DELHI TRANSCO LIMITED.

(A Govt. of NCT of Delhi Undertaking)

STATE LOAD DESPATCH CENTER

REGD. OFFICE : SHAKTI SADAN, KOTLA MARG, NEW DELHI-110002

SLDC Building, 33kV Minto Road Grid Sub-Station, New Delhi-110002

Annual Report
2009-10

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1 INTRODUCTION

Delhi Transco Limited is the State Transmission Utility of the National Capital Territory of Delhi. It is responsible for transmission of power at 400KV and 220KV level, besides planning, construction up gradation operation and maintenance of EHV Network as per system requirements.

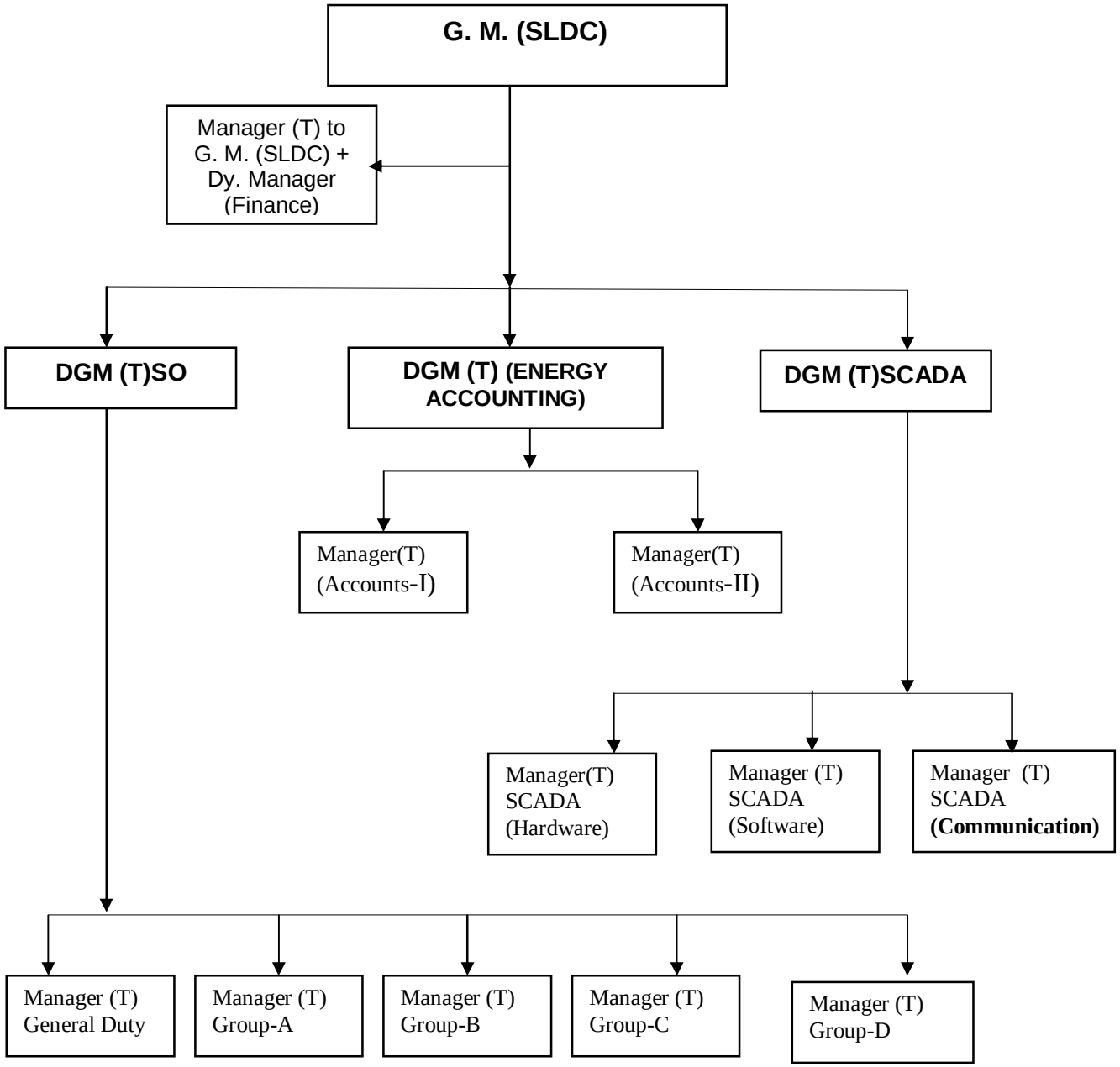
After the enactment of Electricity Act 2003, a new department under the name and style of **State Load Despatch Centre (SLDC)** under Delhi Transco Limited was created as an Apex body to ensure integrated operation of the power system in Delhi. Earlier the department was part of O&M Department of Delhi Transco Ltd / Delhi Vidyut Board. SLDC Delhi started its function on the First day of January 2004. SLDC is responsible for the real time Load Despatch function, O&M of SCADA System and Energy Accounting.

It's mission is to facilitate intra and inter state transfer of power with Responsibility, Security and Economy on sound commercial principles.

LICENSEES OPERATING IN DELHI POWER SYSTEM

1)	DELHI TRANSCO LTD.	:	TRANSMISSION LICENSEE (STU, DELHI)
2)	INDRAPRASTHA POWER GENERATING COMPANY	:	GENERATION LICENSEE
3)	PRAGATI POWER CORPORATION LTD.	:	GENERATION LICENSEE
4)	BSES RAJDHANI POWER LTD.	:	DISTRIBUTION LICENSEE
5)	BSES YAMUNA POWER LTD.	:	DISTRIBUTION LICENSEE
6)	NORTH DELHI POWER LTD.	:	DISTRIBUTION LICENSEE
7)	NEW DELHI MUNICIPAL COUNCIL	:	DEEMED DISTRIBUTION LICENSEE
8)	MILITARY ENGINEERING SERVICE	:	DEEMED DISTRIBUTION LICENSEE

2 ORGANISATIONAL SETUP OF SLDC DEPARTMENT



3 Functions of various circles of SLDC

i) System Operation
ii) SCADA Division
iii) Energy Accounting

3.1 System Operation

System Operation Circle is mainly responsible for optimum scheduling and dispatch of electricity within the NCT of Delhi in accordance with the contracts entered into with the licensees or the generating companies operating in Delhi.

The System Operation Division monitors grid operations, exercise supervision and control over the intra-state transmission system and carry out the real time operation of grid control and dispatch of electricity within Delhi through secure and economic operations of the State Grid in accordance with the Grid standards and the State Grid Code.

The responsibility for implementation of these procedures lies with the Managers (System Operation) General Shift as well as in Manager (System Operation) shifts round the clock under the overall supervision and control of Dy.G.M.(S.O).

3.2 Supervisory Control and Data Acquisition (SCADA)

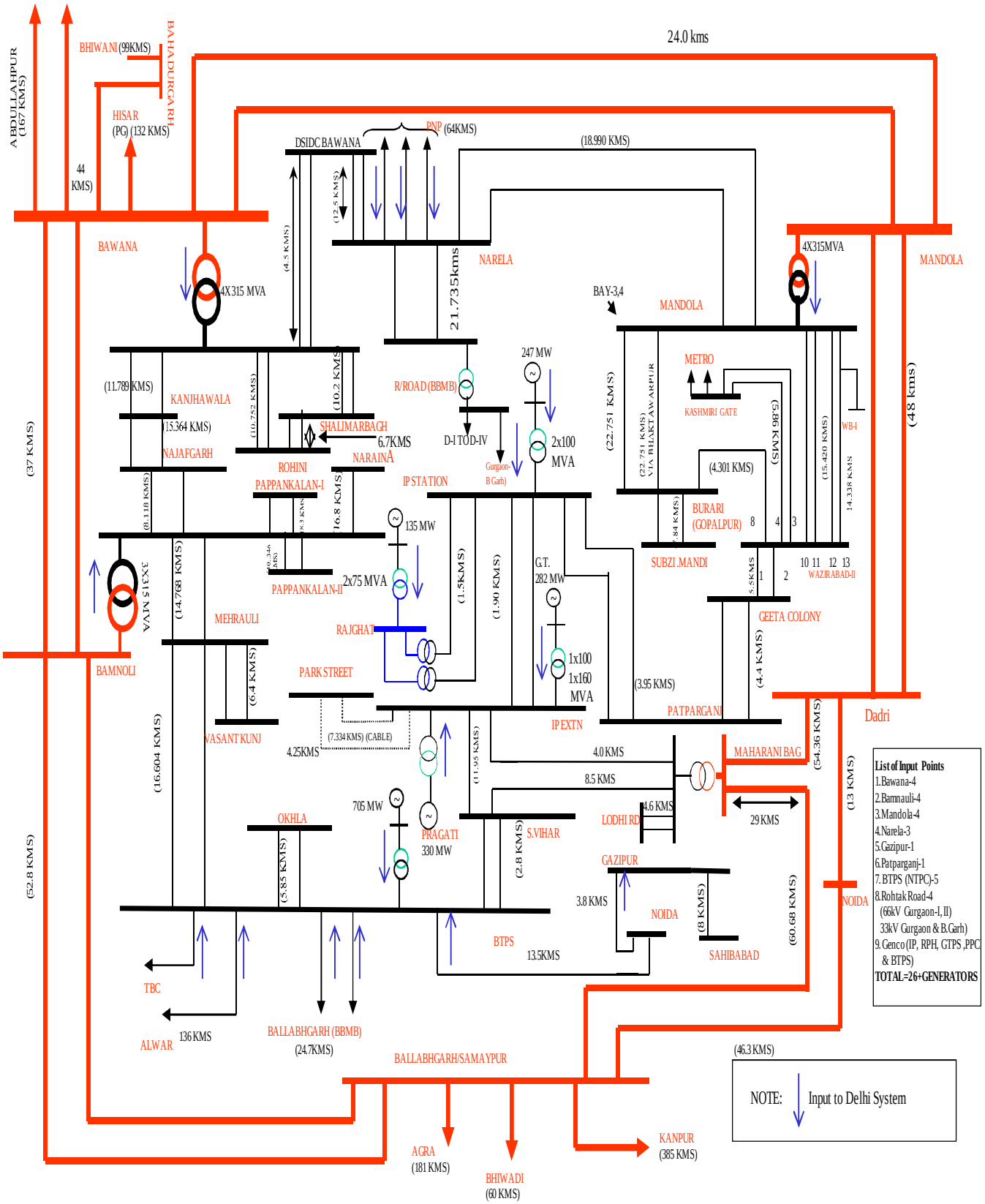
SLDC has a state of art Load despatch centre having SCADA (Supervisor Control And Data Acquisition System) for retrieving information from generating stations and grid sub stations consisting of analog data (like Mega Watt, Voltage, Current, MVar) and digital status of various elements (like Circuit Breaker, Isolator etc.) for real time operation of grid, enabling it to operate safely, securely and economically.

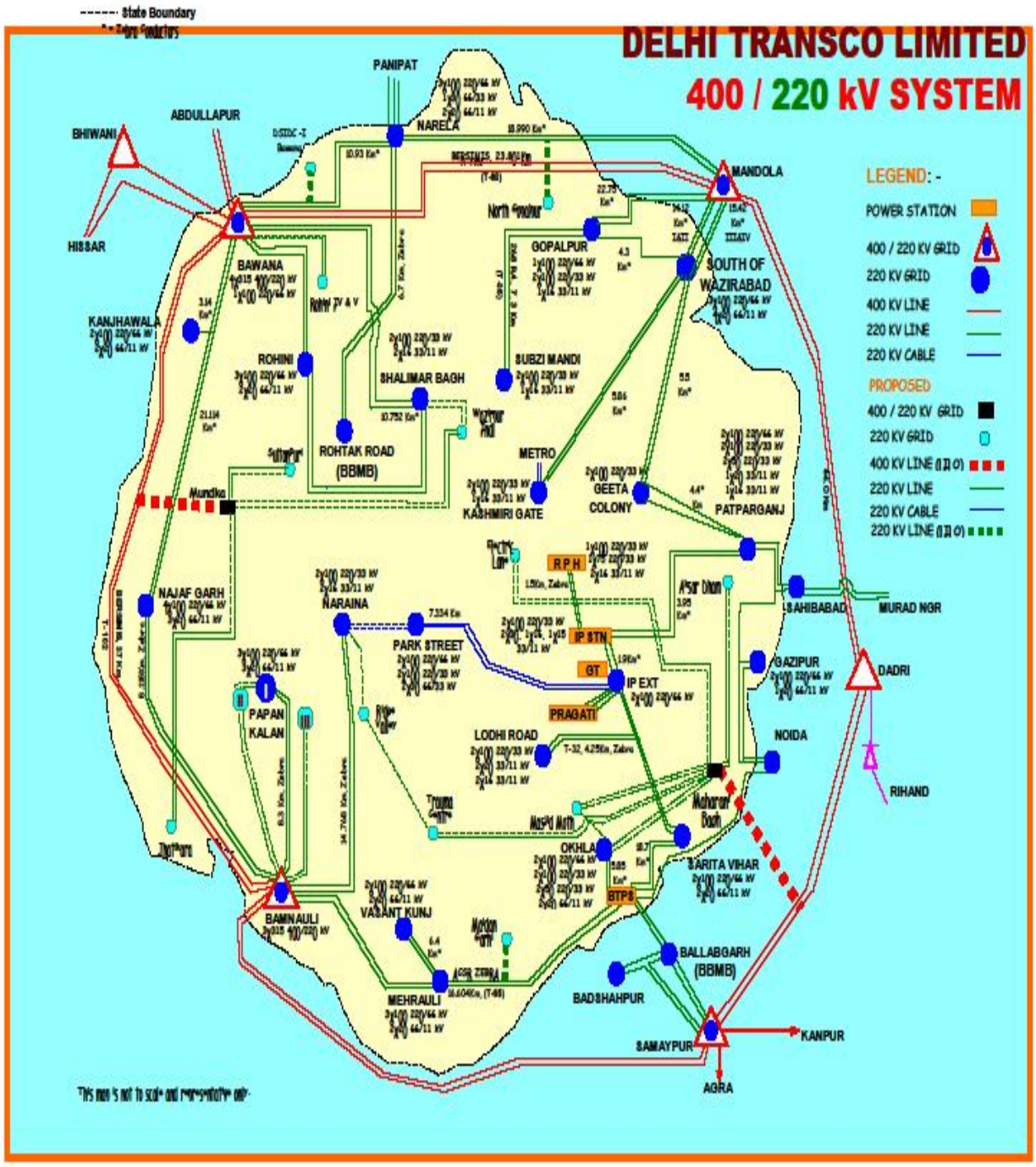
The data from sub station is received through an existing communication ring comprising of OPGW, Microwave and PLCC links. For indicating this data on control room monitors, the hardware and communication links at sub stations are maintained round the clock by the hardware and PLCC sub division of SCADA. The software sub division of SCADA has developed in-house softwares for various activities. Scheduling software as per ABT, energy accounting and the transmission system availability have also been developed and are in use.

3.3 Energy Accounting

The circle is to undertake the accounting of the quantity of electricity transmitted through the state grid as envisaged in the Electricity Act. This includes the preparation of State Energy Accounts indicating Availability, Scheduled Generation, Plant Load Factor computation, Open Cycle Operation of Gas Turbines etc. in respect of Generating Stations within Delhi. It has to prepare weekly UI Accounts as per Intrastate UI bills and Reactive Energy transactions. At present, this circle's responsibilities are being discharged by System Operation circle.

3.4 Single Line Diagram of Delhi Power System




State Boundary
DELHI TRANSCO LIMITED
400 / 220 kV SYSTEM
LEGEND: -
POWER STATION
400 / 220 KV GRID
220 KV GRID
400 KV LINE
220 KV LINE
220 KV CABLE
PROPOSED
400 / 220 KV GRID
220 KV GRID
400 KV LINE (D/C)
220 KV LINE
220 KV CABLE
220 KV LINE (D/C)
PANIPAT
NARELA
ABDULLAPUR
BHIWANI
HISSAR
MANDOLA
BAWANA
KANJHAWALA
ROHINI
GOPALPUR
SOUTH OF WAZIRABAD
SHALIMAR BAGH
SUBZI MANDI
ROHTAK ROAD (BBMB)
METRO
KASHMIRI GATE
GEETA COLONY
PATPARGANJ
Mundka
RPH
NAJAF GARH
NARAINA
PARK STREET
IP STN
GT
IP EXT
PRAGATI
SAHIBABAD
MURAD NGR
GAZIPUR
DADRI
PAPAN KALAN
LODHI ROAD
NOIDA
RIHAND
OKHLA
BTPS
SARITA VIHAR
BAMNAULI
VASANT KUNJ
MEHRAULI
BALLABGARH (BBMB)
BADSHAHPUR
SAMAYPUR
KANPUR
AGRA

4 MAJOR ACTIVITIES OF SLDC DURING 2009-10.

In the second phase of power reforms undertaken in Delhi, the power purchase agreements executed by DESU / DVB / DTL have been reassigned to Distribution Licensees / Deemed Distribution Licensees from 01.04.2007. Subsequently, Intrastate ABT has also been introduced in Delhi w.e.f. 01.04.2007 which is first in the country. Delhi State Electricity Regulatory Commission has subsequently come out with Delhi Grid code (DGC) notified in official Gezette on 22.04.2008. Delhi Grid Code envisages Grid Coordination Committee whose responsibilities are :-

The Grid Coordination Committee shall be responsible for the following matters namely -

(a) facilitating the implementation of these Regulations and the procedures developed under the provisions of these Regulations;

(b) assessing and recommending remedial measures for issues that might arise during the course of implementation of provisions of these Regulations and the procedures developed under the provisions of these Regulations;

(c) review of the DGC, in accordance with the provisions of the Act and these Regulations;

(d) analyse any major grid disturbance after its occurrence,

(e) examining problems raised by the Users, and

(f) investigate in case any Beneficiary is indulging in unfair gaming or collusion after getting reported from SLDC.

(g) review of the complete statement of the State UI and the State Reactive Energy account tabled by the SLDC through its Commercial Committee (a Sub-committee of GCC); and

(h) such other matters as may be directed by the Commission from time to time.

Deputy General Manager (System Operation) is the Convener of the GCC. GCC further formed various Sub-Committees whose responsibilities are detailed hereunder:-

a) Operation Co-Ordination Sub-Committee (OCC)

b) Commercial Sub-Committee (CC)

c) Protection Sub-Committee (PC)

d) System Study Sub-Committee

4.1 OPERATION CO-ORDINATION SUB-COMMITTEE (OCC)

Functions and Responsibilities :

Operation Co-ordination Committee (OCC) is responsible for

- Settle all issues related to operation of the Delhi / Regional grid viz. reviewing the schedule v/s. actual generation of various power stations drawn up in the previous month;
- estimating availability of power and energy from each power station and demand of each licensee for the current and next month;
- drawing up coordinated maintenance schedule for generating units and transmission network;
- reviewing operational discipline and its norms to be observed by constituents;
- reviewing the operation of Automatic Under-Frequency Relays;
- discussing system occurrences, if any, during the previous month ;
- reviewing the status of implementation of the recommendations of the Inquiry Committees;
- monitoring / reviewing violation of provisions of IEGC/DGC related to grid operation;
- discussing / reviewing measures for ensuring economic grid operation including optimization of energy transfer with other constituents;
- examining possibility of optimizing intra state energy exchanges;
- discussing optimization of energy transfer with other states; and
- any other matter referred by the GCC.

4.2 COMMERCIAL SUB-COMMITTEE (CC):

Functions and Responsibilities :

Commercial Sub-Committee(CC) is responsible for

- all commercial related issues viz. energy accounting ;
- schemes required for inclusion in the Bulk Power Supply Agreements ;
- requirement of power from the new projects ;
- installation of special energy meters and its cost sharing, etc.;
- metering aspects;
- reviewing of the payments towards UI charges ;
- treatment of transmission losses;
- commercial declaration of lines / substation and Generating units;
- commercial issues in intra state exchange of power ;
- issues concerning settlement of payments among constituents, if any, etc. and ;
- any other matter referred by the GCC.

Auditing Commercial Committee shall audit the State Energy Accounts, Intra State UI Accounts and Inter discom Energy Transfer Account & Reactive Pool Accounts.

4.3 PROTECTION SUB-COMMITTEE (PC)

Functions and Responsibilities :

Protection Sub-Committee (PC) is responsible for

- all power system protection related issues viz. analysis of system disturbances in the state;
- review of protective relaying schemes ;
- relay co-ordination ;
- islanding schemes;
- automatic under frequency load shedding schemes;
- review of the implementation of recommendations made by the Inquiry Committee of the grid disturbance in the state / region concerning the above matters, etc.;
- and any other matter referred by the GCC.

4.4 SYSTEM STUDY SUB-COMMITTEE:

Functions and Responsibilities

System Study Sub-Committee entrusted with the work to carry out following system studies

- Studies for assessment of the quantum of capacitors required in the state taking into account the expected additions in the generation and transmission systems and the low voltage conditions in the system. The study shall be correlated with that of capacitor requirement study of being carried out at Regional level at NRPC.
- Studies for review of area wise reactive compensation requirement
- Operational load flow studies as & when required, for peak conditions off peak conditions etc.
- Short-circuit studies as and when required.
- Transient stability studies for major events like grid disturbances or other issues periodically or as and when requested by the constituent(s).
- System studies related to transmission constraints.
- Studies specific to high / low voltage conditions with specific reference to reactors or capacitors operation / requirement.
- Identification of requirement of reactors as and when required
- Co-relation of protection related issues from Studies as and when required
- To draw out the contingency plan of Delhi Power System.
- Any other technical study referred by the GCC.

The above said Sub-Committee meets periodically to transact business as envisaged in their formation.

The Apex Committee, Grid Coordination met twice during the year. The details of various decisions taken in the meeting are as under :-

S. No.	Date of meeting		Discussions and Decision on the issue(s)
1	23.04.2009 3rd GCC meeting	i)	All Stakeholders were advised to regulate Reactive Power drawal and ensure the operation of the Grid within the band of normal voltage regime. Utilities were requested to identify the low voltage areas and install additional capacitors.
		ii)	Committee noted the decision of Govt. of NCT of Delhi to close down the units at IP Stn. which is proposed to be started from 31.10.09
		iii)	GCC advised the beneficiaries to give in principle approval for proceeding with the proposal of replacement of BTPS Phase-I units with suitable capacity of Gas Turbines.
		iv)	Phasing out of outlived CVT, PT and CT by DTL at various voltage level was agreed and recover the cost through tariff as per regulatory stipulations.
2	06.11.2009 4th GCC meeting	i)	BTPS representative requested Chairperson GCC to take up the matter with Govt. of India through Govt. of NCT of Delhi for getting gas allocation for capacity addition of 2X650MW Gas Turbines. Accordingly, Ministry of Petroleum and Natural Gas, Govt of India was requested by the Chief Secretary, GNCTD for allocation of Gas. The present proposal is first to install 1050MW Gas Plant in the adjacent land of BTPS. After the establishment of the plant, the existing 705MW coal based plant would be decommissioned in part of quality improvement of air. After the decommissioning of the existing coal based plant, another 1050MW gas based generation addition is also planned.
		ii)	All utilities were requested to install additional capacitors to avoid reactive power drawal during low voltage conditions.
		iii)	Coordinated augmentation / commissioning of projects to commensurate with increasing load demand to serve the consumers in a best way through the Steering Committee of STU was stressed.
		iv)	Installation of 2nd 66/11kV 20MVA Transformer at Gazipur was approved on payment basis.
		v)	Procurement of 0.25MMSCMD RLNG on long term basis by PPCL to augment generation within Delhi was approved.
		vi)	Establishment of 66kV bays at GT Station to feed the Akshardham Grid S/Stn was approved at an estimated cost of Rs. 63.81Lacs since the this bay also shall improve the evacuation at GT Station and hence would benefit all beneficiaries of GT Station, it was decided to share cost by all beneficiaries of GT Station subject to the approval of DERC.

S. No.	Date of meeting	Discussions and Decision on the issue(s)
2	06.11.2009 4th GCC meeting	vii) The proposal for installation of inlet cooling system at Pragati Power Station to increase the output during summer season and avoid the tripping of machines at thick foggy weather due to chocking of filters at an estimated cost of Rs. 6-8 Crores was approved under additional capitalization. viii) The STU Charges for open access transactions from 01.11.2009 has been finalized at Rs. 20.48 per MWh for 2009-10 till the STU Charges for 2010-11 is calculated intimated to RLDCs. These calculations are based on MYT Regulation on Transmission Tariff issued by DERC. ix) Recovery of penalty imposed on SLDC and other legal charges incurred by SLDC for the over drawal case initiated by CERC for the month of October 2008 from the over drawing Discoms was decided subject to the approval of DERC. x) The methodology of computation of interest on delayed payment of UI amount based on Intrastate UI Account issued by SLDC was approved. xi) Incentive based on Transmission System Availability achieved by DTL during the year 2008-09 was approved. xii) Accounting methodology in respect of Rohtak Road S/Stn consisting of apportionment of mis-match of energy input / output has been finalized.

In addition to the above, there are number of coordination meetings also held in SLDC to resolve various issues. The details are as under :-

S. No.	Date of meeting	Discussions and Decision on the issue(s)
1	26.05.2009	The implementation of revised UI Regulations of CERC at Intrastate level applicable from 01.04.2009 was decided.
2	25.06.2009	Power supply position for summer 2009 was reviewed.
3	06.07.2009	Power supply position for summer 2009 was reviewed. Discoms were requested to arrange power to meet the requirement and advised all Distribution Licensees not to export power outside Delhi at the time of shortages.

5. SALIENT FEATURES OF DELHI POWER SYSTEM

Sr. No.	Features	2008-09	2009-10
1	**Effective Generation Capacity within Delhi in MW**		
	Indraprastha Power Station	247.5	247.5*
	Rajghat Power House	135	135
	Gas Turbine	282	270
	Pragati Power Corporation Ltd.	330	330
	Badapur Thermal Power Station	705	700
	Total	1699.5	1682.5
2	**Maximum Unrestricted Demand (MW)**	**4036**	**4502**
	Date	24.07.2008	29.06.2009
	Time	15:06:36	15:30:00
3	**Peak Demand met (MW)**	**4034**	**4408**
	Date	24.07.2008	08.07.09
	Time	15:06:36	16:12:49
4	Peak Availability (MW)	3558	3989
5	Shortage (-) / Surplus (+) in MW	(-)476	(-)419
6	Percentage Shortage (-) / Surplus (+)	(-)11.65	9.51
7	Maximum Energy Consume in a day (Mus)	82.196	89.266
8	Energy Consumed during the year in MUs	**22006**	**23358**
9	**Load Shedding in Mus**		
A)	Due to Grid Restrictions		
i)	Under Frequency Relay Operations	39.227	8.424
ii)	Load Shedding by		
	NDPL	15.140	10.025
	BRPL	16.960	64.108
	BYPL	4.905	16.101
	NDMC	0.000	0.000
	MES	0.000	0.000
iii)	Due to Transmission Constraints in Central Sector System	0.709	8.490
	Total due to Grid Restriction	**76.941**	**107.148**
B)	Due to Constraints in System & in Mus		
	DTL	7.057	17.386
	NDPL	15.681	43.003
	BRPL	24.787	11.156
	BYPL	2.840	3.535
	NDMC	0.000	0.000
	MES	0.000	0.000
	Other Agencies	0.677	0.222
	Total	**51.042**	**75.302**
11	**Grand Total in Mus (Load Shedding)**	**127.983**	**182.45**
12	**Load shedding in percentage of Energy Consumption**	**0.58**	**0.77**

Note

i) IP Station has been desynchronized on 31.12.2009

ii) Capacity STG of Gas Turbine has been derated from 34MW to 30MW w.e.f. 16.09.09

6. PERFORMANCE OF GENERATING STATIONS WITHIN DELHI DURING YEAR 2009-10

Power Station	Effective Capacity (MW)	Actual Generation In MUs	%age Availability	% PLF
IP TPS	247.5	386.166	33.43 (upto Oct-09)*	33.43 (upto Oct-09) *
Rajghat TPS	135	554.370	54.64	54.64
Gas Turbine	270	1446.079	73.28	63.21
PPCL	330	2385.985	85.50	84.24
BTPS	705	4701.35269	86.46	84.24
Total	1687.5	9473.95269		

Note

***** As per the decision taken in the meeting of 4th Commercial Sub-Committee meeting held on 27.11.2009, it was decided to treat the closure of IP Station w.e.f. 31.10.2009. The generation / drawal of power by the station from 01.11.2009 to 31.12.2009 has been taken in UI transactions according to the decision of the said meeting.

* The actual generation is net generation on day to day basis. The percentage availability and PLF is based on monthly energy accounts.

7. DETAILS OF OUTAGES OF GENERATING STATIONS WITHIN DELHI FOR 2009-10

(A) IP STATION

Unit no.	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	**62.5**	03.04.09	07.02	03.04.09	08.58	D- Rediator Level not maintained.
		03.04.09	09.35	05.04.09	07.25	Loss of excitation
		21.04.09	05.22	27.04.09	23.05	Boiler Tube Leakage
		17.05.09	00.07	19.05.09	12.03	Problem in Bottom System
		19.05.09	21.20	20.05.09	02.15	Low vacuum
		22.05.09	14.39	22.05.09	16.15	Due to tripping of associated transmission lines.
		01.06.09	09.25	01.06.09	11.08	
		05.06.09	15.08	05.06.09	16.40	
		15.06.09	13.32	15.06.9	14.30	
		29.06.09	22.50	01.07.09	15.45	Boiler Tube Leakage
		06.07.09	12.40	06.07.09	13.53	Fire out.
		14.07.09	09.40	14.07.09	11.35	Due to tripping of associated transmission lines.
		28.07.09	10.53	28.07.09	20.15	Steam line burnt
		03.08.09	05.05	03.08.09	17.52	Problem in Boiler Feed Pump
		11.08.09	17.50	13.08.09	07.40	Boiler Tube Leakage
		27.08.09	17.30	08.09.09	20.28	Due to tripping of associated transmission lines. Could not synchronized due to Durator Valve Knob
		11.09.09	07.55	11.09.09	14.42	CHP Problem
		12.09.09	11.25	15.09.09	07.58	Boiler Tube Leakage
		26.09.09	21.45	29.09.09	17.52	Steam Leakage in Turbine
		29.09.09	20.15	30.09.09	08.18	Generator Stator Temp High
		08.10.09	18.18	11.10.09	13.42	Boiler Tube Leakage
		26.10.09	09.25	26.10.09	21.40	No Coal flow
		27.10.09	05.58	27.10.09	09.10	No Coal flow
		31.10.09	21.40	--	--	Unit stopped in decommissioning
3	**62.5**	06.04.09	13.38	09.04.09	07.07	Boiler Tube Leakage
		06.05.09	06.30	08.05.09	21.55	Boiler Tube Leakage
		19.05.09	21.11	20.05.09	04.58	Low vacuum
		28.05.09	09.22	28.05.09	11.35	Bus differential operation.
		01.06.09	09.29	01.06.09	11.52	Due to tripping of associated transmission lines.
		10.06.09	09.52	10.06.09	12.10	Vacuum Problem
		14.06.09	00.01	28.06.09	08.35	Boiler Tube Leakage
		12.07.09	10.50	15.07.09	00.12	Boiler Tube Leakage
		31.07.09	20.30	01.08.09	04.44	Due to jerk
		02.08.09	22.58	03.08.09	10.30	Low coal flow
		05.08.09	00.10	08.08.09	01.50	Condenser Tube Leakage
		11.08.09	09.30	11.08.09	15.43	No Coal Flow
		17.08.09	08.55	17.08.09	11.43	Due to tripping of associated transmission lines.
		17.08.09	14.01	18.08.09	23.55	Problem in Coal Bunker
		24.08.09	21.10	25.08.09	20.25	Shortage of DM Water.

Unit no.	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
3	**62.5**	27.08.09	17.50	28.08.09	00.50	Due to tripping of associated transmission lines.
		28.08.09	22.50	06.09.09	14.02	Boiler Tube Leakage
		08.09.09	23.40	09.09.09	20.20	Condenser Tube Leakage
		24.09.09	12.15	27.09.09	07.30	ID Fan problem
		04.10.09	09.35	05.10.09	09.50	Leakage in Control Valve Pipe
		20.10.09	23.55	23.10.09	07.20	Coal Mill Problem
		28.10.09	21.30	--	--	Unit stopped in decommissioning.
4	**62.5**	04.04.09	10.30	04.04.09	12.32	Electrocution Trip Device Alarm
		29.04.09	05.10	29.04.09	09.35	Coal mill problem
		29.04.09	12.43	13.05.09	16.43	Main Buchloz Relay Operated(Tx-4)
		19.05.09	21.11	24.05.09	15.05	Low vacuum
		25.05.09	19.42	27.05.09	23.15	Boiler Tube Leakage
		28.05.09	09.25	28.05.09	10.34	Bus differential operation.
		01.06.09	09.25	12.06	18.45	Reduction Gear Problem
		15.06.09	13.32	15.06.09	15.10	Due to tripping of associated transmission lines.
		22.06.09	20.57	24.06.09	04.40	Boiler Tube Leakage
		29.06.09	22.50	30.06.09	01.40	Due to tripping of associated transmission lines.
		04.07.09	06.00	15.07.09	16.25	Shortage of DM water
		26.07.09	15.55	27.07.09	07.12	Due to fire in boiler
		28.07.09	05.30	30.07.09	01.10	Shortage of coal
		03.08.09	07.30	03.08.09	08.58	Low Vacuum
		10.08.09	04.25	10.08.09	22.55	Coal Bunker Empty
		17.08.09	08.55	17.08.09	10.05	Coal Bunker Empty
		18.08.09	05.40	18.05.09	06.58	Low Coal Flow
		18.08.09	07.10	28.08.09	11.55	Condenser Tube Leakage
		28.08.09	14.45	29.08.09	13.12	Heavy Steam Leakage in Boiler
		04.09.09	01.55	04.09.09	11.32	Tripped on ETD
		04.09.09	14.40	06.09.09	04.45	Boiler Tube Leakage
		12.09.09	16.37	12.09.09	20.55	Fire out
		17.09.09	19.45	19.09.09	23.55	Boiler Tube Leakage
		03.10.09	18.27	17.10.09	05.30	Boiler Tube Leakage
		20.10.09	07.25	20.10.09	07.20	Coal mill problem
		20.10.09	23.55	23.10.09	15.16	Coal mill problem
		26.10.09	15.35	28.10.09	21.40	No coal availability
		29.10.09	18.22	29.10.09	22.50	No coal availability
		29.10.09	23.07	30.10.09	00.10	Heat Control valve leakage
		01.11.09	00.10	01.11.09	10.35	No coal availability
		02.11.09	13.47	02.11.09	17.18	Water level low
		03.11.09	10.15	04.11.09	17.34	No coal availability
		05.11.09	03.58	05.11.09	05.00	No coal availability
		05.11.09	09.12	05.11.09	18.18	No coal availability
		05.11.09	16.28	09.11.09	15.20	No coal availability
		10.11.09	21.40	24.11.09	13.40	Boiler Tube Leakage
		24.11.09	13.50	26.11.09	14.00	Boiler Tube Leakage
		27.11.09	18.10	27.11.09	20.45	No coal availability
		28.11.09	13.55	28.11.09	16.55	No coal availability

Unit no.	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
5	**60**	31.03.09	04.03	04.04.09	05.58	Electrocution Trip Device Alarm
		09.04.09	02.40	12.04.09	00.35	Boiler Tube Leakage
		12.04.09	17.40	15.04.09	16.45	Electrocution Trip Device Alarm
		15.04.09	19.43	18.04.09	23.17	Electrocution Trip Device Alarm
		22.04.09	19.02	24.04.09	16.00	Condenser Tube Leakage
		04.05.09	09.45	04.05.09	10.26	Tripped due to jerk due to tripping of 33kV Bay-29
		04.05.09	20.56	11.05.09	05.15	Fire in PA Fan
		15.05.09	23.18	16.05.09	07.40	Problem in RC Feeder
		18.05.09	13.10	05.07.09	03.45	ID Fan Problem
		05.07.09	07.00	08.07.09	02.35	Boiler Tube Leakage
		08.07.09	10.30	12.07.09	03.24	Condenser Tube Leakage
		13.07.09	06.50	13.07.09	07.05	Drum level high
		13.07.09	07.50	13.07.09	23.25	Shortage of DM water
		14.07.09	09.42	14.07.09	18.55	Due to tripping of associated transmission lines
		26.07.09	16.02	28.07.09	20.05	Condenser Tube Leakage
		29.07.09	12.12.	29.07.09	12.55	Auxiliary supply failure
		31.07.09	07.35	31.07.09	08.35	Fire out
		06.08.09	20.48	11.08.09	08.30	Condenser Tube Leakage
		11.08.09	08.35	11.08.09	09.08	Low Vacuum
		15.08.09	05.02	15.08.09	17.10	Maintenance work
		17.08.09	11.28	19.08.09	18.50	Problem in coal bunker
		21.08.09	13.27	21.08.09	13.55	Tripped due to jerk
		23.08.09	21.01	29.08.09	22.50	Shortage of DM Water
		03.09.09	17.46	09.09.09	07.52	Vapour Fan5-1 & Mill 5-2 out
		09.09.09	13.40	13.09.09	13.15	Low vacuum
		17.09.09	12.45	17.09.09	18.25	Low vacuum
		19.09.09	18.22	19.09.09	19.20	Low vacuum
		20.09.09	12.42	27.09.09	12.47	Coal Mill Problem
		28.09.09	02.50	03.10.09	03.05	Boiler Tube Leakage
		03.10.09	18.09	31.10.09	18.50	Due to tripping of 33kV Bay-38
		04.10.09	22.58	12.10.09	13.55	Boiler Tube Leakage
		14.10.09	20.00	16.10.00	14.20	Boiler Tube Leakage
		17.10.09	21.55	18.10.09	06.35	Coal not available
		22.10.09	09.45	01.11.09	03.20	Boiler Tube Leakage
		02.11.09	17.40	23.11.09	16.10	No coal availability
		24.11.09	02.05	--	--	Unit stopped in decommissioning

(B) RPH STATION

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	**67.5**	05.04.09	07.05	05.04.09	08.05	Bus Bar Protection Operated
		10.04.09	08.48	10.04.09	19.33	Condenser Tube Leakage
		09.05.09	03.16	09.05.09	09.46	Cooling Line Problem
		12.05.09	20.05	13.05.09	14.26	Turbine Vibration High
		22.05.09	14.39	22.05.09	22.02	Tripped due to tripping of associated transmission lines
		01.06.09	09.24	01.06.09	10.35	
		05.06.09	15.10	05.06.09	17.16	
		15.06.09	13.35	15.06.09	15.20	
		29.06.09	15.40	29.06.09	20.50	
		03.07.09	01.20	06.07.09	14.20	Thrust bearing maintenance.
		06.07.09	23.33	07.07.09	15.22	Condenser Vacuum low
		07.07.09	20.09	07.07.09	20.42	Flam failure
		14.07.09	09.42	14.07.09	14.48	Tripped due to tripping of associated transmission lines
		15.07.09	22.30	18.07.09	11.05	Condenser Tube Leakage
		18.07.09	11.20	18.07.09	12.05	Boiler Flame Failure
		28.07.09	15.27	28.07.09	16.22	Flame Failure
		28.07.09	18.03	28.07.09	18.39	Flame Failure
		30.07.09	10.52	31.07.09	11.40	Condenser Tube Leakage
		31.07.09	12.32	31.07.09	13.15	Drum level high
		01.08.09	07.52	01.08.09	08.55	Jerk due to appearance of money in yard
		01.08.09	18.20	01.08.09	19.01	Flame failure
		02.08.09	15.19	02.08.09	15.45	Flame failure
		07.08.09	10.44	07.08.09	11..31	Flame failure
		09.08.09	03.55	09.08.09	04.25	Flame failure
		21.08.09	14.34	21.08.09	18.00	Buchloz Relay operated
		23.08.09	19.31	23.08.09	20.07	Burner Pressure High
		25.08.09	17.50	25.08.09	18.25	High Furnace pressure.
		27.08.09	17.35	27.08.09	20.30	Boiler flame failure
		01.09.09	05.26	01.09.09	06.18	Flame failure
		01.09.09	10.17	02.09.09	11.48	Tripped due to tripping of associated transmission lines
		06.09.09	18.35	06.09.09	18.58	Flame failure
		11.09.09	04.38	11.09.09	05.05	Flame failure
		11.09.09	23.50	13.09.09	18.08	Boiler Tube Leakage
		13.09.09	19.51	13.09.09	22.32	Unit Auxiliary TX. tripped on E/F
		14.09.09	06.58	14.09.09	07.50	Flame failure
		16.09.09	05.24	16.09.09	05.59	Flame failure
		02.10.09	09.43	03.10.09	10.09	To attend various leakages
		03.10.09	10.58	03.10.09	11.14	Flame failure
		10.10.09	17.03	11.10.09	02.35	To attend raw water
		02.11.09	22.24	02.11.09	23.01	Control supply fail
		11.11.09	20.00	13.11.09	13.58	Condenser Tube Leakage
		25.11.09	21.30	25.11.09	23.00	To attend diesel generator set
		04.12.09	09.30	04.12.09	10.07	Flame failure
		09.12.09	16.23	09.12.09	17.23	Turbine Trip

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	**67.5**	10.12.09	02.25	10.12.09	02.50	Turbine Trip
		10.12.09	08.35	12.12.09	00.46	Boiler Tube Leakage
		16.12.09	10.16	16.12.09	11.23	Turbine Trip
		23.12.09	04.50	23.12.09	13.56	Turbine Trip
		26.12.09	10.45	26.12.09	11.45	Drum level low
		29.12.09	13.16	29.12.09	14.35	Drum level low.
		02.01.10	04.18	03.01.10	00.35	Due to tripping of transmission lines in Northern Region due to fog
		03.01.10	01.35	03.01.10	20.00	Flame failure
		04.01.10	14.12	10.01.10	21.57	Due to shut-down of 220kV RPH - IP Ckt-I & II in connection with raising the height of towers for Yamuna Vellodrum for CWG-2010
		11.01.10	15.58	14.01.10	00.23	Due to tripping of transmission lines. Later taken on shut-down for construction of Yamuna Vellodrum for CWG-2010
		25.01.10	08.21	25.01.10	08.50	Boiler tripped
		29.01.10	02.54	29.01.10	16.34	Boiler drum level high
		31.01.10	16.28	31.01.10	17.23	Tripped due to jerk in system.
		03.02.10	21.13	0302.10	21.43	Electrical Problem
		06.02.10	10.38	06.02.10	12.16	Tripped along with tripping of associated transmission lines
		06.02.10	16.44	06.02.10	17.57	Electrical fault
		09.02.10	08.14	09.02.10	08.35	Boiler Flame Failure
		10.02.10	12.45	10.02.10	16.44	Due to jerk
		12.02.10	17.28	12.02.10	18.47	Electrical problem
		13.02.10	06.22	14.02.10	06.50	Flame failure
		14.02.10	17.37	14.02.10	18.45	Tripped along with tripping of associated transmission lines
		19.02.10	17.05	19.02.10	17.23	Cooling pump tripped
		20.02.10	06.32	22.02.10	22.25	Maintenance work of cooling line
		07.03.10	17.54	07.03.10	18.30	Electric supply failed
		21.03.10	26.00	21.03.10	17.45	33kV Bus differential operation
		23.03.10	10.28	23.03.10	11.54	Electrical Trouble
		24.03.10	03.10	24.03.10	21.12	Low vacuum
		27.03.10	14.01	27.03.10	15.14	Tripped along with tripping of associated transmission lines.
2	**67.5**	05.04.09	07.05	05.04.09	08.05	Bus Bar Protection Operated
		09.04.09	02.26	09.04.09	23.20	Boiler Tube Leakage
		25.04.09	19.30	25.04.09	21.52	Shaft Vibration High
		08.05.09	08.54	09.05.09	10.05	Condenser Tube Leakage
		11.05.09	20.49	11.05.09	22.10	Turbine Vibration high
		20.05.09	10.04	20.05.09	12.05	Turbine Vibration high
		22.05.09	14.39	23.05.09	00.41	Tripped due to tripping of associated transmission lines
		01.06.09	09.24	01.06.09	11.10	
		01.06.09	11.42	01.06.09	13.20	Low vacuum

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	**67.5**	05.06.09	15.10	05.06.09	17.45	Tripped due to tripping of associated transmission lines
		07.06.09	07.25	07.06.09	21.06	To check Turbine in Auxiliary
		15.06.09	13.35	15.06.09	15.27	Tripped due to tripping of associated transmission lines
		06.07.09	23.34	07.07.09	15.20	Condenser Vacuum low
		10.07.09	22.08	10.07.09	23.08	Condenser Vacuum low
		14.07.09	09.42	14.07.09	15.20	Tripped due to tripping of associated transmission lines
		18.07.09	20.20	19.07.09	11.45	Electrical Fault
		01.08.09	01.15	03.08.09	05.58	Condenser Tube Leakage
		21.08.09	16.28	21.08.09	18.54	Furnace Pressure High
		27.08.09	17.51	27.08.9	22.08	Tripped due to tripping of associated transmission lines
		28.08.09	00.18	28.08.09	01.33	Turbine Tripped
		28.08.09	03.16	28.08.09	04.33	Turbine Tripped
		28.08.09	03.57	29.08.09	04.15	Turbine Tripped
		29.08.09	12.25	30.08.09	00.38	Condenser Tube Leakage
		31.08.09	18.03	31.08.09	19.07	Low Vacuum
		02.09.09	10.17	02.09.09	11.52	Tripped due to tripping of associated transmission lines
		10.09.09	08.23	10.09.09	17.20	Stator Earth Fault
		12.09.09	16.10	30.11.09	08.24	For major overhauling
		30.11.09	14.36	30.11.09	19.41	Shaft vibration high
		01.12.09	00.08	01.12.09	04.20	Turbine problem
		01.12.09	21.14	01.12.09	22.56	Drum level low
		05.12.09	15.30	05.12.09	17.59	Turbine failure
		06.12.09	18.35	06.12.09	20.05	Turbine failure
		11.12.09	06.24	11.12.09	07.26	Turbine failure
		14.12.09	15.52	18.12.09	15.07	Boiler Tube Leakage
		18.12.09	21.05	22.12.09	20.32	Boiler Tube Leakage
		02.01.10	04.18	04.01.10	20.00	Due to tripping of transmission lines in Northern Region due to fog
		04.01.10	14.12	11.01.10	02.00	Due to Shut-down of 220kV IP – RPH Ckt-I & II for raising the height of tower for construction of Yamuna Vellodrum for CWG-2010
		11.01.10	15.58	11.01.10	17.35	Tripped due to tripping of associated transmission lines
		11.01.10	18.04	28.02.10	11.35	Turbine Vibration high
		07.03.10	17.54	07.03.10	19.58	Electrical supply failed
		21.03.10	16.00	21.03.10	17.45	33kV bus differential operation
		23.03.10	10.28	23.03.10	12.12	Electrical trouble
		30.03.10	18.46	30.03.10	20.30	Drum level low

(C) Gas Turbine

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	30	15.04.09	16.15	16.04.09	22.55	Due to overloading on 100 MVA Tr
		05.05.09	08.01	05.05.09	13.00	
		05.05.09	13.00	05.05.09	19.45	For installing the ABT Meter.
		12.06.09	15.15	12.06.09	15.44	FSNL due to tripping of 160 MVA Tx at both end
		28.06.09	06.02	29.06.9	00.28	To attend HSD leakage from the Nozzles.
		08.07.09	23.54	09.07.09	02.07	Due to combined cycle trip alarm.
		09.07.09	11.40	17.07.09	08.55	To attend the GT duct for HRSG# 1.
		17.07.09	13.16	17.07.09	16.14	Emergency manual trip alarm
		19.07.09	05.29	19.07.09	07.20	Tripped due to blast in the breaker of 5 MVA auxiliary transformer.
		21.08.09	16.49	21.08.09	18.11	SF6 gas pressure low
		23.08.09	06.05	23.08.09	21.10	Gas Restriction
		28.08.09	04.32	28.08.09	05.45	Exhaust Temperature High
		01.09.09	22.35	02.09.09	03.25	Electrical Problem
		13.09.09	11.35	13.09.09	18.25	To charge 66KV Dead Bus from Grid.
		17.09.09	10.54	17.09.09	16.50	Tripped due to Grid failure.
		17.09.09	19.40	17.09.09	22.55	Gas restriction
		20.09.09	06.02	20.09.09	09.45	Gas restriction
		23.09.09	06.27	23.09.09	08.02	Loss of flame.
		23.09.09	16.15	24.09.09	00.05	To repair liquid fuel pump
		24.09.09	11.30	24.09.09	20.10	To replace liquid fuel pump.
		26.09.09	08.05	26.09.09	08.10	Came on FSNL due to jerk
		26.09.09	22.15	26.09.09	23.13	High Exhaust Temperature
		30.09.09	11.47	30.09.09	13.55	Tripped on gen. over current alarm
		09.10.09	22.40	10.10.09	02.50	Generator O/C, Over voltage alarm appeared on protection panel.
		30.10.09	15.10	30.10.09	15.30	Tripped due to Grid Failure
		04.11.09	19.50	04.11.09	20.28	Failure of supply to HSD pump.
		17.11.09	14.15	18.11.09	17.58	Gas restriction
		01.12.09	18.15	10.12.09	14.15	Available on liquid fuel
		11.12.09	13.37	11.12.09	14.15	Tripped on high TAD
		11.01.10	23.02	12.01.10	07.00	Swapping of gas to PPCL
		12.01.10	07.00	12.01.10	16.45	Problem in DG set
		12.01.10	17.17	20.01.10	18.31	Tripped on high Exhaust temperature
		21.01.10	07.35	21.01.10	08.27	Tripped on loss of flame
		22.01.10	16.12	22.01.10	17.19	Came on FSNL due to tripping of 160 MVA Transformer
		31.01.10	09.05	01.02.10	04.05	Low availability of Gas.
		05.02.10	15.55	05.02.10	16.44	Due to tripping of 100MVA & 160MVA Tx due to tripping of associated transmission lines.
		24.02.10	14.43	24.02.10	14.48	Bus Bar differential operation
		13.03.10	08.07	22.03.10	07.16	Tripped on Reverse power alarm
		24.03.10	06.40	24.03.10	09.15	Control supply fuse failure.
		29.03.10	02.48	29.03.10	20.45	Tripping of 160 MVA TX. at GT end.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	30	02.04.09	12.47	03.04.09	05.55	Gas Restriction
		08.04.09	12.02	30.04.09	24.00	Major Overhauling
		01.05.09	00.00	19.05.09	13.35	Stopped for Major Inspection.
		22.05.09	20.10	23.05.09	21.50	Swapping of gas to PPCL
		24.05.09	11.05	26.05.09	14.20	Available on Open Cycle (low availability of gas)
		28.05.09	01.05	28.05.09	11.38	Gas Restriction
		28.05.09	12.00	28.05.09	13.14	Gas Restriction
		30.0.09	12.55	30.05.09	19.58	Gas Restriction
		30.05.09	22.32	31.05.09	23.59	Gas Restriction
		01.06.09	00.00	01.06.09	19.42	Gas Restriction
		03.06.09	05.50	03.06.09	17.14	Gas Restriction
		04.06.09	06.32	04.06.09	09.35	Gas Restriction
		05.06.09	11.30	05.06.09	19.35	Gas Restriction
		07.06.09	01.48	07.06.09	18.45	Gas Restriction
		08.06.09	00.10	08.06.09	18.20	To attending Leakages
		09.06.09	00.02	09.06.09	10.35	To attending Leakages
		10.06.09	07.09	10.06.09	17.50	To attending Leakages
		11.06.09	07.47	11.06.09	19.55	To attending Leakages
		12.06.09	03.02	15.06.09	19.20	Swapping of gas to PPCL
		16.06.09	06.02	16.06.09	15.25	Swapping of gas to PPCL
		16.06.09	15.55	16.06.09	20.45	Exhaust Temperature high
		16.06.09	20.45	17.06.09	01.20	Gas Restriction
		17.06.09	01.32	17.06.09	10.27	Exhaust Temperature high
		17.06.09	11.30	17.06.09	14.32	Gas Restriction
		18.06.09	00.02	21.06.09	11.20	Swapping of gas to PPCL
		24.06.09	00.32	25.06.09	09.50	Swapping of gas to PPCL
		26.06.09	22.25	26.06.09	22.55	Exhaust Temperature high
		30.06.09	20.20	02.07	14.05	Gas Restriction
		02.07.09	18.32	03.07.09	03.15	Gas Restriction
		03.07.09	18.02	03.07.09	23.50	Gas Restriction
		04.07.09	01.05	04.07.09	16.10	Gas Restriction
		19.07.09	05.29	19.07.09	06.38	Due to blast in the breaker of 5 MVA auxiliary transformer.
		22.07.09	04.04	23.07.09	13.20	To attend lube oil leakages.
		04.08.09	07.25	04.08.09	08.13	Tripped while changing over from Gas to liquid fuel as the Distilite fuel pump-1 did not start on Auto.
		05.08.09	15.04	05.08.09	15.40	Exhaust Temperature High
		23.08.09	21.15	23.08.09	23.11	Gas Restriction
		23.08.09	23.11	20.09.09	00.52	High vibration at 1800 RPM
		03.10.09	06.02	03.10.09	09.40	Turbine under speed alarm appeared
		04.10.09	01.53	04.10.09	05.55	Exhaust Temperature High
		07.10.09	20.38	08.10.09	16.10	Gas Restriction
		30.10.09	15.10	30.10.09	16.29	Tripped due to Grid Failure
		04.11.09	14.16	04.11.09	16.25	Stopped due GAD running high
		04.11.09	19.50	04.11.09	20.35	Failure of supply to HSD pump
		19.11.09	04.32	19.11.09	15.40	Gas fuel Pressure low.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	30	23.11.09	00.43	23.11.09	03.38	Low lube oil pressure
		30.11.09	19.05	12.12.09	11.35	Low gas availability.
		19.12.09	11.05	22.12.09	19.25	
		23.12.09	20.45	23.12.09	22.45	
		02.01.10	14.07	02.01.10	14.40	Exhaust temperature high
		05.01.20	17.45	05.01.10	18.10	Exhaust temperature high
		05.01.10	19.25	06.01.10	16.01	To attend IGV & Bleed valve problem
		11.01.10	07.28	11.01.10	07.50	Exhaust temperature high
		15.01.10	14.50	16.01.10	06.50	Swapping of gas to PPCL
		16.01.10	12.10	17.01.10	07.05	Swapping of gas to PPCL
		23.01.10	05.58	23.01.10	15.50	Stopped due to overloading of 100 MVA transformer-I as the 160 MVA Transformer was under shut down
		23.01.10	16.31	26.01.10	02.40	Tripped on Exhaust temperature high
		29.01.10	14.55	29.01.10	16.18	Tripped on lube oil temp.high.
		31.01.10	09.05	31.01.10	19.05	Available on liquid fuel
		05.02.10	15.15	05.02.10	16.14	Due to tripping of 100MVA & 160MVA Tx on jerk following the tripping of transmission lines.
		06.02.10	11.25	06.02.10	12.18	High LTTH
		07.02.10	14.05	08.02.10	00.40	Available on Open Cycle
		21.02.10	07.05	21.02.10	19.55	Available on Open Cycle
		24.02.10	14.43	24.02.10	14.46	Bus Bar differential operation
		08.03.10	00.10	10.03.10	12.10	Stopped for Excitor Cleaning
		28.03.10	03.50	28.03.10	04.00	Came on FSNL due to jerk
		29.03.10	02.48	29.03.10	10.25	Tripped due to tripping of 160 MVA TX. at GT end.
		29.03.10	12.50	29.03.10	14.58	Tripped on jerk
3	30	29.04.09	00.50	29.04.09	03.29	LTTH High
		07.05.09	09.02	07.05.09	22.23	Swapping of gas to PPCL
		17.05.09	12.42	17.05.09	17.42	Lube oil temperature high
		19.05.09	12.45	22.05.09	19.40	Swapping of gas to PPCL
		02.06.09	00.25	02.06.09	19.28	Swapping of gas to PPCL
		09.06.09	23.02	10.06.09	06.52	Swapping of gas to PPCL
		12.06.09	00.00	12.06.09	12.13	Swapping of gas to PPCL
		12.06.09	15.15	12.06.09	20.07	Due to tripping of 160 MVA Tx at both end
		15.06.09	13.30	15.06.09	14.45	
		16.06.09	19.10	17.06.09	09.45	Swapping of gas to PPCL
		17.06.09	19.45	18.06.09	12.55	Swapping of gas to PPCL
		21.06.09	12.30	22.06.09	00.28	Swapping of gas to PPCL
		22.06.09	03.00	22.06.09	09.57	Swapping of gas to PPCL
		22.06.09	22.15	23.06.09	12.40	Swapping of gas to PPCL
		29.06.09	11.45	29.06.09	19.27	To attend leakage in HRSG#3
		30.06.09	01.32	30.06.09	11.55	Swapping of gas to PPCL
		30.06.09	23.30	01.07.09	05.58	Swapping of gas to PPCL
		07.07.09	05.42	07.07.09	13.47	Malfunctioning of Battery Charger.
		19.07.09	05.29	19.07.09	08.50	Due to blast in the breaker of 5 MVA auxiliary transformer.
		27.07.09	20.50	27.07.09	23.07	Tripped on loss of flame.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
3	30	15.08.09	10.15	15.08.09	20.55	Gas Restriction
		21.08.09	14.38	21.08.09	16.58	Loss of flame
		31.08.09	21.50	31.08.09	23.59	Tripped without any Audio alarm.
		13.09.09	09.50	13.09.09	10.41	Tripped due to Grid failure.
		13.09.09	11.20	13.09.09	16.15	To charge 66 KV Dead Bus
		17.09.09	10.54	17.09.09	12.20	Tripped due to failure of Grid supply
		20.09.09	09.55	21.09.09	23.34	To provide shut down on 160MVA Tx
		13.10.09	00.05	13.10.09	18.40	Gas restriction
		13.10.09	20.05	14.10.09	20.10	
		14.10.09	22.05	15.10.09	18.02	
		16.10.09	22.03	17.10.09	18.02	
		17.10.09	20.08	18.10.09	18.02	
		18.10.09	20.05	19.10.09	18.45	
		19.10.09	20.05	20.10.09	18.05	
		21.10.09	00.01	21.10.09	18.00	
		21.10.09	20.05	22.10.09	17.45	
		23.10.09	06.10	23.10.09	11.28	
		29.10.09	21.02	29.10.09	23.50	
		30.10.09	15.10	30.10.09	15.58	Tripped due to failure of Grid supply
		31.10.09	07.02	31.10.09	18.04	Gas restriction
		01.11.09	10.04	02.11.09	10.15	Gas restriction
		05.11.09	14.05	05.11.09	14.56	High LTTH
		05.11.09	18.54	06.11.09	09.40	Gas restriction
		06.11.09	16.35	07.11.09	12.15	Gas restriction
		08.11.09	00.10	08.11.09	14.59	Gas restriction
		13.11.09	14.32	14.11.09	18.40	Gas restriction
		20.11.09	01.46	20.11.09	18.40	Gas restriction
		20.11.09	11.02	24.11.09	03.59	Gas restriction
		05.12.09	12.32	05.12.09	16.51	To replace Generator absolute filter.
		10.12.09	15.47	14.12.09	07.30	Low availability of Gas.
		14.12.09	15.05	14.12.09	21.20	
		15.12.09	00.16	15.12.09	07.45	Low availability of Gas.
		15.12.09	15.00	16.12.09	18.08	
		17.12.09	00.05	21.12.09	22.55	
		22.12.09	19.30	02.01.10	11.25	
		06.01.10	12.02	06.01.10	20.50	Swapping of gas to PPCL
		07.01.10	23.42	09.01.10	23.15	Tripped on rotating earth diode fault
		10.01.10	19.15	11.01.10	06.45	Stopped as generation on liquid fuel is not required
		11.01.10	23.10	12.01.10	07.05	
		13.01.10	00.05	13.01.10	07.06	
		13.01.10	17.01	14.01.10	09.53	
		15.01.10	14.52	17.01.10	19.57	
		19.01.10	20.29	20.01.10	06.38	
		21.01.10	17.45	22.01.10	06.50	Swapping of gas to PPCL
		22.01.10	16.12	23.01.10	05.55	Due to tripping of 160MVA Tx. and after that not taken on load due to overloading of 100 MVA Tx.
		24.01.10	14.40	24.01.10	16.40	Tripped on LTTH high
		25.01.10	19.02	26.01.10	14.33	Electrical trouble
		26.01.10	14.35	27.01.10	01.28	Electrical trouble

