06.04.00	396.99	15.44.56	403.93
11-Jun-13	415.05	02.25.05	395.82	16.44.58	408.64
12-Jun-13	414.34	06.22.56	397.23	12.28.06	402.91
13-Jun-13	418.50	--	397.46	--	406.95
14-Jun-13	413.41	19.03.38	397.46	10.57.02	406.37
15-Jun-13	420.91	18.14.35	403.09	00.10.29	413.66
16-Jun-13	423.72	03.42.16	410.36	19.51.39	417.38
17-Jun-13	426.30	02.05.53	398.63	19.40.48	411.21
18-Jun-13	--	--	--	--	--
19-Jun-13	421.85	04.02.25	399.81	14.47.59	409.29
20-Jun-13	418.10	04.03.44	397.23	14.51.38	406.64
21-Jun-13	416.69	06.06.29	390.43	20.13.57	404.08
22-Jun-13	412.70	06.06.16	395.58	14.48.19	402.89
23-Jun-13	413.87	06.04.38	394.88	22.10.44	404.23
24-Jun-13	409.18	18.02.54	392.77	15.02.11	401.25
25-Jun-13	412.70	06.05.53	395.12	12.10.29	404.24
26-Jun-13	413.64	04.02.03	393.94	14.50.29	405.89
27-Jun-13	413.87	07.07.33	394.41	14.26.12	406.12
28-Jun-13	419.74	04.01.30	398.63	23.10.01	409.18
29-Jun-13	419.74	18.04.20	399.81	12.47.39	407.46
30-Jun-13	422.79	03.58.52	397.23	22.08.54	408.29

18 DETAILS OF LUMPED CAPACITORS AT NEAREST 220 KV SUBSTATION

Sl. No	SUB-STATION	INSTALLED CAPACITY			
		66KV	33KV	11KV	TOTAL
1	IP YARD		30		30
1	Kamla Market			16.35	16.35
2	Minto Road				0
3	GB Pant Hosp			15.88	15.88
4	Delhi Gate			10.9	10.9
5	Tilakmarg			5.04	5.04
7	Cannaught Place			10.08	10.08
8	Kilokri		10.08	10.48	20.56
9	NDSE				0
11	Nizamuddin				0
12	Exhibition-I				0
13	Exhibition-II				0
14	Defence Colony				0
15	IG Stadium		10.08	5.45	15.53
16	Lajpat Nagar				0
17	IP Estate			10.9	10.9
	LT BYPL				5.6
		0	50.16	85.08	140.84
2	Electric Lane				
1	Electric Lane			5.04	5.04
2	Scindia House			5.04	5.04
3	Raisina Road			10.08	10.08
4	Raja Bazar			10.08	10.08
	LT NDMC				12
		0	0	30.24	42.24
3	RPH Station		20		20
1	Lahori Gate			10.49	10.49
2	Jama Masjid			10.48	10.48
4	Kamla Market				0
5	Minto Road			10.9	10.9
6	GB Pant Hosp				0
7	IG Stadium				0
	LT BYPL				3
		0	20	31.87	54.87
4	Parkstreet S/stn	20	20		40
1	Shastri Park		10.896	5.45	16.346
2	Faiz Road			18.05	18.05
3	Motia Khan			16.3	16.3
4	Prasad Nagar			16.25	16.25
5	Anand Parbat			10.8	10.8
6	Shankar Road			5.04	5.04
7	Rama Road			0	0
8	Baird Road			10.08	10.08
9	Hanuman Road			5.04	5.04
10	Pusa			5.44	5.44
11	Ridge Valley			0	0
12	B. D. Marg			0	0
13	Nirman Bhawan			5.04	5.04
	LT BYPL			0	30.1
		20.00	30.90	97.49	178.486
5	Naraina S/stn		20	5.04	25.04
1	DMS			10.85	10.85
2	Mayapuri		10.87	10.4	21.27
3	Inderpuri		10	4.8	14.8
4	Rewari line				0
5	Khyber Lane		10.05		10.05
6	Kirbi Place		10.05		10.05
7	Payal			7.2	7.2
8	Saraswati Garden			10.88	10.88
		0	60.97	49.17	110.14

Sl. No	SUB-STATION	INSTALLED CAPACITY			
		66KV	33kV	11kV	TOTAL
6	Mehrauli S/stn	80		5.04	85.04
1	Adchini			14.61	14.61
2	Andheria Bagh			10.85	10.85
3	IIT			10.9	10.9
4	JNU		10.03	10.03	20.06
5	Bijwasan			15.47	15.47
6	DC Saket			9.98	9.98
7	Malviya Nagar				0
8	C Dot			10.48	10.48
9	Vasant kunj B-Blk	21.79		10.9	32.69
