DELHI TRANSCO LTD.

STATE LOAD DISPATCH CENTER

PROGRESS REPORT

****

OCTOBER - 2010

1 SALIENT FEATURES OF DELHI POWER SYSTEM

Sr. No.	Features	Oct. 2009	Oct. 2010
1	**Effective Generation Capacity within Delhi in MW**		
	Rajghat Power House	135	135
	Gas Turbine	270	270
	Pragati Power Corporation Ltd.	330	330
	Rithala	0	37
	Badapur Thermal Power Station	705	705
	Total	1440	1177
2	**Maximum Unrestricted Demand (MW)**	**3980**	**3683**
	Date	01.10.2009	07.10.2010
	Time	19.00.00	18.34.17
3	**Peak Demand met (MW)**	**3957**	**3683**
	Date	01.10.2009	07.10.2010
	Time	18.56.36	18.34.17
4	Peak Availability (MW)	3704	4326
5	Shortage (-) / Surplus (+) in MW	(-)253	(+)643
6	Percentage Shortage (-) / Surplus (+)	(-)6.39	(+)17.46
7	Maximum Energy Consume in a day (Mus)	80.937	71.440
8	Energy Consumed during the month	**1856.735**	**1952.657**
9	**Load Shedding in Mus**		
A)	Due to Grid Restrictions		
i)	Under Frequency Relay Operations	0.272	0.000
ii)	Manual Load shedding from DTL S/Stns.	0.000	0.000
iii)	Load Shedding due to low frequency / Low Voltage / TTC/ATC Violation		
	NDPL	0.000	0.000
	BRPL	0.000	0.000
	BYPL	0.000	0.000
	NDMC	0.000	0.000
	MES	0.000	0.000
iv)	Due to transmission Constraints in Central Sector	0.000	0.000
	Total due to Grid Restriction	**0.272**	0.000
B)	Due to Constraints in System in Mus		
	DTL	0.558	0.713
	NDPL	5.019	0.243
	BRPL	0.739	0.482
	BYPL	0.402	0.320
	NDMC	0.000	0.000
	MES	0.000	0.000
	Other Agencies	0.243	0.013
	Total	**6.961**	**1.769**
11	**Grand Total in Mus**	**7.233**	**31.769**

2. PERFORMANCE OF GENERATING STATIONS WITHIN DELHI DURING OCT. 2010

A) For the month of Oct. 2010

All Figures in MUs

S. No	Stations	Gross Generation	Aux. Consumption	Net Generation	Availability (%)	Backing Down
1.	**RPH**	30.41200	4.01000	26.40200	87.66	50.52400
2.	**GT**	138.61400	4.54000	134.07400	86.78	36.80200
3.	**PPCL**	176.93500	5.20100	171.73400	74.04	4.23925
4.	**BTPS**	413.64562	45.50102	368.14460	93.04	84.86625
5.	**Rithala**	4.54700	0.14900	4.39800	--	0.00000
	TOTAL	**764.15362**	**59.40102**	**704.75260**		**176.43150**

B) For the Year 2010-11 (Upto Oct. 2010)

Power Station	Effective Capacity (MW)	Net Generation in MUs For Oct 2010	Availability (%) For Oct 2010	PLF (%) For Oct. 2010	Cumulative Generation in MUs upto Oct. 2010 for the year 2010-11	Cumulative Availability in % upto OCt. 2010 for the year 2010-11	Cumulative PLF in % upto Oct. 2010 for the year 2010-11
RPH	135	26.40200	87.66	30.96	328.89700	70.83	55.45
GT	270	134.07400	86.78	67.90	760.01500	81.30	58.47
PPCL	330	171.73400	74.04	72.26	1395.96200	87.75	84.48
BTPS	705	368.14460	93.04	74.86	2410.8706	86.45	72.19
Rithala (G)	76	4.39800	--	--	4.39800	--	--
TOTAL	**1440**	**704.75260**			**4900.1426**		

3 DETAILS OF OUTAGES OF GENERATING STNS. WITHIN DELHI W.E.F. APRIL 2010

(A) RPH STATION

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	67.5	02.04.10	01.00	02.04.10	01.43	Boiler drum level low
		02.04.10	14.50	02.04.10	16.27	Tripped alongwtih trippings of associated transmission lines.
		11.04.10	22.13	11.04.10	23.08	Electrical Problem
		17.04.10	00.56	26.06.10	11.53	Planned shut-down for over-hauling of generator.
		26.06.10	12.56	26.06.10	14.25	Furnace pressure very low.
		27.06.10	14.28	05.07.10	00.50	Drum level low.
		10.07.10	15.45	10.07.10	20.02	Due to power loss.
		12.07.10	20.05	13.07.10	06.06	Turbine trip
		13.07.10	12.02	13.07.10	13.41	Flame failure
		13.07.10	18.33	13.07.10	20.21	Tripped along wtih trippings of associated transmission lines.
		15.07.10	10.39	19.07.10	13.14	Auxiliary transformer tripped.
		24.07.10	20.23	26.07.10	09.58	Boiler Tube Leakage
		31.07.10	12.25	31.07.10	14.07	Boiler trip.
		01.08.10	07.30	03.08.10	05.25	Furnace pressure very low.
		03.08.10	16.04	03.08.10	17.50	Loss of oil fuels
		08.08.10	07.28	08.08.10	08.10	Flame failure
		22.08.10	00.03	23.08.10	15.28	Flame failure
		25.08.10	03.00	29.08.10	08.25	Ash formed in coal bunker
		30.08.10	11.00	30.08.10	11.02	Flame failure
		09.09.10	20.45	02.09.10	21.10	Boiler tripped
		04.09.10	02.15	04.09.10	10.23	Due to tripping of bus bar
		05.09.10	18.07	07.09.10	02.47	Reserve shut-down
		08.09.10	13.09	08.09.10	22.42	Flame failure
		09.09.10	09.40	09.09.10	11.10	Drum level low
		16.09.10	04.02	18.10.10	06.47	Failure of boiler and due to Commonwealth Games.
		21.10.10	13:05	21.10.10	13:48	Flame failure
		21.10.10	19.57	22.10.10	13.32	Boiler drum trip
		23.10.10	21.40	26.10.10	01.44	No coal flow
		27.10.10	00.24	27.10.10	02.22	Boiler drum trip
2		02.04.10	14.55	02.04.10	16.45	Tripped along wtih trippings of associated transmission lines.
		20.04.10	13.42	21.04.10	17.12	Low furnace pressure
		28.04.10	18.39	28.04.10	19.23	Low vacuum
		01.05.10	18.15	01.05.10	20.52	Tripped along wtih trippings of associated transmission lines.
		05.05.10	06.45	05.05.10	08.12	Furnace pressure low
		08.05.10	17.28	08.05.10	18.29	Drum level low
		09.05.10	03.48	09.05.10	05.17	Flame failure
		26.05.10	12.25	26.05.10	14.20	33kV bus differential operated
		28.05.10	05.55	29.05.10	07.17	Drum level low

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	67.5	02.06.10	06.25	02.06.10	07.24	Electrical problem
		13.06.10	15.42	13.06.10	18.39	Tripped along with trippings of associated transmission lines.
		22.06.10	07.48	22.06.10	09.09	Furnace pressure low
		07.07.10	10.55	07.07.10	12.08	Flame failure
		10.07.10	15.45	10.07.10	20.01	Tripped along with trippings of associated transmission lines.
		19.07.10	14.39	19.07.10	15.19	Turbine tripped
		20.07.10	18.12	20.07.10	19.57	Turbine tripped.
		21.07.10	04.45	21.07.10	05.47	Turbine tripped.
		25.07.10	12.16	25.07.10	15.10	Under frequency relay operated
		11.08.10	11.24	11.08.10	11.54	High furnace pressure
		22.08.10	09.37	22.08.10	19.11	Coal flow very low
		03.09.10	19.37	04.09.10	01.01	Due to bus bar tripping
		05.09.10	10.25	18.10.10	06.34	Boiler tube leakage. Machines could not be synchronized due to CWG
		18.10.10	09.42	18.10.10	10.37	Boiler drum tripped
		20.10.10	15.54	20.10.10	16.26	Turbine tripped
		24.10.10	14.38	24.10.10	21.24	Tripped on jerk
		28.10.10	00.15	31.10.10	19.20	Boiler tube leakage

(B) Gas Turbine

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	30	11.05.10	17.58	11.05.10	20.07	FSNL due to tripping of 160 MVA Txr. Buchholz and E/F
		15.05.10	14.02	15.04.10	15.34	To attend the hot spot
		28.05.10	05.22	28.05.10	22.15	Due to heavy blast in 11KV Breaker
		30.05.10	12.55	31.05.10	11.12	Stopped due to high under drawal at high frequency.
		07.06.10	09.22	08.06.10	21.08	
		10.06.10	00.10	10.06.10	08.07	Due to overloading of 160 MVA Tx
		02.07.10	15.12	07.01.20	15.54	Gas fuel hydraulic trip pressure low
		04.07.10	21.31	05.07.10	13.28	Tripped due to tripping of 160 MVA TX at IP End and after that machine not taken on bar due high frequency
		06.07.10	07.37	06.07.10	09.15	Tripped due to tripping of 160 MVA TX at IP End.
		08.07.10	07.15	08.07.10	13.00	Gas fuel hydraulic trip pressure low
		08.07.10	13.00	08.07.10	21.10	Stopped due to high under drawal at high frequency.
		12.07.10	11.02	12.07.10	12.05	Gas fuel hydraulic trip pressure low
		12.07.10	20.15	14.07.10	02.42	Stopped due to high under drawal at high frequency.
		14.07.10	06.04	14.07.10	06.55	Gas fuel hydraulic trip pressure low
		14.07.10	19.42	14.07.10	20.40	Gas fuel hydraulic trip pressure low
		18.07.10	07.24	18.07.10	14.19	Due to shut-down of 160 MVA Tx.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	30	20.07.10	15.31	21.07.10	07.52	Stopped due to high under drawal at high frequency.
		22.07.10	18.50	24.07.10	14.55	
		25.07.10	00.02	29.07.10	11.27	
		31.07.10	11.00	12.08.10	11.27	
		12.08.10	18.55	14.08.10	22.18	C&I Problem. After clearance from C&I GT not taken on load due to swapping of gas to PPCL
		15.08.10	11.08	28.08.10	23.10	Stopped due to high under drawal at high freq. Machine could not sync hronized after 15:30hrs. as voltage not build up more than 9.5KV.
		03.09.10	09.02	30.09.10	14.22	Stopped due to high under drawal at high frequency.
		04.10.10	06.05	06.10.10	10.55	Stopped at generation on spot RLNG not required by SLDC
		11.10.10	12.15	11.10.10	13.29	Machine tripped due to problem in Emergency push button switch
		26.10.10	00.02	31.10.10	23.59	Stopped as per requirement of SLDC message no. 10/146
2	30	11.05.10	17.58	11.05.10	20.30	FSNL due to tripping of 160 MVA Txr. Buchholz and E/F
		30.05.10	13.45	31.05.10	09.19	Machine stopped to avoid overloading of 160 Mva Tx as one 100MVA Transformer was under replacement with 160MVA Tx at IP Extension
		07.06.10	14.19	07.06.10	18.55	
		20.06.10	08.35	20.06.10	11.02	Tripped without any alarm
		04.07.10	21.31	05.07.10	07.47	Tripped due to tripping of 160 MVA TX at IP End and after that machine not taken on bar due to high freq.
		06.07.10	07.23	06.07.10	10.03	Tripped due to tripping of 160 MVA TX at IP End.
		08.07.10	14.58	08.07.10	19.32	
		12.07.10	21.12	13.07.10	21.39	Stopped due to high under drawal at high frequency.
		18.07.10	07.58	18.07.10	12.26	Due to shut-down of 160 MVA Tx.
		20.07.10	13.01	21.07.10	04.13	Stopped due to high under drawal at high frequency.
		22.07.10	21.47	24.07.10	07.35	
		25.07.10	01.50	29.07.10	13.18	
		31.07.10	11.00	09.08.10	12.31	
		11.08.10	18.25	12.08.10	11.20	
		12.08.10	12.48	12.08.10	19.45	
		13.08.10	12.30	28.08.10	15.15	Swapping of gas to PPCL.
		01.09.10	22.33	30.09.10	23.59	Stopped due to high under drawal at high frequency.
		01.10.10	00:00	01.10.10	16.00	Machine not taken on load due to low demand from SLDC
		01.10.10	16.00	01.10.10	18.10	Machine not available due to leakage of oil from load gear box
		26.10.10	00.02	31.10.10	23.59	Stopped as per SLDC message no. 10/146

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
3	30	01.05.10	06.05	01.05.10	18.35	Stopped to clean PHE
		28.05.10	10.20	28.05.10	11.27	Tripped on battery under voltage.
		01.06.10	23.55	02.06.10	08.28	To avoid overloading of 160MVA Tx
		04.06.10	12.02	04.06.10	16.04	Condensate level high.
		06.06.10	09.42	07.06.10	14.10	To avoid overloading of 160 Mva Tx as one 100MVA Tx was under replacement with 160MVA Tx at IP Extension
		14.06.10	09.24	14.06.10	11.08	
		04.07.10	21.31	12.07.10	09.00	Tripped due to tripping of 160 MVA TX at IP End and after that machine not taken on bar due SLDC message to maintain schedule of 80 MW.
		12.07.10	09.00	12.07.10	14.15	Machine not available due to problem in Diesel Engine of GT
		12.07.10	14.15	14.07.10	10.25	Stopped due to high under drawal at high frequency.
		17.07.10	12.20	19.07.10	15.42	Loss of Excitation.
		20.07.10	15.22	23.07.10	12.01	To regulate the load of Radial feeders as 160MVA Tx tripped on Buchholtz relay. After 19:17 hrs machine not taken on bar due to low demand
		11.08.10	17.55	12.08.10	12.39	Stopped due to high under drawal at high frequency.
		13.08.10	12.32	14.08.10	06.15	Due to swapping of gas to PPCL.
		15.08.10	11.00	15.08.10	17.13	Stopped due to high under drawal at high frequency.
		26.08.10	19.32	27.08.10	07.20	
		02.09.10	00.20	06.09.10	12.01	
		06.09.10	13.54	06.09.10	15.15	Machine tripped on Y-Phase Bus Bar differential relay on BB-3 and BB-4.
		10.09.10	16.04	28.09.10	18.25	Stopped due to high under drawal at high frequency.
		01.10.10	00.35	01.10.10	01.15	Machine tripped due to CRT was not working properly
		15.10.10	22.20	19.10.10	23.59	Machine stopped as generation on Spot R-LNG is not required by SLDC
		25.10.10	14.05	25.10.10	18.44	Machine stopped as generation on Spot R-LNG is not required by SLDC
		28.10.10	16.41	31.10.10	23.59	Machine stopped as per SLDC message due to low demand of Delhi