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
3	30	28.01.10	06.10	28.01.10	06.45	Tripped on high TAD
		05.02.10	07.46	05.02.10	15.52	Tripped on loss of Excitation field
		05.02.10	15.55	05.02.10	16.12	Due to heavy jerk in the system 100 MVA and 160 MVA Transformer tripped resulting in failure of auxiliary supply and machine tripped.
		08.02.10	19.52	08.02.10	20.52	Tripped on high TAD
		17.02.10	23.02	18.02.10	18.05	Available on Liquid Fuel
		20.02.10	17.02	22.02.10	19.05	Available on Liquid Fuel
		24.02.10	14.43	24.02.10	16.07	tripped on over speed
		26.03.10	10.10	26.03.10	14.30	Battery under voltage alarm
		29.03.10	02.48	29.03.10	05.40	Tripped due to tripping of 160 MVA TX. at GT end.
		29.03.10	10.25	29.03.10	16.40	Stopped to clean PHE.
		29.03.10	16.48	29.03.10	19.45	Loss of flame.
4	30	10.04.09	11.32	10.04.09	15.20	Gas Restriction
		08.05.09	09.10	09.05.09	01.20	Swapping of gas to PPCL
		10.05.09	17.24	10.05.09	20.25	High exhaust temperature
		13.05.09	22.10	13.05.09	23.59	Swapping of gas to PPCL
		24.05.09	11.05	25.05.09	21.20	Gas Restriction
		31.05.09	08.35	31.05.09	08.42	To close 66 KV Bus Coupler.
		13.06.09	06.10	13.06.09	18.20	Swapping of gas to PPCL
		14.06.09	15.04	16.06.09	02.38	Swapping of gas to PPCL
		26.06.09	01.100	26.06.09	13.27	Swapping of gas to PPCL
		04.07.09	16.25	05.07.09	20.02	Swapping of gas to PPCL
		05.07.09	20.28	07.07.09	19.50	Lube oil pressure low
		13.07.09	16.03	28.07.09	15.28	High exhaust temperature
		11.08.09	13.55	11.08.09	18.50	Electrical trouble
		21.08.09	16.39	21.08.09	18.37	Electrical trouble
		21.08.09	18.40	21.08.09	22.15	Electrical trouble
		10.09.09	16.25	10.09.09	18.57	Came on FSNL & reverse power operated on protection panel.
		13.09.09	09.50	13.09.09	14.10	Came on FSNL due to loss of supply
		17.09.09	10.54	17.09.09	12.25	Tripped due to failure of supply from the Grid.
		20.09.09	01.15	21.09.09	22.50	Swapping of gas to PPCL.
		24.09.09	13.58	24.09.09	16.15	To check load hunting
		27.09.09	20.10	29.09.09	11.07	Swapping of gas to PPCL.
		29.09.09	11.41	29.09.09	12.40	Gas fuel hydraulic trip pressure low
		29.09.09	13.33	29.09.09	16.10	Gas fuel hydraulic trip pressure low
		04.10.09	13.40	07.10.09	19.20	Stopped as liquid fuel generation not required
		09.10.09	14.26	09.10.09	19.02	
		10.10.09	11.05	10.10.09	19.12	
		11.10.09	03.50	11.10.09	18.25	
		15.10.09	20.40	16.10.09	18.50	
		22.10.09	07.05	22.10.09	17.55	
		23.10.09	06.15	23.10.09	09.50	
		24.10.09	08.09	24.10.09	10.55	
		25.10.09	07.20	25.10.09	18.02	
		25.10.09	21.47	26.10.09	09.45	Stopped as liquid fuel generation not required.
		25.10.09	21.47	26.10.09	09.45	
		27.10.09	08.02	27.10.09	21.08	
		30.10.09	15.10	30.10.09	16.27	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
4	**30**	02.11.09	18.00	03.11.09	11.30	Stopped as liquid fuel generation not required.
		03.11.09	11.30	05.11.09	18.45	
		09.11.09	00.35	10.11.09	18.18	
		10.11.09	20.15	11.11.09	18.58	
		12.11.09	00.40	13.11.09	07.25	
		15.11.09	01.05	18.11.09	14.05	
		03.12.09	13.00	03.12.09	15.35	Stopped to replace Generator absolute filter.
		12.12.09	11.50	14.12.09	07.37	Stopped as liquid fuel generation not required.
		14.12.09	15.05	14.12.09	21.10	
		15.12.09	00.20	15.12.09	07.20	
		15.12.09	15.00	16.12.09	17.42	
		17.12.09	00.07	19.12.09	07.40	
		23.12.09	22.50	24.12.09	18.45	
		25.12.09	01.25	25.12.09	07.05	
		02.01.10	19.05	04.01.10	00.45	
		04.01.10	06.30	04.01.10	10.55	Due to swapping of gas to PPCL
		04.01.10	15.15	05.01.10	09.00	
		05.01.10	13.10	05.01.10	20.00	
		06.01.10	23.10	07.01.10	06.59	
		07.01.10	23.05	07.01.10	23.58	
		14.01.10	08.41	14.01.10	21.00	Tripped on Generator under voltage alarm
		22.01.10	16.12	22.01.10	17.21	Due to tripping of 160 MVA Tx
		27.01.10	16.31	28.01.10	21.10	Tripped on loss of flame
		04.02.10	00.05	05.02.10	14.10	Swapping of gas to PPCL
		05.02.10	15.55	05.02.10	16.40	Due to tripping of 100&160 MVA Transformers esulting in failure of auxiliary supply and machine tripped.
		06.02.10	01.14	06.02.10	03.28	Gas fuel hydraulic trip pressure low
		06.02.10	11.25	06.02.10	14.40	Failure of Auxiliary supply.
		18.02.10	06.15	18.02.10	07.54	Available on Open Cycle
		24.02.10	14.43	31.03.10	23.59	Electrical trouble (taken under shut-down)
5	**30**	18.04.09	06.02	18.04.09	11.45	HRSG Leakage
		24.04.09	08.02	24.04.09	19.30	Due to planned shut-down of 220/66kV 160MVA Pr. Tr.
		26.04.09	09.35	26.04.09	21.18	
		09.05.09	00.56	09.05.09	17.25	C&I Problem
		10.05.09	14.52	10.05.09	17.15	High exhaust temp.
		31.05.09	08.32	31.05.09	12.38	To close 66 KV Bus Coupler
		15.06.09	13.30	15.06.09	15.10	Due to tripping of 100 MVA Tx following the tripping of 220kV Patparganj – Geeta Colony Ckts
		16.07.09	11.45	16.07.09	23.05	C&I problem
		19.07.09	05.29	19.07.09	06.45	Due to blast in the breaker of 5 MVA Auxiliary Transformer.
		10.09.09	20.05	10.09.09	21.07	Swapping of gas to PPCL.
		12.09.09	13.17	13.09.09	11.53	Swapping of gas to PPCL.
		15.09.09	10.32	16.09.09	10.52	Swapping of gas to PPCL.
		17.09.09	10.54	17.09.09	12.00	Swapping of gas to PPCL.
		09.10.09	11.10	09.10.09	18.25	Hydraulic Protection Trouble and Lube oil header temperature low
		28.10.09	01.05	28.10.09	17.35	Stopped as liquid fuel generation not required.
		30.10.09	15.10	30.10.09	16.04	
		04.11.09	20.36	06.11.09	09.52	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
5	**30**	06.11.09	12.45	09.11.09	19.10	Stopped as liquid fuel generation not required.
		10.11.09	20.45	11.11.09	00.50	
		12.11.09	05.56	12.11.09	19.15	
		24.11.09	13.02	25.11.09	23.12	
		26.11.09	10.46	01.12.09	14.35	
		06.12.09	14.40	06.12.09	16.04	Stopped to attend Mark-IV system
		21.12.09	12.45	23.12.09	23.40	Stopped as liquid fuel generation not required.
		25.12.09	09.05	01.01.10	10.55	
		04.01.10	00.10	05.01.10	09.01	SF-6 pressure low alarm.
		09.01.10	18.50	10.01.10	07.00	Stopped as generation on liquid fuel is not required
		10.01.10	19.02	11.01.10	07.05	
		13.01.10	00.07	13.01.10	07.05	Swapping of gas to PPCL
		13.01.10	16.46	13.01.10	18.20	Loss of flame
		13.01.10	18.20	14.01.10	06.54	Not taken on load as the generation on liquid fuel is not required.
		16.01.10	11.35	16.01.10	15.45	Electrical trouble
		17.01.10	02.38	17.01.10	03.25	Tripped at high TAD
		18.01.10	05.01	02.03.10	19.05	Loss of flame and high vibration
		04.03.10	01.53	04.03.10	17.35	High exhaust temperature
		29.3.10	02.48	29.03.10	13.55	Tripped due to tripping of 160 MVA TX. at GT end.
		31.03.10	22.10	31.03.10	23.59	Hydraulic pressure low
6	**30**	29.04.09	17.26	29.04.09	22.55	Electrical Fault
		09.05.09	14.32	09.05.09	23.59	To install ABT -complaint meters.
		10.05.09	15.35	10.05.09	16.43	Tripped without out any alarm
		11.05.09	22.02	12.05.09	17.44	Swapping of gas to PPCL
		16.05.09	00.32	16.05.09	13.46	Swapping of gas to PPCL
		26.05.09	14.31	26.05.09	17.50	To replace Gen. differential relay.
		31.05.09	08.35	31.05.09	08.42	To close 66 KV Bus Coupler.
		15.06.09	13.30	15.06.09	14.10	Tripping of 100MVA Tx at both end following the tripping of 220kV Geeta Colony – Patparganj Ckt-I & II
		30.06.09	2330	01.07.09	06.42	Swapping of gas to PPCL
		12.07.09	02.40	12.07.09	14.25	Loss of Excitation
		19.07.09	13.28	19.07.09	13.50	FSNL due to Gen. Over heating alarm appearing on protection panel
		19.07.09	17.50	19.07.09	18.35	
		29.07.09	15.40	29.07.09	20.25	Electrical Problem
		21.08.09	16.37	22.08.09	19.40	Tripped on preignition pressure p-2 high and Battery ground alarm
		04.09.09	18.15	06.09.09	15.55	Gas Restriction
		10.09.09	20.15	11.09.09	19.20	Lss of excitation.
		13.09.09	09.50	13.09.09	10.43	Came on FSNL due to Grid failure
		16.09.09	06.04	16.09.09	15.20	Gas Restriction
		17.09.09	10.54	17.09.09	12.32	Tripped due to loss of supply from Grid.
		17.09.09	22.20	17.09.09	23.40	Loss of Excitation
		26.09.09	08.05	26.09.09	08.21	Came on FSNL due to jerk
		28.09.09	18.55	29.09.09	12.05	Gas Restriction
		13.10.09	00.06	13.10.09	15.15	Gas Restriction
		14.10.09	23.46	15.10.09	06.10	Gas Restriction
		30.10.09	15.10	30.10.09	15.37	Due to loss of supply from Grid.
		03.11.09	16.13	04.11.09	15.18	Stopped as liquid fuel generation not required
		12.11.09	06.32	14.11.09	00.02	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
6	**30**	14.11.09	05.58	15.11.09	22.05	Stopped as liquid fuel generation not required
		16.11.09	12.05	23.11.09	00.05	
		23.11.09	14.35	30.11.09	11.50	
		24.12.09	00.40	24.12.09	16.05	Swapping of gas to PPCL
		02.01.10	19.05	03.01.10	18.55	Stopped due to swapping of gas to PPCL
		05.01.10	13.05	06.01.10	06.42	
		06.01.10	19.05	07.01.10	06.57	
		07.01.10	23.05	08.01.10	07.00	
		08.01.10	07.00	08.01.10	13.10	Problem in Diesel Engine
		09.01.10	00.02	09.01.10	06.59	Stopped due to swapping of gas to PPCL
		14.01.10	15.16	15.01.10	17.30	
		15.01.10	17.45	16.01.10	06.57	
		16.01.10	16.37	17.01.10	07.15	
		17.01.10	14.02	18.01.10	13.50	
		19.01.10	13.30	19.01.10	18.58	
		22.01.10	17.05	22.01.10	18.05	
		27.01.10	01.35	27.01.10	06.45	Available on open cycle.
		05.02.10	15.15	05.02.10	16.51	Due to tripping of 100 MVA and 160 MVA Transformers following the tripping of transmission lines.
		09.02.10	11.55	10.02.10	01.48	Available of Open Cycle
		24.02.10	00.00	24.02.10	17.6	Bus bar differential relay operated.
		03.03.10	22.05	04.03.10	03.10	Stopped for exciter cleaning
		04.03.10	22.32	06.03.10	23.59	Stopped for exciter cleaning
		26.03.10	00.02	26.03.10	05.34	Stopped for PHE Cleaning
		29.03.10	03.16	29.03.10	13.40	Tripped due to LTTH high.
STG1	**30**	06.04.09	10.30	08.04.09	12.00	Due to leakage in HRSG-1
		21.04.09	00.05	22.04.09	21.10	Maintenance work
		28.04.09	08.33	29.04.09	16.20	HRSG Leakage
		30.04.09	11.58	30.04.09	12.28	AVR System Problem
		01.05.09	16.58	01.05.09	20.33	Tripped due to CEP 1-A tripped.
		03.05.09	23.10	04.05.09	04.40	Tripped due to disappearance of drum parameters
		05.05.09	08.01	06.05.09	01.05	Stopped due to stopping of GT-1 since only HRSG-I in service.
		13.05.09	11.20	13.05.09	14.27	Tripped while change over Aux. supply from 7.5 MVA to 20 MVA.
		13.05.09	18.06	13.05.09	19.40	Tripped on false alarm of HRSG# I
		22.05.09	19.42	22.05.09	22.05	Malfunctioning of parameters
		31.05.09	08.35	31.05.09	21.28	Failure of 800 KVA transformer.
		02.06.09	18.13	02.06.09	19.20	Due to tripping of BFP-1A & HRSG# 1 & 2.
		06.06.09	22.02	07.06.09	23.40	Stopped to attend various leakages.
		12.06.09	15.15	12.06.09	16.53	Due to tripping of 160 MVA Tx at both end
		15.06.09	13.30	15.06.09	14.42	Due to tripping of 100 MVA Tx.
		20.06.09	06.02	20.06.09	23.48	Stopped to attend various leakages.
		26.06.09	04.05	26.06.09	04.25	Tripped on low hot well level
		30.06.09	13.00	30.06.09	20.05	To attend leakage at PRDS station
		09.07.09	04.45	09.07.09	08.20	Due to malfunctioning of parameters
		14.07.09	00.05	17.07.09	17.25	To attend tube leakage in HRSG#2
		19.07.09	05.29	19.07.09	07.58	Due to blast in the breaker of 5MVA Auxiliary Transformer.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG1	30	21.07.09	08.38	21.07.09	09.28	Tripped due to tripping of 800 KVA transformer on instantaneous O/C
		28.07.09	18.05	28.07.09	18.26	Due to tripping of 7.5 MVA Tx
		09.08.09	17.55	09.08.09	19.47	Due to tripping of HRSG-I & subsequently STG# I.
		23.08.09	00.05	24.08.09	19.10	To attend PRDS leakage.
		26.08.09	02.15	26.08.09	05.05	Tripped due to Closing of MS-1 Valve
		26.08.09	18.05	26.08.09	19.52	Channel-I & II operated.
		27.08.09	08.15	27.08.09	12.55	Tripped though all the parameters were normal at BCD.
		27.08.09	15.05	27.08.09	20.50	Control Oil pressure very low
		28.08.09	04.32	28.08.09	06.35	Tripped due to tripping of GT# 1.
		01.09.09	22.35	02.09.09	04.55	Tripped due to tripping of GT# 1
		02.09.09	07.31	02.09.09	22.55	C&I Problem
		07.09.09	02.20	07.09.09	20.04	Tripped due to GT# 1came on FSNL
		13.09.09	09.50	14.09.09	06.40	Tripped due to failure of supply from the Grid.
		14.09.09	13.52	14.09.09	19.05	Exhaust Steam Pressure High.
		17.09.09	10.54	18.09.09	00.20	Tripped during Grid supply failure
		28.09.09	10.05	28.09.09	11.52	Turbine shaft vibration very high.
		30.10.09	02.40	30.10.09	04.33	Tripped due to failure of BK Card
		30.10.09	15.10	30.10.09	16.25	Tripped due to Grid supply failure
		04.11.09	19.50	04.11.09	21.20	Due to tripping of GT-I & II
		09.11.09	22.25	10.11.09	02.46	Due to choke of suction strainer of both BFPs.
		10.11.09	09.11	10.11.09	11.50	Low Vacuum
		01.12.09	18.15	11.12.09	20.45	Stopped for condenser cleaning
		14.12.09	00.15	14.12.09	03.35	Channel-I& II operated
		19.12.09	05.06	19.12.09	05.58	
		19.12.09	08.05	19.12.09	08.55	Channel-I & II operated
		24.12.09	17.08	24.12.09	18.32	
		26.12.09	14.05	26.12.09	16.10	Stopped to attend hot spot
		21.01.10	09.35	21.01.10	10.50	tripped on Ch-I and II
		31.01.10	09.05	02.02.10	03.35	Stopped to attend leakages in CPH
		05.02.10	15.55	05.02.10	16.58	Due to heavy jerk in the system 100 MVA & 160 MVA Trs. tripped resulting in failure of auxiliary supply and machine tripped.
		06.02.10	11.25	06.02.10	13.15	Failure of Auxiliary supply.
		06.02.10	19.40	06.02.10	20.20	Failure of Auxiliary supply.
		15.02.10	17.26	15.02.10	18.10	Due to tripping of VB-II radial feeder on relay 51& 64.
		20.02.10	01.15	20.02.10	04.35	Tripped due to jerk as VB-I tripped.
		20.02.10	16.43	20.02.10	17.15	Control oil header pressure low.
		20.02.10	17.55	20.02.10	22.15	Control oil header pressure low.
		21.02.10	06.40	21.02.10	20.05	Stopped to install flow meter to measure DM Water and to arrend other leakages.
		24.02.10	14.43	24.02.10	16.55	Bus bar differential relay operated.
		25.02.10	13.15	25.02.10	14.20	Tripped in the jerk due snapping of conductor of VB-II
		25.02.10	15.05	25.02.10	20.20	C&I department
		26.03.10	18.45	26.03.10	19.15	Due to tripping of AC-AOP-IB
		29.03.10	02.48	29.03.10	17.28	Due to tripping of 160 MVA TX. at GT

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG2	**30**	07.04.09	00.05	08.04.09	22.02	To attend leakage
		10.04.09	02.02	10.04.09	02.40	Class A relay group-2 operated
		30.04.09	11.58	30.04.09	12.28	Class 'B' trip relay operated& 40G
		06.05.09	09.05	06.05.09	21.06	To install ABT -complaint meters.
		13.05.09	11.20	13.05.09	11.40	Tripped while change over of Aux. supply from 7.5 MVA to 20 MVA.
		29.05.09	19.24	29.05.09	20.20	Tripped due to following relay i) Generator class-A group-II 86GA-2.
		29.05.09	20.31	29.05.09	21.55	Generator Class-A relay operated.
		31.05.09	07.37	31.05.09	09.55	Due to tripping of 100 MVA Tx-II.
		02.06.09	17.09	02.06.09	19.05	Due to tripping of HRSG# 4.
		15.06.09	13.30	15.06.09	17.05	Due to tripping of 100 MVA Tx. following the tripping of 220kV Geeta Colony – Patparganj Ckts
		07.07.09	05.44	07.07.09	15.28	Tripped due to tripping of GT# 3
		19.07.09	05.29	19.07.09	12.08	Due to blast in the breaker of 5 MVA in switch gear room.
		21.07.09	08.38	21.07.09	09.18	Tripped due to tripping of 800 KVA transformer on instantaneous O/C
		23.07.09	12.27	23.07.09	13.13	Tripped without any abnormality.
		27.07.09	20.50	28.07.09	00.28	Tripped due to tripping of GT# 3 which is tripped on loss of flame.
		28.07.09	18.05	28.07.09	18.20	Due to tripping of 7.5 MVA Tx.
		31.07.09	13.32	31.07.09	19.15	To attend the condensate water transfer problem from hot well to derater.
		15.08.09	21.25	15.08.09	22.28	Drum level very high.
		16.08.09	13.32	16.08.09	14.15	Due to tripping of BFP-2B.
		21.08.09	16.39	21.08.09	17.52	Due to tripping of GT#4.
		26.08.09	14.10	27.08.09	23.59	Shortage of DM water
		13.09.09	09.50	13.09.08	17.55	Tripped due to failure of supply from the Grid.
		17.09.09	10.54	17.09.09	13.50	
		20.09.09	09.55	22.09.09	11.05	Swapping of gas to PPCL.
		21.10.09	10.02	23.10.09	14.29	Parameter of HRSG-4 disappeared while resetting these, Boiler-4 tripped consequently STG tripped
		30.10.09	15.10	30.10.09	21.25	Due to failure of supply from the Grid.
		05.11.09	14.05	05.11.09	15.32	Tripped due to tripping of GT# 3
		05.11.09	17.31	05.11.09	19.55	Stopped to attend leakages
		06.11.09	17.02	06.11.09	18.50	To clean suction strainer of CEP
		07.11.09	17.01	07.11.09	20.10	Stopped to attend leakages
		14.11.09	00.57	14.11.09	07.40	Heavy leakage from flange of SRV
		21.11.09	05.17	21.11.09	21.45	Due to failure of fuse of Power Distribution Module
		12.12.09	11.50	23.12.09	03.00	Stopped for condenser cleaning
		23.12.09	02.02	23.12.09	18.30	Exhaust steam pressure high.
		23.12.09	18.40	24.12.09	23.55	Due to problem in governing system
		25.12.09	00.50	25.12.09	08.55	Machine tripped asload not increased
		04.01.10	06.45	04.01.10	07.58	tripped due to field failure relay
		05.01.10	16.30	05.01.10	23.26	Tripped on Ch-I and II
		05.01.10	23.58	06.01.10	10.50	Manually tripped due to hunting in load
		06.01.10	12.03	06.01.10	12.38	Tripped on Ch-I and II
		06.01.10	14.16	06.01.10	15.59	Axial shift very high
		06.01.10	17.02	06.01.10	18.45	Low vacuum
		07.01.10	23.42	08.01.10	00.28	Tripped due to tripping of GT-3
		10.01.10	11.44	10.01.10	12.18	due to tripping of HRSG-4 and there rafter CEP-2A without any alarm

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG2	**30**	11.01.10	15.45	11.01.10	18.25	Stopped due to choking of CEPs.
		14.01.10	08.41	14.01.10	11.52	Tripped due to tripping of GT-4
		22.01.10	16.12	22.01.10	18.31	Due to tripping of 160 MVA Tx
		28.01.10	06.10	28.01.10	07.33	High TAD
		31.01.10	15.48	31.01.10	16.55	Low vacuum
		05.02.10	07.46	05.02.10	18.50	Tripped due to tripping of GT#3
		05.02.10	19.54	05.02.10	23.12	Tripped on Ch-I and II.
		06.02.10	11.25	06.02.10	14.30	Failure of Auxiliary supply.
		06.02.10	19.40	06.02.10	20.15	Failure of Auxiliary supply.
		18.02.10	06.15	18.02.10	19.55	Stopped to attend various leakages
		22.02.10	11.18	22.02.10	12.05	Tripped on Ch-I and II.
		24.02.10	14.43	24.02.10	17.35	Bus bar differential relay operated.
		03.06.10	12.02	03.06.10	12.45	Lube oil header pressure very low.
		13.03.10	11.32	13.03.10	16.37	Stopped to attend leakages
		24.03.10	09.25	24.03.10	18.55	Stopped to attend SRV of HRSG#4
		25.03.10	15.50	25.03.10	16.55	Trip Oil pressure very low.
		26.03.10	10.10	26.03.10	16.20	Tripped due to tripping of GT-3
		29.03.10	02.48	30.03.10	00.35	Due to tripping of 160 MVA TX. at GT
STG3	**30**	05.05.09	16.15	05.05.09	16.50	To install ABT -complaint meters.
		09.05.09	09.02	09.05.09	21.25	To attend leakages
		10.05.09	15.35	10.05.09	19.15	Due to tripping of GT No. 6.
		11.05.09	17.42	11.05.09	18.35	Tripped due to disappearance of hot well level parameters.
		13.05.09	11.20	13.05.09	12.40	Tripped while change over of Aux. supply from 7.5 MVA to 20 MVA.
		31.05.09	08.35	31.05.09	10.29	Due to failure of 800 KVA Tx
		12.06.09	15.15	12.06.09	18.20	Tripped due to 160 MVA Tx at both end
		15.06.09	13.30	15.06.09	16.12	Due to tripping of 100 MVA Tx.following the tripping of 220kV Geeta Colony–Patparganj Ckt-I & II
		19.07.09	05.29	19.07.09	08.28	Due to blast in the breaker of 5 MVA auxiliary transformer.
		21.07.09	08.38	21.07.09	09.35	Tripped due to tripping of 800 KVA transformer on instantaneous O/C
		23.07.09	14.02	23.07.09	21.50	Generator class -A relay operated.
		28.07.09	18.05	28.07.09	18.35	Due to tripping of 7.5 MVA Tx.
		28.08.09	03.10	11.09.09	02.02	Axial Shift Problem
		12.09.09	06.16	19.09.09	14.13	Channel-I & II operated
		25.10.09	13.05	26.10.09	13.25	Control oil header pressure low
		25.10.09	23.31	26.10.09	15.10	Low vacuum
		27.10.09	17.37	27.10.09	18.40	Low vacuum
		30.10.09	15.10	31.10.09	14.40	Tripped due to failure of supply from the Grid.
		02.11.09	11.57	03.11.09	00.10	To attend leakages and Condenser back washing
		10.11.09	23.28	11.11.09	00.20	Low Vacuum
		11.11.09	17.01	11.11.09	23.40	To attend leakages
		12.11.09	00.45	12.11.09	23.50	Exhaust Temperature High
		24.11.09	12.55	01.12.09	04.05	Stopped for Condenser cleaning
		31.12.09	03.15	31.12.09	09.25	Axial shift very high
		01.01.10	06.02	01.01.10	06.53	Tripped on sudden throw off load and Class-A relay operated
		07.01.10	06.00	07.01.10	22.46	Stopped to attend leakages
		17.01.10	02.38	17.01.10	04.05	Tripped due to tripping of GT-5

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG3	**30**	18.01.10	05.01	18.01.10	17.20	Tripped due to tripping of GT-5
		19.1.10	13.28	19.01.10	21.32	Stopped along with GT-6
		22.01.10	16.12	22.01.10	20.20	Due to tripping of 160 MVA Tx
		26.01.10	17.20	28.01.10	00.11	Tripped on Generator Stator E/F
		03.02.10	19.10	03.02.10	21.42	Manually tripped as BFP-3A was tripping frequently.
		05.02.10	15.55	05.02.10	18.12	Due to heavy jerk in the system 100 MVA & 160 MVA Trs. tripped resulting in failure of auxiliary supply and machine tripped.
		06.02.10	11.25	06.02.10	19.15	Failure of Auxiliary supply.
		09.02.10	11.50	10.02.10	07.05	Mechanical problem
		24.02.10	14.43	24.02.10	19.05	Bus bar differential relay operated.
		26.02.10	13.10	26.02.10	15.10	Tripped due to Stand by Tr. earth fault relay operated
		04.03.10	01.53	04.03.10	04.58	Tripped due to tripping of GT-5
		12.03.10	18.02	12.03.10	20.55	Tripped on low vacuum
		29.03.10	02.48	29.03.10	15.50	Tripped due to tripping of 160 MVA TX. at GT end.

(D) PRAGATI STATION

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
1	**104**	**Date**	**Time**	**Date**	**Time**	
		18.04.09	15.42	18.04.09	16.26	Tripped due to jerk
		27.04.09	10.48	28.04.09	13.25	Hydraulic Pressure Low
		19.05.09	20.55	19.05.09	22.17	Tripped due to tripping of associated transmission lines
		25.05.09	21.29	25.05.09	22.56	Tripped due to tripping of associated transmission lines
		05.06.09	02.48	05.06.09	10.07	
		03.07.09	07.28	03.07.09	12.27	
		04.07.09	11.42	04.07.09	12.01	
		06.07.09	14.10	06.07.09	14.28	
		14.07.09	09.42	14.07.09	10.18	
		05.08.09	16.15	05.08.09	17.37	
		10.08.09	19.09	10.08.09	19.25	
		12.08.09	15.15	12.08.09	16.31	
		20.08.09	21.16	22.08.09	11.02	Internal Fault
		22.08.09	18.17	22.08.09	20.10	Internal Fault
		27.08.09	18.22	27.08.09	18.26	Tripped due to tripping of associated transmission lines
		06.09.09	17.00	06.09.09	17.14	
		13.09.09	09.52	13.09.09	12.00	Tripped due to tripping of associated transmission lines
		17.09.09	10.57	17.09.09	11.50	
		22.09.09	10.45	22.09.09	14.56	Internal Fault
		03.10.09	23.45	04.10.09	01.29	Tripped due to tripping of associated transmission lines
		11.10.09	12.09	11.10.09	15.00	Internal Fault
		23.10.09	00.00	30.10.09	18.35	Maintenance Work
		31.10.09	12.22	31.10.09	13.50	Tripped due to tripping of associated transmission lines
		04.11.09	08.55	04.11.09	15.48	
		04.11.09	19.50	04.11.09	20.35	
		14.12.09	16.12	16.12.09	01.08	Rotor tripped on E/F
		27.12.09	13.44	27.12.09	15.08	Internal Fault

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	**104**	02.01.10	04.14	04.01.10	05.10	Tripping of lines in Northern Region due to fog
		02.01.10	05.40	02.01.10	08.30	
		02.01.10	21.45	02.01.10	23.05	
		11.01.10	15.59	11.01.10	16.47	
		22.01.10	13.30	22.01.10	16.05	Bleed valve problem
		23.01.10	12.45	23.01.10	17.36	To change the filter
		29.01.10	12.12	29.01.10	12.58	Internal fault
		06.02.10	10.57	06.02.10	11.26	Tripped due to tripping of associated transmission lines
		14.02.10	17.37	16.02.10	00.11	Internal fault
		26.02.10	13.00	26.02.10	14.14	Air inlet problem
2	**104**	19.04.09	10.29	19.04.09	11.27	Tripped due to tripping of associated transmission lines
		19.05.09	20.55	19.05.09	22.07	
		22.05.09	14.39	22.05.09	14.28	
		22.05.09	15.36	22.05.09	15.51	Tripped due to tripping of associated transmission lines
		01.06.09	09.26	01.06.09	09.52	
		04.06.09	00.00	05.06.09	05.26	Shut-down
		05.06.09	15.06	05.06.09	17.21	Tripped due to tripping of associated transmission lines
		15.06.09	13.35	15.06.09	14.20	
		15.07.09	00.30	17.08.09	19.50	Shut-down.
		17.08.09	23.54	18.08.09	04.00	Tripped due to tripping of associated transmission lines
		21.08.09	14.42	21.08.09	15.27	
		27.08.09	17.53	27.08.09	19.18	
		01.09.09	05.05	01.09.09	05.52	
		02.09.09	10.17	02.09.09	11.41	
		08.09.09	12.05	08.09.09	13.25	Internal fault
		13.09.09	09.52	13.09.09	11.26	Tripped due to tripping of associated transmission lines
		13.09.09	18.30	13.09.09	19.52	Internal fault
		17.09.09	10.57	17.09.09	12.34	Tripped due to tripping of associated transmission lines
		18.09.09	02.47	18.09.09	04.20	
		19.09.09	10.22	19.09.09	11.26	
		28.09.09	07.39	28.09.09	08.30	
		02.10.09	10.29	02.10.09	12.21	
		11.10.09	12.07	11.10.09	13.38	Internal Fault
		30.10.09	15.12	30.10.09	15.47	Transient Fault
		04.11.09	19.50	04.11.09	20.58	Tripped due to tripping of associated transmission lines
		16.11.09	18.14	16.11.09	19.30	
		14.01.10	17.13	15.01.10	11.16	Internal fault
		05.02.10	16.02	05.02.10	18.00	Tripped due to tripping of associated transmission lines
		16.02.10	10.46	18.02.10	18.14	Shut-down for over-hauling of SF6 breaker at IP Ext. end.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG	**122**	07.04.09	06.34	07.04.09	07.45	Tripped due to tripping of associated transmission lines
		19.04.09	10.29	19.04.09	12.41	
		26.04.09	07.11	28.04.09	13.25	
		16.05.09	18.44	16.05.09	20.24	
		19.05.09	20.55	19.05.09	23.20	
		22.05.09	14.39	22.05.09	15.39	
		01.06.09	09.26	01.06.09	10.41	
		04.06.09	11.25	04.06.09	15.32	Oil leakage from ESU
		05.06.09	15.06	05.06.09	16.40	Tripped due to tripping of associated transmission lines
		15.06.09	13.35	15.06.09	15.20	
		14.07.09	09.42	14.07.09	10.42	
		15.07.09	11.56	15.07.09	12.50	Problem in Boiler feed pump
		10.08.09	19.10	10.08.09	20.14	Tripped due to tripping of associated transmission lines
		12.08.09	15.15	12.08.09	17.20	
		18.08.09	00.15	18.08.09	01.55	Internal Fault
		21.08.09	14.43	21.08.09	16.17	Tripped due to tripping of associated transmission lines
		27.08.09	17.53	27.08.09	20.20	
		11.10.09	12.07	11.10.09	15.06	Internal Fault
		30.10.09	15.12	30.10.09	16.55	Internal Fault
		02.01.10	04.14	02.01.10	07.52	Tripping of lines in Northern Region due to fog
		02.01.10	21.45	03.01.10	00.01	
		11.01.10	15.59	11.01.10	16.39	
		26.01.10	17.56	28.01.10	16.51	Excitation problem
		29.01.10	12.12	29.01.10	14.48	Internal fault
		05.02.10	10.50	06.02.10	12.00	Vibration in Generator Bearing
		06.02.10	10.37	06.02.10	12.48	Tripped due to tripping of associated transmission lines
		09.02.10	12.55	09.02.10	14.08	Internal fault
		14.02.10	17.37	14.02.10	20.09	Tripped due to tripping of associated transmission lines

(E) BADARPUR THERMAL POWER STATION

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	95	30.07.09	06.45	14.09.09	17.00	Planned shut-down for major overhauling
		22.09.09	21.14	23.09.09	04.08	Vacuum problem
		23.09.09	04.15	23.09.09	07.02	Vacuum problem
		26.09.09	17.18	27.09.09	10.40	Drum main hole leakage
2	95	10.05.09	13.12	10.05.09	15.15	Bus differential operated
		16.07.09	17.42	18.07.09	05.25	Boiler Tube Leakage
		29.07.09	17.56	30.07.09	22.22	Furnace Failure
		11.08.09	21.29	11.08.09	22.50	Furnace problem
		30.08.09	14.50	31.08.09	11.00	LT Bus Flashover
		04.09.09	01:22	04.09.09	02:30	Condenser Vacuum Low
		22.10.09	21.48	28.12.09	05.14	Annual maintenance
		11.02.10	20.10	12.02.10	08.40	Reserve shut-down
		21.03.10	06.42	22.03.10	15.05	PA fan problem

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
3	95	12.04.09	05.34	12.04.09	19.43	Excitation System Failure
		13.04.09	17.22	13.04.09	20.45	Excitation System Failure
		25.04.09	22.43	26.04.09	22.43	ESP Problem
		26.05.09	20.54	27.05.09	17.39	Boiler Tube Leakage
		01.09.09	08.40	02.09.09	15.35	Boiler Tube Leakage
		30.10.09	11.15	30.10.09	13.04	Condenser Vacuum Low
		11.12.09	23:49	13.12.09	12:06	Boiler Tube Leakage
		16.12.09	06.58	17.12.09	11.35	Drum level low
		03.02.10	13.33	04.0210	14.05	Drum Manhole Leakage
		26.02.10	2105	27.02.10	09.30	Condenser Vacuum Low
		10.03.10	22.12	11.03.10	20.41	Boiler Tube Leakage
4	210	01.04.09	12.18	17.04.09	23.59	Planned Shut-Down for over-hauling
		18.04.09	12.35	18.04.09	15.48	GT Protection
		10.05.09	23:11	10:05.09	22:13	220 KV Bus Dead
		10.06.09	16.44	11.06.09	16.58	Boiler Tube Leakage
		19.06.09	09.52	20.06.09	09.23	Boiler Tube Leakage
		11.10.09	20.18	13.10.09	11:15	Boiler Tube Leakage
		24.10.09	10.03	25.10.09	05.51	Boiler Tube Leakage
		16.11.09	14.58	17.11.09	09.54	Reserve Shut-down
		29.11.09	06.43	29.11.09	23.32	Boiler Tube leakage
		05.12.09	04.54	05.12.09	12.08	Electrical Protection
		12.12.09	19.25	14.12.09	16.25	Boiler Tube leakage
		20.12.09	18.35	22.12.09	09.58	Boiler Tube leakage
		26.01.10	00.00	27.01.10	09.38	Reserve shut-down
		02.02.10	16.00	02.02.10	17.55	Electrical fault
		24.02.10	07.22	26.02.10	00.30	Boiler Tube Leakage
		03.03.10	12.37	04.03.10	03.40	Boiler Tube Leakage
		04.03.10	12.52	05.03.10	04.59	Boiler Tube Leakage
		10.03.10	02.27	10.03.10	21.24	Boiler Tube Leakage
		12.03.10	07.45	13.03.10	09.11	Boiler Tube Leakage
		14.03.10	23.56	15.03.10	22.30	Boiler Tube Leakage
		17.03.10	17.35	18.03.10	23.52	Boiler Tube Leakage
		21.03.10	16.52	22.03.10	10.40	Boiler Tube Leakage
5	210	07.08.09	17.43	07.08.09	19.40	Furnace Protection.
		18.11.09	00.50	19.11.09	10.38	Boiler Tube Leakage
		12.12.09	14.35	15.12.09	19.35	Boiler Tube leakage
		01.01.10	13.05	03.01.10	07.15	Boiler Tube leakage
		11.01.10	07.38	13.01.10	23.10	Boiler Tube leakage
		29.01.10	06.20	22.03.10	18.35	Annual maintenance

8. POWER SUPPLY POSITION OF DELHI DURING 2009-10

8.1 Power supply position during the month of April 2009

All figures in MUs

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	SINGRAULI	106.064	102.406	105.567	101.927
2	RIHAND-I	68.817	66.435	68.379	66.012
3	RIHAND-II	88.976	85.902	88.417	85.363
4	UNCHAHAR-I	16.995	16.409	16.763	16.184
5	UNCHAHAR-II	31.925	30.822	31.470	30.383
6	UNCHAHAR-III	20.566	19.856	20.286	19.586
7	DADRI(TH)	522.532	504.504	519.096	501.188
8	DADRI(TH)- Stage-II	0.000	0.000	0.000	0.000
9	FARAKA	13.970	13.524	13.475	12.846
10	KHELGAON	24.541	23.788	23.615	22.495
11	KHELGAON-II	54.425	52.721	52.450	50.634
12	ANTA(GT)	18.604	17.963	18.555	17.915
	ANTA(Liquid)	6.125	5.912	2.700	2.610
	ANTA(RLNG)	3.908	3.774	2.384	2.304
13	AURAIYA(GT)	29.712	28.682	29.625	28.598
	AURAIYA(Liquid)	7.373	7.115	3.098	2.993
	AURAIYA(RLNG)	10.453	10.100	7.218	6.978
14	DADRI(GT)	38.795	37.457	38.779	37.442
	DADRI(Liquid)	10.321	9.960	4.395	4.245
	DADRI (RLNG)	11.625	11.227	8.224	7.948
A	TOTAL NTPC (TOTAL 1 TO 14)	**1085.727**	**1048.557**	**1054.496**	**1017.651**
15	TANAKPUR	1.586	1.532	1.579	1.524
16	CHAMERA-I	14.640	14.137	14.640	14.137
17	CHAMERA-II	13.894	13.419	13.894	13.419
18	BAIRA-SUIL	9.391	9.068	9.391	9.068
19	SALAL	28.135	27.170	28.135	27.170
20	DULASTI	19.197	18.543	19.197	18.543
21	DAULI GANGA	5.375	5.192	5.375	5.192
22	URI	38.069	36.756	38.069	36.756
B.	TOTAL NHPC (TOTAL 15 TO 22)	**130.287**	**125.817**	**130.280**	**125.809**
23	NAPP	7.409	7.153	7.409	7.153
24	RAPP 'A'	0.000	0.000	0.000	0.000
25	RAPP 'C'	0.000	0.000	0.000	0.000
26	RAPP (B-4)	1.134	1.095	1.134	1.095
27	RAPP (B-3)	1.450	1.400	1.450	1.400
C.	TOTAL NPC (23 TO 27)	**9.993**	**9.648**	**9.993**	**9.648**
D.	NATHPA JHAKHRI	28.582	27.604	28.582	27.604
E.	TEHRI	20.344	19.642	20.344	19.642
F.	TALA	3.324	3.219	3.219	3.069
G.	TALCHER	0.000	0.000	0.000	0.000
	BILATERAL IMPORT				
(a)	RAJASTHAN	12.158	11.731	12.158	11.731
(b)	MADHYA PRADESH	9.568	9.041	9.041	8.740

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(c)	HARYANA	0.775	0.749	0.775	0.749
(d)	MAHARASHTRA	0.875	0.827	0.787	0.761
(e)	UNREQUISITIONED SURPLUS	0.285	0.276	0.285	0.276
(f)	HIMACHAL PRADESH	20.234	19.541	20.234	19.541
(g)	DVC	57.231	55.475	55.475	53.551
(h)	WEST BENGAL	2.750	2.658	2.562	2.476
(i)	CHATTISHGARH	2.454	2.319	2.225	2.152
(i)	CHATTISHGARH	0.360	0.340	0.340	0.329
(j)	ANDHRA PRADESH	0.295	0.286	0.270	0.261
(k)	POWER EXCHANGE(IEX)	0.874	0.846	0.874	0.846
(l)	POWER EXCHANGE (PX)	0.350	0.339	0.350	0.339
H	TOTAL IMPORT	108.209	104.428	105.376	101.752
	BILATERAL EXPORT				
(a)	RAJASTHAN	-14.624	-15.144	-14.624	-15.144
(b)	MADHYA PRADESH	-0.717	-0.758	-0.758	-0.788
(c)	HARYANA	-0.578	-0.597	-0.578	-0.597
(d)	MAHARASHTRA	-0.892	-0.944	-0.944	-0.980
(e)	WEST BENGAL	-2.180	-2.260	-2.260	-2.339
(f)	UTTRANCHAL	-20.249	-20.986	-20.249	-20.986
(g)	ANDHRA PRADESH	-12.901	-13.284	-13.284	-13.784
(h)	INDIAN ENERGY EXCHANGE (IEX)	-55.759	-57.813	-55.759	-57.813
(i)	POWER EXCHANGE (PX)	-1.883	-1.951	-1.883	-1.951
I	TOTAL EXPORT (TOTAL)	-109.783	-113.737	-110.339	-114.382
J.	TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H+I)	1276.685	1225.178	1241.950	1190.792
K	HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED				**26.218**
L	TOTAL DRAWAL (J - K)				**1164.574**
M	OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID				-133.428
	AVAILABILITY FROM OWN SOURCES				
(i)	IP				92.151
(ii)	1/3rd HARYANA SHARE IN IP				25.828
(iii)	JHAZZAR SHARE IN IP				0.390
(iv)	NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]				65.933
(v)	RPH				73.601
(vi)	JHAZZAR SHARE IN RPH				0.000
(vii)	NET GEN. AVAIL.FOR DELHI IN RPH [(v) - (vi)]				73.601
(viii)	GAS TURBINE				123.364
(ix)	PRAGATI				212.670
N	TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]				475.568
O	IMPORT FROM BTPS				374.792
P	TOTAL AVAILABILITY WITHIN DELHI (N + O)				850.360
Q	TOTAL CONSUMPTION (L + M + P)				1881.506
R	LOAD SHEDDING				24.634
S	REQUIREMENT (P + Q)				1906.140
T	% DEPENDENCE ON NORTHERN GRID				63.29
U	AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI				30.127
V	NET CONSUMPTION OF DELHI (Q - U)				1851.379

8.2 Power supply position during the month of May 2009

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	SINGRAULI	126.765	122.356	126.475	122.076
2	RIHAND-I	79.321	76.558	78.380	75.651
3	RIHAND-II	102.127	98.575	100.989	97.479
4	UNCHAHAR-I	18.004	17.377	17.530	16.921
5	UNCHAHAR-II	34.144	32.970	33.580	32.426
6	UNCHAHAR-III	23.048	22.247	22.474	21.695
7	DADRI(TH)	539.261	520.519	505.606	488.081
8	DADRI(TH)- Stage-II	0.000	0.000	0.000	0.000
9	FARAKA	18.641	18.090	17.574	16.964
10	KHELGAON	22.544	21.880	21.206	20.467
11	KHELGAON-II	66.691	64.717	62.783	60.607
12	ANTA(GT)	13.465	12.990	13.465	12.990
	ANTA(Liquid)	4.941	4.770	3.239	3.127
	ANTA(RLNG)	15.261	14.735	13.405	12.947
13	AURAIYA(GT)	37.818	36.504	37.817	36.503
	AURAIYA(Liquid)	9.542	9.210	6.072	5.864
	AURAIYA(RLNG)	4.933	4.759	3.204	3.095
14	DADRI(GT)	36.022	34.774	32.612	31.485
	DADRI(Liquid)	4.121	3.982	2.501	2.417
	DADRI (RLNG)	6.748	6.509	3.537	3.418
A	TOTAL NTPC (TOTAL 1 TO 14)	**1163.397**	**1123.522**	**1102.449**	**1064.213**
15	TANAKPUR	3.317	3.200	3.317	3.200
16	CHAMERA-I	19.771	19.080	19.771	19.080
17	CHAMERA-II	27.955	26.979	27.955	26.979
18	BAIRA-SUIL	9.455	9.127	9.455	9.127
19	SALAL	44.991	43.421	44.991	43.421
20	DULASTI	39.824	38.439	39.824	38.439
21	DAULI GANGA	13.748	13.269	13.748	13.269
22	URI	39.393	38.024	39.393	38.024
B.	TOTAL NHPC (TOTAL 15 TO 22)	**198.454**	**191.539**	**198.454**	**191.539**
23	NAPP	6.489	6.263	6.489	6.263
24	RAPP 'A'	0.000	0.000	0.000	0.000
25	RAPP 'C'	0.000	0.000	0.000	0.000
26	RAPP (B-4)	1.246	1.202	1.246	1.202
27	RAPP (B-3)	1.091	1.052	1.091	1.052
C	TOTAL NPC (23 TO 27)	**8.826**	**8.517**	**8.826**	**8.517**
D.	NATHPA JHAKHRI	84.515	81.542	84.515	81.542
E.	TEHRI	20.405	19.696	20.405	19.696
F.	TALA	6.148	5.971	5.971	5.755
G.	TALCHER	0.000	0.000	0.000	0.000
	BILATERAL IMPORT				
(a)	RAJASTHAN	51.395	49.606	51.392	49.606
(b)	MADHYA PRADESH	18.159	17.182	17.181	16.585
(c)	HARYANA	0.022	0.021	0.022	0.021
(d)	MAHARASHTRA	17.911	16.946	16.124	15.564

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(e)	**UNREQUISITIONED SURPLUS**	0.470	0.452	0.470	0.452
(f)	**HIMACHAL PRADESH**	55.325	53.397	55.325	53.397
(g)	**DVC**	42.172	40.927	40.926	39.502
(h)	**WEST BENGAL**	0.244	0.237	0.229	0.222
(i)	**UTTRANCHAL**	23.600	22.746	23.600	22.746
(j)	**ANDHRA PRADESH**	0.050	0.049	0.046	0.044
(k)	**POWER EXCHANGE(IEX)**	11.490	11.090	11.490	11.090
(l)	**POWER EXCHANGE (PX)**	1.025	0.987	1.025	0.987
H	**TOTAL IMPORT**	221.863	213.640	217.830	210.216
	BILATERAL EXPORT				
(a)	**RAJASTHAN**	-2.093	-2.167	-2.093	-2.167
(b)	**MADHYA PRADESH**	-0.382	-0.404	-0.404	-0.419
(c)	**HARYANA**	-2.263	-2.349	-2.263	-2.349
(d)	**HIMACHAL PRADESH**	-2.287	-2.364	-2.287	-2.364
(e)	**TAMILNADU**	-0.980	-1.010	-1.010	-1.047
(f)	**INDIAN ENERGY EXCHANGE (IEX)**	-14.292	-14.803	-14.292	-14.803
(g)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL EXPORT (TOTAL)**	-22.297	-23.097	-22.349	-23.149
j.	**TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H+I)**	1681.309	1621.329	1616.104	1558.330
K	**HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED**				**20.911**
L	**TOTAL DRAWAL (J - K)**				**1537.419**
M	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-151.783
	AVAILABILITY FROM OWN SOURCES				
(i)	**IP**				74.006
(ii)	**1/3rd HARYANA SHARE IN IP**				20.508
(iii)	**JHAZZAR SHARE IN IP**				0.403
(iv)	**NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]**				53.095
(v)	**RPH**				64.205
(vi)	**JHAZZAR SHARE IN RPH**				0.000
(vii)	**NET GEN. AVAIL.FOR DELHI IN RPH [(v) - (vi)]**				64.205
(viii)	**GAS TURBINE**				128.364
(ix)	**PRAGATI**				220.389
N	**TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]**				466.053
O	**IMPORT FROM BTPS**				469.412
P	**TOTAL AVAILABILITY WITHIN DELHI (N + O)**				935.465
Q	**TOTAL CONSUMPTION (L + M + P)**				2321.101
R	**LOAD SHEDDING**				18.416
S	**REQUIREMENT (P + Q)**				2339.517
T	**% DEPENDENCE ON NORTHERN GRID**				67.14
U	**AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI**				28.828
V	**NET CONSUMPTION OF DELHI (Q - U)**				2292.273

8.3 Power supply position during the month of June 2009

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	**SINGRAULI**	109.877	106.155	109.818	106.098
2	**RIHAND-I**	79.787	77.087	79.751	77.052
3	**RIHAND-II**	95.546	92.310	95.503	92.268
4	**UNCHAHAR-I**	17.888	17.283	17.749	17.149
5	**UNCHAHAR-II**	26.566	25.668	26.431	25.537
6	**UNCHAHAR-III**	21.769	21.032	21.603	20.872
7	**DADRI(TH)**	512.653	495.305	508.205	491.005
8	**DADRI(TH)- Stage-II**	0.000	0.000	0.000	0.000
9	**FARAKA**	21.522	20.958	20.788	20.084
10	**KHELGAON**	38.418	37.411	37.083	35.826
11	**KHELGAON-II**	47.049	45.830	45.498	43.960
12	**ANTA(GT)**	14.095	13.620	14.093	13.617
	ANTA(Liquid)	2.554	2.469	1.683	1.628
	ANTA(RLNG)	8.962	8.660	6.977	6.743
13	**AURAIYA(GT)**	32.912	31.799	32.912	31.799
	AURAIYA(Liquid)	11.846	11.445	6.906	6.672
	AURAIYA(RLNG)	5.240	5.062	2.618	2.529
14	**DADRI(GT)**	32.607	31.502	32.589	31.485
	DADRI(Liquid)	9.539	9.214	6.286	6.074
	DADRI (RLNG)	8.053	7.781	3.687	3.562
A	**TOTAL NTPC (TOTAL 1 TO 14)**	**1096.883**	**1060.591**	**1070.180**	**1033.960**
15	**TANAKPUR**	4.471	4.320	4.471	4.320
16	**CHAMERA-I**	20.748	20.046	20.748	20.046
17	**CHAMERA-II**	29.246	28.258	29.246	28.258
18	**BAIRA-SUIL**	6.419	6.203	6.419	6.203
19	**SALAL**	50.744	49.031	50.744	49.031
20	**DULASTI**	38.639	37.331	38.639	37.331
21	**DAULI GANGA**	18.875	18.240	18.875	18.240
22	**URI**	38.263	36.968	38.263	36.968
B.	**TOTAL NHPC (TOTAL 15 TO 22)**	**207.405**	**200.397**	**207.405**	**200.397**
23	**NAPP**	7.114	6.874	7.114	6.874
24	**RAPP 'A'**	0.000	0.000	0.000	0.000
25	**RAPP 'C'**	0.000	0.000	0.000	0.000
26	**RAPP (B-4)**	0.923	0.892	0.923	0.892
27	**RAPP (B-3)**	0.868	0.838	0.867	0.838
C	**TOTAL NPC (23 TO 27)**	**8.905**	**8.604**	**8.904**	**8.604**
D.	**NATHPA JHAKHRI**	109.833	106.115	109.833	106.115
E.	**TEHRI**	14.734	14.235	14.734	14.235
F.	**TALA**	11.824	11.516	11.516	11.126
G.	**TALCHER**	0.332	0.323	0.323	0.312
	BILATERAL IMPORT				
(a)	**RAJASTHAN**	99.921	96.538	99.915	96.534
(b)	**MADHYA PRADESH**	7.631	7.173	7.173	6.927
(c)	**MAHARASHTRA**	10.196	9.587	9.121	8.813

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(d)	**HIMACHAL PRADESH**	73.652	71.163	73.652	71.163
(e)	**DVC**	54.865	53.429	53.428	51.615
(f)	**CHATTISHGARH**	34.041	32.011	32.010	30.920
(g)	**UTTRANCHAL**	26.623	25.718	26.623	25.718
(h)	**KARNATAKA**	0.131	0.125	0.117	0.113
(i)	**JAMMU & KASHMIR**	72.000	69.564	72.000	69.564
(j)	**POWER EXCHANGE(IEX)**	1.774	1.713	1.774	1.713
(k)	**POWER EXCHANGE (PX)**	0.742	0.717	0.742	0.717
H	**TOTAL IMPORT**	381.576	367.738	376.555	363.797
	BILATERAL EXPORT				
(a)	**RAJASTHAN**	-6.013	-6.230	-6.013	-6.230
(b)	**HARYANA**	-6.878	-7.120	-6.878	-7.120
(c)	**HIMACHAL PRADESH**	-0.190	-0.197	-0.190	-0.197
(d)	**WEST BENGAL**	-0.648	-0.665	-0.665	-0.690
(e)	**KERAL**	-0.115	-0.119	-0.119	-0.123
(f)	**INDIAN ENERGY EXCHANGE (IEX)**	-20.520	-21.253	-20.520	-21.253
(g)	**POWER EXCHANGE (PX)**	-5.387	-5.576	-5.387	-5.576
I	**TOTAL EXPORT (TOTAL)**	-39.751	-41.160	-39.772	-41.189
j.	**TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H+I)**	1791.738	1728.358	1759.677	1697.360
K	**HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED**				**18.733**
L	**TOTAL DRAWAL (J - K)**				**1678.627**
M	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-206.721
	AVAILABILITY FROM OWN SOURCES				
(i)	**IP**				62.300
(ii)	**1/3rd HARYANA SHARE IN IP**				18.343
(iii)	**JHAZZAR SHARE IN IP**				0.390
(iv)	**NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]**				43.567
(v)	**RPH**				66.392
(vi)	**JHAZZAR SHARE IN RPH**				0.000
(vii)	**NET GEN. AVAIL.FOR DELHI IN RPH [(v) - (vi)]**				66.392
(viii)	**GAS TURBINE**				129.873
(ix)	**PRAGATI**				205.315
N	**TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]**				445.147
O	**IMPORT FROM BTPS**				460.663
P	**TOTAL AVAILABILITY WITHIN DELHI (N + O)**				905.810
Q	**TOTAL CONSUMPTION (L + M + P)**				2377.716
R	**LOAD SHEDDING**				40.146
S	**REQUIREMENT (P + Q)**				2417.862
T	**% DEPENDENCE ON NORTHERN GRID**				71.39
U	**AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI**				27.013
V	**NET CONSUMPTION OF DELHI (Q - U)**				2350.703

8.4 Power supply position during the month of July 2009

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	**SINGRAULI**	93.077	89.873	93.074	89.870
2	**RIHAND-I**	82.080	79.255	82.080	79.255
3	**RIHAND-II**	95.766	92.471	95.766	92.471
4	**UNCHAHAR-I**	18.649	18.007	18.427	17.792
5	**UNCHAHAR-II**	38.065	36.754	37.631	36.335
6	**UNCHAHAR-III**	22.843	22.057	22.577	21.800
7	**DADRI(TH)**	535.962	517.502	532.176	513.848
8	**DADRI(TH)- Stage-II**	0.000	0.000	0.000	0.000
9	**FARAKA**	18.804	18.249	18.243	17.616
10	**KHELGAON**	35.779	34.702	34.702	33.507
11	**KHELGAON-II**	38.882	37.721	37.721	36.427
12	**ANTA(GT)**	3.824	3.692	3.824	3.692
	ANTA(Liquid)	3.566	3.442	1.943	1.876
	ANTA(RLNG)	24.592	23.741	13.390	12.928
13	**AURAIYA(GT)**	36.131	34.889	36.131	34.889
	AURAIYA(Liquid)	11.981	11.570	6.145	5.935
	AURAIYA(RLNG)	0.000	0.000	0.000	0.000
14	**DADRI(GT)**	44.300	42.775	44.300	42.775
	DADRI(Liquid)	19.771	19.090	10.030	9.686
	DADRI (RLNG)	0.000	0.000	0.000	0.000
A	**TOTAL NTPC (TOTAL 1 TO 14)**	**1124.072**	**1085.790**	**1088.160**	**1050.702**
15	**TANAKPUR**	6.505	6.280	6.505	6.280
16	**CHAMERA-I**	29.113	28.107	29.113	28.107
17	**CHAMERA-II**	33.125	31.985	33.125	31.985
18	**BAIRA-SUIL**	7.596	7.334	7.596	7.334
19	**SALAL**	53.374	51.537	53.374	51.537
20	**DULASTI**	40.297	38.910	40.297	38.910
21	**DAULI GANGA**	26.488	25.573	26.488	25.573
22	**URI**	38.800	37.464	38.800	37.464
B.	**TOTAL NHPC (TOTAL 15 TO 22)**	**235.298**	**227.190**	**235.298**	**227.190**
23	**NAPP**	8.642	8.344	8.527	8.234
24	**RAPP 'A'**	0.000	0.000	0.000	0.000
25	**RAPP 'C'**	0.000	0.000	0.000	0.000
26	**RAPP (B-4)**	1.005	0.970	1.005	0.970
27	**RAPP (B-3)**	1.237	1.195	1.237	1.194
C	**TOTAL NPC (23 TO 27)**	**10.884**	**10.509**	**10.769**	**10.398**
D.	**NATHPA JHAKHRI**	119.764	115.640	119.764	115.640
E.	**TEHRI**	14.575	14.073	14.575	14.073
F.	**TALA**	18.963	18.389	18.389	17.757
G.	**TALCHER**	2.049	1.990	1.990	1.922
	BILATERAL IMPORT				
(a)	**RAJASTHAN**	84.456	81.547	84.014	81.119
(b)	**MADHYA PRADESH**	36.435	34.306	34.306	33.121
(c)	**MADHYA PRADESH**	0.046	0.044	0.042	0.040
(d)	**HARYANA**	0.750	0.724	0.750	0.724

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(e)	**MAHARASHTRA**	33.965	31.994	30.442	29.395
(f)	**UNREQUISITIONED SURPLUS**	1.855	1.791	1.855	1.791
(g)	**TRIPURA**	9.905	9.595	9.237	8.915
(h)	**SIKKIM**	0.420	0.408	0.408	0.394
(i)	**HIMACHAL PRADESH**	101.542	98.046	101.542	98.046
(j)	**DVC**	40.901	39.678	39.677	38.309
(k)	**WEST BENGAL**	12.803	12.408	12.024	11.605
(l)	**CHATTISHGARH**	37.281	35.116	35.116	33.907
(m)	**UTTRANCHAL**	51.902	50.118	51.902	50.118
(n)	**ANDHRA PRADESH**	64.729	62.772	58.091	56.091
(o)	**KARNATAKA**	0.441	0.423	0.395	0.381
(p)	**PUNJAB**	9.758	9.421	9.187	8.870
(q)	**POWER EXCHANGE(IEX)**	46.800	45.182	46.800	45.182
(r)	**POWER EXCHANGE (PX)**	10.088	9.735	10.088	9.735
H	**TOTAL IMPORT**	544.077	523.308	525.876	507.743
	BILATERAL EXPORT				
(a)	**RAJASTHAN**	-7.185	-7.437	-7.185	-7.437
(b)	**ORISSA**	-0.161	-0.166	-0.166	-0.172
(c)	**INDIAN ENERGY EXCHANGE (IEX)**	-18.064	-18.700	-18.064	-18.700
(d)	**POWER EXCHANGE (PX)**	-0.550	-0.570	-0.550	-0.570
I	**TOTAL EXPORT (TOTAL)**	-25.960	-26.873	-25.965	-26.879
j.	**TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H+I)**	2043.722	1970.015	1988.853	1918.546
K	**HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED**				**23.588**
L	**TOTAL DRAWAL (J - K)**				**1894.958**
M	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-209.516
	AVAILABILITY FROM OWN SOURCES				
(i)	**IP**				83.927
(ii)	**1/3rd HARYANA SHARE IN IP**				23.185
(iii)	**JHAZZAR SHARE IN IP**				0.403
(iv)	**NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]**				60.339
(v)	**RPH**				55.966
(vi)	**JHAZZAR SHARE IN RPH**				0.000
(vii)	**NET GEN. AVAIL.FOR DELHI IN RPH [(v) - (vi)]**				55.966
(viii)	**GAS TURBINE**				134.384
(ix)	**PRAGATI**				159.845
N	**TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]**				410.534
O	**IMPORT FROM BTPS**				462.323
P	**TOTAL AVAILABILITY WITHIN DELHI (N + O)**				872.857
Q	**TOTAL CONSUMPTION (L + M + P)**				2558.299
R	**LOAD SHEDDING**				12.425
S	**REQUIREMENT (P + Q)**				2570.724
T	**% DEPENDENCE ON NORTHERN GRID**				74.99
U	**AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI**				29.408
V	**NET CONSUMPTION OF DELHI (Q - U)**				2528.891

8.5 Power supply position during the month of August 2009

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	**SINGRAULI**	105.387	101.629	105.387	101.629
2	**RIHAND-I**	67.281	64.881	67.281	64.881
3	**RIHAND-II**	69.086	66.636	69.086	66.636
4	**UNCHAHAR-I**	17.210	16.596	17.081	16.472
5	**UNCHAHAR-II**	35.795	34.519	35.540	34.273
6	**UNCHAHAR-III**	22.445	21.645	22.290	21.496
7	**DADRI(TH)**	537.185	518.036	532.357	513.382
8	**DADRI(TH)- Stage-II**	0.000	0.000	0.000	0.000
9	**FARAKA**	11.861	11.430	11.430	11.021
10	**KHELGAON**	30.170	29.074	29.074	28.037
11	**KHELGAON-II**	29.053	28.005	28.005	27.008
12	**ANTA(GT)**	5.118	4.934	5.118	4.934
	ANTA(Liquid)	2.365	2.281	1.488	1.436
	ANTA(RLNG)	24.972	24.082	16.491	15.908
13	**AURAIYA(GT)**	38.058	36.701	38.058	36.701
	AURAIYA(Liquid)	13.494	13.013	8.547	8.244
	AURAIYA(RLNG)	0.553	0.534	0.553	0.534
14	**DADRI(GT)**	40.737	39.285	40.737	39.285
	DADRI(Liquid)	19.551	18.852	12.557	12.112
	DADRI (RLNG)	1.100	1.061	1.100	1.061
A	**TOTAL NTPC (TOTAL 1 TO 14)**	**1071.421**	**1033.194**	**1042.180**	**1005.050**
15	**TANAKPUR**	6.329	6.103	6.329	6.103
16	**CHAMERA-I**	22.343	21.550	22.343	21.550
17	**CHAMERA-II**	30.013	28.947	30.013	28.947
18	**BAIRA-SUIL**	7.186	6.931	7.186	6.931
19	**SALAL**	55.462	53.485	55.462	53.485
20	**DULASTI**	40.153	38.722	40.153	38.722
21	**DAULI GANGA**	27.712	26.723	27.712	26.723
22	**URI**	29.594	28.544	29.594	28.544
B.	**TOTAL NHPC (TOTAL 15 TO 22)**	**218.792**	**211.005**	**218.792**	**211.005**
23	**NAPP**	8.888	8.571	8.888	8.571
24	**RAPP 'A'**	0.000	0.000	0.000	0.000
25	**RAPP 'C'**	0.000	0.000	0.000	0.000
26	**RAPP (B-4)**	0.479	0.462	0.477	0.460
27	**RAPP (B-3)**	0.805	0.776	0.805	0.776
C	**TOTAL NPC (23 TO 27)**	**10.172**	**9.809**	**10.170**	**9.807**
D.	**NATHPA JHAKHRI**	110.529	106.591	110.529	106.591
E.	**TEHRI**	13.690	13.203	13.690	13.203
F.	**TALA**	22.927	22.093	22.093	21.305
G.	**TALCHER**	0.405	0.391	0.391	0.378
	BILATERAL IMPORT				
(a)	**RAJASTHAN**	79.630	76.567	79.219	76.394
(b)	**MADHYA PRADESH**	29.173	27.524	27.523	26.543
(c)	**MAHARASHTRA**	37.136	35.046	33.346	32.157
(d)	**UNREQUISITIONED SURPLUS**	2.290	2.209	2.290	2.209