10	Vasant kunj C-Blk	20.16		10.48	30.64
11	Palam				0
12	IGNOU			5.04	5.04
13	R. K. Puram-I			10.07	10.07
14	Vasant Vihar			19.25	19.25
15	Pusp Vihar			10.44	10.44
16	Bhikaji Cama Place		10.08	10.07	20.15
	LT BRPL				25
		121.95	20.11	163.61	330.67
7	Vasantkunj S/stn	40		5.04	45.04
1	R. K. Puram-II			10.08	10.08
2	Vasant kunj C-Blk				0
3	Vasant kunj D-Blk			9.63	9.63
4	Ridge Valley				0
	LT BRPL				33.2
		40	0	24.75	97.95
8	Okhla S/stn	60	10	5.04	75.04
1	Balaji			10.8	10.8
2	East of Kailash			15.89	15.89
3	Alaknanda			16.3	16.3
4	Malviya Nagar	21.79		10.85	32.64
5	Masjid Moth			16.3	16.3
6	Nehru Place			21.34	21.34
7	Okhla Ph-I	21.79		16.3	38.09
8	Okhla Ph-II		20.93	15.47	36.4
9	Shivalik			10.8	10.8
10	Batra			15.9	15.9
11	VSNL			10.9	10.9
12	Siri Fort			10.49	10.49
13	Tuglakabad			10.85	10.85
	LT BRPL				59
		103.58	30.93	187.23	380.74
9	Lodhi Road S/stn		20		20
1	Defence Colony		14.85		14.85
2	Hudco		10.9		10.9
3	Lajpat Nagar		10.9		10.9
4	Nizamuddin		10.44		10.44
5	Vidyut Bhawan				0
6	Ex. Gr. II				0
7	IHC				0
	LT BRPL				42
		0	67.09	0	109.09
10	Sarita Vihar S/stn	20		5.04	25.04
1	Sarita Vihar			10.07	10.07
2	MCIE			10.06	10.06
3	Mathura Road	20.16		11.69	31.85
4	Jamia Millia			10.89	10.89
5	Sarai Julena		10.08	16.29	26.37
6	Jasola			5.44	5.44
	LT BRPL				23.6
		40.16	10.08	69.48	143.32

Sl. No	SUB-STATION	INSTALLED CAPACITY			
		66KV	33kV	11kV	TOTAL
11	Wazirabad				
1	Bhagirathi		14.4	10.9	25.3
2	Ghonda	21.79	22.56	15.94	60.29
3	Seelam Pur		10.08	21.39	31.47
4	Dwarkapuri			15.46	15.46
5	Nandnagri	20.16		16.35	36.51
6	Yamuna Vihar			16.2	16.2
7	East of Loni Road			10.8	10.8
8	Shastri Park			10.9	10.9
9	Karawal Nagar			5.4	5.4
10	Sonia Vihar			7.2	7.2
	LT BYPL				10
		41.95	47.04	130.54	229.53
12	Geeta Colony				
1	Geeta Colony				0
2	Kanti Nagar			10.49	10.49
3	Kailash Nagar			10.9	10.9
4	Seelam Pur			15.48	15.48
5	Shakar Pur				0
	LT BYPL				5.8
		0	0	36.87	42.67
13	Gazipur S/stn	40		5.04	45.04
1	Dallupura	28.8		10.9	39.7
2	Vivek Vihar			9.57	9.57
3	GT Road			10.85	10.85
4	Kondli	20.16		10.85	31.01
5	MVR-I			10.9	10.9
6	MVR-II	20.16		10.9	31.06
7	PPG Ind. Area			10.06	10.06
	LT BYPL				20.6
		109.12	0	79.07	208.79
14	Patparganj S/stn	40	20	5.04	65.04
1	GH-I	19.89		10.45	30.34
2	GH-II	20.09		10.9	30.99
3	CBD		10.03	15.48	25.51
4	Guru Angad Nagar			15.49	15.49
5	Karkadooma		10.8	10.44	21.24
6	Preet Vihar			10.07	10.07
7	CBD-II			10.8	10.8
8	Shakarpur			10.8	10.8
9	Jhilmil			10.8	10.8
10	Dilshad Garden	20.16		16.35	36.51
11	Khichripur	21.79		10.49	32.28
12	Mother Dairy				0
13	Scope Building				0
14	Vivek Vihar				0
15	Akhardham			14.6	14.6
	LT BYPL				23.3
		121.93	40.83	151.71	337.77
15	Najafgarh S/stn	60		5.04	65.04
1	A4 Paschim Vihar			10.8	10.8
2	Nangloi	21.73		15.84	37.57
3	Nangloi W/W	20.89		10.85	31.74
4	Pankha Road			15.88	15.88
5	Jaffarpur			15.43	15.43
7	Inst. Area Janakpuri			17.6	17.6
8	Paschimpuri		10.05	15.47	25.52