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
4	**30**	01.04.10	00.00	24.05.10	15.35	Planned shut-down
		24.05.10	18.02	24.05.10	22.50	Tripped on LTTH high.
		27.05.10	10.35	27.05.10	13.45	Take on FSNL to adjust the load.
		28.05.10	01.10	28.05.10	03.00	Tripped without any alarm.
		29.05.10	03.10	29.05.10	03.45	Tripped without any alarm.
		29.05.10	05.10	29.05.10	05.57	Tripped without any alarm.
		29.05.10	20.25	29.05.10	21.25	Came on FSNL
		03.06.10	14.10	03.06.10	15.30	Generator Stator overheating alarm
		05.06.10	05.46	07.06.10	08.29	To avoid overloading of 160 Mva Tx as one 100MVA Tx was under replacement with 160MVA Tx at IP Extension
		28.06.10	01.10	28.06.10	01.50	Came on FSNL
		29.06.10	14.50	29.06.10	16.10	Tripped without any alarm
		14.07.10	21.31	12.07.10	09.00	Tripped due to tripping of 160 MVA TX at IP End and after that machine not taken on bar due to low demand.
		12.07.10	09.00	12.07.10	18.15	Problem in DC EOP of GT
		12.07.10	18.15	14.07.10	11.33	Stopped due to high under drawal at high frequency.
		14.07.10	11.33	16.07.10	17.25	Due to problem in Mark-VI
		20.07.10	15.35	20.07.10	16.27	Machine came on FSNl due to jerk in the system
		20.07.10	21.01	24.07.10	05.45	Stopped due to high under drawal at high frequency.
		19.08.10	14.39	19.08.10	16.57	Tripped on loss of flame.
		19.08.10	17.35	19.08.10	22.53	Stopped due to high under drawal at high frequency.
		05.09.10	07.50	05.09.10	11.25	Tripped on following alarms lost communication with Controller R,S &T. Field failure alarm appeared on protection panel.
		06.09.10	13.54	06.09.10	14.35	Machine tripped on Y-Phase Bus Bar differential relay on BB-3 and BB-4.
		15.09.10	15.10	15.09.10	15.48	Machine came on FSNL due tripping of 160 MVA Tx
		22.09.10	21.11	28.09.10	11.57	Stopped due to high under drawal at high frequency.
		18.10.10	07.30	18.10.10	10.27	Machine tripped on Generator GAC Electrical protection trouble alarm
		25.10.10	14.10	31.10.10	23.59	Machine stopped as generation on Spot R-LNG is not required by SLDC
5	**30**	01.04.10	00.00	01.04.10	01.30	Hydraulic pressure low
		25.04.10	11.32	25.04.10	14.55	To change generator absolute filter.
		07.05.10	18.20	08.05.10	16.35	Stopped due to high frequency.
		01.06.10	20.50	01.06.10	23.16	GT came on FSNL
		03.06.10	01.15	03.06.10	08.09	To avoid overloading of 160 Mva Tx as one 100MVA Tx was under replacement with 160MVA Tx at IP Extension
		03.06.10	20.15	04.06.10	08.33	
		07.06.10	21.43	09.06.10	15.45	
		25.06.10	09.40	25.06.10	15.25	
		26.06.10	00.05	26.06.10	05.56	
		26.06.10	09.50	28.06.10	12.20	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
5	**30**	14.07.10	21.31	14.07.10	22.20	Tripped due to tripping of 160 MVA TX at IP End.
		05.07.10	13.45	08.07.10	10.55	Machine stopped as per SLDC message to maintain load of 110 MW
		08.07.10	14.58	08.07.10	20.10	Tripped due to tripping of 160 MVA TX at IP End on Buckholtz relay.
		18.07.10	07.55	18.07.10	12.20	Due to shut-down of 160 MVA Tx.
		20.07.10	15.35	20.07.10	19.18	Machine came on FSNl due to jerk in the system
		21.07.10	09.31	22.07.10	18.46	Stopped due to high frequency and low demand
		31.07.10	11.00	01.08.10	12.57	
		13.08.10	18.25	14.08.10	06.18	Due to swapping of gas to PPCL.
		15.08.10	18.40	17.08.10	16.25	Stopped due to high frequency and low demand
		24.08.10	11.07	31.08.10	23.59	
		06.09.10	13.54	06.09.10	17.45	Machine tripped on Y-Ph Bus Bar differential relay on BB-3 and BB-4.
		08.09.10	09.30	10.09.10	14.55	Stopped due to high frequency and low demand
		15.09.10	15.10	15.09.10	16.12	Machine came on FSNL due tripping of 160 MVA Tx
		28.09.10	15.10	30.09.10	15.14	Stopped due to high frequency and low demand
		15.10.10	09.00	15.10.10	15.46	Machine stopped as generation on Spot R-LNG is not required by SLDC
		28.10.10	11.30	28.10.10	15.55	Machine stopped as per SLDC message due to low demand in Delhi
6	**30**	16.04.10	11.35	16.04.10	17.16	To clean PHE of GT
		05.05.10	09.03	05.05.10	15.32	Stopped for PHE cleaning.
		08.05.10	18.02	10.05.10	09.30	Stopped due to high frequency.
		11.05.10	17.58	11.05.10	20.10	FSNL due to tripping of 160 MVA Txr. Buchholz and E/F
		24.05.10	16.45	24.05.10	21.13	Taken on FSNL to facilitate checking of auto synch. Mode.
		25.05.10	11.00	25.05.10	12.00	
		27.05.10	14.12	27.05.10	14.55	
		28.05.10	05.22	28.05.10	16.10	Due to blast in 11 KV Breaker
		29.05.10	17.42	30.05.10	09.55	Stopped due to high frequency.
		03.06.10	14.42	03.06.10	15.29	Machine came on FSNL due to Combustion trouble and flame detector trouble
		04.06.10	22.32	05.06.10	06.45	To avoid overloading of 160 MVA Tx as one 100MVA Tx was under replacement with 160MVA Tx at IP Extension
		07.06.10	19.55	09.06.10	14.35	
		25.06.10	18.53	28.06.10	18.50	Gas fuel control oil pressure low.
		30.06.10	17.05	30.06.10	18.58	Stopped as required by Protection Deptt
		04.07.10	21.31	04.07.10	21.42	Due to tripping of 160 MVA TX at IP End.
		06.07.10	07.37	08.07.10	08.20	Tripped due to tripping of 160 MVA TX at IP End and after that machine not taken on bar due to low demand
		08.07.10	14.58	08.07.10	16.49	Tripped due to tripping of 160 MVA TX at IP End on Buckholtz relay.
		08.07.10	17.25	08.07.10	18.06	Tripped due to tripping of 160 MVA TX at IP End on Buckholtz relay.
		14.07.10	09.32	14.07.10	14.28	To attend hunting in load

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
6	**30**	20.07.10	15.35	20.07.10	15.43	Machine came on FSNL due to jerk in the system
		21.07.10	02.27	21.07.10	04.15	Tripped with multiple alarms
		21.07.10	04.15	22.07.10	18.16	Due to low demand and high freq.
		23.07.10	11.20	27.07.10	18.00	Due to smoke from mark VI panel
		27.07.10	18.00	29.07.10	12.17	Stopped due to high frequency and low demand.
		31.07.10	11.00	09.08.10	12.40	
		15.08.10	11.06	17.08.10	15.50	
		19.08.10	21.50	23.08.10	12.25	Due to swapping of gas to PPCL.
		27.08.10	08.25	31.08.10	12.37	Stopped due to high frequency and low demand.
		31.08.10	16.02	31.08.10	23.59	
		06.09.10	13.54	06.09.10	14.44	Machine tripped on Y-Ph Bus Bar differential relay on BB-3 and BB-4.
		15.09.10	15.10	15.09.10	16.12	FSNL due tripping of 160 MVA Tx
		18.09.10	12.15	18.09.10	13.40	Due to failure of IO card
		24.09.10	16.45	24.09.10	17.35	Electrical trouble
		28.09.10	19.15	30.09.10	14.20	Stopped due to high frequency and low demand.
		15.10.10	08.00	15.10.10	19.02	Machine stopped as generation on Spot R-LNG is not required by SLDC
		28.10.10	11.30	28.10.10	15.55	
STG1	**34**	07.04.10	12.55	07.04.10	17.35	To attend dearater level problem
		12.04.10	11.52	12.04.10	12.32	Lube oil header pressure low
		11.05.10	17.58	11.05.10	21.35	Tripped due to tripping of GT#2.
		19.05.10	23.25	20.05.10	03.25	Failure of supply of Turbine panel
		28.05.10	05.22	28.05.10	15.57	Due to blast in 11 KV Breaker
		30.05.10	13.45	31.05.10	12.46	Stopped due to high frequency.
		07.06.10	14.22	07.06.10	21.35	To avoid overloading of 160 Mva Tx as one 100MVA Tx was under replacement with 160MVA Tx at IP Extension
		29.06.10	15.32	29.06.10	16.50	Tripped without any alarm
		04.07.10	21.31	05.07.10	09.50	Tripped due to tripping of 160 MVA TX at IP End and after that machine not taken on bar due SLDC message to maintain schdule of 80 MW.
		06.07.10	07.23	06.07.10	10.58	Tripped due to tripping of 160 MVA TX at IP End .
		08.07.10	14.58	08.07.10	22.10	Tripped due to tripping of 160 MVA TX at IP End .
		09.07.10	23.42	10.07.10	01.50	Tripped on Ch-I&II
		10.07.10	02.38	10.07.10	03.17	
		10.07.10	03.25	10.07.10	03.50	
		10.07.10	03.55	10.07.10	04.42	
		07.10.10	18.32	10.07.10	18.48	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG 1	**34**	12.07.10	21.12	13.07.10	23.47	Machine stopped as per SLDC message to maintain load of 80 MW
		18.07.10	07.01	18.07.10	14.14	Due to shut-down of 160 MVA Tx.
		20.07.10	15.31	21.07.10	07.50	To regulate the load of Radial feeders as 160 MVA Tx tripped on Buchholtz relay. After 19:17 hrs machine not taken on bar due to low demand
		22.07.10	21.47	24.07.10	08.25	Machine stopped as per SLDC message to maintain load of 80 MW
		24.07.10	17.04	24.07.10	17.32	Due to tripping of 800 KVA Tx
		25.07.10	01.30	29.07.10	17.50	Stopped due to high frequency and low demand.
		31.07.10	11.00	09.08.10	19.12	
		10.08.10	13.26	10.08.10	15.03	Machine tripped as AOP-1A tripped.
		11.08.10	18.25	12.08.10	14.15	Stopped due to high frequency and low demand.
		12.08.10	18.55	12.08.10	21.40	Tripped due to tripping of GT#1.
		13.08.10	12.30	15.08.10	03.40	Due to swapping of gas to PPCL.
		15.08.10	11.08	28.08.10	20.15	Stopped due to high frequency and low demand.
		03.09.10	09.02	30.09.10	21.28	Stopped due to high frequency and low demand.
		04.10.10	06.41	04.10.10	13.28	Tripped due to low vacuum
		05.10.10	12.48	05.10.10	15.05	Tripped on low drum level, drum level could not be controlled due to disappearance of boiler parameter
		11.10.10	21.12	12.10.10	01.20	Machine tripped on generator shaft vibration very high and axial shift very high
		26.10.10	00.02	31.10.10	23.59	Stopped as per SLDC message no. 10/146
STG2	**34**	15.04.10	11.15	15.04.10	18.40	To attend leakage in CPH linie
		01.05.10	06.05	01.05.10	20.30	Stopped as GT#3 stopped for cleaning of PHE
		11.05.10	14.46	11.05.10	20.34	Stopped due to leakage in SRV.
		17.05.10	19.05	17.05.10	20.55	Due to non availability of the BFPs.
		24.05.10	10.50	26.05.10	22.00	To attend condenser backwashing and other leakages
		28.05.10	05.22	28.05.10	08.25	Due to blast in 11 KV Breaker
		01.06.10	10.23	01.06.10	10.40	Low vacuum due to tripping of CEP
		06.06.10	09.42	07.06.10	12.55	To avoid overloading of 160 Mva Tx as one 100MVA Tx was under replacement with 160MVA Tx at IP Extension
		14.06.10	07.32	14.06.10	15.05	Tripped on CH-I & II
		14.07.10	21.31	12.07.10	09.00	Tripped due to tripping of 160 MVA TX at IP End and after that machine not taken on bar due SLDC message to maintain schdule of 80 MW.
		12.07.10	09.00	12.07.10	14.15	Due to outage of GT# 3 & 4
		12.07.10	14.15	12.07.10	18.15	HRSG# 4 due to outage of GT# 4
		12.07.10	18.15	14.07.10	12.50	Stopped due to high frequency and low demand.
		18.07.10	06.37	18.07.10	13.35	To attend 160 MVA Tx.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG 2	**34**	20.07.10	15.22	23.07.10	14.55	To regulate the load of Radial feeders as 160 MVA Transformer tripped on Buchholtz relay. After 19:17 hrs machine not taken on bar due to low demand
		24.07.10	17.04	24.07.10	17.22	Due to tripping of 800 KVA Tx
		26.07.10	08.55	26.07.10	10.46	Low level vacuum
		06.08.10	15.42	08.08.10	16.50	Machine tripped as Both Boiler Tripp alarm appeared on BCD while the drum level of both HRSG were normal.
		17.08.10	12.42	17.08.10	13.10	Machine tripped as both boiler tripped
		19.08.10	15.22	19.08.10	15.50	Failure of DC supply
		05.09.10	7.25	05.09.10	14.45	Machine tripped due to tripping of GT#4
		06.09.10	13.54	06.09.10	16.15	Machine tripped on Y-Ph Bus Bar differential relay on BB-3 and BB-4.
		07.09.10	09.55	07.09.10	10.28	C&I Problem
		07.09.10	19.15	07.09.10	21.32	Machine tripped due to jerk.
		15.09.10	15.10	15.09.10	17.09	Machine tripped due to tripping of 160 MVA Tx
		22.09.10	21.11	28.09.10	14.55	Stopped due to high frequency.
		18.10.10	07.30	18.10.10	11.36	Machine tripped due to tripping of G.T.#4
		25.10.10	14.10	25.10.10	20.17	Machine stopped as generation on Spot R-LNG is not required by SLDC
		28.10.10	16.41	31.10.10	23.59	Machine stopped as per SLDC message due to load demand of Delhi
STG3	**34**	02.04.10	03.25	07.04.10	05.28	Axial shift alarm appeared
		07.04.10	07.35	07.04.10	07.58	Lube oil pressure low
		09.07.10	21.20	09.04.10	22.32	Plunger coil trip alarm
		29.04.10	11.06	29.04.10	15.15	Plunger coil trip alarm
		05.05.10	09.05	05.05.10	17.32	Stopped to attend various leakages
		11.05.10	17.58	11.05.10	20.34	FSNL due to tripping of 160 MVA Tx. Buchholz and E/F
		18.05.10	07.05	18.05.10	17.58	Stopped to attend Various leakages
		18.05.10	18.34	18.05.10	18.55	Tripped on Control oil header pressure very low. Both the Boiler trip alarm also appeared.
		18.05.10	19.35	18.05.10	22.25	
		28.05.10	05.22	28.05.10	10.58	Due to blast in 11 KV Breaker
		29.05.10	17.42	30.05.10	13.37	Stopped due to high frequency.
		07.06.10	21.43	09.06.10	17.25	To avoid overloading of 160MVA Tx as 100MVA Tx under replace ment with 160MVA Tx at IP Ext.
		25.06.10	18.53	28.06.10	23.59	Tripped due to tripping of GT#6
		04.07.10	21.31	14.07.10	23.10	Tripped due to tripping of 160 MVA TX at IP End.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG3	**34**	06.07.10	07.23	08.07.10	11.13	Tripped due to tripping of 160 MVA TX at IP End and after that machine not taken on bar due to low demand
		08.07.10	12.20	08.07.10	21.28	Due to oil leakages observe in ESV.
		10.07.10	18.48	10.07.10	19.50	Due to disappearance of Parameters
		18.07.10	06.37	18.07.10	13.55	Due to shut-down of 160 MVA Tx.
		20.07.10	15.07	20.07.10	20.53	Due to tripping of 160 MVA Tx
		21.07.10	09.31	22.07.10	21.15	Stopped due to high frequency and low demand.
		31.07.10	11.00	09.08.10	17.05	
		1				Machine stopped as per SLDC message to maintain load of 80 MW
		15.08.10	18.40	17.08.10	23.59	Machine stopped as per SLDC message to maintain load of 75 MW
		20.08.10	17.10	20.08.10	19.25	Machine tripped on low vaccum.
		21.08.10	09.52	21.08.10	11.12	Machine tripped on low vaccum.
		27.08.10	08.25	31.08.10	23.59	Machine stopped as per SLDC message to maintain load of 80 MW
		06.09.10	13.54	06.09.10	16.52	Machine tripped on Y-Ph Bus Bar differential relay on BB-3 and BB-4.
		07.09.10	19.19	07.09.10	20.53	Machine tripped due to jerk.
		07.09.10	22.00	07.09.10	23.15	Machine tripped on false alarm of Hot well level very high though the level was normal.
		08.09.10	12.41	09.09.10	00.46	
		15.09.10	15.10	15.09.10	17.15	Machine tripped due to tripping of 160 MVA Tx
		28.09.10	19.15	30.09.10	16.50	Stopped due to high frequency and low demand.
		15.10.10	09.00	15.10.10	17.26	Machine stopped as generation on Spot R-LNG is not required by SLDC
		20.10.10	06.45	20.10.10	08.57	Machine tripped due to tripping of LOP of BEP

(C) PRAGATI STATION

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	**104**	01.05.10	18.16	01.05.10	20.10	Tripped alongwtih trippings of associated transmission lines.
		23.05.10	09.45	23.05.10	15.41	Due to shut-down of 220kV Bus-II at IP Extension.
		09.06.10	17.38	09.06.10	22.56	Internal fault.
		13.06.10	15.38	13.06.10	16.55	Tripped alongwtih trippings of associated transmission lines.
		04.07.10	21.26	04.07.10	22.20	
		10.07.10	15.47	10.07.10	16.56	
		13.07.10	18.29	13.07.10	19.10	
		27.07.10	18.50	28.07.10	04.18	Due to firing in underneath bearings.
		01.08.10	09.00	02.08.10	12.18	Due to low demand and high frequency
		15.08.10	00.00	16.08.10	09.12	
		03.09.10	16.59	03.09.10	18.12	Problem in generator transformer
		03.09.10	23.30	04.09.10	02.40	Problem in turbine
		16.09.10	15.12	16.09.10	16.16	Tripped alongwtih trippings of associated transmission lines.
		26.09.10	14.35	26.09.10	15.44	
		11.10.10	04.18	11.10.10	09.48	Due to all Boiler feed pump tripped
		14.10.10	17.10	14.10.10	17.44	Tripped on jerk

