DELHI TRANSCO LTD.

STATE LOAD DISPATCH CENTER

PROGRESS REPORT

****

JULY 2012

1 **SALIENT FEATURES OF DELHI POWER SYSTEM**

Sr. No.	Features	JULY 2012	JULY 2011
1	**Effective Generation Capacity within Delhi in MW**		
	Rajghat Power House	135	135
	Gas Turbine	270	270
	Pragati Power Corporation Ltd.	330	330
	Badapur Thermal Power Station	705	705
	Rithala GT	108	73
	Total	1548	1513
2	**Maximum Unrestricted Demand (MW)**	**5727**	**4819**
	Date	05.07.2012	20.07.2011
	Time	15.10.14	15.37.38
3	**Peak Demand met (MW)**	**5642**	**4810**
	Date	05.07.2012	20.07.2011
	Time	15.10.14	15.37.38
4	Peak Availability (MW)	5461	4737
5	Shortage (-) / Surplus (+) in MW	(-) 181	(-) 82
6	Percentage Shortage (-) / Surplus (+)	(-) 3.208	(-) 1.731
7	Maximum Energy Consume in a day (Mus)	107.365	95.419
8	Energy Consumed during the month	**2888.449**	**2748.310**
9	**Load Shedding in Mus**		
A)	Due to Grid Restrictions		
i)	Under Frequency Relay Operations	0.247	0.006
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	6.378	0.000
	BRPL	2.735	0.000
	BYPL	1.290	0.000
	NDMC	0.017	0.000
	MES	0.000	0.000
iv)	Due to transmission Constraints in Central Sector	36.840	0.000
	Total due to Grid Restriction	**47.507**	**0.000**
B)	Due to Constraints in System in Mus		
	DTL	2.425	0.637
	NDPL	0.976	0.398
	BRPL	2.946	0.687
	BYPL	1.332	0.328
	NDMC	0.003	0.027
	MES	0.003	0.000
	Other Agencies	0.023	0.101
	Total	**7.705**	**2.178**
11	**Grand Total in Mus**	**55.212**	**2.244**

2. PERFORMANCE OF GENERATING STATIONS WITHIN DELHI DURING JULY 2012

A) For the month of JULY 2012

All Figures in MUs

S. No	Stations	Gross Generation	Aux. Consumption	Net Generation	Availability (%)	Backing Down
1.	**RPH**	35.799	5.219	30.580	41.20	5.305
2.	**GT**	142.865	4.013	138.852	84.49	25.941
3.	**PPCL**	209.595	5.611	203.984	88.47	4.025
4.	**BTPS**	421.964	37.029	384.935	89.22	35.388
5.	**Rithala**	16.171	1.024	15.147	--	--
6.	**Bawana**	131.355	4.035	127.320	80.41	134.758
	TOTAL	**957.749**	**56.931**	**900.818**	--	**205.417**

B) For the Year 2011-12 (Upto JULY 2012)

Power Station	Effective Capacity (MW)	Net Generation in MUs For JULY 2012	Availability (%) For JULY. 2012	PLF (%) For JULY 2012	Cumulative Generation in MUs upto JULY. 2012 for the year 2012-13	Cumulative Availability in % upto JULY 2012 for the year 2012-13	Cumulative PLF in % upto JULY 2012 for the year 2012-13
RPH	135	30.580	41.20	35.25	223.280	65.30	63.79
GT	270	138.852	84.49	71.18	543.335	80.98	70.55
PPCL	330	203.984	88.47	88.47	810.684	88.51	88.50
BTPS	705	384.935	89.22	81.76	1392.681	82.86	75.21
Rithala	108	15.147	--	--	77.144	--	--
Bawana	**216**	127.320	80.41	39.31	452.465	75.21	90.72
TOTAL	**1764**	**900.818**	--	--	**3499.589**	--	--

3 DETAILS OF OUTAGES OF GENERATING STNS. WITHIN DELHI W.E.F. APRIL 2012

(A) RPH STATION

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	67.5	03.04.12	19.10	03.04.12	21.05	Unit tripped due to grid disturbance.
		10.04.12	17.00	10.04.12	18.05	Unit tripped due to grid disturbance.
		11.04.12	5.50	11.04.12	6.30	Flame failure.
		11.04.12	6.55	11.04.12	7.40	Flame failure.
		11.04.12	7.55	11.04.12	11.45	Turbine trip.
		27.04.12	11.05	29.04.12	5.20	Unit desynchronised due to Boiler Tube Leakage.
		29.04.12	8.40	29.04.12	9.40	Unit tripped with heavy jerk, when AOP-1A started, emergency boerd incomer No. A tripped on earth fault.
		03.05.12	17.40	05.05.12	8.40	Unit desynchronized to attend the Condensor tube leakage.
		12.05.12	17.30	16.05.12	6.45	Unit tripped on system disturbance, later on there is found Boiler tube leakage.
		16.05.12	11.30	15.05.12	13.40	Unit tripped on system disturbance, total dark out.
		20.05.12	12.05	20.05.12	12.35	Unit tripped due to electrical problem.
		23.05.12	10.30	23.05.12	11.55	Unit tripped due to furnace pr. high.
		25.05.12	17.10	25.05.12	21.55	Unit tripped due to electrical problem.
		26.05.12	11.10	26.05.12	12.15	Unit tripped due to drum level very low.
		26.05.12	17.05	27.05.12	3.25	Unit tripped due to electrical problem.
		27.05.12	3.40	27.05.12	4.10	Unit tripped due to master fuel trip.
		28.05.12	7.30	28.05.12	9.35	Unit tripped due to electrical problem.
		03.06.12	17.35	03.06.12	19.20	Unit tripped due to flame failure.
		07.06.12	3.05	07.06.12	5.50	Unit trpped on aux. supply failure due to Stn.-1 tripped.
		07.06.12	10.40	07.06.12	11.10	Unit trpped on aux. supply failure due to Stn.-1 tripped.
		19.06.12	10.40	22.06.12	15.10	Unit tripped due to Boiler tube leakage.
		30.06.12	0.45	30.06.12	1.25	Unit tripped due to 33KV supply failure.
		06.07.12	18.35	09.07.12	15.00	Unit tripped on turbine trip, later on the unit still stopped as per system operation.
		10.07.12	8.10	Contd.		Unit tripped on flame failure, later on the unit taken on Plenned Outage as capital O/H w.e.f. 18/07/2012 at zero hrs.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	67.5	01.04.12	2.00	01.04.12	11.15	Unit desynchronised due to MS pr. & temp. could not maintained as per system operation.
		03.04.12	19.10	03.04.12	20.50	Unit tripped due to grid disturbance.
		10.04.12	17.00	10.04.12	18.35	Unit tripped due to grid disturbance.
		10.04.12	18.40	10.04.12	19.30	Excitation system problem.
		16.04.12	17.40	18.04.12	19.05	Unit desynchronised due to non-availability of coal mills.as per system operation.
		12.05.12	17.30	12.05.12	20.00	Unit tripped on system disturbance.
		16.05.12	11.30	16.05.12	12.50	Unit tripped on system disturbance, total dark out.
		24.05.12	14.10	24.05.12	1.45	Unit desynchronized to attend the Economisor tube leakage.
		28.05.12	7.30	28.05.12	12.50	Unit tripped due to electrical problem.
		07.06.12	3.05	07.06.12	4.40	Unit trpped on aux. supply failure due to Stn.-1 tripped.
		29.06.12	22.50	30.06.12	2.15	Unit tripped due to fire occurred on 33KV supply cable.
		02.07.12	12.50	05.07.12	11.30	Boiler Tube Leakage.
		06.07.12	21.35	06.07.12	23.35	33KV supply failure.
		07.07.12	8.00	09.07.12	14.00	Unit desynchronized as per system operation.
		09.07.12	15.25	09.07.12	16.05	Turbine vibration high.
		10.07.12	22.15	11.07.12	1.20	Electrical fault.
		13.07.12	1.30	13.07.12	14.10	Furnace pr. very high.
		17.07.12	12.05	17.07.12	13.45	Furnace pr. very high.
		20.07.12	4.45	20.07.12	5.45	Furnace pr. high.
		22.07.12	10.10	22.07.12	11.05	Turbine vibration high.
		22.07.12	12.00	22.07.12	12.35	Turbine vibration high.
		30.07.12	2.25	30.07.12	11.40	Grid failure, Total dark out.
		31.07.12	12.55	31.07.12	17.20	Grid failure, Total dark out.

(B) Gas Turbine

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	30	04.04.12	09.28	04.04.12	12.05	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. tripped on relay 86X.
		08.04.12	17.00	08.04.12	18.05	Machine tripped due to jerk observed in C/R.160MVA Trf. No.2 tripped.
		10.04.12	00.05	10.04.12	12.25	Stopped due to low demand and high frequency.
		12.04.12	17.05	12.04.12	18.22	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. tripped at both end. Over current & earth fault relay operated at GT end on 160MVA Tx-I. Buch-Holtz relay operated on 160MVA Tx-II at IP Ext.end.
		06.05.12	10.49	06.05.12	16.30	Tripped on loss of flame,negative phase sequence alarm appeared in CRT.One controller got out of order.
		24.05.12	22.30	25.05.12	01.20	Stopped as request of C&I staff with HRSG#I to change gen. absolute filter.
		09.06.12	10.05	06.09.12	10.25	Machine came on FSNL
		17.06.12	06.03	18.06.12	19.54	Stopped due to low demand and high frequency.
		19.06.12	21.02	20.06.12	11.30	
		20.06.12	11.30	20.06.12	19.00	Machine tripped during starting due to some elect. Problem.
		20.06.12	19.00	21.06.12	14.50	Stopped due to low demand and high frequency.
		13.07.12	12.38	13.07.12	13.01	GT#1 came on FSNL as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		30.07.12	02.35	30.07.12	04.00	Machine came on FSNL due to Grid disturbance as both 160 MVA ICT-I&II tripped
		31.07.12	13.02	31.07.12	13.11	Machine came on FSNL due to Grid disturbance as both 160 MVA ICT-I&II tripped
		31.07.12	13.50	31.07.12	13.58	Came on FSNL due to Grid disturbance as both 160 MVA ICT-I&II tripped on under frequency relay operated at 220 KV end.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	**30**	08.04.12	17.00	08.04.12	18.06	Machine tripped due to jerk observed in C/R.160MVA Trf. No.2 tripped.
		12.04.12	00.02	12.04.12	06.10	Stopped due to low demand and high frequency.
		12.04.12	09.31	12.04.12	18.32	
		12.04.12	19.45	12.04.12	20.31	Tripped on -ve phase sequence elect. Trouble normal shut down.
		29.04.12	00.01	29.04.12	20.45	Stopped due to low demand and high frequency.
		30.04.12	13.52	30.04.12	21.35	
		06.06.12	12.35	08.06.12	12.10	
		06.07.12	18.02	06.07.12	18.58	During storm GAC shade fibre sheet fell on unit Trf. To avoid damage& protection of GT#2 66KV breaker &11KV breaker made open. GT#2 kept on FSNL.
		13.07.12	12.38	13.07.12	13.02	GT#2came on FSNL as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		21.07.12	21.16	22.07.12	17.50	Stopped due to low demand and high frequency.
		28.07.12	00.32	28.07.12	17.52	
		30.07.12	02.35	30.07.12	04.30	Came on FSNL due to Grid disturbance as both 160 MVA ICT-I&II tripped on under frequency relay operated at 220 KV end.
		31.07.12	13.09	31.07.12	15.23	Tripped on negative phase sequence and back up timer operated .
3	**30**	01.04.12	00.00	04.02.12	13.50	Stopped due to low demand and high frequency.
		03.04.12	12.27	03.04.12	17.44	Machine tripped on loss of flame.
		04.04.12	09.28	04.04.12	12.15	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. Tripped on relay 86X.
		05.04.12	10.05	30.04.12	06.15	Machine stopped due to HGPI .
		30.04.12	22.15	02.05.12	15.25	Stopped due to low demand and high frequency.
		04.05.12	04.58	04.05.12	07.54	Machine tripped on loss of Exciatation
		06.05.12	17.06	06.05.12	17.50	Machine stopped to attend the leakages.
		20.05.12	10.02	20.05.12	21.55	Stopped due to low demand and high frequency.
		29.05.12	22.05	29.05.12	23.32	Stopped to attend hot gas leakage from compressor.
		30.05.12	03.45	30.05.12	13.16	Stopped due to low demand and high frequency.
		03.06.12	18.15	04.06.12	16.15	
		07.06.12	06.04	07.06.12	13.15	
		18.06.12	20.32	19.06.12	10.53	
		20.06.12	14.58	20.06.12	16.02	Machine stopped due to diverter damper problem.
		25.06.12	11.50	25.06.12	12.05	Hunting observed in load & Machine came on FSNL on turbine under speed alarm appeared.
		28.06.12	02.42	28.06.12	05.35	Tripped due to combined cycle tripped alarm.
		06.07.12	19.02	13.07.12	14.55	Stopped due to low demand and high frequency.
		14.07.12	01.35	16.07.12	07.40	
		27.07.12	14.45	27.07.12	17.55	
		30.07.12	02.35	30.07.12	06.40	Tripped due to grid disturbance as both 160 MVA ICT tripped .
		31.07.12	13.02	31.07.12	14.17	came on FSNL due to Grid disturbance as both 160 MVA ICT-I&II tripped on under frequency relay operated at 220 KV end.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
4	**30**	01.04.12	00.00	02.04.12	13.48	Stopped due to low demand and high frequency.
		04.04.12	09.28	04.04.12	11.40	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. Tripped on relay 86X.
		07.04.12	19.01	07.04.12	21.45	Stopped due to low demand and high frequency.
		12.04.12	17.05	12.04.12	17.45	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. tripped at both end. Over current & earth fault relay operated at GT end on 160MVA Tx-I. Buch-Holtz relay operated on 160MVA Tx-II at IP Ext.end.
		12.04.12	18.30	19.04.12	09.45	Stopped due to low demand and high frequency.
		25.04.12	21.35	26.04.12	08.40	
		28.04.12	10.02	30.04.12	14.45	
		20.05.12	10.02	20.05.12	20.12	
		02.06.12	21.03	04.06.12	16.15	Machine stopped as per SLDC message to maintain SG .
		04.06.12	16.15	05.06.12	05.45	Machine started but could not be taken on load due to problem in control ckt.
		05.06.12	05.45	06.06.12	11.40	Stopped due to low demand and high frequency.
		12.06.12	06.02	12.06.12	10.44	
		13.06.12	00.02	13.06.12	12.52	
		13.06.12	15.14	13.06.12	17.20	Tripped due to ignition problem.
		17.06.12	07.37	17.06.12	08.25	Tripped with following alarm appeared on CRT: IGV servo current -ve saturation alarm.Compressor bleed valve#1 open alarm. CPD measurment fault alarm.
		18.06.12	19.02	19.06.12	10.54	Stopped due to low demand and high frequency.
		06.07.12	18.28	06.07.12	19.00	Tripped on over temp. trip alarm.
		06.07.12	19.00	13.07.12	14.35	Stopped due to low demand and high frequency.
		14.07.12	01.35	16.07.12	08.09	
		16.07.12	10.25	16.07.12	15.30	
		17.07.12	03.32	17.07.12	07.50	
		18.07.12	02.30	18.07.12	11.50	
		23.07.12	23.01	24.07.12	09.50	
		26.07.12	00.47	26.07.12	11.05	
		27.07.12	18.16	30.07.12	08.30	
		31.07.12	04.02	31.07.12	23.59	
5	**30**	01.04.12	00.00	02.04.12	15.45	Stopped due to low demand and high frequency.
		04.04.12	09.28	04.04.12	11.58	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. Tripped on relay 86X.
		06.04.12	00.18	09.04.12	15.31	Machine stopped as generation available in open cycle mode
		12.04.12	17.05	12.04.12	18.20	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. tripped at both end. Over current & earth fault relay operated at GT end on 160MVA Tx-I. Buch-Holtz relay operated on 160MVA Tx-II at IP Ext.end.
		29.04.12	21.37	02.05.12	13.15	Stopped due to low demand and high frequency
		04.05.12	22.07	04.05.12	22.55	Machine tripped on Field fail alarm and Electrical trouable normal shut down
		04.05.12	23.24	09.05.12	17.10	Machine again tripped on Field fail alarm and Electrical trouable normal shut down. Machine inspected and Alternate DC supply provided but Diesel engine did not started.M-I decided to open the diesel Engine.
		09.05.12	22.10	10.05.12	02.20	Tripped on field fail alarm.Elect. Trouble normal shut down.
		06.06.12	13.30	06.06.12	14.00	Tripped on false LTTH high alarm. The Temperaure switch is malfunctioning.
		07.06.12	13.36	09.06.12	06.15	Stopped due to low demand and high frequency
		13.07.12	12.38	13.07.12	12.50	GT#5 came on FSNL as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		17.07.12	17.35	17.07.12	22.57	Tripped on gas fuel hydraulic pressure low alarm.
		30.07.12	02.35	30.07.12	02.40	GT#5 came on FSNL as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		31.07.12	13.50	31.07.12	13.52	GT#5 came on FSNL due to under frequency