9	Paschim Vihar	41.83		15.43	57.26
10	Mukherjee Park			20.83	20.83
11	Udyog Nagar			10.43	10.43
12	Choukhandi			10.07	10.07
	LT BRPL				27
		144.45	10.05	163.67	345.17

Sl. No	SUB-STATION	INSTALLED CAPACITY			
		66KV	33kV	11kV	TOTAL
16	Pappankalan-I S/stn	20		5.04	25.04
1	Bindapur Grid G-3 PPK	21.73		15.85	37.58
2	Bodella-I	20.1		16.24	36.34
3	Bodella-II	21.73		17.64	39.37
4	DC Janakpuri			10.03	10.03
5	G-2 PPK			10.8	10.8
6	G-5 PPK			15.51	15.51
7	G-6 PPK			5.4	5.4
8	G-15 PPK			10.8	10.8
9	Harinagar	21.18		16.25	37.43
10	Rewari line			5.44	5.44
	LT BRPL				13.5
		104.74	0	129	247.24
17	BBMB Rohtak Road				
1	S.B. Mill			10.07	10.07
2	Rama Road			10.88	10.88
3	Ram Pura			10.48	10.48
4	Rohtak Road			8.04	8.04
5	Vishal			10.4	10.4
6	Tri Nagar			5.44	5.44
7	Madipur			10.43	10.43
8	Sudershan Park			10.08	10.08
9	Kirti Nagar			5.44	5.44
		0	0	81.26	81.26
18	Shalimarbagh S/stn		40	6	46
1	S.G.T. Nagar			5.44	5.44
2	Wazirpur-1			17.18	17.18
3	Wazirpur-2			11.39	11.39
4	Ashok Vihar			5.44	5.44
5	Rani Bagh			10.88	10.88
6	Haiderpur			11.39	11.39
7	SMB FC			5.44	5.44
8	SMB KHOSLA			5.44	5.44
	LT TPDDL				30
		0	40	78.6	148.6
19	Subzimandi S/stn			6	6
1	Shakti Nagar			5.94	5.94
2	Gulabibagh			10.88	10.88
3	Shahzadabagh			13.68	13.68
4	DU			5.44	5.44
5	Tripolia			10.88	10.88
	B. G. Road			5.4	5.4
	LT BYPL				0.9
	LT TPDDL				20
		0	0	58.22	79.12
20	Narela S/stn	40		5.04	45.04
1	A-7 Narela			10.88	10.88
2	AlR Kham pur			6	6
3	Ashok vihar			10.48	10.48
4	Azad Pur			5.44	5.44
5	Tri Nagar			5.44	5.44
6	Badli	20		5.95	25.95
7	DSIDC Narela-1			5.95	5.95
8	GTK			5.44	5.44
9	Jahangirpuri	20	10	0	30
10	Bhalswa			3.6	3.6
	LT TPDDL				10
		80	10	64.22	164.22

Sl. No	SUB-STATION	INSTALLED CAPACITY			
		66KV	33kV	11kV	TOTAL
21	Gopalpur S/stn		30	5.04	35.04
1	Azad Pur			10.88	10.88
2	Hudson Lane			5.44	5.44
3	Wazirabad			2.4	2.4
4	Indra Vihar			5.44	5.44
6	GTK Road			5.94	5.94
7	Jahangirpuri		10	5.95	15.95
8	Civil lines			5.44	5.44
9	Pitam Pura-1			5.44	5.44
10	Pitam Pura-3			5.44	5.44
11	Air Khampur			5.95	5.95
12	SGT Nagar			5.95	5.95
13	Tiggipur			10.88	10.88
	LT TPDDL				29
		0	40	80.19	149.19
22	Rohini S/stn	40		6	46
1	Rohini Sec-22			10.88	10.88
2	Rohini Sec-23	20		5.44	25.44
3	Rohini Sec-24			5.44	5.44
4	Rohini-1			5.44	5.44
5	Rohini-3			5.95	5.95
6	Rohini-4			11.39	11.39
7	Rohini-5			11.39	11.39
8	Rohini-6			5.95	5.95
9	Mangolpuri-1			16.83	16.83
10	Mangolpuri-2	20		5.94	25.94
11	Pitam Pura-1	20		5.04	25.04
12	Pitam Pura-2			10.48	10.48
13	Rohini DC-1			14.4	14.4
	LT TPDDL				30
		100	0	120.57	250.57
23	Kanjhawala S/stn	20		5.04	25.04
1	Bawana Clear Water			10.88	10.88
2	Pooth Khoord			5.44	5.44
		20	0	21.36	41.36
24	BAWANA S/stn				
1	Bawana S/stn No. 6			10.88	10.88
2	Bawana S/stn No. 7				0
		0	0	10.88	10.88
25	Kashmeregate S/stn			5.04	5.04
1	Civil lines			5.44	5.44
2	Town Hall			8.64	8.64
3	Fountain			5.45	5.45
	LT BYPL				2.7