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	104	09.06.10	15.41	09.06.10	16.50	Mark-V fuse tripped.
		03.09.10	16.59	03.09.10	19.43	Problem in generator transformer
		05.09.10	11.30	06.09.10	09.20	Reserve shut-down
		16.09.10	15.12	16.09.10	15.59	Tripped alongwtih trippings of associated transmission lines.
		19.09.10	10.00	20.09.10	10.16	Generation back down due to low demand and high frequency
		19.10.10	21.08	20.10.10	01.55	Due to internal fault
		20.10.10	02.28	31.10.10	23.59	Due to internal fault, oil pressure pump
STG	**122**	02.04.10	14.50	02.04.10	16.34	Tripped due to tripping of associated transmission lines
		01.05.10	18.16	01.05.10	19.50	
		12.05.10	15.53	12.05.10	17.00	
		14.05.10	15.32	14.05.10	16.27	Tripped due to tripping of associated transmission lines
		13.06.10	15.38	13.06.10	17.40	
		01.07.10	17.09	01.07.10	18.10	Internal fault
		04.07.10	21.26	04.07.10	23.00	Tripped due to tripping of associated transmission lines
		10.07.10	15.47	10.07.10	16.43	
		13.07.10	18.29	13.07.10	19.25	
		17.07.10	13.30	17.07.10	17.19	Exitor vibration problem
		19.07.10	15.05	19.07.10	19.13	
		03.09.10	16.59	03.9.10	19.05	Problem in generator transformer
		16.09.10	15.22	16.09.10	17.34	Tripped due to tripping of associated transmission lines
		28.09.10	14.35	26.09.10	15.35	
		11.10.10	04.18	11.10.10	06.28	Due to all Boiler feed pump tripped
		14.10.10	17.10	14.10.10	17.58	Tripped on jerk
		29.10.10	14.45	29.10.10	15.34	Water level low in drum

(D) BADARPUR THERMAL POWER STATION

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	95	05.04.10	22.04	06.04.10	21.40	Maintenance work
		23.04.10	16.09	23.04.10	21.50	Electrical fault
		01.05.10	19.09	02.05.10	20.04	Generation back down due to low demand and high frequency.
		11.05.10	21.37	12.05.10	12.53	Electrical problem
		25.05.10	03.50	11.06.10	14.30	Excel shaft high
		13.07.10	12.02			Flame failure
		27.07.10	12.27	28.07.10	19.40	Generation back down due to low demand and high frequency.
		21.08.10	14.24	21.04.10	17.24	
		23.09.10	06.20	23.09.10	08.56	Boiler problem
		26.09.10	09.23	26.09.10	10.39	Boiler problem
2	95	07.05.10	19.45	10.05.10	08.16	Generation back down due to low demand and high frequency.
		20.05.10	11.35	22.05.10	22.40	Boiler Tube Leakage
		05.06.10	14.31	07.06.10	07.55	Generation back down due to low demand and high frequency.
		09.07.10	11.40	09.07.10	13.00	Electrical fault

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	95	20.08.10	18.22	28.08.10	17.39	Generation back down due to low demand and high frequency.
		02.09.10	18.47	02.09.10	20.04	Due to tripping of associated transmission lines
		09.09.10	00.19	15.09.10	02.52	Reserve shut-down
		06.10.10	04.18	08.10.10	07.10	Electrical problem, economizer tube leakage
3	95	03.04.10	00.18	03.04.10	05.20	Protection failure
		09.04.10	12.50	09.04.10	16.17	Vacuum low
		30.04.10	02.04	30.04.10	24.00	Annual maintenance
		29.06.10	22.56	03.07.10	19.02	Boiler Tube Leakage
		31.07.10	17.30	31.07.10	20.46	FD fan tripped
		25.08.10	19.34	28.08.10	11.15	Generation back down due to low demand and high frequency.
		26.09.10	02.23	29.09.10	03.05	
4	210	23.04.10	07.02	24.04.10	19.55	Water valve leakage
		04.05.10	12.29	05.05.10	13.39	Boiler Tube Leakage
		12.05.10	23.25	13.05.10	18.32	Boiler Tube Leakage
		17.05.10	00.28	17.05.10	17.50	Boiler Tube Leakage
		19.05.10	12.43	20.05.10	03.02	Boiler Tube Leakage
		21.05.10	08.00	22.05.10	05.56	Boiler Tube Leakage
		22.05.10	06.57	22.05.10	07.49	Electrical Problem
		27.05.10	20.33	31.05.10	12.14	Boiler Tube Leakage
		07.06.10	16.20	14.6.10	12.52	Generation back down due to heavy under drawal and high frequency
		19.06.10	19.43	20.06.10	19.10	Boiler Tube Leakage
		04.07.10	12.29	26.08.10	12.19	Planned shut-down for maintenance
		30.08.10	12.15	01.09.10	08.19	Boiler Tube Leakage
		10.09.10	18.03	10.09.10	21.18	Cooling system problem
		15.09.10	23.46	22.09.10	03.00	Generation back down due to high frequency and low demand.
		29.09.10	04.30	01.10.10	20.09	
		06.10.10	09.44	07.10.10	10.50	Boiler tube leakage
		07.10.10	19.58	08.10.10	12.37	Boiler tube leakage
		08.10.10	14.08	14.10.10	16.12	Boiler tube leakage
		20.10.10	22.10	21.10.10	15.50	Internal fault
		26.10.10	19.10	27.10.10	10.45	Generation back down due to high frequency and low demand
		27.10.10	23.50	31.10.10	23.59	
5	210	02.04.10	16.29	03.04.10	20.22	Boiler tube leakage
		17.04.10	22.30	18.04.10	12.20	Boiler tube leakage
		09.05.10	17.40	09.05.10	19.48	Tripped on jerk due to tripping of 220kV Ballabhgarh – BTPS Ckts and 220kV BTPS – Alwar Ckt.
		13.05.10	17.58	13.05.10	20.11	Furnace problem
		14.07.10	04.50	14.07.10	07.35	Electrical problem
		05.09.10	12.42	08.09.10	20.05	Reserve shut-down
		15.09.10	04.41	15.09.10	23.15	Stopped due to high frequency and low demand.
		23.09.10	17.06	26.09.10	01.14	
		31.10.10	10.16	31.10.10	15.30	Boiler tube leakage

4 ALLOCATION OF POWER TO DELHI

A) Allocation from Unallocated quota of Central Sector Generating Stations to Delhi w.e.f. 01.10.2010

i) TIME BLOCK - 00.00-06.00hrs. and 23.00hrs. - 24.00hrs @ 0%

All figures in MW

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	0	0	130
Rihand	1000	150	100	87	0	0	87
Rihand Stage -II	1000	150	126	109	0	0	109
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	0	882	766	0	0	766
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	8782	1005	2321	2029	0	0	2029
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
URI HEP	480	0	53	50	0	0	50
Sewa HEP	120	18	16	15	0	0	15
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	3074	172	351	333	0	0	333
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
Total	15676	1619	3020	2665	0	0	2665
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
Grand Total	21886	1772	3309	2907	0	0	2907

ii) Time Block 10.00HRS. - 18.00hrs. @ 8% Un-allocated quota of Central Sector Generating Stations (without RAPP Unit-3 & 4)

All figures in MW

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	19	17	147
Rihand	1000	150	100	87	10	8	95
Rihand Stage -II	1000	150	126	109	10	8	118
ANTA GPS	419	63	44	41	4	4	45
Auriya GPS	663.36	99	72	67	4	4	71
Dadri GPS	829.78	129	91	85	4	3	88
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Dadri NCTPS (Th) Stage-II	980	0	882	766	0	0	766
Unchahaar-I TPS	420	20	24	21	1	1	22
Unchahaar-II TPS	420	63	47	41	4	4	44
Unchahaar-III TPS	210	31	29	25	2	2	27
TOTAL	**8782**	**1005**	**2321**	**2029**	**58**	**51**	**2080**
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	3	3	41
URI HEP	480	0	53	50	0	0	50
Sewa HEP	120	18	16	15	1	1	16
Dhauli Ganga HEP	280	42	37	35	3	3	38
Dulhasti HEP	390	58	50	48	4	4	51
TOTAL	**3074**	**172**	**351**	**333**	**11**	**10**	**344**
NPC							
Narora APS	440	64	47	41	4	4	44
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
RAPP (C)	440	64	56	49	4	4	52
TOTAL	**1320**	**194**	**103**	**89**	**8**	**7**	**96**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	9	9	132
THDC							
Tehri Hydro	1000	99	103	89	6	6	95
Total	**15676**	**1619**	**3020**	**2665**	**93**	**83**	**2748**
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**
Grand Total	**21886**	**1772**	**3309**	**2907**	**93**	**83**	**2990**

iii) Time Block 18.00hrs. to 23.00hrs. @ 8% Un-allocated quota of Central Sector Generating Stations (with RAPP Unit-3 & 4)

All figures in MW

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	19	17	147
Rihand	1000	150	100	87	10	8	95
Rihand Stage -II	1000	150	126	109	10	8	118
ANTA GPS	419	63	44	41	4	4	45
Auriya GPS	663.36	99	72	67	4	4	71
Dadri GPS	829.78	129	91	85	4	3	88
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Dadri NCTPS (Th) Stage-II	980	0	882	766	0	0	766
Unchahaar-I TPS	420	20	24	21	1	1	22
Unchahaar-II TPS	420	63	47	41	4	4	44
Unchahaar-III TPS	210	31	29	25	2	2	27
TOTAL	**8782**	**1005**	**2321**	**2029**	**58**	**51**	**2080**
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	3	3	41
URI HEP	480	0	53	50	0	0	50
Sewa HEP	120	18	16	15	1	1	16
Dhauli Ganga HEP	280	42	37	35	3	3	38
Dulhasti HEP	390	58	50	48	4	4	51
TOTAL	**3074**	**172**	**351**	**333**	**11**	**10**	**344**
NPC							
Narora APS	440	64	47	41	4	4	44
RAPP(B) Unit-3 APS	220	33	0	0	7	6	6
RAPP(B) Unit-4 APS	220	33	0	0	7	6	6
RAPP (C)	440	64	56	49	4	4	52
TOTAL	**1320**	**194**	**103**	**89**	**22**	**19**	**109**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	9	9	132
THDC							
Tehri Hydro	1000	99	103	89	6	6	95
Total	**15676**	**1619**	**3020**	**2665**	**107**	**96**	**2760**
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**
Grand Total	**21886**	**1772**	**3309**	**2907**	**107**	**96**	**3002**

5 ALLOCATION OF POWER TO DISCOMS

ALLOCATION OF POWER TO VARIOUS LISCENCEES 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. 01.01.2010 TO 31.03.2010. ALLOCATION OF 0.9MW HAS BEEN ALLOCATED TO UPCOMING JHAJJHAR PLAT FROM IP STATION. ALLOCATION OF 1 MW POWER FOR AUXILIARY NEEDS OF IP STATION FROM RPH WAS MADE W.E.F. 01.11.2009.

(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. IP	0.00	0.00	0.00	0.00	0.00	100.00
5. RPH	0.86	0.00	28.35	43.04	27.75	100.00
6. GT	0.93	0.00	28.28	42.99	27.80	100.00
7. Pragati	26.69	0.00	20.77	31.76	20.78	100.00
8. 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. IP	0.00	0.00	0.00	0.00	0.00	100.00
5. RPH	0.00	0.00	28.35	43.04	28.61	100.00
6. GT	0.00	0.00	28.28	42.99	29.73	100.00
7. Pragati	25.76	0.00	20.77	31.76	21.71	100.00
8. 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 OCTOBER 2010

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
		Rithala	RPH	GT	PPCL	BTPS	Bawana	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	18:51:11	0	0	199	299	410	0	908	2686	3227	541	3594	3	3597
2	20:50:58	0	0	230	267	528	0	1025	1994	2931	937	3019	0	3019
3	19:41:41	0	0	224	296	508	0	1028	2096	2520	424	3124	0	3124
4	19:04:29	0	0	191	296	616	0	1103	2464	3384	920	3567	1	3568
5	18:45:14	0	0	182	294	585	0	1061	2541	3276	735	3602	4	3606
6	18:51:37	0	0	225	294	345	0	864	2794	2461	-333	3658	0	3658
7	18:34:17	0	0	234	299	539	0	1072	2611	3254	643	3683	0	3683
8	18:48:05	0	0	229	296	392	0	917	2722	3279	557	3639	0	3639
9	18:49:06	19	0	226	291	423	0	959	2605	3241	636	3564	0	3564
10	19:07:15	20	0	236	263	401	0	920	2301	2576	275	3221	0	3221
11	18:46:46	20	0	227	295	418	0	960	2540	3170	630	3500	0	3500
12	19:33:14	0	0	225	296	401	0	922	2628	3235	607	3550	0	3550
13	18:46:15	0	0	230	294	428	0	952	2617	3081	464	3569	0	3569
14	19:15:56	0	0	231	290	427	0	948	2332	2936	604	3280	0	3280
15	18:54:26	0	0	191	292	577	0	1060	2490	2956	466	3550	0	3550
16	18:48:15	0	0	166	294	504	0	964	2466	2799	333	3430	0	3430
17	21:42:54	0	0	191	264	498	0	953	1936	1691	-245	2889	0	2889
18	18:47:11	0	113	179	295	493	0	1080	2556	2845	289	3636	0	3636
19	18:45:52	0	119	194	296	618	0	1227	2425	2752	327	3652	0.23	3652
20	18:44:53	0	123	191	138	615	100	1067	2556	2691	135	3623	33	3656
21	18:48:48	0	83	174	139	595	0	991	2676	2888	212	3667	10	3677
22	11:58:56	0	57	188	137	549	0	931	2425	2115	-310	3356	0	3356
23	18:46:19	0	113	185	142	521	0	961	2245	2923	678	3206	0	3206
24	18:38:45	0	0	190	150	520	0	860	1989	2146	157	2849	0	2849
25	18:34:37	0	61	158	144	611	0	974	2143	2339	196	3117	0	3117
26	18:32:49	20	118	115	143	478	0	874	2222	2818	596	3096	0	3096
27	18:49:20	20	120	118	146	587	0	991	2115	2276	161	3106	2	3108
28	18:46:16	20	62	77	148	411	0	718	2395	2667	272	3113	0	3113
29	18:36:04	0	63	82	144	388	0	677	2445	2357	-88	3122	0	3122
30	18:18:30	20	62	82	146	421	0	731	2311	2057	-254	3042	0	3042
31	18:32:57	20	58	87	148	229	0	542	2292	2815	523	2834	0	2834

7 POWER AVAILABILITY- DEMAND POSITION AT THE TIME OF MAXIMUM UNRESTRICTED DEMAND DURING OCTOBER 2010

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
		IP	RPH	GT	PPCL	BTPS	Bawana	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	18:51:11	0	0	199	299	410	0	908	2686	3227	541	3594	3	3597
2	20:50:58	0	0	230	267	528	0	1025	1994	2931	937	3019	0	3019
3	19:41:41	0	0	224	296	508	0	1028	2096	2520	424	3124	0	3124
4	19:04:29	0	0	191	296	616	0	1103	2464	3384	920	3567	1	3568
5	18:45:14	0	0	182	294	585	0	1061	2541	3276	735	3602	4	3606
6	18:51:37	0	0	225	294	345	0	864	2794	2461	-333	3658	0	3658
7	18:34:17	0	0	234	299	539	0	1072	2611	3254	643	3683	0	3683
8	18:48:05	0	0	229	296	392	0	917	2722	3279	557	3639	0	3639
9	18:49:06	19	0	226	291	423	0	959	2605	3241	636	3564	0	3564
10	19:07:15	20	0	236	263	401	0	920	2301	2576	275	3221	0	3221
11	18:46:46	20	0	227	295	418	0	960	2540	3170	630	3500	0	3500
12	19:33:14	0	0	225	296	401	0	922	2628	3235	607	3550	0	3550
13	18:46:15	0	0	230	294	428	0	952	2617	3081	464	3569	0	3569
14	19:15:56	0	0	231	290	427	0	948	2332	2936	604	3280	0	3280
15	18:54:26	0	0	191	292	577	0	1060	2490	2956	466	3550	0	3550
16	18:48:15	0	0	166	294	504	0	964	2466	2799	333	3430	0	3430
17	21:42:54	0	0	191	264	498	0	953	1936	1691	-245	2889	0	2889
18	18:47:11	0	113	179	295	493	0	1080	2556	2845	289	3636	0	3636
19	18:45:52	0	119	194	296	618	0	1227	2425	2752	327	3652	0.23	3652
20	18:44:53	0	123	191	138	615	100	1067	2556	2691	135	3623	33	3656
21	18:48:48	0	83	174	139	595	0	991	2676	2888	212	3667	10	3677
22	11:58:56	0	57	188	137	549	0	931	2425	2115	-310	3356	0	3356
23	18:46:19	0	113	185	142	521	0	961	2245	2923	678	3206	0	3206
24	18:38:45	0	0	190	150	520	0	860	1989	2146	157	2849	0	2849
25	18:34:37	0	61	158	144	611	0	974	2143	2339	196	3117	0	3117
26	18:32:49	20	118	115	143	478	0	874	2222	2818	596	3096	0	3096
27	18:49:20	20	120	118	146	587	0	991	2115	2276	161	3106	2	3108
28	18:46:16	20	62	77	148	411	0	718	2395	2667	272	3113	0	3113
29	18:36:04	0	63	82	144	388	0	677	2445	2357	-88	3122	0	3122
30	18:18:30	20	62	82	146	421	0	731	2311	2057	-254	3042	0	3042
31	18:32:57	20	58	87	148	229	0	542	2292	2815	523	2834	0	2834