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
6	**30**	01.04.12	00.00	02.04.12	15.50	Stopped due to low demand and high frequency
		04.04.12	05.01	04.04.12	19.42	
		06.04.12	00.18	09.04.12	15.35	
		10.04.12	00.07	10.04.12	11.50	
		12.04.12	17.05	12.04.12	21.25	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. tripped at both end. Over current & earth fault relay operated at GT end on 160MVA Tx-I. Buch-Holtz relay operated on 160MVA Tx-II at IP Ext.end.
		25.04.12	01.45	25.05.12	20.25	Stopped due to low demand and high frequency
		30.04.12	09.45	02.05.12	14.25	
		22.05.12	12.52	22.05.12	22.20	Tripped due to failure of MOV,due to which battery voltage fluctuated at computer screen from 103V to 118V.The following alarms appeared:- -ve phase sequence & Condensate level high temp.
		03.06.12	02.16	03.06.12	07.55	Tripped due to failure of controllers.
		19.06.12	21.02	20.06.12	10.32	Stopped due to low demand and high frequency.
		28.06.12	17.20	28.06.12	19.20	Tripped manually due to sudden fire in window A/C of GT#6 which was installed in GAC(module side)
		13.07.12	12.38	13.07.12	13.43	GT#6 tripped on reverse power as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		26.07.12	22.03	27.07.12	11.00	Machine stopped due to leakage of lube oil observed in the TAC.
		26.07.12	22.03	27.07.12	10.55	Machine stopped due to oil leakages.
		30.07.12	00.15	30.07.12	05.40	Stopped due to low demand and high frequency.
		31.07.12	13.09	31.07.12	14.14	Tripped on under voltage
STG-1	**30**	04.04.12	09.28	04.04.12	15.20	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. Tripped on relay 86X.
		08.04.12	17.00	08.04.12	20.18	Machine tripped due to jerk observed in C/R.160MVA Trf. No.2 tripped.
		08.04.12	22.32	08.04.12	23.20	Machine tripped due to low vaccum.
		12.04.12	17.05	12.04.12	20.57	Machine tripped due to jerk observed in C/R.Both 160MVA Trs. tripped at both end. Over current & earth fault relay operated at GT end on 160MVA Tx-I. Buch-Holtz relay operated on 160MVA Tx-II at IP Ext.end.
		22.04.12	07.46	22.04.12	15.05	Machine tripped suddenly,all parameters were normal. Following alarms appeared:control oil pressure very low,trip oil pressure very low & turbine shaft vibration very high 176.
		03.05.12	01.12	03.05.12	02.29	Tripped on hot well level very high.
		06.05.12	14.25	06.05.12	15.12	Stopped to attend lube oil leakages.
		08.05.12	22.12	08.05.12	22.55	parameters of STG#1 got freezed. As per AM (C&I) all BKs & FV01 should be in line B. while checking all BKs & FV01 from CRA 01 to CRc 04 pannel were found in line A.While changing from A to Line B, machine tripped on Hot well level very high. Machine also tripped on same fault on 03/05/2012
		12.05.12	17.28	12.05.12	19.28	160 MVA Tx-I tripped in jerk at GT end due to which GT#1 & 2 came on FSNL and STG#1 tripped.
		23.05.12	14.05	23.05.12	18.05	Tripped due to false alarm of cond .Hot well level very high.
		24.05.12	22.35	24.05.12	23.20	Tripped on class-A relay appeared on DDC room pannel.
		27.05.12	19.20	27.05.12	20.35	Tripped due to false alarm of cond.Hot well level very high.The following relays appeared in DDC room: Gen. class A-timer for 32G2A,Gen.class-B-tripp relay86GB.
		06.06.12	12.40	06.06.12	15.25	Tripped in emergency while developing the load 20 MW load became zero.
		06.06.12	16.15	06.06.12	17.40	Tripped without any alarm.Relay 86GB appeared in DDC room.
		13.07.12	12.38	13.07.12	14.20	Machine tripped as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		30.07.12	02.35	30.07.12	08.15	Machine tripped as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		31.07.12	13.02	31.07.12	16.15	Machine tripped on low vaccum the load on GTs reduced due to tripping of 160 MVA ICT I& II on under frequency relay operated.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG-2	**30**	01.04.12	00.00	02.04.12	16.25	Stopped due to low demand and high frequency
		04.04.12	09.28	04.04.12	12.50	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. Tripped on relay 86X.
		07.04.12	19.01	04.07.12	22.45	Stopped due to low demand and high frequency.
		08.04.12	17.00	08.04.12	18.51	Machine tripped due to jerk observed in C/R.160MVA Trf. No.2 tripped.
		12.04.12	17.05	12.04.12	23.15	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. tripped at both end. Over current & earth fault relay operated at GT end on 160MVA Tx-I. Buch-Holtz relay operated on 160MVA Tx-II at IP Ext.end.
		12.04.12	23.15	19.04.12	12.25	Stopped due to low demand and high frequency
		25.05.12	21.35	26.4.12	10.40	
		28.04.12	10.02	30.04.12	09.30	
		20.05.12	10.02	20.05.12	18.00	Machine stopped to attend the leakages.
		20.05.12	18.00	20.05.12	22.15	Stopped due to low demand and high frequency
		03.06.12	18.15	04.06.12	18.25	
		18.06.12	20.32	19.06.12	12.58	
		20.06.12	14.58	20.06.12	15.21	Tripped due to sudden fall of vaccum
		28.06.12	02.32	28.06.12	03.54	Tripped due to hot well level high
		06.07.12	18.35	06.07.12	19.00	Tripped due to operation of Generater transformer standby earth fault 64SGT relay. It is expected that this relay operated due to atmoshpheric lightening.
		06.07.12	19.00	13.07.12	18.02	Stopped due to low demand and high frequency.
		14.07.12	01.35	16.07.12	10.20	
		30.07.12	02.35	30.07.12	08.40	Machine tripped as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		31.07.12	13.02	31.07.12	16.46	Machine tripped on low vaccum the load on GTs reduced due to tripping of 160 MVA ICT I& II on under frequency relay operated.
STG-3	**30**	01.04.12	00.00	02.04.12	21.25	Stopped due to low demand and high frequency
		04.04.12	09.28	04.04.12	22.20	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. Tripped on relay 86X.
		06.04.12	00.18	09.04.12	18.15	Machine stopped due to non availability of DC EOP.
		12.04.12	17.05	12.04.12	19.48	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. tripped at both end. Over current & earth fault relay operated at GT end on 160MVA Tx-I. Buch-Holtz relay operated on 160MVA Tx-II at IP Ext.end.
		20.04.12	14.00	20.04.12	15.50	Machine stopped to attend oil leakages in Governing system.
		30.04.12	09.45	02.05.12	18.35	Stopped due to low demand and high frequency
		26.05.12	14.05	26.05.12	17.35	Machine stopped to attend oil leakage from glass of bearing no.1 drain line(return line)
		07.06.12	12.40	09.06.12	08.15	Stopped due to low demand and high frequency
		06.07.12	18.35	06.07.12	19.50	Tripped due to operation of Generater transformer standby earth fault 64SGT relay. It is expected that this relay operated due to atmoshpheric lightening.
		13.07.12	12.38	13.07.12	15.58	Machine tripped as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		30.07.12	02.35	30.07.12	08.35	Machine tripped as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		31.07.12	13.02	31.07.12	16.22	Machine tripped on low vaccum the load on GTs reduced due to tripping of 160 MVA ICT I& II on under frequency relay operated.

(C) PRAGATI STATION

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	104	14.04.12	14:22	16.04.12	5.40	Stopped due to low demand and high frequency
		27.05.12	3:00	27.05.12	11.44	
		28.05.12	6:25	28.05.12	17.03	Tripped on internal fault
		07.06.12	23:18	08.06.12	0.26	
		08.06.12	1:41	08.06.12	5.10	
		16.06.12	9:17	16.06.12	13.29	
		23.06.12	10:17	23.06.12	12.12	
		23.06.12	17:38	23.06.12	18.32	
		26.06.12	18:00	26.06.12	19.31	
		27.06.12	9:31	27.06.12	12.19	
		20.07.12	21:24	20.07.12	23.16	
		30.07.12	2:35	30.07.12	8.49	Grid Black-out
		31.07.12	13:02	31.07.12	15.43	
2	104	03.04.12	19:07	03.04.12	19.47	Tripped on on grid disturbance
		10.04.12	17:00	10.04.12	17.51	
		12.05.12	17:28	12.05.12	17.57	
		16.05.12	11:28	16.05.12	12.19	
		03.06.12	3:00	03.06.12	9.00	Stopped due to low demand and high frequency
		27.06.12	9:31	27.06.12	10.35	Tripped on internal fault
		01.07.12	4:00	01.07.12	10.43	Stopped due to low demand and high frequency
		06.07.12	18:50	07.07.12	12.28	
		13.07.12	12:40	13.07.12	13.35	Tripped due to Grid disturbance
		30.07.12	2:38	30.07.12	8.42	
		31.07.12	13:02	31.07.12	15.40	
STG	122	03.04.12	19:26	03.04.12	23.26	Tripped on on grid disturbance
		10.04.12	17:00	10.04.12	18.04.	
		12.05.12	17:28	12.05.12	18.48	
		16.05.12	11:28	16.05.12	12.25	
		10.06.12	3.05	10.06.12	9.46	Stopped due to low demand and high frequency
		10.06.12	12.30	10.06.12	15.12	Stopped due to internal fault
		27.06.12	9:31	27.06.12	11.15	Tripped on internal fault
		13.07.12	12:40	13.07.12	14.12	Tripped due to Grid disturbance
		30.07.12	2:35	30.07.12	13.41	
		31.07.12	13.02	31.07.12	20.58	

(D) BADARPUR THERMAL POWER STATION

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	95	24-04-12	18:35	25-04-12	18:15	Reserve shutdown
		13-05-12	13:12	13-05-12	13:43	Furnace Disturbance
		26-05-12	8:32	26-05-12	11:10	Grid Disturbance
		26-05-12	12:37	29-05-12	1:25	Water wall Tube Leakage
		20-07-12	22:02	22-07-12	13:00	Water wall Tube Leakage
		22-07-12	13:00	23-07-12	3:07	CW Pump not available
		30-07-12	6:58	30-07-12	10:57	Grid Disturbance
		31-07-12	13:08	31-07-12	16:48	Grid Disturbance
2	95	05-04-12	3:30	05-04-12	12:27	Loss of excitation field
		15-05-12	12:05	19-05-12	18:30	CW Shortage
		26-05-12	8:32	26-05-12	11:43	Grid Disturbance
		06-06-12	19:08	06-06-12	19:55	PC feeder trip on Low LT Voltage caused by system jerk
		06-07-12	19:20	09-07-12	10:05	Reserve shutdown
		30-07-12	2:35	30-07-12	5:27	Grid Disturbance
		30-07-12	6:58	30-07-12	11:29	Grid Disturbance
		31-07-12	13:01	31-07-12	17:05	Grid Disturbance
3	95	01-04-12	23:45	22-04-12	17:12	Planned shutdown
		22-04-12	18:21	22-04-12	21:46	Generator Over Fluxing
		12-05-12	6:04	13-05-12	5:17	Economiser Tube leakage
		13-05-12	20:22	13-05-12	21:25	Furnace Disturbance
		26-05-12	8:32	26-05-12	15:20	Grid Disturbance
		27-05-12	7:20	27-05-12	8:05	Furnace Disturbance
		30-05-12	15:05	30-05-12	15:40	Furnace Disturbance
		02-06-12	11:46	03-06-12	16:15	CW Shortage
		09-06-12	23:50	10-06-12	10:43	Fuurnace plate red hot near burner
		15-06-12	7:40	15-06-12	8:50	Furnace Disturbance
		28-06-12	6:15	28-06-12	12:55	Furnace Disturbance
		30-07-12	6:58	30-07-12	10:25	Grid Disturbance
		31-07-12	13:08	31-07-12	16:18	Grid Disturbance
		31-07-12	18:35	31-07-12	19:17	Low Condenser Vacuum
		31-07-12	20:05	CONTD.		Excitation System Problem
4	210	21-05-12	7:12	23-05-12	15:35	CW Shortage
		26-05-12	8:32	26-05-12	11:28	Grid Disturbance
		06-07-12	7:35	06-07-12	9:33	Excitation System Problem
		30-07-12	2:35	30-07-12	18:00	Grid Disturbance
		31-07-12	13:01	31-07-12	17:25	Grid Disturbance
5	210	28-04-12	12:40	30-04-12	6:25	Reserve shutdown
		19-05-12	14:48	21-05-12	5:45	CW Shortage
		26-05-12	8:32	26-05-12	11:35	Grid Disturbance
		03-06-12	11:46	27-06-12	20:37	Plan shutdown boiler overhauling
		25-07-12	20:34	26-07-12	21:57	Water wall Tube Leakage
		27-07-12	14:51	27-07-12	16:04	Both BFPs tripped
		30-07-12	6:58	30-07-12	15:10	Grid Disturbance
		31-07-12	13:12	31-07-12	18:01	Grid Disturbance

4 ALLOCATION OF POWER TO DELHI

A) Allocation of power to Delhi from Unallocated quota of Central Sector Generating Stations to Delhi w.e.f. 04.11.2011

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

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-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	147	735	639	0	0	639
Unchahaar-I TPS	420	20	24	21	0	0	21
Unchahaar-II TPS	420	63	47	41	0	0	41
Unchahaar-III TPS	210	31	29	25	0	0	25
TOTAL	**8782**	**1152**	**2174**	**1902**	**0**	**0**	**1902**
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
Koteshwar HEP	200	0	20	19	0	0	19
TOTAL	**1200**	**99**	**123**	**108**	**0**	**0**	**108**
Total	**15876**	**1766**	**2892**	**2556**	**0**	**0**	**2556**
Allocation from ER and Tala HEP							
Farakka	1600	0	22	19	0	0	19
Kahalgaon	840	0	51	43	0	0	43
Talchar	1000	0	0	0	0	0	0
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1500	0	157	131	0	0	131
Total ER	**6210**	**153**	**290**	**242**	**0**	**0**	**242**
Joint Venture							
Jhajjar TPS	500	38	0	0	0	0	0
Grand Total	**22586**	**1957**	**3182**	**2798**	**0**	**0**	**2798**

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. 01.04.2011.