		0	0	24.57	27.27
26	Pappankalan-II				
1	DMRC-I				0
2	DMRC-II				0
27	Trauma Center (AIIMS)				
1	AIIMS		13.26	5.04	18.3
2	Trauma Center			10.08	10.08
3	Netaji Nagar			15.12	15.12
4	Sanjay Camp			10.08	10.08
5	Kidwai Nagar			5.04	5.04
6	SJ Airport			5.04	5.04
	Race Course			5.04	5.04
		0	13.26	55.44	68.7

Sl. No	SUB-STATION	INSTALLED CAPACITY			
		66KV	33kV	11kV	TOTAL
28	MUNDKA				
	Rohini-2			11.39	11.39
	LT BRPL				18.5
		0	0	11.39	29.89
29	DSIDC BAWANA				
	DSIDC NRL-1	20			20
	DSIDC NRL-2			10.88	10.88
		20	0	10.88	30.88
30	RIDGE VALLEY				
	Keventry Diary			10.08	10.08
	Nehru Park			5.04	5.04
	Bapu Dham			10.08	10.08
		0	0	25.2	25.2
31	IP EXTN (PRAGATI)				
	Vidyut Bhawan			10.08	10.08
	Dalhousie Road			5.04	5.04
	School Lane			5.04	5.04
	LT NDMC				12.29
	0	0	20.16	32.45	
	TOTAL CAPACITY	1067.9	491.4	2092.7	4139

Utility	HT	LT	Total
BYPL	864	102	966
TPDDL	657	119	776
NDMC	180	24	204
DTL	754	0	754
BRPL	1158	242	1400
RPH	20	0	20
MES	20	0	20
	3652	487	4139

20 DETAILS OF BREAK-DOWNS DURING THE MONTH OF JUNE 2013

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
1	03.06.13	7:25	220kV MAHARANIBAGH-MASJID MOTH CKT-II	03.06.13	8:10	AT M BAGH CKT TRIPPED ON D/P,Z-3,86A&B. NO TRIPPING AT M MOTH.
2	05.06.13	7:10	PRAGATI 220/66kV 160MVA Tx-II	05.06.13	15:23	TX TRIPPED ON DIFFERENTIAL PROTECTION,REF,86. 66KV I/C-2 TRIPPED ON INTER TRIPPING.
3	06.06.13	14:20	NAJAFGARH 66/11kV, 20MVA Tx-II	06.06.13	14:37	TX TRIPPED ON O/C,51AX.
4	06.06.13	16:13	400kV Mundka-Jhatikara Ckt-I	06.06.13	17:10	AT MUNDKA CKT TRIPPED ON D/P,Z-1,R-PH,A/R,DIST-10.5 KM. AT JHATIKRA : NOT AVAILABLE
5	06.06.13	16:41	400kV Mundka-Jhatikara Ckt-I	14.06.13	10:00	AT MUNDKA CKT TRIPPED ON DIST. PROT. ZONE-I, R-PHASE, A/R LOCKOUT. EARTH WIRE SNAPPED BETWEEN T. NO. 124 & 129 NEAR NELWAL VILLAGE AT MUNDKA. AT JHATIKRA : NOT AVAILABLE
6	06.06.13	16:47	220KVBAWANA- ROHINI CKT-I	24.06.13	14:10	AT BAWANA CKT TRIPPED ON DIST. PROT. C-PHASE, ZONE-1. TOWER NO. 27 (NEAR KHERA KALAN VILLAGE) COLLAPSED AND TOP CROSS ARM OF TOWER NO. 24 ALSO DAMAGED. NO TRIPPING AT ROHINI
7	06.06.13	16:47	220KVBAWANA- ROHINI CKT-II	09.06.13	16:04	AT BAWANA CKT TRIPPED ON DIST. PROT. C-PHASE, ZONE-1. TOWER NO. 27 (NEAR KHERA KALAN VILLAGE) COLLAPSED AND TOP CROSS ARM OF TOWER NO. 24 ALSO DAMAGED. NO TRIPPING AT ROHINI. CKT RESTORED THROUGH EMERGENCY RESTORATION SYSTEM(ERS) ON 09.06.2013.
8	06.06.13	16:55	220kV GOPALPUR- MANDOLACKT-I	06.06.13	18:05	AT MANDOLA CKT TRIPPED ON DIST. PROT. ZONE-4, C-N PHASE. NO TRIPPING AT GOPALPUR
9	06.06.13	16:55	220kV GOPALPUR- MANDOLACKT-II	06.06.13	18:05	AT GOPALPUR CKT TRIPPED ON DIST. PROT. ZONE-I, 3-PHASE TRIP. AT MANDOLA CKT TRIPPED ON DIST. PROT. ZONE-I
10	06.06.13	16:59	220KV BAWANA-SHALIMARBAGH CKT-I	07.06.13	10:00	AT SHALIMARBAGH CKT TRIPPED ON DIST. PROT. C-PHASE, 186A&B, ZONE-I. B-PHASE CONDUCTOR SNAPPED AND FELT NEAR 66KV BADLI GRID OF TPDDL.