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(e)	**TRIPURA**	16.851	16.238	15.652	15.096
(f)	**HIMACHAL PRADESH**	71.583	69.034	71.583	69.034
(g)	**DVC**	28.427	27.390	27.390	26.408
(h)	**CHATTISHGARH**	50.394	47.634	45.252	43.626
(i)	**CHATTISHGARH**	58.301	55.052	55.052	53.062
(j)	**CHATTISHGARH**	2.319	2.184	2.108	2.035
(k)	**UTTRANCHAL**	12.945	12.487	12.945	12.487
(l)	**ANDHRA PRADESH**	51.183	49.417	45.634	44.013
(m)	**KARNATAKA**	24.724	23.723	21.514	20.736
(n)	**JAMMU & KASHMIR**	6.721	6.481	6.721	6.481
(o)	**POWER EXCHANGE(IEX)**	72.879	70.298	73.190	70.598
(p)	**POWER EXCHANGE (PX)**	7.216	6.963	7.216	6.963
H	**TOTAL IMPORT**	551.772	528.247	526.635	507.842
	BILATERAL EXPORT				
(a)	**RAJASTHAN**	-3.891	-4.039	-3.891	-4.039
(b)	**HARYANA**	-1.207	-1.199	-1.207	-1.199
(c)	**ORISSA**	-0.137	-0.142	-0.142	-0.148
(d)	**INDIAN ENERGY EXCHANGE (IEX)**	-11.633	-12.070	-11.633	-12.070
(e)	**POWER EXCHANGE (PX)**	-0.880	-0.914	-0.880	-0.914
I	**TOTAL EXPORT (TOTAL)**	-18.548	-19.196	-18.585	-19.232
j.	**TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H+I)**	1981.157	1905.337	1925.895	1855.947
K	**HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED**				**14.677**
L	**TOTAL DRAWAL (J - K)**				**1841.270**
M	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-200.876
	AVAILABILITY FROM OWN SOURCES				
(i)	**IP**				54.077
(ii)	**1/3rd HARYANA SHARE IN IP**				14.274
(iii)	**JHAZZAR SHARE IN IP**				0.403
(iv)	**NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]**				39.400
(v)	**RPH**				59.722
(vi)	**JHAZZAR SHARE IN RPH**				0.000
(vii)	**NET GEN. AVAIL.FOR DELHI IN RPH [(v) - (vi)]**				59.722
(viii)	**GAS TURBINE**				149.069
(ix)	**PRAGATI**				152.866
N	**TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]**				401.057
O	**IMPORT FROM BTPS**				388.885
P	**TOTAL AVAILABILITY WITHIN DELHI (N + O)**				789.942
Q	**TOTAL CONSUMPTION (L + M + P)**				2430.336
R	**LOAD SHEDDING**				35.597
S	**REQUIREMENT (P + Q)**				2465.933
T	**% DEPENDENCE ON NORTHERN GRID**				76.37
U	**AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI**				27.783
V	**NET CONSUMPTION OF DELHI (Q - U)**				2402.553

8.6 Power supply position during the month of September 2009

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	**SINGRAULI**	105.841	101.568	105.461	101.204
2	**RIHAND-I**	77.919	74.774	77.540	74.411
3	**RIHAND-II**	43.164	41.430	42.933	41.208
4	**UNCHAHAR-I**	17.131	16.439	16.642	15.969
5	**UNCHAHAR-II**	17.900	17.178	17.406	16.703
6	**UNCHAHAR-III**	21.664	20.790	21.043	20.194
7	**DADRI(TH)**	454.239	435.971	438.108	420.494
8	**DADRI(TH)- Stage-II**	0.000	0.000	0.000	0.000
9	**FARAKA**	10.399	10.053	9.860	9.464
10	**KHELGAON**	23.039	22.275	22.271	21.376
11	**KHELGAON-II**	26.298	25.424	25.424	24.398
12	**ANTA(GT)**	7.431	7.130	7.317	7.021
	ANTA(Liquid)	1.090	1.047	0.508	0.487
	ANTA(RLNG)	23.271	22.336	9.901	9.495
13	**AURAIYA(GT)**	36.060	34.606	35.897	34.450
	AURAIYA(Liquid)	14.941	14.339	5.707	5.472
	AURAIYA(RLNG)	0.000	0.000	0.000	0.000
14	**DADRI(GT)**	37.968	36.431	37.727	36.200
	DADRI(Liquid)	25.190	24.177	9.639	9.244
	DADRI (RLNG)	1.381	1.330	0.265	0.255
A	**TOTAL NTPC (TOTAL 1 TO 14)**	**944.926**	**907.298**	**883.649**	**848.045**
15	**TANAKPUR**	7.133	6.845	7.133	6.845
16	**CHAMERA-I**	17.324	16.632	17.324	16.632
17	**CHAMERA-II**	23.361	22.420	23.361	22.420
18	**BAIRA-SUIL**	5.857	5.622	5.857	5.622
19	**SALAL**	35.205	33.786	35.205	33.786
20	**DULASTI**	38.530	36.976	38.530	36.976
21	**DAULI GANGA**	24.910	23.909	24.910	23.909
22	**URI**	18.217	17.481	18.217	17.481
B.	**TOTAL NHPC (TOTAL 15 TO 22)**	**170.537**	**163.671**	**170.537**	**163.671**
23	**NAPP**	7.710	7.398	7.710	7.398
24	**RAPP 'A'**	0.000	0.000	0.000	0.000
25	**RAPP 'C'**	0.000	0.000	0.000	0.000
26	**RAPP (B-4)**	0.000	0.000	0.000	0.000
27	**RAPP (B-3)**	0.422	0.405	0.422	0.405
C	**TOTAL NPC (23 TO 27)**	**8.132**	**7.803**	**8.132**	**7.803**
D.	**NATHPA JHAKHRI**	88.462	84.909	88.462	84.909
E.	**TEHRI**	13.353	12.813	13.353	12.813
F.	**TALA**	20.410	19.728	19.728	18.935
G.	**TALCHER**	0.000	0.000	0.000	0.000
	BILATERAL IMPORT				
(a)	**RAJASTHAN**	74.274	71.203	73.381	70.422
(b)	**UTTAR PRADESH**	18.000	17.274	18.000	17.274
(c)	**GUJRAT**	13.048	12.396	12.396	11.894
(d)	**MADHYA PRADESH**	11.638	11.056	11.056	10.610

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(e)	**HARYANA**	0.265	0.254	0.265	0.254
(f)	**UNREQUISITIONED SURPLUS**	0.300	0.289	0.300	0.289
(g)	**HIMACHAL PRADESH**	41.445	39.770	41.445	39.770
(h)	**DVC**	43.091	41.675	41.673	40.009
(i)	**WEST BENGAL**	2.312	2.234	2.234	2.142
(j)	**WEST BENGAL**	0.725	0.701	0.679	0.651
(k)	**CHATTISHGARH**	89.271	84.808	84.807	81.376
(l)	**CHATTISHGARH**	3.591	3.411	3.241	3.105
(m)	**CHATTISHGARH**	1.399	1.329	1.329	1.273
(n)	**UTTRANCHAL**	37.181	35.680	37.181	35.680
(o)	**ANDHRA PRADESH**	38.958	37.537	34.842	33.436
(p)	**KARNATAKA**	8.531	8.208	7.609	7.291
(q)	**ORISSA**	17.059	16.493	16.492	15.827
(r)	**PUNJAB**	13.678	12.810	12.810	12.358
(s)	**PUNJAB**	0.648	0.622	0.648	0.622
(t)	**POWER EXCHANGE(IEX)**	62.879	60.365	62.879	60.365
(u)	**POWER EXCHANGE (PX)**	4.374	4.201	4.374	4.201
H	**TOTAL IMPORT**	482.667	462.316	467.641	448.849
	BILATERAL EXPORT				
(a)	**INDIAN ENERGY EXCHANGE (IEX)**	-1.975	-2.052	-1.975	-2.052
(b)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL EXPORT (TOTAL)**	-1.975	-2.052	-1.975	-2.052
j.	**TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H+I)**	1726.511	1656.486	1649.525	1582.974
K	**HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED**				**11.193**
L	**TOTAL DRAWAL (J - K)**				**1571.781**
M	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-207.293
	AVAILABILITY FROM OWN SOURCES				
(i)	**IP**				40.516
(ii)	**1/3rd HARYANA SHARE IN IP**				10.803
(iii)	**JHAZZAR SHARE IN IP**				0.390
(iv)	**NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]**				29.323
(v)	**RPH**				40.448
(vi)	**JHAZZAR SHARE IN RPH**				0.000
(vii)	**NET GEN. AVAIL.FOR DELHI IN RPH [(v) - (vi)]**				40.448
(viii)	**GAS TURBINE**				116.100
(ix)	**PRAGATI**				215.489
N	**TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]**				401.360
O	**IMPORT FROM BTPS**				388.073
P	**TOTAL AVAILABILITY WITHIN DELHI (N + O)**				789.433
Q	**TOTAL CONSUMPTION (L + M + P)**				2153.921
R	**LOAD SHEDDING**				11.378
S	**REQUIREMENT (P + Q)**				2165.299
T	**% DEPENDENCE ON NORTHERN GRID**				73.49
U	**AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI**				23.503
V	**NET CONSUMPTION OF DELHI (Q - U)**				2130.418

8.7 Power supply position during the month of October 2009

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	**SINGRAULI**	100.872	96.278	100.653	96.069
2	**RIHAND-I**	79.609	75.998	79.172	75.580
3	**RIHAND-II**	61.136	58.393	60.868	58.137
4	**UNCHAHAR-I**	14.182	13.529	13.626	12.998
5	**UNCHAHAR-II**	37.153	35.469	35.589	33.976
6	**UNCHAHAR-III**	22.737	21.707	21.777	20.790
7	**DADRI(TH)**	429.829	410.334	420.144	401.095
8	**DADRI(TH)- Stage-II**	0.000	0.000	0.000	0.000
9	**FARAKA**	10.394	10.057	9.999	9.546
10	**KHELGAON**	27.136	26.252	26.086	24.900
11	**KHELGAON-II**	28.334	27.416	27.368	26.128
12	**ANTA(GT)**	12.674	12.102	12.632	12.061
	ANTA(Liquid)	4.557	4.348	1.037	0.990
	ANTA(RLNG)	8.254	7.877	2.181	2.084
13	**AURAIYA(GT)**	37.272	35.582	37.027	35.348
	AURAIYA(Liquid)	15.266	14.575	2.809	2.682
	AURAIYA(RLNG)	0.000	0.000	0.000	0.000
14	**DADRI(GT)**	39.560	37.769	39.344	37.563
	DADRI(Liquid)	24.745	23.613	5.022	4.795
	DADRI (RLNG)	0.000	0.000	0.000	0.000
A	**TOTAL NTPC (TOTAL 1 TO 14)**	**953.710**	**911.299**	**895.334**	**854.742**
15	**TANAKPUR**	6.562	6.267	6.562	6.267
16	**CHAMERA-I**	7.524	7.181	7.524	7.181
17	**CHAMERA-II**	11.820	11.281	11.820	11.281
18	**BAIRA-SUIL**	3.004	2.867	3.004	2.867
19	**SALAL**	20.700	19.752	20.700	19.752
20	**DULASTI**	29.441	28.093	29.441	28.093
21	**DAULI GANGA**	18.654	17.793	18.654	17.793
22	**URI**	10.391	9.916	10.391	9.916
B.	**TOTAL NHPC (TOTAL 15 TO 22)**	**108.096**	**103.150**	**108.096**	**103.150**
23	**NAPP**	8.289	7.911	8.283	7.906
24	**RAPP 'A'**	0.000	0.000	0.000	0.000
25	**RAPP 'C'**	0.000	0.000	0.000	0.000
26	**RAPP (B-4)**	0.530	0.506	0.526	0.502
27	**RAPP (B-3)**	0.442	0.422	0.442	0.422
C	**TOTAL NPC (23 TO 27)**	**9.261**	**8.839**	**9.251**	**8.830**
D.	**NATHPA JHAKHRI**	54.696	52.204	54.696	52.204
E.	**TEHRI**	18.966	18.104	18.966	18.104
F.	**TALA**	15.172	14.670	14.670	13.998
G.	**TALCHER**	0.000	0.000	0.000	0.000
	BILATERAL IMPORT				
(a)	**RAJASTHAN**	5.209	4.980	4.980	4.754
(b)	**UTTAR PRADESH**	31.172	28.271	28.271	26.989
(c)	**GUJRAT**	3.744	3.556	3.381	3.219
(d)	**MADHYA PRADESH**	0.158	0.150	0.150	0.143
(e)	**MAHARASHTRA**	23.646	22.313	21.228	20.265
(f)	**TRIPURA**	14.880	14.397	13.944	13.312

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(g)	**HIMACHAL PRADESH**	10.392	9.902	10.392	9.902
(h)	**DVC**	33.890	32.749	32.748	31.221
(i)	**DVC (TATA STEEEL)**	16.990	16.408	16.089	15.323
(j)	**WEST BENGAL**	0.438	0.424	0.424	0.406
(k)	**CHHATTISGARH**	226.24	213.485	211.5	201.904
(l)	**UTTRANCHAL**	13.500	12.861	13.500	12.861
(m)	**MEGHALAYA**	5.954	5.761	5.404	5.159
(n)	**KARNATAKA**	8.736	8.441	7.812	7.449
(o)	**ORISSA**	0.035	0.034	0.034	0.033
(p)	**PUNJAB**	8.381	7.499	7.499	7.149
(q)	**POWER EXCHANGE(IEX)**	8.614	8.243	8.614	8.243
(r)	**POWER EXCHANGE (PX)**	1.131	1.083	1.131	1.083
H	**TOTAL IMPORT**	413.110	390.557	387.101	369.415
	BILATERAL EXPORT				
(a)	**UTTAR PRADESH**	-4.810	-5.024	-4.810	-5.024
(b)	**MADHYA PRADESH**	-13.048	-13.880	-13.880	-14.496
(c)	**HARYANA**	-23.746	-24.869	-23.746	-24.869
(d)	**ANDHRA PRADESH**	-1.339	-1.383	-1.383	-1.447
(e)	**ANDHRA PRADESH**	0.000	0.000	0.000	0.000
(f)	**TAMILNADU**	-2.747	-2.839	-2.839	-2.969
(g)	**PUNJAB**	-1.165	-1.216	-1.165	-1.216
(h)	**INDIAN ENERGY EXCHANGE (IEX)**	-42.833	-44.886	-42.833	-44.886
(i)	**POWER EXCHANGE (PX)**	-0.355	-0.373	-0.355	-0.373
I	**TOTAL EXPORT (TOTAL)**	-90.043	-94.470	-91.011	-95.280
j.	**TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H+I)**	1482.967	1404.352	1397.101	1325.162
K	**HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED**				**10.506**
L	**TOTAL DRAWAL (J - K)**				**1314.656**
M	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-265.310
	AVAILABILITY FROM OWN SOURCES				
(i)	**IP**				38.474
(ii)	**1/3rd HARYANA SHARE IN IP**				10.103
(iii)	**JHAZZAR SHARE IN IP**				0.403
(iv)	**NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]**				27.968
(v)	**RPH**				37.409
(vi)	**JHAZZAR SHARE IN RPH**				0.000
(vii)	**NET GEN. AVAIL.FOR DELHI IN RPH [(v) - (vi)]**				37.409
(viii)	**GAS TURBINE**				145.491
(ix)	**PRAGATI**				197.428
N	**TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]**				408.296
O	**IMPORT FROM BTPS**				421.789
P	**TOTAL AVAILABILITY WITHIN DELHI (N + O)**				830.085
Q	**TOTAL CONSUMPTION (L + M + P)**				1879.431
R	**LOAD SHEDDING**				7.233
S	**REQUIREMENT (P + Q)**				1886.664
T	**% DEPENDENCE ON NORTHERN GRID**				70.51
U	**AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI**				22.696
V	**NET CONSUMPTION OF DELHI (Q - U)**				1856.735

8.8 Power supply position during the month of November 2009

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	**SINGRAULI**	85.903	82.125	85.903	82.125
2	**RIHAND-I**	66.049	63.185	66.048	63.184
3	**RIHAND-II**	93.224	89.160	93.216	89.152
4	**UNCHAHAR-I**	10.640	10.169	9.139	8.737
5	**UNCHAHAR-II**	32.946	31.508	28.725	27.478
6	**UNCHAHAR-III**	21.338	20.408	18.997	18.174
7	**DADRI(TH)**	519.186	496.522	488.164	466.891
8	**DADRI(TH)- Stage-II**	0.000	0.000	0.000	0.000
9	**FARAKA**	13.717	13.292	11.812	11.260
10	**KHELGAON**	28.319	27.409	25.174	23.994
11	**KHELGAON-II**	28.276	27.517	26.535	25.377
12	**ANTA(GT)**	20.258	19.375	20.258	19.375
	ANTA(Liquid)	2.979	2.847	0.000	0.000
	ANTA(RLNG)	3.708	3.536	0.000	0.000
13	**AURAIYA(GT)**	32.347	30.937	32.347	30.937
	AURAIYA(Liquid)	12.896	12.334	0.000	0.000
	AURAIYA(RLNG)	0.000	0.000	0.000	0.000
14	**DADRI(GT)**	40.938	39.153	40.200	38.448
	DADRI(Liquid)	12.190	11.655	0.000	0.000
	DADRI (RLNG)	0.000	0.000	0.000	0.000
A	**TOTAL NTPC (TOTAL 1 TO 14)**	**1024.914**	**981.132**	**946.518**	**905.132**
15	**TANAKPUR**	4.489	4.295	4.489	4.295
16	**CHAMERA-I**	5.626	5.379	5.626	5.379
17	**CHAMERA-II**	8.395	8.030	8.395	8.030
18	**BAIRA-SUIL**	2.941	2.812	2.941	2.812
19	**SALAL**	12.115	11.587	12.115	11.587
20	**DULASTI**	17.503	16.741	17.503	16.741
21	**DAULI GANGA**	8.896	8.512	8.896	8.512
22	**URI**	9.183	8.780	9.183	8.780
B.	**TOTAL NHPC (TOTAL 15 TO 22)**	**69.148**	**66.136**	**69.148**	**66.136**
23	**NAPP**	0.744	0.714	0.744	0.714
24	**RAPP 'A'**	0.000	0.000	0.000	0.000
25	**RAPP 'C'**	0.000	0.000	0.000	0.000
26	**RAPP (B-4)**	0.587	0.561	0.587	0.561
27	**RAPP (B-3)**	0.510	0.487	0.508	0.486
C	**TOTAL NPC (23 TO 27)**	**1.841**	**1.762**	**1.839**	**1.761**
D.	**NATHPA JHAKHRI**	32.221	30.824	32.221	30.824
E.	**TEHRI**	15.351	14.680	15.351	14.680
F.	**TALA**	6.622	6.412	6.412	6.114
G.	**TALCHER**	0.000	0.000	0.000	0.000
	BILATERAL IMPORT				
(a)	**UTTAR PRADESH**	2.242	2.145	2.242	2.145
(b)	**SIKKIM**	8.840	8.602	8.602	8.210
(c)	**DVC**	29.215	28.428	28.428	27.192
(d)	**WEST BENGAL**	0.690	0.672	0.672	0.641

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(e)	**CHATTISHGARH**	23.750	23.029	21.831	20.877
(f)	**CHATTISHGARH**	5.500	5.196	5.196	4.963
(g)	**MEGHALAYA**	3.000	2.908	2.831	2.708
(h)	**KARNATAKA**	7.140	6.779	6.328	6.040
(i)	**PUNJAB**	12.339	11.028	11.028	10.554
(j)	**POWER EXCHANGE(IEX)**	12.501	11.929	12.501	11.929
(k)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
H	**TOTAL IMPORT**	105.217	100.716	99.659	95.259
	BILATERAL EXPORT				
(a)	**RAJASTHAN**	-6.785	-7.092	-6.785	-7.092
(b)	**UTTAR PRADESH**	-4.321	-4.531	-4.321	-4.531
(c)	**MADHYA PRADESH**	-71.383	-75.565	-75.565	-78.919
(d)	**HIMACHAL PRADESH**	-35.512	-37.134	-35.512	-37.134
(e)	**UTTRANCHAL**	-22.553	-23.640	-22.553	-23.640
(f)	**ORISSA**	-0.834	-0.858	-0.858	-0.896
(g)	**INDIAN ENERGY EXCHANGE (IEX)**	-10.389	-10.883	-10.389	-10.883
(h)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL EXPORT (TOTAL)**	-151.777	-159.703	-155.983	-163.095
j.	**TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H+I)**	1103.535	1041.960	1015.163	956.808
K	**HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED**				**0.855**
L	**TOTAL DRAWAL (J - K)**				**955.953**
M	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-192.108
	AVAILABILITY FROM OWN SOURCES				
(i)	**IP**				2.546
(ii)	**1/3rd HARYANA SHARE IN IP**				0.465
(iii)	**JHAZZAR SHARE IN IP**				0.390
(iv)	**NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]**				1.691
(v)	**RPH**				35.323
(vi)	**JHAZZAR SHARE IN RPH**				0.000
(vii)	**NET GEN. AVAIL.FOR DELHI IN RPH [(v) - (vi)]**				35.323
(viii)	**GAS TURBINE**				116.595
(ix)	**PRAGATI**				217.213
N	**TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]**				370.822
O	**IMPORT FROM BTPS**				350.240
P	**TOTAL AVAILABILITY WITHIN DELHI (N + O)**				721.062
Q	**TOTAL CONSUMPTION (L + M + P)**				1484.907
R	**LOAD SHEDDING**				5.075
S	**REQUIREMENT (P + Q)**				1489.982
T	**% DEPENDENCE ON NORTHERN GRID**				64.44
U	**AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI**				17.045
V	**NET CONSUMPTION OF DELHI (Q - U)**				1467.862

8.9 Power supply position during the month of December 2009

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	**SINGRAULI**	107.795	103.364	107.795	103.364
2	**RIHAND-I**	71.641	68.692	71.641	68.692
3	**RIHAND-II**	93.071	89.243	93.071	89.243
4	**UNCHAHAR-I**	17.235	16.526	15.089	14.469
5	**UNCHAHAR-II**	33.996	32.598	29.776	28.552
6	**UNCHAHAR-III**	21.152	20.282	18.523	17.762
7	**DADRI(TH)**	535.747	513.712	511.402	490.375
8	**DADRI(TH)- Stage-II**	0.000	0.000	0.000	0.000
9	**FARAKA**	16.790	16.379	15.653	15.011
10	**KHELGAON**	25.470	24.846	23.621	22.648
11	**KHELGAON-II**	54.924	53.578	51.998	49.859
12	**ANTA(GT)**	15.246	14.618	15.246	14.618
	ANTA(Liquid)	0.737	0.707	0.001	0.001
	ANTA(RLNG)	14.634	14.032	2.224	2.135
13	**AURAIYA(GT)**	33.017	31.659	33.017	31.659
	AURAIYA(Liquid)	19.418	18.619	1.043	1.001
	AURAIYA(RLNG)	0.000	0.000	0.000	0.000
14	**DADRI(GT)**	41.064	39.374	40.958	39.273
	DADRI(Liquid)	25.034	24.007	1.347	1.294
	DADRI (RLNG)	0.000	0.000	0.000	0.000
A	**TOTAL NTPC (TOTAL 1 TO 14)**	**1126.971**	**1082.236**	**1032.405**	**989.956**
15	**TANAKPUR**	2.376	2.278	2.376	2.278
16	**CHAMERA-I**	5.442	5.218	5.442	5.218
17	**CHAMERA-II**	5.572	5.343	5.572	5.343
18	**BAIRA-SUIL**	1.774	1.701	1.774	1.701
19	**SALAL**	9.446	9.058	9.446	9.058
20	**DULASTI**	13.300	12.754	13.300	12.754
21	**DAULI GANGA**	5.366	5.146	5.366	5.146
22	**URI**	8.956	8.588	8.946	8.579
B.	**TOTAL NHPC (TOTAL 15 TO 22)**	**52.232**	**50.086**	**52.222**	**50.077**
23	**NAPP**	0.157	0.150	0.157	0.150
24	**RAPP 'A'**	0.000	0.000	0.000	0.000
25	**RAPP 'C'**	0.000	0.000	0.000	0.000
26	**RAPP (B-4)**	0.641	0.614	0.641	0.614
27	**RAPP (B-3)**	0.628	0.602	0.628	0.602
C	**TOTAL NPC (23 TO 27)**	**1.426**	**1.366**	**1.426**	**1.366**
D.	**NATHPA JHAKHRI**	24.603	23.592	24.603	23.592
E.	**TEHRI**	20.049	19.224	20.049	19.224
F.	**TALA**	4.028	3.928	3.928	3.768
G.	**TALCHER**	0.000	0.000	0.000	0.000
	BILATERAL IMPORT				
(a)	**MAHARASHTRA**	11.970	11.233	10.688	10.247
(b)	**DVC**	28.100	27.411	27.411	26.289
(c)	**WEST BENGAL**	9.244	9.019	9.019	8.647
(d)	**CHATTISHGARH**	116.711	109.445	109.444	104.943

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(e)	**MEGHALAYA**	6.324	6.169	5.805	5.566
(f)	**KARNATAKA**	38.744	36.827	34.468	33.047
(g)	**PUNJAB**	18.397	16.476	16.476	15.798
(h)	**POWER EXCHANGE(IEX)**	4.570	4.383	4.570	4.383
(i)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
H	**TOTAL IMPORT**	234.060	220.963	217.881	208.920
	BILATERAL EXPORT				
(a)	**RAJASTHAN**	-0.284	-0.296	-0.284	-0.296
(b)	**UTTAR PRADESH**	-19.031	-19.848	-19.031	-19.848
(c)	**MADHYA PRADESH**	-65.806	-70.205	-70.205	-73.208
(d)	**HIMACHAL PRADESH**	-25.654	-26.754	-25.654	-26.754
(e)	**UTTRANCHAL**	-46.847	-48.856	-46.847	-48.856
(f)	**INDIAN ENERGY EXCHANGE (IEX)**	-51.694	-53.913	-53.913	-56.399
(g)	**POWER EXCHANGE (PX)**	-1.875	-1.957	-1.875	-1.957
I	**TOTAL EXPORT (TOTAL)**	-211.191	-221.829	-217.809	-227.318
j.	**TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H+I)**	1252.177	1179.566	1134.704	1069.584
K	**HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED**				**0.661**
L	**TOTAL DRAWAL (J - K)**				**1068.923**
M	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-237.311
	AVAILABILITY FROM OWN SOURCES				
(i)	**IP**				0.720
(ii)	**1/3rd HARYANA SHARE IN IP**				0.186
(iii)	**JHAZZAR SHARE IN IP**				0.475
(iv)	**NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]**				0.059
(v)	**RPH**				68.585
(vi)	**JHAZZAR SHARE IN RPH**				0.000
(vii)	**NET GEN. AVAIL.FOR DTL IN RPH [(v) - (vi)]**				68.585
(viii)	**GAS TURBINE**				107.760
(ix)	**PRAGATI**				230.346
N	**TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]**				406.750
O	**IMPORT FROM BTPS**				342.256
P	**TOTAL AVAILABILITY WITHIN DELHI (N + O)**				749.006
Q	**TOTAL CONSUMPTION (L + M + P)**				1580.618
R	**LOAD SHEDDING**				5.265
S	**REQUIREMENT (P + Q)**				1585.883
T	**% DEPENDENCE ON NORTHERN GRID**				67.67
U	**AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI**				18.471
V	**NET CONSUMPTION OF DELHI(Q - U)**				1562.147

8.10 Power supply position during the month of January 2010

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	**SINGRAULI**	104.148	99.114	103.937	98.912
2	**RIHAND-I**	73.747	70.179	73.587	70.026
3	**RIHAND-II**	93.226	88.715	93.022	88.520
4	**UNCHAHAR-I**	17.338	16.499	15.251	14.512
5	**UNCHAHAR-II**	33.439	31.822	29.446	28.021
6	**UNCHAHAR-III**	21.240	20.212	18.712	17.807
7	**DADRI(TH)**	534.875	508.993	513.622	488.766
8	**DADRI(TH)- Stage-II**	4.370	4.162	4.370	4.162
9	**FARAKA**	19.202	18.698	17.581	16.730
10	**KHELGAON**	33.193	32.321	32.083	30.526
11	**KHELGAON-II**	58.539	56.996	56.523	53.787
12	**ANTA(GT)**	14.466	13.765	14.466	13.765
	ANTA(Liquid)	0.574	0.547	0.024	0.023
	ANTA(RLNG)	18.244	17.361	9.616	9.149
13	**AURAIYA(GT)**	34.626	32.951	34.626	32.951
	AURAIYA(Liquid)	14.074	13.396	3.190	3.035
	AURAIYA(RLNG)	0.000	0.000	0.000	0.000
14	**DADRI(GT)**	36.204	34.453	36.076	34.333
	DADRI(Liquid)	20.259	19.276	5.650	5.373
	DADRI (RLNG)	9.688	9.219	3.571	3.398
A	**TOTAL NTPC (TOTAL 1 TO 14)**	**1141.452**	**1088.679**	**1065.353**	**1013.796**
15	**TANAKPUR**	2.161	2.057	2.161	2.057
16	**CHAMERA-I**	4.154	3.953	4.154	3.953
17	**CHAMERA-II**	4.465	4.248	4.465	4.248
18	**BAIRA-SUIL**	1.472	1.400	1.472	1.400
19	**SALAL**	8.180	7.784	8.180	7.784
20	**DULASTI**	10.993	10.461	10.993	10.461
21	**DAULI GANGA**	4.544	4.323	4.544	4.323
22	**URI**	6.931	6.595	6.926	6.590
B.	**TOTAL NHPC (TOTAL 15 TO 22)**	**42.900**	**40.821**	**42.895**	**40.816**
23	**NAPP**	7.031	6.689	7.031	6.689
24	**RAPP 'A'**	0.000	0.000	0.000	0.000
25	**RAPP 'C'**	0.000	0.000	0.000	0.000
26	**RAPP (B-4)**	0.610	0.581	0.610	0.581
27	**RAPP (B-3)**	0.599	0.570	0.599	0.570
C	**TOTAL NPC (23 TO 27)**	**8.240**	**7.840**	**8.240**	**7.840**
D.	**NATHPA JHAKHRI**	19.462	18.520	19.462	18.520
E.	**TEHRI**	27.835	26.486	27.835	26.486
F.	**TALA**	1.682	1.638	1.638	1.559
G.	**TALCHER**	0.000	0.000	0.000	0.000
	BILATERAL IMPORT				
(a)	**MADHYA PRADESH**	0.336	0.316	0.301	0.287
(b)	**MADHYA PRADESH**	0.185	0.174	0.174	0.165
(c)	**HARYANA**	9.860	9.383	9.860	9.383
(d)	**MAHARASHTRA**	23.151	21.762	20.707	19.705

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(e)	**UNREQUISITIONED SURPLUS**	5.300	5.037	5.300	5.037
(f)	**HIMACHAL PRADESH**	0.678	0.643	0.678	0.643
(g)	**DVC**	27.122	26.428	26.405	25.122
(h)	**WEST BENGAL**	40.801	38.353	37.356	35.545
(i)	**CHATTISHGARH**	128.316	120.617	120.611	114.771
(j)	**CHATTISHGARH**	7.233	6.799	6.460	6.149
(k)	**ANDHRA PRADESH**	42.102	40.052	37.423	35.612
(l)	**ANDHRA PRADESH**	1.850	1.799	1.709	1.627
(m)	**KARNATAKA**	49.325	46.943	43.865	41.738
(n)	**PUNJAB**	35.592	31.633	31.633	30.101
(o)	**POWER EXCHANGE(IEX)**	31.184	29.631	31.184	29.631
(p)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
H	**TOTAL IMPORT**	403.035	379.570	373.666	355.516
	BILATERAL EXPORT				
(a)	**UTTAR PRADESH**	-20.340	-21.375	-20.340	-21.375
(b)	**JAMMU & KASHMIR**	-74.237	-78.012	-74.237	-78.012
(c)	**MADHYA PRADESH**	-21.272	-22.630	-22.630	-23.788
(d)	**HIMACHAL PRADESH**	-60.849	-63.945	-60.849	-63.945
(e)	**INDIAN ENERGY EXCHANGE (IEX)**	-52.180	-54.796	-52.180	-54.796
(f)	**POWER EXCHANGE (PX)**	-0.200	-0.210	-0.200	-0.210
I	**TOTAL EXPORT (TOTAL)**	-229.078	-240.968	-230.436	-242.126
j.	**TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H+I)**	1415.527	1322.589	1308.649	1222.410
K	**HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED**				**0.000**
L	**TOTAL DRAWAL (J - K)**				**1222.410**
M	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-225.664
	AVAILABILITY FROM OWN SOURCES				
(i)	**IP**				0.000
(ii)	**1/3rd HARYANA SHARE IN IP**				0.000
(iii)	**JHAZZAR SHARE IN IP**				0.000
(iv)	**NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]**				0.000
(v)	**RPH**				27.910
(vi)	**JHAZZAR SHARE IN RPH**				0.682
(vii)	**NET GEN. AVAIL.FOR DTL IN RPH [(v) - (vi)]**				27.228
(viii)	**GAS TURBINE**				118.809
(ix)	**PRAGATI**				222.229
N	**TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]**				368.266
O	**IMPORT FROM BTPS**				411.853
P	**TOTAL AVAILABILITY WITHIN DELHI (N + O)**				780.119
Q	**TOTAL CONSUMPTION (L + M + P)**				1776.865
R	**LOAD SHEDDING**				12.846
S	**REQUIREMENT (P + Q)**				1789.711
T	**% DEPENDENCE ON NORTHERN GRID**				68.80
U	**AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI**				14.527
V	**NET CONSUMPTION OF DELHI (Q - U)**				1762.338

8.11 Power supply position during the month of February 2010

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	**SINGRAULI**	98.073	93.598	97.254	92.816
2	**RIHAND-I**	66.220	63.198	65.703	62.704
3	**RIHAND-II**	84.103	80.266	83.438	79.630
4	**UNCHAHAR-I**	15.652	14.937	13.723	13.098
5	**UNCHAHAR-II**	30.563	29.168	26.869	25.645
6	**UNCHAHAR-III**	18.724	17.870	16.537	15.783
7	**DADRI(TH)**	486.009	463.832	463.059	441.933
8	**DADRI(TH)- Stage-II**	204.221	195.056	197.766	188.887
9	**FARAKA**	17.057	16.587	15.622	14.909
10	**KHELGAON**	37.332	36.308	34.606	33.032
11	**KHELGAON-II**	58.189	56.586	53.387	50.962
12	**ANTA(GT)**	14.560	13.897	14.412	13.756
	ANTA(Liquid)	2.089	1.994	0.024	0.023
	ANTA(RLNG)	12.830	12.242	1.375	1.311
13	**AURAIYA(GT)**	32.888	31.390	32.637	31.150
	AURAIYA(Liquid)	8.304	7.918	0.212	0.202
	AURAIYA(RLNG)	6.186	5.910	0.583	0.556
14	**DADRI(GT)**	36.270	34.618	35.879	34.246
	DADRI(Liquid)	8.777	8.368	0.224	0.213
	DADRI (RLNG)	15.435	14.740	1.464	1.396
A	**TOTAL NTPC (TOTAL 1 TO 14)**	**1253.482**	**1198.483**	**1154.774**	**1102.252**
15	**TANAKPUR**	1.948	1.860	1.948	1.860
16	**CHAMERA-I**	5.039	4.814	5.039	4.814
17	**CHAMERA-II**	5.324	5.085	5.324	5.085
18	**BAIRA-SUIL**	3.911	3.736	3.911	3.736
19	**SALAL**	11.824	11.291	11.824	11.291
20	**DULASTI**	9.985	9.531	9.985	9.531
21	**DAULI GANGA**	3.686	3.519	3.686	3.519
22	**URI**	20.815	19.883	20.815	19.883
B.	**TOTAL NHPC (TOTAL 15 TO 22)**	**62.532**	**59.719**	**62.532**	**59.719**
23	**NAPP**	7.863	7.504	7.863	7.504
24	**RAPP 'A'**	1.219	1.163	1.197	1.142
25	**RAPP 'C'**	13.274	12.679	11.444	10.931
26	**RAPP (B-4)**	0.000	0.000	0.000	0.000
27	**RAPP (B-3)**	0.000	0.000	0.000	0.000
C	**TOTAL NPC (23 TO 27)**	**22.356**	**21.346**	**20.504**	**19.577**
D.	**NATHPA JHAKHRI**	18.109	17.285	18.109	17.285
E.	**TEHRI**	24.385	23.272	24.385	23.272
F.	**TALA**	0.541	0.526	0.526	0.501
G.	**TALCHER**	0.000	0.000	0.000	0.000
	BILATERAL IMPORT				
(a)	**GUJRAT**	55.682	52.485	52.517	50.081
(b)	**GUJRAT**	50.062	47.192	45.217	43.121
(c)	**HARYANA**	11.217	10.706	11.217	10.706
(d)	**MAHARASHTRA**	14.865	13.998	13.319	12.720

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(e)	**DVC**	28.800	28.003	28.003	26.717
(f)	**CHATTISHGARH**	68.897	64.927	61.683	58.874
(g)	**ANDHRA PRADESH**	8.051	7.634	7.424	7.087
(h)	**KARNATAKA**	55.157	52.312	48.839	46.608
(i)	**PUNJAB**	21.790	19.413	19.413	18.518
(j)	**POWER EXCHANGE(IEX)**	1.020	0.970	1.020	0.970
(k)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
H	**TOTAL IMPORT**	315.541	297.640	288.652	275.402
	BILATERAL EXPORT				
(a)	**UTTAR PRADESH**	-18.370	-19.306	-4.585	-4.827
(b)	**MADHYA PRADESH**	-19.846	-21.057	-21.057	-22.064
(c)	**HIMACHAL PRADESH**	-54.036	-56.625	-54.036	-56.625
(d)	**UTTRANCHAL**	-42.115	-44.128	-42.115	-44.128
(e)	**MEGHALAYA**	-2.879	-2.961	-2.961	-3.103
(f)	**TAMILNADU**	-15.359	-15.793	-15.793	-16.548
(g)	**KARNATAKA**	-31.122	-32.008	-32.008	-33.381
(h)	**ORISSA**	-1.792	-1.844	-1.844	-1.921
(i)	**INDIAN ENERGY EXCHANGE (IEX)**	-194.758	-203.929	-194.758	-203.929
(j)	**POWER EXCHANGE (PX)**	-2.028	-2.126	-2.028	-2.126
I	**TOTAL EXPORT (TOTAL)**	-382.305	-399.777	-371.185	-388.652
j.	**TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H)**	1314.638	1218.493	1198.294	1109.360
K	**HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED**				**0.000**
L	**TOTAL DRAWAL (J - K)**				**1109.360**
M	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-294.399
	AVAILABILITY FROM OWN SOURCES				
(i)	**IP**				0.000
(ii)	**1/3rd HARYANA SHARE IN IP**				0.000
(iii)	**JHAZZAR SHARE IN IP**				0.000
(iv)	**NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]**				0.000
(v)	**RPH**				30.395
(vi)	**JHAZZAR SHARE IN RPH**				0.616
(vii)	**NET GEN. AVAIL.FOR DTL IN RPH [(v) - (vi)]**				29.779
(viii)	**GAS TURBINE**				111.519
(ix)	**PRAGATI**				188.786
N	**TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]**				330.084
O	**IMPORT FROM BTPS**				280.404
P	**TOTAL AVAILABILITY WITHIN DELHI (N + O)**				610.488
Q	**TOTAL CONSUMPTION (L + M + P)**				1425.449
R	**LOAD SHEDDING**				5.223
S	**REQUIREMENT (P + Q)**				1430.672
T	**% DEPENDENCE ON NORTHERN GRID**				77.83
U	**AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI**				13.632
V	**NET CONSUMPTION OF DELHI (Q - U)**				1411.817

8.12 Power supply position during the month of March 2010

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	**SINGRAULI**	107.904	104.006	107.613	103.726
2	**RIHAND-I**	67.378	64.944	67.191	64.765
3	**RIHAND-II**	89.702	86.469	89.480	86.256
4	**UNCHAHAR-I**	17.041	16.425	16.332	15.745
5	**UNCHAHAR-II**	33.381	32.177	32.030	30.878
6	**UNCHAHAR-III**	20.107	19.381	19.246	18.555
7	**DADRI(TH)**	535.623	516.267	527.913	508.866
8	**DADRI(TH)- Stage-II**	127.230	122.398	122.614	117.967
9	**FARAKA**	15.081	14.733	14.591	14.058
10	**KHELGAON**	32.427	31.674	31.303	30.161
11	**KHELGAON-II**	67.304	65.773	65.018	62.681
12	**ANTA(GT)**	18.869	18.190	18.836	18.158
	ANTA(Liquid)	0.000	0.000	0.000	0.000
	ANTA(RLNG)	11.491	11.072	5.044	4.867
13	**AURAIYA(GT)**	31.538	30.392	31.480	30.336
	AURAIYA(Liquid)	0.592	0.568	0.007	0.007
	AURAIYA(RLNG)	10.484	10.102	4.208	4.060
14	**DADRI(GT)**	43.550	41.981	43.489	41.922
	DADRI(Liquid)	4.305	4.151	0.199	0.192
	DADRI (RLNG)	14.829	14.285	6.039	5.824
A	**TOTAL NTPC (TOTAL 1 TO 14)**	**1248.836**	**1204.988**	**1202.633**	**1159.024**
15	**TANAKPUR**	2.193	2.114	2.159	2.081
16	**CHAMERA-I**	10.748	10.364	10.748	10.364
17	**CHAMERA-II**	9.498	9.159	9.498	9.159
18	**BAIRA-SUIL**	8.380	8.080	8.380	8.080
19	**SALAL**	22.576	21.767	20.645	19.903
20	**DULASTI**	15.726	15.162	15.726	15.162
21	**DAULI GANGA**	5.551	5.353	5.551	5.353
22	**URI**	36.773	35.444	37.013	35.675
B.	**TOTAL NHPC (TOTAL 15 TO 22)**	**111.445**	**107.443**	**109.720**	**105.777**
23	**NAPP**	9.162	8.833	9.162	8.833
24	**RAPP 'A'**	1.292	1.245	1.292	1.245
25	**RAPP 'C'**	17.930	17.283	17.930	17.283
26	**RAPP (B-4)**	0.000	0.000	0.000	0.000
27	**RAPP (B-3)**	0.000	0.000	0.000	0.000
C	**TOTAL NPC (23 TO 27)**	**28.384**	**27.361**	**28.384**	**27.361**
D.	**NATHPA JHAKHRI**	27.734	26.742	27.734	26.742
E.	**TEHRI**	25.115	24.206	25.115	24.206
F.	**TALA**	0.878	0.858	0.858	0.828
G.	**TALCHER**	0.000	0.000	0.000	0.000
	BILATERAL IMPORT				
(a)	**RAJASTHAN**	7.457	6.882	6.882	6.644
(b)	**GUJRAT**	22.288	20.988	20.394	19.659
(c)	**MADHYA PRADESH**	2.282	2.151	2.077	2.005
(d)	**MAHARASHTRA**	10.361	9.761	9.288	8.960
(e)	**UNREQUISITIONED SURPLUS**	1.258	1.303	1.258	1.303
(f)	**HIMACHAL PRADESH**	0.442	0.424	0.442	0.424

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(g)	**DVC**	30.387	29.691	29.691	28.617
(h)	**CHATTISHGARH**	71.705	67.531	64.154	61.859
(i)	**CHATTISHGARH**	0.360	0.340	0.340	0.329
(j)	**ANDHRA PRADESH**	10.074	9.445	9.228	8.895
(k)	**KARNATAKA**	47.197	44.250	41.504	40.002
(l)	**PUNJAB**	18.527	16.678	16.678	16.076
(m)	**POWER EXCHANGE(IEX)**	43.143	41.649	43.143	41.649
(n)	**POWER EXCHANGE (PX)**	0.120	0.116	0.120	0.116
H	**TOTAL IMPORT**	265.601	251.209	245.199	236.538
	BILATERAL EXPORT				
(a)	**RAJASTHAN**	-5.929	-6.146	-5.929	-6.146
(b)	**UTTAR PRADESH**	-0.662	-0.690	-0.662	-0.690
(c)	**MADHYA PRADESH**	-12.003	-12.751	-12.751	-13.238
(d)	**HARYANA**	-6.409	-6.639	-6.409	-6.639
(e)	**MAHARASHTRA**	-10.734	-11.400	-11.400	-11.827
(f)	**HIMACHAL PRADESH**	-25.638	-26.599	-25.638	-26.599
(g)	**WEST BENGAL**	-23.006	-23.545	-23.545	-24.428
(h)	**UTTRANCHAL**	-47.091	-48.856	-47.091	-48.856
(i)	**MEGHALAYA**	-8.627	-8.830	-8.830	-9.161
(j)	**ANDHRA PRADESH**	-44.291	-45.345	-45.345	-47.072
(k)	**ANDHRA PRADESH**	-3.840	-4.072	-4.072	-4.216
(l)	**TAMILNADU**	-15.915	-16.290	-16.290	-16.903
(m)	**KARNATAKA**	-59.041	-60.460	-60.460	-62.773
(n)	**INDIAN ENERGY EXCHANGE (IEX)**	-60.700	-63.082	-60.700	-63.082
(o)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL EXPORT (TOTAL)**	-323.886	-334.705	-329.122	-341.630
j.	**TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H+I)**	1384.106	1308.104	1310.519	1238.847
K	**HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED**				**0.000**
L	**TOTAL DRAWAL (J - K)**				**1238.847**
M	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-236.178
	AVAILABILITY FROM OWN SOURCES				
(i)	**IP**				0.000
(ii)	**1/3rd HARYANA SHARE IN IP**				0.000
(iii)	**JHAZZAR SHARE IN IP**				0.000
(iv)	**NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]**				0.000
(v)	**RPH**				85.164
(vi)	**JHAZZAR SHARE IN RPH**				0.682
(vii)	**NET GEN. AVAIL.FOR DTL IN RPH [(v) - (vi)]**				84.482
(viii)	**GAS TURBINE**				117.470
(ix)	**PRAGATI**				230.136
N	**TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]**				432.088
O	**IMPORT FROM BTPS**				326.127
P	**TOTAL AVAILABILITY WITHIN DELHI (N + O)**				758.215
Q	**TOTAL CONSUMPTION (L + M + P)**				1760.884
R	**LOAD SHEDDING**				6.446
S	**REQUIREMENT (P + Q)**				1767.330
T	**% DEPENDENCE ON NORTHERN GRID**				70.35
U	**AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI**				19.799
V	**NET CONSUMPTION OF DELHI (Q - U)**				1741.085

8.13 Consolidated Power Supply Position for 2009-10

All figures in MUs

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
1	SINGRAULI	1251.706	1202.472	1248.937	1199.816
2	RIHAND-I	879.849	845.186	876.753	842.213
3	RIHAND-II	1009.127	969.570	1005.789	966.363
4	UNCHAHAR-I	197.965	190.196	187.352	180.046
5	UNCHAHAR-II	385.873	370.653	364.493	350.207
6	UNCHAHAR-III	257.633	247.487	244.065	234.514
7	DADRI(TH)	6143.101	5901.497	5959.852	5725.924
8	DADRI(TH)- Stage-II	335.821	321.616	324.750	311.016
9	FARAKA	187.438	182.050	176.628	169.509
10	KHELGAON	358.368	347.940	340.824	326.969
11	KHELGAON-II	557.964	542.284	532.710	511.828
	ANTA(GT)	158.610	152.276	158.222	151.902
	ANTA(Liquid)	31.577	30.364	12.647	12.201
12	ANTA(RLNG)	170.127	163.448	82.988	79.871
	AURAIYA(GT)	412.379	396.092	411.574	395.321
	AURAIYA(Liquid)	139.727	134.102	43.736	42.107
13	AURAIYA(RLNG)	37.849	36.467	18.384	17.752
	DADRI(GT)	468.015	449.572	462.690	444.457
	DADRI(Liquid)	183.803	176.345	57.850	55.645
14	DADRI (RLNG)	68.859	66.152	27.887	26.862
A	TOTAL NTPC (TOTAL 1 TO 14)	13235.791	12725.769	12538.131	12044.523
15	TANAKPUR	49.070	47.151	49.029	47.110
16	CHAMERA-I	162.472	156.461	162.472	156.461
17	CHAMERA-II	202.668	195.154	202.668	195.154
18	BAIRA-SUIL	67.386	64.881	67.386	64.881
19	SALAL	352.752	339.669	350.821	337.805
20	DULASTI	313.588	301.663	313.588	301.663
21	DAULI GANGA	163.805	157.552	163.805	157.552
22	URI	295.385	284.443	295.610	284.660
B.	TOTAL NHPC (TOTAL 15 TO 22)	1607.126	1546.974	1605.379	1545.286
23	NAPP	79.498	76.404	79.377	76.289
24	RAPP 'A'	2.511	2.408	2.489	2.387
25	RAPP 'C'	31.204	29.962	29.374	28.214
26	RAPP (B-4)	7.155	6.883	7.149	6.877
27	RAPP (B-3)	8.052	7.747	8.049	7.745
C	TOTAL NPC (23 TO 27)	128.420	123.404	126.438	121.512
D.	NATHPA JHAKHRI	718.510	691.568	718.510	691.568
E.	TEHRI	228.802	219.634	228.802	219.634
F.	TALA	112.519	108.948	108.948	104.715
G.	TALCHER	2.786	2.704	2.704	2.612
	BILATERAL IMPORT				
(a)	RAJASTHAN	414.500	399.054	411.941	397.204
(b)	UTTAR PRADESH	51.414	47.690	48.513	46.408
(c)	GUJRAT	86.713	81.831	81.147	77.588
(d)	GUJRAT	58.111	54.786	52.758	50.386

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(e)	**MADHYA PRADESH**	**114.602**	**108.163**	**108.072**	**104.251**
(f)	**MADHYA PRADESH**	**1.009**	**0.954**	**0.952**	**0.915**
(g)	**HARYANA**	**22.889**	**21.837**	**22.889**	**21.837**
(h)	**MAHARASHTRA**	**160.875**	**151.657**	**144.300**	**138.841**
(i)	**MAHARASHTRA**	**23.201**	**21.810**	**20.750**	**19.746**
(j)	**UNREQUISITIONED SURPLUS**	**11.758**	**11.357**	**11.758**	**11.357**
(k)	**TRIPURA**	**41.636**	**40.230**	**38.833**	**37.323**
(l)	**SIKKIM**	**9.260**	**9.010**	**9.010**	**8.604**
(m)	**HIMACHAL PRADESH**	**375.293**	**361.920**	**375.293**	**361.920**
(n)	**DVC**	**444.201**	**431.284**	**431.255**	**414.552**
(o)	**DVC (TATA STEEEL)**	**16.990**	**16.408**	**16.089**	**15.323**
(p)	**WEST BENGAL**	**69.282**	**66.005**	**64.520**	**61.684**
(q)	**WEST BENGAL**	**0.725**	**0.701**	**0.679**	**0.651**
(r)	**CHATTISHGARH**	**807.185**	**761.401**	**751.090**	**719.372**
(s)	**CHATTISHGARH**	**117.095**	**110.539**	**108.059**	**103.666**
(t)	**CHATTISHGARH**	**3.843**	**3.633**	**3.550**	**3.416**
(u)	**UTTRANCHAL**	**165.751**	**159.610**	**165.751**	**159.610**
(v)	**MEGHALAYA**	**15.278**	**14.838**	**14.040**	**13.433**
(w)	**ANDHRA PRADESH**	**215.442**	**207.192**	**192.958**	**185.439**
(x)	**ANDHRA PRADESH**	**1.850**	**1.799**	**1.709**	**1.627**
(y)	**KARNATAKA**	**240.126**	**228.031**	**212.451**	**203.405**
(z)	**JAMMU & KASHMIR**	**78.721**	**76.045**	**78.721**	**76.045**
(aa)	**ORISSA**	**17.094**	**16.527**	**16.526**	**15.860**
(ab)	**PUNJAB**	**138.462**	**124.958**	**124.724**	**119.424**
(ac)	**PUNJAB**	**0.648**	**0.622**	**0.648**	**0.622**
(ad)	**POWER EXCHANGE(IEX)**	**297.728**	**286.299**	**298.039**	**286.599**
(ae)	**POWER EXCHANGE (PX)**	**25.046**	**24.141**	**25.046**	**24.141**
H	**TOTAL IMPORT**	4026.728	3840.332	3832.071	3681.249
	BILATERAL EXPORT				
(a)	**RAJASTHAN**	**-46.804**	**-48.551**	**-46.804**	**-48.551**
(b)	**UTTAR PRADESH**	**-67.534**	**-70.774**	**-53.749**	**-56.295**
(c)	**JAMMU & KASHMIR**	**-74.237**	**-78.012**	**-74.237**	**-78.012**
(d)	**MADHYA PRADESH**	**-204.457**	**-217.250**	**-217.250**	**-226.920**
(e)	**HARYANA**	**-41.081**	**-42.773**	**-41.081**	**-42.773**
(f)	**MAHARASHTRA**	**-11.626**	**-12.344**	**-12.344**	**-12.807**
(g)	**HIMACHAL PRADESH**	**-204.166**	**-213.618**	**-204.166**	**-213.618**
(h)	**WEST BENGAL**	**-25.834**	**-26.470**	**-26.470**	**-27.457**
(i)	**UTTRANCHAL**	**-178.855**	**-186.466**	**-178.855**	**-186.466**
(j)	**MEGHALAYA**	**-11.506**	**-11.791**	**-11.791**	**-12.264**
(k)	**ANDHRA PRADESH**	**-59.331**	**-60.844**	**-60.844**	**-63.165**
(l)	**ANDHRA PRADESH**	**-3.840**	**-4.072**	**-4.072**	**-4.216**
(m)	**TAMILNADU**	**-35.001**	**-35.932**	**-35.932**	**-37.467**
(n)	**KARNATAKA**	**-90.163**	**-92.468**	**-92.468**	**-96.154**
(o)	**KERAL**	**-0.115**	**-0.119**	**-0.119**	**-0.123**
(p)	**ORISSA**	**-2.924**	**-3.010**	**-3.010**	**-3.137**

Sr. NO.	DETAILS OF THE IMPORT FROM THE GRID INDICATING DIFFERENT SOURCES	Requirement at Power Plant	Requirement at Periphery	Allocation made by NRLDC at Power Plant	Allocation made by NRLDC at Periphery
(q)	**PUNJAB**	**-1.165**	**-1.216**	**-1.165**	**-1.216**
(r)	**INDIAN ENERGY EXCHANGE (IEX)**	**-534.797**	**-558.180**	**-537.016**	**-560.666**
(s)	**POWER EXCHANGE (PX)**	**-13.158**	**-13.677**	**-13.158**	**-13.677**
I	**TOTAL EXPORT (TOTAL)**	-1606.594	-1677.567	-1614.531	-1684.984
j.	**TOTAL DRAWAL FROM THE NORTHERN GRID (A+B+C+D+E+F+G+H+I)**	**18454.088**	**17581.766**	**17546.452**	**16726.115**
K	**HARYANA SHARE INLUDING JHAZZAR TO BE ADJUSTED**				**127.342**
L	**TOTAL DRAWAL (J - K)**				**16598.773**
M	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-2560.582
	AVAILABILITY FROM OWN SOURCES				
(i)	**IP**				**448.717**
(ii)	**1/3rd HARYANA SHARE IN IP**				**123.695**
(iii)	**JHAZZAR SHARE IN IP**				**3.647**
(iv)	**NET GENENERATION AVAILABLE FOR DELHI IN IP [(i) - (ii) - (iii)]**				**321.375**
(v)	**RPH**				**645.120**
(vi)	**JHAZZAR SHARE IN RPH**				**1.980**
(vii)	**NET GEN. AVAIL.FOR DTL IN RPH [(v) - (vi)]**				**643.140**
(viii)	**GAS TURBINE**				**1498.798**
(ix)	**PRAGATI**				**2452.712**
N	**TOTAL AVAILABILITY FROM OWN SOURCES [(iii) + (vii) + (viii) + (ix)]**				**4916.025**
O	**IMPORT FROM BTPS**				**4676.817**
P	**TOTAL AVAILABILITY WITHIN DELHI (N + O)**				**9592.842**
Q	**TOTAL CONSUMPTION (L + M + P)**				**23631.033**
R	**LOAD SHEDDING**				**184.684**
S	**REQUIREMENT (P + Q)**				**23815.717**
T	**% DEPENDENCE ON NORTHERN GRID**				**70.78**
U	**AUXILIARY CONSUMPTION OF GENERATING UNITS WITHIN DELHI**				**272.832**
V	**NET CONSUMPTION OF DELHI (Q - U)**				**23358.201**

Note : The above figures are operational figures compiled on day to day basis for operational purposes only.