(Allocation In %)

(A) 10.00hrs. to 17.00hrs.

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

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

SOURCES	LICENSEES					
	NDMC	MES	NDPL	BRPL	BYPL	TOTAL
1. Central Sector without Dadri (Th)	0.00	0.00	29.18	43.58	27.24	100.00
2. Dadri (Th)	14.05	0.00	24.18	3687	24.90	100.00
3. BTPS	15.07	7.09	21.88	33.37	22.59	100.00
4. RPH	0.00	0.00	28.390	42.97	28.64	100.00
5. GT	0.00	0.00	28.28	42.99	28.73	100.00
6. Pragati	25.76	0.00	20.77	31.76	21.71	100.00
7. DVC	0.00	0.00	29.18	43.58	27.24	100.00

6 POWER AVAILABILITY-DEMAND POSITION AT THE TIME OF PEAK DEMAND MET DURING JULY 2012

All figures in MW

Date	Time of peak demand	Generation within Delhi							Import from the Grid	Schedule from the Grid	OD(-) / UD(+)	Demand met	Shedding	Un-Restricted Demand
		RPH	GT	PPCL	Rithala	Bawana	BTPS	Total						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)= (3) to (8)	(10)	(11)	(12)= (11) - (10)	(13)= (11)+ (12)	(14)	(15)= (13)+ (14)
1	23.33.34	81	215	275	29	209	491	1300	3725	3603	122	5025	39	5064
2	16.00.57	46	211	275	15	245	520	1312	4142	4004	138	5454	184	5638
3	15.48.05	40	218	277	20	273	514	1342	4038	4130	-92	5380	108	5488
4	15.44.32	41	209	267	-1	274	530	1320	3944	3825	119	5264	196	5460
5	15.10.14	88	210	268	13	238	587	1404	4238	4057	181	5642	85	5727
6	16.03.40	95	206	275	25	215	530	1346	3890	3918	-28	5236	12	5248
7	00.00.18	39	149	144	-1	0	497	828	3191	3419	-228	4019	0	4019
8	22.50.25	0	150	290	28	0	464	932	3093	3226	-133	4025	0	4025
9	22.50.54	85	149	283	20	0	550	1087	3519	3555	-36	4606	96	4702
10	15.15.04	34	147	278	21	0	560	1040	3776	3472	304	4816	14	4830
11	15.16.10	31	143	280	19	-1	494	966	3602	3838	-236	4568	6	4574
12	15.20.43	28	145	285	5	0	535	998	3347	3302	45	4345	9	4354
13	14.57.47	22	155	248	19	-2	529	971	3846	3007	839	4817	133	4950
14	23.19.53	35	146	285	32	-1	506	1003	3205	3376	-171	4208	0	4208
15	22.53.10	36	147	284	19	0	547	1033	3486	3555	-69	4519	0	4519
16	15.39.46	37	185	273	31	24	546	1096	3590	3527	63	4686	131	4817
17	22.50.26	32	171	275	0	307	561	1346	3623	3746	-123	4969	47	5016
18	15.56.56	50	205	263	34	259	552	1363	3802	3445	357	5165	179	5344
19	15.08.01	49	203	266	34	243	547	1342	3804	3440	364	5146	196	5342
20	22.01.24	36	217	131	28	410	533	1355	3717	3655	62	5072	20	5092
21	15.35.53	53	212	272	62	420	457	1476	3502	3625	-123	4978	24	5002
22	22.45.35	50	220	281	-1	237	464	1251	3693	3598	95	4944	15	4959
23	15.30.26	52	211	271	70	456	533	1593	3651	3829	-178	5244	13	5257
24	16.24.04	49	213	273	37	279	560	1411	3746	3847	-101	5157	58	5215
25	15.03.43	49	216	276	20	266	560	1387	3589	3739	-150	4976	184	5160
26	15.41.04	50	222	282	38	471	388	1451	3341	3667	-326	4792	78	4870
27	14.51.51	48	172	274	14	271	503	1282	3600	3626	-26	4882	0	4882
28	22.35.26	48	184	284	0	-1	545	1060	3363	3427	-64	4423	3	4426
29	00.00.12	48	186	278	-1	-3	542	1050	3288	3506	-218	4338	0	4338
30	15.47.59	48	224	284	14	293	312	1175	3389	3205	184	4564	11	4575
31	00.00.31	50	224	276	14	580	495	1639	2703	3041	-338	4342	0	4342

7 POWER AVAILABILITY- DEMAND POSITION AT THE TIME OF MAXIMUM UNRESTRICTED DEMAND DURING JULY 2012

Date	Time of peak demand	Generation within Delhi							Import from the Grid	Schedule from the Grid	OD(-) / UD(+)	Demand met	Shedding	Un-Restricted Demand
		RPH	GT	PPCL	Rithala	Bawana	BTPS	Total						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)= (3) to (8)	(10)	(11)	(12)= (11) - (10)	(13)= (11)+ (12)	(14)	(15)= (13)+ (14)
1	23.33.34	81	215	275	29	209	491	1300	3725	3603	122	5025	39	5064
2	16.00.57	46	211	275	15	245	520	1312	4142	4004	138	5454	184	5638
3	15.48.05	40	218	277	20	273	514	1342	4038	4130	-92	5380	108	5488
4	15.44.32	41	209	267	-1	274	530	1320	3944	3825	119	5264	196	5460
5	15.10.14	88	210	268	13	238	587	1404	4238	4057	181	5642	85	5727
6	16.03.40	95	206	275	25	215	530	1346	3890	3918	-28	5236	12	5248
7	00.00.18	39	149	144	-1	0	497	828	3191	3419	-228	4019	0	4019
8	22.50.25	0	150	290	28	0	464	932	3093	3226	-133	4025	0	4025
9	22.50.54	85	149	283	20	0	550	1087	3519	3555	-36	4606	96	4702
10	15.15.04	34	147	278	21	0	560	1040	3776	3472	304	4816	14	4830
11	15.16.10	31	143	280	19	-1	494	966	3602	3838	-236	4568	6	4574
12	15.20.43	28	145	285	5	0	535	998	3347	3302	45	4345	9	4354
13	14.57.47	22	155	248	19	-2	529	971	3846	3007	839	4817	133	4950
14	23.19.53	35	146	285	32	-1	506	1003	3205	3376	-171	4208	0	4208
15	22.53.10	36	147	284	19	0	547	1033	3486	3555	-69	4519	0	4519
16	15.39.46	37	185	273	31	24	546	1096	3590	3527	63	4686	131	4817
17	22.50.26	32	171	275	0	307	561	1346	3623	3746	-123	4969	47	5016
18	15.56.56	50	205	263	34	259	552	1363	3802	3445	357	5165	179	5344
19	15.30.00	50	196	264	34	257	538	1338	3520	3398	122	4858	692	5550
20	15.00.00	44	217	277	-1	451	525	1512	3424	3426	-2	4936	386	5322
21	15.35.53	53	212	272	62	420	457	1476	3502	3625	-123	4978	24	5002
22	22.45.35	50	220	281	-1	237	464	1251	3693	3598	95	4944	15	4959
23	15.30.26	52	211	271	70	456	533	1593	3651	3829	-178	5244	13	5257
24	16.00.00	49	209	269	38	281	560	1406	3709	3861	-152	5115	116	5231
25	15.03.43	49	216	276	20	266	560	1387	3589	3739	-150	4976	184	5160
26	15.41.04	50	222	282	38	471	388	1451	3341	3667	-326	4792	78	4870
27	14.51.51	48	172	274	14	271	503	1282	3600	3626	-26	4882	0	4882
28	22.35.26	48	184	284	0	-1	545	1060	3363	3427	-64	4423	3	4426
29	00.00.12	48	186	278	-1	-3	542	1050	3288	3506	-218	4338	0	4338
30	15.47.59	48	224	284	14	293	312	1175	3389	3205	184	4564	11	4575
31	00.00.31	50	224	276	14	580	495	1639	2703	3041	-338	4342	0	4342

8 SOURCEWISE SCHEDULED DRAWL FROM NORTHERN GRID AS WELL AS AVAILABILITY WITHIN DELHI FOR JULY 2012

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

A (i) RPH	35.799
(ii) GT+STG	142.865
(iii) PRAGATI	209.595
(iv) RITHALA	16.171
(v) BAWANA CCGT	131.355
TOTAL	535.785
B) AVAILABILITY FROM BTPS	384.935
C) AUXILIARY CONSUMPTION OF GENERATING STNs. EXCLUDING BTPS	19.902
D) NET GENERATION AVAILABLE WITHIN DELHI(A+B-C)	**900.818**

B) SOURCE WISE SCHEDULED DRAWL FROM THE NORTHERN GRID

NAME OF THE STATION	AVAILABILITY AT POWER PLANT	AVAILABILITY AT DELHI PERIPHERY	ALLOCATION MADE BY NRLDC AT POWER PLANT	ALLOCATION MADE BY NRLDC AT DELHI PERIPHERY
B/SUIL	8.074	7.825	4.556	4.416
SALAL	54.112	52.440	30.531	29.588
TANKAPUR	8.237	7.982	4.648	4.504
CHAMERA	27.285	26.440	15.394	14.917
CHAMERA -II	28.576	27.692	16.122	15.624
CHAMERA -III	20.642	20.004	20.642	20.004
DHAULIGANGA	26.932	26.100	15.195	14.726
SEWA -2	2.996	2.904	1.690	1.638
URI	38.018	36.841	21.449	20.785
KOTESHWAR	6.760	6.552	6.760	6.552
MUNDRA_UMPP	0.000	0.000	0.000	0.000
ANTA (GAS)	18.526	17.956	16.220	15.720
ANTA (RLNG)	11.513	11.157	1.546	1.496
ANTA (LIQUID)	0.000	0.000	0.000	0.000
DADRI (GAS)	38.075	36.899	32.622	31.614
DADRI (RLNG)	18.975	18.391	2.888	2.796
DADRI (LIQUID)	0.021	0.020	0.000	0.000
AURAIYA (GAS)	14.580	14.132	12.097	11.725
AURAIYA (RLNG)	22.410	21.719	2.961	2.865
AURAIYA (LIQUID)	0.000	0.000	0.000	0.000
SINGRAULI	98.022	94.998	98.022	94.998
RIHAND -I	50.098	48.543	49.858	48.311
RIHAND -II	87.461	84.756	87.218	84.521
UNCHAHAR-I	14.961	14.499	14.269	13.828
UNCHAHAR-II	29.595	28.682	28.279	27.406
UNCHAHAR-III	18.663	18.087	17.849	17.298
DADRI (TH)	493.947	478.723	451.483	437.561
DADRI (TH) STAGE-II	464.188	449.877	444.340	430.634
NAPP	20.413	19.784	20.413	19.784
RAPP 'B'	0.000	0.000	0.000	0.000
RAPP 'C'	29.537	28.628	29.537	28.628
NATHPA JHAKRI	112.935	109.452	112.935	109.452
DULASTI	31.401	30.429	17.716	17.168
TEHRI	17.227	16.697	17.227	16.697
JHAJJAR	118.092	114.418	62.751	60.779
KHELGAON	21.876	21.201	21.055	20.404
KHELGAON-II	70.577	68.399	68.923	66.794
FARAKA	8.737	8.467	7.833	7.590
TALA	21.581	20.913	21.581	20.913
TALCHER	0.000	0.000	0.000	0.000
DVC	152.186	150.104	150.104	145.489
CHATTISHGARH	0.000	0.000	0.000	0.000
ANDHRA	2.871	2.805	2.805	2.721
DVC TATA STEEL	0.000	0.000	0.000	0.000
DVC CTPS (BRPL)	24.789	24.450	24.450	23.707
DVC CTPS (BYPL)	15.493	15.281	15.281	14.816
DVC CTPS (NDPL)	0.000	0.000	0.000	0.000
METHON POWER(NDPL)	109.735	108.234	108.234	104.890
DVC MEJIA (LT-08)(BYPL)	50.771	50.077	50.077	48.508

NAME OF THE STATION	AVAILABILITY AT POWER PLANT	AVAILABILITY AT DELHI PERIPHERY	ALLOCATION MADE BY NRLDC AT POWER PLANT	ALLOCATION MADE BY NRLDC AT DELHI PERIPHERY
ORISSA	54.758	54.013	54.013	52.358
SIKKIM	14.322	14.125	14.125	13.691
HIMACHAL PRADESH	73.648	72.661	72.661	70.411
WEST BENGAL	26.408	26.046	26.046	25.230
MADHYA PRADESH(WR)	101.944	99.934	99.934	96.792
JAMMU & KASHMIR	70.491	69.544	69.544	67.387
DVC (FOR NDPL) LT-09	16.196	15.975	15.975	15.491
HARYANA (LT-05)	3.759	3.702	3.702	3.596
KARNATAKA	0.197	0.193	0.193	0.187
URS	0.162	0.157	0.162	0.157
UTTRANCHAL	52.177	51.169	51.169	49.578
NAGALAND	9.782	9.594	9.594	9.294
RAJASTHAN	27.228	26.778	26.778	25.939
TO CHHATISHGARH	0.000	0.000	0.000	0.000
TO WEST BENGAL	0.000	0.000	0.000	0.000
TO MADHYA PRADESH	0.000	0.000	0.000	0.000
TO JAMMU & KASHMIR	-2.229	-2.259	-2.259	-2.331
TO JHARKHAND	0.000	0.000	0.000	0.000
TO RAJASTHAN	0.000	0.000	0.000	0.000
TO HIMACHAL PRADESH	0.000	0.000	0.000	0.000
TO ASSAM	0.000	0.000	0.000	0.000
TO UTTAR PRADESH	0.000	0.000	0.000	0.000
POWER EXCHANGE(IEX)	21.102	20.451	21.102	20.451
TO POWER EXCHANGE (IEX)	-84.919	-87.607	-84.919	-87.607
POWRER EXCHANGE(PX)	0.409	0.397	0.409	0.397
TO POWER EXCHANGE (PX)	-1.068	-1.102	-1.068	-1.102
TO SHARE PROJECT (HARYANA)	-11.800	-12.182	-11.800	-12.182
TO SHARE PROJECT (PUNJAB)	-10.592	-10.933	-10.592	-10.933
TOTAL	**2772.864**	**2693.213**	**2482.330**	**2398.671**