11	06.06.13	17:17	GOPALPUR 33/11kV, 16MVA Tx-II	06.06.13	20:31	TX TRIPPED ON OLTC BUCHHOLZ
12	08.06.13	8:06	INDRAPRASTHA POWER 220/33kV 100MVA Tx-II	08.06.13	15:55	33KV I/C OF TX TRIPPED WITHOUT INDICATION
13	09.06.13	5:31	GOPALPUR 33/11kV, 16MVA Tx-I	09.06.13	5:36	TX TRIPPED ON O/C, R-PHASE
14	09.06.13	6:38	PARKSTREET 220/33kV 100MVA Tx-II	09.06.13	8:28	I/C OF TX TRIPPED ON E/F
15	09.06.13	8:14	PRAGATI 220/66kV 160MVA Tx-II	09.06.13	10:15	TX. TRIPPED ON OLTC BUCHHOLZ, 30A
16	09.06.13	8:14	PRAGATI 220/66kV 160MVA Tx-I	09.06.13	8:54	TX TRIPPED ON 30D, OLTC, 86
17	11.06.13	11:38	220kV NARELA - MANDOLA CKT-I	11.06.13	12:15	AT MANDOLA CKT TRIPPED ON DIST. PROT. ZONE-I, R-PHASE. NO TRIPPING AT NARELA
18	11.06.13	23:36	220kV GAZIPUR - BTPS CKT	31.07.13	10:10	AT BTPS CKT TRIPPED ON D/P,Z-1,Y-PH,E/F,DIST-10.8 KM. NO TRIPPING AT GAZIPUR. CABLE DAMAGED.
19	13.06.13	8:42	BAWANA 400/220kV 315MVA ICT-I	13.06.13	11:40	ICT TRIPPED ON PRV
20	13.06.13	8:46	GOPALPUR 220/33kV 100MVA Tx-III	13.06.13	11:40	TX. TRIPPED ON 186, AUX RELAY
21	13.06.13	9:20	PRAGATI 220/66kV 160MVA Tx-I	13.06.13	10:11	TX TRIPPED ON 195C
22	13.06.13	10:16	BAWANA 400/220kV 315MVA ICT-II	13.06.13	11:44	ICT TRIPPED ON 186A&B
23	14.06.13	12:57	220 KV PATPARGANJ - I.P. CKT-II	14.06.13	13:06	AT PATPARGANJ CKT TRIPPED ON 186, ZONE-I. NO TRIPPING AT IP. 220KV Y-PHASE LA DAMAGED
24	14.06.13	12:57	220KV GEETA COLONY- PATPARGANJ CKT -II	14.06.13	18:00	AT PATPARGANJ CKT TRIPPED ON 186, ZONE-I. AT GEETA COLONY CKT TRIPPED ON 3-PHASE TRIP, DIST. PROT. O/C, E/F
25	14.06.13	16:32	GAZIPUR 220/66kV 100MVA Tx-I	14.06.13	17:10	TX TRIPPED ON HIGH SPEED TRIPPING RELAY
26	14.06.13	21:58	220kV BAWANA-DSIIDC BAWANA CKT-II	15.06.13	8:30	AT NARELA CKT TRIPPED ON 86. NO TRIPPING AT DSIDC
27	15.06.13	14:57	220kV GOPALPUR- MANDOLA CKT-II	15.06.13	16:52	AT GOPALPUR CKT TRIPPED ON DIST. PROT. Z-1. AT MANDOLA CKT TRIPPED ON DIST. PROT. ZONE-2, 3-PHASE TRIP
28	15.06.13	17:35	OKHLA 220/33kV 100MVA Tx-III	16.06.13	12:15	TX TRIPPED ON DIFFERENTIAL DUE TO ELECTROCUTION OF MONKEY. R-PHASE CT DAMAGED
29	15.06.13	17:35	OKHLA 220/33kV 100MVA Tx-IV	15.06.13	17:55	33KV I/C OF TX TRIPPED ON 86LV, E/F DUE TO ELECTROCUTION OF MONKEY
30	15.06.13	18:50	SARITA VIHAR 220/66kV 100MVA Tx-II	16.06.13	1:36	TX TRIPPED ON 86, 64REF
31	15.06.13	23:29	MEHRAULI 220/66kV 100MVA Tx-III	16.06.13	12:25	TX TRIPPED WITHOUT INDICATION ALONG WITH 66KV I/C
32	16.06.13	13:06	PAPPANKALAN-I 220/66kV 100MVA Tx-I	16.06.13	23:30	TX TRIPPED ON HV REF, 87 DUE TO BIRDAGE

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
33	16.06.13	13:06	PAPPANKALAN-I 220/66kV 100MVA Tx-IV	16.06.13	13:31	TX TRIPPED ON O/C, E/F, C-PHASE
34	16.06.13	14:13	PAPPANKALAN-I 220/66kV 100MVA Tx-I	16.06.13	18:24	TX TRIPPED ON WINDING TEMP ALARM, GROUPA, 30ABC, 30G
35	16.06.13	23:25	OKHLA 220/33kV 100MVA Tx-III	17.06.13	14:24	I/C OF TX TRIPPED ON 51A,51B,86. Y-PHASE JUMPER OF 33KV BUS SNAPPED