8.14 LOAD SHEDDING DETAILS FOR 2009-10

All figures in MUs

Month	Number of Under Frequency Trippings	Load shedding due to under Frequency Relay Operation				
		BYPL	BRPL	NDPL	NDMC	Total
Apr 2009	67	0.021	0.446	0.312	0.000	**0.779**
May 2009	6	0.000	0.079	0.022	0.000	**0.101**
Jun 2009	124	0.657	1.362	0.350	0.016	**2.385**
July 2009	11	0.094	0.025	0.001	0.000	**0.120**
Aug. 2009	141	0.438	2.101	0.200	0.000	**2.739**
Sept 2009	93	0.174	0.909	0.433	0.000	**1.516**
Oct. 2009	28	0.073	0.160	0.039	0.000	**0.272**
Nov. 2009	0	0.000	0.000	0.000	0.000	**0.000**
Dec. 2009	2	0.000	0.020	0.000	0.000	**0.020**
Jan. 2010	12	0.056	0.105	0.055	0.000	**0.216**
Feb. 2010	0	0.000	0.000	0.000	0.000	**0.000**
Mar. 2010	43	0.012	0.094	0.170	0.000	**0.276**
TOTAL	**527**	**1.525**	**5.301**	**1.582**	**0.016**	**8.424**

All figures in MUs

Months	Load Shedding due to Grid Restriction						
	To restrict over drawal at low frequency and low voltage			Due to TTC / ATC Violation			Total due to Grid Restriction
	BYPL	BRPL	NDPL	BYPL	BRPL	NDPL	
Apr 2009	3.608	16.608	1.210	0.000	0.000	0.000	21.426
May 2009	0.343	6.186	0.202	0.319	4.064	0.662	11.776
Jun 2009	5.260	20.979	0.965	0.075	1.103	0.100	28.482
July 2009	0.699	1.461	0.059	0.000	0.000	0.000	2.219
Aug. 2009	3.878	11.067	6.070	0.000	0.000	0.074	21.089
Sept 2009	0.951	2.026	0.367	0.000	0.000	0.000	3.344
Oct. 2009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nov. 2009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dec. 2009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jan. 2010	0.219	0.146	0.128	0.000	0.000	0.002	0.495
Feb. 2010	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mar. 2010	0.549	0.468	0.186	0.000	0.000	0.000	1.203
TOTAL	**15.507**	**58.941**	**9.187**	**0.394**	**5.167**	**0.838**	**90.034**

All figures in MUs

Month	Load Shedding due to Transmission Constraints in Central Sector Transmission System					Total Shedding due to Grid Restrictions
	BYPL	BRPL	NDPL	NDMC	Total	
Apr 2009	0.000	0.000	0.000	0.000	21.426	**22.205**
May 2009	0.000	1.157	0.145	0.000	13.078	**13.179**
Jun 2009	1.015	0.000	0.005	0.000	29.502	**31.887**
July 2009	0.000	0.000	0.000	0.000	2.219	**2.339**
Aug. 2009	0.000	0.019	0.000	0.000	21.108	**23.847**
Sept 2009	0.000	0.000	0.000	0.000	3.344	**4.860**
Oct. 2009	0.000	0.000	0.000	0.000	0.000	**0.272**
Nov. 2009	0.000	0.000	0.000	0.000	0.000	**0.000**
Dec. 2009	0.000	0.000	0.000	0.000	0.000	**0.020**
Jan. 2010	0.456	1.812	3.875	0.006	6.644	**6.860**
Feb. 2010	0.000	0.000	0.000	0.000	0.000	**0.000**
Mar. 2010	0.000	0.000	0.000	0.000	1.203	**1.479**
TOTAL	**1.471**	**2.988**	**4.025**	**0.006**	**105.543**	**106.948**

Month	Load Shedding due to Trippings / Break-downs / Shut-downs / Constraints in DTL System					Total
	BYPL	BRPL	NDPL	NDMC	MES	
Apr 2009	0.016	0.156	0.992	0.004	0.000	**1.168**
May 2009	1.261	0.588	0.117	0.031	0.000	**1.997**
Jun 2009	0.711	1.178	0.319	0.103	0.000	**2.311**
July 2009	0.775	1.484	1.736	0.000	0.000	**3.995**
Aug. 2009	1.208	1.989	0.230	0.026	0.000	**3.453**
Sept 2009	0.912	0.842	0.059	0.047	0.000	**1.860**
Oct. 2009	0.214	0.207	0.122	0.015	0.000	**0.558**
Nov. 2009	0.079	0.023	0.140	0.002	0.006	**0.250**
Dec. 2009	0.102	0.096	0.041	0.000	0.000	**0.239**
Jan. 2010	0.178	0.144	0.134	0.007	0.000	**0.463**
Feb. 2010	0.500	0.010	0.098	0.006	0.000	**0.614**
Mar. 2010	0.182	0.170	0.123	0.003	0.000	**0.478**
TOTAL	**6.138**	**6.887**	**4.111**	**0.244**	**0.006**	**17.386**

All figures in MUs

Months	Load shedding due to Constraints in Discoms System			Load shedding due to Shut-downs / Break-downs / Trippings in the System of other utilities				Total
	BYPL	BRPL	NDPL	BYPL	BRPL	NDPL	NDMC	
Apr 2009	0.116	1.021	0.097	0.000	0.000	0.000	0.000	0.027
May 2009	0.310	1.002	0.364	0.000	0.000	0.000	0.000	0.153
Jun 2009	0.340	1.993	0.302	0.000	0.000	0.000	0.000	1.775
July 2009	0.334	2.107	0.470	0.000	0.000	0.000	0.000	0.000
Aug. 2009	0.674	1.758	0.938	0.000	0.000	0.000	0.000	0.213
Sept 2009	0.246	0.804	0.183	0.000	0.000	0.000	0.000	0.023
Oct. 2009	0.207	0.533	0.496	0.000	0.000	0.000	0.000	0.243
Nov. 2009	0.097	0.329	0.161	0.001	0.019	0.000	0.000	**0.020**
Dec. 2009	0.204	0.188	0.234	0.001	0.006	0.006	0.000	**0.013**
Jan. 2010	0.345	0.508	0.248	0.026	0.007	0.038	0.000	**0.071**
Feb. 2010	0.156	0.401	0.256	0.000	0.000	0.000	0.021	**0.021**
Mar. 2010	0.311	0.306	0.238	0.028	0.008	0.005	0.056	**0.097**
TOTAL	**3.340**	**10.950**	**3.987**	**0.056**	**0.040**	**0.049**	**0.077**	**2.656**

Month	Load shedding carried out in theft prone areas in MUs			Total shedding due to T& D Constraints in MUs	Total Load Shedding in MUs	Net Consumption in MUs	Max Demand met in MW	Date	Time in Hrs.
	BYPL	BRPL	NDPL						
Apr 2009	0.000	0.000	0.000	**2.429**	**24.634**	1851.379	3690	30.04.09	19:51:37
May 2009	0.000	0.000	1.411	**5.237**	**18.416**	2292.273	4107	21.05.09	14:23:27
Jun 2009	0.000	0.000	1.538	**8.259**	**40.146**	2350.703	4337	30.06.09	16:04:33
July 2009	0.000	0.000	3.180	**10.086**	**12.425**	2528.891	4408	08.07.09	16:12:49
Aug. 2009	0.000	0.000	4.714	**11.750**	**35.597**	2402.553	4352	13.08.09	15:36:02
Sept 2009	0.000	0.000	3.402	**6.518**	**11.378**	2130.418	3892	01.09.09	15:04:37
Oct. 2009	0.195	0.206	4.523	**6.961**	**7.233**	1856.735	3957	01.10.09	18:56:36
Nov. 2009	0.000	0.000	4.218	**5.075**	**5.075**	1467.862	2916	06.11.09	18:31:37
Dec. 2009	0.000	0.000	4.367	**5.245**	**5.265**	1562.147	3243	31.12.09	10:04:00
Jan. 2010	0.000	0.000	4.351	**5.986**	**12.846**	1762.338	3678	14.01.10	09:40:00
Feb. 2010	0.000	0.000	3.775	**5.223**	**5.223**	1411.817	3196	12.02.10	10:04:55
Mar.2010	0.000	0.000	3.537	**4.967**	**6.446**	1741.085	3411	26.03.10	19:20:11
TOTAL	0.195	0.206	**39.016**	**77.736**	**184.684**	**23358.20**	**4408**	08.07.09	16:12:49

Month	Shedding at the time of Peak Demand	Un-restricted Demand in MW	Maximum Un-restricted Demand in MW	Date	Time in Hrs.	Demand at that Time in MW	Shedding at that time in MW
Apr 2009	65	**3755**	**3818**	30.04.09	15:00:00	3453	365
May 2009	20	**4127**	**4139**	19.05.09	16:00:00	3838	301
Jun 2009	75	**4412**	**4476**	26.06.09	15:10:35	4171	305
July 2009	56	**4464**	**4482**	08.07.09	15:00:00	4133	349
Aug. 2009	93	**4445**	**4470**	12.08.09	16:00:00	3737	733
Sept 2009	52	**3944**	**3944**	05.09.09	15:04:37	3892	52
Oct. 2009	8	**3965**	**3980**	01.10.09	19:00:00	3935	45
Nov. 2009	0	**2916**	**2916**	06.11.09	18:31:37	2916	0
Dec. 2009	0	**3243**	**3243**	31.12.09	10:04:00	3243	0
Jan. 2010	0	**3678**	**3678**	14.01.10	09:40:00	3678	0
Feb. 2010	0	**3196**	**3196**	12.02.10	10:04:55	3196	0
Mar.2010	0	**3411**	**3411**	26.03.10	19:20:11	3411	0
Max		**4464**	**4482**	08.07.09	15:00:00	4133	349

8.15 DEMAND - AVAILABILITY-DEMAND POSITION OF DELHI AT THE TIME OF PEAK DEMAND MET DURING 2009-10

Month	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	Total						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)= (3) to (7)	(9)	(10)	(11)= (10) - (9)	(12)= (10)+ (11)	(13)	(14)= (12)+ (13)
Apr 09	30	19:51:37	100	95	167	279	637	1278	2412	2281	-131	**3690**	65	3755
May 09	21	14:23:27	79	92	162	275	614	1222	2885	2375	-510	**4107**	20	4127
Jun 09	30	16:04:33	67	75	191	287	624	1244	3093	2585	-508	**4337**	75	4412
July 09	8	16:12:49	120	86	208	279	618	1311	3097	2678	-419	**4408**	56	4464
Aug.09	13	15:36:02	104	81	217	140	482	1024	3328	2924	-404	**4352**	93	4445
Sept 09	1	15:04:37	37	70	150	303	391	951	2941	2638	-303	3892	52	3944
Oct. 09	1	18:56:36	88	53	203	292	603	1239	2718	2465	-253	3957	8	3965
Nov.09	6	18:31:37	0	49	142	309	485	985	1931	1858	-73	2916	0	2916
Dec. 09	31	10:04:00	0	104	127	321	592	1144	2099	2019	-80	3243	0	3243
Jan. 10	14	09:40:00	0	43	144	317	596	1100	2578	2257	-321	3678	0	3678
Feb. 10	12	10:04:55	0	47	186	295	436	964	2232	2418	186	3196	0	3196
Mar.10	26	19:20:11	0	111	178	288	598	1175	2236	2235	-1	3411	0	3411
Max	**08.07.09**	**16:12:49**	**120**	**86**	**208**	**279**	**618**	**1311**	**3097**	**2678**	**-419**	**4408**	**56**	**4464**

8.16 POWER AVAILABILITY- DEMAND POSITION AT THE TIME OF OCCURRENCE OF MAXIMUM UNRESTRICTED DEMAND DURING 2009-10

Month	Date	Time of peak demand	Generation within Delhi						Import from the Grid	Schedule from the Grid	OD (-) / UD (+)	Demand met	Sheddding	Un-Restricted Demand
			IP	RPH	GT	PPCL	BTPS	Total						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)= (3) to (7)	(9)	(10)	(11)= (10) - (9)	(12)= (10)+ (11)	(13)	(14)= (12)+ (13)
Apr 09	30	15:00:00	95	92	164	272	615	1238	2215	2054	-161	**3453**	365	3818
May 09	19	16:00:00	118	92	150	273	626	1259	2579	2622	43	**3838**	301	4139
Jun 09	29	15:30:00	114	78	175	276	628	1271	2828	2681	-147	**4099**	403	4502
July 09	8	15:00:00	111	57	177	226	625	1196	2937	2722	-215	**4133**	349	4482
Aug.09	13	15:36:02	104	81	217	140	482	1024	3328	2924	-404	**4352**	93	4445
Sept 09	1	15:04:37	37	70	150	303	391	951	2941	2638	-303	3892	52	3944
Oct. 09	1	19:00:00	88	52	204	293	594	1231	2704	2658	-46	3935	45	3980
Nov.09	6	18:31:37	0	49	142	309	485	985	1931	1858	-73	2916	0	2916
Dec. 09	31	10:04:00	0	104	127	321	592	1144	2099	2019	-80	3243	0	3243
Jan. 10	14	09:40:00	0	43	144	317	596	1100	2578	2257	-321	3678	0	3678
Feb. 10	12	10:04:55	0	47	186	295	436	964	2232	2418	186	3196	0	3196
Mar.10	26	19:20:11	0	111	178	288	598	1175	2236	2235	-1	3411	0	3411
Max	**29.06.09**	**15:30:00**	**114**	**78**	**175**	**276**	**628**	**1271**	**2828**	**2681**	**-147**	**4099**	**403**	**4502**

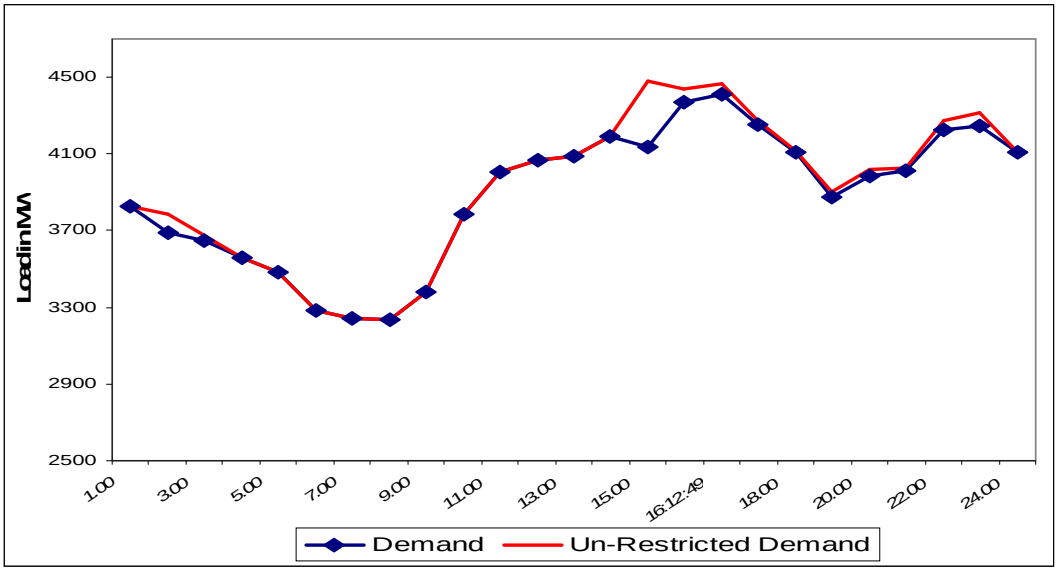
8.17 LOAD PATTERN

8.17.1 SUMMER SEASON

8.17.1.1 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM PEAK DEMAND MET DURING SUMMER 2009-10 – 08.07.2009 – 4408MW at 16:12:49Hrs.(Wednesday)

All figures in MW

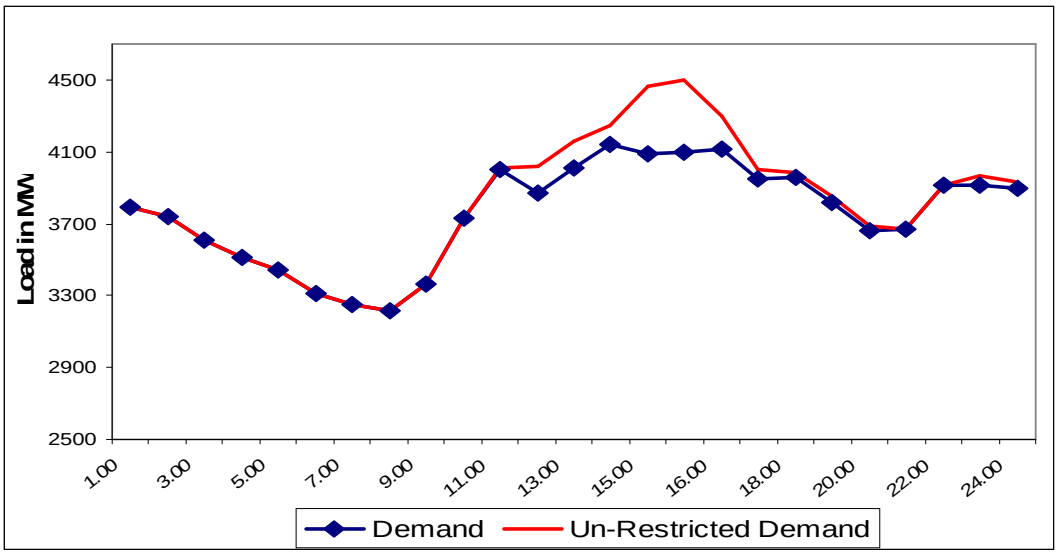
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	3828	0	3828
2.00	3689	98	3787
3.00	3650	28	3678
4.00	3559	0	3559
5.00	3486	0	3486
6.00	3283	0	3283
7.00	3245	0	3245
8.00	3239	0	3239
9.00	3381	0	3381
10.00	3788	0	3788
11.00	4003	0	4003
12.00	4067	0	4067
13.00	4085	0	4085
14.00	4191	0	4191
15.00	4133	349	4482
16.00	4371	67	4438
16:12:49	**4408**	56	4464
17.00	4256	20	4276
18.00	4108	5	4113
19.00	3875	26	3901
20.00	3984	38	4022
21.00	4013	11	4024
22.00	4224	50	4274
23.00	4246	68	4314
24.00	4107	0	4107
ENERGY IN Mus	**89.266**	**0.795**	**90.061**



8.17.1.2 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED DEMAND DURING SUMMER 2009-10 – 29.06.2009 – 4502MW at 15:30:00Hrs. (Monday)

All figures in MW

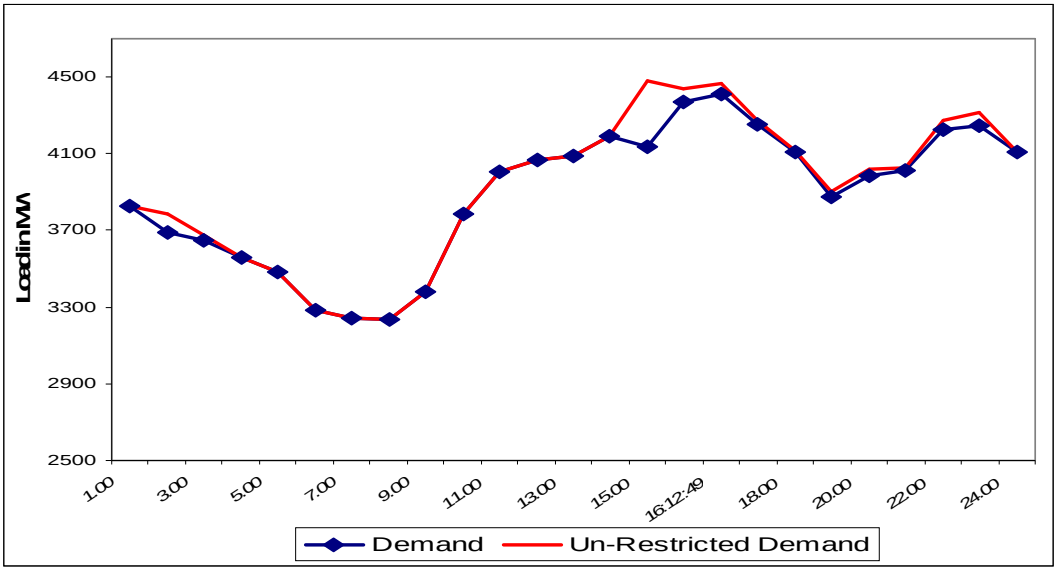
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	*3788*	0	3788
2.00	*3744*	0	3744
3.00	*3613*	0	3613
4.00	*3516*	0	3516
5.00	*3443*	0	3443
6.00	*3311*	0	3311
7.00	*3251*	0	3251
8.00	*3218*	0	3218
9.00	*3363*	0	3363
10.00	*3735*	0	3735
11.00	*4000*	12	4012
12.00	*3873*	144	4017
13.00	*4014*	146	4160
14.00	*4140*	104	4244
15.00	*4088*	373	4461
15.30	***4099***	**403**	**4502**
16.00	*4111*	189	4300
17.00	*3952*	51	4003
18.00	*3955*	25	3980
19.00	*3818*	33	3851
20.00	*3662*	24	3686
21.00	*3672*	0	3672
22.00	*3911*	0	3911
23.00	*3911*	58	3969
24.00	*3897*	39	3936
ENERGY IN Mus	85.682	1.197	86.879



8.17.1.3 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM ENERGY CONSUMED DURING SUMMER 2009-10 – 89.266 ON 08.07.2009 (Wednesday)

All figures in MW

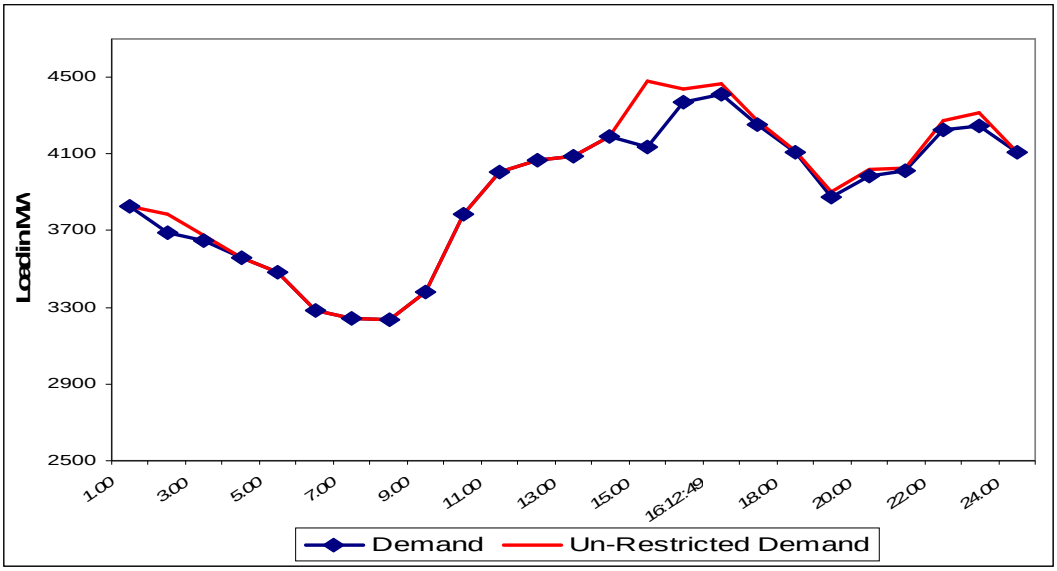
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	3828	0	3828
2.00	3689	98	3787
3.00	3650	28	3678
4.00	3559	0	3559
5.00	3486	0	3486
6.00	3283	0	3283
7.00	3245	0	3245
8.00	3239	0	3239
9.00	3381	0	3381
10.00	3788	0	3788
11.00	4003	0	4003
12.00	4067	0	4067
13.00	4085	0	4085
14.00	4191	0	4191
15.00	4133	349	4482
16.00	4371	67	4438
16:12:49	**4408**	56	4464
17.00	4256	20	4276
18.00	4108	5	4113
19.00	3875	26	3901
20.00	3984	38	4022
21.00	4013	11	4024
22.00	4224	50	4274
23.00	4246	68	4314
24.00	4107	0	4107
ENERGY IN Mus	**89.266**	**0.795**	**90.061**



8.17.1.4 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED ENERGY DEMAND DURING SUMMER 2009-10 – 90.061MUs ON 08.07.2009 (Wednesday)

All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	3828	0	3828
2.00	3689	98	3787
3.00	3650	28	3678
4.00	3559	0	3559
5.00	3486	0	3486
6.00	3283	0	3283
7.00	3245	0	3245
8.00	3239	0	3239
9.00	3381	0	3381
10.00	3788	0	3788
11.00	4003	0	4003
12.00	4067	0	4067
13.00	4085	0	4085
14.00	4191	0	4191
15.00	4133	349	4482
16.00	4371	67	4438
16:12:49	**4408**	56	4464
17.00	4256	20	4276
18.00	4108	5	4113
19.00	3875	26	3901
20.00	3984	38	4022
21.00	4013	11	4024
22.00	4224	50	4274
23.00	4246	68	4314
24.00	4107	0	4107
ENERGY IN Mus	**89.266**	**0.795**	**90.061**

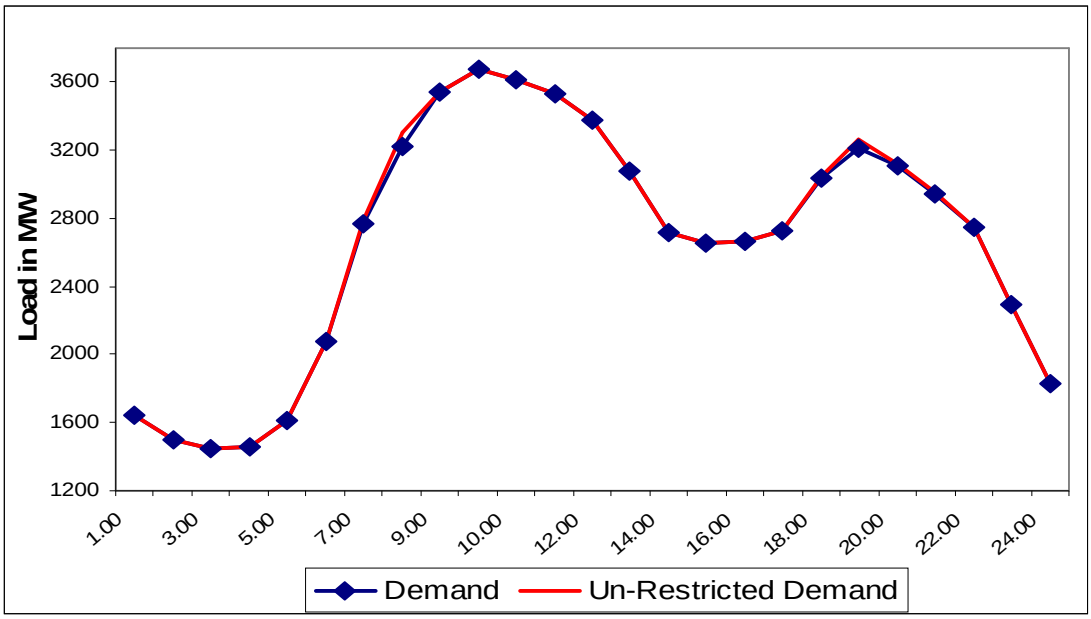


8.17.2 WINTER LOAD PATTERN

8.17.2.1 LOAD PATTERN OF DELHI ON THE DAY OF PEAK DEMAND MET DURING WINTER 2009-10 – 3678MW ON 14.01.2010 at 09:40:52Hrs.(Thursday)

All figures in MW

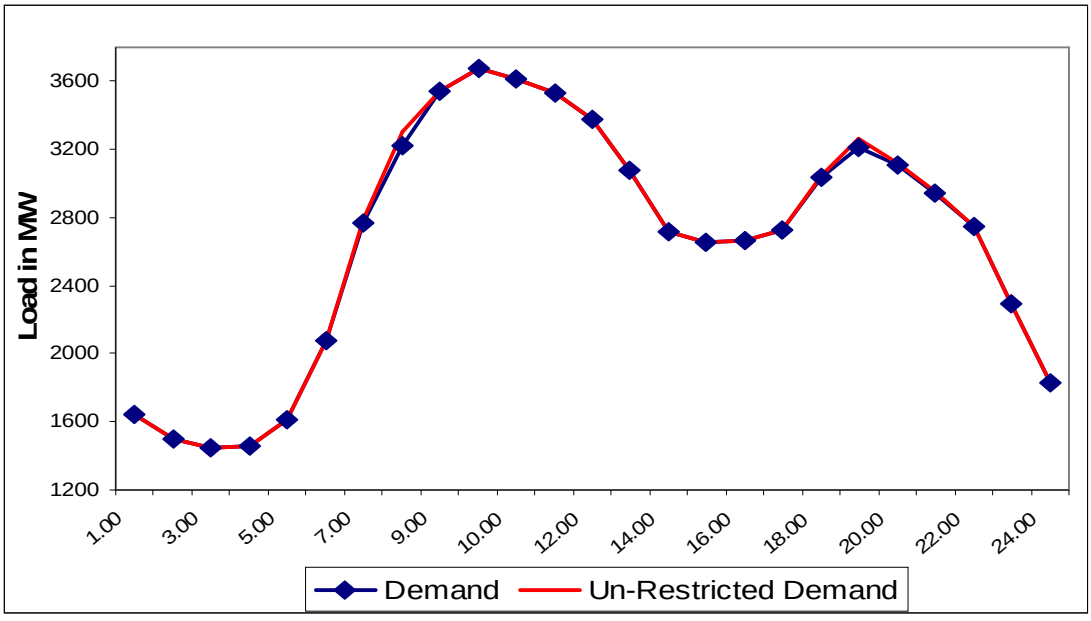
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	1641	0	1641
2.00	1503	0	1503
3.00	1449	0	1449
4.00	1460	0	1460
5.00	1613	0	1613
6.00	2074	0	2074
7.00	2770	22	2792
8.00	3227	73	3300
9.00	3538	0	3538
09:40	**3678**	**0**	**3678**
10.00	3611	0	3611
11.00	3529	0	3529
12.00	3382	0	3382
13.00	3080	0	3080
14.00	2715	0	2715
15.00	2653	0	2653
16.00	2669	0	2669
17.00	2723	0	2723
18.00	3035	7	3042
19.00	3213	54	3267
20.00	3109	7	3116
21.00	2948	2	2950
22.00	2743	0	2743
23.00	2293	0	2293
24.00	1827	0	1827
ENERGY IN Mus	**60.710**	**0.174**	**60.884**



8.17.2.2 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UN-RESTRICTED DEMAND WINTER 2009-10 – 3678MW ON 14.01.2010 at 09:40:52Hrs. (Thursday)

All figures in MW

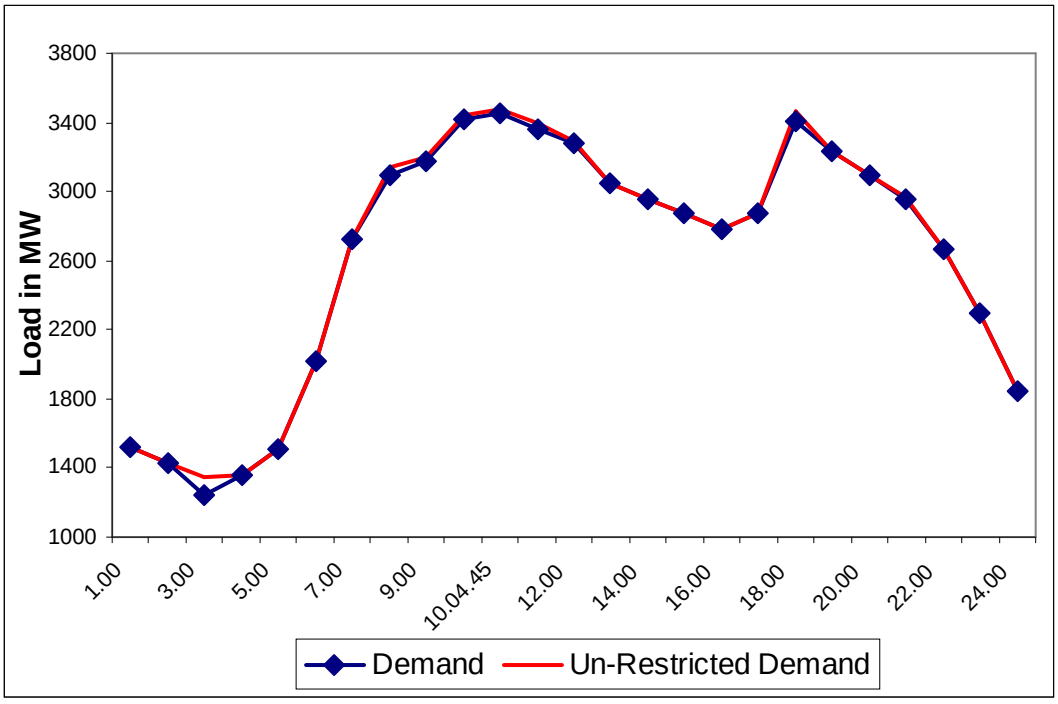
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	1641	0	1641
2.00	1503	0	1503
3.00	1449	0	1449
4.00	1460	0	1460
5.00	1613	0	1613
6.00	2074	0	2074
7.00	2770	22	2792
8.00	3227	73	3300
9.00	3538	0	3538
09:40	**3678**	**0**	**3678**
10.00	3611	0	3611
11.00	3529	0	3529
12.00	3382	0	3382
13.00	3080	0	3080
14.00	2715	0	2715
15.00	2653	0	2653
16.00	2669	0	2669
17.00	2723	0	2723
18.00	3035	7	3042
19.00	3213	54	3267
20.00	3109	7	3116
21.00	2948	2	2950
22.00	2743	0	2743
23.00	2293	0	2293
24.00	1827	0	1827
ENERGY IN Mus	**60.710**	**0.174**	**60.884**



8.17.2.3 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM ENERGY CONSUMED DURING WINTER 2009-10 – 61.704MUs ON 08.01.2010 (Friday)

All figures in MW

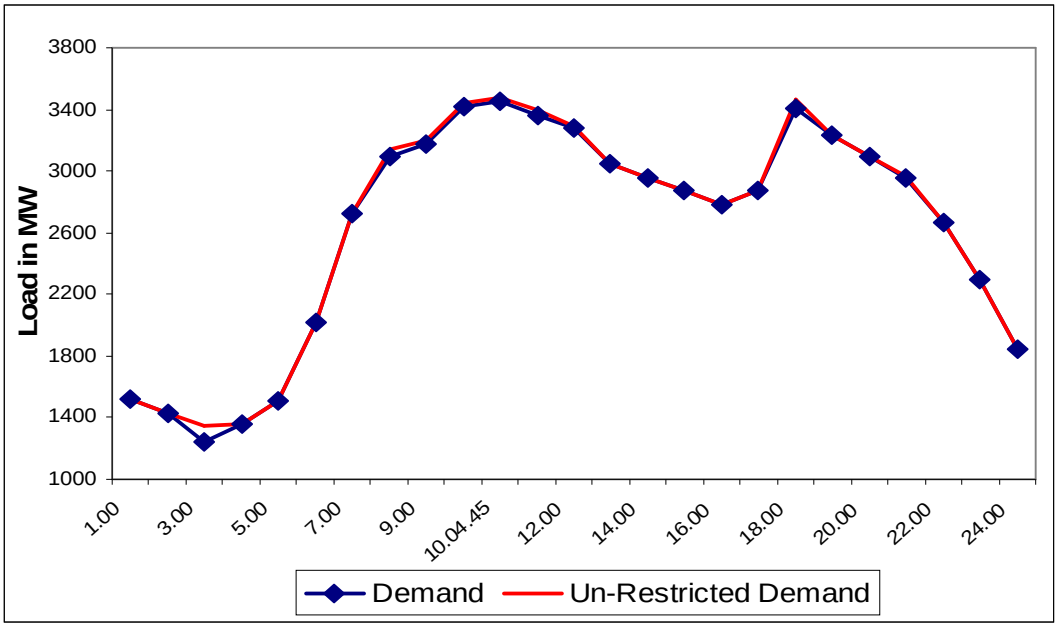
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	1519	0	1519
2.00	1428	0	1428
3.00	1243	104	1347
4.00	1364	0	1364
5.00	1510	0	1510
6.00	2022	0	2022
7.00	2721	6	2727
8.00	3098	39	3137
9.00	3178	16	3194
10.00	3419	22	3441
11.00	3363	29	3392
12.00	3283	13	3296
13.00	3050	0	3050
14.00	2951	0	2951
15.00	2878	0	2878
16.00	2777	0	2777
17.00	2869	5	2874
18.00	3410	53	3463
19.00	3229	8	3237
20.00	3092	3	3095
21.00	2960	2	2962
22.00	2661	0	2661
23.00	2299	0	2299
24.00	1841	0	1841
ENERGY IN Mus	**61.704**	**0.279**	**61.983**



8.17.2.4 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED ENERGY DEMAND DURING 2009-10 – 61.983MUs ON 08.01.2010 (Friday)

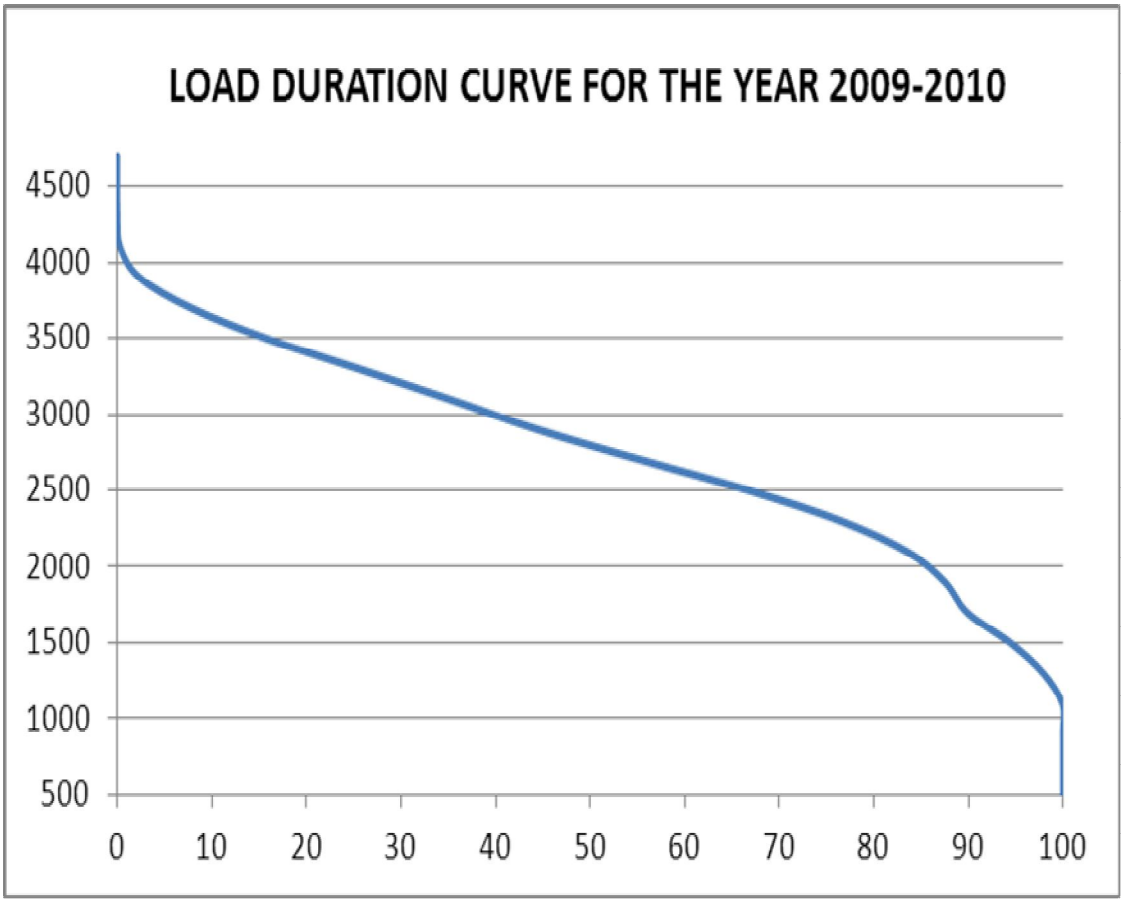
All figures in MW

Hrs.	Demand met	Load Shedding	Un-Restricted Demand
1.00	1519	0	1519
2.00	1428	0	1428
3.00	1243	104	1347
4.00	1364	0	1364
5.00	1510	0	1510
6.00	2022	0	2022
7.00	2721	6	2727
8.00	3098	39	3137
9.00	3178	16	3194
10.00	3419	22	3441
11.00	3363	29	3392
12.00	3283	13	3296
13.00	3050	0	3050
14.00	2951	0	2951
15.00	2878	0	2878
16.00	2777	0	2777
17.00	2869	5	2874
18.00	3410	53	3463
19.00	3229	8	3237
20.00	3092	3	3095
21.00	2960	2	2962
22.00	2661	0	2661
23.00	2299	0	2299
24.00	1841	0	1841
ENERGY IN Mus	**61.704**	**0.279**	**61.983**



8.18 LOAD DURATION CURVE FOR 2009-10 (Based on SCADA)

LOAD (MW)	% TIME
4500	0.00
4300	0.03
4100	0.31
3900	2.37
3700	7.85
3500	15.79
3300	25.53
3100	35.12
2900	44.43
2700	55.38
2500	66.74
2300	76.53
2100	83.56
1900	87.53
1700	89.88
1500	94.43
1300	97.94
1100	99.91
900	99.97
700	100.00



9 FREQUENCY SPECTRUM OF NORTHERN REGIONAL GRID [(NORTH-EAST-WEST)-(NEW)] FOR 2009-10

Month	Below 48.5Hz (% Time)	48.5 – 48.8Hz (% Time)	48.8-49.0Hz (% Time)	49.0-49.2 Hz (% Time)	49.2-49.5Hz (% Time)	49.5-50.0Hz (% Time)	50.0-50.3Hz (% Time)	50.3-51Hz (% Time)	Above 51.0Hz	Ave.freq. during the month	Max. freq. during the month	Min. freq. during the month
APR'09	0.00	0.12	5.41	14.10	36.73	38.81	4.52	0.31	0.00	49.46	50.16	48.87
MAY'09	0.00	0.01	1.05	5.51	23.42	52.13	15.52	2.36	0.00	49.68	50.42	48.97
JUN'09	0.00	0.33	6.67	12.33	30.01	42.09	8.07	0.49	0.00	49.51	50.25	48.90
JUL'09	0.00	0.01	1.03	3.70	23.16	60.41	11.15	0.53	0.00	49.67	50.29	48.97
AUG.'09	0.00	0.50	8.67	16.34	35.45	35.01	3.90	0.13	0.00	49.41	50.04	48.82
SEP.'09	0.00	0.37	5.69	10.23	23.79	47.34	12.07	0.51	0.00	49.41	50.04	48.82
OCT.'09	0.00	0.07	1.21	3.75	23.21	61.93	9.53	0.30	0.00	49.66	50.27	48.95
NOV.'09	0.00	0.00	0.01	0.44	7.87	56.43	29.66	5.58	0.00	49.88	50.44	49.17
DEC.'09	0.00	0.00	0.02	0.50	14.13	62.01	21.31	2.02	0.00	49.81	50.42	49.11
JAN.'10	0.00	0.00	0.48	2.84	22.78	55.84	18.54	1.51	0.01	49.71	50.44	49.00
FEB.'10	0.00	0.00	0.02	0.33	8.11	70.04	19.88	1.63	0.00	49.85	50.40	49.20
MAR'10	0.00	0.00	1.26	4.73	27.50	54.15	10.65	1.71	0.00	49.61	50.37	49.03
TOTAL 2009-10	**0.00**	**0.12**	**2.63**	**6.23**	**23.01**	**53.02**	**13.57**	**1.42**	**0.00**	**49.64**	**50.30**	**48.98**

10 DETAILS OF UNDER FREQUECY RELAY TRIPPINGS OCCURRED DURING 2009-10 IN DELHI SYSTEM.

MONTH	STAGE-1 (48.8Hz)	STAGE-2 (48.6Hz)	df/dt (49.9Hz with slop 0.1, 0.2, 0.3Hz/Sec)	TOTAL
APRIL 2009	67	0	0	67
MAY 2009	7	0	0	7
JUNE 2009	103	0	0	103
JULY 2009	11	0	2	13
AUGUST 2009	133	0	5	138
SEPTEMBER 2009	92	0	1	93
OCTOBER 2009	28	0	0	28
NOVEMBER 2009	0	0	0	0
DECEMBER 2009	2	0	0	2
JANUARY 2010	12	0	0	12
FEBRUARY 2010	0	0	0	0
MARCH 2010	42	0	0	42
TOTAL 2009-10	**497**	**--**	**8**	**505**

11 INTRASTATE TRANSMISSION LOSSES

11.1 WEEK WISE INTRASTATE TRANSMISSION LOSSES FOR 2009-10 (Based on SEM data)

Week No.	Avg Trans. Loss in %age	Actual drawal from the grid in Mus	Actual Ex-bus generation with in Delhi in Mus					
			IP	RPH	GT	PRAGATI	BTPS	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(4)+(5)+(6)+(7)+(8)
1	1.10	142.98457	12.69184	10.85336	20.58860	36.12176	53.64586	133.90142
2	1.37	205.76263	19.09246	13.63589	27.41243	49.76092	72.98119	182.88288
3	1.40	254.24914	20.16264	15.31777	27.80280	47.97518	80.40190	191.66028
4	1.41	266.56213	18.76053	15.24047	27.86870	49.25633	109.52579	220.65181
5	1.36	308.19501	15.94410	15.23540	28.05041	44.23205	110.74540	214.20735
6	1.35	291.39790	10.87240	13.33585	26.04951	49.16167	107.30662	206.72604
7	1.43	319.70242	17.53608	11.27653	27.23076	48.88866	110.56585	215.49788
8	1.53	353.98431	11.87585	11.26894	28.60658	47.01185	107.70092	206.46414
9	1.48	325.49978	16.64727	12.52063	29.81242	47.61472	99.40374	205.99878
10	1.55	365.54794	12.12637	12.87278	30.53313	41.56584	107.74372	204.84184
11	1.48	346.78193	13.10214	13.96783	28.46179	48.37528	105.33818	209.24522
12	1.55	342.59238	12.70396	13.46566	27.01755	47.98337	107.03299	208.20352
13	1.69	388.61799	11.77158	13.11642	30.24973	47.24417	111.89232	214.27423
14	1.56	365.37703	14.87668	9.84041	30.28771	47.89045	109.24301	212.13825
15	1.60	403.93517	17.21573	12.73295	30.18434	48.51219	110.05885	218.70406
16	1.56	420.83750	15.45199	8.91982	25.33876	30.77632	104.72908	185.21596
17	1.38	412.31614	17.59729	12.47634	29.00843	23.88934	105.65038	188.62178
18	1.44	401.48180	13.24081	7.60830	33.97424	23.95490	93.05888	171.83714
19	1.35	434.70934	11.54409	11.53416	34.83011	22.93155	89.50368	170.34359
20	1.34	393.48339	13.59159	12.87402	35.44165	23.24816	85.75074	170.90615
21	1.61	370.04106	8.60970	11.96270	33.46751	39.31712	89.67328	183.03031
22	1.56	376.73874	5.71841	10.83724	26.83159	48.37213	88.42513	180.18449
23	1.47	372.57057	2.81698	10.83174	24.62378	49.94666	80.17447	168.39364
24	1.37	300.52733	6.25409	7.57562	24.26975	47.73146	79.81220	165.64313
25	1.42	314.60760	10.22975	6.55563	23.17180	48.72000	99.71719	188.39437
26	1.49	351.10905	10.90318	7.40086	30.79328	48.54492	99.66382	197.30605
27	1.34	325.81973	8.95397	5.88843	31.65682	48.96206	102.28512	197.74640

Week No.	Avg Trans. Loss in %age	Actual drawal from the grid in Mus	Actual Ex-bus generation with in Delhi in Mus					
			IP	RPH	GT	PRAGATI	BTPS	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(4)+(5)+(6)+(7)+(8)
28	1.23	268.59198	4.10676	7.07022	30.71165	48.53657	98.41426	188.83945
29	1.30	244.99310	7.76911	7.62682	31.00997	50.63638	94.63145	191.67372
30	1.04	200.48133	7.33483	7.66816	31.99186	39.81724	91.82796	178.64005
31	1.44	196.72960	5.07597	7.63995	32.55824	27.62271	92.45539	165.35227
32	1.64	189.94262	-0.01419	7.65510	26.77845	47.99790	91.17247	173.58973
33	1.53	191.30012	0.01034	5.60023	25.45908	51.63637	83.90192	166.60795
34	1.36	197.72018	-0.36701	7.36541	25.84485	50.01680	71.07671	153.93676
35	1.36	186.64938	0.40250	6.97095	25.90642	50.43569	81.09920	164.81477
36	1.42	181.53813	-0.26680	15.22655	23.99175	51.52817	82.44895	172.92862
37	0.94	193.63868	-0.19543	15.06750	24.69214	52.64924	70.66570	162.87916
38	1.40	210.94470	0.41084	8.26332	25.10720	46.11937	70.16414	150.06487
39	1.41	206.11052	-0.11272	13.10408	21.58892	51.57614	77.23508	163.39150
40	1.61	199.38786	-0.20113	12.88891	23.39800	51.44352	89.43703	176.96632
41	1.50	234.80064	-0.06722	0.45029	27.33567	52.75455	102.69898	183.17227
42	1.37	260.32837	-0.15298	5.26447	26.51364	49.06884	90.47516	171.16913
43	0.85	242.00727	-0.14848	7.16833	24.12583	49.62412	100.41906	181.18885
44	1.04	214.12704	-0.33068	6.95054	23.99369	44.33221	83.53620	158.48196
45	1.06	220.94471	-0.25191	6.99978	26.30228	47.08270	70.97886	151.11172
46	1.07	206.38423	-0.21289	6.67155	29.51796	46.93206	70.76628	153.67495
47	0.89	217.90321	-0.24836	5.36521	26.85764	39.22587	75.55982	146.76018
48	1.00	210.49829	-0.29366	6.60334	24.60407	50.76722	63.97922	145.66020
49	1.11	186.39038	-0.07846	16.70172	25.77473	50.89323	65.85152	159.14275
50	1.15	208.42455	-0.11827	17.51322	25.09129	52.46390	63.98285	158.93298
51	1.55	251.89617	-0.11031	17.32791	23.92577	50.84825	59.04167	151.03330
52	1.12	269.49874	-0.20204	16.44124	28.25349	48.61523	93.36284	186.47078
53	1.44	125.99514	-0.07010	7.26420	9.86186	21.20177	44.13965	82.39738
Total 2009-10	**1.38**	**14672.65949**	**371.95918**	**552.01473**	**1444.76058**	**2381.81516**	**4701.35269**	**9451.90235**

Week	Total Consumption of Delhi at DTL periphery in Mus	Actual drawal of distribution licensees and deemed licensees in MUs							Trans. Loss in %
		NDPL	BRPL	BYPL	NDMC	MES	Total	Avg. Trans Loss in Mus	
(1)	(10)=(3)+(9)	(11)	(12)	(13)	(14)	(15)	(16)=(11)+(12)+(13)+(14)+(15)	(17)=(10)-(16)	(18)=(17)*100/10
1	276.88599	81.17028	110.16412	66.92199	13.37069	2.21853	273.84562	3.04037	1.10
2	388.64551	114.87760	153.26799	92.89086	19.17778	3.10151	383.31573	5.32978	1.37
3	445.90942	127.28197	177.58106	107.52629	23.79929	3.48574	439.67435	6.23508	1.40
4	487.21395	136.58414	196.82476	116.79219	26.36643	3.76584	480.33337	6.88057	1.41
5	522.40236	145.49768	212.27638	125.27301	28.15051	4.08151	515.27909	7.12327	1.36
6	498.12394	136.19671	206.51448	119.62164	25.19994	3.84237	491.37514	6.74880	1.35
7	535.20030	146.78481	220.71277	127.63397	28.26780	4.16115	527.56049	7.63981	1.43
8	560.44845	152.15927	231.40476	133.45060	30.56408	4.29243	551.87115	8.57731	1.53
9	531.49856	146.81801	217.39345	126.35799	29.03250	4.03333	523.63527	7.86329	1.48
10	570.38977	158.32421	232.72622	135.57395	30.63487	4.29832	561.55757	8.83221	1.55
11	556.02715	154.35784	227.06320	133.72944	28.61105	4.05638	547.81791	8.20924	1.48
12	550.79590	154.22289	224.58059	130.93076	28.33379	4.17575	542.24377	8.55213	1.55
13	602.89222	171.04935	241.14193	143.54088	32.34346	4.64994	592.72556	10.16666	1.69
14	577.51527	159.30478	235.01559	138.98833	30.77205	4.41673	568.49749	9.01778	1.56
15	622.63922	171.10286	255.41391	148.69438	32.70732	4.73891	612.65738	9.98185	1.60
16	606.05346	168.47112	247.02310	144.37013	32.05640	4.67336	596.59411	9.45935	1.56
17	600.93791	167.55972	244.64191	143.96838	31.88247	4.59523	592.64771	8.29020	1.38
18	573.31894	159.11584	232.94022	138.22017	30.48959	4.32523	565.09105	8.22788	1.44
19	605.05293	166.91071	248.50404	144.75170	32.02786	4.66498	596.85930	8.19363	1.35
20	564.38955	157.58410	230.51767	135.12659	29.17912	4.40376	556.81124	7.57830	1.34
21	553.07137	156.76869	222.15856	131.91448	29.07473	4.25746	544.17392	8.89745	1.61
22	556.92323	157.00746	224.25164	133.45192	29.26468	4.27064	548.24634	8.67689	1.56
23	540.96421	152.12707	218.76368	129.37216	28.48371	4.24450	532.99111	7.97310	1.47
24	466.17046	132.84431	184.97086	113.14800	25.11873	3.70414	459.78604	6.38442	1.37
25	503.00196	143.41539	200.00774	122.15750	26.45073	3.81817	495.84952	7.15244	1.42
26	548.41510	157.14132	220.43005	130.95435	27.67097	4.02885	540.22553	8.18957	1.49
27	523.56614	150.05516	208.40650	127.09969	27.01814	3.95566	516.53515	7.03098	1.34

Week	Total Consumption of Delhi at DTL periphery in Mus	Actual drawal of distribution licensees and deemed licensees in MUs							Trans. Loss in %
		NDPL	BRPL	BYPL	NDMC	MES	Total	Avg. Trans Loss in Mus	
(1)	(10)=(3)+(9)	(11)	(12)	(13)	(14)	(15)	(16)=(11)+(12)+(13)+(14)+(15)	(17)=(10)-(16)	(18)=(17)*100/10
28	457.43143	136.34217	175.86330	110.63200	25.35864	3.59329	451.78940	5.64203	1.23
29	436.66682	126.51892	171.64241	107.09025	22.37568	3.37731	431.00457	5.66226	1.30
30	379.12139	112.93445	148.66772	90.56891	19.88361	3.13099	375.18566	3.93572	1.04
31	362.08187	111.12670	138.66590	85.54027	18.49340	3.05385	356.88012	5.20175	1.44
32	363.53236	111.92709	139.27006	85.52245	17.78967	3.06202	357.57129	5.96106	1.64
33	357.90807	110.71707	136.98998	83.82658	17.74457	3.14066	352.41886	5.48921	1.53
34	351.65695	109.43190	134.44947	82.36689	17.36351	3.24998	346.86175	4.79520	1.36
35	351.46415	108.99352	135.41683	81.66915	17.06234	3.53676	346.67859	4.78555	1.36
36	354.46675	109.69726	136.66380	81.96956	17.44064	3.65084	349.42211	5.04465	1.42
37	356.51784	107.39365	141.72033	82.86305	17.42055	3.75176	353.14934	3.36850	0.94
38	361.00956	107.24584	143.29985	83.55059	17.97682	3.89439	355.96750	5.04207	1.40
39	369.50203	110.24473	146.46169	85.21551	18.14902	4.20743	364.27837	5.22365	1.41
40	376.35418	108.34425	150.97605	87.30322	19.09575	4.56970	370.28896	6.06522	1.61
41	417.97291	118.78404	169.35341	95.87500	22.29361	5.38804	411.69410	6.27881	1.50
42	431.49750	121.37177	175.85049	99.70444	23.02504	5.63801	425.58974	5.90776	1.37
43	423.19612	125.04306	170.72481	96.05052	22.34380	5.42086	419.58306	3.61306	0.85
44	372.60900	112.57768	147.19889	86.16262	18.36540	4.43464	368.73924	3.86976	1.04
45	372.05643	115.63064	145.92334	84.08859	18.30709	4.14865	368.09831	3.95811	1.06
46	360.05918	111.23545	141.53488	81.94767	17.66115	3.82650	356.20565	3.85353	1.07
47	364.66339	113.39986	143.53541	82.82326	17.78527	3.88108	361.42488	3.23850	0.89
48	356.15849	111.78627	139.74247	80.57839	17.13387	3.36583	352.60682	3.55167	1.00
49	345.53313	103.78365	138.27735	78.74825	17.70923	3.16601	341.68448	3.84865	1.11
50	367.35753	114.75290	143.33981	83.44482	18.38493	3.20434	363.12680	4.23073	1.15
51	402.92947	123.73800	158.46107	92.71531	18.38493	3.36515	396.66446	6.26501	1.55
52	455.96952	136.01668	182.82118	105.59413	22.82260	3.61164	450.86624	5.10328	1.12
53	208.39252	59.18972	84.98168	48.39097	11.12852	1.69249	205.38337	3.00914	1.44
Total 2009-10	**24124.56184**	**6962.96058**	**9666.52937**	**5706.70371**	**1247.54835**	**207.62260**	**23791.36461**	**333.19724**	**1.38**

11.2 MONTH WISE TRANSMISSION LOSSES FOR 2009-10

All figures in MUs

Month	NDPL	BRPL	BYPL	NDMC	MES	Total supply to disoms
1	2	3	4	5	6	7=sum(2 to 6)
Apr-09	542.74478	755.08772	453.76936	99.72057	14.94060	1866.26304
May-09	644.62569	971.05206	562.69918	124.20846	18.04180	2320.62718
Jun-09	685.48862	996.30575	585.11119	129.58890	18.56701	2415.06148
Jul-09	731.62930	1076.45823	632.48837	140.75612	20.21560	2601.54762
Aug-09	706.83048	1025.98385	604.81792	131.58783	19.39057	2488.61064
Sep-09	627.80834	881.39330	530.35879	115.24881	16.86847	2171.67771
Oct-09	557.56971	734.96475	455.08700	98.93441	14.98555	1861.54142
Nov-09	471.58006	583.96513	356.50683	74.66621	13.91951	1500.63774
Dec-09	483.25069	635.64159	371.45666	79.57937	17.58700	1587.51531
Jan-10	521.97506	727.18519	415.89288	93.94009	22.84481	1781.83803
Feb-10	452.05222	570.73610	329.43790	70.88738	15.22206	1438.33567
Mar-10	537.48096	707.88109	408.89347	88.43021	15.03962	1757.72535
Total	**6963.03591**	**9666.65476**	**5706.51956**	**1247.54835**	**207.62260**	**23791.38118**

Month	IP	GT	RPH	PPCL	BTPS	Drawal from the Grid
1	8	9	10	11	12	13
Apr-09	80.13244	63.72617	119.46286	206.36738	380.06753	1042.07082
May-09	63.45072	54.95867	123.95934	213.65576	472.20973	1426.26706
Jun-09	53.29955	56.75374	125.47913	198.91596	463.54043	1555.73266
Jul-09	70.93107	46.89337	129.76059	154.53454	465.02716	1774.10251
Aug-09	43.90948	50.07436	144.04892	147.78223	391.19611	1748.56500
Sep-09	35.60154	33.62713	111.89544	208.73097	390.78762	1425.97776
Oct-09	30.35359	32.04593	140.68097	191.05709	423.24094	1067.66575
Nov-09	-1.95636	29.96422	112.21132	211.00952	352.12385	817.70367
Dec-09	-0.25439	59.59843	103.87479	224.76854	342.92018	877.76659
Jan-10	-0.76162	22.07095	113.19812	216.96292	412.57643	1038.87227
Feb-10	-1.00681	25.63987	107.28195	184.00786	281.28419	855.73043
Mar-10	-0.57918	75.24829	112.90715	224.02239	326.37853	1042.20498
Total	**373.12004**	**550.60113**	**1444.76058**	**2381.81516**	**4701.35269**	**14672.65949**

Month	Total Injection For supply to Discoms in MUs	Losses in MUs	Losses in %	Losses in % during previous year
1	14=Sum(8to13)	15=14-7	16=15*100/14	17
Apr-09	1891.82721	25.56417	1.35	1.61
May-09	2354.50127	33.87409	1.44	1.70
Jun-09	2453.72146	38.65998	1.58	1.47
Jul-09	2641.24924	39.70162	1.50	1.50
Aug-09	2525.57610	36.96546	1.46	1.62
Sep-09	2206.62048	34.94277	1.58	1.53
Oct-09	1885.04427	23.50285	1.25	1.49
Nov-09	1521.05623	20.41849	1.34	1.55
Dec-09	1608.67415	21.15883	1.32	1.64
Jan-10	1802.91905	21.08102	1.17	1.78
Feb-10	1452.93748	14.60181	1.00	1.74
Mar-10	1780.18217	22.45681	1.26	1.55
Total	**24124.30910**	**332.92792**	**1.38**	**1.59**

12 ALLOCATION OF POWER TO DISCOMS FOR 2009-10

12.1 ALLOCATION FROM CENTRAL SECTOR

12.1.1 ALLOCATION FROM CENTRAL SECTOR GENERATING STATIONS TO DELHI W.E.F. 01.04.2009 TO 30.04.2009

A) TIME BLOCK 00.00HRS. TO 06.00HRS. & 23.00HRS. TO 24.00HRS. AND 10.00-18.00HRS @ 0% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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
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	**7802**	**1005**	**1439**	**1263**	**0**	**0**	**1263**
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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**0**	**0**	**41**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
THDC							
Tehri Hydro	1000	99	103	89	0	0	89
Total	**14136**	**1537**	**2066**	**1835**	**0**	**0**	**1835**
Allocation from ER and Tala HEP							
Farakka	1600	0	37	31	0	0	31
Kahalgaon	840	0	79	66	0	0	66
Talchar	1000	0	0	0	0	0	0
Tala HEP	1020	153	0	0	0	0	0
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	109	91	0	0	91
Total ER	**5710**	**153**	**254**	**212**	**0**	**0**	**212**
Grand Total	**19846**	**1690**	**2320**	**2047**	**0**	**0**	**2047**

B) TIME BLOCK 06.00-10.00HRS. AND 18.00-23.00HRS. @ 6% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
Singrauli STPS	2000	300	150	130	18	16	146
Rihand	1000	150	100	87	9	8	95
Rihand Stage -II	1000	150	126	109	9	8	117
ANTA GPS	419	63	44	41	4	4	44
Auriya GPS	663.36	99	72	67	4	4	71
Dadri GPS	829.78	129	91	85	3	3	88
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	1	1	22
Unchahaar-II TPS	420	63	47	41	1	1	42
Unchahaar-III TPS	210	31	29	25	2	2	27
TOTAL	**7802**	**1005**	**1439**	**1263**	**52**	**46**	**1309**

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
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
Dhauli Ganga HEP	280	42	37	35	3	2	38
Dulhasti HEP	390	58	50	48	4	3	51
TOTAL	**2954**	**154**	**335**	**318**	**9**	**9**	**327**
NPC							
Narora APS	440	64	47	41	4	3	44
RAPP(B) Unit-3 APS	220	33	0	0	6	5	5
RAPP(B) Unit-4 APS	220	33	0	0	6	5	5
TOTAL	**880**	**130**	**47**	**41**	**15**	**13**	**54**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	9	8	132
THDC							
Tehri Hydro	1000	99	103	89	6	6	95
Total	**14136**	**1537**	**2066**	**1835**	**90**	**81**	**1916**
Allocation from ER and Tala HEP							
Farakka	1600	0	37	31	0	0	31
Kahalgaon	840	0	79	66	0	0	66
Talchar	1000	0	0	0	0	0	0
Tala HEP	1020	153	0	0	0	0	0
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	109	91	4	3	94
Total ER	**5710**	**153**	**254**	**212**	**4**	**3**	**215**
Grand Total	**19846**	**1690**	**2320**	**2047**	**94**	**84**	**2131**

12.1.2 ALLOCATION FROM CENTRAL SECTOR GENERATING STATIONS TO DELHI W.E.F. 01.05.2009 TO 28.06.2009

A) TIME BLOCK 00.00HRS. TO 06.00HRS. & 23.00HRS. TO 24.00HRS. @ 0% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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
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	**7802**	**1005**	**1439**	**1263**	**0**	**0**	**1263**
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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**0**	**0**	**41**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC Tehri Hydro	1000	99	103	89	0	0	89
Total	**14136**	**1537**	**2066**	**1835**	**0**	**0**	**1835**
Allocation from ER							
Farakka	1600	0	50	42	0	0	42
Kahalgaon	840	0	74	62	0	0	62
Talchar	1000	0	13	11	0	0	11
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	108	90	0	0	90
Total ER	**5710**	**153**	**304**	**254**	**0**	**0**	**254**
Grand Total	**19846**	**1690**	**2370**	**2088**	**0**	**0**	**2088**

B) TIME BLOCK 06.00HRS. TO 12.00HRS. @ 4% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	12	10	141
Rihand	1000	150	100	87	6	5	92
Rihand Stage -II	1000	150	126	109	6	5	115
ANTA GPS	419	63	44	41	3	2	43
Auriya GPS	663.36	99	72	67	3	3	70
Dadri GPS	829.78	129	91	85	2	2	87
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	1	1	22
Unchahaar-II TPS	420	63	47	41	3	2	43
Unchahaar-III TPS	210	31	29	25	1	1	26
TOTAL	**7802**	**1005**	**1439**	**1263**	**36**	**32**	**1295**
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	2	2	40
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	2	2	37
Dulhasti HEP	390	58	50	48	2	2	50
TOTAL	**2954**	**154**	**335**	**318**	**6**	**6**	**324**
NPC							
Narora APS	440	64	47	41	3	2	43
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**3**	**2**	**43**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	6	6	129
THDC							
Tehri Hydro	1000	99	103	89	4	4	93
Total	**14136**	**1537**	**2066**	**1835**	**55**	**50**	**1884**
Allocation from ER							
Farakka	1600	0	50	42	0	0	42
Kahalgaon	840	0	74	62	0	0	62
Talchar	1000	0	13	11	0	0	11
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	110	92	2	2	94
Total ER	**5710**	**153**	**306**	**256**	**2**	**2**	**258**
Grand Total	**19846**	**1690**	**2372**	**2090**	**57**	**52**	**2142**

C) TIME BLOCK 12.00HRS. TO 19.00HRS. @ 20% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	60	52	182
Rihand	1000	150	100	87	30	26	113
Rihand Stage -II	1000	150	126	109	30	26	136
ANTA GPS	419	63	44	41	13	12	53
Auriya GPS	663.36	99	72	67	14	13	80
Dadri GPS	829.78	129	91	85	12	11	96
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	4	3	24
Unchahaar-II TPS	420	63	47	41	13	11	52
Unchahaar-III TPS	210	31	29	25	6	5	31
TOTAL	**7802**	**1005**	**1439**	**1263**	**180**	**159**	**1422**
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	11	10	48
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	8	8	43
Dulhasti HEP	390	58	50	48	12	11	59
TOTAL	**2954**	**154**	**335**	**318**	**31**	**29**	**347**
NPC							
Narora APS	440	64	47	41	13	11	52
RAPP(B) Unit-3 APS	220	33	0	0	6	5	5
RAPP(B) Unit-4 APS	220	33	0	0	6	5	5
TOTAL	**880**	**130**	**47**	**41**	**24**	**21**	**62**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	30	28	152
THDC							
Tehri Hydro	1000	99	103	89	20	19	108
Total	**14136**	**1537**	**2066**	**1835**	**285**	**256**	**2091**
Allocation from ER							
Farakka	1600	0	50	42	0	0	42
Kahalgaon	840	0	74	62	0	0	62
Talchar	1000	0	13	11	0	0	11
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	108	90	12	10	100
Total ER	**5710**	**153**	**304**	**254**	**12**	**10**	**263**
Grand Total	**19846**	**1690**	**2370**	**2088**	**296**	**266**	**2354**