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

NAME OF THE STATION	AVAILABILITY AT POWER PLANT	AVAILABILITY AT DELHI PERIPHERY	ALLOCATION MADE BY NRLDC AT POWER PLANT	ALLOCATION MADE BY NRLDC AT DELHI PERIPHERY
NTPC - NR	1381.034	1338.439	1259.651	1220.773
NTPC - ER	101.190	98.067	97.810	94.789
NHPC	246.273	238.658	147.944	143.370
NPC	49.950	48.412	49.950	48.412
KOTESHWAR	6.760	6.552	6.760	6.552
MUNDRA_UMPP	0.000	0.000	0.000	0.000
NATHPA JHAKRI	112.935	109.452	112.935	109.452
TEHRI	17.227	16.697	17.227	16.697
TALA	21.581	20.913	21.581	20.913
JHAJJAR	118.092	114.418	62.751	60.779
TALCHER	0.000	0.000	0.000	0.000
DVC	152.186	150.104	150.104	145.489
ANDHRA	2.871	2.805	2.805	2.721
DVC CTPS (BRPL)	24.789	24.450	24.450	23.707
DVC CTPS (BYPL)	15.493	15.281	15.281	14.816
DVC CTPS (NDPL)	0.000	0.000	0.000	0.000
METHON POWER (NDPL)	109.735	108.234	108.234	104.890
DVC MEJIA (LT-08)(BYPL)	50.771	50.077	50.077	48.508
ORISSA	54.758	54.013	54.013	52.358
SIKKIM	14.322	14.125	14.125	13.691
HIMACHAL PRADESH	73.648	72.661	72.661	70.411
WEST BENGAL	26.408	26.046	26.046	25.230
MADHYA PRADESH(WR)	101.944	99.934	99.934	96.792
JAMMU & KASHMIR	70.491	69.544	69.544	67.387
DVC (FOR NDPL) LT-09	16.196	15.975	15.975	15.491
HARYANA (LT -05)	3.759	3.702	3.702	3.596
KARNATAKA	0.197	0.193	0.193	0.187
URS	0.162	0.157	0.162	0.157
UTTRANCHAL	52.177	51.169	51.169	49.578
NAGALAND	9.782	9.594	9.594	9.294
RAJASTHAN	27.228	26.778	26.778	25.939
POWER EXCHANGE(IEX)	21.102	20.451	21.102	20.451
POWER EXCHANGE(PX)	0.409	0.397	0.409	0.397
TOTAL	**2883.472**	**2807.296**	**2592.968**	**2512.826**

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 CHHATISHGARH	0.000	0.000	0.000	0.000
TO MADHYA PRADESH	0.000	0.000	0.000	0.000
TO WEST BENGAL	0.000	0.000	0.000	0.000
TO JAMMU & KASHMIR	-2.229	-2.259	-2.259	-2.331
TO JHARKHAND	0.000	0.000	0.000	0.000
TO RAJASTHAN	0.000	0.000	0.000	0.000
TO HIMACHAL PRADESH	0.000	0.000	0.000	0.000
TO ASSAM	0.000	0.000	0.000	0.000
TO UTTAR PRADESH	0.000	0.000	0.000	0.000
TO POWER EXCHANGE (IEX)	-84.919	-87.607	-84.919	-87.607
TO POWER EXCHANGE (PX)	-1.068	-1.102	-1.068	-1.102
TO SHARE PROJECT (HARYANA)	-11.800	-12.182	-11.800	-12.182
TO SHARE PROJECT (PUNJAB)	-10.592	-10.933	-10.592	-10.933
TOTAL	**-110.608**	**-114.083**	**-110.638**	**-114.155**
TOTAL SCHEDULED DRAWAL FROM THE GRID	**2772.864**	**2693.213**	**2482.330**	**2398.671**
TOTAL CONSUMPTION INCLUDING AUX. OF GENERATING STNs. EXCLUDING BTPS				2908.351
NET CONSUMPTION				2888.449
AVAILABILITY WITHIN DELHI				900.818
ACTUAL DRAWAL FROM THE GRID				1987.631
OVER DRAWAL(+)/UNDER DRAWAL(-) FROM THE GRID ON THE BASIS OF SCHEDULED ALLOCATION MADE BY NRLDC TO DELHI AT PERIPHERY				-411.040
LOAD SHEDDING				**55.212**
UNRESTRICTED DEMAND (GROSS)				**2963.563**
UNRESTRICTED DEMAND (NET)				**2943.661**
MAX. NET CONSUMPTION				107.365Mus. ON 02.07.2012
MAX. LOAD SHEDDING				3499MW ON 31.07.2012 AT 13.30HRS.
PEAK LOAD	Peak Demand during the month			SHEDDING AT PEAK TIME
DAY PEAK	5642MW AT 15.10.14HRS ON 05.07.2012			85MW
EVENING PEAK	5124MW AT 23.00.00HRS ON 02.07.2012			120MW
P.L.F. OF GENCO AND PRAGATI STNs.	RPH GT PRAGATI RITHALA BAWANA			35.64% 71.12% 85.37% 20.13% 25.81%

9 SHEDDING DETAILS DURING THE MONTH OF JULY 2012.

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-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.080	0.018	0.000
2-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.530	1.275	0.000
3-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.144	0.411	0.000
4-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.193	0.000
5-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.048	0.000	0.000
6-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
7-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
8-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
9-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
10-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
11-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
12-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
13-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.003	0.168	0.000	0.000
14-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
15-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
16-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.291	0.039	0.000
17-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.029	0.340	0.000
18-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.742	0.090	0.957	0.011
19-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.271	0.892	1.270	0.006
20-Jul-12	1	0.003	0.000	0.000	0.000	**0.003**	0.274	0.346	1.771	0.000
21-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.013	0.000
22-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.064	0.000
23-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
24-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.027	0.000
25-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
26-Jul-12	4	0.053	0.000	0.000	0.000	**0.053**	0.000	0.000	0.000	0.000
27-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
28-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
29-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.000	0.000
30-Jul-12	6	0.000	0.190	0.001	0.000	**0.191**	0.000	0.000	0.000	0.000
31-Jul-12	0	0.000	0.000	0.000	0.000	**0.000**	0.000	0.117	0.000	0.000
TOTAL	**11**	**0.056**	**0.190**	**0.001**	**0.000**	**0.247**	**1.290**	**2.735**	**6.378**	**0.017**

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-Jul-12	0.000	0.000	0.000	0.000	**0.098**	**0.098**	0.000	0.008	0.000	0.000	0.000
2-Jul-12	0.000	0.000	0.000	0.000	**1.805**	**1.805**	0.110	0.025	0.001	0.000	0.000
3-Jul-12	0.000	0.000	0.000	0.000	**0.555**	**0.555**	0.000	0.003	0.001	0.000	0.000
4-Jul-12	0.000	0.000	0.000	0.000	**0.193**	**0.193**	0.031	0.069	0.003	0.000	0.000
5-Jul-12	0.000	0.000	0.000	0.000	**0.048**	**0.048**	0.000	0.183	0.328	0.000	0.000
6-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.137	0.000	0.000	0.000
7-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.007	0.011	0.000	0.000	0.000
8-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.000	0.000	0.000
9-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.013	0.007	0.004	0.000	0.000
10-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.049	0.005	0.000
11-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.041	0.007	0.000	0.000
12-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.022	0.000	0.000	0.000
13-Jul-12	0.000	0.000	0.000	0.000	**0.171**	**0.171**	0.541	0.065	0.007	0.051	0.000
14-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.028	0.000	0.000	0.000
15-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.006	0.000	0.000	0.000
16-Jul-12	0.000	0.000	0.000	0.000	**0.330**	**0.330**	0.000	0.000	0.000	0.000	0.000
17-Jul-12	0.000	0.000	0.000	0.000	**0.369**	**0.369**	0.000	0.035	0.000	0.000	0.000
18-Jul-12	0.000	0.000	0.000	0.000	**1.800**	**1.800**	0.005	0.024	0.049	0.000	0.000
19-Jul-12	0.000	0.000	0.000	0.000	**2.439**	**2.439**	0.000	0.004	0.014	0.000	0.000
20-Jul-12	0.000	0.000	0.000	0.000	**2.391**	**2.394**	0.147	0.000	0.000	0.000	0.000
21-Jul-12	0.000	0.000	0.000	0.000	**0.013**	**0.013**	0.000	0.000	0.000	0.000	0.000
22-Jul-12	0.000	0.000	0.000	0.000	**0.064**	**0.064**	0.000	0.000	0.000	0.000	0.000
23-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.003	0.000	0.000	0.000
24-Jul-12	0.000	0.000	0.000	0.000	**0.027**	**0.027**	0.029	0.222	0.007	0.000	0.000
25-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.042	0.015	0.008	0.000	0.000
26-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.053**	0.000	0.000	0.000	0.000	0.000
27-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.000	0.000	0.000	0.000	0.000
28-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.017	0.000	0.002	0.000	0.000
29-Jul-12	0.000	0.000	0.000	0.000	**0.000**	**0.000**	0.010	0.027	0.002	0.000	0.000
30-Jul-12	5.463	11.568	5.997	0.480	**23.508**	**23.699**	0.000	0.000	0.000	0.000	0.000
31-Jul-12	3.023	6.507	3.248	0.554	**13.449**	**13.449**	0.000	0.000	0.000	0.000	0.000
	8.486	**18.075**	**9.245**	**1.034**	**47.260**	**47.507**	**0.952**	**0.935**	**0.482**	**0.056**	**0.000**

ALL FIGURES IN MUs

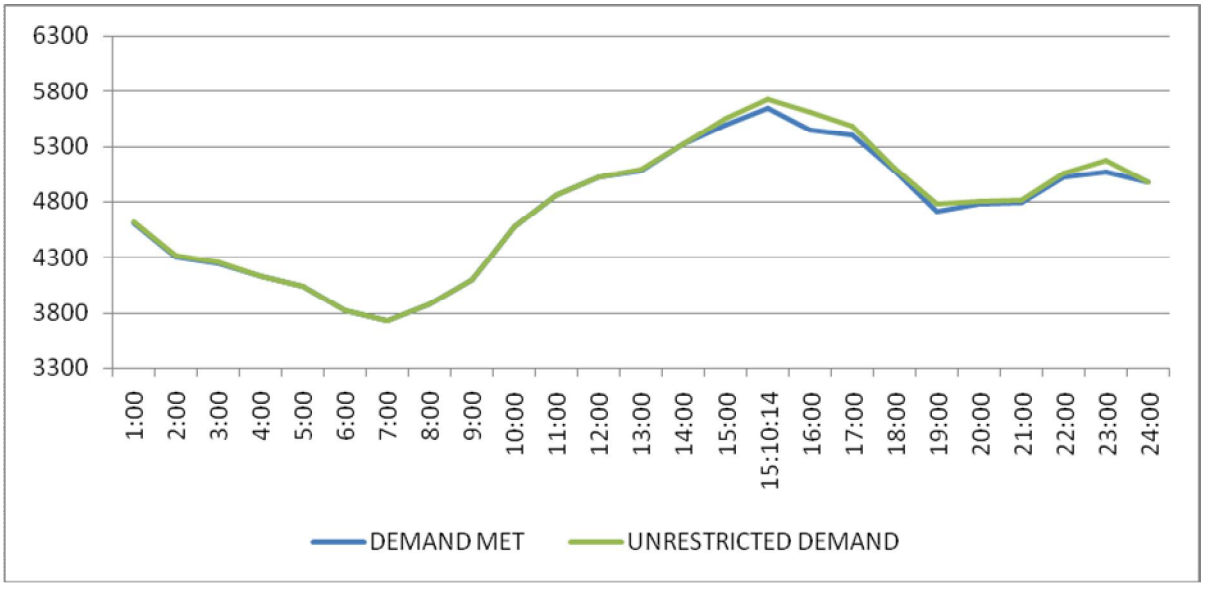
DATE	DUE TO T&D CONTRAINTS				OTHER AGENCIES LIKE GENCO, BBMB, BTPS ETC.	THEFT PRONE SHEDDING			TOTAL SHEDDING DUE TO T&D CONSTS. & THEFT PRONE	GRAND TOTAL
	DISCOMS									
	BSES		NDPL	NDMC		BSES		NDPL		
	BYPL	BRPL				BYPL	BRPL			
1	23	24	25		26	27	28	29	30=18 to29	31=30+17
1-Jul-12	0.146	0.116	0.010	0.000	0.000	0.000	0.000	0.037	0.317	0.415
2-Jul-12	0.010	0.393	0.040	0.000	0.000	0.000	0.000	0.009	0.588	2.393
3-Jul-12	0.081	0.389	0.023	0.000	0.000	0.000	0.000	0.000	0.497	1.052
4-Jul-12	0.022	0.545	0.000	0.000	0.000	0.000	0.000	0.000	0.670	0.863
5-Jul-12	0.062	0.156	0.056	0.000	0.000	0.000	0.000	0.000	0.785	0.833
6-Jul-12	0.026	0.313	0.126	0.000	0.023	0.000	0.000	0.011	0.636	0.636
7-Jul-12	0.017	0.023	0.041	0.000	0.000	0.000	0.000	0.000	0.099	0.099
8-Jul-12	0.015	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.017	0.017
9-Jul-12	0.001	0.092	0.000	0.000	0.000	0.000	0.000	0.021	0.138	0.138
10-Jul-12	0.053	0.033	0.001	0.000	0.000	0.000	0.000	0.010	0.151	0.151
11-Jul-12	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.018	0.089	0.089
12-Jul-12	0.014	0.030	0.013	0.000	0.000	0.000	0.000	0.024	0.103	0.103
13-Jul-12	0.097	0.000	0.002	0.000	0.000	0.000	0.000	0.024	0.787	0.958
14-Jul-12	0.010	0.040	0.030	0.000	0.000	0.000	0.000	0.029	0.137	0.137
15-Jul-12	0.022	0.001	0.001	0.000	0.000	0.000	0.000	0.029	0.059	0.059
16-Jul-12	0.019	0.006	0.012	0.000	0.000	0.000	0.000	0.021	0.058	0.388
17-Jul-12	0.002	0.056	0.000	0.000	0.000	0.000	0.000	0.000	0.093	0.462
18-Jul-12	0.004	0.056	0.003	0.000	0.000	0.000	0.000	0.000	0.141	1.941
19-Jul-12	0.121	0.095	0.011	0.000	0.000	0.000	0.000	0.000	0.245	2.684
20-Jul-12	0.096	0.113	0.053	0.000	0.000	0.000	0.000	0.000	0.409	2.803
21-Jul-12	0.027	0.023	0.000	0.000	0.000	0.000	0.000	0.015	0.065	0.078
22-Jul-12	0.030	0.043	0.011	0.000	0.000	0.000	0.000	0.011	0.095	0.159
23-Jul-12	0.000	0.052	0.000	0.000	0.000	0.000	0.000	0.027	0.082	0.082
24-Jul-12	0.019	0.105	0.007	0.003	0.000	0.000	0.000	0.012	0.404	0.431
25-Jul-12	0.023	0.018	0.034	0.000	0.000	0.000	0.000	0.011	0.151	0.151
26-Jul-12	0.017	0.080	0.009	0.000	0.000	0.000	0.000	0.037	0.143	0.196
27-Jul-12	0.084	0.004	0.027	0.000	0.000	0.000	0.000	0.027	0.142	0.142
28-Jul-12	0.279	0.014	0.003	0.000	0.000	0.000	0.000	0.037	0.352	0.352
29-Jul-12	0.012	0.011	0.008	0.000	0.000	0.000	0.000	0.029	0.099	0.099
30-Jul-12	0.000	0.139	0.006	0.000	0.000	0.000	0.000	0.000	0.145	23.844
31-Jul-12	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.005	0.008	13.457
TOTAL	**1.332**	**2.946**	**0.532**	**0.003**	**0.023**	**0.000**	**0.000**	**0.444**	**7.705**	**55.212**