8 SOURCEWISE SCHEDULED DRAWL FROM NORTHERN GRID AS WELL AS AVAILABILITY WITHIN DELHI FOR OCTOBER 2010

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

A (i) RPH	30.412
JHAJJAR SHARE	0.682
NET RPH	29.730
(ii) GT+WHRU	138.614
(iii) PRAGATI	176.935
(iv) Rithala	4.547
TOTAL (i+ii+iii)	349.826
B) AVAILABILITY FROM BTPS	363.470
C) AUXILIARY CONSUMPTION OF GENERATING STNs. EXCLUDING BTPS	13.900
D) NET GENERATION AVAILABLE WITHIN DELHI(A+B-C)	**699.396**

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	4.045	3.921	4.045	3.921
SALAL	26.484	25.675	26.484	25.675
TANKAPUR	8.020	7.772	7.997	7.751
CHAMERA	10.075	9.769	10.075	9.769
CHAMERA -II	13.747	13.327	13.747	13.327
DHAULIGANGA	17.125	16.608	17.125	16.608
SEWA -2	2.723	2.639	2.723	2.639
URI	18.144	17.590	18.144	17.590
ANTA (GAS)	25.477	24.692	6.736	6.528
ANTA (RLNG)	6.535	6.335	0.167	0.161
ANTA (LIQUID)	0.000	0.000	0.000	0.000
DADRI (GAS)	46.208	44.771	12.853	12.454
DADRI (RLNG)	20.180	19.564	0.241	0.233
DADRI (LIQUID)	0.464	0.452	0.000	0.000
AURAIYA (GAS)	36.972	35.816	10.215	9.896
AURAIYA (RLNG)	15.132	14.674	0.125	0.120
AURAIYA (LIQUID)	1.254	1.220	0.000	0.000
SINGRAULI	108.080	104.731	105.377	102.106
RIHAND -I	74.992	72.678	73.091	70.831
RIHAND -II	93.825	90.927	91.324	88.498
UNCHAHAR-I	17.481	16.941	8.838	8.563
UNCHAHAR-II	33.323	32.295	17.519	16.972
UNCHAHAR-III	21.735	21.064	11.034	10.691
DADRI (TH)	534.729	518.211	395.137	382.913
DADRI (TH) STAGE-II	618.530	599.432	469.130	454.676
NAPP	21.599	20.930	21.599	20.930
RAPP 'B'	2.032	1.970	2.032	1.970
RAPP 'C'	37.227	36.074	37.227	36.074
NATHPA JHAKRI	65.341	63.348	65.341	63.348
DULASTI	32.372	31.383	32.372	31.383
TEHRI	38.514	37.352	38.514	37.352
KHELGAON	26.463	25.641	21.487	20.825
KHELGAON-II	82.995	80.406	71.528	69.323
FARAKA	14.297	13.851	10.567	10.237
TALA	15.574	15.098	15.574	15.098
TALCHER	0.000	0.000	0.000	0.000
DVC	106.375	103.394	99.597	96.628
MADHYA PRADESH	10.134	9.728	9.225	8.948
MEGHALAYA	4.212	4.090	3.951	3.839

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
CHATTISHGARH	81.284	77.848	73.555	71.387
WEST BENGAL	10.557	10.245	9.900	9.623
ANDHRA PRADESH	45.261	42.831	40.836	39.678
KARNATAKA	2.548	2.397	2.287	2.217
KERALA	52.955	50.116	49.624	48.219
TAMILNADU	33.309	31.542	30.891	30.020
TO RAJASTHAN	-14.629	-15.130	-14.629	-15.130
POWER EXCHANGE(IEX)	0.000	0.000	0.000	0.000
TO POWER EXCHANGE (IEX)	-243.432	-251.035	-243.432	-251.035
POWRER EXCHANGE(PX)	0.000	0.000	0.000	0.000
TO POWER EXCHANGE (PX)	-11.994	-12.350	-11.994	-12.350
TOTAL	**2168.274**	**2080.835**	**1668.180**	**1600.506**

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

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
NTPC - NR	1654.918	1603.802	1201.788	1164.642
NTPC - ER	123.756	119.899	103.583	100.386
NHPC	132.734	128.685	132.711	128.663
NPC	60.859	58.973	60.859	58.973
NATHPA JHAKRI	65.341	63.348	65.341	63.348
TEHRI	38.514	37.352	38.514	37.352
TALA	15.574	15.098	15.574	15.098
TALCHER	0.000	0.000	0.000	0.000
DVC	106.375	103.394	99.597	96.628
MADHYA PRADESH	10.134	9.728	9.225	8.948
MEGHALAYA	4.212	4.090	3.951	3.839
CHATTISHGARH	81.284	77.848	73.555	71.387
WEST BENGAL	10.557	10.245	9.900	9.623
ANDHRA PRADESH	45.261	42.831	40.836	39.678
KARNATAKA	2.548	2.397	2.287	2.217
KERALA	52.955	50.116	49.624	48.219
TAMILNADU	33.309	31.542	30.891	30.020
POWER EXCHANGE(IEX)	0.000	0.000	0.000	0.000
POWER EXCHANGE(PX)	0.000	0.000	0.000	0.000
TOTAL	**2438.330**	**2359.350**	**1938.235**	**1879.021**

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 RAJASTHAN	-14.629	-15.130	-14.629	-15.130
TO POWER EXCHANGE (IEX)	-243.432	-251.035	-243.432	-251.035
TO POWER EXCHANGE (PX)	-11.994	-12.350	-11.994	-12.350
TOTAL	**-270.055**	**-278.515**	**-270.055**	**-278.515**
TOTAL SCHEDULED DRAWAL FROM THE GRID	**2168.274**	**2080.835**	**1668.180**	**1600.506**
TOTAL CONSUMPTION INCLUDING AUX. OF GENERATING STNs. EXCLUDING BTPS				1966.557
NET CONSUMPTION				1953.657
AVAILABILITY WITHIN DELHI				699.396
ACTUAL DRAWAL FROM THE GRID				1253.261
OVER DRAWAL(+)/UNDER DRAWAL(-) FROM THE GRID ON THE BASIS OF SCHEDULED ALLOCATION MADE BY NRLDC TO DELHI AT PERIPHERY				(-)347.245
LOAD SHEDDING				**1.769**
UNRESTRICTED DEMAND (GROSS)				**1968.326**
UNRESTRICTED DEMAND (NET)				**1954.426**
MAX. NET CONSUMPTION				71.440Mus. ON 07.10.2010
MAX. LOAD SHEDDING				311 MW ON 22.10.2010 AT 17.00HRS.
PEAK LOAD	Peak Demand during the month			SHEDDING AT PEAK TIME
DAY PEAK	3490MW AT 12:30:00HRS ON 07.10.2010			0 MW
EVENING PEAK	3683MW AT 18:34:17HRS ON 07.10.2010			0 MW
P.L.F. OF GENCO AND PRAGATI STNs.	RPH			30.28%
	GT			69.00%
	PRAGATI			72.07%
	RITHALA			16.52%

9 SHEDDING DETAILS DURING THE MONTH OF OCTOBER 2010.

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 drawal / 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
1-Oct-10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
2- Oct-10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
3- Oct-10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
4- Oct-10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
5- Oct-10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
6- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
7- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
8- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
9- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
10- Oct-10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
11- Oct-10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
12- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
13- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
14- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
15- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
16- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
17- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
18- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
19- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
20- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
21- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
22- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
23- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
24- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
25- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
26- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
27- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
28- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
29- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
30- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
31- Oct -10	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
Total	**0**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

ALL FIGURES IN MUs

Date	Shedding due to Transmission/Grid Constraints in Central Sector Stations / TTC / ATC VOILATION				TOTAL	TOTAL SHEDDING DUE TO GRID RESTRICTIONS	Due to T&D Constraints				
							DTL				
	BSES		NDPL	NDMC			BSES		NDPL	NDMC	MES
	BYPL	BRPL					BYPL	BRPL			
1	12	13	14	15	**16=8to15**	**17=16+7**	18	19	20	21	22
1-Oct-10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.000	0.000	0.000
2- Oct-10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.117	0.002	0.000	0.000
3- Oct-10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.006	0.000	0.008	0.000	0.000
4- Oct-10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.022	0.000	0.000
5- Oct-10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.024	0.000	0.000
6- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.000	0.000	0.000
7- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.004	0.000	0.000	0.000
8- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.030	0.000	0.000	0.000
9- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.000	0.000	0.000
10- Oct-10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.003	0.000	0.009	0.000	0.000
11- Oct-10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.001	0.000	0.000
12- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.000	0.000	0.000
13- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.037	0.000	0.000	0.000
14- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.081	0.130	0.000	0.007	0.000
15- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.026	0.000	0.000	0.000
16- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.000	0.000	0.000
17- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.001	0.000	0.000	0.000
18- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.010	0.000	0.000	0.000
19- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.001	0.000	0.000
20- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.015	0.000	0.000	0.000	0.000
21- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.079	0.001	0.000	0.000
22- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.008	0.039	0.007	0.000	0.000
23- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.002	0.000	0.000	0.000
24- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.014	0.000	0.000	0.000	0.000
25- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.001	0.011	0.000	0.000	0.000
26- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.002	0.000	0.000
27- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.015	0.000	0.000	0.000
28- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.000	0.000	0.000
29- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.000	0.000	0.000
30- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.000	0.000	0.000
31- Oct -10	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.000	0.000	0.000
Total	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.128**	**0.501**	**0.077**	**0.007**	**0.000**

ALL FIGURES IN MUs

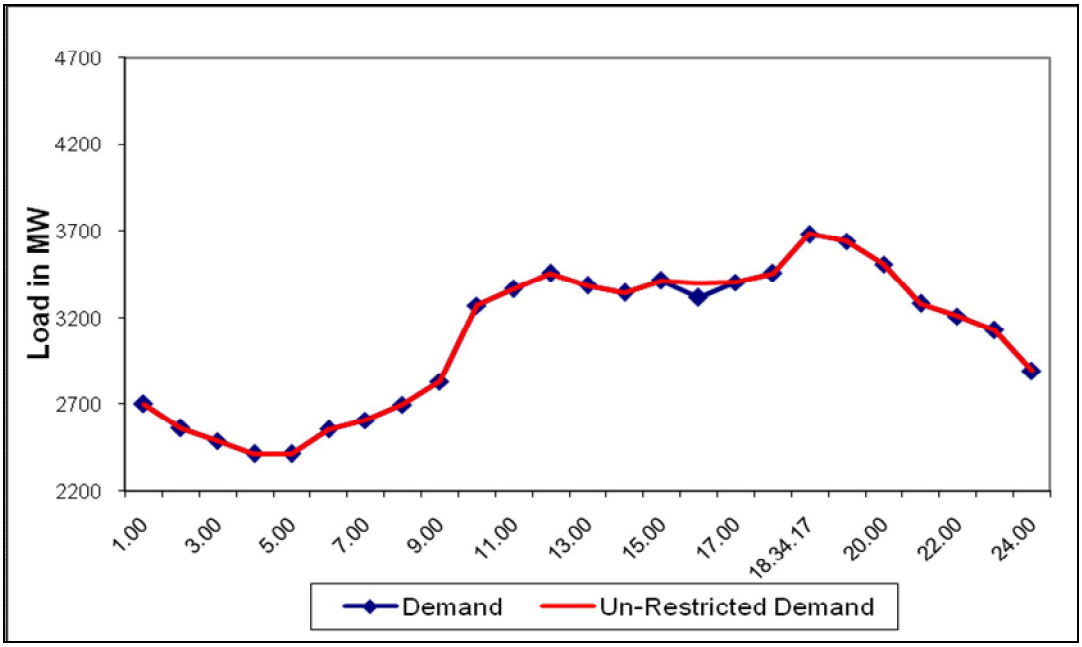
DATE	DUE TO T&D CONTRAINTS			OTHER AGENCIES LIKE GENCO, BBMB, BTPS ETC.	THEFT PRONE SHEDDING			TOTAL SHEDDING DUE TO T&D CONSTS. & THEFT PRONE	GRAND TOTAL
	DISCOMS								
	BSES		NDPL		BSES		NDPL		
	BYPL	BRPL			BYPL	BRPL			
1	23	24	25	2+	27	28	29	30=18 to29	31=30+17
1-Oct-10	0.000	0.013	0.006	0.000	0.000	0.000	0.000	**0.019**	**0.019**
2- Oct-10	0.000	0.001	0.008	0.003	0.000	0.000	0.000	**0.131**	**0.131**
3- Oct-10	0.000	0.011	0.001	0.000	0.000	0.000	0.000	**0.026**	**0.026**
4- Oct-10	0.015	0.000	0.023	0.000	0.000	0.000	0.000	**0.060**	**0.060**
5- Oct-10	0.000	0.017	0.004	0.000	0.000	0.000	0.000	**0.045**	**0.045**
6- Oct -10	0.036	0.001	0.005	0.000	0.000	0.000	0.000	**0.042**	**0.042**
7- Oct -10	0.021	0.000	0.001	0.000	0.000	0.000	0.000	**0.026**	**0.026**
8- Oct -10	0.000	0.000	0.007	0.000	0.000	0.000	0.000	**0.037**	**0.037**
9- Oct -10	0.000	0.003	0.000	0.000	0.000	0.000	0.000	**0.003**	**0.003**
10- Oct-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.012**	**0.012**
11- Oct-10	0.000	0.006	0.000	0.000	0.000	0.000	0.000	**0.007**	**0.007**
12- Oct -10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**
13- Oct -10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.037**	**0.037**
14- Oct -10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.218**	**0.218**
15- Oct -10	0.006	0.000	0.000	0.000	0.000	0.000	0.000	**0.032**	**0.032**
16- Oct -10	0.026	0.006	0.005	0.000	0.000	0.000	0.000	**0.037**	**0.037**
17- Oct -10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.001**	**0.001**
18- Oct -10	0.025	0.000	0.001	0.000	0.000	0.000	0.000	**0.036**	**0.036**
19- Oct -10	0.000	0.011	0.000	0.000	0.000	0.000	0.000	**0.012**	**0.012**
20- Oct -10	0.021	0.263	0.000	0.000	0.000	0.000	0.000	**0.299**	**0.299**
21- Oct -10	0.001	0.001	0.000	0.000	0.000	0.000	0.000	**0.082**	**0.082**
22- Oct -10	0.146	0.051	0.123	0.000	0.000	0.000	0.000	**0.374**	**0.374**
23- Oct -10	0.003	0.025	0.001	0.000	0.000	0.000	0.000	**0.031**	**0.031**
24- Oct -10	0.020	0.000	0.000	0.000	0.000	0.000	0.000	**0.034**	**0.034**
25- Oct -10	0.000	0.015	0.000	0.000	0.000	0.000	0.000	**0.027**	**0.027**
26- Oct -10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.002**	**0.002**
27- Oct -10	0.000	0.025	0.011	0.000	0.000	0.000	0.000	**0.051**	**0.051**
28- Oct -10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**
29- Oct -10	0.000	0.033	0.026	0.000	0.000	0.000	0.000	**0.059**	**0.059**
30- Oct -10	0.000	0.000	0.021	0.008	0.000	0.000	0.000	**0.029**	**0.029**
31- Oct -10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**
Total	**0.320**	**0.482**	**0.243**	0.011	**0.000**	**0.000**	**0.000**	**1.769**	**1.769**