D) TIME BLOCK 19.00HRS. TO 23.00HRS. @ 26% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	78	68	198
Rihand	1000	150	100	87	39	34	121
Rihand Stage -II	1000	150	126	109	39	34	143
ANTA GPS	419	63	44	41	16	15	56
Auriya GPS	663.36	99	72	67	18	17	84
Dadri GPS	829.78	129	91	85	15	14	99
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	5	5	25
Unchahaar-II TPS	420	63	47	41	16	14	55
Unchahaar-III TPS	210	31	29	25	8	7	32
TOTAL	**7802**	**1005**	**1439**	**1263**	**235**	**207**	**1470**
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	14	13	51
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	11	10	46
Dulhasti HEP	390	58	50	48	15	14	62
TOTAL	**2954**	**154**	**335**	**318**	**40**	**38**	**356**
NPC							
Narora APS	440	64	47	41	17	14	55
RAPP(B) Unit-3 APS	220	33	0	0	7	6	6
RAPP(B) Unit-4 APS	220	33	0	0	7	6	6
TOTAL	**880**	**130**	**47**	**41**	**31**	**27**	**67**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	39	37	160
THDC							
Tehri Hydro	1000	99	103	89	26	24	114
Total	**14136**	**1537**	**2066**	**1835**	**370**	**333**	**2168**
Allocation from ER							
Farakka	1600	0	50	42	0	0	42
Kahalgaon	840	0	74	62	0	0	62
Talchar	1000	0	13	11	0	0	11
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	108	90	15	13	103
Total ER	**5710**	**153**	**304**	**254**	**15**	**13**	**266**
Grand Total	**19846**	**1690**	**2370**	**2088**	**385**	**346**	**2434**

12.1.3 ALLOCATION FROM CENTRAL SECTOR GENERATING STATIONS TO DELHI W.E.F. 29.06.2009 TO 10.07.2009

A) TIME BLOCK 00.00HRS. TO 06.00HRS. & 023.00hrs. To 24.00hrs@ 0% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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
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	**7802**	**1005**	**1439**	**1263**	**0**	**0**	**1263**
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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**0**	**0**	**41**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC Tehri Hydro	1000	99	103	89	0	0	89
Total	**14136**	**1537**	**2066**	**1835**	**0**	**0**	**1835**
Allocation from ER							
Farakka	1600	0	50	42	0	0	42
Kahalgaon	840	0	74	62	0	0	62
Talchar	1000	0	13	11	0	0	11
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	108	90	0	0	90
Total ER	**5710**	**153**	**304**	**254**	**0**	**0**	**254**
Grand Total	**19846**	**1690**	**2370**	**2088**	**0**	**0**	**2088**

B) TIME BLOCK 12.00-19.00HRS. WITH 20% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	60	52	182
Rihand	1000	150	100	87	30	26	113
Rihand Stage -II	1000	150	126	109	30	26	136
ANTA GPS	419	63	44	41	13	12	53
Auriya GPS	663.36	99	72	67	14	13	80
Dadri GPS	829.78	129	91	85	12	11	96
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	4	3	24
Unchahaar-II TPS	420	63	47	41	13	11	52
Unchahaar-III TPS	210	31	29	25	6	5	31
TOTAL	**7802**	**1005**	**1439**	**1263**	**180**	**159**	**1422**
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	11	10	48
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	8	8	43
Dulhasti HEP	390	58	50	48	12	11	59
TOTAL	**2954**	**154**	**335**	**318**	**31**	**29**	**347**
NPC							
Narora APS	440	64	47	41	13	11	52
RAPP(B) Unit-3 APS	220	33	0	0	6	5	5
RAPP(B) Unit-4 APS	220	33	0	0	6	5	5
TOTAL	**880**	**130**	**47**	**41**	**24**	**21**	**62**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	30	28	152
THDC							
Tehri Hydro	1000	99	103	89	20	19	108
Total	**14136**	**1537**	**2066**	**1835**	**285**	**256**	**2091**
Allocation from ER							
Farakka	1600	0	50	42	0	0	42
Kahalgaon	840	0	74	62	0	0	62
Talchar	1000	0	13	11	0	0	11
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	108	90	12	10	100
Total ER	**5710**	**153**	**304**	**254**	**12**	**10**	**263**
Grand Total	**19846**	**1690**	**2370**	**2088**	**296**	**266**	**2354**

C) TIME BLOCK 19.00-23.00HRS. WITH 26% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	78	68	198
Rihand	1000	150	100	87	39	34	121
Rihand Stage -II	1000	150	126	109	39	34	143
ANTA GPS	419	63	44	41	16	15	56
Auriya GPS	663.36	99	72	67	18	17	84
Dadri GPS	829.78	129	91	85	15	14	99
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	5	5	25
Unchahaar-II TPS	420	63	47	41	16	14	55
Unchahaar-III TPS	210	31	29	25	8	7	32
TOTAL	**7802**	**1005**	**1439**	**1263**	**235**	**207**	**1470**
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	14	13	51
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	11	10	46
Dulhasti HEP	390	58	50	48	15	14	62
TOTAL	**2954**	**154**	**335**	**318**	**40**	**38**	**356**
NPC							
Narora APS	440	64	47	41	17	14	55
RAPP(B) Unit-3 APS	220	33	0	0	7	6	6
RAPP(B) Unit-4 APS	220	33	0	0	7	6	6
TOTAL	**880**	**130**	**47**	**41**	**31**	**27**	**67**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	39	37	160
THDC							
Tehri Hydro	1000	99	103	89	26	24	114
Total	**14136**	**1537**	**2066**	**1835**	**370**	**333**	**2168**
Allocation from ER							
Farakka	1600	0	50	42	0	0	42
Kahalgaon	840	0	74	62	0	0	62
Talchar	1000	0	13	11	0	0	11
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	108	90	15	13	103
Total ER	**5710**	**153**	**304**	**254**	**15**	**13**	**266**
Grand Total	**19846**	**1690**	**2370**	**2088**	**385**	**346**	**2434**

D) TIME BLOCK 06.00-12.00HRS. WITH 4% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	12	10	141
Rihand	1000	150	100	87	6	5	92
Rihand Stage -II	1000	150	126	109	6	5	115
ANTA GPS	419	63	44	41	3	2	43
Auriya GPS	663.36	99	72	67	3	3	70
Dadri GPS	829.78	129	91	85	2	2	87
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	1	1	22
Unchahaar-II TPS	420	63	47	41	3	2	43
Unchahaar-III TPS	210	31	29	25	1	1	26
TOTAL	**7802**	**1005**	**1439**	**1263**	**36**	**32**	**1295**
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	2	2	40
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	2	2	37
Dulhasti HEP	390	58	50	48	2	2	50
TOTAL	**2954**	**154**	**335**	**318**	**6**	**6**	**324**
NPC							
Narora APS	440	64	47	41	3	2	43
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**3**	**2**	**43**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	6	6	129
THDC							
Tehri Hydro	1000	99	103	89	4	4	93
Total	**14136**	**1537**	**2066**	**1835**	**55**	**50**	**1884**
Allocation from ER							
Farakka	1600	0	50	42	0	0	42
Kahalgaon	840	0	74	62	0	0	62
Talchar	1000	0	13	11	0	0	11
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	110	92	2	2	94
Total ER	**5710**	**153**	**306**	**256**	**2**	**2**	**258**
Grand Total	**19846**	**1690**	**2372**	**2090**	**57**	**52**	**2142**

12.1.4 ALLOCATION FROM CENTRAL SECTOR GENERATING STATIONS TO DELHI W.E.F. 11.07.2009 TO 17.07.2009

A) TIME BLOCK 00.00HRS. TO 06.00HRS. & 023.00HRS. TO 24.00HRS@ 0% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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
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	**7802**	**1005**	**1439**	**1263**	**0**	**0**	**1263**
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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**0**	**0**	**41**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC Tehri Hydro	1000	99	103	89	0	0	89
Total	**14136**	**1537**	**2066**	**1835**	**0**	**0**	**1835**
Allocation from ER							
Farakka	1600	0	50	42	0	0	42
Kahalgaon	840	0	74	62	0	0	62
Talchar	1000	0	13	11	0	0	11
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	108	90	0	0	90
Total ER	**5710**	**153**	**304**	**254**	**0**	**0**	**254**
Grand Total	**19846**	**1690**	**2370**	**2088**	**0**	**0**	**2088**

B) TIME BLOCK 12.00-19.00HRS. WITH 20% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	60	52	182
Rihand	1000	150	100	87	30	26	113
Rihand Stage -II	1000	150	126	109	30	26	136
ANTA GPS	419	63	44	41	13	12	53
Auriya GPS	663.36	99	72	67	14	13	80
Dadri GPS	829.78	129	91	85	12	11	96
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	4	3	24
Unchahaar-II TPS	420	63	47	41	13	11	52
Unchahaar-III TPS	210	31	29	25	6	5	31
TOTAL	**7802**	**1005**	**1439**	**1263**	**180**	**159**	**1422**
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	11	10	48
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	8	8	43
Dulhasti HEP	390	58	50	48	12	11	59
TOTAL	**2954**	**154**	**335**	**318**	**31**	**29**	**347**
NPC							
Narora APS	440	64	47	41	13	11	52
RAPP(B) Unit-3 APS	220	33	0	0	6	5	5
RAPP(B) Unit-4 APS	220	33	0	0	6	5	5
TOTAL	**880**	**130**	**47**	**41**	**24**	**21**	**62**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	30	28	152
THDC Tehri Hydro	1000	99	103	89	20	19	108
Total	**14136**	**1537**	**2066**	**1835**	**285**	**256**	**2091**
Allocation from ER							
Farakka	1600	0	50	42	0	0	42
Kahalgaon	840	0	74	62	0	0	62
Talchar	1000	0	13	11	0	0	11
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	108	90	12	10	100
Total ER	**5710**	**153**	**304**	**254**	**12**	**10**	**263**
Grand Total	**19846**	**1690**	**2370**	**2088**	**296**	**266**	**2354**

C) TIME BLOCK 19.00HRS. - 23.00HRS. WITH 26% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	78	68	198
Rihand	1000	150	100	87	39	34	121
Rihand Stage -II	1000	150	126	109	39	34	143
ANTA GPS	419	63	44	41	16	15	56
Auriya GPS	663.36	99	72	67	18	17	84
Dadri GPS	829.78	129	91	85	15	14	99
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	5	5	25
Unchahaar-II TPS	420	63	47	41	16	14	55
Unchahaar-III TPS	210	31	29	25	8	7	32
TOTAL	**7802**	**1005**	**1439**	**1263**	**235**	**207**	**1470**
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	14	13	51
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	11	10	46
Dulhasti HEP	390	58	50	48	15	14	62
TOTAL	**2954**	**154**	**335**	**318**	**40**	**38**	**356**
NPC							
Narora APS	440	64	47	41	17	14	55
RAPP(B) Unit-3 APS	220	33	0	0	7	6	6
RAPP(B) Unit-4 APS	220	33	0	0	7	6	6
TOTAL	**880**	**130**	**47**	**41**	**31**	**27**	**67**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	39	37	160
THDC Tehri Hydro	1000	99	103	89	26	24	114
Total	**14136**	**1537**	**2066**	**1835**	**370**	**333**	**2168**
Allocation from ER							
Farakka	1600	0	50	42	0	0	42
Kahalgaon	840	0	74	62	0	0	62
Talchar	1000	0	13	11	0	0	11
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	108	90	15	13	103
Total ER	**5710**	**153**	**304**	**254**	**15**	**13**	**266**
Grand Total	**19846**	**1690**	**2370**	**2088**	**385**	**346**	**2434**

D) TIME BLOCK 19.00-23.00HRS. WITH 26% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	78	68	198
Rihand	1000	150	100	87	39	34	121
Rihand Stage -II	1000	150	126	109	39	34	143
ANTA GPS	419	63	44	41	16	15	56
Auriya GPS	663.36	99	72	67	18	17	84
Dadri GPS	829.78	129	91	85	15	14	99
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	5	5	25
Unchahaar-II TPS	420	63	47	41	16	14	55
Unchahaar-III TPS	210	31	29	25	8	7	32
TOTAL	**7802**	**1005**	**1439**	**1263**	**235**	**207**	**1470**
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	14	13	51
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	11	10	46
Dulhasti HEP	390	58	50	48	15	14	62
TOTAL	**2954**	**154**	**335**	**318**	**40**	**38**	**356**
NPC							
Narora APS	440	64	47	41	17	14	55
RAPP(B) Unit-3 APS	220	33	0	0	7	6	6
RAPP(B) Unit-4 APS	220	33	0	0	7	6	6
TOTAL	**880**	**130**	**47**	**41**	**31**	**27**	**67**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	39	37	160
THDC Tehri Hydro	1000	99	103	89	26	24	114
Total	**14136**	**1537**	**2066**	**1835**	**370**	**333**	**2168**
Allocation from ER							
Farakka	1600	0	50	42	0	0	42
Kahalgaon	840	0	74	62	0	0	62
Talchar	1000	0	13	11	0	0	11
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1000	0	108	90	15	13	103
Total ER	**5710**	**153**	**304**	**254**	**15**	**13**	**266**
Grand Total	**19846**	**1690**	**2370**	**2088**	**385**	**346**	**2434**

E) TIME BLOCK 06.00-12.00HRS. WITH 4% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
Singrauli STPS	2000	300	150	130	12	10	141
Rihand	1000	150	100	87	6	5	92
Rihand Stage -II	1000	150	126	109	6	5	115
ANTA GPS	419	63	44	41	3	2	43
Auriya GPS	663.36	99	72	67	3	3	70
Dadri GPS	829.78	129	91	85	2	2	87
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	1	1	22
Unchahaar-II TPS	420	63	47	41	3	2	43
Unchahaar-III TPS	210	31	29	25	1	1	26
TOTAL	**7802**	**1005**	**1439**	**1263**	**36**	**32**	**1295**
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	2	2	40
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	2	2	37
Dulhasti HEP	390	58	50	48	2	2	50
TOTAL	**2954**	**154**	**335**	**318**	**6**	**6**	**324**
NPC							
Narora APS	440	64	47	41	3	2	43
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**3**	**2**	**43**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	6	6	129
THDC							
Tehri Hydro	1000	99	103	89	4	4	93
Total	**14136**	**1537**	**2066**	**1835**	**55**	**50**	**1884**
Allocation from ER and Tala HEP							

12.1.5 ALLOCATION FROM CENTRAL SECTOR GENERATING STATIONS TO DELHI W.E.F. 18.07.2009 TO 28.07.2009

A) TIME BLOCK 00.00HRS. TO 06.00HRS. & 023.00HRS. TO 24.00HRS@ 0% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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
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	**7802**	**1005**	**1439**	**1263**	**0**	**0**	**1263**
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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**0**	**0**	**41**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC Tehri Hydro	1000	99	103	89	0	0	89
Total	**14136**	**1537**	**2066**	**1835**	**0**	**0**	**1835**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	0	0	90
Total ER	**5710**	**153**	**260**	**217**	**0**	**0**	**217**
Grand Total	**19846**	**1690**	**2326**	**2052**	**0**	**0**	**2052**

B) TIME BLOCK 12.00-19.00HRS. WITH 20% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	60	52	182
Rihand	1000	150	100	87	30	26	113
Rihand Stage -II	1000	150	126	109	30	26	136
ANTA GPS	419	63	44	41	13	12	53
Auriya GPS	663.36	99	72	67	14	13	80
Dadri GPS	829.78	129	91	85	12	11	96
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	4	3	24
Unchahaar-II TPS	420	63	47	41	13	11	52
Unchahaar-III TPS	210	31	29	25	6	5	31
TOTAL	**7802**	**1005**	**1439**	**1263**	**180**	**159**	**1422**
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	11	10	48
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	8	8	43
Dulhasti HEP	390	58	50	48	12	11	59
TOTAL	**2954**	**154**	**335**	**318**	**31**	**29**	**347**
NPC							
Narora APS	440	64	47	41	13	11	52
RAPP(B) Unit-3 APS	220	33	0	0	6	5	5
RAPP(B) Unit-4 APS	220	33	0	0	6	5	5
TOTAL	**880**	**130**	**47**	**41**	**24**	**21**	**62**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	30	28	152
THDC							
Tehri Hydro	1000	99	103	89	20	19	108
Total	**14136**	**1537**	**2066**	**1835**	**285**	**256**	**2091**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	12	10	100
Total ER	**5710**	**153**	**260**	**217**	**12**	**10**	**227**
Grand Total	**19846**	**1690**	**2326**	**2052**	**296**	**266**	**2318**

C) TIME BLOCK 19.00-23.00HRS. WITH 26% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	78	68	198
Rihand	1000	150	100	87	39	34	121
Rihand Stage -II	1000	150	126	109	39	34	143
ANTA GPS	419	63	44	41	16	15	56
Auriya GPS	663.36	99	72	67	18	17	84
Dadri GPS	829.78	129	91	85	15	14	99
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	5	5	25
Unchahaar-II TPS	420	63	47	41	16	14	55
Unchahaar-III TPS	210	31	29	25	8	7	32
TOTAL	**7802**	**1005**	**1439**	**1263**	**235**	**207**	**1470**
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	14	13	51
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	11	10	46
Dulhasti HEP	390	58	50	48	15	14	62
TOTAL	**2954**	**154**	**335**	**318**	**40**	**38**	**356**
NPC							
Narora APS	440	64	47	41	17	14	55
RAPP(B) Unit-3 APS	220	33	0	0	7	6	6
RAPP(B) Unit-4 APS	220	33	0	0	7	6	6
TOTAL	**880**	**130**	**47**	**41**	**31**	**27**	**67**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	39	37	160
THDC							
Tehri Hydro	1000	99	103	89	26	24	114
Total	**14136**	**1537**	**2066**	**1835**	**370**	**333**	**2168**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	15	13	103
Total ER	**5710**	**153**	**260**	**217**	**15**	**13**	**230**
Grand Total	**19846**	**1690**	**2326**	**2052**	**385**	**346**	**2398**

D) TIME BLOCK 06.00-12.00HRS. WITH 4% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	12	10	141
Rihand	1000	150	100	87	6	5	92
Rihand Stage -II	1000	150	126	109	6	5	115
ANTA GPS	419	63	44	41	3	2	43
Auriya GPS	663.36	99	72	67	3	3	70
Dadri GPS	829.78	129	91	85	2	2	87
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	1	1	22
Unchahaar-II TPS	420	63	47	41	3	2	43
Unchahaar-III TPS	210	31	29	25	1	1	26
TOTAL	**7802**	**1005**	**1439**	**1263**	**36**	**32**	**1295**
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	2	2	40
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	2	2	37
Dulhasti HEP	390	58	50	48	2	2	50
TOTAL	**2954**	**154**	**335**	**318**	**6**	**6**	**324**
NPC							
Narora APS	440	64	47	41	3	2	43
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**3**	**2**	**43**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	6	6	129
THDC Tehri Hydro	1000	99	103	89	4	4	93
Total	**14136**	**1537**	**2066**	**1835**	**55**	**50**	**1884**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	2	2	92
Total ER	**5710**	**153**	**260**	**217**	**2**	**2**	**219**
Grand Total	**19846**	**1690**	**2326**	**2052**	**57**	**52**	**2103**

12.1.6 ALLOCATION FROM CENTRAL SECTOR GENERATING STATIONS TO DELHI W.E.F. 29.07.2009 TO 21.08.2009

A) TIME BLOCK 00.00HRS. TO 12.00HRS. & 023.00HRS. TO 24.00HRS@ 0% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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
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	**7802**	**1005**	**1439**	**1263**	**0**	**0**	**1263**
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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**0**	**0**	**41**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC Tehri Hydro	1000	99	103	89	0	0	89
Total	**14136**	**1537**	**2066**	**1835**	**0**	**0**	**1835**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	0	0	90
Total ER	**5710**	**153**	**260**	**217**	**0**	**0**	**217**
Grand Total	**19846**	**1690**	**2326**	**2052**	**0**	**0**	**2052**

B) TIME BLOCK 12.00-19.00HRS. WITH 20% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	60	52	182
Rihand	1000	150	100	87	30	26	113
Rihand Stage -II	1000	150	126	109	30	26	136
ANTA GPS	419	63	44	41	13	12	53
Auriya GPS	663.36	99	72	67	14	13	80
Dadri GPS	829.78	129	91	85	12	11	96
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	4	3	24
Unchahaar-II TPS	420	63	47	41	13	11	52
Unchahaar-III TPS	210	31	29	25	6	5	31
TOTAL	**7802**	**1005**	**1439**	**1263**	**180**	**159**	**1422**
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	11	10	48
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	8	8	43
Dulhasti HEP	390	58	50	48	12	11	59
TOTAL	**2954**	**154**	**335**	**318**	**31**	**29**	**347**
NPC							
Narora APS	440	64	47	41	13	11	52
RAPP(B) Unit-3 APS	220	33	0	0	6	5	5
RAPP(B) Unit-4 APS	220	33	0	0	6	5	5
TOTAL	**880**	**130**	**47**	**41**	**24**	**21**	**62**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	30	28	152
THDC							
Tehri Hydro	1000	99	103	89	20	19	108
Total	**14136**	**1537**	**2066**	**1835**	**285**	**256**	**2091**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	12	10	100
Total ER	**5710**	**153**	**260**	**217**	**12**	**10**	**227**
Grand Total	**19846**	**1690**	**2326**	**2052**	**296**	**266**	**2318**

C) TIME BLOCK 19.00-23.00HRS. WITH 22% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	66	57	188
Rihand	1000	150	100	87	33	28	115
Rihand Stage -II	1000	150	126	109	33	29	138
ANTA GPS	419	63	44	41	14	13	54
Auriya GPS	663.36	99	72	67	15	14	81
Dadri GPS	829.78	129	91	85	13	12	97
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	4	4	25
Unchahaar-II TPS	420	63	47	41	14	12	53
Unchahaar-III TPS	210	31	29	25	7	6	31
TOTAL	**7802**	**1005**	**1439**	**1263**	**199**	**175**	**1438**
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	12	11	49
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	9	9	44
Dulhasti HEP	390	58	50	48	13	12	60
TOTAL	**2954**	**154**	**335**	**318**	**34**	**32**	**350**
NPC							
Narora APS	440	64	47	41	14	12	53
RAPP(B) Unit-3 APS	220	33	0	0	7	6	6
RAPP(B) Unit-4 APS	220	33	0	0	7	6	6
TOTAL	**880**	**130**	**47**	**41**	**28**	**24**	**65**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	33	31	154
THDC							
Tehri Hydro	1000	99	103	89	22	21	110
Total	**14136**	**1537**	**2066**	**1835**	**315**	**284**	**2119**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	13	11	101
Total ER	**5710**	**153**	**260**	**217**	**13**	**11**	**228**
Grand Total	**19846**	**1690**	**2326**	**2052**	**328**	**295**	**2346**

12.1.7 ALLOCATION FROM CENTRAL SECTOR GENERATING STATIONS TO DELHI W.E.F. 22.08.2009 TO 29.08.2009

A) TIME BLOCK 00.00HRS. TO 12.00HRS. & 023.00HRS. TO 24.00HRS@ 0% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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
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	**7802**	**1005**	**1439**	**1263**	**0**	**0**	**1263**
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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**0**	**0**	**41**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC Tehri Hydro	1000	99	103	89	0	0	89
Total	**14136**	**1537**	**2066**	**1835**	**0**	**0**	**1835**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	0	0	90
Total ER	**5710**	**153**	**260**	**217**	**0**	**0**	**217**
Grand Total	**19846**	**1690**	**2326**	**2052**	**0**	**0**	**2052**

B) TIME BLOCK 12.00-19.00HRS. WITH 20% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	60	52	182
Rihand	1000	150	100	87	30	26	113
Rihand Stage -II	1000	150	126	109	30	26	136
ANTA GPS	419	63	44	41	13	12	53
Auriya GPS	663.36	99	72	67	14	13	80
Dadri GPS	829.78	129	91	85	12	11	96
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	4	3	24
Unchahaar-II TPS	420	63	47	41	13	11	52
Unchahaar-III TPS	210	31	29	25	6	5	31
TOTAL	**7802**	**1005**	**1439**	**1263**	**181**	**159**	**1422**
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	11	10	48
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	8	8	43
Dulhasti HEP	390	58	50	48	12	11	59
TOTAL	**2954**	**154**	**335**	**318**	**31**	**29**	**347**
NPC							
Narora APS	440	64	47	41	13	11	52
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**13**	**11**	**52**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	30	28	152
THDC Tehri Hydro	1000	99	103	89	20	19	108
Total	**14136**	**1537**	**2066**	**1835**	**274**	**247**	**2082**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	12	10	100
Total ER	**5710**	**153**	**260**	**217**	**12**	**10**	**227**
Grand Total	**19846**	**1690**	**2326**	**2052**	**286**	**257**	**2308**

C) TIME BLOCK 19.00-23.00HRS. WITH 22% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	66	57	188
Rihand	1000	150	100	87	33	28	115
Rihand Stage -II	1000	150	126	109	33	29	138
ANTA GPS	419	63	44	41	14	13	54
Auriya GPS	663.36	99	72	67	15	14	81
Dadri GPS	829.78	129	91	85	13	12	97
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	4	4	25
Unchahaar-II TPS	420	63	47	41	14	12	53
Unchahaar-III TPS	210	31	29	25	7	6	31
TOTAL	**7802**	**1005**	**1439**	**1263**	**199**	**175**	**1438**
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	12	11	49
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	9	9	44
Dulhasti HEP	390	58	50	48	13	12	60
TOTAL	**2954**	**154**	**335**	**318**	**34**	**32**	**350**
NPC							
Narora APS	440	64	47	41	14	12	53
RAPP(B) Unit-3 APS	220	33	0	0	7	6	6
RAPP(B) Unit-4 APS	220	33	0	0	7	6	6
TOTAL	**880**	**130**	**47**	**41**	**28**	**24**	**65**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	33	31	154
THDC							
Tehri Hydro	1000	99	103	89	22	21	110
Total	**14136**	**1537**	**2066**	**1835**	**315**	**284**	**2119**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	13	11	101
Total ER	**5710**	**153**	**260**	**217**	**13**	**11**	**228**
Grand Total	**19846**	**1690**	**2326**	**2052**	**328**	**295**	**2346**

12.1.8 ALLOCATION FROM CENTRAL SECTOR GENERATING STATIONS TO DELHI W.E.F. 30.08.2009 TO 14.11.2009

A) TIME BLOCK 00.00HRS. TO 12.00HRS. & 023.00HRS. TO 24.00HRS@ 0% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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
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	**7802**	**1005**	**1439**	**1263**	**0**	**0**	**1263**
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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**0**	**0**	**41**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC Tehri Hydro	1000	99	103	89	0	0	89
Total	**14136**	**1537**	**2066**	**1835**	**0**	**0**	**1835**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	0	0	90
Total ER	**5710**	**153**	**260**	**217**	**0**	**0**	**217**
Grand Total	**19846**	**1690**	**2326**	**2052**	**0**	**0**	**2052**

B) TIME BLOCK 12.00-19.00HRS. WITH 18.18% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	55	47	178
Rihand	1000	150	100	87	27	24	110
Rihand Stage -II	1000	150	126	109	27	24	133
ANTA GPS	419	63	44	41	11	11	52
Auriya GPS	663.36	99	72	67	13	12	79
Dadri GPS	829.78	129	91	85	11	10	95
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	4	3	24
Unchahaar-II TPS	420	63	47	41	11	10	51
Unchahaar-III TPS	210	31	29	25	6	5	30
TOTAL	**7802**	**1005**	**1439**	**1263**	**164**	**145**	**1408**
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	10	9	47
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	8	7	42
Dulhasti HEP	390	58	50	48	11	10	58
TOTAL	**2954**	**154**	**335**	**318**	**28**	**27**	**345**
NPC							
Narora APS	440	64	47	41	12	10	51
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**12**	**10**	**51**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	27	26	149
THDC							
Tehri Hydro	1000	99	103	89	18	17	107
Total	**14136**	**1537**	**2066**	**1835**	**249**	**224**	**2059**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	11	9	99
Total ER	**5710**	**153**	**260**	**217**	**11**	**9**	**226**
Grand Total	**19846**	**1690**	**2326**	**2052**	**260**	**233**	**2285**

C) TIME BLOCK 19.00-23.00HRS. WITH 20.18% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	61	53	183
Rihand	1000	150	100	87	30	26	113
Rihand Stage -II	1000	150	126	109	30	26	136
ANTA GPS	419	63	44	41	13	12	53
Auriya GPS	663.36	99	72	67	14	13	80
Dadri GPS	829.78	129	91	85	12	11	96
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	4	4	24
Unchahaar-II TPS	420	63	47	41	13	11	52
Unchahaar-III TPS	210	31	29	25	6	5	31
TOTAL	**7802**	**1005**	**1439**	**1263**	**182**	**161**	**1424**
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	11	10	48
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	8	8	43
Dulhasti HEP	390	58	50	48	12	11	59
TOTAL	**2954**	**154**	**335**	**318**	**31**	**30**	**348**
NPC							
Narora APS	440	64	47	41	13	11	52
RAPP(B) Unit-3 APS	220	33	0	0	7	6	6
RAPP(B) Unit-4 APS	220	33	0	0	7	6	6
TOTAL	**880**	**130**	**47**	**41**	**27**	**23**	**64**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	30	29	152
THDC							
Tehri Hydro	1000	99	103	89	20	19	108
Total	**14136**	**1537**	**2066**	**1835**	**291**	**261**	**2096**
Allocation from ER and Tala HEP							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	12	10	100
Total ER	**5710**	**153**	**260**	**217**	**12**	**10**	**227**
Grand Total	**19846**	**1690**	**2326**	**2052**	**302**	**271**	**2323**

12.1.9 ALLOCATION FROM CENTRAL SECTOR GENERATING STATIONS TO DELHI W.E.F. 15.11.2009 TO 28.02.2010

A) TIME BLOCK 00.00HRS - 06.00HRS, 10.00HRS. - 18.00HRS AND 23.00HRS. - 24.00HRS. @ 0% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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
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	**7802**	**1005**	**1439**	**1263**	**0**	**0**	**1263**
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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**0**	**0**	**41**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC Tehri Hydro	1000	99	103	89	0	0	89
Total	**14136**	**1537**	**2066**	**1835**	**0**	**0**	**1835**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	0	0	90
Total ER	**5710**	**153**	**260**	**217**	**0**	**0**	**217**
Grand Total	**19846**	**1690**	**2326**	**2052**	**0**	**0**	**2052**

B) TIME BLOCK 18.00HRS. TO 23HRS. @ 4% ALLOCATION FROM UN-ALLOCATED QUOTA (WITH RAPP UNIT-3 & 4)

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	12	10	141
Rihand	1000	150	100	87	6	5	92
Rihand Stage -II	1000	150	126	109	6	5	115
ANTA GPS	419	63	44	41	3	2	43
Auriya GPS	663.36	99	72	67	3	3	70
Dadri GPS	829.78	129	91	85	2	2	87
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	1	1	22
Unchahaar-II TPS	420	63	47	41	3	2	43
Unchahaar-III TPS	210	31	29	25	1	1	26
TOTAL	**7802**	**1005**	**1439**	**1263**	**36**	**32**	**1295**
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	2	2	40
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	2	2	37
Dulhasti HEP	390	58	50	48	2	2	50
TOTAL	**2954**	**154**	**335**	**318**	**6**	**6**	**324**
NPC							
Narora APS	440	64	47	41	3	2	43
RAPP(B) Unit-3 APS	220	33	0	0	1	1	1
RAPP(B) Unit-4 APS	220	33	0	0	1	1	1
TOTAL	**880**	**130**	**47**	**41**	**4**	**3**	**44**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	6	6	129
THDC							
Tehri Hydro	1000	99	103	89	4	4	93
Total	**14136**	**1537**	**2066**	**1835**	**56**	**51**	**1886**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	2	2	92
Total ER	**5710**	**153**	**260**	**217**	**2**	**2**	**219**
Grand Total	**19846**	**1690**	**2326**	**2052**	**59**	**53**	**2104**

C) TIME BLOCK 18.00HRS. TO 23HRS. @ 4% ALLOCATION FROM UN-ALLOCATED QUOTA (WITH RAPP UNIT-3 & 4)

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	12	10	141
Rihand	1000	150	100	87	6	5	92
Rihand Stage -II	1000	150	126	109	6	5	115
ANTA GPS	419	63	44	41	3	2	43
Auriya GPS	663.36	99	72	67	3	3	70
Dadri GPS	829.78	129	91	85	2	2	87
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Unchahaar-I TPS	420	20	24	21	1	1	22
Unchahaar-II TPS	420	63	47	41	3	2	43
Unchahaar-III TPS	210	31	29	25	1	1	26
TOTAL	**7802**	**1005**	**1439**	**1263**	**36**	**32**	**1295**
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	2	2	40
URI HEP	480	0	53	50	0	0	50
Dhauli Ganga HEP	280	42	37	35	2	2	37
Dulhasti HEP	390	58	50	48	2	2	50
TOTAL	**2954**	**154**	**335**	**318**	**6**	**6**	**324**
NPC							
Narora APS	440	64	47	41	3	2	43
RAPP(B) Unit-3 APS	220	33	0	0	0	0	0
RAPP(B) Unit-4 APS	220	33	0	0	0	0	0
TOTAL	**880**	**130**	**47**	**41**	**3**	**2**	**43**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	6	6	129
THDC							
Tehri Hydro	1000	99	103	89	4	4	93
Total	**14136**	**1537**	**2066**	**1835**	**55**	**50**	**1884**
Allocation from ER and Tala HEP							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	2	2	92
Total ER	**5710**	**153**	**260**	**217**	**2**	**2**	**219**
Grand Total	**19846**	**1690**	**2326**	**2052**	**57**	**51**	**2103**

12.1.10ALLOCATION FROM CENTRAL SECTOR GENERATING STATIONS TO DELHI W.E.F. 01.03.2010 TO 12.03.2010

A) TIME BLOCK 00.00HRS.- 18.00HRS AND 23.00HRS. - 24.00HRS. @ 0% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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)-II	490	0	441	383	0	0	383
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	**8292**	**1005**	**1880**	**1646**	**0**	**0**	**1646**
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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B)	440	66	0	0	0	0	0
RAPP (C)	220	32	28	24	0	0	24
TOTAL	**1100**	**162**	**75**	**65**	**0**	**0**	**65**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC Tehri Hydro	1000	99	103	89	0	0	89
Total	**14846**	**1569**	**2535**	**2242**	**0**	**0**	**2242**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	0	0	90
Total ER	**5710**	**153**	**260**	**217**	**0**	**0**	**217**
Grand Total	**20556**	**1722**	**2795**	**2459**	**0**	**0**	**2459**

B) TIME BLOCK 18.00HRS - 23.00HRS @ 0% FROM UN-ALLOCATED AND 3.18% FROM RAPP B' ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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	490	0	441	383	0	0	383
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	**8292**	**1005**	**1880**	**1646**	**0**	**0**	**1646**
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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B)	440	66	0	0	14	12	12
RAPP (C)	220	32	28	24	0	0	24
TOTAL	**1100**	**162**	**75**	**65**	**14**	**12**	**77**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC Tehri Hydro	1000	99	103	89	0	0	89
Total	**14846**	**1569**	**2535**	**2242**	**14**	**12**	**2254**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	0	0	90
Total ER	**5710**	**153**	**260**	**217**	**0**	**0**	**217**
Grand Total	**20556**	**1722**	**2795**	**2459**	**14**	**12**	**2471**

12.1.11 ALLOCATION FROM CENTRAL SECTOR GENERATING STATIONS TO DELHI W.E.F. 13.03.2010 TO 31.03.2010

A) TIME BLOCK 00.00HRS.- 18.00HRS AND 23.00HRS. - 24.00HRS. @ 0% ALLOCATION FROM UN-ALLOCATED QUOTA OF CENTRAL SECTOR STATIONS

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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)-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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B)	440	66	0	0	0	0	0
RAPP (C)	220	32	28	24	0	0	24
TOTAL	**1100**	**162**	**75**	**65**	**0**	**0**	**65**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC Tehri Hydro	1000	99	103	89	0	0	89
Total	**15336**	**1569**	**2976**	**2625**	**0**	**0**	**2625**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	0	0	90
Total ER	**5710**	**153**	**260**	**217**	**0**	**0**	**217**
Grand Total	**21046**	**1722**	**3236**	**2842**	**0**	**0**	**2842**

B) TIME BLOCK 18.00HRS - 23.00HRS @ 0% ALLOCATION FROM UN-ALLOCATED AND 3.18% ALLOCATION FROM RAPP B'

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
	in MW	in MW	in MW	in MW	in MW	in MW	in MW
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 (Th) Stage-II	490	0	441	383	0	0	383
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	**8292**	**1005**	**1880**	**1646**	**0**	**0**	**1646**
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
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**2954**	**154**	**335**	**318**	**0**	**0**	**318**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B)	440	66	0	0	14	12	12
RAPP (C)	220	32	28	24	0	0	24
TOTAL	**1100**	**162**	**75**	**65**	**14**	**12**	**77**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC Tehri Hydro	1000	99	103	89	0	0	89
Total	**14846**	**1569**	**2535**	**2242**	**14**	**12**	**2254**
Allocation from ER							
Farakka	1600	0	30	25	0	0	25
Kahalgaon	840	0	63	53	0	0	53
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	1000	0	108	90	0	0	90
Total ER	**5710**	**153**	**260**	**217**	**0**	**0**	**217**
Grand Total	**20556**	**1722**	**2795**	**2459**	**14**	**12**	**2471**

12.2 ALLOCATION OF POWER TO DELHI DISCOMS FROM VARIOUS SOURCES

12.2.1 ALLOCATION OF POWER TO VARIOUS LISCENCEES AS PER ORDER OF DERC AND DECISION OF GNCTD FOR ALLOCATION OF CENTRAL SECTOR STATIONS (DADRI THERMAL AND BTPS) AND STATE SECTOR GENERATING STATIONS w.e.f. 01.04.2009 TO 30.06.2009. ALLOCATION OF 0.9MW HAS BEEN ALLOCATED TO UPCOMING JHAJJHAR PLAT FROM IP STATION.

(Allocation In %)

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	25.09	34.65	26.21	100.00
3. BTPS	15.07	7.09	22.59	31.64	23.61	100.00
4. IP	0.00	0.00	30.01	38.78	31.21	100.00
5. RPH	0.00	0.00	30.05	38.54	31.41	100.00
6. GT	0.00	0.00	30.05	38.54	31.41	100.00
7. Pragati	25.76	0.00	20.95	31.41	21.88	100.00
8. DVC	0.00	0.00	29.18	43.58	27.24	100.00

12.2.2 ALLOCATION OF POWER TO VARIOUS LISCENCEES AS PER ORDER OF DERC AND DECISION OF GNCTD FOR ALLOCATION OF CENTRAL SECTOR STATIONS (DADRI THERMAL AND BTPS) AND STATE SECTOR GENERATING STATIONS w.e.f. 01.07.2009 TO 31.12.2009. ALLOCATION OF 0.9 MW 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)	14.91	0.00	23.89	33.50	25.70	100.00
3. BTPS	15.87	7.09	21.61	32.10	23.33	100.00
4. IP	0.83	0.00	28.02	41.68	29.47	100.00
5. RPH	0.86	0.00	27.99	41.62	29.53	100.00
6. GT	0.86	0.00	27.99	41.62	29.53	100.00
7. Pragati	26.61	0.00	20.47	30.41	22.51	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	23.89	36.36	25.70	100.00
3. BTPS	15.07	7.09	21.61	32.90	23.33	100.00
4. IP	0.00	0.00	28.02	42.51	29.47	100.00
5. RPH	0.00	0.00	27.99	42.48	29.53	100.00
6. GT	0.00	0.00	27.99	42.48	29.53	100.00
7. Pragati	25.76	0.00	20.47	31.26	22.51	100.00
8. DVC	0.00	0.00	29.18	43.58	27.24	100.00

12.2.3 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

13 Inter Discom transfer of power

As per the order of Delhi Electricity Regulatory Commission (DERC) dated 14.08.2007, surplus power by virtue of allocation of the licensees should be distributed to the needy distribution licensees to the ratio of the allocation of the sources to the extent of requirement. SLDC started such scheduling from 19.08.2007. Upto 19.02.2008, the scheduling was done on the basis of requirement and availability assessed by the licensees involved. From 20.02.2008 for better management of inter discom surplus, the same has been done on actual basis. As per the order of commission dated 14.08.2007, *for the settlement rate, Commission orders that the fixed cost of Badarpur Power Station, the variable charge for BTPS and a mark up of 10 paise over and above the two charges towards income tax and any other item which is unforeseen at this stage shall be added. As per the current indications, the fixed charge for BTPS is Rs. 0. 53 per kwhr and the variable charge is Rs. 2.11 per Kwhr as of 30-6-07. Adding 10 paise per kwhr for all other adjustments, the single settlement rate between the Discom for such transaction is fixed at Rs. 2.75 per kwhr. Any fuel price adjustment to Rs. 2.11 per kwhr beyond 30.06.07 shall be added at actuals to the prescribed rate of 2.75 kwhr.*

As per the above order, the inter discom transfer rates for 2009-10 has been as under :-

All figures in Ps/Unit

Month	Basic Rate of Inter Discoms Transfer	Fuel Price Adjustment difference	Net Rate for Inter Discom Transfer
Apr-09	275.00	48.42	323.42
May-09	275.00	49.62	324.62
Jun-09	275.00	62.03	337.03
Jul-09	275.00	71.14	346.14
Aug-09	275.00	51.21	326.21
Sep-09	275.00	36.39	311.39
Oct-09	275.00	43.28	318.28
Nov-09	275.00	44.62	319.62
Dec-09	275.00	41.41	316.41
Jan-10	275.00	55.51	330.51
Feb-10	275.00	105.87	380.87
Mar-10	275.00	137.99	412.99

A) The details of inter discom surplus by virtue of allocation sale of power for the year 2009-10

13.1 Military Engineering Services (MES)

All figures in MUs

MONTH	BRPL	BYPL	NDPL	NDMC	Total
Apr-09	2.67132	0.34605	1.96730	0.01526	4.99994
May-09	5.80742	1.07740	3.39614	0.05361	10.33458
Jun-09	5.84659	1.57600	4.28981	0.06320	11.77560
Jul-09	5.47947	1.95253	3.89355	0.06498	11.39054
Aug-09	3.43992	1.05449	2.71755	0.03455	7.24650
Sep-09	3.95882	1.79994	3.25808	0.02426	9.04111
Oct-09	3.39901	1.23506	3.62204	0.00705	8.26316
Nov-09	0.14618	0.00075	1.00975	0.00000	1.15668
Dec-09	0.24635	0.00304	0.56706	0.00000	0.81645
Jan-10	0.57566	0.15461	0.92052	0.00165	1.65244
Feb-10	0.00870	0.00038	0.13765	0.00000	0.14673
Mar-10	0.45188	0.03169	0.77894	0.00007	1.26258
Total	**32.03133**	**9.23193**	**26.55842**	**0.26463**	**68.08630**

13.2 New Delhi Municipal Council (NDMC)

All figures in MUs

MONTH	BRPL	BYPL	NDPL	MES	Total
Apr-09	12.24522	0.81385	8.93982	0.00069	21.99958
May-09	25.96627	3.65236	14.37197	0.00000	43.99060
Jun-09	25.94917	6.05614	18.38409	0.00000	50.38940
Jul-09	22.11871	6.29427	15.81472	0.00001	44.22771
Aug-09	19.79928	4.79316	15.94779	0.00068	40.54091
Sep-09	21.66530	8.71778	18.30174	0.00004	48.68485
Oct-09	14.81254	4.67238	17.14893	0.00110	36.63494
Nov-09	1.85661	0.02922	7.92623	0.02444	9.83650
Dec-09	5.56262	0.24528	7.67658	0.16227	13.64676
Jan-10	14.70103	4.00611	14.45955	0.13869	33.30537
Feb-10	1.44584	0.02063	3.22747	0.09381	4.78775
Mar-10	3.92485	0.35864	7.08320	0.11663	11.48331
Total	**170.04743**	**39.65980**	**149.28209**	**0.53834**	**359.52766**

13.3 BSES Rajdhani Power Ltd. (BRPL)

All figures in MUs

MONTH	BYPL	NDPL	NDMC	MES	Total
Apr-09	0.00998	1.22596	0.00000	0.00000	1.23594
May-09	0.00701	0.21172	0.00000	0.00000	0.21872
Jun-09	0.01388	0.14518	0.00045	0.00000	0.15951
Jul-09	0.00422	0.04891	0.00000	0.00000	0.05313
Aug-09	0.00841	0.12684	0.00000	0.00000	0.13525
Sep-09	0.00078	0.02530	0.00000	0.00000	0.02608
Oct-09	0.00067	3.48813	0.00000	0.00001	3.48880
Nov-09	0.00000	9.46218	0.00000	0.02272	9.48490
Dec-09	0.00000	4.96827	0.00000	0.16356	5.13183
Jan-10	0.00005	2.47380	0.00000	0.01513	2.48898
Feb-10	0.00000	3.51584	0.00000	0.15426	3.67010
Mar-10	0.00000	4.73326	0.00000	0.12143	4.85469
Total	**0.04499**	**30.42538**	**0.00045**	**0.47711**	**30.94793**

13.4 BSES Yamuna Power Ltd. (BYPL)

All figures in MUs

MONTH	BRPL	NDPL	NDMC	MES	Total
Apr-09	8.90626	7.77700	0.01084	0.00043	16.69452
May-09	14.03419	5.36977	0.11590	0.00000	19.51986
Jun-09	7.82688	4.81389	0.12288	0.00017	12.76382
Jul-09	1.94958	1.68730	0.00307	0.00000	3.63995
Aug-09	0.86680	0.95077	0.00302	0.00000	1.82060
Sep-09	0.66565	0.74051	0.00041	0.00000	1.40656
Oct-09	2.12437	8.36571	0.00000	0.00014	10.49022
Nov-09	0.57198	11.98919	0.00000	0.02795	12.58911
Dec-09	2.43293	9.07047	0.00000	0.24430	11.74770
Jan-10	2.52152	6.04744	0.00000	0.04654	8.61549
Feb-10	0.50290	4.19508	0.00000	0.17423	4.87221
Mar-10	1.37611	7.87165	0.00000	0.15942	9.40718
Total	**43.77916**	**68.87877**	**0.25613**	**0.65317**	**113.56723**

13.5 North Delhi Power Ltd. (NDPL)

All figures in MUs

MONTH	BRPL	BYPL	NDMC	MES	Total
Apr-09	0.23339	0.00000	0.00000	0.00000	0.23339
May-09	1.21118	0.05099	0.00156	0.00000	1.26372
Jun-09	0.26892	0.01936	0.00026	0.00000	0.28855
Jul-09	0.03798	0.00994	0.00023	0.00000	0.04815
Aug-09	0.00000	0.00000	0.00000	0.00000	0.00000
Sep-09	0.00000	0.00000	0.00000	0.00000	0.00000
Oct-09	0.05468	0.00000	0.00000	0.00000	0.05468
Nov-09	0.00000	0.00000	0.00000	0.00276	0.00276
Dec-09	0.01730	0.00000	0.00000	0.06106	0.07836
Jan-10	0.14678	0.01944	0.00000	0.01145	0.17766
Feb-10	0.00194	0.00000	0.00000	0.05334	0.05528
Mar-10	0.00114	0.00000	0.00000	0.03370	0.03483
Total	1.97331	0.09972	0.00205	0.16231	2.23739

B) INTERDISCOM TRANSFER OF SURPLUS POWER BY VIRTUE OF BILATERAL ARRANGEMENTS.

To utilize the surplus power of Delhi by virtue of bilateral arrangements made by Discoms to meet the shortages, the Delhi Power Procurement Group (DPPG) in its meeting held on 21.07.2009 decided to transfer the surplus power to the needy Discoms based on the assessment of availability – demand position on day ahead basis by them w.e.f. 24.07.2009 to 01.11.2009. The rate is as per Indian Energy Exchange Rate for Northern Regional Constituents. The details of such transfer are as under :-

13.1 Military Engineering Services (MES)

NIL

13.2 New Delhi Municipal Council (NDMC)

All figures in MUs

Month	ENERGY TRANSACTIO IN MUs					AMOUNT IN RS LACS					Rate in Ps/ Unit
	MES	BRPL	BYPL	NDPL	Total	MES	BRPL	BYPL	NDPL	Total	
Jul-09	0.000012	0.000000	0.000002	0.000001	0.000014	During the period July 2009 to August 2009, Discoms drived the rates from IEX/PXI to raise the bill for the transaction of surplus energy. On the request of Discoms, SLDC finalized the rates of the surplus energy transactions w.e.f. September 2009.					
Aug-09	0.000000	1.223710	0.079310	0.189615	1.492635						
Sep-09	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
Oct-09	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
Nov-09	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
Total	**0.000012**	**1.223710**	**0.079312**	**0.189616**	**1.492649**	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00***

*** Average rate has been calculated for transaction of surplus energy for the period Sept. 2009 to Nov. 2009.**

13.3 BSES Rajdhani Power Ltd. (BRPL)

Month	ENERGY TRANSACTION IN MUs					AMOUNT IN RS LACS					Rate in Ps/ Unit
	NDMC	MES	BYPL	NDPL	Total	NDMC	MES	BYPL	NDPL	Total	
Jul-09	0.221741	0.0000	0.000000	0.046059	0.267801	During the period July 2009 to August 2009, Discoms drived the rates from IEX/PXI to raise the bill for the transaction of surplus energy. On the request of Discoms, SLDC finalized the rates of the surplus energy transactions w.e.f. September 2009.					
Aug-09	0.000000	0.0000	0.008363	0.000000	0.008363						
Sep-09	0.000000	0.0000	0.009380	0.003145	0.012525	0.00000	0.0000	0.46987	0.14441	0.61428	490.44
Oct-09	0.000000	0.0000	0.145660	0.205453	0.351113	0.00000	0.0000	6.12444	12.46906	18.59350	529.56
Nov-09	0.000000	0.0000	0.000000	0.000000	0.000000	0.00000	0.0000	0.00000	0.00000	0.00000	0.00
Total	**0.221741**	**0.0000**	**0.163403**	**0.254657**	**0.639802**	**0.00000**	**0.0000**	**6.59432**	**12.61347**	**19.20778**	**528.21***

*** Average rate has been calculated for transaction of surplus energy for the period Sept. 2009 to Nov. 2009.**

13.4 BSES Yamuna Power Ltd. (BYPL)

Month	ENERGY TRANSACTION IN MUs					AMOUNT IN RS LACS					Rate in Ps/ Unit
	NDMC	MES	BRPL	NDPL	Total	NDMC	MES	BRPL	NDPL	Total	
Jul-09	0.572223	0.0000	0.001590	0.056621	0.630434	During the period July 2009 to August 2009, Discoms drived the rates from IEX/PXI to raise the bill for the transaction of surplus energy. On the request of Discoms, SLDC finalized the rates of the surplus energy transactions w.e.f. September 2009.					
Aug-09	0.000250	0.0000	4.260305	0.085600	4.346155						
Sep-09	0.023215	0.0000	20.101578	0.130830	21.61048	1.81778	0.0000	832.75048	7.16086	841.72911	389.50
Oct-09	0.000000	0.0000	0.113925	0.428483	0.542408	0.00000	0.0000	6.90961	22.3545	29.26411	539.52
Nov-09	0.000000	0.0000	0.033720	0.000000	0.033720	0.00000	0.0000	1.55345	0.00000	1.55345	460.69
Total	**0.595688**	**0.0000**	**24.511118**	**0.701534**	**27.163197**	**1.81778**	**0.0000**	**841.21355**	**29.51535**	**872.54668**	**393.28***

*** Average rate has been calculated for transaction of surplus energy for the period Sept. 2009 to Nov. 2009.**

13.5 North Delhi Power Ltd. (NDPL)

Month	ENERGY TRANSACTION IN MUs					AMOUNT IN RS LACS					Rate in Ps/ Unit
	NDMC	MES	BRPL	BYPL	Total	NDMC	MES	BRPL	BYPL	Total	
Jul-09	0.176880	0.0000	0.000000	0.049473	0.226353	During the period July 2009 to August 2009, Discoms drived the rates from IEX/PXI to raise the bill for the transaction of surplus energy. On the request of Discoms, SLDC finalized the rates of the surplus energy transactions w.e.f. September 2009.					
Aug-09	0.000000	0.0000	1.079070	0.104198	1.183268						
Sep-09	0.000000	0.0000	0.787068	0.166175	0.953243	0.00000	0.000	47.90984	12.08565	59.99549	629.38
Oct-09	0.000000	0.0000	0.277960	0.000000	0.277960	0.00000	0.000	16.83051	0.00000	16.83051	605.50
Nov-09	0.000000	0.0000	0.043635	0.000000	0.043635	0.00000	0.000	1.86601	0.00000	1.86601	427.64
Total	**0.176880**	**0.0000**	**2.187733**	**0.319846**	**2.684459**	**0.00000**	**0.000**	**66.60636**	**12.08565**	**78.69201**	**617.27***

*** Average rate has been calculated for transaction of surplus energy for the period Sept. 2009 to Nov. 2009.**

14 IMPLEMENTATION OF INTRASTATE ABT IN DELHI

In the second phase of power reforms undertaken in Delhi, the power purchase agreements entered into by DESU/DVB/DTL have been reassigned to distribution licensees as per DERC order dated 31.03.2007. Intrastate ABT has also bee introduced in Delhi from 01.04.2007. SLDC has started issuing UI bills from covering the period from 01.04.2007 on weekly basis. The Intrastate UI Pool Account is also operated by SLDC as per the DERC order. The details of Main meters used for ABT billing are as under :

A) For Intrastate (Meters provided by DTL)

S.no.	Main Metering Points				No. of meters as per beneficiary / utility	Check metering points			No. of meters as per beneficiary / utility	Number of meters
	Discom	220/66/33KV	11/6.6KV	TOTAL	(+)	220/66/33KV	11/6.6KV	TOTAL	(+)	Total
1)	NDPL	54	36	90	82	44	0	44	37	119
2)	BRPL	53	39	92	44	56	11	67	44	88
3)	BYPL	61	25	86	58	60	1	61	47	105
4)	NDMC	25	4	29	29	25	4	29	29	58
5)	MES	7	8	15	14	7	8	15	14	28
	TOTAL	**200**	**112**	**312**	**227**	**192**	**24**	**216**	**171**	**398**
	GRAND TOTAL			**483**	**398**					

B) For Generating Stations (Meters provided by DTL)

Sr. No.	Station	Metering points (feeders)	Main	check
			Nos. of meters as per beneficiary utility	Nos. of meters as per beneficiary utility
01	IP Station	28	3	3
02	RPH	13	2	2
03	G.T.	10	2	2
04	Pragati	3	3	--
05	BTPS	11	6	5
	TOTAL	**65**	**16**	**12**

a) No. of Meters involved for Intrastate ABT billing with DISCOMs = 227
b) No of Meters involved for UI billing of Genco = 16
c) Overall meters dealt by DTL = 414

C) For Interstate (Meters provided by NRLDC)

S. N.	Details	Main	Stand by / check
01	Nos. of meters to compute input from the Grid to DTL system	20	14
	Total		34

The details of the UI Transactions for 2009-10 at Intrastate Level are as under :

14.1 UI Transactions of NDPL

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	Amount as per Intrastate UI account in Rs. Lacs	Additional UI amount for overdraw below 49.2 in Rs. Lacs	Adjusted net UI amount to equate the same with Inter state UI issued by NRPC for the state Delhi as a whole in Rs. Lacs	Average rate in Ps/Unit
Apr-09	558.7568	542.7448	-16.0120	-752.5076	68.2490	-760.9047	475.21
May-09	676.7227	644.6257	-32.0970	-1116.2032	11.6542	-1150.6409	358.49
Jun-09	737.5463	685.4886	-52.0577	-2009.7165	77.1783	-1911.8349	367.25
Jul-09	763.3902	731.6293	-31.7609	-963.1760	21.2590	-960.9614	302.56
Aug-09	764.2703	706.8305	-57.4398	-2339.3719	130.7701	-2084.4260	362.89
Sep-09	695.4851	627.8083	-67.6768	-2167.6866	59.5825	-2080.1482	307.37
Oct-09	600.3994	557.5697	-42.8297	-1444.7273	24.3362	-1538.9273	359.31
Nov-09	468.8127	471.5801	2.7673	-116.6991	0.0000	-172.0060	-621.56
Dec-09	483.8518	483.2507	-0.6011	-257.5323	0.0000	-293.7099	4886.14
Jan-10	535.6878	521.9751	-13.7127	-317.8929	7.4543	-478.3874	348.86
Feb-10	504.9261	452.0522	-52.8739	-1386.8026	0.0000	-1490.8747	281.97
Mar-10	507.3946	537.4810	30.0864	1891.2916	169.0139	1583.9204	526.46
Total	**7297.2437**	**6963.0359**	**-334.2078**	**-10981.0244**	**569.4974**	**-11338.9010**	**339.28**

Note :

i) (-)ve indicates amount receivable by the Utility

ii) (+)ve indicates amount payable by the Utility.

iii) The above UI accounts are subject to change if UI accounts are revised by NRPC due to any reason.