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-Jul-12	98.637	5025	23:33:34	45	5070	5070	23:33:34	5025	45
2-Jul-12	107.365	5454	16:00:57	184	5638	5638	16:00:57	5454	184
3-Jul-12	104.322	5350	15:48:05	108	5458	5458	15:48:05	5350	108
4-Jul-12	103.108	5264	15:44:32	196	5460	5460	15:44:32	5264	196
5-Jul-12	104.757	5642	15:10:14	85	5727	5727	15:10:14	5642	85
6-Jul-12	93.121	5236	16:03:40	12	5248	5248	16:03:40	5236	12
7-Jul-12	83.313	4019	00:00:18	0	4019	4019	00:00:18	4019	0
8-Jul-12	78.043	4025	22:50:25	0	4025	4025	22:50:25	4025	0
9-Jul-12	86.297	4606	22:50:54	96	4702	4702	22:50:54	4606	96
10-Jul-12	91.674	4816	15:15:04	14	4830	4830	15:15:04	4816	14
11-Jul-12	89.666	4568	15:16:10	6	4574	4574	15:16:10	4568	6
12-Jul-12	89.180	4345	15:20:43	9	4354	4354	15:20:43	4345	9
13-Jul-12	88.715	4817	14:57:47	133	4950	4950	14:57:47	4817	133
14-Jul-12	84.241	4208	23:19:53	0	4208	4208	23:19:53	4208	0
15-Jul-12	85.109	4519	22:53:10	0	4519	4519	22:53:10	4519	0
16-Jul-12	93.043	4686	15:39:46	131	4817	4817	15:39:46	4686	131
17-Jul-12	97.715	4969	22:50:26	47	5016	5016	22:50:26	4969	47
18-Jul-12	99.695	5165	15:56:56	179	5344	5344	15:56:56	5165	179
19-Jul-12	101.695	5146	15:08:01	196	5342	5550	15:30	4858	692
20-Jul-12	104.150	5072	22:01:24	20	5092	5322	15:00	4936	386
21-Jul-12	98.573	4978	15:35:53	24	5002	5002	15:35:53	4978	24
22-Jul-12	94.569	4944	22:45:35	15	4959	4959	22:45:35	4944	15
23-Jul-12	102.467	5244	15:30:26	13	5257	5257	15:30:26	5244	13
24-Jul-12	103.606	5157	16:24:04	58	5215	5231	16:00	5115	116
25-Jul-12	99.360	4976	15:03:43	184	5160	5160	15:03:43	4976	184
26-Jul-12	96.392	4792	15:41:04	78	4870	4870	15:41:04	4792	78
27-Jul-12	93.740	4882	14:51:51	0	4882	4882	14:51:51	4882	0
28-Jul-12	90.723	4423	22:35:26	3	4426	4426	22:35:26	4423	3
29-Jul-12	86.736	4338	00:00:12	0	4338	4338	00:00:12	4338	0
30-Jul-12	67.628	4564	15:47:59	11	4575	4575	15:47:59	4564	11
31-Jul-12	70.809	4342	00:00:31	0	4342	4342	00:00:31	4342	0
Total	**2888.449**	**5642** **05.07.2012**	15.10.14	85	**5727**	**5727** **05.07.2012**	15.10.14	5642	85

10 LOAD PATTERN OF DELHI ON THE DAY OF PEAK DEMAND MET DURING JULY 2012 ON 05.07.2012- 5642MW at 15.10.14HRS.

All figures in MW

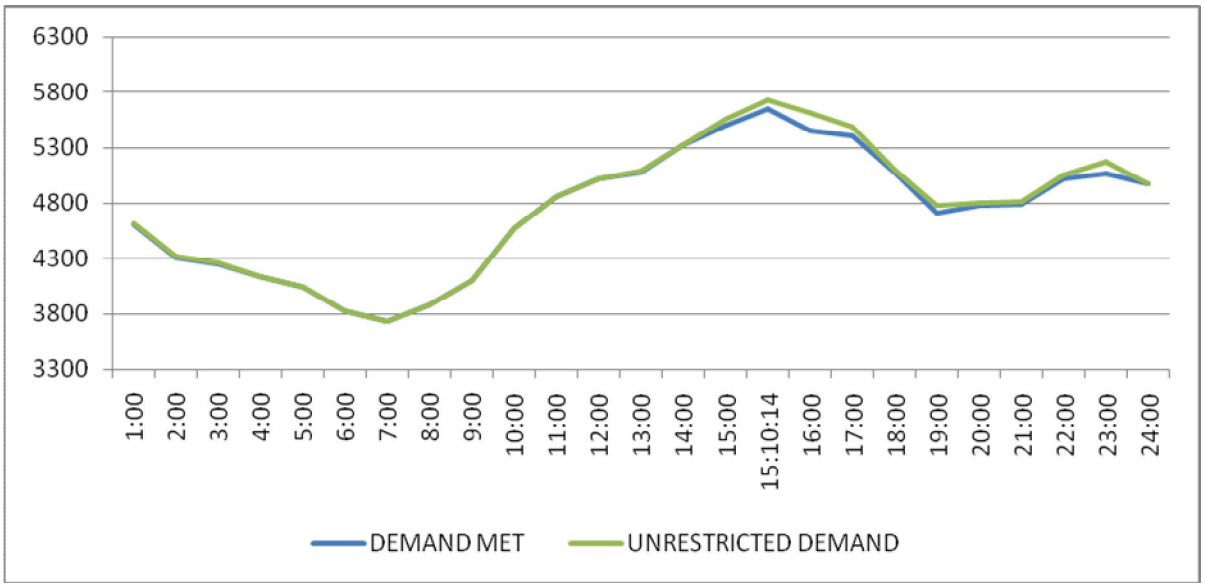
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	4600	17	4617
2:00	4305	9	4314
3:00	4252	9	4261
4:00	4126	5	4131
5:00	4035	2	4037
6:00	3818	0	3818
7:00	3727	0	3727
8:00	3879	0	3879
9:00	4099	0	4099
10:00	4575	0	4575
11:00	4861	0	4861
12:00	5023	0	5023
13:00	5080	8	5088
14:00	5318	8	5326
15:00	5497	59	5556
15:10:14	5642	85	5727
16:00	5446	163	5609
17:00	5405	73	5478
18:00	5076	30	5106
19:00	4711	65	4776
20:00	4780	26	4806
21:00	4794	19	4813
22:00	5023	34	5057
23:00	5071	104	5175
24:00	4970	0	4970
ENERGY IN MUS	**104.757**	**0.833**	**105.590**



11 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UN-RESTRICTED DEMAND DURING JULY 2012 ON 05.07.2012- 5727MW at 15.10.14HRS.

All figures in MW

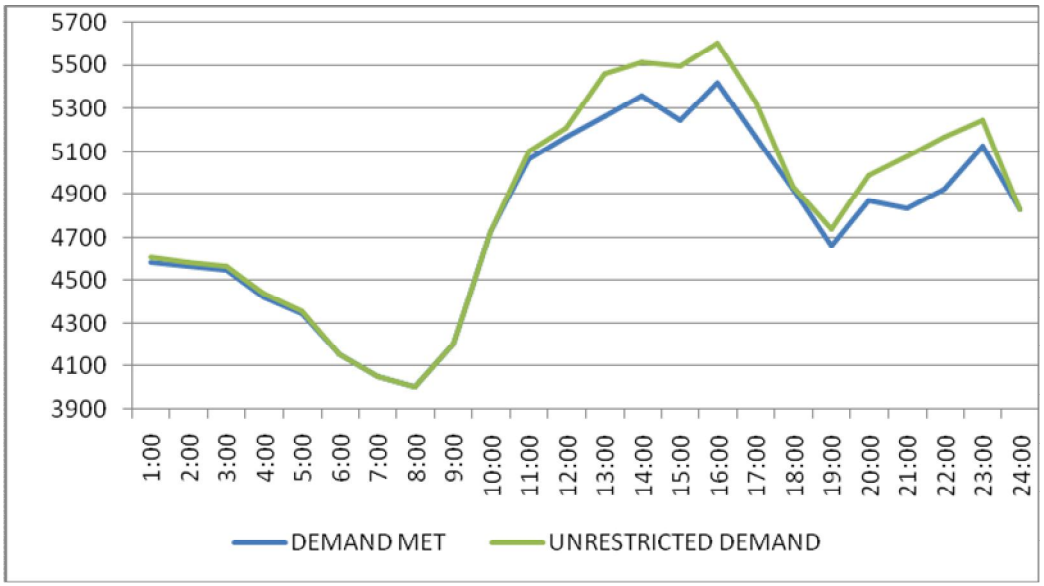
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	4600	17	4617
2:00	4305	9	4314
3:00	4252	9	4261
4:00	4126	5	4131
5:00	4035	2	4037
6:00	3818	0	3818
7:00	3727	0	3727
8:00	3879	0	3879
9:00	4099	0	4099
10:00	4575	0	4575
11:00	4861	0	4861
12:00	5023	0	5023
13:00	5080	8	5088
14:00	5318	8	5326
15:00	5497	59	5556
15:10:14	5642	85	5727
16:00	5446	163	5609
17:00	5405	73	5478
18:00	5076	30	5106
19:00	4711	65	4776
20:00	4780	26	4806
21:00	4794	19	4813
22:00	5023	34	5057
23:00	5071	104	5175
24:00	4970	0	4970
ENERGY IN MUS	**104.757**	**0.833**	**105.590**



12 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM ENERGY CONSUMED DURING JULY 2012 – 02.07.2012 – 107.365 Mus

All figures in MW

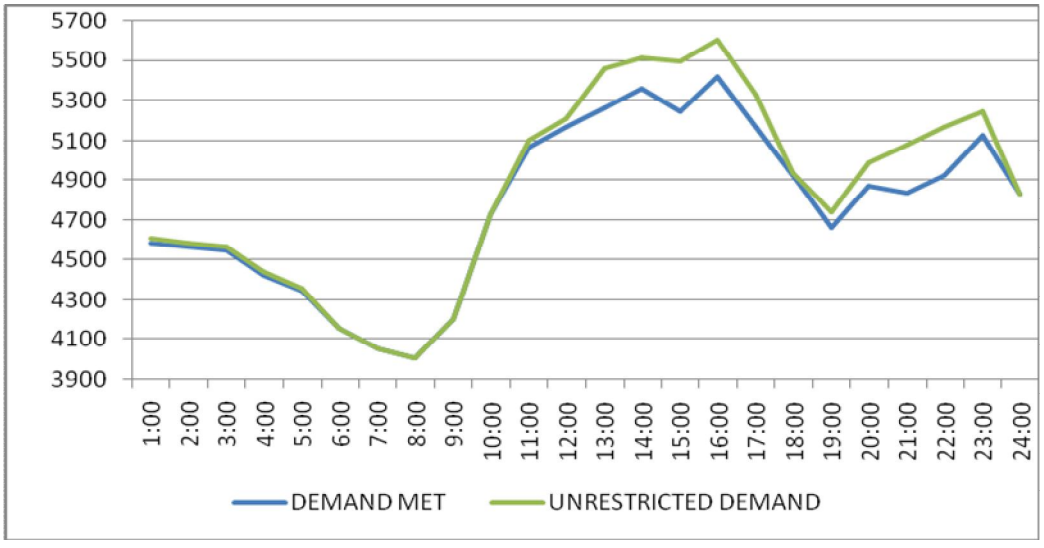
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	4582	25	4607
2:00	4565	21	4586
3:00	4547	17	4564
4:00	4421	20	4441
5:00	4343	13	4356
6:00	4153	0	4153
7:00	4054	0	4054
8:00	4009	0	4009
9:00	4200	0	4200
10:00	4725	0	4725
11:00	5066	39	5105
12:00	5166	44	5210
13:00	5264	196	5460
14:00	5356	157	5513
15:00	5247	251	5498
16:00	5418	184	5602
17:00	5168	162	5330
18:00	4923	15	4938
19:00	4663	74	4737
20:00	4868	123	4991
21:00	4834	243	5077
22:00	4924	242	5166
23:00	5124	120	5244
24:00	4829	0	4829
ENERGY IN MUS	**107.365**	**2.393**	**109.758**



13 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED ENERGY DEMAND DURING JULY 2012 – 02.07.2012 – 109.758 Mus

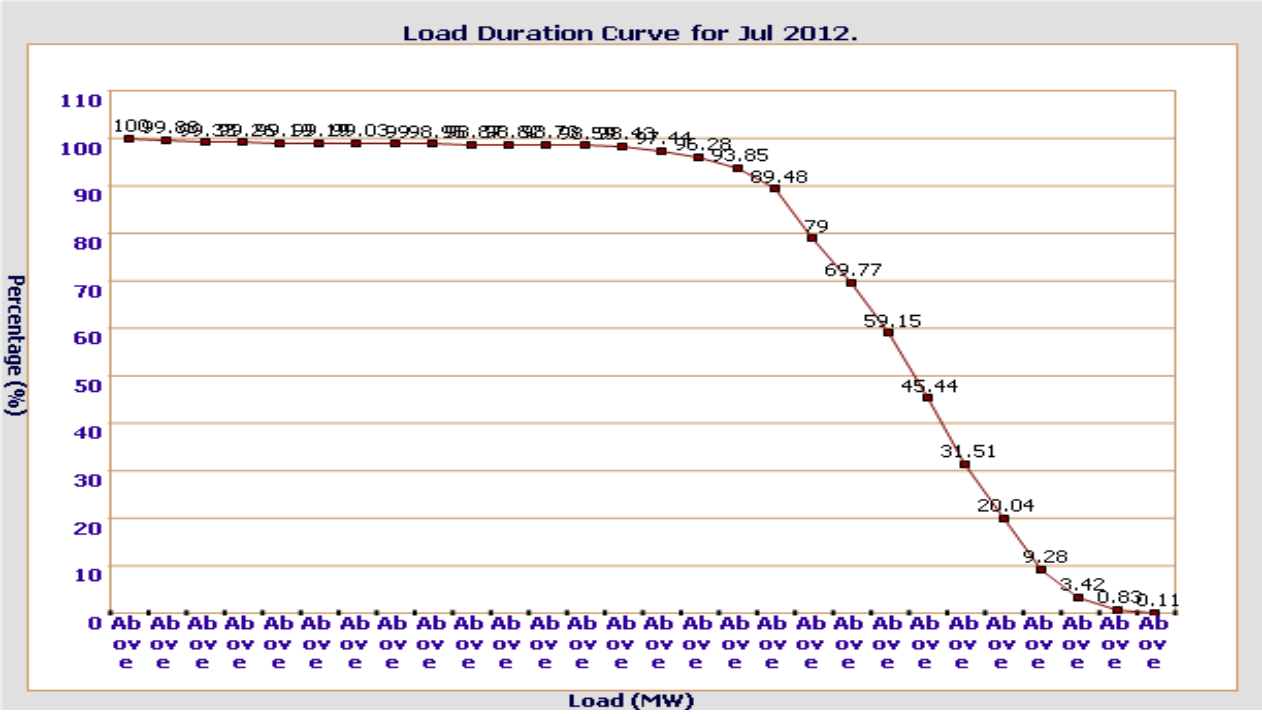
All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	4582	25	4607
2:00	4565	21	4586
3:00	4547	17	4564
4:00	4421	20	4441
5:00	4343	13	4356
6:00	4153	0	4153
7:00	4054	0	4054
8:00	4009	0	4009
9:00	4200	0	4200
10:00	4725	0	4725
11:00	5066	39	5105
12:00	5166	44	5210
13:00	5264	196	5460
14:00	5356	157	5513
15:00	5247	251	5498
16:00	5418	184	5602
17:00	5168	162	5330
18:00	4923	15	4938
19:00	4663	74	4737
20:00	4868	123	4991
21:00	4834	243	5077
22:00	4924	242	5166
23:00	5124	120	5244
24:00	4829	0	4829
ENERGY IN MUS	**107.365**	**2.393**	**109.758**