DATE	(NET CONS.)	MAXI. DEMAND MET DURING THE DAY	TIME OF OCCUR-RENCE OF MAX DEMAND	SHEDDING AT THIS TIME	UN-REST-RICTED DEMAND	MAXIMUM UN-REST-RICTED 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
1-Oct-10	69.340	3594	18:51	3	**3597**	**3597**	18:51	3594	3
2- Oct-10	60.782	3019	20:50:58	0	**3019**	**3019**	20:50:58	3019	0
3- Oct-10	61.995	3124	19:41:41	0	**3124**	**3124**	19:41:41	3124	0
4- Oct-10	70.114	3567	19:04:29	1	**3568**	**3568**	19:04:29	3567	1
5- Oct-10	69.911	3602	18:45:14	4	**3606**	**3606**	18:45:14	3602	4
6- Oct -10	70.118	3658	18:51:37	0	**3658**	**3658**	18:51:37	3658	0
7- Oct -10	71.440	3683	18:34:17	0	**3683**	**3683**	18:34:17	3683	0
8- Oct -10	69.984	3639	18:48:05	0	**3639**	**3639**	18:48:05	3639	0
9- Oct -10	67.840	3564	18:49:06	0	**3564**	**3564**	18:49:06	3564	0
10- Oct-10	61.829	3221	19:07:15	0	**3221**	**3221**	19:07:15	3221	0
11- Oct-10	65.789	3500	18:46:46	0	**3500**	**3500**	18:46:46	3500	0
12- Oct -10	67.448	3550	19:33:14	0	**3550**	**3550**	19:33:14	3550	0
13- Oct -10	67.365	3569	18:46:15	0	**3569**	**3569**	18:46:15	3569	0
14- Oct -10	62.339	3280	19:15:56	0	**3280**	**3280**	19:15:56	3280	0
15- Oct -10	67.293	3550	18:54:26	0	**3550**	**3550**	18:54:26	3550	0
16- Oct -10	65.541	3430	18:48:15	0	**3430**	**3430**	18:48:15	3430	0
17- Oct -10	60.113	2889	21:42:54	0	**2889**	**2889**	21:42:54	2889	0
18- Oct -10	67.943	3636	18:47:11	0	**3636**	**3636**	18:47:11	3636	0
19- Oct -10	69.918	3652	18:45:52	0.23	**3652**	**3652**	18:45:52	3652	0.23
20- Oct -10	69.781	3623	18:44:53	33	**3656**	**3656**	18:44:53	3623	33
21- Oct -10	68.887	3667	18:48:48	10	**3677**	**3677**	18:48:48	3667	10
22- Oct -10	64.105	3356	11:58:56	0	**3356**	**3356**	11:58:56	3356	0
23- Oct -10	57.361	3206	18:46:19	0	**3206**	**3206**	18:46:19	3206	0
24- Oct -10	53.532	2849	18:38:45	0	**2849**	**2849**	18:38:45	2849	0
25- Oct -10	55.092	3117	18:34:37	0	**3117**	**3117**	18:34:37	3117	0
26- Oct -10	54.175	3096	18:32:49	0	**3096**	**3096**	18:32:49	3096	0
27- Oct -10	53.998	3106	18:49:20	2	**3108**	**3108**	18:49:20	3106	2
28- Oct -10	53.542	3113	18:46:16	0	**3113**	**3113**	18:46:16	3113	0
29- Oct -10	53.653	3122	18:36:04	0	**3122**	**3122**	18:36:04	3122	0
30- Oct -10	52.403	3042	18:18:30	0	**3042**	**3042**	18:18:30	3042	0
31- Oct -10	49.026	2834	18:32:57	0	**2834**	**2834**	18:32:57	2834	0
Total	**1952.657**	**3683**	**18:34:17**	0	**3683**	**3683**			

10 LOAD PATTERN OF DELHI ON THE DAY OF PEAK DEMAND MET DURING OCTOBER 2010 ON 07.10.2010 – 3683MW at 18:34:17HRS.

All figures in MW

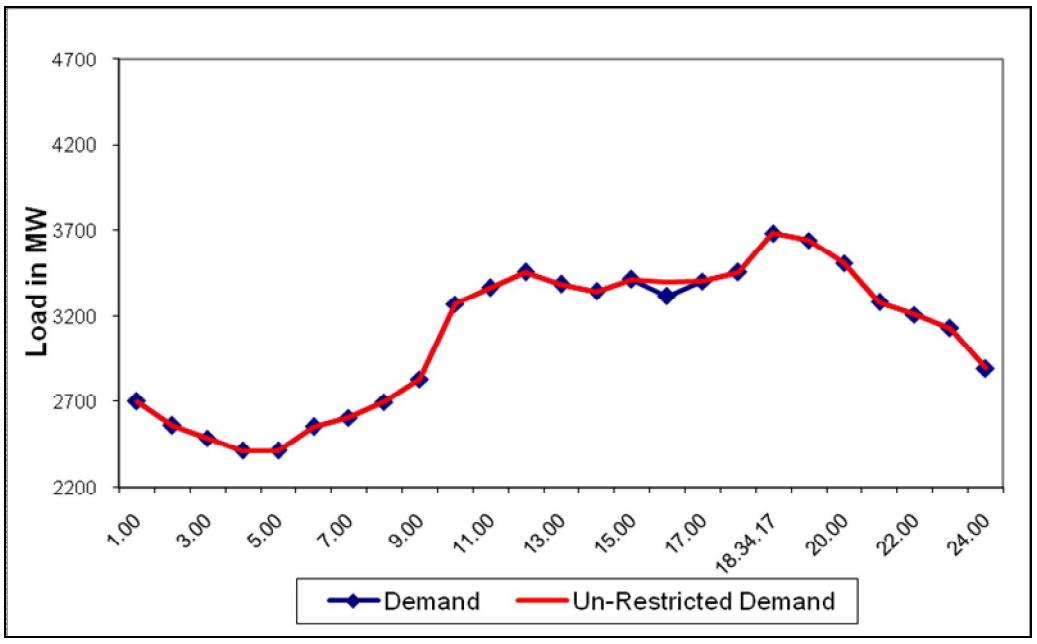
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	2702	0	2702
2.00	2563	0	2563
3.00	2490	0	2490
4.00	2416	0	2416
5.00	2416	0	2416
6.00	2556	0	2556
7.00	2608	0	2608
8.00	2700	0	2700
9.00	2833	0	2833
10.00	3273	0	3273
11.00	3368	0	3368
12.00	3457	0	3457
13.00	3389	0	3389
14.00	3346	0	3346
15.00	3414	0	3414
16.00	3317	84	3401
17.00	3404	0	3404
18.00	3457	0	3457
18.34.17	**3683**	0	3683
19.00	3642	0	3642
20.00	3509	0	3509
21.00	3284	0	3284
22.00	3209	0	3209
23.00	3128	0	3128
24.00	2894	0	2894
ENERGY IN Mus	71.440	0.000	71.440



11 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UN-RESTRICTED DEMAND DURING OCTOBER 2010 – 07.10.2010– 3683MW at 18:34:17HRS.

All figures in MW

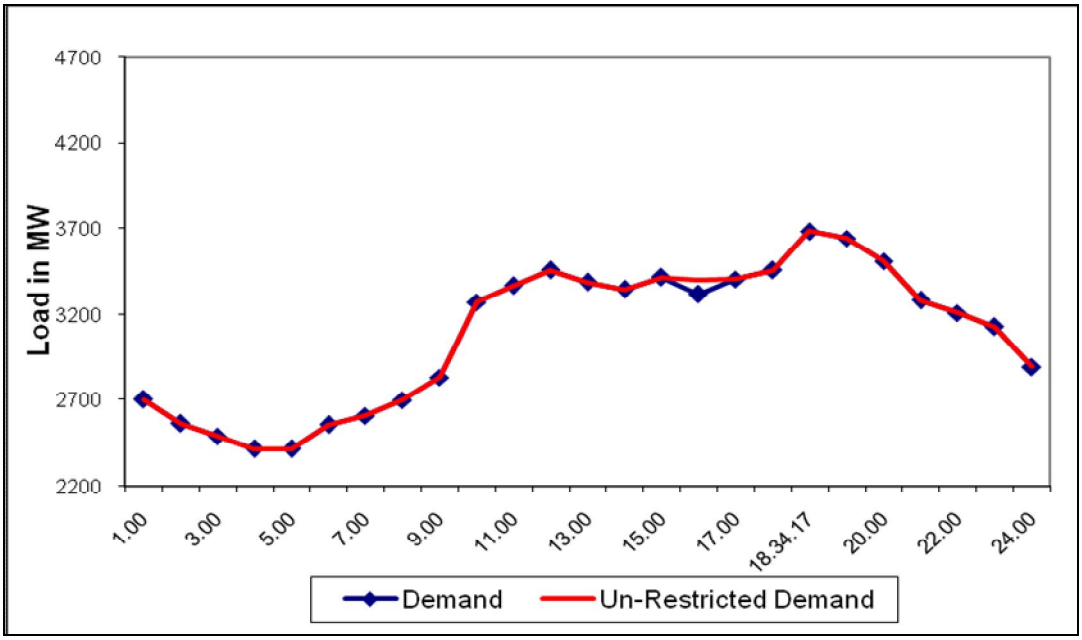
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	2702	0	2702
2.00	2563	0	2563
3.00	2490	0	2490
4.00	2416	0	2416
5.00	2416	0	2416
6.00	2556	0	2556
7.00	2608	0	2608
8.00	2700	0	2700
9.00	2833	0	2833
10.00	3273	0	3273
11.00	3368	0	3368
12.00	3457	0	3457
13.00	3389	0	3389
14.00	3346	0	3346
15.00	3414	0	3414
16.00	3317	84	3401
17.00	3404	0	3404
18.00	3457	0	3457
18.34.17	3683	0	**3683**
19.00	3642	0	3642
20.00	3509	0	3509
21.00	3284	0	3284
22.00	3209	0	3209
23.00	3128	0	3128
24.00	2894	0	2894
ENERGY IN Mus	71.440	0.000	71.440



12 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM ENERGY CONSUMED DURING OCTOBER 2010 – 07.10.2010 – 71.440 Mus

All figures in MW

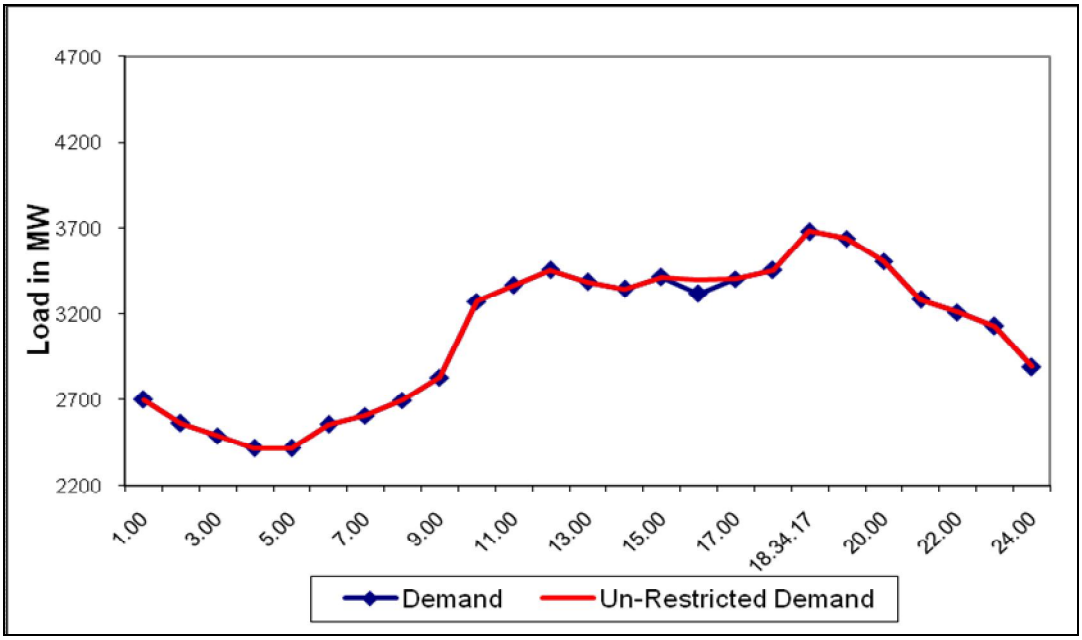
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	2702	0	2702
2.00	2563	0	2563
3.00	2490	0	2490
4.00	2416	0	2416
5.00	2416	0	2416
6.00	2556	0	2556
7.00	2608	0	2608
8.00	2700	0	2700
9.00	2833	0	2833
10.00	3273	0	3273
11.00	3368	0	3368
12.00	3457	0	3457
13.00	3389	0	3389
14.00	3346	0	3346
15.00	3414	0	3414
16.00	3317	84	3401
17.00	3404	0	3404
18.00	3457	0	3457
18.34.17	3683	0	3683
19.00	3642	0	3642
20.00	3509	0	3509
21.00	3284	0	3284
22.00	3209	0	3209
23.00	3128	0	3128
24.00	2894	0	2894
ENERGY IN Mus	**71.440**	0.000	71.440



13 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED ENERGY DEMAND DURING OCTOBER 2010 – 07.10.2010 – 71.466Mus

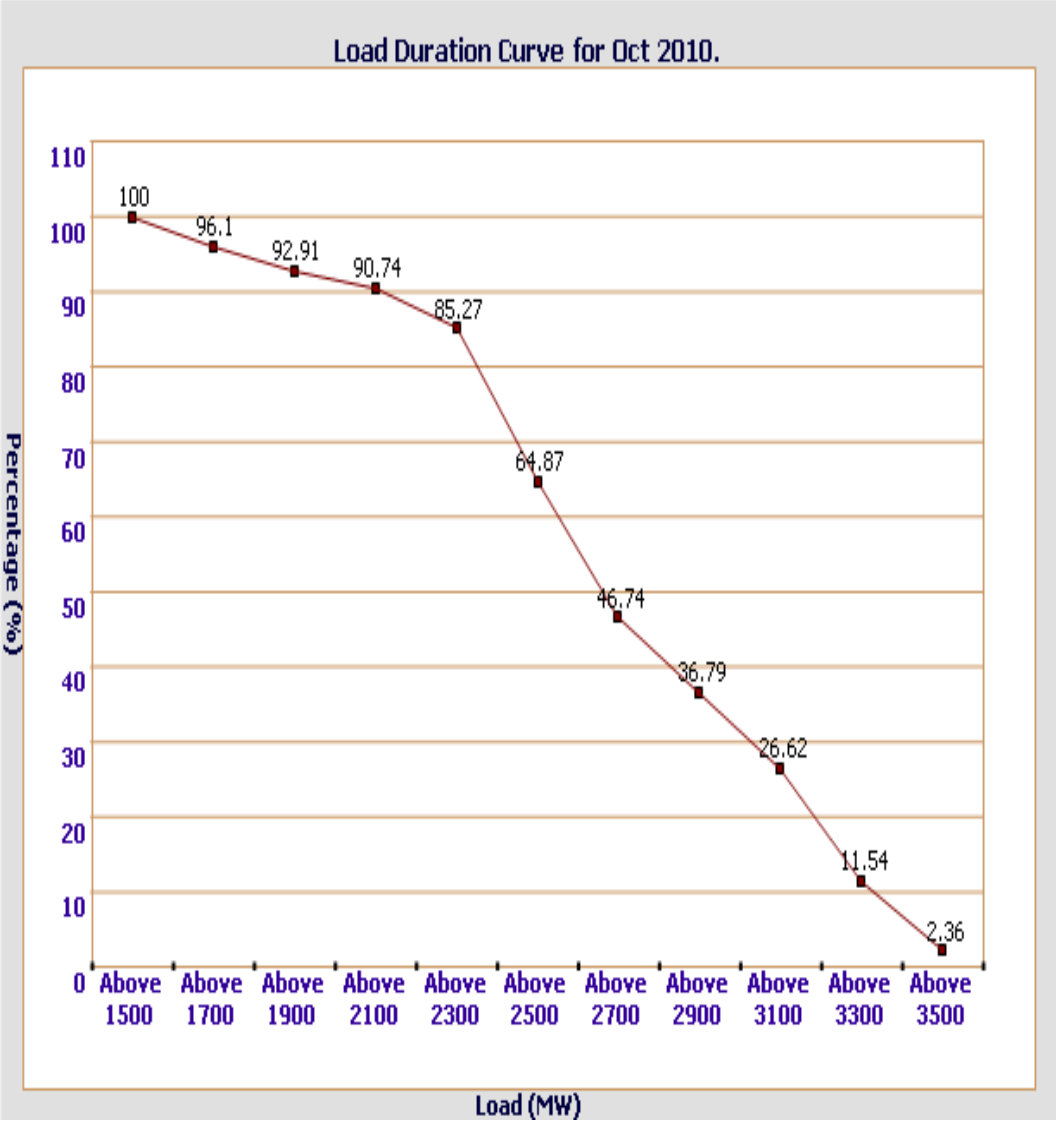
All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	2702	0	2702
2.00	2563	0	2563
3.00	2490	0	2490
4.00	2416	0	2416
5.00	2416	0	2416
6.00	2556	0	2556
7.00	2608	0	2608
8.00	2700	0	2700
9.00	2833	0	2833
10.00	3273	0	3273
11.00	3368	0	3368
12.00	3457	0	3457
13.00	3389	0	3389
14.00	3346	0	3346
15.00	3414	0	3414
16.00	3317	84	3401
17.00	3404	0	3404
18.00	3457	0	3457
18.34.17	3683	0	3683
19.00	3642	0	3642
20.00	3509	0	3509
21.00	3284	0	3284
22.00	3209	0	3209
23.00	3128	0	3128
24.00	2894	0	2894
ENERGY IN Mus	71.440	0.000	**71.440**