36	16.06.13	23:25	OKHLA 220/33kV 100MVA Tx-IV	17.06.13	14:24	I/C OF TX TRIPPED TRIPPED ON 51A, 86 LV SIDE. Y-PHASE JUMPER OF 33KV BUS SNAPPED
37	16.06.13	23:25	OKHLA 220/33kV 50MVA Tx-I	17.06.13	15:18	I/C OF TX TRIPPED ON 51A,51C,95C. Y-PHASE JUMPER OF 33KV BUS SNAPPED
38	17.06.13	8:50	RIDGE VALLEY 220/66kV 160MVA Tx-I	17.06.13	14:48	TX TRIPPED ON OLTC, CB TROUBLE ALARM, 86A&B
39	17.06.13	12:22	PRAGATI 220/66kV 160MVA Tx-I	17.06.13	12:41	TX TRIPPED ON 51CX, 86
40	17.06.13	12:22	PRAGATI 220/66kV 160MVA Tx-II	17.06.13	14:52	TX TRIPPED ON OLTC BUCHOLZ,86
41	17.06.13	12:55	WAZIRABAD 66/11kV, 20MVA Tx-III	17.06.13	14:02	TX TRIPPED ON SPR
42	17.06.13	14:42	220kV OKHLA - BTPS CKT. - II	17.06.13	15:18	AT BTPS CKT TRIPPED ON Y-PHASE, E/F. NO TRIPPING AT OKHLA
43	17.06.13	15:15	NARAINA 220/33kV 100MVA Tx-I	17.06.13	16:44	TX TRIPPED ON 30DEF, 86
44	17.06.13	17:16	SHALIMAR BAGH 220/33kV 100MVA Tx-I	25.06.13	17:15	TX TRIPPED ON OLTC BUCHOLZ. Y-PHASE 33kV BUSHING DAMAGED
45	17.06.13	17:50	NARAINA 220/33kV 100MVA Tx-I	17.06.13	22:22	TX TRIPPED ON GOUP B, 86B, 30DEF
46	17.06.13	23:42	NARAINA 220/33kV 100MVA Tx-I	18.06.13	17:05	TX TRIPPED ON 30DEF, INTERTRIP GROUP B
47	18.06.13	12:11	NARAINA 220/33kV 100MVA Tx-II	18.06.13	12:25	33KV I/C-2 TRIPPED ON O/C, E/F
48	18.06.13	14:25	220kV NARELA - MANDOLA CKT-I	18.06.13	15:07	CKT TRIPPED ON SPS AT 400KV MANDOLA.
49	18.06.13	14:25	220kV NARELA - MANDOLA CKT-II	18.06.13	14:05	CKT TRIPPED ON SPS AT 400KV MANDOLA.
50	18.06.13	14:25	220kV GOPALPUR- MANDOLA CKT-I	18.06.13	14:58	CKT TRIPPED ON SPS AT 400KV MANDOLA.
51	18.06.13	14:25	220kV GOPALPUR- MANDOLA CKT-II	18.06.13	14:58	CKT TRIPPED ON SPS AT 400KV MANDOLA.
52	19.06.13	12:11	GEETA COLONY 220/33kV 100MVA Tx-II	19.06.13	12:24	TX TRIPPED ON 30E,86 AND 33KV I/C-1 TRIPPED ON O/C,30. BIRDAGE REPORTED IN YARD.
53	19.06.13	12:11	GEETA COLONY 220/33kV 100MVA Tx-I	19.06.13	12:24	TX TRIPPED ON 30E,86 AND 33KV I/C-1 TRIPPED ON O/C. BIRDAGE REPORTED IN YARD.
54	20.06.13	16:57	220kV PRAGATI - SARITA VIHAR CKT	20.06.13	20:13	AT PRAGATI CKT TRIPPED ON D/P,Z-1,DIST-8.729 KM AT S VIHAR CKT TRIPPED ON 195CA,195CC,D/P,Z-1,DIST-3.705 KM. Y-PH BUS-2 ISOLATOR CLAMP DAMAGED.
55	22.06.13	11:58	220KV BAWANA -NAJAFGARH CKT	22.06.13	12:06	AT BWN CKT TRIPPED ON D/P,C-PH,Z-1,DIST.-11.98KM. AT NJF CKT TRIPPED ON 186.
56	22.06.13	22:15	PATPARGANJ 220/66kV 100MVA Tx-II	22.06.13	22:20	66KV I/C-2 TRIPPED ON R-PH,O/C.
57	22.06.13	22:15	PATPARGANJ 220/66kV 100MVA Tx-I	22.06.13	22:20	66KV I/C-1 TRIPPED ON R-PH,O/C.
58	22.06.13	22:32	PATPARGANJ 220/66kV 100MVA Tx-II	22.06.13	22:35	66KV I/C-2 TRIPPED ON R-PH,O/C.
59	22.06.13	22:32	PATPARGANJ 220/66kV 100MVA Tx-I	22.06.13	22:35	66KV I/C-1 TRIPPED ON R-PH,O/C.
60	22.06.13	22:45	PATPARGANJ 220/66kV 100MVA Tx-II	22.06.13	22:54	66KV I/C-2 TRIPPED ON R-PH,O/C.