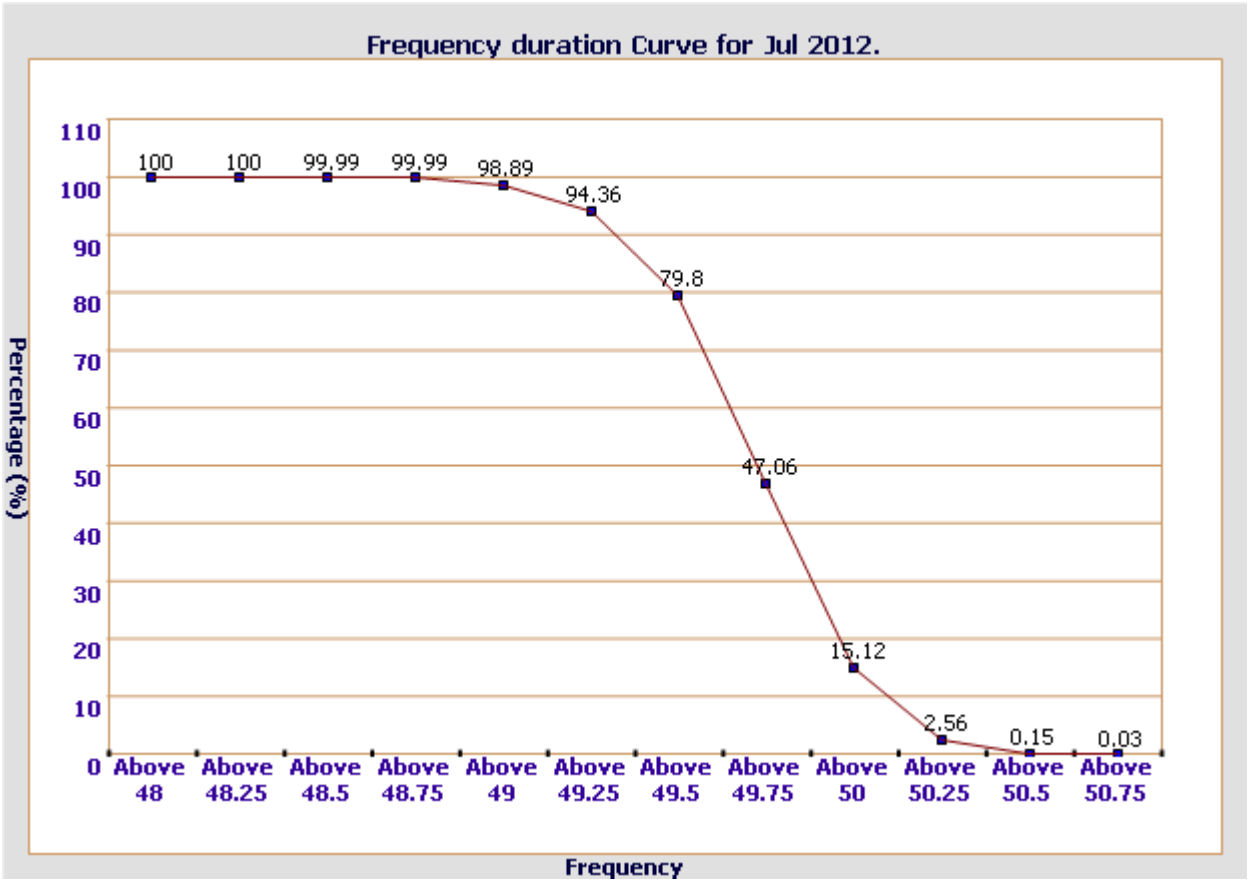
14 LOAD DURATION CURVE FOR JULY 2012

Load in MW	Percentage of Time
Above 300	99.88 %
Above 500	99.33 %
Above 700	99.26 %
Above 900	99.19 %
Above 1100	99.19 %
Above 1300	99.03 %
Above 1500	99 %
Above 1700	98.95 %
Above 1900	98.87 %
Above 2100	98.82 %
Above 2300	98.73 %
Above 2500	98.59 %
Above 2700	98.43 %
Above 2900	97.44 %
Above 3100	96.28 %
Above 3300	93.85 %
Above 3500	89.48 %
Above 3700	79 %
Above 3900	69.77 %
Above 4100	59.15 %
Above 4300	45.44 %
Above 4500	31.51 %
Above 4700	20.04 %
Above 4900	9.28 %
Above 5100	3.42 %
Above 5300	0.83 %
Above 5500	0.11 %



15 FREQUENCY ANALYSIS FOR THE MONTH OF JULY 2012

Frequency Range in Hz.	Percentage of time
Above 48.25	100 %
Above 48.5	99.99 %
Above 48.75	99.99 %
Above 49	98.89 %
Above 49.25	94.36 %
Above 49.5	79.8 %
Above 49.75	47.06 %
Above 50	15.12 %
Above 50.25	2.56 %
Above 50.5	0.15 %
Above 50.75	0.03 %



16 VOLTAGE PROFILE OF 220 KV SUB-STATIONS IN DELHI DURING JULY 2012

All figures in kV

Date	NARELA		GAZIPUR	
	Max	Min	Max	Min
1-Jul-12	223.38	209.45	224.79	210.48
2-Jul-12	222.34	210.48	223.38	207.38
3-Jul-12	221.44	208.54	222.99	209.83
4-Jul-12	222.21	209.58	223.76	--
5-Jul-12	222.09	--	224.28	207.38
6-Jul-12	228.28	206.35	230.73	208.29
7-Jul-12	225.31	212.80	226.73	214.09
8-Jul-12	224.41	214.35	226.60	212.67
9-Jul-12	225.05	210.22	225.44	208.16
10-Jul-12	226.34	210.48	224.41	211.77
11-Jul-12	226.86	210.61	226.34	212.32
12-Jul-12	226.21	215.25	229.89	217.83
13-Jul-12	--	--	--	--
14-Jul-12	--	--	--	--
15-Jul-12	--	--	--	--
16-Jul-12	--	--	--	--
17-Jul-12	224.79	212.54	227.63	214.61
18-Jul-12	224.66	--	226.73	--
19-Jul-12	223.50	209.58	226.08	212.67
20-Jul-12	224.02	214.35	226.60	214.61
21-Jul-12	225.57	--	228.92	213.96
22-Jul-12	227.63	213.06	227.89	--
23-Jul-12	225.05	213.32	227.24	214.09
24-Jul-12	224.28	209.58	226.73	211.12
25-Jul-12	226.08	212.67	228.92	214.73
26-Jul-12	226.08	215.12	228.79	216.02
27-Jul-12	225.44	212.67	228.53	215.25
28-Jul-12	225.57	213.83	228.79	215.25
29-Jul-12	225.70	215.12	228.28	215.12
30-Jul-12	234.34	--	230.08	--
31-Jul-12	234.08	--	227.89	--

17 VOLTAGE PROFILE OF 400 KV SUB-STATIONS IN DELHI DURING JULY 2012

All figures in kV

Date	400kV Bamnauli Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
1-Jul-12	405.20	19.05.19	382.22	16.33.10	395.45
2-Jul-12	406.84	17.03.51	378.47	04.21.30	390.75
3-Jul-12	405.67	19.31.10	381.98	11.07.44	392.49
4-Jul-12	407.31	19.24.47	383.86	13.37.04	395.17
5-Jul-12	406.37	06.04.59	376.12	14.43.43	394.53
6-Jul-12	416.69	18.30.59	380.81	12.15.59	397.97
7-Jul-12	414.81	04.07.25	390.89	14.44.50	402.32
8-Jul-12	412.47	18.05.18	393.47	23.05.45	402.85
9-Jul-12	411.53	03.52.25	379.64	13.53.48	397.81
10-Jul-12	406.37	04.04.53	382.22	14.40.42	397.18
11-Jul-12	409.65	04.01.42	387.61	14.59.29	400.11
12-Jul-12	413.64	06.05.23	394.65	09.31.47	403.72
13-Jul-12	--	--	--	--	--
14-Jul-12	--	--	--	--	--
15-Jul-12	--	--	--	--	--
16-Jul-12	--	--	--	--	--
17-Jul-12	413.41	05.36.11	394.88	14.59.46	403.96
18-Jul-12	409.89	17.33.32	382.22	10.15.12	399.09
19-Jul-12	409.18	18.57.08	383.39	15.11.11	395.89
20-Jul-12	411.06	18.38.01	393.24	15.11.11	401.85
21-Jul-12	413.41	07.04.39	395.82	11.02.24	404.89
22-Jul-12	412.47	19.01.52	393.47	22.06.42	401.53
23-Jul-12	412.23	19.00.35	391.36	01.10.54	400.34
24-Jul-12	411.06	06.02.14	384.56	14.14.37	400.25
25-Jul-12	414.58	06.01.55	390.89	12.40.25	402.55
26-Jul-12	412.70	07.06.34	395.82	10.22.06	402.91
27-Jul-12	412.23	06.04.52	389.72	13.38.38	400.78
28-Jul-12	412.23	06.02.22	389.25	09.45.24	399.31
29-Jul-12	413.64	18.02.00	390.43	11.49.59	401.46
30-Jul-12	410.36	09.56.53	--	--	399.04
31-Jul-12	442.01	15.14.55	--	--	405.03

Date	400kV Bawana Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
1-Jul-12	408.72	19.05.19	386.67	16.31.30	399.89
2-Jul-12	410.83	17.03.51	384.09	04.21.30	395.86
3-Jul-12	410.12	20.02.52	387.85	10.05.27	398.14
4-Jul-12	411.06	19.22.47	389.02	13.40.34	400.05
5-Jul-12	410.36	19.01.41	383.86	14.44.14	399.49
6-Jul-12	420.67	18.30.49	386.67	12.18.09	403.90
7-Jul-12	418.10	04.31.06	396.29	14.45.40	407.24
8-Jul-12	415.98	18.04.18	398.40	23.05.55	407.17
9-Jul-12	415.05	03.51.45	387.38	13.51.18	403.08
10-Jul-12	410.12	18.03.55	387.61	14.14.20	401.50
11-Jul-12	413.64	04.03.32	394.41	14.58.49	405.84
12-Jul-12	418.10	06.04.53	400.27	09.31.37	408.82
13-Jul-12	--	--	--	--	--
14-Jul-12	--	--	--	--	--
15-Jul-12	--	--	--	--	--
16-Jul-12	--	--	--	--	--
17-Jul-12	413.41	05.36.11	394.88	14.59.46	403.96
18-Jul-12	428.88	10.03.41	391.36	14.12.30	405.14
19-Jul-12	414.34	18.57.18	391.36	15.11.51	401.72
20-Jul-12	416.69	18.36.31	399.10	15.11..51	407.41
21-Jul-12	418.56	19.01.16	399.34	12.24.21	409.25
22-Jul-12	419.74	08.02.27	394.88	14.27.55	407.89
23-Jul-12	416.92	19.00.25	397.23	01.10.44	405.61
24-Jul-12	413.64	05.58.24	395.82	01.05.57	405.80
25-Jul-12	416.22	19.01.32	396.99	12.40.35	406.45
26-Jul-12	416.92	07.06.24	400.98	10.22.16	408.45
27-Jul-12	416.92	06.03.42	396.99	13.8.38	406.84
28-Jul-12	416.92	06.01.52	396.05	09.45.54	405.53
29-Jul-12	419.03	18.02.00	396.76	11.49.39	406.99
30-Jul-12	425.36	07.08.54	--	--	405.12
31-Jul-12	442.01	14.46.41	--	--	410.33

18 DETAILS OF LUMPED CAPACITORS AT NEAREST 220 KV SUBSTATION

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	**TOTAL**
1	**IP YARD**		30		**30**
1	Kamla Market			16.35	**16.35**
2	Minto Road				
3	GB Pant Hosp			15.88	**15.88**
4	Delhi Gate			10.9	**10.9**
5	Tilakmarg			5.04	**5.04**
6	Electric Lane			5.04	**5.04**
7	Cannaught Place			10.08	**10.08**
8	Kilokri		10.08	10.48	**20.56**
9	NDSE			5.03	**5.03**
10	AIIMS		10	5.04	**15.04**
11	Nizamuddin				
12	Exhibition-I		10		**10**
13	Exhibition-II				
14	Defence Colony				
15	IG Stadium		10.08	5.45	**15.53**
16	Lajpat Nagar				
17	IP Estate			10.9	**10.9**
	Total				**170.4**
2	**IP Extn.**				
1	School Lane			5.04	**5.04**
2	Scindia House			5.04	**5.04**
3	Vidyut Bhawan			10.08	**10.08**
4	Nirman Bhawan			5.04	**5.04**
5	Dalhousie Road			5.04	**5.04**
	Total				**30.24**
3	**RPH Station**		20	5.04	**25.04**
1	Lahori Gate			10.49	**10.49**
2	Jama Masjid			5.03	**5.03**
4	Kamla Market				
5	Minto Road			10.9	**10.9**
6	GB Pant Hosp				
7	IG Stadium				
	Total				**51.46**
4	**Parkstreet S/stn**	20	20		**40**
1	Shastri Park		10.896	5.45	**16.35**
2	Faiz Road			10.9	**10.9**
3	Motia Khan			16.3	**16.3**
4	Prasad Nagar			16.25	**16.25**
5	Anand Parbat			10.8	**10.8**
6	Shankar Road			5.04	**5.04**
7	Rama Road			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. Marg				
	Total				**157.4**