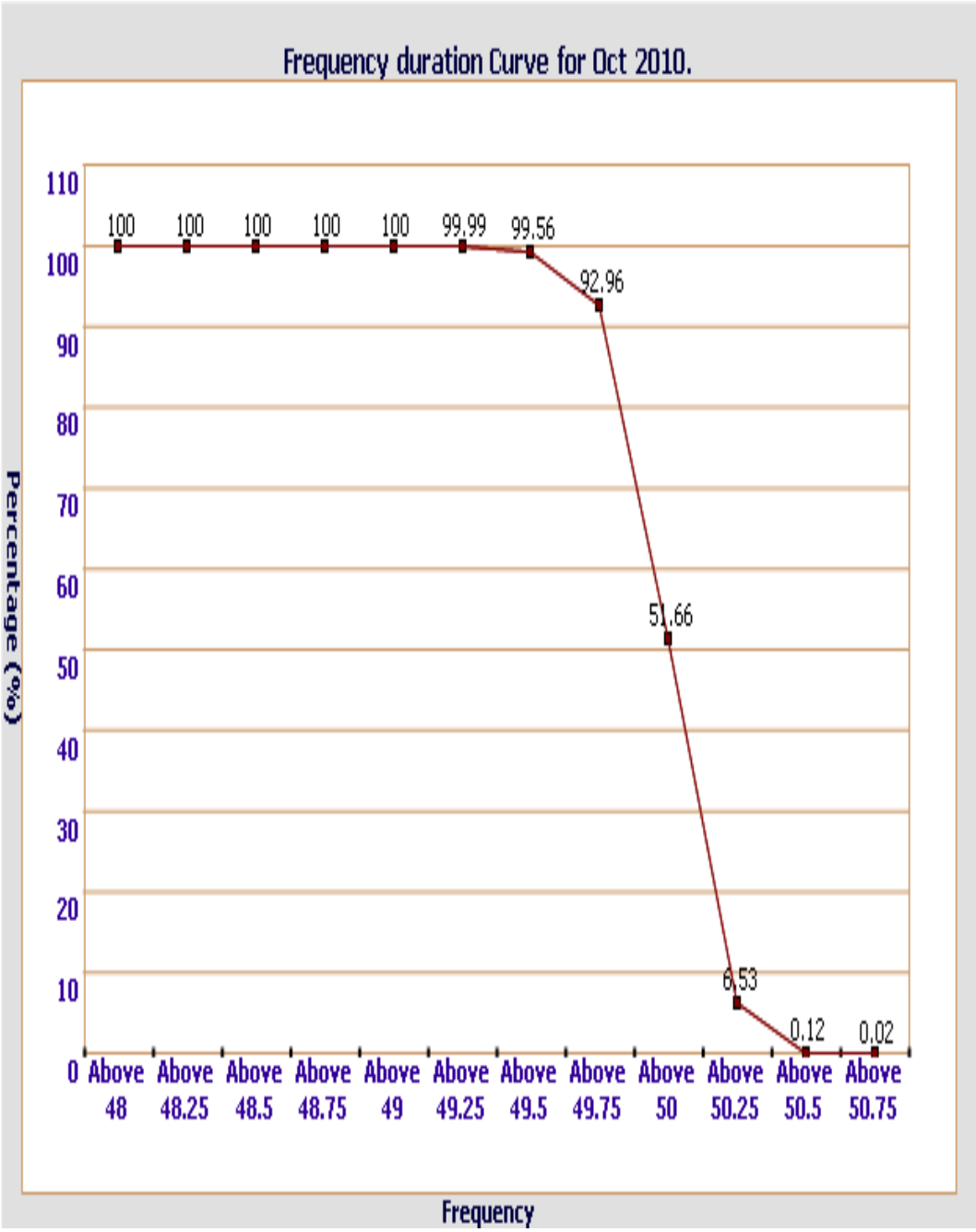
14 LOAD DURATION CURVE FOR OCTOBER 2010

Load in MW	Percentage of Time
Above 1500	100 %
Above 1700	96.1 %
Above 1900	92.91 %
Above 2100	90.74 %
Above 2300	85.27 %
Above 2500	64.87 %
Above 2700	46.74 %
Above 2900	36.79 %
Above 3100	26.62 %
Above 3300	11.54 %
Above 3500	2.36 %



15 FREQUENCY ANALYSIS FOR THE MONTH OF OCTOBER 2010

Frequency Range in Hz.	Percentage of time
Above 49	100 %
Above 49.25	99.99 %
Above 49.5	99.56 %
Above 49.75	92.96 %
Above 50	51.66 %
Above 50.25	6.53 %
Above 50.5	0.12 %
Above 50.75	0.02 %



16 VOLTAGE PROFILE OF 220 KV SUB-STATIONS IN DELHI DURING OCTOBER 2010

All figures in kV

Date	NARELA		GAZIPUR	
	Max	Min	Max	Min
1-Oct-10	224.66	212.03	230.47	211.90
2- Oct -10	224.28	214.99	229.82	213.44
3- Oct -10	223.38	213.44	225.31	211.12
4- Oct -10	224.02	212.80	224.92	211.51
5- Oct -10	224.02	213.44	225.57	214.48
6- Oct -10	223.63	212.15	225.44	214.99
7- Oct -10	221.57	212.67	224.02	209.83
8- Oct -10	221.57	212.15	224.79	211.25
9- Oct -10	223.76	213.83	226.73	217.70
10- Oct -10	224.66	216.67	228.28	218.60
11- Oct -10	223.50	212.80	228.79	215.25
12- Oct -10	223.76	213.70	232.02	213.15
13- Oct -10	224.15	212.54	230.08	216.41
14- Oct -10	230.60	204.16	229.82	219.12
15- Oct -10	232.79	218.99	229.18	211.77
16- Oct -10	232.02	219.25	231.37	208.03
17- Oct -10	233.31	224.41	238.98	218.86
18- Oct -10	233.31	220.80	236.27	213.44
19- Oct -10	231.37	220.54	230.86	219.76
20- Oct -10	231.50	219.89	230.73	217.76
21- Oct -10	232.15	220.80	231.24	220.15
22- Oct -10	235.76	221.05	236.27	220.15
23- Oct -10	235.76	215.12	233.05	219.51
24- Oct -10	233.82	214.09	234.98	221.09
25- Oct -10	235.24	221.83	233.95	220.15
26- Oct -10	233.82	220.92	232.53	219.12
27- Oct -10	234.98	218.60	233.95	216.93
28- Oct -10	234.47	222.21	233.82	215.25
29- Oct -10	232.15	217.83	233.43	216.93
30- Oct -10	232.66	217.96	232.15	217.06
31- Oct -10	233.43	223.12	232.79	222.34

17 VOLTAGE PROFILE OF 400 KV SUB-STATIONS IN DELHI DURING OCTOBER 2010

All figures in kV

Date	400kV Bamnauli Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
1-Oct-10	415.98	04.04.36	393.24	12.20.55	402.79
2- Oct -10	414.34	06.15.54	397.46	18.59.50	406.02
3- Oct -10	412.23	04.00.27	396.29	18.41.27	405.33
4- Oct -10	412.00	04.03.01	392.77	18.41.07	403.70
5- Oct -10	413.17	04.02.34	398.16	14.38.51	404.47
6- Oct -10	412.47	03.12.05	395.82	18.40.36	404.07
7- Oct -10	408.48	03.57.36	394.41	10.11.19	400.94
8- Oct -10	408.95	04.00.58	391.13	14.30.51	401.88
9- Oct -10	412.00	03.35.28	396.99	11.21.36	405.23
10- Oct -10	413.64	04.00.09	399.81	00.20.46	407.28
11- Oct -10	412.00	03.24.05	393.94	14.32.22	403.51
12- Oct -10	413.87	04.00.49	395.12	18.26.10	404.38
13- Oct -10	413.64	03.57.02	390.89	17.37.51	398.92
14- Oct -10	411.53	21.45.54	391.60	11.47.31	404.00
15- Oct -10	413.87	04.02.46	392.07	14.00.12	401.19
16- Oct -10	413.17	06.31.08	389.02	11.49.57	401.97
17- Oct -10	413.17	17.36.20	396.99	00.11.45	406.33
18- Oct -10	414.58	03.33.13	387.85	11.21.44	402.58
19- Oct -10	410.36	03.58.03	390.43	13.53.48	400.53
20- Oct -10	410.12	21.47.54	399.34	11.47.17	408.61
21- Oct -10	410.36	03.52.14	390.19	12.18.44	400.48
22- Oct -10	411.06	03.16.06	--	--	403.83
23- Oct -10	--	--	--	--	--
24- Oct -10	--	--	--	--	--
25- Oct -10	--	--	--	--	--
26- Oct -10	--	--	--	--	--
27- Oct -10	415.52	21.44.29	--	--	405.13
28- Oct -10	415.75	04.00.20	391.13	14.39.32	403.91
29- Oct -10	416.22	04.01.56	389.02	17.56.52	403.52
30- Oct -10	413.87	21.48.22	389.96	18.25.00	401.89
31- Oct -10	416.22	23.41.24	397.93	12.05.47	407.09

Date	400kV Bawana Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
1-Oct-10	418.10	04.04.56	396.29	12.20.55	405.27
2- Oct -10	416.22	06.17.44	401.68	00.06.03	408.66
3- Oct -10	414.58	03.50.16	399.57	18.41.27	407.99
4- Oct -10	414.58	04.03.01	396.05	18.41.07	406.70
5- Oct -10	415.75	04.01.04	401.45	09.44.23	407.41
6- Oct -10	414.81	04.01.07	399.57	18.41.16	406.92
7- Oct -10	410.83	21.25.57	397.23	10.11.29	403.44
8- Oct -10	411.30	08.03.00	394.88	14.30.51	404.51
9- Oct -10	413.87	03.52.20	399.57	11.21.36	407.80
10- Oct -10	415.98	03.59.49	--	--	410.09
11- Oct -10	415.98	03.59.57	398.63	14.32.22	408.02
12- Oct -10	418.33	04.00.49	400.27	09.44.50	409.07
13- Oct -10	418.33	03.59.23	397.23	17.35.41	403.99
14- Oct -10	416.22	21.46.04	396.99	11.47.21	408.76
15- Oct -10	417.86	03.20.23	--	--	405.41
16- Oct -10	416.92	06.31.28	--	--	409.02
17- Oct -10	418.33	17.35.40	404.49	00.10.25	411.94
18- Oct -10	419.50	03.53.55	398.40	11.21.34	409.26
19- Oct -10	415.52	03.57.53	396.76	13.53.38	407.09
20- Oct -10	418.33	21.47.54	399.34	11.47.17	408.61
21- Oct -10	418.33	03.51.34	400.98	12.45.16	409.83
22- Oct -10	425.36	17.02.42	401.45	11.18.14	414.30
23- Oct -10	425.13	03.06.38	402.15	18.22.28	413.92
24- Oct -10	424.43	03.10.36	404.03	18.27.15	416.21
25- Oct -10	422.55	03.24.05	402.62	09.40.48	412.53
26- Oct -10	420.91	03.15.23	398.40	09.50.55	410.51
27- Oct -10	421.85	21.44.39	395.58	15.48.11	403.03
28- Oct -10	420.91	03.57.30	394.65	17.55.43	408.77
29- Oct -10	421.389	04.01.56	396.76	18.06.42	408.76
30- Oct -10	419.50	21.49.32	395.82	18.23.50	406.38
31- Oct -10	420.44	21.12.06	403.79	12.05.57	412.28

18 DETAILS OF LUMPED CAPACITORS AT NEAREST 220 KV SUBSTATION

a) Delhi Transco Limited (DTL)

Name of the Sub-stn	Voltage (KV)	Installed Capacity (MVAR)	Working Capacity (MVAR)	ReAprks
Patparganj	66	20	20	
	66	20	20	
	33	10	10	
	33	10	10	
	11	5.04	5.04	
Kashmere Gate	11	5.04	5.04	
Gazipur	66	20	20	
	66	20	20	
	11	5.04	5.04	
Okhla	66	20	20	
	66	20	20	
	66	20	20	
	33	10	10	
	11	5.04	5.04	
Lodhi Road	33	10	10	
	33	10	10	
	11	5.976	0	TEMPORARILY DISMANTLED ON 11.11.2006 FOR TAKING OUT 100MVA PR. TX.-I
Sarita Vihar	66	20	20	
	11	5.04	5.04	
Vasant Kunj	66	20	20	
	66	20	20	
	11	5.04	5.04	
Mehrauli	66	20	20	
	66	20	20	
	66	20	20	
	66	20	20	
	11	5.04	5.04	
Najafgarh	66	20	20	
	66	20	20	
	66	20	20	
	11	5.04	5.04	
Narela	66	20	20	
	66	20	20	
	11	5.04	5.04	

Name of the sub-stn	Voltage (KV)	Installed Capacity (MVAR)	Working Capacity (MVAR)	Remarks
Shalimar Bagh	33	10	10	
	33	10	10	
	33	10	10	
	33	10	10	
	11	6	6	
Rohini	66	20	20	
	66	20	20	
	11	6	6	
Gopalpur	33	10	10	
	33	10	10	
	33	10	10	
	11	5.04	5.04	
Subzi Mandi	11	6	6	
Kanjhawala	66	20	20	
	11	5.04	5.04	
Park Street	66	20	20	
	33	10	10	
	33	10	10	
Papankalan-I	66	20	20	
	11	5.04	5.04	
Naraina	33	10	10	
	33	10	10	
	11	5.04	5.04	
	Total Capacity	749.496	743.700	

B. IPGCL

Name of the Sub-stn	Voltage (KV)	Installed Capacity (MVAR)	Working Capacity (MVAR)	Remarks
IP	33	10	10	
	33	10	10	
	33	10	10	
	33	10	0	OUT SINCE 08.04.2005. CELLS DAMAGED, ORDER PLACED ON BHEL
RPH	11	5.04	5.04	
	33	10	10	
	33	10	10	
	Total Capacity	65.04	55.04	

Sl. No	Name of the Grid S/Sub-Station	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	**TOTAL**
1	**IP STATION**		30		**30**
1	Kamla market			9.65	**9.65**
2	Minto Road			5.45	**5.45**
3	GB Pant Hosp			5.45	**5.45**
4	Delhi Gate			10.9	**10.9**
5	Tilak Marg			5.04	**5.04**
6	Electric Lane			5.04	**5.04**
7	Connaught Place			10.08	**10.08**
8	Kilokri		10	10.48	**20.48**
9	NDSE			5.04	**5.04**
10	AIIMS		10	5.04	**15.04**
11	Nizamuddin			5.04	**5.04**
12	Exhibition-I		10		**10**
13	Exhibition-II				
14	Defence Colony			10.9	**10.9**
15	IG Stadium		10		**10**
16	Lajpat Nagar			5.04	**5.04**
	Total				**163.15**
2	**IP Extn.**				
1	School Lane			5.04	**5.04**
2	Scindia House			5.04	**5.04**
3	Vidyut Bhawan			15.12	**15.12**
4	Nirman Bhawan			5.04	**5.04**
5	Dalhousie Road			5.04	**5.04**
	Total				**35.28**
3	**RPH Station**		20	5.04	**25.04**
1	Lahori Gate			10.45	**10.45**
2	Jama Masjid			5.03	**5.03**
4	Kamla market			5.45	**5.45**
5	Minto Road			5.45	**5.45**
6	GB Pant Hosp			5.03	**5.03**
7	IG Stadium			5.45	**5.45**
8	IP Estate			10.9	**10.9**
	Total				**72.8**