61	22.06.13	22:45	PATPARGANJ 220/66kV 100MVA Tx-I	22.06.13	22:54	66KV I/C-1 TRIPPED ON R-PH,O/C.
62	23.06.13	2:23	PATPARGANJ 220/66kV 100MVA Tx-II	23.06.13	2:45	66KV I/C-2 TRIPPED ON SPS.
63	23.06.13	2:23	GEETA COLONY 220/33kV 100MVA Tx-II	23.06.13	2:40	33KV I/C-2 TRIPPED ON SPS.
64	23.06.13	2:23	PATPARGANJ 220/66kV 100MVA Tx-I	23.06.13	2:45	66KV I/C-1 TRIPPED ON SPS.
65	23.06.13	9:40	GOPALPUR 33/11kV, 16MVA Tx-I	23.06.13	9:50	TX TRIPPED ON O/C AND 11KV I/C TRIPPED ON O/C,86
66	23.06.13	15:13	PATPARGANJ 220/66kV 100MVA Tx-I	23.06.13	15:39	TX TRIPPED ON O/C,R-PH,WINDING TEMPERATURE ALARM.
67	23.06.13	22:53	VASANT KUNJ 220/66kV 160MVA Tx-I	24.06.13	4:40	TX TRIPPED ON 96(BUS BAR PROTECTION)OPERATED.
68	23.06.13	22:53	VASANT KUNJ 220/66kV 100MVA Tx-II	24.06.13	4:40	TX TRIPPED ON 96(BUS BAR PROTECTION)OPERATED.
69	23.06.13	22:53	220kV MEHRAULI - VASANT KUNJ CKT.-I	24.06.13	0:28	CKT TRIPPED ON 186 A&B,96(BUS BAR PROTECTION)OPERATED.
70	24.06.13	9:50	SUBZI MANDI 33/11kV, 16MVA Tx-I	24.06.13	10:42	TX TRIPPED ON O/C,Y&B-PH.

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
71	24.06.13	12:23	220kV MAHARANI BAGH - SARITA VIHAR CKT	24.06.13	13:15	AT MAHARANI BAGH CKT TRIPPED ON D/P,B-PH. NO TRIPPING AT SARITA VIHAR.
72	24.06.13	12:24	220kV PRAGATI - SARITA VIHAR CKT	24.06.13	13:17	AT SARITA VIHAR CKT TRIPPED ON D/P,Z-1,A/R,186 A&B-PH, DIST-1.713KM.
73	25.06.13	13:45	220kV MAHARANI BAGH - SARITA VIHAR CKT	25.06.13	14:06	AT MAHARANIBAGH CKT TRIPPED ON D/P,R-PH,Z-1,DIST-2.4 KM. NO TRIPPING AT SARITA VIHAR.
74	25.06.13	19:38	220kV MAHARANI BAGH - SARITA VIHAR CKT	25.06.13	20:43	AT MAHARANI BAGH CKT TRIPPED ON D/P,Z-1. NO TRIPPING AT SARITA VIHAR.
75	26.06.13	4:22	GAZIPUR 220/66kV 100MVA Tx-I	26.06.13	5:05	TX TRIPPED ON SUPERVISION RELAY.
76	26.06.13	6:55	NARAINA 220/33kV 100MVA Tx-II	26.06.13	7:21	33KV I/C-2 TRIPPED ON O/C,B-PH,E/F,86. BIRDAGE REPORTED IN YARD. R AND B-PH OF 33KV BUS-1 ISOLATOR OF 33KV KIRBI PLACE CKT-2 DAMAGED.
77	26.06.13	6:55	NARAINA 220/33kV 100MVA Tx-III	26.06.13	7:21	33KV I/C-3 TRIPPED ON O/C,B-PH,E/F,86. BIRDAGE REPORTED IN YARD. R AND B-PH OF 33KV BUS-1 ISOLATOR OF 33KV KIRBI PLACE CKT-2 DAMAGED.
78	26.06.13	6:55	NARAINA 220/33kV 100MVA Tx-I	26.06.13	7:21	33KV I/C-1 TRIPPED ON O/C,B-PH,E/F,86. BIRDAGE REPORTED IN YARD. R AND B-PH OF 33KV BUS-1 ISOLATOR OF 33KV KIRBI PLACE CKT-2 DAMAGED.
79	26.06.13	11:00	220kV WAZIRABAD - MANDOLA CKT-III	26.06.13	11:29	AT WZB CKT TRIPPED ON D/P,Z-1 AT MANDOLA CKT TRIPPED ON D/P,Z-1,RY&B-PH,DIST-12.55 KM
80	28.06.13	1:03	220kV MEHRAULI - BTPS CKT. - I	29.06.13	8:13	AT BTPS CKT TRIPPED ON R-PH,E/F,D/P,Z-1,DIST-4.6 KM. NO TRIPPING AT MEHRAULI. JUMPER SNAPPED AT TOWER NO-20. Y-PH FEMALE CONTACT OF LINE ISOLATOR DAMAGED.