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	**TOTAL**
5	**Naraina S/stn**		20	5.04	**25.04**
1	DMS			10.85	**10.85**
2	Mayapuri		10.87	5	**15.87**
3	Inderpuri		13.26	5.04	**18.3**
4	Rewari line			7.2	**7.2**
5	Khyber Lane			5.04	**5.04**
6	Kirbi Place	10		5.97	**15.97**
7	Payal			14.4	**14.4**
	Total				**112.7**
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		10.03	10.08	**20.11**
5	Bijwasan			10.08	**10.08**
6	DC Saket		10.08	4.54	**14.62**
7	Malviya Nagar				
8	C Dot			5.4	**5.4**
9	Vasant kunj B-Blk	21.79		10.9	**32.69**
10	Vasant kunj C-Blk	20.16		10.49	**30.65**
11	Palam				
12	IGNOU				
13	R. K. Puram-I			10.08	**10.08**
14	Vasant Vihar			15.12	**15.12**
15	Pusp Vihar			9.6	**9.6**
16	Bhikaji Cama Place		10	10.08	**20.08**
	Total				**290.3**
7	**Vasantkunj S/stn**	40		5.04	**45.04**
1	R. K. Puram-II			7.2	**7.2**
2	Vasant kunj C-Blk				
3	Vasant kunj D-Blk	20.16		10.25	**30.41**
4	Race Course			5.04	**5.04**
5	Bapu Dham			10.08	**10.08**
6	Nehru Park			10	**10**
7	Ridge Valley				
	Total				**107.8**
8	**Okhla S/stn**	60	10	5.04	**75.04**
1	Balaji			7.2	**7.2**
2	East of Kailash			10	**10**
3	Alaknanda			16.25	**16.25**
4	Malviya Nagar	21.79	20.16	10.49	**52.44**
5	Masjid Moth			15.94	**15.94**
6	Nehru Place			21.35	**21.35**
7	Okhla Ph-I	21.79		10.9	**32.69**
8	Okhla Ph-II		20.93	15.53	**36.46**
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				**326.2**

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	**TOTAL**
9	**Lodhi Road S/stn**		20		**20**
1	Defence Colony			10.9	**10.9**
2	Hudco			10.9	**10.9**
4	Lajpat Nagar			10.9	**10.9**
5	Nizamuddin			10.49	**10.49**
6	Vidyut Bhawan				
7	Kidwai Nagar			5.04	**5.04**
8	Ex. Gr. II				
9	IHC				
	Total				**68.23**
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	20.16		10.08	**30.24**
4	Jamia Millia			5.4	**5.4**
5	Sarai Julena		10.08	10.9	**20.98**
	Total				**101.8**
11	**South of Wazirabad**				
1	Bhagirathi		10.03	10.9	**20.93**
2	Ghonda	21.79	22.56	15.94	**60.29**
3	Seelam Pur		10.08	21.39	**31.47**
4	Dwarkapuri			15.46	**15.46**
5	Nandnagri	20.16		16.35	**36.51**
6	Yamuna Vihar			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				**202.6**
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	21.79		10.9	**32.69**
2	Vivek Vihar			10.57	**10.57**
3	GT Road			10.85	**10.85**
4	Kondli	20.16		10.85	**31.01**
5	MVR-I			10.9	**10.9**
6	MVR-II	20.16		10.9	**31.06**
7	PPG Ind. Area			10.06	**10.06**
	Total				**182.2**
14	**Patparganj S/stn**	40	20	5.04	**65.04**
1	GH-I	19.89		10.45	**30.34**
2	GH-II	20.09		10.9	**30.99**
3	CBD		10.03	15.48	**25.51**
4	Guru Angad Nagar			15.49	**15.49**
5	Karkadooma		10.08	10.44	**20.52**
6	Preet Vihar			10.07	**10.07**

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	**TOTAL**
7	CBD-II			7.2	**7.2**
8	Shakarpur			5.4	**5.4**
9	Jhilmil			9	**9**
10	Dilshad Garden	20.16		16.35	**36.51**
11	Khichripur	21.79		10.49	**32.28**
12	Mother Dairy				
13	Scope Building				
14	Vivek Vihar				
15	Akhardham			14.4	**14.4**
	Total				**302.8**
15	**Najafgarh S/stn**	60		5.04	**65.04**
1	A4 Paschim Vihar			10.9	**10.9**
2	Nangloi	21.73		15.85	**37.58**
3	Nangloi W/W	20.89		5.45	**26.34**
4	Pankha Road			15.69	**15.69**
5	Jaffarpur			15.49	**15.49**
7	Inst. Area Janakpuri			15.9	**15.9**
8	Paschimpuri		10.05	15.53	**25.58**
9	Paschim Vihar	41.83		15.44	**57.27**
10	Mukherjee Park			15.49	**15.49**
11	Udyog Nagar			10.04	**10.04**
12	Choukhandi			10.08	**10.08**
	Total				**305.4**
16	**Pappankalan-I S/stn**	20		5.04	**25.04**
1	Bindapur	21.73		15.9	**37.63**
2	Bodella-I	20.1		15.9	**36**
3	Bodella-II	21.73		14.53	**36.26**
4	DC Janakpuri			10.04	**10.04**
5	G-2 PPK			10.9	**10.9**
6	G-5 PPK			15.53	**15.53**
7	G-6 PPK			5.45	**5.45**
8	G-15 PPK			10.08	**10.08**
9	Harinagar	21.18		10.49	**31.67**
	Total				**218.6**
17	**BBMB Rohtak Road**				
1	S.B. Mill			10.08	**10.08**
2	GTK Road				**0**
3	Ram Pura			12.24	**12.24**
4	Rohtak Road			10.08	**10.08**
5	Vishal			5.4	**5.4**
6	Madipur			10.43	**10.43**
7	Sudershan Park			10.08	**10.08**
	Total				**58.31**
18	**Shalimarbagh S/stn**		40	6	**46**
1	S.G.T. Nagar			13.15	**13.15**
2	Wazirpur-1			20.7	**20.7**
3	Wazirpur-2			14.4	**14.4**
4	Shalimarbagh				
5	Ashok Vihar			20.35	**20.35**
6	Rani Bagh			14.4	**14.4**

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	**TOTAL**
7	Haiderpur			13.15	**13.15**
8	SMB FC			7.2	**7.2**
9	SMB KHOSLA			7.2	**7.2**
	Total				**156.6**
19	**Subzimandi S/stn**			6	**6**
1	Shakti Nagar			5.04	**5.04**
2	Gulabibagh			7.2	**7.2**
3	Shahzadabagh			19.44	**19.44**
4	Tripolia			14.4	**14.4**
5	B. G. Road				
	Total				**52.08**
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	20		5.95	**25.95**
5	DSIDC Narela-2			14.4	**14.4**
6	Jahangirpuri	20	20	5.95	**45.95**
	Total				**184.8**
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			13.15	**13.15**
7	Jahangirpuri				**0**
8	Civil lines			6	**6**
9	DIFR			7.2	**7.2**
10	Delhi Univ.			7.2	**7.2**
11	Tiggipur			14.4	**14.4**
	Total				**138.1**
22	**Rohini S/stn**	40		6	**46**
1	Rohini Sec-24 Ckt-I			14.4	**14.4**
2	Rohini Sec-24 Ckt-II	20		14.4	**34.4**
3	Rohini-1			7.2	**7.2**
4	Rohini-2			13.15	**13.15**
5	Rohini-3			5.95	**5.95**
6	Rohini-4			13.15	**13.15**
7	Rohini-5			13.15	**13.15**
8	Rohini-6	20		5.95	**25.95**
9	Mangolpuri-1			20.35	**20.35**
10	Mangolpuri-2	20		5.04	**25.04**
11	Saraswati Garden			10.08	**10.08**
12	Pitam Pura-1	20		12.24	**32.24**
13	Pitam Pura-2			12.24	**12.24**
14	Pitam Pura-3			7.2	**7.2**
15	Rohini DC-1			14.4	**14.4**
	Total				**294.9**

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	**TOTAL**
23	**Kanjhawala S/stn**	20		5.04	**25.04**
1	Bawana Clear Water			14.4	**14.4**
2	Pooth Khoord			7.2	**7.2**
3	Ghevra			14.4	**14.4**
	Total				**61.04**
24	**BAWANA S/stn**				
1	Bawana S/stn No. 6				**0**
2	Bawana S/stn No. 7				**0**
	Total				**0**
25	**Kashmeregate S/stn**			5.04	**5.04**
1	Civil lines			6	**6**
2	Town Hall			8.64	**8.64**
3	Fountain			5.45	**5.45**
	Total				**25.13**
26	**Pappankalan-II**				
1	DMRC-I				
2	DMRC-II				
	Total				
	TOTAL CAPACITY				**3636**

20 DETAILS OF BREAK-DOWNS DURING THE MONTH OF JULY 2012

SL NO.	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.07.12	15.27	400KV BAWANA – DIPALPUR CKT.	01.07.12	18.52	CB-1352 OF THE CKT. TRIPPED ON CB AUTO TRIP AND CB-1452 ON TC-1 FAULTY. RELAY 86A&B, TIMER 2/AA AT BAWANA.
02	01.07.12	18.47	220/66KV 160MVA PR. TR-II AT RIDGE VALLEY	01.07.12	22.52	TR. TRIPPED OF RET 670, GENERAL TRIP, 86A&B ALONG WITH 66KV I/C WHICH TRIPPED ON 86B.
03	02.07.12	06.39	400KV MANDOLA - BAWANA CKT.-I	02.07.12	16.29	CB-152 OF THE CKT. TRIPPED ON POLE DISCREPANCY, 186A&B. CB-152 TRIED TO CLOSE AT 07.02HRS. BUT AGAIN TRIPPED ON SAME INDICATION. CB-252 ALSO TRIPPED ON 186.
04	03.07.12	17.50	66/11KV 20MVA PR. TR.-I AT MEHRAULI	03.07.12	19.15	TR. TRIPPED ON 86.
05	04.07.12	12.43	220/66KV 100MVA PR. TR-IV AT NAJAFGARH	04.07.12	13.00	TR. TRIPPED ON E/F.
06	04.07.12	12.43	220KV BAMNAULI – NAJAFGARH CKT-II	04.07.12	19.15	CKT. TRIPPED ON 186 AT NAJAFGARH AND ON E/F, 186, DIST PROT, 21Q AT BAMNAULI.
07	04.07.12	12.43	220KV BAWANA – NAJAFGARH CKT.	04.07.12	20.25	CKT. TRIPPED ON 186 AT NAJAFGARH. CKT. TRIPPED ON E/F, 186, DIST PROT AT BAMNAULI.
08	04.07.12	12.43	220KV KANJHAWALA – NAJAFGARH CKT.	04.07.12	12.52	CKT. TRIPPED ON 186 AT NAJAFGARH.
09	04.07.12	15.10	220/66KV 100MVA PR. TR.-II AT GAZIPUR	04.07.12	15.25	TR. TRIPPED WITHOUT INDICATION.
10	04.07.12	16.50	220/66KV 160MVA PR. TR.-III AT MUNDKA	04.07.12	17.06	TR. TRIPPED ON BUS BAR PROTECTION, 186A&B ALONG WITH 66KV I/C-III WHICH TRIPPED ON INTER TRIPPING. 220KV I/C-IV OF 315MVA PR. TR.-IV ALSO TRIPPED ON BUS BAR PROTECTION, 186A&B
11	05.07.12	14.57	400/220KV 315MVA PR. TR.-III AT BAWANA	06.07.12	04.01	TR. TRIPPED ON 86B-I, GROUP-I, 99A/ OVER FLUX, 95A, SUPERVISION, 199A/ OVERFLUX,
12	05.07.12	18.09	400/220KV 315MVA PR. TR.-II AT BAWANA	06.07.12	19.47	CB-952 OF TR.TRIPPED ON 86 ALONG WITH 220KV I/C-II WHICH TRIPPED ON AUTO TRIP.
13	06.07.12	04.20	400/220KV 315MVA ICT-III AT BAWANA	06.07.12	13.25	ICT TRIPPED ON 95A, 652, 186A&B, 86A, GROUP31.
14	06.07.12	07.28	400KV BAWANA – MUNDKA CKT.-I	06.07.12	12.12	CB-42052 OF 400KV BAWANA – MUNDKA CKT-I TRIPPED ON POLE DISCREPANCY AT MUNDKA.
15	06.07.12	10.44	220/33KV 50MVA PR. TR. AT PATPARGANJ	06.07.12	11.10	TR. TRIPPED OF E/F (REF) & 86.
16	06.07.12	17.35	400KV BAWANA – ABDULLAPUR CKT.	06.07.12	18.08	CB-1152 OF THE CKT. TRIPPED ON 186, 52X AND CB-1252 TRIPPED ON AC SUPPLY FAIL, 186, TIMER, 2/AA AT BAWANA. NO TRIPPING AT ABDULLAPUR.
17	06.07.12	18.02	220KV SARITA VIHAR – PRAGATI CKT.	06.07.12	19.55	CKT. TRIPPED ON DIST PROT `B' ZONE-I AT SARITA VIHAR AND ON DIST PROT ZONE-I AT PRAGATI.
18	06.07.12	18.01	220/66KV 100MVA PR. TR.-III AT ROHINI	06.07.12	19.45	TR. TRIPPED ON 30E, 86B,

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
19	06.07.12	18.00	400/220KV 315MVA ICT-V AT BAWANA	07.07.12	17.02	ICT TRIPPED ON 86A, 86B, BUCHLOZ,
20	06.07.12	18.11	400/220KV 315MVA ICT-II AT BAMNAULI	06.07.12	23.05	ICT TRIPPED ON TRIP GROUP-I, 86A-I, TRIP GROUP-II, 86-I, 30L,OLTC BUCHLOZ B' PHASE.
21	06.07.12	18.13	220KV MEHRAULI – VASANT KUNJ CKT-I	06.07.12	18.45	CKT. TRIPPED ON DIST PROT `B' PHASE, 186B AT MEHRAULI. NO TRIPPING AT VASANT KUNJ.
22	06.07.12	18.50	220KV MEHRAULI – VASANT KUNJ CKT-II	06.07.12	18.50	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-II, 186A&B, 86B AT MEHRAULI. NO TRIPPING AT VASANT KUNJ.
23	06.07.12	18.18	220/33KV 100MVA PR. TR.-III AT IP	07.07.12	15.25	TR. TRIPPED ON E/F. 33KV I/C-II ALSO TRIPPED ON E/F ALONG WITH TR.
24	06.07.12	18.46	220KV MAHRANI BAGH – SARITA VIHAR CKT.	06.07.12	22.52	CKT. TRIPPED ON L2E, 13.31KA AT MAHARANI BAGH AND ON POLE DISCREPANCY AT SARITA VIHAR.
25	06.07.12	17.55	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-II	06.07.12	19.32	TR. TRIPPED ON PRV, SRV, 86
26	06.07.12	18.33	220KV GEETA COLONY – PATPARGANJ CKT-II	06.07.12	19.00	CKT. TRIPPED ON DIST PROT `A' PHASE, E/F, O/C, 27RYB AT GEETA COLONY AND ON 86, 86, E/F AT PATPARGANJ.
27	06.07.12	18.33	220KV PATPARGANJ – IP CKT.-II	06.07.12	19.00	CKT. TRIPPED ON DIRECTIONAL E/F AT IP AND ON E/F AT PATPARGANJ.
28	06.07.12	18.33	220KV IP – PRAGATI CKT-II	06.07.12	18.40	CKT. TRIPPED ON 67NX, 86 AT PRAGATI. NO TRIPPING AT IP.
29	07.07.12	04.56	66/11KV 20MVA PR. TR.-II AT MEHRAULI	07.07.12	13.40	TR. TRIPPED ON WINDING FUSE TRIP, INSTANTENEOUS E/F ALONG WITH 11KV I/C-II WHICH TRIPPED WITHOUT INDICATION.
30	07.07.12	05.55	220/33KV 50MVA PR. TR. AT PATPARGANJ	07.07.12	10.55	TR. TRIPPED ON 86
31	07.07.12	15.39	400/220KV 315MVA ICT-III AT BAWANA (CB-752)	09.07.12	17.10	CB-752 OF THE ICT TRIPPED ON CB AUTO TRIP, 295AB, 195CA, CB. ICT REMAINED CHARGED THROUGH CB-652
32	08.07.12	10.05	33/11KV 16MVA PR. TR. AT PATPARGANJ	08.07.12	11.45	TR. TRIPPED ON DIFFERENTIAL ALONG WITH ITS 11KV I/C WHICH TRIPPED ON INTER TRIPPING.
33	08.07.12	11.15	220KV IP – RPH CKT-I	08.07.12	16.23	CKT. TRIPPED ON 186A&B AT RPH.
34	08.07.12	11.57	220KV WAZIRABAD - GOPALPUR CKT-I	08.07.12	19.50	CKT. TRIPPED ON E/F AT WAZIRABAD. TOP PHASE JUMPER SNAPPED ON TOWER NO. 331
35	09.07.12	10.47	400KV BAWANA – BAHADURGARH CKT.	09.07.12	17.20	CB-552 OF THE CKT. TRIPPED WITHOUT INDICATION.
				09.07.12	15.50	TR. TRIPPED ON O/C, E/F, AC SUPERVISION RELAY ALONG WITH ITS 33KV I/C-III
36	09.07.12	15.17	220/33KV 100MVA PR. TR.-III AT IP	STILL OUT		
37	09.07.12	17.05	220/66KV 100MVA PR. TR.-I AT GAZIPUR	09.07.12	17.28	TR. TRIPPED WITHOUT INDICATION.
38	09.07.12	17.20	220/66KV 100MVA PR. TR.-II AT GAZIPUR	09.07.12	17.28	TR. TRIPPED WITHOUT INDICATION
39	10.07.12	15.20	220/66KV 100MVA PR. TR.-II & III AT DSIDC	10.07.12	15.59	TR-II & III TRIPPED ON 86 ALONG WITH 66KV I/C-II & III. 66KV I/C-II TRIPPED ON 86, E/F, O/C AND 66KV I/C-III TRIPPED ON 86. 100MVA PR.TR-I & II CHARGED AT 15.35HRS.