14.2 UI Transactions of BRPL

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	Amount as per Intrastate UI account in Rs. Lacs	Additional UI amount for overdraw below 49.2 in Rs. Lacs	Adjusted net UI amount to equate the same with Inter state UI issued by NRPC for the state Delhi as a whole in Rs. Lacs	Average rate in Ps/Unit
Apr-09	744.7922	755.0877	10.2956	760.3869	153.9254	830.7605	806.91
May-09	956.3916	971.0521	14.6604	1013.6873	56.9778	985.1918	672.01
Jun-09	1021.6119	996.3057	-25.3061	-551.1111	150.6930	-294.2722	116.29
Jul-09	1137.7784	1076.4417	-61.3367	-1959.9870	17.3847	-2006.7541	327.17
Aug-09	1067.7623	1025.9839	-41.7784	-1301.9049	326.8471	-800.6003	191.63
Sep-09	940.3135	881.1940	-59.1195	-1770.5864	100.8159	-1623.5782	274.63
Oct-09	838.3762	734.9648	-103.4114	-3766.7204	7.2364	-3931.5617	380.19
Nov-09	600.2248	583.9651	-16.2597	-220.6531	0.0000	-252.3890	155.22
Dec-09	677.9844	635.6416	-42.3428	-1087.0784	0.0000	-1097.4449	259.18
Jan-10	785.8217	727.1852	-58.6365	-1684.9762	7.9625	-1754.8261	299.27
Feb-10	614.6800	570.7361	-43.9439	-1060.9504	0.0000	-1732.9563	394.36
Mar-10	750.1934	707.8811	-42.3123	-1445.0843	41.1701	-2116.0046	500.09
Total	**10135.9303**	**9666.4388**	**-469.4914**	**-13074.9780**	**863.0131**	**-13794.4350**	**293.82**

Note :

i) (-)ve indicates amount receivable by the Utility

ii) (+)ve indicates amount payable by the Utility.

iii) The above UI accounts are subject to change if UI accounts are revised by NRPC due to any reason

14.3 UI Transactions of BYPL

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	Amount as per Intrastate UI account in Rs. Lacs	Additional UI amount for overdraw below 49.2 in Rs. Lacs	Adjusted net UI amount to equate the same with Inter state UI issued by NRPC for the state Delhi as a whole in Rs. Lacs	Average rate in Ps/Unit
Apr-09	487.9315	453.7694	-34.1622	-1729.3770	21.0878	-1793.9513	525.13
May-09	612.9412	562.6992	-50.2420	-1977.0940	1.2632	-2050.2936	408.08
Jun-09	616.2512	585.1112	-31.1400	-1418.2489	23.0415	-1304.5626	418.94
Jul-09	650.0987	632.4884	-17.6103	-492.0115	18.4557	-469.1571	266.41
Aug-09	590.2796	604.8179	14.5383	1120.5892	293.8237	1577.0998	1084.79
Sep-09	527.9644	530.5581	2.5938	502.0375	128.5799	699.1109	2695.35
Oct-09	495.5493	455.0870	-40.4623	-1402.1532	7.7989	-1463.6488	361.73
Nov-09	377.4625	356.5068	-20.9557	-332.9616	0.0000	-347.9244	166.03
Dec-09	413.5184	371.4567	-42.0618	-871.1665	0.0000	-874.1235	207.82
Jan-10	436.1705	415.8929	-20.2776	-415.6839	7.1919	-474.0037	233.76
Feb-10	378.0405	329.4379	-48.6026	-1281.9510	0.0000	-1381.5355	284.25
Mar-10	491.9568	408.8935	-83.0633	-3420.4919	13.2654	-3748.9017	451.33
Total	**6078.1645**	**5706.7189**	**-371.4456**	**-11718.5128**	**514.5080**	**-11631.8913**	**313.15**

Note :

i) (-)ve indicates amount receivable by the Utility

ii) (+)ve indicates amount payable by the Utility.

iii) The above UI accounts are subject to change if UI accounts are revised by NRPC due to any reason

14.4 UI Transactions of NDMC

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	Amount as per Intrastate UI account in Rs. Lacs	Additional UI amount for overdraw below 49.2 in Rs. Lacs	Adjusted net UI amount to equate the same with Inter state UI issued by NRPC for the state Delhi as a whole in Rs. Lacs	Average rate in Ps/Unit
Apr-09	153.1790	99.7206	-53.4584	-2671.8756	5.5056	-2825.6556	528.57
May-09	145.5601	124.2085	-21.3517	-729.6524	2.6028	-753.6425	352.97
Jun-09	131.0808	129.5889	-1.4919	73.5638	41.5115	127.0873	-851.87
Jul-09	136.6045	140.7561	4.1516	170.3705	3.7105	86.8476	209.19
Aug-09	126.8092	131.5878	4.7786	331.0236	47.5505	418.8959	876.61
Sep-09	120.6692	115.2488	-5.4203	-94.1891	16.0005	-70.0842	129.30
Oct-09	128.2448	98.9344	-29.3104	-1094.7697	2.9397	-1149.4386	392.16
Nov-09	154.9036	74.6662	-80.2374	-1978.7118	0.0000	-2051.7042	255.70
Dec-09	163.2950	79.5794	-83.7156	-2425.7923	0.0000	-2453.2292	293.04
Jan-10	152.1046	93.9401	-58.1645	-1705.8410	0.0688	-1841.7955	316.65
Feb-10	145.6450	70.8874	-74.7576	-2101.0083	0.0000	-2262.1731	302.60
Mar-10	164.1561	88.4302	-75.7259	-3116.4706	0.0026	-3316.2040	437.92
Total	**1722.2519**	**1247.5483**	**-474.7035**	**-15343.3529**	**119.8924**	**-16091.0961**	**338.97**

Note :

i) (-)ve indicates amount receivable by the Utility

ii) (+)ve indicates amount payable by the Utility.

iii) The above UI accounts are subject to change if UI accounts are revised by NRPC due to any reason

14.5 UI Transactions of MES

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	Amount as per Intrastate UI account in Rs. Lacs	Additional UI amount for overdraw below 49.2 in Rs. Lacs	Adjusted net UI amount to equate the same with Inter state UI issued by NRPC for the state Delhi as a whole in Rs. Lacs	Average rate in Ps/Unit
Apr-09	23.1386	14.9406	-8.1980	-438.5468	0.0000	-453.2753	552.91
May-09	22.2005	18.0418	-4.1587	-144.2020	0.0000	-149.1357	358.61
Jun-09	20.8612	18.5670	-2.2942	-70.2520	0.1222	-69.9519	304.91
Jul-09	20.6660	20.2156	-0.4504	-12.9996	0.0079	-14.9580	332.09
Aug-09	19.6285	19.3906	-0.2380	-4.5832	1.5094	-2.8410	119.38
Sep-09	17.5989	16.8685	-0.7304	-19.2004	0.0191	-19.8837	272.22
Oct-09	20.8336	14.9855	-5.8480	-218.6545	0.0000	-228.0904	390.03
Nov-09	23.2151	13.9195	-9.2956	-232.0731	0.0000	-239.3999	257.54
Dec-09	23.4217	17.5870	-5.8347	-150.2567	0.0000	-155.1981	265.99
Jan-10	26.7095	22.8448	-3.8647	-95.2452	0.2102	-110.2582	285.30
Feb-10	19.4287	15.2221	-4.2067	-109.6090	0.0000	-117.9455	280.38
Mar-10	21.7632	15.0396	-6.7236	-277.5372	0.8759	-314.1536	467.24
Total	**259.4657**	**207.6226**	**-51.8431**	**-1773.1595**	**2.7446**	**-1875.0913**	**361.69**

Note :

i) (-)ve indicates amount receivable by the Utility

ii) (+)ve indicates amount payable by the Utility.

iii) The above UI accounts are subject to change if UI accounts are revised by NRPC due to any reason

14.6 UI Transactions of IP

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	Amount as per Intrastate UI account in Rs. Lacs	Additional UI amount for overdraw below 49.2 in Rs. Lacs	Adjusted net UI amount to equate the same with Inter state UI issued by NRPC for the state Delhi as a whole in Rs. Lacs	Average rate in Ps/Unit
Apr-09	53.2386	55.4108	2.1722	-3.6132	2.3767	-33.67646089	-155.03
May-09	41.9592	41.9551	-0.0041	12.1969	0.6708	-32.654628	80258.79
Jun-09	34.3330	33.9527	-0.3802	21.6109	2.2829	-3.2518	85.52
Jul-09	47.4709	46.9511	-0.5199	18.9110	0.4024	-11.9590	230.04
Aug-09	29.3903	28.5661	-0.8242	55.8805	5.7047	41.1798	-499.65
Sep-09	21.2412	20.4124	-0.8287	38.2464	2.9998	41.0307	-495.09
Oct-09	20.3341	19.0450	-1.2891	57.4479	0.8876	-130.1281	1009.49
Nov-09	-0.0240	-1.9564	-2.0336	68.9826	0.0000	11.6466	-57.27
Dec-09	-0.7440	-0.2544	0.4896	-16.9164	0.0000	-15.6600	-319.85
Jan-10	-0.7440	-0.7616	-0.0176	26.7839	1.3067	-107.7934	61159.71
Feb-10	-0.6720	-1.0068	-0.3348	11.0424	0.0000	-175.7870	5250.36
Mar-10	-0.7440	-0.5792	0.1648	-8.0631	1.1114	-24.0144	-1456.96
Total	**245.0392**	**241.7349**	**-3.4056**	**282.5098**	**17.7430**	**-441.067662**	**1295.13**

Note :

i) (+)ve indicates amount receivable by the Utility

ii) (-)ve indicates amount payable by the Utility.

iii) The above UI accounts are subject to change if UI accounts are revised by NRPC due to any reason

14.7 UI Transactions of RPH

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	Amount as per Intrastate UI account in Rs. Lacs	Additional UI amount for overdraw below 49.2 in Rs. Lacs	Adjusted net UI amount to equate the same with Inter state UI issued by NRPC for the state Delhi as a whole in Rs. Lacs	Average rate in Ps/Unit
Apr-09	63.3705	63.7262	0.3557	-11.6435	1.3357	-110.9763875	-3120.18
May-09	55.3025	54.9587	-0.3438	5.6519	0.3915	1.120220	-32.58
Jun-09	56.7248	56.7537	0.0290	8.7673	1.8154	1.9513	673.19
Jul-09	47.7628	46.8934	-0.8695	49.6944	1.6175	28.0625	-322.76
Aug-09	50.2663	50.0744	-0.1919	24.2174	3.3255	31.6872	-1651.12
Sep-09	34.2231	33.6271	-0.5960	20.8722	1.1130	9.1317	-153.22
Oct-09	31.7833	32.0459	0.2627	-4.3848	0.2545	-49.1500	-1871.08
Nov-09	29.6200	29.3138	-0.3062	12.0654	0.0000	1.2467	-40.72
Dec-09	59.6669	58.1848	-1.4821	54.8648	0.0000	58.9634	-397.85
Jan-10	22.3847	22.0709	-0.3138	7.3275	0.1324	5.0971	-162.44
Feb-10	24.8320	24.3631	-0.4689	9.8432	0.0000	-122.6489	2615.55
Mar-10	74.1622	73.8347	-0.3275	11.3412	0.6850	-15.4763	472.61
Total	**550.0990**	**545.8467**	**-4.2523**	**188.6171**	**10.6704**	**-160.991589**	**378.60**

Note :

i) (+)ve indicates amount receivable by the Utility

ii) (-)ve indicates amount payable by the Utility.

iii) The above UI accounts are subject to change if UI accounts are revised by NRPC due to any reason

14.8 UI Transactions of GT

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	Amount as per Intrastate UI account in Rs. Lacs	Additional UI amount for overdraw below 49.2 in Rs. Lacs	Adjusted net UI amount to equate the same with Inter state UI issued by NRPC for the state Delhi as a whole in Rs. Lacs	Average rate in Ps/Unit
Apr-09	117.4232	119.4629	2.0397	-91.5879	3.9564	-108.506386	-531.98
May-09	123.3552	123.9593	0.6041	-29.4465	2.4257	-41.750461	-691.12
Jun-09	124.2616	125.4791	1.2175	-59.4780	6.3380	-45.3287	-372.29
Jul-09	128.1900	129.7606	1.5706	-42.9216	0.4499	-52.9304	-337.00
Aug-09	141.1395	144.0489	2.9094	-137.6009	3.6382	-14.3724	-49.40
Sep-09	111.6745	111.8954	0.2209	-25.5727	4.8259	5.5295	250.29
Oct-09	139.4886	140.6810	1.1924	-45.8803	8.2308	-85.9077	-720.47
Nov-09	111.5317	112.2113	0.6796	-31.4273	0.0000	-36.6413	-539.17
Dec-09	101.9989	103.8748	1.8759	-66.6437	0.0000	-68.6652	-366.03
Jan-10	110.9097	113.1981	2.2885	-71.1814	0.3462	-97.2065	-424.77
Feb-10	106.4406	107.2819	0.8414	-4.1068	0.0000	-71.9964	-855.72
Mar-10	112.9072	112.9072	0.0000	0.0000	0.0000	0.0000	0.00
Total	**1429.3206**	**1444.7606**	**15.4400**	**-605.8470**	**30.2111**	**-617.776051**	**-400.11**

Note :

i) (+)ve indicates amount receivable by the Utility

ii) (-)ve indicates amount payable by the Utility.

iii) The above UI accounts are subject to change if UI accounts are revised by NRPC due to any reason.

iv) UI in respect of GT remained suspended w.e.f. 16.02.2010 to 31.03.2010 due to the outage of one 100MVA Transformer at IP Extention for augmentation of the same to 160MVA.

14.9 UI Transactions of PPCL

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	Amount as per Intrastate UI account in Rs. Lacs	Additional UI amount for overdraw below 49.2 in Rs. Lacs	Adjusted net UI amount to equate the same with Inter state UI issued by NRPC for the state Delhi as a whole in Rs. Lacs	Average rate in Ps/Unit
Apr-09	201.0845	206.3674	5.2829	-268.4985	1.2042	-296.6194	-561.47
May-09	212.6528	213.6558	1.0030	-97.4997	0.1788	-111.1369	-1108.03
Jun-09	195.8521	198.9160	3.0638	-165.3297	0.6214	-137.3810	-448.40
Jul-09	153.2266	154.5345	1.3079	-57.9137	0.3186	-58.1773	-444.81
Aug-09	145.9168	147.7822	1.8654	-99.5871	3.5842	-57.9259	-310.53
Sep-09	205.5140	208.7310	3.2170	-150.6562	1.1090	-110.2814	-342.81
Oct-09	189.4859	191.0571	1.5712	-52.9700	0.2777	-59.1483	-376.46
Nov-09	207.5894	211.0095	3.4201	-110.9596	0.0000	-116.4414	-340.46
Dec-09	221.0056	224.7685	3.7629	-115.3254	0.0000	-127.9525	-340.03
Jan-10	214.2337	216.9629	2.7292	-129.4764	0.0490	-147.9001	-541.91
Feb-10	180.4646	184.0079	3.5432	-95.3465	0.0000	-128.3597	-362.27
Mar-10	220.3804	224.0224	3.6419	-181.7320	0.1331	-226.9189	-623.07
Total	**2347.4065**	**2381.8152**	**34.4087**	**-1525.2948**	**7.4760**	**-1578.2429**	**-458.68**

Note :

i) (+)ve indicates amount receivable by the Utility

ii) (-)ve indicates amount payable by the Utility.

iii) The above UI accounts are subject to change if UI accounts are revised by NRPC due to any reason

14.10 UI Transactions of BTPS

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	Amount as per Intrastate UI account in Rs. Lacs	Additional UI amount for overdraw below 49.2 in Rs. Lacs	Adjusted net UI amount to equate the same with Inter state UI issued by NRPC for the state Delhi as a whole in Rs. Lacs	Average rate in Ps/Unit
Apr-09	373.2353	380.0675	6.8323	-291.7504	3.3896	-229.1412	-335.38
May-09	465.8748	472.2097	6.3350	-249.6031	1.0097	-224.7540	-354.78
Jun-09	458.1193	463.5404	5.4212	-245.7163	3.0847	-165.1069	-304.56
Jul-09	459.6723	465.0272	5.3549	-229.0148	0.2586	-213.7682	-399.20
Aug-09	386.0278	391.1961	5.1684	-223.3126	7.4363	-103.3691	-200.00
Sep-09	384.7015	390.7876	6.0861	-242.5449	3.0038	-170.0826	-279.46
Oct-09	416.0378	423.2409	7.2032	-263.6524	0.5881	-267.0424	-370.73
Nov-09	347.8923	352.1238	4.2316	-156.1847	0.0000	-154.4649	-365.03
Dec-09	338.0325	342.9202	4.8877	-154.8721	0.0000	-149.4047	-305.68
Jan-10	403.0858	412.5764	9.4906	-364.2053	0.0744	-351.9609	-370.85
Feb-10	273.4931	281.2842	7.7911	-220.3975	0.0000	-233.4582	-299.65
Mar-10	323.5323	326.3785	2.8463	-72.2900	3.9040	-67.8556	-238.40
Total	**4629.7045**	**4701.3527**	**71.6482**	**-2713.5441**	**22.7491**	**-2330.4089**	**-325.26**

Note :

i) (+)ve indicates amount receivable by the Utility

ii) (-)ve indicates amount payable by the Utility.

iii) The above UI accounts are subject to change if UI accounts are revised by NRPC due to any reason

15 CAPACITOR REQUIREMENT IN DELHI

15.1 CAPACITOR REQUIREMENT AND INSTALLED CAPACITY OF CAPACITORS IN DELHI AS PER NRPC STUDY FOR 2008-09 AND 2009-10

(**All figures in MVAR)**

Requirement		Installed Capacity		Working Capacity in MVAR	
2008-09	2009-10	2008-09	2009-10	2008-09	2009-10
2097	2097	3456	3456	3360	3390

[The above does not include LT Capacitors]

15.2 DETAILS OF THE CAPACITORS INSTALLED IN DELHI SYSTEM LUMPED TO THE NEAREST 220KV GRID SUB-STATIONS AS ON 31.03.2009 IS AS UNDER :-

a) Delhi Transco Limited (DTL)

Name of the Sub-stn	Voltage (KV)	Installed Capacity (MVAR)	Working Capacity (MVAR)	Remarks
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	

Name of the sub-stn	Voltage (KV)	Installed Capacity (MVAR)	Working Capacity (MVAR)	Remarks
Narela	66	20	20	
	66	20	20	
	11	5.04	5.04	
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	Tilakmarg			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. Marg				
	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	**Shalimarbagh 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	Shalimarbagh			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**

16. AVAILABILITY OF DELHI TRANSCO LTD. SYSTEM FOR THE YEAR 2009-10

Sl. No.	Name of Elements	Availability in %age
1	AVAILABILITY OF 8NOS. 400kV, 315MVA ICTs	84.35
2	AVAILABILITY OF 6NOS. 400kV LINES	99.06
3	AVAILABILITY OF 65NOS. 220kV LINES	98.88
4	AVAILABILITY OF 44NOS. 220/66kV ICTs	97.54
5	AVAILABILITY OF 28NOS. 220/33kV ICTs	90.33
6	AVAILABILITY OF 3NOS. 66/33kV ICTs	99.36
7	AVAILABILITY OF 24NOS. 66/11kV PR. TXS	99.67
8	AVAILABILITY OF 16NOS. 33/11kV PR. TXS	98.46
9	AVAILABILITY OF 92NOS. 66kV FEEDER BAYs	99.80
10	AVAILABILITY OF 118NOS. 33kV FEEDER BAYs	99.73
11	AVAILABILITY OF 204NOS. 11kV SYSTEM	100.00
12	AVAILABILITY OF 59NOS. CAP. BANKS	92.80
TOTAL AVAILABILITY OF DTL SYSTEM =		**98.36**

The following elements added during the year 2009-10

Sr No.	Name of the Element	Date of Commissioning
1	66kV Kanjhawala – DMRC Ckt.	24.04.2009 at 13.44hrs.
2	220kV Shalimar Bagh – DMRC Ckt.	03.06.2009 at 12.11hrs.
3	66kV Pappankalan-II – G-V Matiala Ckt.	23.07.2009 at 18.05hrs.
4	66kV Pappankalan-II – G-15 Dwarka Ckt-I	16.10.2009 at 16.30hrs.
5	66kV Pappankalan-II – G-15 Dwarka Ckt-II	14.10.2009 at 18.10hrs.
6	220/66kV 160MVA Pr. Tx at Vasant Kunj 220kV	31.03.2010 at 17.55hrs.
	FOLLOWING ELEMENTS INHERITED FROM IPGCL AT IP YARD	
7	24Nos. 33kV Feeder Bays	11.01.2010 at 10.00hrs.
8	03Nos 220/33kV Txs.	11.01.2010 at 10.00hrs.
9	03Nos. 10MVAR Capacitor Banks	11.01.2010 at 10.00hrs.

Sl. No.		Name of Element	Date of inherited by DTL from IPGCL
		220/33kV 100MVA TRANSFORMER	
1	1	220/33kV 100MVA Tx-I	11.01.2010 AT 10:00 HRS.
2	2	220/33kV 100MVA Tx-II	
3	3	220/33kV 100MVA Tx-III	
		33kV CAPACITOR BANKS	
4	1	10MVAR CAP BANK-I	
5	2	10MVAR CAP BANK-II	
6	3	10MVAR CAP BANK-III	
		33kV BAYs	
7	1	33kV KILOKRI CKT (BAY-1)	
8	2	33kV NIRMAN BHAWAN CKT (BAY-2)	
9	3	33kV KILOKRI CKT (BAY-3)	
10	4	33kV ELECTRIC LANE CKT (BAY-4)	
11	5	33kV LAJPATNAGAR CKT (BAY-5)	
12	6	33kV TILAK MARG CKT (BAY-6)	
13	7	33kV EXHIBITION GR-I CKT (BAY-7)	
14	8	33kV EXHIBITION GR-2 CKT (BAY-9)	
15	9	33kV ELECTRIC LANE CKT (BAY-10)	
16	10	33kV NIZAMUDDIN CKT (BAY-13)	
17	11	33kV NIRMAN BHAWAN CKT (BAY-16)	
18	12	33kV DELHI GATE CKT (BAY-17)	
19	13	33kV KAMLA MARKET CKT (BAY-18)	
20	14	33kV GB PANT CKT (BAY-19)	
21	15	33kV DEFENCE COLONY CKT (BAY-24)	
22	16	33kV KILOKRI CKT (BAY-25)	
23	17	33kV CONNAUGHT PLACE CKT (BAY-28)	
24	18	33kV IG STADIUM CKT-I (BAY-29)	
25	19	33kV KAMLA MARKET CKT (BAY-30)	
26	20	33kV IG STADIUM CKT-II (BAY-31)	
27	21	33kV MINTO ROAD CKT (BAY-34)	
28	22	33kV KILOKRI CKT (BAY-37)	
29	23	33kV CONNAUGHT PLACE CKT (BAY-38)	
30	24	33kV CONNAUGHT PLACE CKT (BAY-42)	

17 TRIPPINGS / BREAK-DOWNS IN 400/220KV SYSTEM FOR THE YEAR 2009-10

17.1 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH APRIL 2009

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	02.04.08	12.24	220KV BTPS – MEHRAULI – OKHLA CKT-I	02.04.09	12.55	CKT. TRIPPED ON 30B, 30G, 30A, 86B, 186A&B AT BTPS. NO TRIPPING AT MEHRAULI AND OKHLA.
02	02.04.09	15.10	66/11KV 20MVA PR. TR.-I AT NAJAFGARH	02.04.09	15.15	TR. TRIPPED ON NEUTRAL UNBALANCED ALONG WITH 11KV O/G PUMPING STATION FEEDER
03	03.04.08	05.02	33/11KV 16MVA PR. TR.-II AT SUBZI MANDI	03.04.09	50.30	TR. TRIPPED ON DIFFERENTIAL ALONG WITH 11KV I/C-II WHICH TRIPPED ON INTER TRIPPING
04	03.04.09	18.20	220KV BTPS – MEHRAULI – OKHLA CKT.	03.04.09	18.30	CKT. TRIPPED ON 186, DIST PROT `B&C' PHASE, ZONE-I AT MEHRAULI. NO TRIPPING AT OKHLA AND MEHRAULI.
05	04.04.09	11.40	220KV BAMNAULI – MEHRAULI CKT-II	04.04.09	11.52	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-II, 186, 186 AT MEHRAULI AND ON DIST PROT `C' PHASE ZONE-I, 186A&B AT BAMNAULI.
06	04.04.09	17.10	66/11KV 20MVA PR. TR.-I AT KANJHAWALA	04.04.09	17.20	TR. TRIPPED ON 86, AUX, OLTC BUCHLOZ, DUE TO FAULT IN 11KV O/G JJ CLUSTER FEEDER-1
07	04.04.09	17.50	220/33KV 100MVA PR. TR.-I AT PARK STREET	04.04.09	20.30	TR. TRIPPED ON 87, TA, TB, `B' PHASE DIFFERENTIAL, 86 ALONG WITH 33KV I/C-I WHICH TRIPPED ON INTER TRIPPING
08	04.04.09	17.50	66/33KV 30MVA PR. TR.-II AT PARK STREET	04.04.09		TR. TRIPPED ON DIFFERENTIAL, 87Y, 87YB, RESTRICTED E/F, 64R, 86
09	06.04.09	13.20	220KV MANDOLA – GOPALPUR CKT-II	06.04.09	13.37	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-II AT MANDOLA. NO TRIPPING AT GOPALPUR
10	08.04.09	14.58	220KV BAMNAULI – MEHRAULI CKT-I	08.04.09	15.11	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-II, 186A&B AT BAMNAULI AND ON DIST PROT `A' PHASE ZONE-I AT MEHRAULI.
11	08.04.09	16.25	220/66KV 100MVA PR. TR.-II AT OKHLA	08.04.09	16.45	TR. TRIPPED WITHOUT INDICATION
12	08.04.09	16.25	220/33KV 50MVA PR. TR.-I & II AND 220/33KV 100MVA PR. TR.-IV AT OKHLA	08.04.09	16.58	50MVA PR.T R.-I TRIPPED ON 186M 50MVA PR. TR.-II TRIPPED WITHOUT INDICATION AND 100MVA PR.TR.-IV TRIPPED ON 186. 50MVA PR. TR.-I & II CHARGED AT 16.58HRS. AND 100MVA PR. TR.-IV CHARGED AT 16.45HRS.
13	09.04.09	15.53	220/66KV 100MVA PR. TR.-II AT WAZIRABAD	09.04.09	15.55	TR. TRIPPED WITHOUT INDICATION ALONG WITH 66KV I/C-II WHICH ALSO TRIPPED WITHOUT INDICATION.
14	10.04.09	12.53	220KV BTPS – MEHRALI CKT-II	10.04.09	13.00	CKT. TRIPPED ON 30G, 30C AT BTPS. NO TRIPPING AT MEHRAULI
15	10.04.09	17.35	220KV MANDOLA – WAZIRABAD KT-III	10.04.09	18.05	CKT. TRIPPED ON THREE PHASE TRIPPING AT WAZIRABAD. NO TRIPPING AT MANDOLA.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
16	12.04.09	22.57	220KV BAWANA – NAJAFGARH CKT-I & II	12.04.09	23.18	BOTH CKTS TRIPPED ON UNDER FREQUENCY AT BAWANA.
17	12.04.09	22.27	220KV BAWANA–DSIDC BAWANA CKT-I & II	12.04.09	23.23	BOTH CKTS TRIPPED ON UNDER FREQUENCY AT BAWANA.
18	12.04.9	23.18	220/66KV 100MVA PR. TR.-II AT KANJHAWALA	13.04.09	08.05	TR. TRIPPED ON DIFFERENTIAL.
19	13.04.09	15.58	220/66KV 100MVA PR. TR.-II AT VASANT KUNJ	13.04.09	18.28	TR. TRIPPED ON 30L, LOW OIL TEMP.
20	13.04.09	23.47	ALL 400/220KV ICTS AT BAWANA	14.04.09	01.06	ALL ICTS TRIPPED ON BUS DIFFER- ENTIAL. `B' PHASE CVT OF 400KV BUS-II DAMAGED AT BAWANA S/STN AND BUS BAR PROTECTION OPERATED. 400KV MANDOLA – BAWANA CKT-I TRIPPED ON DIRECT TRIP AT MANDOLA END. 400KV BAMNAULI CKT-II TRIPPED ON 85LO, CARRIER LOCK OUT. 400KV MANDOLA – BAWANA CKT-II MADE OFF MANUALLY AT MANDOLA END. AT 01.03HRS, 400KV MANDOLA – BAWANA CKT-I & II CHARGED FROM BAWANA END. 400/220KV ICT-I & IV CHARGED AT 01.04 HRS. & ICT-III CHARGED AT 01.06HRS. 400KV MANDOLA – BAWANA CKT-II CHARGED FROM MANDOLA END. AT 01.13HRS, 400KV MANDOLA – BAWANA CKT-I CHARGED FROM MANDOLA END. AT 01.15HRS, ALL 220KV FEEDERS NORMALIZED. 400KV BAWANA – HISSAR CKT SYNCHRONIZED AT 01.20HRS. 400KV ABDULLAPUR CKT-II AND ICT-II CHARGED AT 01.22HRS. 400KV BAWANA – ABDULLAPUR CKT-I CHARGED AT 01.25HRS.
21	14.04.09	04.20	220KV PRAGATI – PARK STREET CKT-II	14.04.09	04.34	CKT. TRIPPED ON E/F AT PARK STREET
22	14.04.09	04.20	220/33KV 100MVA PR. TR.-I AT PARK STREET	14.04.09	04.35	TR. TRIPPED ON DIFFERENTIAL, 87T
23	14.04.09	11.36	220KV BTPS – OKHLA CKT-II	14.04.09	12.00	CKT. TRIPPED ON 186, DIST PROT `YB' PH. AT BTPS. NO TRIPPING AT OKHLA.
24	14.04.09	21.02	220/66KV 100MVA PR. TR-III AT NARELA	14.04.09	10.38	TR. TRIPPED ON E/F, 86 ALONG WITH 66KV I/C-III WHICH TRIPPED ON 51BX, 54RX `R' PHASE CVT OF 66KV I/C-III BLAST.
25	14.4.09	21.02	220KV MANDOLA – NARELA CKT-II	14.04.09	23.17	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-I AT MANDOLA. NO TRIPPING AT NARELA.
26	16.04.09	21.50	220/33KV 100MVA PR. TR.-I AT PARK STREET	16.04.09	21.56	TR. TRIPPED ON DIFFERENTIAL, 87TA, TB, 86
27	18.04.09	12.35	220KV BTPS – NOIDA – GAZIPUR CKT.	18.04.09	12.57	CKT. TRIPPED ON A-N, AB, 86A, 186A&B, AT BTPS. NO TRIPPING AT GAZIPUR
28	18.04.09	15.45	220KV BTPS – OKHLA CKT-II	18.04.09	15.47	CKT. TRIPPED ON 30BC, 30G AT BTPS. NO TRIPPING AT OKHLA.
29	19.04.09	10.10	220KV MANDOLA – WAZIRABAD CKT-III & IV	19.04.09	10.38	CKT-III TRIPPED ON DIST PROT `RYB' PH. & CKT-IV TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT WAZIRA BAD. NO TRIPPING AT MANDOLA. CKT.-III & IV CHARGED AT 10.17HRS. AND 10.38HRS RESPECTIVELY.
30	19.04.09	13.01	220KV MANDOLA – WAZIRABAD CKT-IV	19.04.09	13.22	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I, RXME18 AT WAZIRA BAD. NO TRIPPING AT MANDOLA.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
31	19.04.09	14.06	220KV MANDOLA – WAZIRABAD CKT-III	19.04.09	16.15	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD. NO TRIPPING AT MANDOLA.
32	20.04.09	09.33	220KV PANIPAT – NARELA CKT-III	20.04.09	09.46	CKT. TRIPPED ON 30A, 30G, 186 AT NARELA.
33	21.04.09	19.40	BTPS – SARITA VIHAR CKT-II	20.04.09	20.04	CKT. TRIPPED ON 67NX AT BTPS AND ON 195CC, AUTO RECLOSE LOCK OUT, 186A, 186B, 67NX AT SARITA VIHAR
34	21.04.09	19.40	220KV SARITA VIHAR – MAHARANI BAGH CKT	21.04.09	20.04	CKT. TRIPPED WITHOUT INDICATION AT MAHARANI BAGH. NO TRIPPING AT SARITA VIHAR.
35	22.04.09	12.03	400KV MANDOLA – BAWANA CKT-II	22.04.09	12.13	CKT. TRIPPED ON CB AUTO TRIP, MAIN-I VT FUSE FAIL AT BAWANA.
36	26.04.09	07.10	220/66KV 100MVA PR. TR.-I AT PARK STREET	26.04.09	07.05	TR. TRIPPED ON 51A, 86B, E/F, O/C ALONG WITH 66KV I/C-I WHICH TRIPPED ON 51A, 86.
37	29.04.09	06.30	220/33KV 100MVA PR. TR.-I AT GOPALPUR	29.04.09	07.20	TR. TRIPPED ON 51AX, 86.
38	29.04.09	13.10	220/33KV 100MVA PR. TR.-II AT GOPALPUR	30.04.09	03.55	TR. TRIPPED ON 64RLV, E/F, 86.
39	29.04.09	13.27	220KV BTPS – NOIDA – GAZIPUR CKT.	29.04.09	20.50	CKT. TRIPPED ON `R' PHASE E/F AT BTPS. NO TRIPPING AT GAZIPUR

17.2 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH MAY – 2009

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.05.09	12.02	220KV WAZIRABAD – KASHMIRI GATE CKT-I	01.05.09	12.10	CKT. TRIPPED ON GENERAL TRIPP, GFC-STFW L1-L2-L3, ZM-1 TRIP, ZM-2 & ZM-3 START AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE
02	01.05.09	14.23	220KV PANIPAT – NARELA CKT-II	01.05.09	15.05	220KV PANIPAT CKT-I TRIPPED ON DIST PROT `B&C' PHASE, ZONE-1, 30B, 30G, 186 AND CKT-II TRIPPED ON DIST PROT `C' PHASE ZONE-I, 95CC, 30C, 30G, 186 AT NARELA. NO TRIPPING AT NARELA. CKT-I & II CHARGED AT 14.55HRS. AND 15.05HRS.
03	04.05.09	18.49	220KV MANDOLA – WAZIRABAD CKT-I & IV	04.05.09	18.59	BOTH CIRCUITS TRIPPED WITHOUT INDICATION AT WAZIRABAD. NO TRIPPING AT MANDOLA. CKT-I & II CHARGED AT 18.57HRS. AND 18.59HRS.
04	04.05.09	18.49	220KV WAZIRABAD – KASHMIRI GATE CKT-I & II	04.05.09	19.30	THE FOLLOWING TRIPPING OCCURRED : AT WAZIRABAD KASHMIRI GATE CKT-I : GENERAL TRIP GFC-STFW L3, GFC-STFW, ZM-I TRIP, ZM-2 START, ZM-3 START, FAULT LOOP L-3N KASHMIRI GATE CKT-II : NO TRIPPING AT KASHMIRI GATE : NO TRIPPING. KASHMIRI GATE CKT-I CHARGED AT 19.07HRS. AND 220KV KASHMIRI GATE CKT-II CHARGED AT 19.30HRS. FROM WAZIRABAD.
05	04.05.09	18.49	220KV WAZIRABAD – GEETA COLONY CKT-II	04.05.09	18.58	CKT. TRIPPED WITHOUT INDICATION AT WAZIRABAD. NO TRIPPING AT GEETA COLONY. CKT CHARGED AT 18.58HRS. FROM WAZIRABAD.
06	04.05.09	18.49	220/66KV 100MVA PR. TR.-I & II AT WAZIRABD	04.05.09	19.00	BOTH TRANSFORMERS TRIPPED WITHOUT INDICATIONS.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
07	04.05.09	19.11	220KV MANDOLA – WAZIRABAD CKT-I & IV	04.05.09	19.21	BOTH CKTS TRIPPED DUE TO OPERATION OF 220KV BUS BAR PROTECTION AT WAZIRABAD WHILE ENERGIZSING 220KV BUS COUPLER AT WAZIRABAD.
08	04.05.09	19.11	220KV WAZIRABAD – GEETA COLONY CKT-II	04.05.09	19.21	BOTH CKT TRIPPED DUE TO APPEARANCE OF 220KV BUS BAR PROTECTION AT WAZIRABAD WHILE ENERGIZSING 220KV BUS AT WAZIRABAD.
09	04.05.09	19.11	220/66KV 100MVA PR. TR.-I & II AT WAZIRABD	04.05.09	19.21	BOTH CKT TRIPPED DUE TO APPEARANCE OF 220KV BUS BAR PROTECTION AT WAZIRABAD WHILE ENERGIZSING 220KV BUS AT WAZIRABAD.
10	05.05.09	15.20	220/66KV 160MVA PR. TR. AT PRAGATI	05.05.09	17.45	TR. TRIPPED ON BUCHLOZ, 30A, 86, 86
11	06.05.09	06.58	220KV GEETA COLONY – PATPARGANJ CKT-I	06.05.09	07.49	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT GEETA COLONY AND ON DIST PROT `ABC' PHASE ZONE-I, 186, 186 AT PATPARGANJ
12	10.05.09	10.15	220/33KV 100MVA PR. TR-I AT GEETA COLONY	10.05.09	13.38	TR. TRIPPED ON 86, 30E, 30G BUCHLOZ ALONG WITH 33KV I/C-I WHICH TRIPPED ON 30.
13	10.05.09	11.41	220KV MANDOLA – WAZIRABAD CKT-II & III	10.05.09	15.07	220KV MANDOLA CKT-II TRIPPEDON DIST PROT `R' PHASE, BUS BAR PROTECTION AND CKT-III TRIPPED ON SUPERVISION RELAY, BUS BAR PROTECTION AT WAZIRABAD. CKT-II & III CHARGED AT 12.35HRS AND 15.07HRS RESPECTIVELY.
14	10.05.09	11.41	220KV WAZIRABAD – GEETA COLONY CKT-I	10.05.09	12.48	CKT. TRIPPED ON DIST PROT `RYB' PHASE, AUTO RECLOSE LOCK OUT AT WAZIRABAD. NO TRIPPING AT GEETA COLONY
15	10.05.09	11.41	220KV WAZIRABAD – KASHMIRI GATE CKT-I	10.05.09	12.45	CKT. TRIPPED ON GENERAL TRIP, GFC STFW L1-L2-L3 ZM-1 TRIP, ZM2 & ZM-3 START FAULT LOOP L1-L2 AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE
16	10.05.09	11.41	220/66KV 100MVA PR. TR.-III AT WAZIRABAD	10.05.09	12.55	TR. TRIPPED ON BUS BAR PROTECTION.
17	10.05.09	13.12	220KV BTPS – OKHLA CKT-II	10.05.09	14.07	CKT. TRIPPED DUE TO 220KV BUS DIFFERENTIAL OPERATION AT BTPS.
18	10.05.09	13.12	220KV BTPS – MEHRAULI CKT-II	10.05.09	14.07	CKT. TRIPPED DUE TO 220KV BUS DIFFERENTIAL OPERATION AT BTPS.
19	10.05.09	13.12	220KV BTPS – SARITA VIHAR CKT-II	10.05.09	14.07	CKT. TRIPPED DUE TO 220KV BUS DIFFERENTIAL OPERATION AT BTPS.
20	10.05.09	13.12	220KV BTPS – NOIDA – GAZIPUR CKT	10.05.09	14.07	CKT. TRIPPED DUE TO 220KV BUS DIFFERENTIAL OPERATION AT BTPS.
21	10.05.09	15.28	220KV BTPS – MEHRAULI CKT-II	10.05.09	16.21	CKT. TRIPPED `B' PHASE E/F AT BTPS AND ON DIST PROT `A' PHASE ZONE-I AT MEHRAULI.
22	10.05.09	15.50	220KV NAJAFGARH – BAMNAULI CKT-I & II	10.05.09	16.50	BOTH CKTS TRIPPED ON 186, 186 AT NAJAFGARH.
23	13.05.09	13.42	220KV BAMNAULI – MEHRAULI CKT-II	13.05.09	13.44	CKT TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT MEHRAULI.
24	17.05.09	18.37	220KV MANDOLA – WAZIRABAD CKT--I	17.05.09	18.45	CKT. TRIPPED ON DIST PROT `R&Y' PHASE ZONE-I, 86R&B, 186A&B AT MANDOLA AND ON RXME18, REL511, DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD.
25	17.05.09	21.10	220/66KV 100MVA PR. TR.-II AT PARK STREET	17.05.09	24.00	TR. TRIPPED ON DIFFERENTIAL ALONG WITH 66KV I/C-II WHICH TRIPPED ON INTER TRIPPING.
26	18.05.09	13.12	220KV PANIPAT – NARELA CKT-I & II	18.05.09	18.38	CKT-I TRIPPED ON DIST PROT B' PH ZONE-1, 186A&B, 30G, 30B AND CKT-II TRIPPED ON 186A&B, 30G, 30C AT NARELA.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
27	19.05.09	20.40	220/66KV 100MVA PR. TR.AT DSIDC BAWANA	19.05.09	21.30	TR. TRIPPED ON 86, AUXILIARY, BUCHLOZ, OIL WINDING TEMP TRIP, 30ABC.
28	19.05.09	21.05	33/11KV 16MVA PR. TR-II AT SUBZI MANDI	19.05.09	21.45	TR. TRIPPED ON NON DIRECTIONAL E/F, 51RYB, 86
29	19.05.09	21.20	220KV NARELA – ROHTAK ROAD CKT-I	19.05.09	22.50	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT NARELA.
30	22.05.09	06.21	220KV PRAGATI – PARK STREE CKT-I	22.05.09	06.40	CKT. TRIPPED ON E/F, 67N, 86B AT PARK STREET END ONLY.
31	22.05.09	14.42	400/220KV 315MVA ICT-III AT BAMNAULI	23.05.09	00.17	400/220KV ICT-III TRIPPED ON TIE CB AUTO RECLOSE LOCK OUT, CIRCLE OIL TEMP, OIL ALARM, BUCHLOZ, VRB, OIL / WINDING TRIP, AUX BUCHLOZ, 30A, AUX AUX TRIP, LOW ALARM, 30U, GROUP-A 86X1, AUTO RECLOSE LOCK OUT 186A&B.
32	22.05.09	14.38	VARIOUS TRIPPING IN DELHI SYSTEM			DETAILED REPORT IS MENTIONED AFTER THE TRIPPING REPORT OF MAY 2009.
33	23.05.09	16.52	220KV MANDOLA – GOPALPUR CKT-I	23.05.09	17.23	CKT. TRIPPED ON DIST PROT. `R' PHASE ZONE-I AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR.
34	23.05.09	19.31	220KV DSIDC BAWANA – NARELA CKT-I & II	23.05.09	20.37	THE FOLLOWING TRIPPINGS OCCURRED **AT DSIDC BAWANA** NARELA CKT-I : MAIN-I& II DIST PROT `C' PH. NARELA CKT-II : DIST PROT `C' PHASE, 186 **AT NARELA** DSIDC BAWANA CKT-I : PSB, 186, 186 DSODC NAWAMA CLT-II : NO TRIPPING. 220KV DSIDC BAWANA CKT-I & II CHARGED AT 20.37HRS. AND 19.41HRS. RESPECTIVELY.
35	23.05.09	19.31	220/66KV 100MVA PR. TR.-III AT DSIDC BAWANA	23.05.09	23.40	TR. TRIPPED ON TRIP, 86, O/C, E/F, 50, 51, PROTECTION 87.
36	23.05.09	20.08	220KV MANDOLA – GOPALPUR CKT-I	23.05.09	20.29	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-II AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR.
37	25.05.09	21.26	220KV SARITA VIHAR – PRAGATI CKT.	25.05.09	22.02	CKT. TRIPPED ON ACTIVE GROUP-I, DIST PROT `B' PH ZONE-I AT PRAGATI AND ON DIST PROT `B' PH. ZONE-I AT SARITA VIHAR.
38	27.05.09	13.25	220KV BTPS – NOIDA – GAZIPUR CKT	27.05.09	13.46	CKT. TRIPPED ON `B' PHASE E/F AT BTPS. NO TRIPPING AT GAZIPUR.
39	29.05.09	08.10	220/66KV 100MVA PR. TR.-I AT PAPPANKALAN-I	29.05.09	11.15	TR. TRIPPED ON O/C, E/F, 86B ALONG WITH 66KV I/C-I WHICH TRIPPED ON INTER TRIPPING.
40	29.05.09	12.50	33/11KV 20MVA PR. TR. AT SHALIMAR BAGH	29.05.09	13.22	TR. TRIPPED ON 86.
41	29.05.09	17.01	220KV MANDOLA – WAZIRABAD CKT-I	29.05.09	19.35	CKT. TRIPPED ON CB AUTO TRIP, CARRIER SIGNAL AT MANDOLA AND ON RXME18, DIST PROT `RYB' PHASE AT WAZIRABAD.
42	29.05.09	17.01	220KV PATPARGANJ – IP CKT-I	29.05.09	17.21	CKT. TRIPPED ON NON DIRECTIONAL E/F, 186 AT IP. NO TRIPPING AT PATPARGANJ.
43	29.05.09	19.21	220KV BAMNAULI – NAJAFGARH CKT-I & II	29.05.09	19.55	BOTH CKT. TRIPPED ON BUS BAR PROTECTION, 96, AUTO RECLOSE, 186A&B AT BAMNAULI. NO TRIPPING AT NAJAFGARH
44	29.05.09	19.21	220KV BAMNAULI – MEHRAULI CKT-I & II	29.05.09	19.55	CKT-I TRIPPED ON DIST PROT `A&B' PH ,AUTO RECLOSE LOCK OUT, 186 AND CKT-II TRIPPED ON BUS BAR PROTECTION, 96, AUTO RECLOSE, 186A&B AT BAMNAULI.
45	29.05.09	19.21	220KV BAMNAULI – PAPPANKALAN-I CKT-I & II	29.05.09	19.55	BOTH CKT. TRIPPED ON BUS BAR PROT., 96, AUTO RECLOSE, 186A&B AT BAMNAULI. NO TRIPPING AT PAPPANKALAN-I

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
46	29.05.09	19.21	220KV BAMNAULI – PAPPANKALAN-II CKT-II	29.05.09	19.55	BOTH CKT. TRIPPED ON BUS BAR PROT., 96, AUTO RECLOSE, 186A&B AT BAMNAULI. NO TRIPPING AT PAPPANKALAN-II
47	30.05.09	18.35	220KV SARITA VIHAR – MAHARANI BAGH CKT	30.05.09	19.07	CKT. TRIPPED ON DIST PROT `RYB' PH ZONE-I AT MAHARANI BAGH AND ON DIST PROT `ABC' PHASE ZONE-I AT SARITA VIHAR.
48	31.05.09	02.25	220KV SARITA VIHAR – PRAGATI CKT.	31.05.09	02.37	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I AT SARITA VIHAR AND ON DIST PROT `A' PHASE ZONE-I AT PRAGATI.
49	31.05.09	06.02	33/11KV 16MVA PR. TR. AT SHALIMAR BAGH	31.05.09	15.02	TR. TRIPPED ON DIFFERENTIAL ALONG WITH ITS 11KV I/C WHICH TRIPPED ON 86.
50	31.05.09	07.30	220/66KV 100MVA PR. TR. AT PRAGATI	31.05.09	12.30	TR. TRIPPED ON POLE DISCREPANCY.
51	31.05.09	09.50	220KV WAZIRABAD – GEETA COLONY CKT-II	31.05.09	19.45	CKT. TRIPPED ON RXME18, DIST PROT `RYB' PHASE AT WAZIRABAD AND ON DIST PROT `RYB' PHASE ZONE-I AT GEETA COLONY.
52	31.05.09	20.52	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-II	31.05.09	23.20	TR. TRIPPED ON BUCHLOZ, DIFFERENTIAL, MASTER RRELAY, O/C.

DETAILS OF THE TRIPPING OCCURRED ON 22.05.2009

The following trippings occurred in Delhi system.

(a) 220kV Wazirabad-II Sub station

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	RXME-18, Dist. Prot. Zone-I, R&Y-phase	14.37	14.52	
02	220kV Geeta Colony Ckt-II	RXME-18, Dist. Prot. Zone-I, R&Y-phase	14.37	16:55 24.05.09	Ckt tried at SOW at 14.52 hrs. but again tripped on same indication. CVT of Mandola Ckt-I, II, III & IV disappeared. Bus Bar Prot. Operated & Bus coupler tripped on Bus Bar Prot., check zone, 87, 89A, R-ϕ
03	220kV Kashmiri Gate Ckt-I	RXME-18, Dist. Prot. Zone-I, R&B-phase, W L1-L2-L3, Fault location 3.3km	14.37	16:55 24.05.09	
04	220kV Kashmiri Gate Ckt - II	RXME-18, Dist. Prot. Zone-I, R&B-phase, W L1-L2-L3	14.37	18:10 24.05.09	
05	200/66kV 100MVA Tx-2	Bucholtz Alarm and trip, 3-phase trip	14.37	15:47 23.05.09	
06	200/66kV 100MVA Tx-1 & 3	With out indication	14.37	16.55	
07	220kV Mandola Ckt-IV	RXME-18, Dist. Prot. Zone-I, R&B-ϕ, L1-L2, Fault location 6.2Km	14.37	16.06	
08	220kV Mandola Ckt-I	Supply failed	14.52	16.13	Cvt of Mandola Ckt-I, II, III & IV disappeared.
09	220kV Mandola Ckt-II	Supply failed	14.52	16.10	
10	220kV Mandola Ckt-III	Supply failed	14.52	16.08	
11	220kV Mandola Ckt-I	No tripping at SOW	16.22	16.50	When Kashmeregate Ckt-I was tried to charge from SOW CVT of Mandola Ckt-I,II,III &IV disappeared
12	220kV Mandola Ckt-II	No tripping at SOW	16.22	16.47	
13	220kV Mandola Ckt-III	No tripping at SOW	16.22	16.46	
14	220kV Mandola Ckt-IV	No tripping at SOW	16.22	16.45	

(b) 220kV Gopalpur Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	220kV Mandola Ckt-I	Dist. Prot. Zone-I, 3-ϕ trip, Fault loop L1-N. Location 2.1Km	14.37	17.34	

(c) 400kV Mandola Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	220kV Wazirabad Ckt-I	3-phase trip, Dist. Prot. Zone-2	14.52	16.50	
02	220kV Wazirabad Ckt-II	R-N phase, Dist. Prot. Zone-2	14.52	16.47	
03	220kV Wazirabad Ckt-III	B-N phase, Dist. Prot. Zone-3	14.52	16.46	
04	220kV Wazirabad Ckt-IV	R-N phase, Dist. Prot. Zone-2	14.52	16.45	
05	220kV Gopalpur Ckt-I	R-N phase, Dist. Prot. Zone-1	14.52	17.34	

(d) 220kV Subzimandi Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	220kV Gopalpur Ckt-II	Supply failed	14.37	15.04	

(e) 220kV Geeta Colony Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	220kV Wazirabad Ckt-I	Main-I, 3-phase trip, Dist. Prot. Zone-I, fault location 2.836Km Main-II, 3-phase trip, Dist. Prot. Zone-I, Phase A-N	14.37	16.20	
02	220kV Wazirabad Ckt-II	Main-I, 3-Ph. trip, Dist. Prot. Zone-I, fault location 3.089Km, Main-II, 3-ϕ trip, Dist. Prot. Zone-Iϕ C-N	14.37	16:55 24.05.09	
03	220kV Patparganj Ckt-I	No tripping at Geeta Colony	14.37	17:25	
04	220kV Patparganj Ckt-II	No tripping at Geeta Colony	14.37	17:25	

(f) 220kV Pragati Sub station (IP Extn.)

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	220kV IP Ckt-I	Supply failed	14.37	15.10	220kV Bus-II becomes dead due to collapse of RPH, IP and Pragati generating station
02	220kV IP Ckt-II	Supply failed	14.37	15.10	
03	220kV Parkstreet Ckt-II	Supply failed	14.37	15.10	

(g) 220kV Patparganj Sub station

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	186, Under Frequency	14.37	17.25	
02	220kV Geeta Colony Ckt-II	186, Under Frequency	14.37	17.25	
03	220kV IP Ckt-I	Supply Failed	14.37	15.10	
04	220kV IP Ckt-II	Supply Failed	14.37	15.10	
05	66 kV G.H.-I	Under Frequency	14.37	17.40	**Load Relief in MW**
06	33kV KARKARDOOMA CKT-I	Under Frequency	14.37	17.40	
07	33kV KARKARDOOMA CKT-II	Under Frequency	14.37	17.40	
08	33kV GEETA COLONY CKT	Under Frequency	14.37	17.40	
09	33kV SHAKAR PUR CKT	Under Frequency	14.37	17.40	
10	33kV PREET VIHAR CKT	Under Frequency	14.37	16.20	
11	33kV GURU ANGAD NAGAR CKT-I	Under Frequency	14.37	17.40	
12	33kV GURU ANGAD NAGAR CKT-II	Under Frequency	14.37	17.40	
13	33kV CBD SHAHDARA CKT	Under Frequency	14.37	17.40	
14	11KV Commercial Practice	Under Frequency	14.37	17.40	
15	11kv Shakarpur	Under Frequency	14.37	17.40	
16	11kV Preet Vihar	Under Frequency	14.37	17.40	
17	66kV Khichri pur	Made off	14.45	17.40	
18	33kV Twin Tower	Made off	14.45	16.50	
19	33kV Mother Diary	Made off	14.45	15.20	

66kV	63
33kV	90
11kV	2
Total	**155**

(h) RPH Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	Unit # 1		14.37		
2	Unit # 2		14.37	00.41 23.05.09	
3	33kV Bay No 5, 6,12,13, 18	Under Frequency	14:37	16:40	Load Relief-54 MW

(i) IP Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	Unit # 2		14.39	16.15	
2	Unit # 3		14.39	16.05	
3	33kV Bay -25, 37, 18, 24 & 30	Under frequency	14.39	14.59	Load affected – 60MW
4	220/33kV 100MVA Pr. Tr. -1	Without indication	14.54	15.04	

(j) Pragati Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	Unit # 2		14.39	14.58	
			15.36	15.51	
2	STG		14.39	15.39	

Load affected was as under :-

Duration in hrs.		Quantum in MW	Grid
From	**To**		
14.37	16.55	120	Wazirabad
14.37	16.55	307	Geeta Colony
14.30	16.55	90	Gopalpur
14.30	15.04	47	Subzimandi
14.30	17.40	178	Patparganj
14.37	15.10	150	Pragati S/stn

System configuration during the incident (position at 1439Hrs.).

At the time of incident, IP, RPH, Pragati (Unit-2 & STG) were connected to Mandola side through 220kV IP Ext – IP – Patparganj – Geeta Colony – Wazirabad – Mandola Ckts. GT and Pragati (Unit-I) were connected to BTPS side through 220kV Pragati – Maharani Bagh - Sarita Vihar – BTPS Ckts.

Tripping of 220kV Mandola-Wazirabad Ckt-I,II,III & IV resulting the islanding of generating stations namely RPH, IP and Pragati (Unit-II & STG) from the Grid and collapsed. The load generation position prior to the grid incident was as under :-

Sub-Station	Load in MW	Generation position at 1400hrs. in MW
Patparganj	178	
IP	206	92
RPH	92	92
Pragati	NIL	191
Park Street	150	NIL
Wazirabad	105	NIL
Geeta Colony	75	NIL
Total	806	375

The generating units affected was normalized as under :

Generating Station Name	Unit No.	Time of tripping	Time of synchronization
RPH	1	14.39	22.05
	2	14.39	00.41 (23.05.09)
IP	2	14.39	16.15
	3	14.39	16.05
Pragati	2	14.39	15.51
	2	15.36	15.39
	STG	14.39	15.39

Note : The weather was storming. Tower nos. 12,13&14 of 220kV Wazirabad-Kashmeregate Ckt-I&II collapsed. The earth wire of collapsed towers falls on 220kV Wazirabad-Geeta Colony Ckt-II.

17.3 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH JUNE 2009

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.06.09	09.23	220KV MANDOLA – WAZIRABAD CKT-II & III	01.06.09	13.03	BOTH CKT. TRIPPED ON DIST PROT AT WAZIRABAD. CKT.-II CHARGED AT 09.25HRS. AND CKT-II & III CHARGED AT 09.25HRS. AND 13.03HRS. RESPECTIVELY.
02	01.06.09	09.23	220KV WAZIRABAD – GEETA COLONY CKT-II	01.06.09	13.15	CKT. TRIPPED ON DIST PROT AT WAZIRABAD AND ON MAIN-I DIST PROT `ABC' PHASE ZONE-II, O/C, MAIN-II : DIST PROT `ABC' PHASE ZONE-II AT GEETA COLONY.
03	01.06.09	09.23	220/33KV 100MVA PR. TR.-I AT WAZIRABAD	01.06.09	15.55	TRANSFORMER TRIPPED ON E/F ALONG WITH ITS 66KV I/C-I WHICH TRIPPED ON MASTER RELAY.
04	01.06.09	09.25	220KV WAZIRABAD – KASHMIRI GATE CKT-I	01.06.09	13.15	CKT. TRIPPED ON DIST PROT `ABC' PHASE, 86, 21D, BC AT KASHMIRI GATE.
05	04.06.09	08.25	220KV BAMNAULI – MEHRAULI CKT-I	04.06.09	08.37	CKT. TRIPPED ON DIST PROT `A' PH. ZONE-I, ACTIVE GROUP-I AT MEHRAULI AND ON DIST PROT `A' PHASE 186A&B AT BAMNAULI.
06	04.06.09	10.41	220/66KV 100MVA PR. TR.-II AT VASANT KUNJ	04.06.09	11.42	100MVA PR. TR.-II TRIPPED ON OIL TEMP HIGH ALONG WITH 66KV I/C-I & II WHICH TRIPPED ON E/F. 66KV I/C-I & II CHARGED AT 10.50HRS.
07	05.06.09	08.15	220KV BTPS – OKHLA CKT-I	05.06.09	08.25	CKT. TRIPPED ON `R' PHASE O/C AT BTPS.
08	05.06.09	08.15	220/33KV 50MVA PR. TR.-I & II AT OKHLA	05.06.09	08.20	220/33KV 50MVA PR. TR.-I & II TRIPPED ON 85C, 51AX BACKUP PROT. AND 86 ALONG WITH ALL 33KV I/CS WHICH WERE TRIPPED AS UNDER :- 33KV I/C-I : 95C, 86, 51A 33KV I/C-II : 86, LB 33KV I/C-III : 51A, 86 33KV I/C-IV : O/C, 86LB ALL 33KV I/C NORMALIZED BY 08.20HRS.
09	05.06.09	15.10	220KV WAZIRABAD – GEETA COLONY CKT-I	05.06.09	15.28	CKT. TRIPPED ON O/C, 67R, 67B, 86 AT WAZIRABAD
10	05.06.09	15.10	220KV GEETA COLONY – PATPARGANJ CKT-I & II	05.06.09	15.35	BOTH CIRCUITS TRIPPED ON 186 AT GEETA COLONY END.
11	06.06.09	09.00	220/33KV 100MVA PR. TR.-I AT GEETA COLONY	06.06.09	09.00	TR. TRIPPED ON SUPERVIISON-I & II RELAY, 195RYB, 295RYB, 30A, 30B, GENERAL LOCK OUT, OIL PRESSURE LOW.
12	06.06.09	10.55	220/33KV 100MVA PR. TR.-I AT GEETA COLONY	06.06.09	14.13	TR. TRIPPED ON SUPERVIISON-I & II RELAY, 195RYB, 295RYB, 30A, 30B, GENERAL LOCK OUT, OIL PRESSURE LOW.
13	06.06.09	18.40	220KV MANDOLA – WAZIRABAD CKT-IV	06.06.09	22.20	CKT. TRIPPED ON DIST PROT `Y&B' PHASE AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I, RXME-18 AT WAZIRABAD.
14	07.06.09	02.15	220KV GEETA COLONY – PATPARGANJ CKT-II	07.06.09	10.40	CKT. TRIPPED ON MAIN-I : 195RYB, 30A, 30B, 30C, MAIN-II:295RYB, 30D AT GEETA COLONY
15	07.06.09	12.47	220KV PRAGATI – SARITA VIHAR CKT.	07.06.09	13.10	CKT. TRIPPED ON 186, 186, DIST PROT `C' PH. ZONE—I, ACTIVE GROUP-I AT PRAGATI AND ON DIST PROT `C' PHASE ZONE-I, AUTO RECLOSE LOCK OUT AT SARITA VIHAR.
16	08.06.09	07.02	220/66KV 100MVA PR. TR-I & II AT VASANT KUNJ	08.06.09	7.30	TR.-I TRIPPED ON 51A, 86C ALONGWITH 66KV I/C-I WHICH TRIPPED ON 51A, 86 AND 220/66KV 100MVA PR. TR.-II TRIPPED 30K, 51A, 51C, LOW OIL PRESSURE ALARM ALONG WITH 66KV I/C-II WHICH TRIPPED ON 51A, 51C. 100MVA PR. TR.-I & 656KV I/C-I CHARGED AT 07.15HRS. AND 100MVA PR. TR.-II AND 66KV I/C-II CHARGED AT 07.30HRS.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
17	09.06.09	17.20	220KV SHALIMAR BAGH – DMRC CKT.	09.06.09	19.32	CKT. TRIPPED ON DISTANCE PROT. , LBB, AIR BLOCK, DIFFERENCE TRIP AT SHALIMAR BAGH
18	10.06.09	04.20	66/11KV 20MVA PR. TR.-I, II & III AT NAJAFGARH	10.06.09	18.58	THE FOLLOWING RELAY INDICATIONS APPEARED :- 20MVA TX-I : 51AX, O/C, `R' BACK UP PROT. 11KV I/C-I : O/C, `B' PHASE 20MVA TX-II:51AX, 51BX, 51CX, BACK UP PROT. 11KV I/C-II : O/C `R' PHASE 20MVA TX-III : O/C `R' PHASE 11KV I/C-III : O/C,`R' PHASE, E/F 20MVA PR. TX-I, II & III CHARGED AT 18.58 HRS, 05.35HRS AND 04.25HRS RESPECTIVELY.
19	10.06.09	14.22	220KV PRAGATI – SARITA VIHAR CKT	10.06.09	14.24	CKT. TRIPPED ON DIST PROT `C' PH. ZONE-I, 186,186 AT PRAGATI AND ON DIST PROT `C' PHASE ZONE-I, 186 AT SARITA VIHAR.
20	10.06.09	15.02	220KV MANDOLA – WAZIRABAD CKT-II, III & IV	10.06.09	15.31	220KV MANDOLA CKT-II & III TRIPPED WITH OUT INDICATION AND CKT-IV TRIPPED ON DIST PROT `RYB' PHASE ZONE-II, RXME-18 AT WAZIRABAD AND ON DIST PROT., 86RYB, 186A&B AT MANDOLA. CKT.-II, III & IV CHARGED AT 15.16HRS, 15.17HRS AND 15.31HRS RESPECTIVELY.
21	10.06.09	15.02	220KV WAZIRABAD – GEETA COLONY CKT-I	10.06.09	15.17	CKT. TRIPPED AT WAZIRABAD WITHOUT INDICATION
22	10.06.09	15.02	220KV WAZIRABAD – KASHMIRI GATE CKT-I	10.06.09	15.19	CKT. TRIPPED AT WAZIRABAD WITHOUT INDICATION
23	10.06.09	15.03	220KV PANIPAT – NARELA CKT-III	10.06.09	15.37	CKT. TRIPPED ON 30G, 30B, 186 AT NARELA.
24	10.06.09	15.47	220KV MEHRAULI – VASANT KUNJ CKT-I	10.06.09	17.10	CKT. TRIPPED ON POLE DISCREPANCY AT VASANT KUNJ
25	11.06.09	04.00	220KV MANDOLA – GOPALPUR CKT-II	11.06.09	04.28	CKT. TRIPPED ON DIST PROT `R' PHASE ZONE-II & III AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR.
26	11.06.09	16.18	220KV BAWANA – NAJAFGARH CKT-I	11.06.09	16.38	CKT. TRIPPED WITHOUT INDICATION AT NAJAFGARH.
27	11.06.09	17.44	220KV BTPS – MEHRAULI CKT-I	11.06.09	18.03	CKT. TRIPPED ON DIST PROT ZONE-I, 30G AT BTPS. NO TRIPPING AT MEHRAULI.
28	12.06.09	13.05	220/66KV 100MVA PR. TR.-I AT NAJAFGARH	13.06.09	12.08	TR. TRIPPED ON 95AA, 95CA, 95BA, 95AB, 95CB, 95BB, 95AC, 95CC, 95BC, 30E, 30F, 86
29	12.06.09	13.05	220KV BAWANA – NAJAFGARH CKT-II	12.06.09	13.42	CKT. TRIPPED ON 186, 186 AT NAJAFGARH.
30	12.06.09	13.05	66/11KV 20MVA PR. TR.-III AT NAJAFGARH	13.06.09	13.15	TR. TRIPPED ON 86, O/C ALONG WITH 11KV I/C-III WHICH TRIPPED ON `R&B' O/C.
31	12.06.09	15.12	220/66KV 160MVA PR. TR. AT PRAGATI (GT)	12.06.09	21.20	TR. TRIPPED ON 30D, 30C, 86, 86 AT PRAGATI AND ON 51 AND 64 AT GT.
32	13.06.09	18.07	220KV MAHARANI BAGH – SARITA VIHAR CKT.	13.06.09	17.20	CKT. TRIPPED ON DIST PROT `R' PH. ZONE-I AT MAHARANI BAGH AND ON DIST PROT `A' PHASE ZONE-I, 186A, 186A AT SARITA VIHAR.
33	14.06.09	07.47	220KV BTPS – NOIDA – GAZIPUR CKT.	14.06.09	08.08	CKT. TRIPPED ON DIRECTIONAL O/C, 86 ALONG WITH 66KV I/C-II WHICH TRIPPED ON O/C, 86 AT GAZIPUR. NO TRIPPING AT BTPS.
34	15.06.09	13.35	220KV GEETA COLONY – PATPARGANJ CKT-I & II			DETAILED REPORT IS MENTIONED AFTER THE REPORT OF JUNE 2009
35	16.06.09	07.30	220/33KV 100MVA PR. TR.-I AND 220/33KV 50MVA PR. TR.-II AT PATPARGANJ	16.06.09	14.40	THE FOLLOWING TRIPPING OCCURRED : 220/33KV 100MVA PR. TR.-I : O/C `R' PH 86, 86 33KV I/C-I : O/C `R' PHASE 220/33KV 50MVA PR. TR.-II : REF LV, 86 33KV I/C-II : INTER TRIPPED 33KV I/C-IV : O/C, `R' PHASE, 86

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
36	17.06.09	05.50	220KV MANDOLA – NARELA CKT-II	16.06.09	06.30	CKT. TRIPPED ON 186 AT NARELA.
37	17.06.09	08.13	220/66KV 100MVA PR. TR.-II AT PAPPANKALAN-II	17.06.09	10.15	TR. TRIPPED ON REF, LBB PROT, 86 ALONG WITH 66KV I/C-I WHICH TRIPPED ON O/C, E/F, L8, L11, LBB PROT, IDMB / O/C TRIP, IDMB E/F
38	17.06.09	12.29	220KV SARITA VIHAR – MAHARANI BAGH CKT	17.06.09	13.05	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I, 186A, 186B AT SARITA VIHAR AND ON DIST PROT ZONE-I AT MAHARANI BAGH.
39	18.06.09	09.40	220KV BTPS – MEHRAULI CKT-II	18.06.09	10.00	CKT. TRIPPED ON `R' PH. E/F AT BTPS AND ON DIST PROT `A' PH. ZONE-I AT MEHRAULI.
40	20.06.09	15.55	220KV BAWANA – NAJAFGARH CKT-II	20.06.09	16.00	CKT. TRIPPED ON 86, 86 AT NAJAFGARH.
41	21.06.09	09.23	400KV BAWANA – HISSAR CKT.	21.06.09	09.23	AUTO RECLOSED OPERATED MAIN-I & II ANZ-I
42	21.06.09	16.58	220KV MANDOLA – GOPALPUR CKT-I	21.06.09	17.26	CKT. TRIPPED ON DIST PROT, 186A&B, 86RYB, AUTO RECLOSE LOCKOUT AT MANDOLA AND ON DIST PROT `RYB PHASE ZONE-I AT GOPALPUR
43	21.06.09	19.35	220/66KV 100MVA PR. TR.-II AT MEHRAULI	21.06.09	20.17	100MVA PR. TR.-II TRIPPED ON O/C ALONG WITH 66KV I/C-I, II AND III. 66KV I/C-I TRIPPED ON 64X, 51BX AND 66KV I/C-II & III TRIPPED ON 51BX. 66KV I/C-I & II CHARGED AT 20.08HRS. AND 66KV I/C-II CHARGED AT 20.17HRS.
44	22.06.09	12.50	220/66KV 100MVA PR.TR.-IV AT NAJAFGARH	22.06.09	16.30	TR. TRIPPED ON 30A, BUCHLOZ, 86, 86, 295 ALONG WITH 66KV I/C-IV.
45	23.06.09	01.02	33/11KV 16MVA PR. TR.-II AT SUBZI MANDI	23.06.09	05.10	TR. TRIPPED ON DIFFERENTIAL, 87R, 86.
46	24.06.09	15.15	66/11KV 20MVA PR. TR-I AT PAPPANKALAN-II	24.06.09	18.30	TR. TRIPPED ON LBB REF.
47	25.06.09	16.45	220KV NARELA – ROHTAK ROAD CKT-I	25.06.09	17.25	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT NARELA.
48	26.06.09	11.41	220KV BAMNAULI – MEHRAULI CKT-I	26.06.09	11.49	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-II, 86, 186A&B AT BAMNAULI AND ON ACTIVE GROUP-I, DIST PROT `A' PHASE ZONE-I AT MEHRALI.
49	26.06.09	17.35	66/11KV 20MVA PR. TR-I AT PAPPANKALAN-II	24.06.09	2.15	TR. TRIPPED ON LBB REF, 86.
50	27.06.09	17.15	220KV BAMNAULI – PAPPANKALAN-I CKT-I & II	27.06.09	17.40	CKT-I TRIPPED ON 86ABC, 186X, 186AB, DIST PROT AUTO RECLOSE LOCK OUT AND CKT-II TRIPPED ON 67C, O/C, 186AB, 186X AT PAPPANKALAN-I
51	28.06.09	03.40	220/66KV 100MVA PR. TR.-II AT NAJAFGARH	28.06.09	05.26	TR. TRIPPED ON 30B, WT, 186 ALONG WITH 66KV I/C-II & IV. 66KV I/C-II TRIPPED ON INTER TRIPPING AND 66KV I/C-IV TRIPPED ON O/C.
52	28.06.09	08.05	220KV MEHRAULI – VASANT KUNJ CKT-I	28.06.09	08.10	CKT. TRIPPED ON DIST PROT 186 AT MEHRAULI.
53	28.06.09	21.10	220/66KV 100MVA PR. TR.-IV AT PAPPANKALAN-I	28.06.09	22.30	TR. TRIPPED ON AUX WIDING OIL TEMP HIGH, AL 30E ALONG WITH 66KV I/C-IV WHICH TRIPPED ON O/C, E/F, 86.
54	29.06.09	22.50	220/33KV 100MVA PR. TR.-II AT IP STN.	3006.09	01.09	TR. TRIPPED ALONG WITH 33KV BUS DIFFERENTIAL AT IP
55	30.06.09	06.15	220KV SARITA VIHAR – PRAGATI CKT	30.06.09	06.31	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I, 186A&B AT SARITA VIHAR AND ON ACTIVE GROUP-I, DIST PROT `A' PHASE ZONE-I AT PRAGATI.
56	30.06.09	06.12	400KV BAWANA – HISSAR CKT.	30.06.09	06.46	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-II AT BAWANA.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
57	30.06.09	06.45	33/11KV 16MVA PR. TR.-II AT SUBZI MANDI	30.06.09	06.45	TR. TRIPPED ON DIFFERENTIAL, 87R, 86 ALONG WITH 11KV I/C-II WHICH TRIPPED ON INTER TRIPPING.
58	30.06.09	10.12	220KV IP – RPH CKT-II	30.06.09	13.40	CKT. TRIPPED ON DIST PROT `ABC' PH. ZONE-II AT IP AND ON DIST PROT ZONE-II AT RPH.
59	30.06.09	17.35	400KV MANDOLA – BAWANA CKT-I	30.06.09	17.45	CKT. TRIPPED ON CB-I FACIA TROUBLE ALARM, CB-2, AUTO TRIP, MAIN-I & II : CNZ-I, 186A&B ON BOTH CB AT BAWANA . CKT. TRIPPED ON BNZONE-I AT MANDOLA END.