Sl. No	Name of the Grid S/Sub-Station	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	TOTAL
4	**Parkstreet S/stn**	20	20		**40**
1	Shastri Park		10	5.45	**15.45**
2	Faiz Road			10.9	**10.9**
3	Motia Khan			16.3	**16.3**
4	Parshad Nagar			16.3	**16.3**
5	Anand Parbat			10.8	**10.8**
6	Shankar Road			5.04	**5.04**
7	Rama Road			14.4	**14.4**
8	Baird Road			10.08	**10.08**
9	Hanuman Road			5.04	**5.04**
10	Pusa			7.2	**7.2**
11	Ridge Valley				
12	SJ Airport			5.04	**5.04**
13	B. D. Aprg				
	Total				**156.55**
5	**Naraina S/stn**		20	5.04	**25.04**
1	DMS			10.45	**10.45**
2	Mayapuri		10	5	**15**
3	Inderpuri		10	5.04	**15.04**
4	Rewari line			7.2	**7.2**
5	Khyber Lane		10		**10**
6	Kirbi Place			5	**5**
7	Payal Cinema			14.4	**14.4**
	Total				**102.13**
6	**Mehrauli S/stn**	80		5.04	**85.04**
1	Adchini			15.12	**15.12**
2	Andheria Bagh			10.85	**10.85**
3	IIT			10.9	**10.9**
4	JNU		10	10.08	**20.08**
5	Bijwasan			10.08	**10.08**
6	DC Saket		10	4.54	**14.54**
7	Malviya Nagar	20			**20**
8	C Dot				
9	Vasant kunj B-Blk	20		10.9	**30.9**
10	Vasant kunj C-Blk	20		5.45	**25.45**
11	Palam				
12	IGNOU				
13	R. K. Puram-I			10.08	**10.08**
14	Vasant Vihar			10.08	**10.08**
15	Bhikaji Cama Place		10	10.08	**20.08**
	Total				**283.2**
7	**Vasantkunj S/stn**	40		5.04	**45.04**
2	R. K. Puram-II			3.6	**3.6**
4	Vasant kunj C-Blk			5.04	**5.04**
5	Vasant kunj D-Blk	20		10.25	**30.25**
8	Race Course			5.04	**5.04**
9	Bapu Dhaam			5.04	**5.04**
10	Nehru Park			5.04	**5.04**
12	Ridge Valley				
	Total				**99.05**

Sl. No	Name of the Grid S/Sub-Station	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	**TOTAL**
8	**Okhla S/stn**	60	10	5.04	**75.04**
1	Balaji			7.2	**7.2**
2	East of Kailash			10	**10**
3	Alaknanda			10.85	**10.85**
4	Malviya Nagar		20	10.49	**30.49**
5	Masjid Moth			15.94	**15.94**
6	Nehru Place			21.35	**21.35**
7	Okhla Ph-I	20		10.9	**30.9**
8	Okhla Ph-II		20.93	10.49	**31.42**
9	Shivalik			10.9	**10.9**
10	Batra			15.8	**15.8**
11	VSNL			10.8	**10.8**
12	Siri Fort			10.49	**10.49**
13	Tuglakabad			10.8	**10.8**
	Total				**291.98**
9	**Lodhi Road S/stn**		20		**20**
1	Defence Colony				
2	Hudco			10.9	**10.9**
4	Lajpat Nagar			5.04	**5.04**
5	Nizamuddin			5.45	**5.45**
6	Vidyut Bhawan			10.08	**10.08**
7	Kidwai Nagar			5.04	**5.04**
8	Ex. Gr. II				
9	IHC				
	Total				**56.51**
10	**Sarita Vihar S/stn**	20		5.04	**25.04**
1	Sarita Vihar			10.08	**10.08**
2	MCIE			10.06	**10.06**
3	Mathura Road	20		5.04	**25.04**
4	Jamia Millia			5.4	**5.4**
5	Sarai Julena		10	10.9	**20.9**
	Total				**96.52**
11	**Wazirabad**				
1	Bhagirathi		10	10.9	**20.9**
2	Ghonda	20	20	15.94	**55.94**
3	Seelam Pur		10	21.39	**31.39**
4	Dwarkapuri			10.06	**10.06**
5	Nandnagri	20		16.35	**36.35**
6	Yamuna Vihar			10.8	**10.8**
7	East of Loni Road			10.8	**10.8**
8	Shastri Park			10.9	**10.9**
9	Karawal Nagar			5.4	**5.4**
	Total				**192.54**

Sl. No	Name of the Grid S/Sub-Station	INSTALLED CAPACITY MVAR			
		66KV	33kV	11kV	**TOTAL**
12	**Geeta Colony**				
1	Geeta Colony			10.49	**10.49**
2	Kanti Nagar			10.9	**10.9**
3	Kailash Nagar			15.48	**15.48**
4	Seelam Pur				
5	Shakar Pur				
	Total				**36.87**
13	**Gazipur S/stn**	40		5.04	**45.04**
1	Dallupura	20		10.9	**30.9**
2	Vivek Vihar			9.57	**9.57**
3	GT Road			10.85	**10.85**
4	Kondli	20		10.45	**30.45**
5	MVR-I			10.9	**10.9**
6	MVR-II	20		10.9	**30.9**
7	PPG Ind. Area			10.06	**10.06**
	Total				**178.67**
14	**Patparganj S/stn**	40	20	5.04	**65.04**
1	GH-I	20		10.45	**30.45**
2	GH-II	20		10.9	**30.9**
3	CBD		10	14.94	**24.94**
4	Guru Angad Nagar			15.49	**15.49**
5	Karkadooma		10	10.44	**20.44**
6	Preet Vihar			10.07	**10.07**
7	CBD-II			7.2	**7.2**
8	Shakarpur			5.4	**5.4**
9	Jhilmil			9	**9**
10	Dilshad Garden	20		16.35	**36.35**
11	Khichripur	20		10.49	**30.49**
12	Mother Dairy				
13	Scope Building				
14	Vivek Vihar				
	Total				**285.77**
15	**Najafgarh S/stn**	60		5.04	**65.04**
1	A4 Paschim Vihar			10.9	**10.9**
2	Nangloi	20		15.85	**35.85**
3	Nangloi W/W	20		5.45	**25.45**
4	Pankha Road			15.69	**15.69**
5	Jaffarpur			15.49	**15.49**
7	Sagarpur			15.9	**15.9**
8	Paschimpuri		10	15.53	**25.53**
9	Paschim Vihar	40		15.44	**55.44**
10	Mukherjee Park			15.49	**15.49**
11	Udyog Nagar			10.08	**10.08**
12	Choukhandi			10.08	**10.08**
	Total				**300.94**

Sl. No	Name of the Grid S/Sub-Station	INSTALLED CAPACITY			
		66KV	33kV	11kV	**TOTAL**
16	**Pappankalan-I S/stn**	20		5.04	**25.04**
1	Bindapur	20		15.9	**35.9**
2	Bodella-I	20		15.9	**35.9**
3	Bodella-II	20		14.53	**34.53**
4	DC Febakpuri			10.04	**10.04**
5	G-2 PPK (Nasirpur)			10.9	**10.9**
6	G-5 PPK (Matiala)			15.53	**15.53**
7	G-6 PPK			5.45	**5.45**
8	Harinagar	20		10.49	**30.49**
	Total				**203.78**
17	**BBMB Rohtak Road**				
1	S.B. Mill			10.08	**10.08**
1	GTK Road			12.64	**12.64**
1	Ram Pura			12.25	**12.25**
1	Rohtak Road			10.08	**10.08**
1	Vishal		10	5	**15**
1	Madipur			10.43	**10.43**
1	Sudershan Park			10.99	**10.99**
	Total				**81.47**
18	**ShaliAprbagh S/stn**		40	6	**46**
1	S.G.T. Nagar			13.15	**13.15**
2	Wazirpur-1			18.8	**18.8**
3	Wazirpur-2			14.4	**14.4**
4	ShaliAprbagh			5.44	**5.44**
5	Ashok Vihar			20.47	**20.47**
6	Rani Bagh			14.4	**14.4**
7	Haiderpur			13.15	**13.15**
8	SMB Fsc			7.2	**7.2**
	Total				**153.01**
19	**Subzimandi S/stn**			6	**6**
1	Shakti Nagar			5.04	**5.04**
2	Gulabibagh			7.32	**7.32**
3	Shahzadabagh			18.19	**18.19**
4	Tripolia			14.4	**14.4**
5	B. G. Road				
	Total				**50.95**
20	**Narela S/stn**	40		5.04	**45.04**
1	A-7 Narela			14.4	**14.4**
2	AIR Kham pur			13.15	**13.15**
3	Badli	20		5.95	**25.95**
4	DSIDC Narela-1	20		5.95	**25.95**
5	DSIDC Narela-2			14.4	**14.4**
6	Jahangirpuri				
	Total				**138.89**

Sl. No	Name of the Grid S/Sub-Station	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	**TOTAL**
21	**Gopalpur S/stn**		30	5.04	**35.04**
1	Azad Pur			21.6	**21.6**
2	Hudson Lane			5.95	**5.95**
3	Wazirabad			7.2	**7.2**
4	Indra Vihar			5.95	**5.95**
5	Tri Nagar			14.4	**14.4**
6	GTK Road			12.64	**12.64**
7	Jahangirpuri	20	20	5.95	**45.95**
8	DIFR			7.2	**7.2**
8	Civil lines				
	Total				**155.93**
22	**Rohini S/stn**	40		6	**46**
1	Rohini Sec-22			14.4	**14.4**
2	Rohini Sec-23	20		5.95	**25.95**
3	Rohini Sec-24			7.2	**7.2**
4	Rohini-1			5.95	**5.95**
5	Rohini-2			13.15	**13.15**
6	Rohini-3			5.95	**5.95**
7	Rohini-4			11.9	**11.9**
8	Rohini-5			13.15	**13.15**
9	Rohini-6	20		5.95	**25.95**
10	Mangolpuri-1			20.35	**20.35**
11	Mangolpuri-2	20		6	**26**
12	Saraswati Garden			11.9	**11.9**
13	Pitam Pura-1	20		12.6	**32.6**
14	Pitam Pura-2			12.24	**12.24**
15	Pitam Pura-3			7.32	**7.32**
	Total				**280.01**
23	**Kanjhawala S/stn**	20		5.04	**25.04**
1	Bawana Clear Water			14.64	**14.64**
2	Pooth Khoord			7.2	**7.2**
	Total				**46.88**
24	**BAWANA S/stn**				
1	Bawana S/stn No. 6			14.64	**14.64**
2	Bawana S/stn No. 7			7.2	**7.2**
	Total				**21.84**
25	**Kashmeregate**			5.04	**5.04**
1	Civil lines			12	**12**
2	Town Hall			10.49	**10.49**
3	Fountain			5.45	**5.45**
	Total				**32.98**
26	**Pappankalan-II**				
1	DMRC-I				
2	DMRC-II				
	Total				**0**

20 DETAILS OF BREAK-DOWNS DURING THE MONTH OF OCTOBER 2010

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REAPRKS
	DATE	TIME		DATE	TIME	
01	02.10.10	10.02	220KV BAWANA – KANJHAWALA CKT.	02.10.10	10.12	CKT. TRIPPED ON DIST PROT `R&Y' PHASE AT BAWANA.
02	02.10.10	10.50	220KV BTPS – NOIDA – GAZIPUR CKT.	02.10.10	10.56	CKT. TRIPPED ON `R' PHASE E/F AT BTPS. NO TRIPPING AT GAZIPUR
03	02.10.10	14.49	400KV BAMNAULI – BAWANA CKT-II	02.10.10	14.58	CKT. TRIPPED ON 85LO, 85LDX, 30CM2, 186R&B ON BOTH BREAKERS AT BAWANA. NO TRIPPING AT BAMNAULI.
04	03.10.10	20.45	220KV BAWANA – ROHINI CKT-I	03.10.10	20.50	CB-1052 OF 220KV BUS SECTION TRIPPED WITHOUT INDICATION AT BAWANA. BUS BAR PROTECTION OPERATED AT BAWANA
05	03.10.10	20.45	220KV BAWANA – KANJHAWALA CKT.	03.10.10	20.49	CB-1052 OF 220KV BUS SECTION TRIPPED WITHOUT INDICATION AT BAWANA. BUS BAR PROTECTION OPERATED AT BAWANA
06	03.10.10	20.45	220/66KV 100MVA PR. TR. AT BAWANA	03.10.10	20.47	CB-1052 OF 220KV BUS SECTION TRIPPED WITHOUT INDICATION AT BAWANA. BUS BAR PROTECTION OPERATED AT BAWANA
07	03.10.10	20.57	66/11KV 20MVA PR. TR-III AT WAZIRABAD	04.10.10	04.44	TR. TRIPPED ON DIFFERENTIAL, 87B, REF. 66KV `B' PHASE CT BLAST AND `R' PHASE ISOLATOR TO THE COMMON JUMPER DAMAGED.
08	04.10.10	10.39	220/66KV 160MVA TR-I AT RIDGE VALLEY	04.10.10	15.15	TR. TRIPPED ON 86AB, E/F LV SIDE
09	04.10.10	12.27	220KV BAWANA – SHALIMAR BAGH CKT-I & II	04.10.10	12.44	CKT-I TRIPPED ON 86AB, 96A AND CKT-II TRIPPED ON 186A&B, 96 AT SHALIMAR BAGH. NO TRIPPING AT BAWANA. BIRDAGE REPORTED AT SHALIMAR BAGH.
10	04.10.10	12.27	220KV BAWANA – ROHINI CKT-II	04.10.10	12.44	CKT. TRIPPED ON 186, 96 AT SHALIMAR BAGH. NO TRIPPING AT ROHINI
11	04.10.10	12.27	220/33KV 100MVA PR. TR.-I AT SHALIMAR BAGH	04.10.10	12.44	TR. TRIPPED ON 96, 186A&B.
12	05.10.10	06.40	220/66KV 160MVA PR. TR.-I AT RIDGE VALLEY	04.10.10	12.23	TR. TRIPPED ON TSTA , RSTB. ALONGWITH 66KV BUS –I
13	05.10.10	10.50	33/11KV 16MVA PR. TR.-I AT NARAINA	06.10.10	01.15	TR. TRIPPED ALONG WITH 11KV I/C-I ON O/C, E/F, 86.
14	07.10.10	18.51	220KV BAMNAULI – MEHRAULI CKT-I	07.10.10	18.55	CKT. TRIPPED ON 186A&B, DIST PROT `B' PHASE AT BAMNAULI. NO TRIPPING AT MEHRAULI.
15	08.10.10	09.09	220/66KV 100MVA PR. TR.-IV AT NAJAFGARH	08.10.10	16.50	TR. TRIPPED ON 30A, BUCHLOZ, 86, 95CB, TR. TROUBLE ALARM
16	08.10.10	10.52	220KV BAMNAULI – PAPPANKALAN-I CKT-I	08.10.10	11.30	CKT. TRIPPED ON AUTO RECLOSE LOCK OUT, BACK UP PROTECTION, DIRECTIONAL O/C AT PAPPANKALAN-I. NO TRIPPING AT BAMNAULI.
17	08.10.10	15.50	220KV MANDOLA – WAZIRABAD CKT-II	08.10.10	16.10	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD AND ON DIST PROT `RY' PHASE ZONE-I AT MANDOLA.
18	10.10.10	00.19	220/66KV 100MVA PR. TR.-I AT MEHRAULI	10.10.10	15.29	TR. TRIPPED ON 95CA, 86, TROUBLE TRIP, PRV
19	10.10.10	07.56	33/11KV 20MVA PR. TR. AT KASHMIRI GATE	10.10.10	11.20	TR. TRIPPED ON O/C `B' PHASE, 86 ALONG WITH ITS 11KV I/C WHICH ALSO TRIPPED ON SAME INDICATION.