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
40	10.07.12	17.03	220KV MANDOLA – GOPALPUR CKT-I	10.07.12	17.11	CKT. TRIPPED ON `R' PHASE O/C AT MANDOLA. NO TRIPPING AT GOPALPUR.
41	11.07.12	09.41	400KV MUNDKA – JHAJJAR CKT-II	11.07.12	09.59	CB-41352 OF THE CKT. TRIPPED ON POLE DISCREPANCY AT MUNDKA.
42	11.07.12	19.22	400/220KV 315MVA ICT AT MUNDKA	11.07.12	19.53	TR. TRIPPED ON 86A&B
43	12.07.12	10.39	220KV PANIPAT – NARELA CKT-III	12.07.12	11.25	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I, 30B
44	13.07.12	04.40	220KV BAMNAULI – NARAINA CKT-I	13.07.12	05.11	CKT. TRIPPED ON DIST PROT `A' PHASE, 186A&B AT BAMNAULI. NO TRIPPING AT NARAINA.
45	13.07.12	12.40	220KV WAZIRABAD – GEETA COLONY CKT-I & II	13.07.12	19.05	THE FOLLOWING TRIPPINGS OCCURRED :- AT WAZIRABAD :- GEETA COLONY CKT-I : DIST PROT `ABC' PHASE ZONE-I GEETA COLONY CKT-II : NO TRIPPING AT GEETA COLONY WAZIRABAD CKT-I : NO TRIPPING WAZIRABAD CKT-II : MAIN-I ACTIVE GROUP-I, DIST PROT `ABC' PHASE ZONE-I, O/C, MAIN-II DIST PROT `AB' PHASE ZONE-I. R' PHASE JUMPER AT TOWR NO. 355 SNAPPED. CKT-I CHARGED AT 12.52HRS AND CKT-II CHARGED AT 19.05HRS.
46	13.07.12	12.48	220/66KV 100MVA PR. TR.-II AT PAPPANKALAN-II	13.07.12	13.12	TR. TRIPPED ON LBB PROTECTION ALONG WITH 66KV I/C-II WHICH TRIPPED ON LBB MASTER TRIP, IDMT O/C, 86
47	13.07.12	23.28	66/11KV 20MVA PR. TR.-II AT DSIDC	14.07.12	05.05	TR. TRIPPED ON 30D, SUDDEN PRESSURE RELAY ALONG WITH 11KV I/C-II.
48	15.07.12	14.12	220KV PRAGATI – SARITA VIHAR CKT.	13.07.12	16.45	CKT. TRIPPED ON DIST PROT `A' PHASE AT PRAGATI AND ON 186A&B, DIST PROT ZONE-I AT SARITA VIHAR.
49	15.07.12	20.25	220KV MANDOLA – GOPALPUR CKT-I	15.07.12	20.42	CKT. TRIPPED ON DIST PROT `R' PHASE ZONE-I AT MANDOLA END ONLY.
50	18.07.12	08.59	220KV PRAGATI – SARITA VIHAR CKT.	18.07.12	09.26	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-I AT SARITA VIHAR AND ON ACTIVE GROUP-I, DIST PROT `C' PHASE ZONE-I AT PRAGATI.
51	18.07.12	10.00	400KV MANDOLA – BAWANA CKT-I & II	18.07.12	14.02	THE FOLLOWING TRIPPINGS OCCURRED :- AT MANDOLA 400KV BAWANA CKT-I : DIST PROT `RY' PHASE ZONE-II 400KV BAWANA CKT-II : DIST PROT `B' PHASE ZONE-II AT BAWANA 400KV MANDOLA CKT-I : (CB-1552 & 1652) : CB-I LBB PROTECTION, CB-II FAULTY, DC-II FAIL, CB-I FAIL, CB-I AUTO TRIP, CB-II AUTO TRIP, 130 BREAKER ALARM, 186A&B BOTH CB, 285A-IC. LBB PROTECTION OPERATED ON 400KV BUS-I DUE TO WHICH CB-152 (MANDOLA CKT-I), CB-352 (MANDOLA CKT-II), CB-852 (HISSAR CKT), CB-552 (BAHADURGARH CKT), CB-452 (ABDULLAPUR CKT) AND CB-352(DIPALPUR CKT) ALSO TRIPPED. `R' PHASE CT OF CB-1552 CONTROLLING 400KV MANDOLA – BAWANA CKT-I BLASTED. `B' PHASE CT OF CB-1752 CONTROLLING 400KV MANDOLA – BAWANA CKT-II OBSERVED FAULTY. 315MVA ICT-III CHARGED AT 10.32HRS AND ICT-IV CHARGED AT 14.03HRS. 400KV MANDOLA – BAWANA CKT-II CHARGED AT 10.41HRS. 400KV BUS-I CHARGED AT 14.02HRS, CB-1652 CHARGED AT 14.50HRS, CB-1352 CHARGED AT 15.05HRS.

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
52	18.07.12	10.00	400KV MUNDKA – BAWANA CKT-I & II	18.07.12	11.27	THE FOLLOWING TRIPPINGS OCCURRED :- AT MUNDKA BAWANA CKT-I – CB-41952 : INTER TRIPPING CHANNEL-I & II CB-42052 : P OLE DISCREPANCY BAWANA CKT-II : CB-41752 : INTER TRIPPING CHANNEL-I & II, 186LO CB-41852 : 286LO CB-41952 AND 41852 CHARGED AT 10.30HRS. AND 41752 CHARGED AT 11.27HRS.
53	18.07.12	11.42	220KV MANDOLA – WAZIRABAD CKT-II	18.07.12	10.07	CKT. TRIPPED ON DIST PROT AT WAZIRABAD. NO TRIPPING AT MANDOLA
54	18.07.12	22.55	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-I	18.07.12	22.58	TR. TRIPPED ON 86 ALONG WITH ITS 66KV I/C WHICH TRIPPED ON O/C
55	19.07.12	00.10	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-I	19.07.12	00.12	TR. TRIPPED ON 86
56	19.07.12	15.30	33/11KV 20MVA PR. TR. AT SHALIMAR BAGH	19.07.12	19.15	TR. TRIPPED ON DIFFERENTIAL ALONG WITH ITS 11KV I/C
57	20.07.12	18.27	220KV GEETA COLONY – PATPARGANJ CKT-I	20.07.12	19.26	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT PATPARGANJ AND ON DIST PROT `AB' PHASE, 27RYB, 186 AT GEETA COLONY
58	23.07.12	07.48	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-II	23.07.12	10.55	TR. TRIPPED ON 86, 87, LBB PROTECTION.
59	23.07.12	09.25	220KV BAWANA – SHALIMAR BAGH CKT-II	23.07.12	09.48	CKT. TRIPPED ON DIST PROT `C' PHASE, 186A&B AT SHALIMAR BAGH AND ON DIST PROT `C' PHASE 186
60	23.07.12	19.57	400KV BAWANA – BAHADUR GARH CKT			CB-552 TRIPPED ON 30CH-2, 186A&B CKT. TRIED TO CLOSE AT 20.27 BUT COULD NOT HELD AND TRIPPED ON POLE DISCREPANCY. CB-552 IS STILL OUT. CKT. IS CHARGED THROUGH CB-652.
61	24.07.12	06.25	220/33KV 100MVA PR. TR.-III AT IP	24.07.12	13.10	TR. TRIPPED ON BUCHLOZ, 86, SUPERVISION RELAY. JUMPER OF WEST BUS BROKEN
62	24.07.12	06.30	220/33KV 100MVA PR. TR.-II AT IP	24.07.12	06.40	TR. TRIPPED ON 51N
63	24.07.12	14.53	400KV MUNDKA – JHAJJAR CKT-I	24.07.12	19.14	CKT. TRIPPED ON 86B, CH-2 (BOTH CB) AT MUNDKA. CKT. TRIED AT 16.10HRS. BUT COULD NOT HOLD AND TRIPPED SAME INDICATION.
64	24.07.12	15.37	220KV BAMNAULI – PAPPANKALAN-II CKT-I	24.07.12	15.44	CKT. TRIPPED ON DIRECTIONAL O/C, 67C, 186A&B AT BAMNAULI. NO TRIPPING AT P APPANKALAN-II
65	24.07.12	16.44	220/66KV 100MVA PR.TR-II AT PARK STREET	03.08.12	14.48	TR. TRIPPED ON BUCHLOZE, DIFFERENTIAL, E/F. LV SIDE `R&Y' PHASE BUSHING DAMAGED.
66	24.07.12	19.29	220KV MAHARANI BAGH – SARITA VIHAR CKT.	24.08.12	20.13	CKT. TRIPPED ON DIST PROT AT SARITA VIHAR AND ON PHASE TO PHASE FAULT L1-L2 AT MAHARANI BAGH.
67	25.07.12	10.05	220KV BAMNAULI – NARAINA CKT-I & II	25.07.12	10.14	THE FOLLOWING TRIPPINGS OCCURRED : AT BAMNAULI : NARAINA CKT-I: 86BU, 3 PHASE, A/R, 86A&B NARAINA CKT-II : 86BU, 3 PHASE, A/R, 86A&B AT NARAINA : NO TRIPPING CKT-I & II CHARGED AT 10.14HRS. AND 10.13HRS. RESPECTIVELY

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
68	25.07.12	10.05	220KV BAMNAULI – NAJAFGARH CKT-I & II	25.07.12	10.53	THE FOLLOWING TRIPPINGS OCCURRED : AT BAMNAULI : NAJAFGARH CKT-I : 86BU, 3PHASE, 186A&B NAJAFGARH CKT-II: 86BU, 3PHASE, 186A&B, A/R AT NAJAFGARH BAMNAULI CKT-I : NO TRIPPING BAMNAULI CKT-II : 186 CKT-I & II CHARGED 10.22HRS. AND 10.43HRS. RESPECTIVELY
69	25.07.12	13.20	220KV WAZIRABAD – GEETA COLONY CKT-I	25.07.12	13.33	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD AND ON DIST PROT `ABC' PHASE ZONE-I AT GEETA COLONY.
69	25.07.12	13.20	220KV WAZIRABAD – KASHMIRI GATE CKT-I	25.07.12	14.04	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD AND ON DIST PROT `ABC' PHASE, 86A, 86B, A/R AT KASHMIRI GATE.
70	25.07.12	14.56	220KV MANDOLA – WAZIRABAD CKT-I & II	25.07.12	17.09	CKT-I TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AND CKT-II TRIPPED ON DIST PROT `RYB' PHASE ZONE-IV AT WAZIRABAD. NO TRIPPING AT MANDOLA. CKT-I & II CHARGED AT 15.00HRS. CKT-II TRIED AT 15.00HRS BUT DID NOT HOLD. CKT. FINALLY CHARGED AT 17.09HRS.
71	27.07.12	16.34	66/11KV 20MVA PR. TR-I AT SARITA VIHAR	27.07.12	05.18	TR. TRIPPED ON 30X
72	29.07.12	03.15	220/33KV 100MVA PR. TR-I & II AT IP	27.07.12	05.18	T-I. TRIPPED ON DIFFERENTIAL AND TR.-II TRIPPED ON 51B, O/C ALONG WITH 33KV I/C-I & II. 33KV I/C-I & II TRIPPED WITHOUT INDICATION. 100MVA PR. TR.-I & II CHARGED AT 05.13HRS. AND 05.18HRS. RESPECTIVELY
73	30.07.12	02.33	MAJOR GRID DISTURBANCE IN NORTHERNR REGIONAL SYSTEM			DETAILED REPORTS ENCLOSED
74	31.07.12	13.01	MAJOR GRID DISTURBANCE IN NORTHERNR REGIONAL SYSTEM			DETAILED REPORTS ENCLOSED

20 DETAILS OF UNDER FREQUENCY RELAY OPERATIONS IN DELHI POWER SYSTEM DURING THE MONTH OF JULY 2012

DATE	S. N.	TIME		Name of Grid	NAME OF AFFECTED FEEDERS	LOAD RELIEF IN MW
		OUT	IN			
20.07.12	1	22:16	22:27	KASHMIRI GATE	LAHORI GATE CKT., FOUNTAIN CKT.	17
26.07.12	1	22:15	22:18	NAJAFGARH	BODELA CKT. I & II	110
26.07.12	2	22:53	22:27	NAJAFGARH	BODELA CKT. I & II	110
26.07.12	3	22:35	22:41	NAJAFGARH	BODELA CKT. I & II	110
26.07.12	4	22:48	23:02	NAJAFGARH	BODELA CKT. I & II	110
30.07.12	1	19:22	19:59	KASHMIRI GATE	11kV LOAD	2
30.07.12	2	11:30	12:45	GEETA COLONY	11kV LOAD	15
30.07.12	3	11:30	12:45	PATPARGANJ	11kV LOAD	23
30.07.12		11:30	12:45	PATPARGANJ	11kV LOAD	7
30.07.12	4	11:30	12:45	PARK STREET	11kV LOAD	20
30.07.12	5	12:55	13:55	WAZIRABAD	11kV LOAD	40
30.07.12		12:55	13:55	WAZIRABAD	11kV LOAD	10
30.07.12		12:55	13:25	WAZIRABAD	11kV LOAD	20
30.07.12		12:55	14:05	WAZIRABAD	11kV LOAD	23
30.07.12	6	12:55	14:45	WAZIRABAD	11kV LOAD	48