81	28.06.13	7:39	400kV Mandola-Bawana Ckt-I	28.06.13	17:44	CKT MADE OFF AS SPARKING REPORTED ON CVT JUMPER AT BAWANA
82	28.06.13	12:48	220kV BAWANA-DSIIDC BAWANA CKT-I	28.07.13	18:31	AT BAWANA CKT TRIPPED ON D/P,Z-1,DIST-1.15 KM. AT DSIDC CKT TRIPPED ON D/P,A-PH,86
83	29.06.13	12:40	MUNDKA 220/66kV 160MVA Tx-III	29.06.13	13:40	TX TRIPPED ON GENERAL TRIP O/C.
84	29.06.13	16:11	220kV MEHRAULI - BTPS CKT. - I	29.06.13	20:45	AT BTPS CKT TRIPPED ON D/P,Z-1,A-PH,DIST-13.5 KM AT MEHRAULI CKT TRIPPED ON D/P,Z-1,R-PH,DIST-6.8 KM.
85	29.06.13	17:12	220kV GOPALPUR- MANDOLA CKT-II	29.06.13	18:33	AT GOPALPUR CKT TRIPPED ON D/P,Z-1,Y-PH,DIST-2.91 KM. AT MDL CKT TRIPPED ON D/P,Z-1,DIST-18.12 KM.
86	29.06.13	17:23	GOPALPUR 220/33kV 100MVA Tx-III	06.07.13	17:46	TX TRIPPED ON DIFFERENTIAL,E/F & 86. R-PH BUSHING OF LV SIDE DAMAGED.
87	29.06.13	17:25	400kV Mandola-Bawana Ckt-I	29.06.13	17:42	AT BAWANA CKT TRIPPED ON D/P,B-PH,Z-1. AT MDL CKT TRIPPED ON D/P,C-N PHASE,DIST-13.34 KM
88	29.06.13	17:44	220kV WAZIRABAD-GEETA COLONY CKT-II	29.06.13	17:55	AT WZB CKT TRIPPED ON GENERAL TRIP,D/P,Z-1. AT GEETA COLONY CKT TRIPPED ON E/F,D/P,Z-2,DIST-6.749 KM
89	29.06.13	17:50	220 KV PATPARGANJ - I.P. CKT-II	29.06.13	17:55	AT IP CKT TRIPPED ON D/P,Z-1,186,RY&B-PHASE. NO TRIPPING AT PPG.
90	29.06.13	17:56	PAPPANKALAN-I 66/11kV, 20MVA Tx-III	29.06.13	21:05	TX TRIPPED ON 30 ABC,BUCHHOLZ(OLTC),86
91	29.06.13	18:03	220kV OKHLA - BTPS CKT. - II	29.06.13	18:23	AT BTPS CKT TRIPPED ON D/P,Z-1,Y&B-PHASE,DIST-6.91 KM. NO TRIPPING AT OKHLA.
92	29.06.13	18:16	GEETA COLONY 220/33kV 100MVA Tx-II	29.06.13	19:30	TX TRIPPED ON 30L,86,30 AUTO TRIP,PRV. 33KV I/C-2 TRIPPED WITHOUT INDICATION.

20 DETAILS OF UNDER FREQUENCY RELAY OPERATIONS IN DELHI POWER SYSTEM DURING THE MONTH OF JUNE 2013

DATE	S. N.	TIME		Name of Grid	NAME OF AFFECTED FEEDERS	LOAD RELIEF IN MW
		OUT	IN			
01.06.13	1	10:25	10:30	220kV WAZIRABAD	11kV LOAD	3
	2	10:33	10:36	220kV WAZIRABAD	11kV LOAD	3
	3	11:10	11:13	220kV WAZIRABAD	11kV LOAD	4
	4	9:20	10:13	220kV NARAINA	11kV LOAD	1
02.06.13	5	14:15	14:58	220kV NARAINA	11kV LOAD	1
	6	10:40	10:50	220kV PATPARGANJ	66kV VIVEK VIHAR CKT.	38
03.06.13	7	13:40	13:57	220kV NARAINA	11kV LOAD	2
	8	13:40	14:00	220kV KASHMIRI GATE	11kV LOAD	3
08.06.13	9	19:21	19:26	220kV NARAINA	11kV LOAD	1
10.06.13	10	18:40	18:55	220kV KHANJAWALA	11kV LOAD	2
	11	18:40	18:42	220kV SHALIMAR BAGH	33kV SMB KHOSLA CKT.	15
	12	18:40	18:55	220kV NAJAFGARH	11kV LOAD, 20 MVA PR. TR.	22
	13	18:40	18:42	220kV LODHI ROAD	33kV INDIAN HABITAT CENTER	0
	14	18:40	18:46	220kV LODHI ROAD	33kV INDIAN HABITAT CENTER	3
	15	18:40	18:44	220kV GEETA COLONY	33kV KAILASH NAGAR CKT. -I	10