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REAPRKS
	DATE	TIME		DATE	TIME	
20	10.10.10	18.23	220KV GOPALPUR – SUBZI MANDI CKT-II	10.10.10	18.43	CKT. TRIPPED ON DIST PROT `RYB' PHASE AT GOPALPUR. NO TRIPPING AT SUBZI MANDI
21	10.10.10	19.34	ALL 220KV BREAKERS ON 400KV BUS-II AT BAWANA	10.10.10	20.09	ALL BREAKERS TRIPPED DUE TO TRIPPING OF BUS WITH INDICATION 96B, 96D, 96H, 96K, 96C, 96M, 96P, 96R. THE ABOVE TRIPPING OCCURRED WHILE CLOSING OF BAY-401 AND BAY-423 AT BAWANA CCGT.
22	11.10.10	05.23	220/66KV 100MVA PR. TR.-I AT MEHRAULI	17.10.10	18.31	TR. TRIPPED ON SUDDEN PRESSURE RELAY, 86.
23	12.10.10	16.54	220KV PRAGATI – SARITA VIHAR CKT.	12.10.10	17.38	CKT. TRIPPED ON DIST PROT ZONE-I, ACTIVE GROUP-I AT PRAGATI AND ON DIST PROT 186A&B, AUTO RECLOSE LOCK OUT AT SARITA VIHAR.
24	12.10.10.	16.55	220KV MAHARANI BAGH – PRAGATI CKT.	12.10.10	17.36	CKT. TRIPPED ON DIST PROT. L3 NEUTRAL, `B' PHASE NEUTRAL AT PRAGATI. DUE TO TRIPPING OF 220KV PRAGATI – SARITA VIHAR CKT. AND 220KV MAHARANI BAGH – SARITA VIHAR CKT, PRAGATI UNIT-II AND GT UNITS ISLANDED FROM THE GRID AND SURVIDED.
25	13.10.10	13.19	220KV MEHRAULI – DIAL CKT-II	13.10.10	13.37	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-I AT MEHRAULI.
26	13.10.10	13.19	220/66KV 160MVA PR. TR.-I & II AT DIAL	19.10.10	11.40	BOTH TRANSFORMER TRIPPED ON GENERAL TRIP, DIFFERENTIA R&B PHASE.
27	13.10.10	17.04	220KV BTPS – OKHLA CKT-I	13.10.10	17.25	CKT. TRIPPED ON 186, 30G, 30C, 86X, 86X1 AT BTPS. NO TRIPPING AT OKHLA
28	14.10.10	07.40	220KV BTPS – OKHLA CKT-I & II	14.10.10	14.56	THE FOLLOWING TRIPPINGS OCCURRED : AT BTPS 220KV OKHLA CKT-I : POLE DISCREPANCY 220KV OKHLA CKT-II : 30A, 30G, 86 AT OKHLA 220KV BTPS CKT-I : 95CC, 220KV BTPS CKT-II : NO TRIPPING. CKT-I TRIED TO CLOSE BUT AGAIN TRIPPED ON POLE DISCREPANCY. CKT-I & II CHARGED 14.56HRS. AND 08.14HRS RESPECTIVELY.
29	14.10.10	07.40	220/33KV 50MVA PR. TR. AT OKHLA	14.10.10	08.14	TR. TRIPPED ON 95C, 86
30	14.10.10	20.25	220/33KV 100MVA PR. TR.-II AT IP	14.10.10	20.34	TR. TRIPPED ON 86
31	14.10.10	17.06	VARIOUS TRIPPINGS IN DTL SYSTEM	14.10.10		DETAILED REPORT IS AVAILABLE AT SR. '**A**'
32	14.10.10	22.07	400KV BALLABHGARH – BAMNAULI CKT-I	14.10.10		AUTO RECLOSE OPERATED. ANZ-I OBSERVED AT BAMNAULI END AND RNZ-I AT BALLABHGARH END.
33	15.10.10	06.35	220/33KV 100MVA PR. TR.-II AT IP	15.10.10	06.42	TR. TRIPPED WITHOUT INDICATION.
34	15.10.10	13.04	220KV SARITA VIHAR – MAHARANI BAGH CKT	15.10.10	18.41	CKT. TRIPPED ON POLE DISCREPANCY AT SARITA VIHAR.
35	15.10.10	18.09	220KV GEETA COLONY – PATPARGANJ CKT-II	15.10.10	18.09	CKT. TRIPPED ON ACTIVE GROUP-I, DIST PROT `ABC' PHASE ZONE-II AT GEETA COLONY AND ON ACTIVE GROUP, DIST PROT `ABC' PHASE ZONE-I AT PATPARGANJ
36	15.10.10	21.10	ALL ICTS AND 400KV FEEDERS AT BAWANA	15.10.10	21.34	BUS BAR PROTECTION OPERATED AT 400KV BAWANA ON 400KV BUS-II DURING THE SYNCHRONIZATION OF BAWANA CCGT BUS.

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REAPRKS
	DATE	TIME		DATE	TIME	
37	17.10.10	07.22	220KV IP – PRAGATI CKT-I & II	17.10.10	07.28	CKT-I. TRIPPED ON 86 AND CKT-II TRIPPED ON DIST PROT `ABC' PHASE ZONE-II AT IP. CKT-I & II CHARGED AT 07.27HRS. AND 07.28HRS RESPECTIVELY.
38	17.10.10	07.22	220/33KV 100MVA PR. TR.-II AT IP	17.10.10	07.40	TR. TRIPPED ON 86
39	17.10.10	07.22	220KV PATPARGANJ – IP CKT-I	17.10.10	09.35	CKT. TRIPPED ON DIST PROT `C' PHASE, 186, ACTIVE GROUP-I AT PATPARGANJ.
40	18.10.10	20.52	220/66KV 100MVA PR. TR.-IV AT NAJAFGARH	19.10.10	09.55	TR. TRIPPED ON 295CB, 295CC, 86, 30E, SUDDEN PRESSURE RELAY ALONG WITH ITS 66KV I/C WHICH TRIPPED WITHOUT INDICATION.
41	19.10.10	01.45	66/11KV 20MVA PR. TR.-III AT PAPPANKALAN-I	19.10.10	09.42	TR. TRIPPED ON GAS PRESSURE LOW.
42	20.10.10	15.55	220KV WAZIRABAD – GEETA COLONY CKT-II	20.10.10	18..24	CKT. TRIPPED ON RXME18, DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD AND ON DIST PROT ABC PHASE ZONE-II AT GEETA COLONY.
43	20.10.10	15.55	220KV WAZIRABAD – KASHMIRI GATE CKT-II	20.10.10	16.13	CKT TRIPPED ON DIST PROT ZONE-I AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE.
44	21.10.10	12.22	220/33KV 100MVA PR. TR.-II AT IP	21.10.10	12.28	TR. TRIPPED ON TRIPPING RELAY
45	22.10.10	13.27	33/11KV 16MVA TR. TR AT SHALIMAR BAGH	23.10.10	00.03	TR. TRIPPED ON DIFFERENTIAL ALONG WITH ITS 11KV I/C WHICH TRIPPED WITHOUT INDICATION.
46	22.10.10	16.26	220/66KV 100MVA PR. TR.-I AT NAJAFGARH	22.10.10	17.08	TR. TRIPPED ON O/C, 51AX ALONG WITH 66KV I/C-I & III WHICH TRIPPED ON O/C, 51CX. 66KV I/C-I & III CHARGED AT 17.08HRS.
47	22.10.10	16.46	220KV PRAGATI – SARITA VIHAR CKT.	22.10.10	17.13	CKT. TRIPPED ON DIST PROT C' PHASE ZONE-I AT SARITA VIHAR AND ON DIST PROT ZONE-I, 186 AT PRAGATI.
48	22.10.10	16.50	220KV MANDOLA – GOPALPUR CKT-II	22.10.10	17.33	CKT. TRIPPED ON B2N ZONE-II, 86 RYB, 186A&B AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR.
49	22.10.10	17.00	220KV BNTPS – NOIDA – GAZIPUR CKT.	22.10.10	18.49	CKT TRIPPED ON O/C, 67B AT GAZIPUR.
50	23.10.10	01.20	220/66KV 100MVA PR. TR-I AT SARITA VIHAR	23.10.10	17.50	TR. TRIPPED ON TRANSFORMER TROUBLE ALARM, 30A, 86
51	23.10.10	17.15	66/11KV 20MVA PR. TR.-III AT PAPPANKALAN-I	23.10.10	18.45	TR. TRIPPED ON SF6 GAS PRESSURE LOW AND MASTER RELAY INDICATIONS.
52	24.10.10	14.40	220KV MANDOLA – WAZIRABAD CKT-IV	24.10.10	16.35	CKT. TRIPPED ON DIST PROT `Y&B' PHASE ZONE-I AT MANDOLA NAD ON DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD.
53	24.10.10	17.39	220/33KV 100MVA PR. TR-I, II & III AND 220/33KV 50MVA PR. TR. AT PATPARGANJ	24.10.10	17.54	ALL TRANSFORMERS TRIPPED ON 86. 220KV BUS BAR PROTECTION OPERATED ON 220KV BUS-I AT PATPARGANJ
54	24.10.10	17.39	220KV PATPARGANJ – IP CKT-I	24.10.10	18.17	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT PATPARGANJ. NO TRIPPING AT IP.
55	25.10.10	03.35	220/66KV 160MVA PR. TR-I AT DIAL	30.10.10	22.05	TR. TRIPPED ON BUCHLOZ
56	25.10.10	07.20	66/11KV 20MVA PR. TR.-I AT VASANT KUNJ	25.10.10	11.52	TR TRIPPED ON 30D, 86

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REAPRKS
	DATE	TIME		DATE	TIME	
57	25.10.10	07.32	220/66KV 160MVA PR. TR.-II AT RIDGE VALLEY	25.10.10	09.20	TR. TRIPPED ON 86A&B GENERAL TRIP A&B.
58	25.10.10	07.32	220KV BAMNAULI – PAPPANKALAN-I CKT-II	25.10.10	07.42	CKT. TRIPPED ON 67NX, 186A&B AT PAPPANKALAN-I. NO TRIPPING AT BAMNAULI
59	25.10.10	07.32	220/66KV 100MVA PR. TR.-IV AT PAPPANKALAN-I	25.10.10	09.40	TR. TRIPPPED ON O/C, E/F, 86B.
60	25.10.10	07.36	22/66KV 100MVA PR. TR.-I AT PAPPANKALAN-II	25.10.10	10.04	TR. TRIPPED ON O/C, E/F, LBB PROTECTION, 86
61	25.10.10	07.33	400KV BALLABHGARH – BAMNAULI CKT-II	25.10.10	08.30	CB-452 OF THE CKT. TRIPPED ON 186A&B, CARRIER CHANNEL AT BAMNAULI.
62	25.10.10	09.34	220KV MANDOLA – NARELA CKT-II	25.10.10	10.17	CKT. TRIPPED WITHOUT INDICATION AT NAELA.
63	25.10.10	07.32	220KV BAMNAULI – DIAL – MEHRAULI CKT	25.10.10	09.42	CKT. TRIPPED ON GENERAL TRIP, GROUP-A, E/F AT DIAL.
64	25.10.10	10.36	220/33KV 100MVA PR. TR-II AT NARELA	25.10.10	11.34	TR. TRIPPED ON 86 ALONG WITH ITS 66KV I/C WHICH TRIPPED ON INTER TRIPPING.
65	29.10.10	02.58	220KV BTPS – MEHRAULI CKT-II	28.10.10	03.18	CKT. TRIPPED ON 30A, 30G AT BTPS AND ON DIST PROT `A' PHASE ZONE-I AT MEHRAULI.
66	29.10.10	07.36	400KV BAWANA – BAMNAULI CKT-I	29.10.10	07.48	BREAKER NO.252 OF THE CKT. TRIPPED ON 186A&B AT BAWANA.
67	29.10.10	21.30	400KV BAWANA – HISSAR CKT.	30.10.10	01.01	BOTH BREAKER AUTO TRIP AT BAWANA.
68	31.10.10	05.25	400KV BAWANA – HISSAR CKT.	31.10.10	06.19	BREAKER NO.952 TRIPPED ON DIST PROT MAIN-I AT BAWANA.

A) Subject : Report on Grid Incident on 14.10.2010 in Delhi system.

The following trippings occurred in Delhi system on 14.10.2010 at 17.06 Hrs

(a) 220kV WAZIRABAD

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	220kV Geeta Colony Ckt.I	Distance Protection, zone-II	17.06	17.10	No tripping at Geeta Colony 220 KV Bus coupler kept open
02	220kV Geeta Colony Ckt.I	Distance Prot. Zone –II,Distance-5.5KM	17.23	17:23	No tripping at Geeta Colony

(b) 220kV GEETA COLONY

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	220 kV Patparganj Ckt I	Distance Protection , Zone II ,ABC Phase Distance – 4.273 Km.	17:08	17:12	220 kV Bus Coupler kept Opened.
02	220 kV Patparganj Ckt II	Distance Protection , Zone II , ABC Phase Distance – 4.458 Km.	17:06	17:16	
03	220 kV Wazirabad Ckt I	Supply Fail	17:06	17:12	No tripping at Geeta Colony
04	220 kV Patparganj Ckt I	Supply Fail	17:23	17:24	No tripping at Geeta Colony
05	220 kV Wazirabad Ckt I	Supply Fail	17:23	17:23	No tripping at Geeta Colony

(c) 220kV PATPARGANJ

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	220 kV Geeta Colony Ckt I	Distance Prot. Zone I , ABC Ph	17:07	17:17	220 kV Bus Coupler kept Opened.
02	220 kV Geeta Colony Ckt II	Distance Protection Zone I, ABC Phase, Distance – 59.81 meter.	17:08	17:18	
03	220 kV Geeta Colony Ckt I	Bus Bar protection Operated	17:22	17:24	Kite thread found on the Ckt.
04	220 kV IP Ckt I	Bus Bar protection Operated	17:22	--	Kite thread found on the Ckt
05	100 MVA Tr. No. I (220/33kV)	Bus Bar protection Operated	17:22	17:24	
06	50 MVA Tr. No. I (220/33kV)	Bus Bar protection Operated	17:22	17:24	
07	220 kV Geeta Colony Ckt II	Bus Bar protection Operated	17:25	17:28	Kite thread found on the Ckt

(d) 220kV I P STATION

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	220 KV Patparganj Ckt I	Distance Protection , Zone I, Distance – 2.56 Km.	17:06	17:15	220 KV Bus Coupler kept Opened.
02	220 KV Patparganj Ckt II	Supply Failed	17:06	17:18	
03	100 MVA Transformer No. II	Earth Fault , 86	17:06	17:27	
04	220 KV Patparganj Ckt I	Supply Failed	17:23		Supply restore by closing 220 KV Bus coupler at IP Ext. at 17:27 Hrs.
05	220 KV Patparganj Ckt II	Supply Failed	17:23		

(e) UNDER FREQUENCY OPERATION

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	**RPH** 33kV Bay-1, 2, 5, 6,13	Under Frequency	17:06	17:30	Load relief through Under Frequency relay operation 20 MW
02	**PATPARGANJ** 33 KV Guru Angad Nagar Ckt No II , Preet Vihar , Mother Dairy	Under Frequency	17:06	17:30	Load relief through Under Frequency relay operation 24 MW
	TOTAL LOAD RELIEF				**44 MW**

System configuration during the incident

At the time of incident, Pragati Unit I and S.T.G. were connected to Mandola side through 220kV Wazirabad – Geeta Colony – Patparganj – 220 KV IP - IP Ext.(Pragati) Ckt. RPH units were out. Due to the tripping of 220 kV Patparganj – Geeta Colony Ckt. I & II caused the islanding of the Pragati Units from the Grid and their tripping.

Due to the holiday and closing of all commercial activities in Delhi the kite flying activities increased caused the tripping.

The load generation position prior to the grid incident was as under:-

Sub-Station	Connected Load in MW	Generation position prior to the incident in MW	Load relief due to under frequency operation
Geeta Colony	22	--	--
Patparganj	140	--	24
IP	72	Nil	Nil
RPH	34	Nil	20
Pragati Unit I	--	91	--
S.T.G	--	108	--
Total	**268**	**199**	**44**

The generating units affected were normalized as under:

Generating Station Name	Unit No.	Time of trippings	Time of synchronization	Generation prior to the incident
Pragati	1	17:06	17:44	91
	STG	17:06	17:58	108
TOTAL				**199**

Load affected due to the above tripping is as under:-

Duration in hrs.		**Quantum in MW**	**Grid**	**Name of the ckt.**	**Remarks**
From	**To**				
17:07	17:30	34	**RPH**	33kV Bay no. 1, 2, 5, 6, 12, 13, 17 and 19	IG Stadium Supply changed over to Kashmere Gate Side through 33 kV Bay No. 16.
17:06	17:30	24	**Patparganj**	33kV Preet Vihar Ckt, 33kV Mother Dairy Ckt, 33kV Guru Angad Nagar Ckt II	Load relief by Under Frequency relay Operation
17:06	17:28	116		33kV Geeta Colony Ckt., 33kV CBD Shahdra Ckt, 33kV Karkardooma Ckt. I& II, 33kV Guru Angad Nagar Ckt. I 66kV Vivek Vihar Ckt I & II 66kV GH Ckt I 66 kV Khichripur 66 kV Akshardham	
17:06	17:12	22	**Geeta Colony**	33 kV Shakarpur 33 kV Kanti Nagar I & II	
17:06	17:18	72	**I.P**	33 kV Bay No - 1,3,5 7,9 13, 17, 19,25,33,37, 2, 4, 6, 10,16 ,30, 34, 38, 42	Exhibition Ground Load changed over to Lodhi Road Grid
17:23	17:26	72	**IP**	33 kV Bay No - 1,3,5 7,9 13, 17, 19,25,33,37, 2, 4, 6, 10,16 ,30, 34, 38, 42	

20 DETAILS OF UNDER FREQUENCY RELAY OPERATIONS IN DELHI POWER SYSTEM DURING THE MONTH OF OCTOBER 2010

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