Details of trippings occurred on 15.06.2009

At about 13.35hrs on 15.06.09, 220kV Patparganj–Geeta Colony Ckt-I & II tripped at Patparganj on Master Relay indication resulting into the following trippings in Delhi system.

(a) 220kV Patparganj Sub station

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 & II	186, 186	13.35	13.50	
02	220kV IP Ckt-I & II	CVT Disappeared	13.35	13.50	
03	66kV Vivek Vihar Ckt-I & II	Under Frequency	13.35	15.05	Load relief through under frequency relay operation was as under : 66kV : 92MW 33kV : 91MW 11kV : 11MW **Total : 194MW**
04	66kV GH-I Ckt.	Under Frequency	13.35	15.05	
05	66V Khiripur Ckt.	Under Frequency	13.35	15.05	
06	33kV Karkardooma Ckt-I & II	Made off manually	13.35	14.40	
07	33kV Guru Angad Ngr Ckt-I & II	Under Frequency	13.35	14.40	
08	33kV Preet Vihar Ckt.	Under Frequency	13.35	14.35	
09	33kV Shakarpur Ckt.	Under Frequency	13.35	14.35	
10	33kV CBD Shahdra Ckt.	Under Frequency	13.35	15.05	
11	11kV Feeders	Under Frequency	13.35	14.30	

(b) 220kV IP Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	220kV Patparganj Ckt-I & II	Made off manually	13.36	13.51	
02	33kV Bay-18, 24, 25, 30, 37	Under frequency	13.35	15.18	Load relief through under frequency was 45MW

(c) 220kV RPH

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	33kV Bay-1, 2, 5, 6, 12, 13, 16, 17, 18, 19	Under Frequency	13.35	14.35	load relief through under frequency relay was 87MW

(d) 220kV GT Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	Unit-6 came on FSNL		13.35	14.10	Supply to the feeders 66kV Vidyut Bhawan Ckt-II and 66kV School Lane Ckt-I remained affected during 13.35hrs. to 13.40hrs.
02	Unit-5 & STG-2	Tripped	13.35 13.35	15.06 17.03	

System configuration during the incident

At the time of incident, IP, RPH, Pragati (Unit-2 & STG) and GT Unit-5, 6 STG-2 through 220/66kV 100MVA Pr. Tr-II were connected to Mandola side through 220kV IP Ext – IP – Patparganj – Geeta Colony – Wazirabad – Mandola Ckts. Rest of GT Station and Pragati (Unit-I) were connected to BTPS side through 220kV Pragati – Maharani Bagh - Sarita Vihar – BTPS Ckts.

Due to tripping of 220kV Patparganj – Geeta Colony Ckt-I & II on master relay indications at Patparganj resulting the islanding of generating stations namely RPH, IP, GT and Pragati (Unit-II & STG) and GT Unit-5, 6 & STG-2 from the Grid and their collapse. The load generation position prior to the grid incident was as under:-

Sub-Station	Load in MW	Generation position prior to the incident in MW
Patparganj	194	--
IP	147	85
GT (5, 6 & STG-2)	41	62
RPH	87	82
Pragati (Uunit-2 & STG)	0	192
Total	469	421

The generating units affected was normalized as under :

Generating Station Name	Unit No.	Time of tripping	Time of synchronization	Generation prior to the incident
RPH	1	13.35	15:20	41
	2	13.35	15:27	40
3IP	2	13.35	14.36	48
	4	13.35	14.30	37
Pragati	2	13.35	14.26	84
	STG	13.35	15.20	108
GT	3	13.35	14.45	24
	5	13.35	15.10	27
	6	13.35	14.10	26
	STG-1	13.35	14.47	10
	STG-2	13.35	17.05	9
	STG3	13.35	16.12	21

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

Duration in hrs.		**Quantum in MW**	**Grid**	**Name of The Ckt.**
From	**To**			
13.35	15.05	48	**Patparganj**	66kV Vivek Vihar Ckt-I & II
13.35	15.05	32		66kV GH-I Ckt.
13.35	15.05	14		66V Khiripur Ckt.
13.35	14.40	20		33kV Karkardooma Ckt-I & II
13.35	14.40	22		33kV Guru Angad Nagar Ckt-I & II
13.35	14.35	16		33kV Preet Vihar Ckt.
13.35	14.35	Off		33kV Shakarpur Ckt.
13.35	15.05	12		33kV CBD Shahdra Ckt.
13.35	14.30	11		11kV Feeders
13.35	14.35	87	**RPH**	**33kV Bay-1, 2, 5, 6, 12, 13, 16, 17, 18, 19**
13.35	13.40	41	**GT**	**66kV Vidyut Bhawan Ckt-II** **66kV School Lane Ckt-I**
14.27	15.07	16	**Geeta Colony**	33kV Kailash Nagar Ckt-I & II
15.12	16.12	23		33kV Kanti Nagar Ckt-I & II

Duration in hrs.		Quantum in MW	Grid	Name of The Ckt.
From	To			
13.32	15.18	5.5	**IP Station**	33kV Bay-18
13.32	13.45	--		33kV Bay-24
13.32	14.50	14		33kV Bay-25
13.32	15.12	13		33kV Bay-30
13.32	14.48	12		33kV Bay-37
13.33	13.45	67		33kV Bay-2, 4, 6, 10, 16, 28, 42
13.33	14.15	6		33kV Bay-34
13.33	14.43	5		33kV Bay-29
13.33	15.12	28		33kV Bay-5, 13, 19
13.33	14.48	12		33kV Bay-53, 54

17.4 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH JULY – 2009

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.07.09	13.37	220KV MANDOLA – GOPALPUR CKT-I	01.07.09	14.11	CKT. TRIPPED ON DIST PROT `R' PHASE ZONE-III AT MANDOLA. NO TRIPPING AT GOPALPUR.
02	03.07.09	07.27	220/33KV 100MVA PR. TR.-I & II AT PARK STREET	03.07.09	08.25	TR-I. TRIPPED ON E/F, O/C ALONG WITH 33KV I/C-I WHICH TRIPPED ON INTER TRIPPING. TR.-II TRIPPED ON O/C, 86B ALONG WITH 33KV I/C-II WHICH TRIPPED ON INTER TRIPPING. TR-I & II CHARGED AT 08.25HRS AND 07.47HRS RESPECTIVELY.
03	03.07.09	10.05	220KV SHALIMAR BAGH – DMRC CKT	03.07.09	18.10	CKT. TRIPPED ON HALF BUS PT VALVE, AB INITIA, THREE PHASE, AUTO RECLOSE LOCK OUT, CB TRIP AT SHALIMAR BAGH
04	03.07.09	19.07	220KV BTPS – MEHRAULI CKT-II	03.07.09	19.22	CKT. TRIPPED ON `C' PHASE ZONE-I AT MEHRAULI AND ON 30AB, 30A, E/F AT BTPS.
05	04.07.09	11.42	220KV BTPS – OKHLA CKT-I	0.07.09	12.15	CKT. TRIPPED ON 67AX, 186, 86X1, 86X2 AT BTPS. NO TRIPPING AT OKHLA. THE TRIPPING WAS OCCURRED DUE TO THE INCIDENT MENTIONED AT SR. NO.6.
06	04.07.09	11.42	220/33KV 50MVA PR TR-I & II AND 100MVA PR. TR.-III & IV	04.07.09	15.30.	THE FOLLOWING TRIPPINGS OCCURRED : 50MVA PR. TR.-I : 95C, 86 50MVA PR. TR-II: 86, 86, 51AX, 51CX 33KV I/C-I : 86, 86 33KV I/C-II : 86, LV, MASTER RELAY 33KV I/C-III : 51A, 86 33KV I/C-IV : O/C, 86LV 33KV I/C-I, III & IV ENERGIZED AT 12.18HRS AND 33KV I/C-II ENERGIZED AT 15.30HRS. 33KV CB OF NEHRU PLACE CKT-I DAMAGED AT OKHLA. THIS WAS OCCURRED WHILE CLEARING THE SHUT-DOWN OF THE CKT.
07	04.07.09	15.00	66/11KV 20MVA PR. TR.-II AT OKHLA	04.07.09	19.28	TR. TRIPPED ON 51AX, BACK UP PROTECTION ALONG WITH 11KV I/C-II WHICH TRIPPED ON O/C, E/F, 86.
08	05.07.09	11.20	220KV SHALIMAR BAGH – DMRC CKT	06.07.09	16.10	CKT. TRIPPED ON DIST PROT AT SHALIMAR BAGH.
09	05.07.09	23.18	220/66KV 100MVA PR. TR.-II AT SARITA VIHAR	06.07.09	16.45	TR TRIPPED ON 64REF LV SIDE.
10	06.07.09	14.12	220KV BTPS – MEHRAULI CKT-II	06.07.09	14.28	CKT. TRIPPED 30G, 30H, 186, 30A-B AT BTPS AND ON DIST PROT 'A' PHASE, ZONE-I, 186, 186 AT MEHRAULI.
11	07.07.09	07.00	33/11KV 16MVA PR. TR.-II AT NARAINA	07.07.09	10.47	TR. TRIPPED ON 30A,B,C,D, OLTC BUCHLOZ, 86 ALONG WITH 11KV I/C-II WHICH TRIPPED ON INTER TRIPPING.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
12	07.07.09	11.27	220KV BTPS – MEHRAULI CKT-II	07.07.09	11.38	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I AT MEHRAULI AND ON 30G AT BTPS.
13	07.07.09	12.17	220KV BTPS – MEHRAULI CKT-II	07.07.09	17.22	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I AT MEHRAULI AND ON DIST PROT ZONE-I, 30G AT BTPS.
14	09.07.09	12.11	220KV SARITA VIHAR – MAHARANI BAGH CKT	09.07.09	12.20	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-I, 186A, 186B AT SARITA VIHAR AND ON DIST PROT Y' PHASE AT MAHARANI BAGH.
15	09.07.09	21.25	66/11KV 20MVA PR. TR-I AT KANJHAWALA	09.07.09	21.50	TR. TRIPPED ON 86.
16	10.07.09	10.08	220KV BTPS – MEHRAULI CKT-II	10.07.09	10.22	CKT. TRIPPED ON BUS BAR PTORECTION AT MEHRAULI.
17	10.07.09	10.08	220KV BAMNAULI – MEHRAULI CKT-I & II	10.07.09	10.22	BOTH CKTS TRIPPED ON 186, 186 AT MEHRAULI END ONLY (BUS BAR PROT)
18	10.07.09	10.22	220KV MEHRAULI – VASANT KUNJ CKT-I & II	10.07.09	10.35	BOTH CKTS TRIPPED ON 186, 186 AT MEHRAULI END ONLY
19	10.07.09	18.30	220KV SARITA VIHAR – MAHARANI BAGH CKT	10.07.09	19.00	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I, AUTO RECLOSE LOCK OUT, 186A, 186B AT SARITA VIHAR AND ON DIST PROT `YB' PHASE AT MAHARANI BAGH.
20	10.07.09	19.15	33/11KV 16MVA PR. TR.-II AT SUBZI MANDI	10.07.09	19.45	TR. TRIPPED ON 86 ALONG WITH 11KV I/C-II WHICH TRIPPED ON O/C `R' PHASE
21	11.07.09	15.30	66/11KV 20MVA PR. TR-I AT KANJHAWALA	11.07.09	15.40	TR. TRIPPED ON 86.
22	12.07.09	01.35	66/11KV 20MVA PR. TR.-I AT ROHINI	12.07.09	04.15	TR. TRIPPED ON P/C, ABC PHASE, 86, 51A ALONG WITH 11KV I/C-I WHICH TRIPPED ON 51A, O/C, 86.
23	12.07.09	02.22	220/66KV 100MVA PR. TR.-I AT ROHINI	12.07.09	08.14	WHILE ARRANGING SHUT-DOWN ON 66KV BUS-II AT ROHINI, A FLASH OVER OCCURRED DUE TO WHICH 220/66KV 100MVA PR. TR.-I TRIPPED ALONG WITH 66KV I/C-I, II & IV. 66KV I/C-I, II & IV CHARGED AT 08.14HRS.
24	12.07.09	13.35	220/66KV 100MVA PR. TR.-I AT NARELA	12.07.09	18.55	TR. TRIPPED ON PRV, 86 ALONG WITH 66KV I/C-I WHICH TRIPPED WITHOUT INDICATION.
25	14.07.09	01.33	220KV IP – PATPAR GANJ CKT-I	14.07.09	03.35	CKT. TRIPPED WITHOUT INDICATION AT PATPARGANJ.
26	14.07.09	09.41	220KV MANDOLA – WAZIRABAD CKT-III ALONG WITH 315MVA ICT-III AT MANDOLA	14.07.09		DETAILED REPORT IS MENTIONED BELOW THE REPORT OF THE MONTH.
27	14.07.09	18.49	220/66KV 100MVA PR. TR.-I AT NARELA	14.07.09	21.58	TR. TRIPPED ON PRV ALONG WITH 66KV I/C-I WHICH TRIPPED ON INTER TRIPPING.
28	16.07.09	04.45	220/66KV 100MVA PR. TR.-I AT NARELA	16.07.09	09.20	TR. TRIPPED ON PRV ALONG WITH 66KV I/C-I WHICH TRIPPED ON INTER TRIPPING.
29	16.07.09	23.30	220/66KV 100MVA PR. TR.-IV AT PAPPANKALAN-IV	1707.09	05.51	TR. TRIPPED ON O/C, REF, PROTECTION TRIP RELAY, 86A, 86B, 86, 87, DIFFERENTIAL.
30	17.07.09	15.22	220KV BAMNAULI – PAPPANKALAN-I CKT-I	17.07.09	15.37	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I, 186A, 186B AT BAMNAULI. NO TRIPPING AT PAPPANKALAN-I
31	17.07.09	19.02	220KV WAZIRABAD – GEETA COLONY CKT-II	17.07.09	19.20	CKT. TRIPPED ON GENERAL TRIP, GSC-STF, WL2 ZM1 TRIP, M2 START, ZM3 START, FAULT L2-L3, RXME18, `RYB' PH AT WAZIRA AD AND ON MAIN-I : ACTIVE GROUP-I, DIST PROT ABC' PH.ZONE-I, MAIN-II : DIST PROT `BC' PHASE ZONE-I AT GEETA COLONY

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
32	17.07.09	19.22	220KV MAHARANI BAGH – LODHI ROAD CKT-II	17.07.09	20.12	CKT. TRIPPED ON DIST PROT ZONE-B, LBB PROT, 186 BC AT LODHI ROAD AND ON MAIN-I `Y' PHASE E/F AT MAHARANI BAGH.
33	17.07.09	20.18	220KV MAHARANI BAGH – LODHI ROAD CKT-II	18.07.09	09.09	CKT. TRIPPED ON FAULT LOPP L1L2, MAIN-II DIST PROT ZONE-I AT MAHARANI BAGH. NO TRIPPING AT LODHI ROAD.
34	19.07.09	05.29	220/66KV 160MVA PR. TR.-II AT GT	19.07.09	06.35	TR. TRIPPED WITHOUT INDICATION AS BUS BAR PROT OPERATED AT GT ON 66KV BUS-I & II
35	19.07.09	13.33	220KV BTPS – NOIDA – GAZIPUR CKT.	19.07.09	14.12	CKT. TRIPPED ON 86X1 AT BTPS. NO TRIPPING AT GAZIPUR
36	21.07.09	16.44	200/66KV 100MVA PR. TR AT BAWANA	29.07.09	15.35	TR. TRIPPED ON A&B, 86A, 86B, 589.5 AMP, IA 1.603KV IB 245A-IC, BASIC-I 2.310A IA, 3.145IB, 1.40212I/C, DIFFERENTIAL 2.804IA, FAULT DIFFERENTIAL 5.544IB, 2.7391C, 30A, BUCHOLZ, 30C, BUCHOLZ ALARM HV87.
37	22.07.09	11.45	33/11KV 16MVA PR.TR. AT SUBZI MANDI	22.07.09	11.48	TR. TRIPPED ON 87 DIRECTIONAL R, 86.
38	22.07.09	12.35	220KV MEHRAULI – VASANT KUNJ CKT-II	22.07.09	13.22	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-II, 186A, 186B, AUTO RECLOSE LOCK OUT AT MEHRAULI AND ON DIST PROT `C' PHASE, 186A&B.
39	22.07.09	13.27	220KV BTPS – NOIDA – GAZIPUR CKT	22.07.09	14.03	NO TRIPPING AT GAZIPUR AND BTPS. A JERK AT OBSERVED AT BTPS.
40	22.07.09	16.25	220KV MAHARANI BAGH – LODHI ROAD CKT-II	22.07.09	21.39	CKT. TRIPPED ON DIST PROT `B&Y' PHASE ZONE-I AT MAHARANI BAGH. NO TRIPPING AT LODHI ROAD.
41	22.07.09	20.15	66/11KV 20MVA PR. TR-I AT KANJHAWALA	22.07.09	20.50	TR. TRIPPED ON 86
42	22.07.09	21.15	66/11KV 20MVA PR. TR-I AT KANJHAWALA	22.07.09	21.45	TR. TRIPPED ON 86
43	23.07.09	14.05	66/11KV 20MVA PR. TR. AT KANJHAWALA	23.07.09	14.15	TR. TRIPPED ON 86
44	23.07.09	15.05	220/66KV 100MVA PR. TR.-II AT PARK STREET	23.07.09	15.08	TR. TRIPPED ON SUDDEN PRESSURE RELAY.
45	23.07.09	18.05	220/66KV 100MVA PR. TR.-II AT PAPPANKALAN-II	23.07.09	18.18	TR. TRIPPED ON LBB PROT, 86 ALONG WITH 66KV I/C-I WHICH TRIPPED ON E/F, O/C, LBB PROT, PRC CLOSED, 86. TR. TRIPPED WHILE ENERGIZING THE NEWLY COMMISSIONED 66KV G-5 PAPPANKALAN CKT. FROM PAPPANKALAN-II WHICH TRIPPED ON DIST PROT `B' PH ZONE-I, EARTH BACK UP PROT.
46	25.07.09	20.50	220KV PANIPAT – NARELA CKT-I	25.07.09	20.54	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I, 186 AT NARELA.
47	26.07.09	11.50	220KV BAMNAULI – MEHRAULI CKT-I	26.07.09	12.04	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I AT BAMNAULI AND ON DIST PROT `R' PHASE ZONE-I AT MEHRAULI.
48	26.07.09	13.15	220KV BAMNAULI – MEHRAULI CKT-I	26.07.09	13.20	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-I AT BAMNAULI AND ON DIST PROT `C' PHASE ZONE-II AT MEHRAULI.
49	27.07.09	19.45	220/33KV 100MVA PR. TR.-III AT OKHLA	28.07.09	08.25	TR. TRIPPED WITHOUT INDICATION.
50	27.07.09	21.10	220/33KV 100MVA PR. TR.-II AT KASHMIRI GATE	27.07.09	21.20	TR. TRIPPED ON 86A, AUX TR. TROUBLE, 30A ALONG WITH 33KV I/C-II WHICH TRIPPED ON 86.
51	28.07.09	01.51	220KV BAWANA – SHALIMAR BAGH CKT-II	28.07.09	02.20	CKT. TRIPPED ON DIST PROT`C' PH 86A&B CB AUTO TRIP, AUTO RECLOSE LOCKOUT AT BAWANA. NO TRIPPING AT SHALIMAR BAGH.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
52	28.07.09	10.20	220/33KV 100MVA PR. TR.-III AT OKHLA	28.07.09	14.20	TR. TRIPPED ON TRIP CKT FAULTY.
53	28.07.09	23.37	220KV BAWANA – NAJAFGARH CKT-I	29.07.09	12.08	CKT. TRIPPED ON ABG1, 86, DIST PROT 21XR1, 21XY1, 21B1 AT BAWANA. CKT. TRIED TO CLOSE AT 00.40HRS. ON 29.07.09 BUT DID NOT HOLD AND TRIPPED ON DIST PROT `ABC' PH. ZONE-II, 186, 186. ATTEMPT OF THEFT OF CONDUCTOR IN NEAR REDENDENT CIRCUIT.
54	28.07.09	23.37	400/220KV 315MVA ICT-II, III & IV AT BAWANA	29.07.09	00.03	ICT-IV TRIPPED ON 186A, 186B, LOCK OUT, GROUP-B, 86B, 30A, BUCHLOZ, , 30B, PRV, 30D, 30U, 30J, 30V. NO RELAY OPERATED ON ICT-II & III. ICT-II & III CHARGED AT 00.03HRS AND 00.01HRS ON 29.07.09. TR.-IV ENERGIZED ON 25.10.2010 AT 17.45HRS.
55	28.07.09	23.40	220KV BAWANA – NAJAFGARH CKT-II	29.07.09	03.25	CKT. TRIPPED ON 186, 186 AT NAJAFGARH.
56	28.07.09	23.40	220KV BAMNAULI – NAJAFGARH CKT-I	28.07.09	23.43	CKT. TRIPPED ON 186 AT NAJAFGARH.
57	29.07.09	18.53	220/66KV 100MVA PR. TR.-II AT PATPARGANJ	29.07.09	21.30	TR. TRIPPED ON 95CB, 86, PRV STAGE-II ALONG WITH 66KV I/C-II WHICH TRIPPED ON INTER TRIPPING.
58	30.07.09	10.53	220/66KV 100MVA PR. TR.-IV AT PAPPANKALAN-I	30.07.09	11.30	TR. TRIPPED ON O/C, E/F, PROTECTION RELAY, 86B ALONG WITH 66KV I/C-IV WHICH TRIPPED WITHOUT INDICATION.
59	30.07.09	17.03	33/11KV 16MVA PR. TR.-II AT SUBZI MANDI	30.07.09	17.15	TR. TRIPPED ON 87R, DIFFERENTIA, 86 ALONG WITH 11KV I/C-II WHICH TRIPPED WITHOUT INDICATION.

Subject : Report on Grid Incident on 14.07.2009 in Delhi system.

At about 09.41hrs, 400/220kV 315MVA ICT-III at Mandola tripped along with 220kV Mandola – Wazirabad Ckt-III resulting into the following trippings in Delhi system.

(a) 400kV Mandola Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Bus Bar position
01	400/220kV ICT-III	CB Auto trip, 86B, 86BX,	09.41	10.27	ICT Position at Mandola was as under : ICT-I : 220kV Bus-I ICT-II : 220V Bus-III ICT-IV: 220kV Bus-IV Position of Wazirabad Ckts was as under : Ckt-I : Bus-III Ckt-II : Bus-IV Ckt-III : Shut-down Ckt-IV : Bus-IV `B' Phase of CT of 220kV Mandola – Wazirabad Ckt-III failed.
02	220kV Wazirabad Ckt-I	No tripping	09.41	10.32	
03	220kV Wazirabad Ckt-II		09.41	10.43	
04	220kV Wazirabad Ckt-III	CB Auto trip, Auto Reclose Lock Out, 186A&B	09.41	20.44	
05	220kV Wazirabad Ckt-IV	---do---	09.41	10.43	
06	220kV Bus Coupler-II	87CH, 1296V, 1596V, 1896V, 1296, 1396, 1896, 1596, 1896F, 95C, 1096V	09.41	10.32	

(b) 220kV Wazirabad Sub station

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	Dist Prot Zone-I, Fault Location 2.60Kms	09.41	10.03	Load relief through under frequency relay operation was 131MW
02	220kV Mandola Ckt-I	CVT disappeared	09.41	10.32	
03	220kV Mandola Ckt-IV	CVT disappeared	09.41	10.43	
04	66kV Shastri Park Ckt-I & II	Under Frequency	09.41	10.38	
05	66kV Gonda Ckt-I & II	Under Frequency	09.41	10.38	

(c) 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	220kV Patparganj Ckt-I	Dist Prot `A' Phase Zone-I	09.41	10.03	Fault Location 2.14Kms

(d) 220kV Patparganj

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	Dist Prot ABC Ph. Zone-II, 186, 186, 85X	09.41	10.03	Fault Location 4.06Kms. Load relief through Under Frequency Relay Operation was 122MW at Patparganj
02	220kV Geeta Colony Ckt-II	Under Frequency	09.42	10.03	

(e) 220kV IP Stn

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	33kV Bay-25, 37, 18, 24, 30, 53, 54	Under Frequency	09.41	10.40	Load relief through Under Frequency Relay Operation was 56MW

(f) 220kV RPH

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	33kV Bay-1, 2, 5, 6, 13, 18	Under Frequency	09.42	10.47	Load relief through Under Frequency Relay Operation was 47MW

System configuration during the incident

At the time of incident, IP, RPH, Pragati (Unit-1 & STG) were connected to Mandola side through 220kV IP Ext –IP – Patparganj – Geeta Colony – Wazirabad – Mandola Ckts. GT Station and Pragati (Unit-II) were connected to BTPS side through 220kV Pragati – Maharani Bagh - Sarita Vihar – BTPS Ckts.

Due to tripping of 400/220kV ICT-III along with 220kV Wazirabad Ckt-III at Mandola, 220kV Bus-II at Mandola became dead (220kV Bus-I was already out) resulting the islanding of generating stations namely RPH, IP, GT and Pragati (Unit-I & STG) from the Grid and then collapse. The load generation position prior to the grid incident was as under:-

Sub-Station	Load in MW	Generation position prior to the incident in MW
Patparganj	148	NIL
IP	155	54
RPH	81	75
Pragati	00	202
Total	384	331

The generating units affected was normalized as under :

Generating Station Name	Unit No.	Time of trippinsg	Time of synchronization	Generation prior to the incident
RPH	1	09.42	14.48	42
	2	09.42	15.20	33
IP	2	09.42	11.35	59
	5	09.42	18.55	09
Pragati	1	0942	10.18	93
	STG	09.42	10.42	109

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

Duration in hrs.		Quantum in MW	Grid	Name of The Ckt.
From	To			
09.42	10.04	27	**RPH**	33kV Bay-12, 16, 17, 19
09.42	10.47	47		33kV Bay-1, 2, 5, 6, 13, 18
09.42	10.15	32	**IP**	33kV Bay-6, 9, 10, 16, 38
09.42	10.25	33		33kV Bay-2, 4, 24, 34
09.42	10.40	68		33kV Bay-5, 13, 17, 19, 29, 30, 37, 53, 54
09.42	12.00	22		33kV Bay-18, 25
09.41	10.40	50	**Wazirabad**	66kV Yamuna Vihar Ckt-I & II and 11kV Load
09.45	10.37	22	**Kashmiri Gate**	33kV Feeders
09.42	10.38	144	**Wazirabad-II**	Entire Load
09.41	10.53	26	**Geeta colony**	33kV I/C-I
09.55	10.48	8		33kV Geeta Colony Ckt-I
09.55	10.53	25		33kV I/C-II
09.42	10.45	72	**Patparganj**	Entire 33kV Load
09.42	11.23	50		66kV Vivek Vihar Ckt-I & II

17.5 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH AUGUST - 2009

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.08.09	06.40	220/66KV 100MVA PR. TR.-II AT MEHRAULI	01.08.09	06.53	TR. TRIPPED ON 86 ALONG WITH 66KV I/C-II WHICH TRIPPED ON 64R.
02	01.08.09	10.10	220/66KV 100MVA PR. TR.-II AT NAJAFGARH	01.08.09	10.19	TR. TRIPPED ON 86.
03	02.08.09	14.46	220KV PANIPAT – NARELA CKT-I, II & III	02.08.09	15.36	220KV PANIPAT CKT-I, II & III TRIPPED ON FOLLOWING INDICATIONS AT NARELA : CKT-I : NO TRIPPING CKT-II : 95CA, 95CC, 186, 186 CKT-III : 30G, 30H, 30K, 86 X_2 CKT-I CHARGED AT 15.36HRS. CKT-II & II CHARGED AT 21.44HRS.
04	02.08.09	15.28	220KV GOPALPUR – SUBZI MANDI CKT-II	02.08.09	15.39	CKT. TRIPPED ON DIST PROT `Y&B' PHASE ZONE-I AT GOPALPUR.
05	02.08.09	19.52	66/11KV 20MVA PR. TR.-I AT PAPPANKALAN-II	02.08.09	23.20	TR. TRIPPED ON LBB PROTECTION, REF, LB MASTER RELAY.
06	03.08.09	10.13	220/66KV 100MVA PR. TR.-II AT NARELA	03.08.09	10.45	TR. TRIPPED ON 86 ALONG WITH 66KV I/C-II WHICH TRIPPED ON 86.
07	03.08.09	15.20	220KV BTPS – OKHLA CKT-I & II	04.08.09	01.59	CKT-I TRIPPED ON DIST PROT ZONE-I, 86T, 86T AT OKHLA. NO TRIPPING ON CKT-II. `Y' PHASE TOP CLAMP OF 220KV BUS COUPLER BURNT.
08	05.08.09	10.28	220KV GOPALPUR – SUBZI MANDI CKT-II	05.08.09	10.38	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
09	05.08.09	13.42	220KV BAMNAULI – PAPPANKALAN-II CKT-II	05.08.09	17.10	30C (LOW AIR PRESSURE RELAY) AT BAMNAULI.
10	10.08.09	19.08	220KV IP –PATPAR GANJ CKT-I	10.08.09	19.22	CKT. TRIPPED ON DIST PROT THREE PHASE ZONE-I AT IP AND ON ACTIVE GROUP-I, DIST PROT `B' PHASE ZONE-I AT PATPARGANJ.
11	10.08.09	23.50	66/11KV 20MVA PR. TR .-III AT PAPPANKALAN-I	11.08.09	00.25	TR. TRIPPED ON 51RYB, 86.
12	10.08.09	23.58	66/11KV 20MVA PR. TR.-II AT NAJAFGARH	10.08.09	24:00	TR. TRIPPED ON O/C `B' PHASE, 86X_1

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
13	11.08.09	19.50	66/11KV 20MVA PR. TR.-II AT NAJAFGARH	11.08.09	19.57	TR. TRIPPED ON O/C `B' PHASE
14	12.08.09	18.48	220KV BAMNAULI – NARAINA CK-II	12.08.09	18.58	CKT. TRIPPED ON DIST PROT `R&Y' PH, 186 AT BAMNAULI. NO TRIPPING AT NARAINA.
15	12.08.09	19.20	66/11KV 20MVA PR. TR.-II AT NAJAFGARH	12.08.09	19.40	TR. TRIPPED ON O/C.
16	13.08.09	09.51	220KV PRAGATI – SARITA VIHAR CKT.	13.08.09	10.05	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-I, 186, 186 AT PRAGATI AND ON DIST PROT `C' PHASE, 186A, 186, AUTO RECLOSE LOCK OUT AT SARITA VIHAR.
17	13.08.09	17.58	220KV PATPARGANJ – GEETA COLONY CKT-I	13.08.09	18.10	CKT. TRIPPED ON DIST PROT `B' PH ZONE-I AT PATPARGANJ AND ON MAIN-I : ACTIVE GROUP-I, DIST PROT `BC' PHASE ZONE-I, O/C86, MAIN-II : DIST PROT `BC' PHASE ZONE-I AT GEETA COLONY. THE TRIPPING IS DUE TO KITE FLYING ACTIVITIES.
18	13.08.09	18.15	220KV PATPARGANJ – GEETA COLONY CKT-I	13.08.09	18.28	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT PATPARGANJ AND ON MAIN-I : ACTIVE GROUP-I, DIST PROT `ABC' PHASE ZONE-I, O/C, MAIN-II : DIST PROT `ABC' PHASE ZONE-I AT GEETA COLONY. THE TRIPPING IS DUE TO KITE FLYING ACTIVITIES NEAR GANESH NAGAR AREA.
19	13.08.09	19.40	220/33KV 100MVA PR. TR.-IV AT OKHLA	13.08.09	00.28	220/33KV 100MVA PR. TR.-IV TRIPPED ON INSTANTANEOUS E/F ALONG WITH 33KV I/C-III & IV WHICH TRIPPED ON 51NX AND E/F, 86 RESPECTIVELY. `B' PHASE CT OF 33KV I/C-IV FLASHED. 33KV I/C-III&IV CHARGED AT 19.55 HRS. &0 0.28HRS (14.08.09) RESPECTIVLY.
20	14.08.09	03.48	220KV BAMNAULI – NAJAFGARH CKT-I & II	14.08.09	03.57	BOTH CKT. TRIPPED ON 186 AT NAJAF GARH. NO TRIPPING AT BAMNAULI.
21	14.08.09	10.48	220KV MANDOLA – GOPALPUR(T-OFF) – WAZIRABAD CKT-IV	14.08.09	10.54	CKT. TRIPPED ON 86, 86, 95C, DIST PROT ZONE-I AT GOPALPUR. NO TRIPPING AT MANDOLA AND WAZIRABAD END.
22	14.08.09	10.52	220/66KV 100MVA PR. TR.-II AT WAZIRABAD	20.08.09	11.35	TR. TRIPPED ON E/F, 87T, DIFFERENTIAL, REF LV, HV.
23	15.08.09	15.28	220KV BTPS – OKHLA CKT-II	15.08.09	15.36	CKT. TRIPPED ON `B' PHASE E/F AT BTPS. NO TRIPPING AT OKHLA.
24	15.08.09	15.41	220KV MANDOLA – GOPALPUR CKT-I	15.08.09	16.38	CKT. TRIPPED ON DIST PROT `R' PH AT MANDOLA. NO TRIPPING AT GOPLAPUR.
25	15.08.09	16.45	220KV PATPARGANJ – GEETA COLONY CKT-I	15.08.09	16.52	CKT. TRIPPED ON DIST PROT `BC' PHASE ZONE-I AT GEETA COLONY. NO TRIPPING AT PATPARGANJ.
26	15.08.09	16..59	220KV PATPARGANJ – GEETA COLONY CKT-I	15.08.09	17.03	CKT. TRIPPED ON DIST PROT `BC' PHASE ZONE-I AT GEETA COLONY. NO TRIPPING AT PATPARGANJ.
27	15.08.09	18.07	220KV BTPS – NOIDA – GAZIPUR CKT.	15.08.09	18.25	CKT. TRIPPED ON DIST PROT ANCN ZONE-II, A&C PHASE AT BTPS. NO TRIPPING AT GAZIPUR.
28	15.08.09	18.35	220KV PATPARGANJ – GEETA COLONY CKT-I	15.08.09	18.38	CKT. TRIPPED ON DIST PROT `AB' PHASE ZONE-I AT GEETA COLONY. NO TRIPPING AT PATPARGANJ.
29	16.08.09	05.55	66/11KV 20MVA PR. TR--I AT PAPPANKALAN-I	16.08.09	12.35	TR. TRIPPED ON DIFFERENTIAL, 87A, 87B, `A&B' PHASE E/F, 64RLV, 86.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
30	16.08.09	12.12	220KV PATPARGANJ – GEETA COLONY CKT-II	16.08.09	12.28	CKT. TRIPPED ON ACTIVE GROUP-I, DIST PROT ABC PHASE ZONE-I, 30B, 27RYB, 86, 30E AT GEETA COLONY END ONLY.
31	16.08.09	13.45	220KV BAWANA – SHALIMAR BAGH CKT-II	16.08.09	13.50	CKT. TRIPPED ON DIST PROT ZONE-III AT BAWANA. NO TRIPPING AT SHALIMAR BAGH.
32	16.08.09	14.03	220KV WAZIRABAD – GEETA COLONY CKT-I	16.08.09	14.08	CKT. TRIPPED ON RXME18, DIST PROT `RY' PHASE ZONE-I AT WAZIRABAD. NO TRIPPING AT GEETA COLONY.
33	16.08.09	13.45	220KV MANDOLA – GOPALPUR CKT-I	16.08.09	14.35	CKT. TRIPPED ON DIST PROT `YB' PHASE AT GOPALPUR END.
34	16.08.09	14.57	220KV GEETA COLONY – PATPARGANJ CKT-I	16.08.09	15.15	CKT. TRIPPED ON ACTIVE GROUP-I, DIST PROT `ABC' PH AT GEETA COLONY. NO TRIPPING AT PATPARGANJ.
35	16.08.09	16.49	220KV MANDOLA – GOPALPUR CKT-I	16.08.09	20.50	CKT. TRIPPED ON DIST PROT `RY' PHASE ZONE-I AT MANDOLA. NO TRIPPING AT GOPALPUR. CKT. TRIED TO CLOSE BUT DID NOT HOLD. CKT. FINALLY CHARGED AT 20.50HRS.
36	16.08.09	18.45	220KV NARELA – ROHTAK ROAD CKT-II	16.08.09	19.58	CKT. TRIPPED ON DIST PROT ABC' PH ZONE-I AT NARELA AND ON DIST PROT `ABC' PH. ZONE-I AT ROHTAK ROAD.
37	16.08.09	18.31	220KV MANDOLA – WAZIRABAD CKT-IV	16.08.09	18.50	CKT. TRIPPED WITHOUT INDICATION AT WAZIRABAD.
38	16.08.09	18.31	220KV WAZIRABAD – KASHMIRI GATE CKT-II	16.08.09	18.56	CKT. TRIPPED WITHOUT INDIACATION AT WAZIRABAD.
39	16.08.09	18.31	220/66KV 100MVA PR. TR.-I & II AT WAZIRABAD	16.08.09	19.08	BOTH TRANSFORMERS TRIPPED WITHOUT INDICATION ALONGWITH 66KV I/C-I WHICH TRIPPED ON E/F. 100MVA PR. TR.-I & III CHARGED AT 19.08HRS. & 19.03HRS RESPECTIVELY.
40	16.08.09	18.31	220KV GEETA COLONY –PATPARGANJ CKT-I	16.08.09	18.42	CKT. TRIPPED ON MAIN-I : ACTIVE GROUP-I, DIST PROT `ABC' PH. ZONE-I, 27RYB, 86, MAIN-II ON DIST PROT `ABC' PHASE ZONE-I AT GEETA COLONY. NO TRIPPING AT PATPARGANJ END.
41	16.08.09	19.00	220KV MANDOLA – WAZIRABAD CKT-I	16.08.09	193.35	CKT. TRIPPED ON DIST PROT `B' PH. ZONE-III AT MANDOLA AND ON DIST PROT `ABC' PHASE ZONE-I, AUTO RECLOSE LOCK OUT, RXME18 AT WAZIRABAD.
42	16.08.09	20.31	33/11KV 16MVA PR. TR.-I AT SUBZI MANDI	16.08.09	20.35	TR. TRIPPED ON 30G, 30H, 30J, 30K, 30L, 86, O/C ALL PHASE ALONG WITH 11KV I/C-I WHICH TRIPPED ON O/C `R' PHASE
43	17.08.09	18.22	220KV MANDOLA – WAZIRABAD CKT-I & IV	17.08.09	18.32	BOTH CKTS TRIPPED WITHOUT INDICATION AT WAZIRABAD.
44	17.08.09	19.22	220KV WAZIRABAD – GEETA COLONY CKT-II	17.08.09	18.34	CKT. TRIPPED WITHOUT INDICATION AT BOTH ENDS.
45	17.08.09	18.22	220/66KV 100MVA PR. TR.-I & III AT WAZIRABAD.	17.08.09	18.35	BOTH TRANSFORMERS TRIPPED WITHOUT INDICATION
46	17.08.09	18.22	220KV WAZIRABAD – KASHMIRI GATE CKT-II	17.08.09	18.34	CKT. TRIPPED WITHOUT INDICATION AT WAZIRABAD.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
47	17.08.09	18.22	220KV PATPARGANJ – GEETA COLONY CKT-I	17.08.09	18.35	CKT. TRIPPED ON MAIN-I : ACTIVE GROUP-I, DIST PROT `ABC' PHASE ZONE-I MAIN-II : DIST PROT `ABC' PHASE ZONE-I AT GEETA COLONY. NO TRIPPING AT PATPARGANJ.
48	17.08.09	19.43	220KV MANDOLA – GOPALPUR CKT-I	18.08.09	18.32	CKT. TRIPPED ON DIST PROT `Y&B' PHASE ZONE-I AT MANDOLA.
49	18.08.09	07.37	220KV MANDOLA – NARELA CKT-I	18.08.09	12.11	CKT. TRIPPED ON LOW GAS PRESSURE AT NARELA. CKT. TRIED TO CLOSE AT 08.05HRS. BUT DID NOT HOLD. AND TRIPPED ON POLE DISCREPANCY.
50	18.08.09	12.45	220KV BAMNAULI – MEHRAULI CKT-II	18.08.09	13.08	CKT. TRIPPED ON DIST PROT `C' PHASE, AUTO RECLOSE LOCK OUT, 186A&B AT BAMNAULI AND ON DIST PROT `C' PHASE ZONE-I AT MEHRAULI.
51	19.08.09	07.55	220/33KV 100MVA PR. TR.-I AT PARK STREET	19.08.09	08.12	TR. TRIPPED ON 86 ALONG WITH 33KV I/C-I WHICH TRIPPED ON E/F, 86.
52	21.08.09	14.41	220KV IP – PRAGATI CKT-I & II	21.08.09	20.55	CKT-I TRIPPED ON VT FAIL ALARM, 67NX, 86T AND CKT-II TRIPPED ON 67NX, 86T, 86T AT PRAGATI END. CKT-I & II CHARGED AT 15.05HRS. AND 20.55HRS RESPECTIVELY.
53	21.08.09	16.45	220KV SARITA VIHAR – PRAGATI CKT.	21.08.09	16.52	CKT. TRIPPED ON DIST PROT 'A' PHASE ZONE-I, 186, 186 AT PRAGATI AND ON DIST PROT `A' PHASE ZONE-I AT SARITA VIHAR.
54	21.08.09	18.05	220KV GOPALPUR – SUBZI MANDI CKT.-I	21.08.09	18.07	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
55	21.08.09	19.10	220/66KV 100MVA PR. TR-II AT SARITA VIHAR	21.08.09	20.00	TR. TRIPPED ON E/F, O/C, 86.
56	22.08.09	10.26	220KV BTPS – OKHLA CKT-II	22.08.09	10.34	CKTTRIPPED ON PH TO PH. (Y-B) FAULT AT BTPS. NO TRIPPING AT OKHLA
57	22.08.09	12.20	220KV BAMNAULI – MEHRAULI CKT-I	23.08.09	01.30	CKT. TRIPPED ON DIST PROT A PHASE ZONE-II, AUTO RECLOSE LOCK OUT, 186 AT BAMNAULI AND ON ACTIVE GROUP-I, DIST PROT `A' PHASE ZONE-I AT MEHRAULI.
58	23.08.09	16.16	220KV WAZIRABAD – KASHMIRI GATE CKT-II	23.08.09	16.40	CKT. TRIPPED ON GENERAL TRIP GFC-STF, RXME18 AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE.
59	23.08.09	17.34	220KV WAZIRABAD – GEETA COLONY CKT-II	23.08.09	17.44	CKT. TRIPPED ON RXME18, REL511, GENERAL TRIP, DIST PROT AT WAZIRA BAD AND ON MAIN-I : DIST PROT `ABC' PH. ZONE-I, MAIN-II : DIST PROT `ABC' PHASE ZONE-I AT GEETA COLONY.
60	23.08.09	18.42	220KV GOPALPUR – SUBZI MANDI CKT-II	23.08.09	18.48	CKT. TRIPPED ON DIST PROT `RYB' PHJASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
61	24.08.09	01.55	66/11KV 20MVA PR. TR.-I AT SARITA VIHAR	24.08.09	10.55	TR. TRIPPED ON 30F, `Y' PHASE, 86 ALONG WITH 11KV I/C-I WHICH TRIPPED WITHOUT INDICATION.
62	24.08.09	14.14	66/11KV 20MVA PR. TR.-I AT PAPPANKALAN-II	24.08.09	14.34	TR. TRIPPED ON BACK UP PROTECTION `B' PHASE.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
63	25.08.09	12.40	220KV MANDOLA – GOPALPUR CKT-I	25.08.09	13.00	CKT. TRIPPED ON DIST PROT `YB' PHASE ZONE-II AT MANDOLA AND ON GENERAL TRIP DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR.
64	25.08.09	13.07	220KV WAZIRABAD – KASHMIRI GATE CKT-II	25.08.09	16.36	CKT. TRIPPED ON RXME18, `RYB' PHASE, GENERAL TRIP, GFC-STF AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE.
65	25.08.09	18.29	220KV GOPALPUR – SUBZI MANDI CKT-II	25.08.09	19.03	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
66	25.08.09	18.53	220KV MANDOLA – WAZIRABAD CKT-I& IV	26.08.09	19.15	BOTH CKT. TRIPPED WITHOUT INDICATION AT WAZIRABAD.
67	25.08.09	18.53	220KV WAZIRABAD – GEETA COLONY CKT-II	25.08.09	19.16	CKT. TRIPPED WITHOUT INDICATION AT BOTH END.
68	25.08.09	18.53	220KV WAZIRABAD – KASHMIRI GATE CKT-I & II	25.08.09	19.18	THE FOLLOWING TRIPPINGS OCCURRED :- KASHMIRI GATE CKT-I : 'ABC' PHASE GENERAL TRIP KASHMIRI GATE CKT-II : GENERAL TRIP, GFC NO TRIPPING AT KASHMIRI GATE. 220KV KASHMIRI GATE CKT-I & II CHARGED AT 19.18HRS. AND 19.17HRS. RESPECTIVELY.
69	25.08.09	18.53	220/66KV 100MVA PR. TR.-I, II & III AT WAZIRABAD	25.08.09	19.50	TR. TRIPPED DUE TO BUS BAR PROTECTION OPERATION AT WAZIRABAD.
70	26.08.09	08.27	66/11KV 20MVA PR. TR.-III AT WAZIRABAD	26.08.09	10.22	TR. TRIPPED ON OIL TEMP HIGH, 86 ALONG WITH 11KV I/C-III WHICH TRIPPED ON
71	26.08.09	13.10	220/33KV 100MVA PR. TR.-I AT SHALIMAR BAGH	26.08.09	13.17	100MVA PR. TR.-I TRIPPED ON 51N, 51C, O/C, 86 ALONG WITH 33KV I/C-I & II WHICH TRIPPED ON 51A, 51C, 86 AND 51A, 86 RESPECTIVELY. `Y' PHASE COMMON JUMPER OF 20MVA PR. TR., INSULATOR ON 33KV BUS-I FLASHED
72	27.08.09	16.53	220KV PRAGATI – SARITA VIHAR CKT.	27.08.09	17.00	CKT. TRIPPED ON ACTIVE GROUP-I, 186, 186, DIST PROT `ABC' PHASE ZONE-I AT PRAGATI AND ON DIST PROT `C' PHASE ZONE-I AT SARITA VIHAR.
73	27.08.09	17.45	VARIOUS TRIPPINGS IN DTL SYSTEM			DETAILED REPORT IS AVAILABLE AFTER THE MONTH'S REPORT
74	27.08.09	18.55	66/11KV 20MVA PR. TR.-II AT SARITA VIHAR	28.08.09	07.20	TR. TRIPPED ON 51A ALONG WITH 11KV ½ BUS BAR WHICH FLASHED.
75	28.08.09	07.25	66/11KV 20MVA PR. TR.-II AT SARITA VIHAR	28.08.09	08.55	TR. TRIPPED ON 64RHV, 87T, 86.
76	28.09.09	14.18	220KV GOPALPUR – SUBZI MANDI CKT-I	28.08.09	14.28	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.

Details of Trippings occurred on 27.08.2009.

At 17.45hrs, 220kV Geeta Colony – Patparganj ckt-I tripped at both ends on Distance Protection. During revival of the ckt, 220kV Geeta Colony – Patparganj Ckt-II tripped at Patparganj end along with 220kV Wazirabad Ckt-I & IV at Mandola end at 17.50hrs. This led to the formation nof islanding consisting of Patparganj – IP – RPH and subsequently collapse the system between IP Extention – Mandola.

At 18.05hrs, System was normalized and 220kV supply was extended to IP – RPH and Pragati from Wazirabad and Geeta Colony.

At 18.50hrs, Bus Protection was operated at 220kV Wazirabad leading to multiple trippings and again formation of islanding of IP – RPH – Pragati.

At 19.02hrs, 220kV supply was extened to RPH – IP – Pragati by closing 220kV Bus coupler at IP Extension end. The bus coupler was kept off at PAtparganj end.

The following trippings occurred in Delhi system

1) **At Mandola**

S.N.	Name of the feeder / transformer tripped	Relay indications	Time of tripping	Time of restoration in hrs.	Remarks
1	220kV Wazirabad Ckt-I	CB auto trip	17.50	18.24	
2	220kV Wazirabad Ckt-IV	CB auto trip, auto reclose lock out	17.50	18.12	

2) **At Wazirabad**

S.N.	Name of the feeder / transformer tripped	Relay indications	Time of tripping	Time of restoration in hrs.	Remarks
1	220kV Mandola Ckt-I	Dist Prot Zone-I, Dist 0.7Km	17.50	18.20	
2	220kV Mandola Ckt-I	Bus Prot. operated	18.50	19.10	
3	220kV Mandola Ckt-IV	Bus Prot. operated	18.50	19.40	
4	220kV Kashmiri Gate Ckt-II	Bus Prot. operated	18.50	00.52	Load changed over at Kashmiri Gate end on Wazirabad Ckt-I at 18.51hrs.
5	220kV Geeta Colony Ckt-I	Bus Prot. operated	18.50	19.15	
6	220kV Geeta Colony Ckt-II	Bus Prot. operated	18.50	19.12	
7	220/66kV 100MVA Pr Tr-I, II & III	Bus Prot. operated	18.50	19.17	
8	220kV Bus coupler	Bus Prot. operated	18.50	Kept opened	

3) **At Geeta Colony**

S.N.	Name of the feeder / transformer tripped	Relay indications	Time of tripping	Time of restoration in hrs.	Remarks
1	220kV Patpargnaj Ckt-I	Dist Prot Zone-1, Dist 3.119Kms, 27RYB, 30E, 86	17.45	18.05	
2	220kV Patpargnaj Ckt-I	Dist Prot Zone-1, Dist 3.115Kms, 27RYB, 30E, 86	18.50	22.52	
3	220kV Wazirabad Ckt-II	E/F, 30B, 86, 27Y, V0 Error, V2 Error, VT fail	19.14	16.18hrs. on 28.08.09	`Y' phase jumper snapped at tower no. 343

4) Patparganj

S.N.	Name of the feeder / transformer tripped	Relay indications	Time of tripping	Time of restoration in hrs.	Remarks
1	220kV Geeta Colony Ckt-I	Dist Prot Zone-I	17.45	18.05	
2	220kV Geeta Colony Ckt-II	186, 186	17.50	18.30	
3	220kV Geeta Colony Ckt-I	Dist Prot `B&C Phase	18.50	22.52	
4	66/33kV `X & Y' Group	Under Frequency	17.50	18.25	117MW load affected
			18.25	18.31	27MW load affected

5) IP Station

S.N.	Name of the feeder / transformer tripped	Relay indications	Time of tripping	Time of restoration in hrs.	Remarks
1	Bay-2, 4, 6, 7, 9, 10, 17, 18, 19, 25, 28, 37, 38, 42, 53, 54	Bay-18, 24, 25, 30, 37, 53, 54 tripped on UFR and others made off manually	17.50	18.45	127MW load affected

6) RPH

S.N.	Name of the feeder / transformer tripped	Relay indications	Time of tripping	Time of restoration in hrs.	Remarks
1	Bay-1, 2, 5, 6, 13, 16, 17, 18, 19	Made off manually	17.50	18.35	87MW load affected
			19.00	19.07	87MW load affected

Load affected was as under :

Duration in Hrs.		Quantum in MW	Name of the Grid
From	To		
17.50	18.16	123	Wazirabad-II
18.50	19.15	165	Wazirabad-II
17.50	18.45	54	Wazirabad-I
18.55	19.20	54	Wazirabad-I
17.50	18.28	36	Geeta colony
18.53	19.39	58	Geeta colony
17.50	18.25	117	Patparganj
18.25	18.31	27	Patparganj
18.50	19.47	76	Patparganj
17.50	18.10	127	IP
18.10	18.20	121	IP
18.20	18.25	31	IP
18.25	18.45	25	IP
17.50	18.35	87	RPH
19.00	19.07	87	RPH

The Generating units affected as under :-

Generating Station	Unit no.	Time of tripping in Hrs.	Time of synchronization in Hrs	Generation affected
RPH	1	17.50	20.30	42MW
	2	17.50	22.08	36MW
IP	2	17.50	00.50hrs. on 28.08.2009	35MW
	3	17.50	00.50 on 28.08.2009	29MW
Pragati	2	17.50	19.18	97MW
	STG	17.50	20.20	111MW

17.6 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH SEPTEMBER – 2009

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.09.09	10.07	220KV BTPS – MEHRAULI CKT-II	01.09.09	10.25	CKT. TRIPPED ON 30A, 30G AT BTPS & ON DIST PROT `A' PH. ZONE-I, 186 AT MEHRAULI
02	02.09.09	12.32	220KV MEHRAULI – VASANT KUNJ CKT-II	02.09.09	12.46	CKT. TRIPPED ON DIST PROT `A' PHASE AT MEHRAULI AND ON DIST PROT `A' PHASE, 186A, 186 AT VASANT KUNJ
03	02.09.09	07.56	220KV MANDOLA – WAZIRABAD CKT-I & IV	02.09.09	08.31	CKT-I TRIPPED ON DIST PROT `R' PH. ZONE-III & CKT-IV TRIPPED ON `R' PH ZONE-II AT MANDOLA. NO TRIPPING AT WAZIRABAD. CKT.-I & IV CHARGED AT 08.31HRS. AND 08.28HRS RESPECTIVELY.
04	02.09.09	07.56	220/66KV 100MVA PR. TR.-III AT WAZIRABAD	02.09.09	08.19	TR. TRIPPED ON 86, THREE PHASE TRIP, NON DIRECTIONAL E/F ALONG WITH 66KV I/C-III WHICH TRIPPED ON 86.
05	02.09.09	07.56	220KV WAZIRABAD – GEETA COLONY CKT-II	02.09.09	08.19	CKT. TRIPPED ON MAIN-I : ACTIVE GROUP-I, DIST PROT `ABC' PHASE ZONE-I, MAIN-II : DIST PROT `ABC' PHASE ZONE-II AT GEETA COLONY. NO TRIPPING AT WAZIRABAD.
06	02.09.09	07.47	220/33KV 100MVA PR. TR.-II AT LODHI ROAD	02.09.09	12.05	TR. TRIPPED ON POLE DISCREPANCY.
07	02.09.09	10.20	VARIOUS TRIPPING IN DTL SYSTEM			DETAILED REPORT IS AVAILABLE AT SR. NO.`**A**' AFTER THE REPORT OF THE MONTH
08	03.09.09	22.45	220/33KV 100MVA PR. TR.-I AT PARK STREET	30.09.09	24.00	TR. TRIPPED ON BUCHLOZ ALARM, 30A, 30B, 30S, 30G, 30H, 30J, 86B, 86B, INSTAN-TANEOUS E/F ALONG WITH 33KV I/C-I
09	04.09.09	05.31	220/66KV 100MVA PR. TR. AT BAWANA	04.09.09	10.55	TR. TRIPPED ON TR TROUBLE TRIP
10	05.09.09	00.05	220/66KV 100MVA PR. TR. AT BAWANA	05.09.09	09.58	TR. TRIPPED ON 86/86A, TRIP GROUP`B', 86B, AUX PR. ½, 30LM, 30MRPRELVAL TRIP ALONG WITH 66KV I/C WHICH TRIPPED ON INTERTRIPPING.
11	05.09.09	17.52	220KV GEETA COLONY – PATPARGANJ CKT-I	05.09.09	18.52	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I, MAIN-I : 27RYBM 86, 30E, MAIN-II : DIST PROT `ABC' PHASE ZONE-I AT GEETA COLONY
12	06.09.09	17.03	220KV PATPARGANJ – IP CKT-I	06.09.09	17.17	CKT. TRIPPED ON BUS BAR PROT. 96A, 96E, 96G, 96C, 96K, 87A, 87CH, 30A.
13	07.09.09	08.05	66/11KV 20MVA PR. TR. -I AT PAPPANKALNA-II	07.09.09	10.40	TR. TRIPPED ON O/C, 86, LBB PROT, PRC CLOSED, BACK UP PROTECTION.
14	07.09.09	14.08	220KV GEETA COLONY – PATPARGANJ CKT-II	07.09.09	14.58	CKT. TRIPPED ON MAIN-I DIST PROT ZONE-I, MAIN-II, DIST PROT `AB' PHASE ZONE-II, 27RYB, 86 AT GEETA COLONY. NO TRIPPING AT PATPARGANJ.
15	09.09.09	14.32	220KV BTPS – MEHRAULI CKT-II	09.09.09	14.34	CKT. TRIPPED ON 186 AT MEHRAULI. NO TRIPPING AT BTPS.
16	10.09.09	03.34	220/66KV 100MVA PR. TR.-III AT NARELA	10.09.09	12.40	TR. TRIPPED ON OLTC BUCHLOZ.
17	10.09.09	04.09	220KV PANIPAT – NARELA CKT-I	10.09.09	04.29	CKT. TRIPPED ON 30G, 186A&B, MICROOHM, CNZ-1 AT NARELA.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
18	10.09.09	08.58	220/66KV 100MVA PR. TR.-II AT VASANT KUNJ	10.09.09	16.28	TR. TRIPPED ON 30E, 30K, 30, 86 ALONG WITH 33KV I/C-II WHICH TRIPPED ON 86
19	10.09.09	11.01	220/66KV 100MVA PR. TR. AT BAWANA	10.09.09	15.24	TR. TRIPPED ON 86AB, 30A.
20	10.09.09	14.12	220KV BAMNAULI – MEHRAULI CKT-I	10.09.09	20.20	CKT. TRIPPED ON AUTO RECLOSE LOCK OUT, 186A&B, CB POLE DISCREPANCY, 47TF AT BAMNAULI.
21	10.09.09	14.30	33/11KV 20MVA PR. TR.-I AT KASHMIRI GATE	10.09.09	15.30	TR. TRIPPED ON 86, 30G ALONG WITH 11KV I/C-I WHICH TRIPPED ON INTERTRIPPING.
22	11.09.09	19.00	220KV BAMNAULI – PAPPANKALAN-II CKT-II	12.09.09	17.33	CKT. TRIPPED ON DIST PROT `C' PHASE 186A&B AT BAMNAULI. NO TRIPPING AT PAPPANKALAN-II
23	13.09.09	09.50	VARIOUS TRIPPINGS IN DTL SYSTEM			DETAILS AVAILABLE AT SR. NO. `B' AFTER THE MONTH'S REPORT
24	17.09.09	10.54	VARIOUS TRIPPINGS IN DTL SYSTEM			DETAILS AVAILABLE AT SR. NO. `C' AFTER THE MONTH'S REPORT
25	18.09.09	02.43	220KV IP – PRAGATI CKT-I & II	18.09.09	03.11	CKT.-I TRIPPED ON 96F AT PRAGATI. 96F ALSO OPERATED ON CKT-II AT PRAGATI BUT CKT DID NOT TRIP.
26	18.09.09	02.43	220KV PRAGATI – PARK STREET CKT-II	18.09.09	03.14	CKT. TRIPPED ON 96, BUS BAR PROTECTION AT PRAGATI.
27	18.09.09	18.32	220KV GOPALPUR – SUBZI MANDI CKT-II	18.09.09	18.50	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
28	18.09.09	19.30	220/66KV 100MVA PR. TR.-III AT NAJAFGARH	18.09.09	19.35	TR. TRIPPED ON 86
29	18.09.09	19.30	66/11KV 20MVA PR. TR.-III AT NAJAFGARH	19.09.09	00.05	TR. TRIPPED ON 51ABC, E/F, 30J
30	19.09.09	10.22	220KV PRAGATI – PARK STREET CKT-II	19.09.09	10.28	CKT. TRIPPED WITHOUT INDICAITON AT BOTH ENDS.
31	19.09.09	17.34	400KV BAWANA – HISSAR CKT.	19.09.09	18.12	CKT. TRIPPED ON 186A&B, Z/AA TIMER CKT. TRIED AT 17.24HRS THROUGH CB-852 BUT AGAIN TRIPPED. CKT. FINALLY CHARGED AT 18.12HRS. THROUGH CB-952
32	20.09.09	13.52	220/66KV 100MVA PR. TR.-II AT PATPARGANJ	20.09.09	14.30	TR. TRIPPED ON 996CB, 86, 64RLV.
33	20.09.09	21.04	220/33KV 100MVA PR. TR.-II AT PARK STREET	21.09.09	03.20	TR. TRIPPED ON 86 ALONG WITH 33KV I/C-II WHICH TRIPPED ON E/F.
34	21.09.09	11.30	220/66KV 100MVA PR. TR.-I AT PAPPANKALAN-II	21.09.09	12.47	TR. TRIPPED ON AIR PRESSURE LOW, LBB PROT. RELAY ALONG WITH 66KV I/C-I WHICH TRIPPED ON LBB PROTECTION, E/F, 86
35	25.09.09	07.25	66/11KV 20MVA PR. TR.-I AT KANJHAWALA	25.09.09	15.10	TR. TRIPPED ON 30D, PRV-I, 86 ALONG WITH 11KV I/C-I WHICH TRIPPED ON 86.
36	26.09.09	08.04	220KV SARITA VIHAR – PRAGATI CKT.	26.09.09	08.29	CKT. TRIPPED ON DIST PROT ZONE-I, AUTO RECLOSE LOCK OUT, 186A&B AT SARITA VIHAR AND ON DIST PROT ZONE-I, 186, 186 AT PRAGATI.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
37	26.09.09	15.13	220KV PATPARGANJ – IP CKT-I	26.09.09	17.10	CKT. TRIPPED ON DIST PROT `ABC' PH. ZONE-I AT PATPARGANJ AND ON DIST PROT `RYB' PH. ZONE-I AT IP STN.
38	28.09.09	07.40	220KV GEETA COLONY – PATPARGANJ CKT-I	28.09.09	07.45	CKT. TRIPPED ON ACTIVE GROUP-I, DIST PROT ZONE-II, MAIN-I : ACTIVE GROUP-I, DIST PROT ZONE-II ABC PHASE MAIN-II, DIST PROT ABC PHASE ZONE-II AT GEETA COLONY. NO TRIPPING AT PATPARGANJ
39	28.09.09	07.40	220KV PATPARGANJ – IP CKT-I	28.09.09	07.58	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I, AUTO RECLOSE LOCK OUT 186 AT IP AND ON DIST PROT `ABC' PHASE ZONE-II, AUTO RECLOSE LOCK OUT AT PATPARGANJ.
40	28.09.09	09.24	220KV MANDOLA – WAZIRABAD CKT-IV	28.09.09	09.52	CKT. TRIPPED ON CB AUTO RECLOSE, CB AUTO TRIP AT MANDOLA AND ON DIST PROT DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD
41	30.09.09	12.53	220KV BAMNAULI – MEHRAULI CKT-II	30.09.09	12.59	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-I AT BAMNAULI AND ON DIST PROT `C' PHASE ZONE-I, ACTIVE GROUP-I, 186 AT MEHRAULI.

A) Report on Grid Incident on 02.09.2009 in Delhi system.

The following trippings occurred in Delhi system on 02.09.09 at 10:20Hrs due to reason that Top Bus conductor of R-Ph. of 220kV Patparganj – Geeta Colony Ckt-I snapped at 220kV Patparganj S/stn and fell on 220kV Bus-II due to which Bus Protection operated at Patparganj.

(a) 220kV Patparganj

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	186, Bus Bar prot.	10:20	18:37	
02	220kV IP Ckt-I	186, Bus Bar prot	10:20	18:58	
03	220kV IP Ckt-II	186, Bus Bar prot	10:20	18:58	
04	220/33kV 100MVA Transformer No. 1	86, Bus Bar prot	10:20	10:43	
05	220/33kV 50MVA Transformer No. 2	86, Bus Bar prot	10:20	10:43	
06	220/66kV 100MVA Transformer No. 1	86, Bus Bar prot	10:20	10:43	
07	220kV Geeta Colony Ckt-II	Supply failed	10:20	10:40	

(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	220kV Patparganj Ckt-I	Supply failed	10:20	18:35	
02	220kV Patparganj Ckt-II	Supply failed	10:20	10:40	
03	220kV Wazirabad Ckt-II	Main-I&II, Dist. Prot. Zone-2, Phase AN	7:56	17:22	At the time of disturbance the Ckt was under S/D for changing LA of R-Phase at SOW end

(c) 220kV South of Wazirabad-II Stn

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-II	Supply failed	07:56	17:22	R-phase L.A. damaged
02	220/66kV 100MVA Transformer No. 1II	E/F	07:56	08:55	Load affected 62 MW.
03	220kV Mandola Ckt-I	Supply failed	07:56	08:30	Load affected 52 MW.
04	220kV Mandola Ckt-IV	Supply failed	07:56	08:25	Load affected 30 MW.

(d) 220kV IP Stn

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	220kV Patparganj Ckt-I	Dist. Prot. 3-phase trip, Zone-I	10:20	18:09	
02	220kV Patparganj Ckt-II	Dist. Prot. 3-phase trip, Zone-I	10:20	18:18	
03	33kV Bay-2,4, 6, 9, 10, 19, 38, 42	Under Frequency	10:20	10:32	Load relief through Under Frequency Relay Operation was 60MW
04	33kV Bay - 24	Under Frequency	10:20	11:32	Load relief through Under Frequency Relay Operation was 20MW
05	33kV Bay-37, 53 & 54	Under Frequency	10:20	11:32	Load relief through Under Frequency Relay Operation was 27MW
06	33kV Bay- 25	Under Frequency	10:20	12:00	Load relief through Under Frequency Relay Operation was 10MW
07	33kV Bay-5,13,17,30, 34	Under Frequency	10:20	12:40	Load relief through Under Frequency Relay Operation was 30MW

(e) 220kV RPH

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
01	33kV Bay-1, 2, 5, 6,12, 13, 16, 17,18, 19	Under Frequency	10:20	10:35	Load relief through UFR was 60 MW

System configuration during the incident

At the time of incident, IP, RPH, Pragati (Unit-2 & STG) were connected to Mandola side through 220kV IP Ext–IP–Patparganj–Geeta Colony–Wazirabad–Mandola Ckts. GT Stn. and Pragati (Unit-II) were connected to BTPS side through 220kV Pragati – Maharani Bagh - Sarita Vihar – BTPS Ckts.

Tripping of 220kV Patparganj - I.P.Ckt-I&II at Patparganj resulting into the tripping of generating units of IP, RPH and Pragati Unit No. 2 & STG. At the time of tripping 220kV Geeta Colony-Wazirabad Ckt-II was under shutdown for replacement of damaged L.A. at Wazirabad .

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
Patparganj	150	Nil
IP	147	35
RPH	60	74
Pragati	Nil	203
Geeta Colony	78	
Total	**435**	**312**

The generating units affected was normalized as under :

Generating Station Name	Unit No.	Time of trippings	Time of synchronization	Generation prior to the incident
RPH	1	10:20	11.45	44
	2	10:20	11.52	30
IP	4	10:20	11:38	27
	5	10:20	12.23	8
Pragati	2	10:20	11.41	93
	STG	10:20	11.06	110

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

Duration in hrs.		**Quantum in MW**	**Grid**	**Name of the Ckt.**
From	**To**			
10:15	10:35	28	**RPH**	33kV Bay-12, 16, 17, 19
10:15	10:30	32		33kV Bay-1, 2, 5, 6, 13, 18
10:20	10:32	60	**IP**	33kV Bay-2,4, 6, 9, 10, 19, 38, 42
10:20	11:32	20		33kV Bay - 24
10:20	11:32	27		33kV Bay-37, 53 & 54
10:20	12:00	10		33kV Bay- 25
10:20	12:40	30		33kV Bay-5,13,17,30, 34
10:20	10:43	150	**Patparganj**	Entire Load

B) Report on the Grid Incident occurred on 13.09.2009 at 09.50hrs.

At about 09.50hrs, the following disturbance occurred in Delhi on 13.09.2009 :

S.No.	Name of the Ckt.	Time of outage in hrs	Time of restoration in hrs.	Remarks
1	220kV BTPS – Sarita Vihar ckt-I	09.49	10.30	Ckt. Tripped on E/F at BTPS end.
2	220kV Pragati – Sarita Vihar Ckt.	09.50	14.47	`R' phase jumper of 220kV Pragati – Sarita Vihar Ckt snapped at Sarita Vihar end. 220kV Maharani Bagh – Pragati Ckt. Was under emergency shut-dow.

220kV System configuration before the incident was as under :-

220kV IP – Patparganj Ckt-I was kept open at Patparganj end and 220kV IP – Patparganj Ckt-II was kept close at both ends. 220kV Bus coupler was kept open at Patparganj.

220kV IP, RPH, GT and Pragati generating stations were connected to the Grid through 220kV BTPS – Sarita Vihar – Pragati – IP link. The part load of Patparganj also fed through this link. At Sarita Vihar, 220kV Bus coupler was kept open. 220kV BTPS – Sarita Vihar Ckt-I was connected to the same bus at SArita Vihar on which 220kV Pragati – Sarita Vihar Ckt-I was connected. As 220kV Maharani Bagh – Pragati Ckt was under emergency shut-down and due to tripping of 220kV BTPS – Sarita Vihar Ckt-I on E/F at BTPS end caused the separation of Generating Units namely IP – Pragati and GT Station from the Grid resulting into the trippig of all running units. Affected area was normalized within 30 minutes.

Again, this section disrobed at 10.33hrs. due to operation of bus bar protection at Pragati Grid while GT Station was tried to synchronized the 100MVA and 160MVA transformers to the Grid. System restored within 10 minutes.

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

Name of the station	Unit tripped	Generation prior to the incident	Time of synchronization of unit in hrs.
IP Station	4	25	Still out
	3	28	16.15
	4	28	14.10
	5	28	11.43
	6	20	10.43
	STG-1	12	06.40 (14.09.09)
	STG-1	16	17.55
Pragati	1	99	20.32
	2	94	11.26
	2	110	12.14

Load affected due to the above incident was as under

Name of the Station	Duration of load shedding	Quantum of shedding in MW
IP (entire 33kV load)	09.50hrs. to 10.20hrs. 10.33hrs. to 10.42hrs.	43 43
RPH (entire 33kV load)	09.50hrs. to 10.20hrs 10.33hrs. to 10.42hrs.	29 29
Park Street	09.50hrs. to 10.20hrs 10.33hrs. to 10.42hrs.	85 85
GT (entire 66kV load)	09.50hrs. to 10.20hrs	42 NDMC and DMRC were advised to change over the load.

C) Report on the Grid Incident occurred on 17.09.2009 at 10.54hrs.

At about 09.50hrs, while carrying out bus changing operation of 220kV IP Ckt-II from 220kV Bus-I to 220kV Bus-II at 220kV IP Ext S/Stn and during opening of bus isolator of Bus-II, a heavy sparking occurred resulting into tripping of 220kV Bus Coupler and further operation of Bus Differential Protection leading to following trippings :-

Sr no	Name of the Ckt.	Time of outage	Time of restoration	Relay Indication
01	220kV Pragati –Sarita Vihar Ckt.	10.54hrs.	11.10hrs.	Ckt. tripped on 96T, 186, 186 at Pragati and on 186A, 186B, Dist Prot `ABC' Phase Zone-I, Dist 5.310Kms at Sarita Vihar end.
02	220kV Bus Coupler at Pragati	10.54hrs.		96B, 96C, 96A, 86
03	220kV Pragati – Park Street Ckt-I & II	10.54hrs.	11.15hrs 11.55hrs.	Both Ckts tripped on 95, 295 at Pragati.
04	220kV Pragati –IP Ckt-I & II	10.54	19.45	At Pragati IP Ckt-I : IP Ckt-II : No tripping At IP Stn Pragati Ckt-I : No tripping Pragati Ckt-II : Dist Prot Zone-I, 86a, 86RY, 86C, `RY' Phase
05	220kV Maharani Bagh – Pragati Ckt.	10.54hrs.	11.10hrs.	At Pragati : No tripping At Maharani Bagh : Dist Prot `RY' Phase Zone-II
06	220/66kV 160MVA Tx at GT	10.54hrs.	11.10hrs.	86
07	220/66kV 100MVA Tx at GT	10.54hrs.	11.10hrs.	86, 96T, Bus Bar Protection.

220kV System configuration before the incident was as under :-

220kV IP, RPH, GT and Pragati generating stations were connected to the Grid through 220kV BTPS – Sarita Vihar – Pragati – IP link. The part load of Patparganj also fed through this link. At Sarita Vihar, 220kV Bus coupler was kept open. 220kV BTPS – Sarita Vihar Ckt-I was connected to the same bus at Sarita Vihar on which 220kV Pragati – Sarita Vihar Ckt. was connected.

The 220kV bus configuration at IP Ext prior to the incident was as under :-

220kV Bus-I	:	220kV IP Ckt-I 220kV Sarita Vihar Ckt. 220kV Park Street Ckt-I Pragati Unit-I 220/66kV 160MVA Tx of GT
220kV Bus-II	:	220kV IP Ckt-II 220kV Maharani Bagh Ckt 220kV Park Street Ckt-II 220/66kV 100MVA Tx of GT Pragati Unit-I and STG
220kV Bus Coupler	:	On Position

Due to the above tripping, all running units of GT and Pragati isolated from the Grid and subsequently tripped.

The generation units affected were normalized as under :-

Name of the Station	**Units tripped at hrs.**	**Generation prior to the incident**	**Time of tripping**	**Units synch. at Hrs.**
IP Station	4			
GT	1	28	10.54hrs.	17.50hrs.
	3	27	10.54hrs.	12.20 hrs.
	4	28	10.54hrs.	12.25 hrs.
	5	30	10.54hrs.	12.00 hrs.
	6	22	10.56hrs.	12.32 hrs.
	STG-1	09	10.54hrs.	00.21 hrs.
	STG-2	13	10.54hrs.	13.50 hrs.
Pragati	1	99	10.54hrs.	11.50hrs,
	2	101	10.54hrs.	12.34hrs.
	STG	116	10.54hrs.	14.18hrs.

17.7 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH OCTOBER – 2009

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.10.09	09.59	220KV BTPS – NOIDA – GAZIPUR CKT.	01.10.09	10.33	CKT. TRIPPED ON `Y' PHASE E/F AT BTPS. NO TRIPPING AT GAZIPUR.
02	02.10.09	09.48	66/33KV 30MVA PR. TR.-I & II AT PARK STREET	02.10.09	09.49	BOTH TXS TRIPPED WITHOUT INDICATION. BOTH TXS CHARGED AT 09.49 HRS TXS TRIPPED WHILE FACILITING SHUT-DOWN ON 33KV MOTIA KHAN CKT-II AND CHANGING OVER-OF LOAD OF 33KV MOTIA KHAN CKT-II 33KV MOTIA KHAN CKT-I ON 33KV BUS-I.
03	02.10.09	09.52	66/33KV 30MVA PR. TR.-I & II AT PARK STREET	02.10.09	09.53	BOTH TRANSFORMERS TRIPPED WITHOUT INDICATION DUE TO FAULT IN 33KV MOTIA KHAN CKT-I. BOTH TXS. CHARGED AT 09.53HRS
04	02.10.09	13.20	33/11KV 16MVA PR. TR.-I AT SUBZI MANDI	04.12.09	16.52	TR. TRIPPED ON DIRECTIONAL O/C, `RYB' PHASE, 86 ALONG WITH 11KV I/C-I WHICH TRIPPED ON O/C `R&B' PHASE. TRANSFORMER CHARGED AT 17.40HRS BUT AGAIN TRIPPED ON SAME FAULT.
05	02.10.09	17.10	220KV BAMNAULI – NARAINA CKT-I	02.10.09	17.25	CKT. TRIPPED ON DIST. PROT `ABC' PHASE, AUTO RECLOSE LOCK OUT AT NARAINA. TRIPPING OCCURRED WHILE FACILITATING SHUT-DOWN ON 400/220KV ICT-III AT BAMNAULI.
06	03.10.09	14.38	220KV GOPALPUR – SUBZI MANDI CKT-I	03.10.09	14.47	CKT. TRIPPED ON DIST PROT `RYB' PH. ZONE-I AT GOPALPUR. NO TRIPPING SUBZI MANDI.
07	03.10.09	17.50	220KV WAZIRABAD – KASHMIRI GATE CKT-I	03.10.09	23.41	CKT. TRIPPED ON TRIP CKT SUPERVISION INDICATION.
08	03.10.09	23.43	220/66KV 100MVA PR. TR.-II AT PATPARGANJ	04.10.09	06.46	TR. TRIPPED ON 86, 87T ALONG WITH 66KV I/C-II WHICH TRIPPED ON INTER TRIPPING. 66KV BUS COUPLER ALSO TRIPPED ON E/F. `B' PHASE CT OF 66KV KHICHRIPUR CKT BLAST.
09	04.10.09	13.57	400/22KV 315MVA ICT-III AT BAWANA	04.10.09	14.06	ICT TRIPPED ON 86B-I, TRIP SUPER VISION 95A-1, AUXILIARY RELAY, 30AB 30CPG. FACIA: MAIN CB AUTO TRIP, TX. OIL LOW/ HIGH OIL ALARM, GROUP-I/2 TRIP RELAY CKT FAULTY. 220KC I/C-III TRIPPED ON CB AUTO TRIP.
10	04.10.09	16.12	220KV GOPALPUR – SUBZI MANDI CKT-I	04.10.09	16.15	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
11	04.10.09	16.40	220KV GOPALPUR – SUBZI MANDI CKT-I	04.10.09	19.30	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
12	05.10.09	09.05	220/66KV 100MVA PR. TR.-I AT NARELA	05.10.09	11.45	TR. TRIPPED ON INSTANTENEOUS E/F, 186AB ALONG WITH 66KV I/C-I WHICH TRIPPED ON INTER TRIPPING
13	05.10.09	10.34	220KV BAWANA – NAJAFGARH CKT-I	05.10.09	10.44	CKT. TRIPPED ON E/F AT NAJAFGARH.
14	05.10.09	10.44	220/66KV 100MVA PR. TR.-I & II AT NAJAFGARH	05.10.09	10.44	BOTH TRIPPING TRIPPED ON E/F ALOING WITH THEIR 66KC I/CS. BOTH 66KV I/CS TRIPPED ON INTER TRIPPING.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
15	05.10.09	12.55	33/11KV 16MVA PR. TR.-II AT SUBZI MANDI	05.10.09	18.33	TR. TRIPPED ON 51O/C, 86. TR. CHARGED AT 13.05HRS. BUT AGAIN TRIPPED AT 13.15HRS. ON SAME FAULT. TX FINALLY CHARGED AT 18.33HRS.
16	07.10.09	13.39	220KV BAWANA – NAJAFGARH CKT-II	07.10.09	16.20	CKT. TRIPPED ON DIST PROT `B&C' PHASE ZONE-II AT BAWANA AND ON DIST PROT `A' PHASE AT NAJAFGARH
17	08.10.09	10.59	220KV BAWANA – NAJAFGARH CKT-I	08.10.09	11.35	CKT. TRIPPED ON E/F, 186 AT NAJAFGARH
18	08.10.09	13.13	220KV MANDOLA – WAZIRABAD CKT-II	08.10.09	12.58	CKT. TRIPPED ON DIST PROT `RYB' PH. ZONE-I, RXME18 AT WAZIRABAD.
19	10.10.09	12.17	220KV BAMNAULI – PAPPANKALAN-II CKT-II	10.10.09	12.49	CKT. TRIPPED ON DIST PROT `A&B' PHASE, 186A&B AT BAMNAULI. NO TRIPPING AT PAPPANKALAN-II
20	13.10.09	02.50	220/66KV 100MVA PR. TR.-I AT NARELA	13.10.09	14.40	TR. TRIPPED ON E/F.
21	13.10.09	12.41	220/33KV 100MVA PR TR.-I AT GEETA COLONY	13.10.09	16.30	TR. TRIPPED ON BUCHLOZ, 30G, 30J, 30E, 86 ALONG WITH 33KV I/C-I WHICH TRIPPED ON CB AUTO TRIP
22	15.10.09	10.45	220KV WAZIRABAD – KASHMIRI GATE CKT-II	15.10.09	15.06	CKT. TRIPPED ON GENERAL TRIP GFC-STFWL1L2L3, ZM 1 TRIP, ZM2 ZM3 START AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE.
23	17.10.09	16.30	33/11KV 16MVA PR. TR.-II AT SUBZI MANDI	17.10.09	17.05	TR. TRIPPED ON DIFFERENTIA, MASTER RELAY.
24	20.10.09	12.15	220KV PANIPAT – NARELA CKT-I, II & III	20.10.09	13.30	220KV PANIPAT – NARELA CKT-I, II & III TRIPPED AT NARELA WITHOUT INDICAITON WHILE ARRANGING SHUT-DOWN ON 220/66KV 100MVA PR. TR.-I ALONG WITH 220KV BUS-I AT NARELA.
25	21.10.09	11.23	220/33KV 50MVA PR. TR.-I AT OKHLA	21.10.09	12.20	TR. TRIPPED ON 95C
26	23.10.09	06.34	220KV GOPALPUR – SUBZI MANDI CKT-II	23.10.09	18.35	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI
27	23.10.09	06.34	220/33KV 100MVA PR. TR.-II AT SUBZI MANDI	23.10.09	18.35	TR. TRIPPED ON 87, E/F, 86 ATLONG WITH 33KV I/C-II WHICH TRIPPED ON SUPERVISIO RELAY, 86
28	25.10.09	16.15	220KVPATPARGANJ – GEETA COLONY -I & II	25.10.09	16.35	220KV BUS BAR PROTECTION OPERATED AT PATPARGANJ
29	25.10.09	16.15	220KV PATPARGANJ – IP CKT-II	25.10.09	16.35	220KV BUS BAR PROTECTION OPERATED AT PATPARGANJ
30	25.10.09	16.15	220/66KV 100MVA PR. TR.-I & II AT PATPARGANJ	25.10.09	16.35	220KV BUS BAR PROTECTION OPERATED AT PATPARGANJ
31	25.10.09	16.15	220/33KV 50MVA PR. TR.-II AT PATPARGANJ	25.10.09	16.35	220KV BUS BAR PROTECTION OPERATED AT PATPARGANJ
32	25.10.09	23.28	220/66KV 100MVA PR. TR.-I AT GAZIPUR	26.10.09	16.02	TR. TRIPPED ON DIFFERENTIAL ALONG WITH 66KV I/C-I WHICH TRIPPED WITHOUT INDICATION.
33	28.10.09	17.13	220/66KV 100MVA PR. TR.-I AT PAPPNKALAN-II	28.10.09	17.20	TR. TRIPPED ON LBB PROTECTION ALONG WITH 66KV I/C-I WHICH ALSO TRIPPED ON LBB PROTECTION. 66KV I/C-I TRIPPED WHILE ENERGISING

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
34	28.10.09	10.02	220/66KV 160MVA PR. TR. AT PRAGATI	28.10.09	23.10	TR. TRIPPED ON 195Y, 295Y, 30A, 30B HALF, 30C HALF, 30D HALF.
35	29.10.09	12.10	33/11KV 16MVA PR. TR.-II AT SUBZI MANDI	29.10.09	12.30	TR.TRIPPED ON 51 O/C,`B'PH, 86 ALONG WITH 11KV I/C-II WHICH TRIPPED ON `B' PH O/C
36	30.10.09	15.10	220KV PRAGATI – SARITA VIHAR CKT.	30.10.09	15.18	CKT. TRIPPED ON DIST PROT ZONE-I, 86, AT PRAGATI AND ON DIST PROT ZONE-I, 186A&B AT SARITA VIHAR.
37	30.10.09	15.10	220/66KV 100MVA & 160MVA PR. TRS AT PRAGATI	30.10.09	15.29	BOTH TR. TRIPPED ON 86. 100MVA PR. TR. CHARGED AT 15.29HRS. AND 160MVA TR. CHARGED AT 15.26HRS.

17.8 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH NOVEMBER – 2009

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.11.09	14:40	220KV BTPS-SARITA VIHAR CKT-I	01.11.09	15:12	AT SARITA VIHAR CKT TRIPPED ON DIST. PROT. ZONE-2, C-PHASE, 186A&B. AT BTPS CKT TRIPPED ON 67NX, 186A&B
02	01.11.09	17:40	220KV MAHARANI BAGH – SARITA VIHAR CKT	01.11.09	17:59	AT MAHARANI BAGH CKT TRIPPED ON DIST. PROT. ZONE-I. AT SARITA VIHAR CKT TRIPPED ON DIST. PROT. ZONE-I, 3-PH.TRIP
03	01.11.09	17:40	220KV PRAGATI – MAHARANI BAGH CKT	01.11.09	17:47	AT MAHARANI BAGH CKT TRIPPED ON DIST. PROT. ZONE-I, E/F. NO TRIPPING AT PRAGATI
04	01.11.09	20:15	220KV NARELA – PANIAPAT CKT-I	01.11.09	20.45	AT NARELA CKT TRIPPED ON DIST. PROT. ZONE-I, 3-PAHSE TRIP
	02.11.09	12.07	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-II	02.11.09	14.25	TR. TRIPPED ON O/C, 86, LBB PROTECTION, BACK UP PROTECTION.
05	04.11.09	2:08	400KV BAWANA – ABDULLAPUR CKT-2	04.11.09	02:29	AT BAWANA CKT TRIPPED ON ANZ, BNZ, 85Y, 186A&B
06	04.11.09	13.35	220/33KV 100MVA PR. TR.-II AT PARK STREET	04.11.09	13.38	TR. TRIPPED ON 86 ALONG WITH 33KV I/C-II WHICH TRIPPED ON E/F
07	05.11.09	13.21	220KV WAZIRABAD – GEETA COLONY CKT-I	05.11.09	13.28	CKT. TRIPPED ON RXME18, DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD AND ON MAIN-I, ACTIVE GROUP-I, DIST PROT `ABC' PH. ZONE-I, MAIN-II : DIST PROT ABC PHASE ZONE-I, 27RYB, 30E AT GEETA COLONY.
08	05.11.09	13.21	220KV PATPARGANJ – GEETA COLONY CKT-I	05.11.09	13.52	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-II, 186, 186XJ AT PATPARGANJ.
09	07.11.09	15.06	220/33KV 100MVA PR. TR.-IV AT OKHLA	07.11.09	23.34	TR. TRIPPED ON O/C, 51CX, 86, ALONG WITH 33KV I/C-III & IV. 33KV I/C-III TRIPPED ON 88, 51C, O/C AND 33KV I/C-IV TRIPPED ON 86 LV.
10	09.11.09	10:40	400KV BAMNAULI – BALLABH GARH CKT-I	09.11.09	11:02	AT BAMNAULI CKT TRIPPED ON TRIP CKT SUPVN. RELAY, 195A, 195B, 195C, 295ABC

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
11	09.11.09	12:00	400KV BAMNAULI – BALLABH GARH CKT-I	09.11.09	16:15	AT BAMNAULI CKT TRIPPED ON TRIP CKT SUPVN. RELAY, A/R LOCKOUT, 186A&B
12	12.11.09	16.40	220/66KV 100MVA PR. TR.-II AT NARELA	13.11.09	18.05	TR. TRIPPED ON 87, 86 ALONG WITH 66KV I/C-II WHICH TRIPPED ON INTER TRIPPING.
13	12.11.09	23.06	33/11KV 16MVA PR. TR.-II AT SUBZI MANDI	13.11.09	04.02	TR. TRIPPED ON DIFFERENTIA ALONG WITH 11KV I/C-II WHICH TRIPPED WITHOUT INDICATION.
14	13.11.09	13.40	220KV GOPALPUR – SUBZI MANDI CKT-I	13.11.09	13.55	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
15	15.11.09	15.56	220KV MANDAULA-WAZIRABAD CKT-IV	15.11.09	16.44	AT WAZIRABAD CKT TRIPPED ON DIST. PROT. 3-PHASE TRIP. AT MANDAULA CKT TRIPPED ON DIST. PROT. ZONE-2, 3-PHASE TRIP
16	15.11.09	15.41	220KV WAZIRABAD – KASHMIRI GATE CKT-II	15.11.09	16.56	CKT. TRIPPED WITHOUT INDICATION AT WAZIRABAD.
17	15.11.09	15.41	220KV WAZIRABAD – GEETA COLONY CKT-II	15.11.09	17.05	CKT. TRIPPED ON DIST PROT ZONE-I AT WAZIRABAD AND ON DIST PROT ZONE-II AT GEETA COLONY
18	15.11.09	15.41	220/66KV 100MVA PR. TR.-I, II & III AT WAZIRABAD	15.11.09	16.07	TR.-I, II 7& III TRIPPED WITHOUT INDICATION.
19	16.11.09	23.07	220KV SARITA VIHAR – BTPS CKT-II	17.11.09	00.07	AT SARITA VIHAR CKT TRIPPED ON DIST. PROT. ZONE-2, A-Φ, 186. AT BTPS CKT TRIPPED ON 67NX, 186A&B
20	19.11.09	07.00	220/66KV 100MVA PR. TR. AT GOPALPUR	19.11.09	12.07	TR. TRIPPED ON OLTC BUCHLOZ, 86
21	20.11.09	19.33	220KV SARITA VIHAR – BTPS CKT-I	20.11.09	22.57	AT SARITA VIHAR CKT TRIPPED ON POLE DISCREPANCY. NO TRIPPING AT BTPS
22	20.11.09	23.25	220KV SARITA VIHAR – BTPS CKT-I	21.11.09	01.00	AT SARITA VIHAR CKT TRIPPED ON POLE DISCREPANCY. NO TRIPPING AT BTPS
23	22.11.09	08.02	66/11KV 30MVA PR. TR.-I AT PARK STREET	22.11.09	13.55	TR. TRIPPED ON 86, 95, SUPERVISION RELAY, BUCHLOZ,
24	22.11.09	09.24	220/66KV 100MVA PR. TR. AT BAWANA	22.11.09	11.00	TR. TRIPPED ON 30A, 86A ALONG WITH ITS 66KV I/C WHICH TRIPPED WITHOUT INDICATION.
25	22.11.09	10.42	220KV BAMNAULI – NARAINA CKT-I & II	22.11.09	11.10	220KV BUS BAR PROTECTION OPERATED AT NARAINA
26	22.11.09	15.35	66/11KV 20MVA PR. TR .-II AT PAPPANKALAN-II	23.11.09	00.27	TR. TRIPPED ON LBB PROTECTION, BACK UP PROTECTION, 86 RELAY.
27	23.11.09	15.19	220KV MANDAULA – GOPALPUR CKT-I	23.11.09	15.58	AT GOPALPUR CKT TRIPPED ON SPS, 85LO, 186A&B. NO TRIPPING AT MANDAULA
28	23.11.09	15.19	220KV MANDAULA – GOPALPUR CKT-II	23.11.09	15.58	AT GOPALPUR CKT TRIPPED ON SPS, 85LO, 186A&B. NO TRIPPING AT MANDAULA
29	23.11.09	15.25	220KV NARELA-MANDAULA CKT-I	23.11.09	16.15	AT GOPALPUR CKT TRIPPED ON SPS, 85LO, 186A&B. NO TRIPPING AT MANDAULA

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
30	23.11.09	15.25	220KV NARELA-MANDAULA CKT-II	23.11.09	16.15	AT GOPALPUR CKT TRIPPED ON SPS, 85LO, 186A&B. NO TRIPPING AT MANDAULA
31	24.11.09	13.51	220KV MANDAULA – GOPALPUR CKT -I	25.11.09	16.40	AT MANDAULA CKT TRIPPED ON DIST. PROT. ZONE-2, B-PAHSE, 186. NO TRIPPING AT GOPALPUR. B-PHASE LA DAMAGED.
32	24.11.09	13.51	220KV MANDAULA – WAZIRABAD CKT -IV	24.11.09	14.59	AT GOPALPUR CKT TRIPPED ON DIST. PROT. ZONE-I, 3-PHASE TRIP
33	24.11.09	22.58	220/33KV 100MVA PR. TR.-II AT LODHI ROAD	25.11.09	02.36	TR. TRIPPED ON LBB PROTECTION, TRANSFORMER TROUBLE ALARM, BUCHLOZ 30A, 86A
34	25.11.09	15.04	33/11KV 16MVA PR. TR. AT SUBZI MANDI	25.11.09	15.32	TR. TRIPPED ON 86, 51RYB.
35	27.11.09	15.51	220KV PATPARGANJ – IP CKT-I	25.11.09	16.43	CKT. TRIPPED ON DIST PROT `ABC' PH ZONE-I, 86X AT PATPARGANJ & ON DIST PROT ABC PH ZONE-I, 186 AT IP STN

17.9 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH DECEMBER – 2009

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.12.09	03.45	220/66KV 100MVA PR. TR.-II AT KANJHAWALA	01.12.09	07.50	TR. TRIPPED ON OVER FLUX ALONG WITH 66KV I/C-II WHICH TRIPPED ON INTER TRIPPING.
02	01.12.09	16.57	220KV BAMNAULI – NARAINA CKT-II	01.12.09	17.05	CKT. TRIPPED ON 186, BUS BAR PROTECTION, 96.
03	02.12.09	02.21	220/33KV 100MVA PR. TR.-II AT PARK STREET	02.12.09	02.50	TR. TRIPPED ON 86 ALONG WITH 33KV I/C-II WHICH TRIPPED ON 51NX, 86
04	03.12.09	02.52	220/66KV 100MVA PR. TR.-II AT KANJHAWALA	03.12.09	06.27	TR. TRIPPED ON OVER FLUX, AIR PRESSURE LOW.
05	03.12.09	17.38	220KV BAWANA – NAJAFGARH CKT-I & II	03.12.09	17.43	BOTH CKTS TRIPPING WHILE TESTING OF UFR RELAY AT BAWANA.
06	03.12.09	17.38	220KV BAWANA – DSIDC CKT-I & II	03.12.09	17.43	BOTH CKTS TRIPPING WHILE TESTING OF UFR RELAY AT BAWANA.
07	05.12.09	12.49	220/66KV 100MVA PR. TR.-II AT NARELA	05.12.09	17.42	TR. TRIPPED ON BUS DIFFERENTIAL, A&C PHASE, 86
08	07.12.09	05.00	66/11KV 20MVA PR. TR.-II AT NAJAFGARH	07.12.09	10.30	TR. TRIPPED ON 64RLV, E/F, HV 64, RHF PROTECTION ALONG WITH 11KV I/C-III.
09	08.12.09	15.10	220/33KV 100MVA PR. TR.-II AT KASHMIRI GATE	08.12.09	15.47	TR. TRIPPED ON WINDING TEMP ALARM.
10	10.12.09	08.52	220/33KV 100MVA PR. TR.-I AT IP STATION	10.12.09	10.02	TR. TRIPPED AL
11	10.12.09	11.57	400KV BAMNAULI – BAWANA CKT-I	10.12.09	15.14	CB-1752 OF THE CKT TRIPPED ON CB-I AUTO TRIP, 295BC TRIP CKT SUPERVISION, CB-I TC-2 FAULTY, CB DC-I FAIL AT BAMNAULI AND ON CB-II AUTO TRIP, 186A&B, AUTO RECLOSE LOCKOUT

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
12	11.12.09	01.48	220/33KV 100MVA PR. TR.-II AT SUBZI MANDI	11.12.09	02.50	TR. TRIPPED WITHOUT INDICATION.
13	12.12.09	15.47	220/66KV 100MVA PR. TR.-II AT PARK STREET	12.12.09	16.15	TR. TRIPPED ON E/F, 86 ALONG WITH 66KV I/C-II WHICH TRIPPED ON INTER TRIPPING.
14	13.12.09	12.56	220/66KV 100MVA PR. TR.-II AT PARK STREET	13.12.09	13.07	TR. TRIPPED ON E/F.
15	16.12.09	03.30	66/11KV 20MVA PR. TR.-II AT SARITA VIHAR	16.12.09	08.48	TR. TRIPPED 86, 86T, 64RLV ALONG WITH 11KV I/C-II WHICH TRIPPED ON O/C `R'&B' PHASE.
16	20.12.09	12.38	220KV MAHARANI BAGH – SARITA VIHAR CKT.	20.12.09	12.49	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-I, 186, 186A, 186B AT SARITA VIHAR AND ON DIST PROT `Y' PHASE ZONE-I AT MAHARANI BAGH.
17	20.12.09	18.35	220KV BTPS – SARITA VIHAR CKT-I	21.12.09	19.19	CKT. TRIPPED WITHOUT INDICATION AT BTPS. NO TRIPPING AT SARITA VIHAR.
18	20.12.09	22.30	220KV PRAGATI – SARITA VIHAR CKT.	20.12.09	22.32	CKT. TRIPPED ON AUTO RECLOSE, 186AB, DIRECTIONAL E/F, BACKP ROTECTION AT SARITA VIHAR AND ON `R' PHASE E/F AT BTPS.
19	21.12.09	04.19	220KV SARITA VIHAR – PRAGATI CKT.	21.12.09	19.33	CKT.TRIPPED ON 95, 96 AT SARITA VIHAR. `Y' PHASE POLE OF BREAKER DAMAGED AT SARITA VIHAR.
20	21.12.09	04.19	220KV BTPS – SARITA VIHAR CKT-I	21.12.09	05.18	CKT. TRIPPED ON `R' PHASE E/F AT BTPS. NO TRIPPING AT SARITA VIHAR
21	21.12.09	04.19	220/66KV 100MVA PR. TR.-I & II AT SARITA VIHAR	21.12.09	05.33	BOTH TRANSFORMERS TRIPPED ON BUS BAR PROTECTION. 100MVA PR. TR.-I & II CHARGED AT 05.18HRS. AND 05.33HRS. RESPECTIVELY.
22	21.12.09	07.15	220KV BTPS – NOIDA – GAZIPUR CKT.	21.12.09	07.56	CKT. TRIPPED ON O/C, 86 AT GAZIPUR ALONG WITH 66KV I/C-I & II WHICH TRIPPED ON 86, O/C.
23	22.12.09	05.05	220/66KV 100MVA PR. TR-I AT SARITA VIHAR	22.12.09	19.51	TR. TRIPPED ON 30A.
24	23.12.09	12.36	220/33KV 100MVA PR. TR.-II AT IP STN.	23.12.09	19.20	TR. TRIPPED ON DIFFERENTIAL.
25	25.12.09	13.27	220KV GEETA COLONY – WAZIRABAD CKT-II	25.12.09	13.40	CKT. TRIPPED WITHOUT INDICATION AT WAZIRABAD.
26	25.12.09	13.27	220KV WAZIRABAD – KASHMIRI GATE CKT-I & II	25.12.09	13.41	BOTH CKTS TRIPPED WITHOUT INDICATION AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE. CKT-I & II CHARGED AT 13.36HRS. AND 13.41HRS RESPECTIVELY.
27	25.12.09	13.27	220/66KV 100MVA PR. TR.-I & II AT WAZIRABAD	25.12.09	13.44	BOTH TRANSFORMERS TRIPPED WITHOUT INDICATION. TR.-I & II CHARGED AT 13.42HRS. AND 13.44HRS.
28	25.12.09	13.27	220KV MANDOLA – WAZIRABAD CKT-IV	25.12.09	18.09	CKT. TRIPPED ON DIST PROT `RYB' PHASE AT WAZIRABAD AND ON `Y' PHASE DIST PROT AT AT MANDOLA.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
29	25.12.09	15.39	220KV WAZIRABAD – KASHMIRI GATE CKT-II	25.12.09	20.14	CKT. TRIPPED ON GENERAL TRIP, GFC-STFWL, L2L, L3, ZM1 TRIP, AT WAZIRA BAD. NO TRIPPING AT KASHMIRI GATE
30	26.12.09	09.31	220KV BANMAULI – NARAINA CKT-I	26.12.09	10.25	CKT. TRIPPED ON DIST PROT `C' PH, 186AB, AUTO RECLOSE LOCK OUT AT BAMNAULI. TRIPPING OCCURRED WHILE CHANING OVER OF LOAD FROM BUS-I TO BUS-II DUE TO PLANNED SHUT-DOWN
31	26.12.09	17.54	220/33KV 100MVA PR. TR.-II AT SUBZI MANDI	26.12.09	19.25	TR. TRIPPED ON 86, O/C, E/F ALONG WITH 33KV I/C-II WHICH TRIPPED ON TRIP CKT. SUPERVISION RELAY, 95ABC, 86, NON DIRECTIONAL E/F, O/C, E/F, 51R&B.
32	28.12.09	14.07	220KV WAZIRABAD – KASHMIRI GATE CKT-II	28.12.09	16.10	CKT. TRIPPED ON L1-L2 PANELD, ZM1 TRIP, ZM2 START, ZM3 START, RXME-18, ZONE-I TRIP AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE
33	31.12.09	04.55	220KV BAWANA – NAJAFGARH CKT-II	31.12.09	05.07	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I AT BAWANA AND ON 186A AT NAJAFGARH
34	31.12.09	06.06	220KV BAWANA – NAJAFGARH CKT-II	31.12.09	06.23	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I AT BAWANA AND ON 186A AT NAJAFGARH.
35	31.12.09	06.50	220KV BAWANA – NAJAFGARH CKT-I	31.12.09	06.57	CKT. TRIPPED ON DIST PROT ZONE-I, 86 AT BAWANA AND ON DIST PROT. `ABC' PHASE, 186 AT NAJAFGARH.
36	31.12.09	07.26	220KV BAWANA – NAJAFGARH CKT-I	31.12.09	11.50	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-I AT BAWANA AND ON DIST PROT ABC PHASE, 186 AT NAJAFGARH.
37	31.12.09	08.19	400KV BAMNAULI – BAWANA CKT-I	31.12.09	08.36	CKT. TRIPPED ON MAIN-I & II ANZ-I, 186A&B, DIST PROT ANZ-I, ZONE-I AT BAWANA AND ON 195B1C, 195C2C, 186A, 186B, 130D AT BAMNAULI.

17.10 DETAILS OF TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH JANUARY 2010

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	02.01.10	00.16	VARIOUS TRIPPINGS IN DELHI SYSTEM			DETAILED REPORT IS AVAILABLE AT SR. NO. 'A' AFTER THE TRIPPING REPORT OF THE MONTH.
02	02.01.10	21.44	VARIOUS TRIPPINGS IN DELHI SYSTEM			DETAILED REPORT IS AVAILABLE AT SR. NO.'B AFTER THE TRIPPING REPORT OF THE MONTH.
03	03.01.10	13.25	220KV SHALIMAR BAGH – ROHINI CKT-I	03.01.10	14.22	CKT. TRIPPED ON DIST. PROT 'A&B' PH, 186A&B AT ROHINI. NO TRIPPING AT SHALIMAR BAGH
04	03.01.10	15.55	400KV BALLABHGARH – BAMNAULI CKT-II	03.01.10	20.29	CKT. TRIPPED ON CB TROUBLE, AUTOTRIP, DIST PROT CN ADDED TRIP AT BAMNAULI. DISC INSULATOR FOUND BROKEN AT TOWER NO.276.
05	03.01.10	16.06	400KV BAMNAULI – BAWANA CKT-II	03.01.10	17.50	CB-1652 OF CKT. TRIPPED 86, 186A&B AT BAMNAULI.
06	03.01.10	17.06	220/66KV 100MVA PR. TR.-IV AT NAJAFGARH	03.01.10	19.30	TR. TRIPPED ON 87AB,.86.
07	04.01.10	08.10	2220KV BAMNAULI – PAPPANKALAN-I CKT-I	04.01.10	08.29	CKT. TRIPPED ON DIST PROT `A' PH, 186A&B, 30C, AIR PRESSURE LOW AT BAMNAULI.
08	05.01.10	16.07	220KV GEETA COLONY – PATPARGANJ CKT-I	05.01.10	17.40	CKT. TRIPPED ON MAIN-I ACTIVE GROUP-I DIST PROT `ABC' PHASE ZONE-I, 86 AT GEETA COLONY AND ON ACTIVE GROUP-I, DIST PROT `ABC' PHASE ZONE-I AT PATPARGANJ.
09	06.01.10	12.27	400KV BAMNAULI – BAWANA CKT-II	06.01.10	15.23	CKT. TRIPPED ON DIRECT TRIP, 85LO, 186A&B, BOTH BREAKER 85LOX AT BAMNAULI END ONLY. CKT. TRIPPED WHILE TESTING OF PROTETION RELAY.
10	06.01.10	22.57	220KV PANIPAT – NARELA CKT-III	06.01.10	23.58	CKT. TRIPPED ON 30G, 30H, ZONE TIME RELAY AT NARELA.
11	07.01.10	00.21	220KV BAWANA – NAJAFGARH CKT-II	07.01.10	00.33	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I AT BAWANA AND ON DIST PROT. `A' PHASE 186 AT NAJAFGARH.
12	07.01.10	01.02	220KV BAWANA – NAJAFGARH CKT-II	07.01.10	01.11	CKT. TRIPPED ON DIST PROT `B' PH. ZONE-I AT BAWANA AND ON DIST PROT. `C' PHASE 186 A&B AT NAJAFGARH.
13	07.01.10	01.13	220KV BAWANA – NAJAFGARH CKT-I	07.01.10	01.21	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-I AT BAWANA AND ON DIST PROT 'ABC' PHASE, 186A&B AT NAJAFGARH
14	07.01.10	01.28	220KV BAWANA – NAJAFGARH CKT-II	07.01.10	01.35	CKT. TRIPPED ON DIST PROT `A' PH. ZONE-I AT BAWANA AND ON 186 A&B AT NAJAFGARH.
15	07.01.10	01.57	220KV BAWANA – NAJAFGARH CKT-I	07.01.10	09.00	CKT. TRIPPED ON DIST PROT `C' PH.ZONE-I AT BAWANA. CKT. TRIED TO CLOSE AT 02.10HRS. BUT DID NOT HOLD.
16	07.01.10	02.50	220KV BAWANA – NAJAFGARH CKT-II	07.01.10	12.41	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-II AT BAWANA.
17	07.01.10	04.12	220KV MANDOLA – WAZIRABAD CKT-IV	07.01.10	04.38	CKT. TRIPPED ON DIST PROT `Y' PHASE ZONE-I AT MANDOLA AND ON DIST PROT `R&B' PHASE ZONE-I AT WAZIRABAD.
18	07.01.10	05.06	220KV WAZIRABAD – GEETA COLONY CKT-II	07.01.09	05.33	CKT. TRIPPED ON GENERAL TRIP, GFC STF WL2 CSTFWTE ZM2 TRIP, ZM2 START, ZM3 START AT WAZIRABAD AND ON ACTIVE GROUP-A, DIST PROT `ABC' PHASE ZONE-I, 27RYB, 86 SY GEETA COLONY.
19	07.01.10	21.50	220KV PANIPAT – NARELA CKT-II	07.01.10	22.30	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-I, 186 AT NARELA.
20	07.01.10	22.40	220KV PANIPAT – NARELA CKT-I & II	08.01.10	00.46	BOTH CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT NARELA.
21	08.01.10	00.48	220KV BAWANA – NAJAFGARH CKT-II	08.01.10	00.58	CKT. TRIPPED ON DIST. PROT `BC' PHASENE-I, 21RYB AT BAWANA NAD ON 186A&B AT NAJAFGARH.
22	08.01.10	01.16	220KV BAWANA – NAJAFGARH CKT-II	08.01.10	01.20	CKT. TRIPPED ON `A' PH.ZONE-I AT BAWANA AND ON DIST PROT 186A&B AT NAJAFGARH.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
23	08.01.10	01.38	220KV BAWANA – NAJAFGARH CKT-I	08.01.10	13.35	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-II AT BAWANA.
24	08.01.10	02.15	220KV WAZIRABAD – GEETA COLONY CKT-I	08.01.10	02.25	CKT. TRIPPED ON RXME18, DIST PROT `ABC' PH. ONE-I AT WAZIRABAD AND ON DIST PROT `ABC' PH ZONE-I, 27RYB AT GEETA COLONY.
25	08.01.10	02.17	220KV MANDOLA – WAZIRABAD CKT-IV	08.01.10	02.40	CKT. TRIPPED ON CB AUTO TRIP, AUTO RECLOSE LOCK OUT AT MANDOLA AND ON RXME18, `RYB' PHASE ZONE-I AT WAZIRABAD.
26	08.01.10	02.39	220KV BAMNAULI – NAJAFGARH CKT-I	08.01.10	16.56	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-II, 186A&B, CB AUTO RECLOSE. AT BAWANA AND ON 186A&B AT NAJAFGARH. CKT. TRIED TO CLOSE AT 02.47HRS. BUT AGAIN TRIPPEDO N SOTF. CKT. AGAIN TRIED AT 04.18HRS. BUT DID NOT HOLD AGAIN. CKT. FINALLY CHARGED AT
27	08.01.10	02.47	220KV BAMNAULI – NAJAFGARH CKT-II	08.01.10	02.58	CKT. TRIPPED ON DIST PROT `A' PHASE, 186A&B AT BAMNAULI. NO TRIPPING AT NAJAFGARH.
28	08.01.10	02.49	220/33KV 100MVA PR. TR-II AT KASHMIRI GATE	08.01.10	13.12	TR. TRIPPED ON 86, E/F ALONG WITH 33KV I/C-II WHICH TRIPPED ON 86.
29	08.01.10	02.50	220KV IP – PRAGATI CKT-I	08.01.10	03.04	CKT. TRIPPED ON 87T, DIRECTIONAL E/F REVERSE TYPE AT IP STATION. NO TRIPPING AT PRAGATI.
30	08.01.10	02.58	220KV IP – PATPAR GANJ PRAGATI CKT-II	08.01.10	03.06	CKT. TRIPPED ON DIST PROT THREE PH, 186, 86T AT IP STATION. NO TRIPPING AT PATPARGANJ.
31	08.01.10	02.49	220KV WAZIRABAD – GEETA COLONY CKT-II	08.01.10	03.12	CKT. TRIPPED ON DIST PROT `ABC' PH ZONE-I AT GEETA COLONY. NO TRIPPING AT WAZIRABAD.
32	08.01.10	02.49	220/33KV 100MVA PR. TR.-I AT GEETA COLONY	08.01.10	03.18	TR. TRIPPED ON 86, 30E.
33	08.01.10	02.54	220KV MANDOLA - MANDOLA CKT-III & IV	08.01.10	03.07	CKT-IV TRIPPED ON DIST PROT. NO TRIPPING ON CKT.-III. CKT-III & IV CHARGED AT 03.06HRS. AND 03.07HRS RESPECTIVELY.
34	08.01.10	02.54	220/66KV 100MVA PR. TR.-I AT WAZIRABAD	08.01.10	03.28	TR. TRIPPED ON E/F ALONG WITH 66KV I/C-I WHICH TRIPPED ON INTER TRIPPING.
35	08.01.10	02.48	220KV BAWANA - SHALIMAR BAGH CKT-II	08.01.10	02.56	CKT. TRIPPED ON DIST PROT `C' PHASE, 186A&B AT BAWANA AND ON DIST PROT `C' PHASE 186A&B AT SHALIMAR BAGH.
36	08.01.10	04.31	220KV BAWANA - SHALIMAR BAGH CKT-II	08.01.10	04.34	CKT. TRIPPED ON DIST PROT `C' PH, 186A&B AT BAWANA AND ON DIST PROT `C' PHASE 186AT SHALIMAR BAGH.
37	08.01.10	05.33	220KV NARELA – ROHTAK ROAD CKT-II	08.01.10	06.00	CKT. TRIPPED ON 185A, CX CC AT NARELA.
38	08.01.10	22.02	220KV PANIPAT – NARELA CKT-I & III	08.01.10	22.56	CKT-I TRIPPED ON DIST PROT `ABC' PHASE ZONE-I, 86 AND CKT-III TRIPPED ON 30G, 30H, 30B AT NARELA. CKT-I & III ENERGIZED AT 22.56HRS.
39	09.01.10	01.40	220KV MANDOLA – WAZIRABAD CKT-I	09.01.10	16.17	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-I AT MANDOLA AND ON DIST PROT ZONE-I AT WAZIRABAD. CKT. TRIED TO CLOSE AT 01.58HRS. BUT DID NOT HOLD. CKT. FINALLY CHARGED AT 16.17HRS.
40	10.01.10	16.40	220KV PATPARGANJ – GEETA COLONY CKT-I	10.01.10	16.55	CKT. TRIPPED ON DIST PROT ABC PHASE, 186, 186 AT PATPARGANJ AND ON DIST PROT `ABC' PHASE AT GEETA COLONY
41	10.01.10	16.40	220KV IP – PRAGATI CKT-I	10.01.10	16.50	CKT. TRIPPED ON DIST PROT ALL PHASE ZONE-I AT IP STATION.
42	11.01.10	15.50	220KV PATPARGANJ – IP CKT-I	11.01.09	16.06	CKT. TRIPPED ON DIST PROT ALL PHASE ZONE-I, 186 AT IP STATION.
43	11.01.10	15.50	220KV GEETA COLONY – PATPARGANJ CKT-I	11.01.09	15.59	CKT. TRIPPED ON DIST PROT `ABC' PH ZONE-II, O/C, INSTANTANEOUS O/C, AT GEETA COLONY.
44	11.01.10	15.56	220KV IP – RPH CKT-I & II	11.01.09	16.10	TRANSIENT FAULT.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
45	11.01.10	15.56	220KV GEETA COLONY – PATPARGANJ CKT-I	11.01.10	16.10	CKT. TRIPPED ON ACTIVE GROUP DIST PROT `ABC' PHASE ZONE-I AT PATPARGANJ.
46	11.01.10	15.58	220KV GEETA COLONY – PATPARGANJ CKT-II	11.01.10	16.09	220KV BUS BAR PROTECTION OPERATED AT PATPARGANJ.
47	11.01.10	15.58	220KV IP – PATPAR GANJ CKT-II	11.01.10	16.15	220KV BUS BAR PROTECTION OPERATED AT PATPARGANJ.
48	11.01.10	15.58	220/66KV 100MVA PR. TR.-II AT PATPARGANJ	11.01.10	16.15	220KV BUS BAR PROTECTION OPERATED AT PATPARGANJ.
49	11.01.10	16.39	220KV GEETA COLONY – PATPARGANJ CKT-I	11.01.10	19.21	CKT. TRIPPED ON ACTIVE GROUP-I, DIST PROT `BC' PHASE ZONE-II, 27RYB AT GEETA COLONY.
50	11.01.10	16.50	220KV GEETA COLONY – PATPARGANJ CKT-II	11.01.10	17.20	CKT. TRIPPED ON DIST PROT ZONE-II, O/C AT GEETA COLONY. NO TRIPPING AT PATPARGANJ.
51	12.01.10	06.10	220KV IP – RPH CKT-I	12.01.10	15.21	CKT. TRIPPED ON 186A, 186B AT RPH ALONG WITH 220/33KV 75MVA PR. TR. AT RPH WHICH TRIPPED ON TR. INSIPEANT FAULT RELAY, PRESSURE RELAY TRIP.
52	13.01.10	00.50	220/66KV 100MVA PR. TR.-I & II AT VASANT KUNJ	13.01.10	02.35	TR.-I TRIPPED ON O/C, 51A, 30 OIL LEVEL LOW AND TR.-II TRIPPED ON 86, LOW OIL LEVEL ALONG WITH 66KV I/C-I & II WHICH TRIPPED ON 86 AND 51A RESPECTIVELY.
53	13.01.10	02.45	220/66KV 100MVA PR. TR.-II AT KANJHAWALA	13.01.10	06.00	TR. TRIPPED ON OVER VOLTAGE.
54	13.01.10	03.17	220KV BAWANA – ROHINI CKT-II	13.01.10	16.45	CKT. TRIPPED ON E/F, 67NX, 186A&B AT ROHINI AND ON AUTO RECLOSE LOCK OUT, DIST PROT `A' PHASE AT BAWANA. CKT. TRIED TO CLOSE AT 03.45HRS. BUT DID NOT HOLD
55	13.01.10	03.55	400/220KV 315MVA ICT-III AT BAWANA	13.01.10	06.11	ICT-III TRIPPED ON MAIN CB AUTO TRIP, ½ GROUP TRIP RELAY CKT FAULTY, 186A&B, 95B, 86B1 GROUP, 199A, 199T, OVER FLUX.
56	13.01.10	04.18	66/11KV 20MVA PR. TR.-II AT OKHLA	13.01.10	08.57	TR. TRIPPED ON 51AX ALONG WITH 11KV I/C-II WHICH TRIPPED ON 51AX, 86.
57	14.01.10	11.25	220/33KV 100MVA PR. TR.-II AT PARK STREET	14.01.10	11.40	TR. TRIPPED ON 86, 86 ALONG WITH 33KV I/C-II WHICH TRIPPED ON 86, 51N.
58	14.01.10	16.28	220/66KV 100MVA PR. TR.-I AT SARITA VIHAR	14.01.10	17.52	TR. TRIPPED ON 96, BUS BAR PROTECTION.
59	17.01.10	01.29	220KV PANIPAT – NARELA CKT-I, II & III	18.01.10	14.15	ALL CKTS TRIPPED ON DIST PROT `ABC' PHASE AT NARELA.
60	17.01.10	04.47	220KV BAWANA – SHALIMAR BAGH CKT-II	17.01.10	11.41	CKT. TRIPPED ON DIST PROT `C' PHASE, 186 AT BOTH ENDS.
61	17.01.10	16.57	220KV GOPALPUR – SUBZI MANDI CKT-I	17.01.10	22.35	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
62	18.01.10	02.42	220/66KV 100MVA PR. TR.-II AT KANJHAWALA	18.01.10	07.10	TR. TRIPPED ON OVER VOLTAGE.
63	21.01.10	02.28	220KV WAZIRABAD – GEETA COLONY CKT-I	21.01.10	02.49	CKT. TRIPPED ON E/F AT WAZIRABAD AND ON MAIN-I : ACTIVE GROUP, DIST. PROT`ABC' PHASE ZONE-I, MAIN-II : DIST PROT `ABC' PHASE ZONE-I AT GEETA COLONY.
64	21.01.10	02.28	220/66KV 100MVA PR. TR.-I & II AT WAZIRABAD	21.01.10	02.52	BOTH TRANSFORMERS TRIPPED ON E/F ALONG WITH THEIR RESPECTIVE INCOMERS WHICH WERE ALSO TRIPPED ON E/F.
65	21.01.10	08.17	220KV PANIPAT – NARELA CKT-I & III	21.01.10	09.36	CKT-I TRIPPED ON DIST PROT `ABC' PHASE ZONE-I, 86, 95CA AND CKT-III TRIPPED ON 30G, 30H, ZONE TIME RELAY 30A AT NARELA END.
66	22.01.10	02.27	220KV PANIPAT – NARELA CKT-I, II & III	22.01.10	11.50	220KV PANIPAT CKT-I, II & III TRIPPED ON MICOM RELAY, DIST PROT `ABC' PHASE, 186 AT NARELA.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
67	23.01.10	21.50	220/66KV 100MVA PR. TR.-II AT NARELA	22.01.10	21.50	TR. TRIPPED ON 87HS, BIAS, DIFFERENTIAL A&C PHASE, 86 ALONG WITH 66KV I/C-II WHICH TRIPPED WITHOUT INDICATION.
68	24.01.10	13.17	220KV NARELA – ROHTAK ROAD CKT-II	24.01.10	15.03	CKT. TRIPPED ON 195AC, 195CC AT NARELA. CKT. TRIED TO CLOSE AT 13.43HRS. BUT DID NOT HOLD.
67	24.01.10	16.53	220KV MANDOLA - WAZIRABAD CKT-II	24.01.10	18.20	CKT. TRIPPED DIST PROT `R&B' PHASE AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD.
68	24.01.10	17.07	220KV GOPALPUR – SUBZI MANDI CKT-II	24.01.10	17.28	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
69	25.01.10	16.35	220KV PATPARGANJ – IP CKT-I	25.01.10	16.55	CKT. TRIPPED ON ACTIVE GROUP-I, DIST PROT `ABC' PHASE ZONE-I, 186,186 AT PATPARGANJ AND ON DIST PROT `RYB' PHASE, DIFFERENTIAL RELAY AT IP.
70	28.01.10	02.29	220KV BAWANA – NAJAFGARH CKT-I	28.01.10	02.33	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-II, 86 AT BAWANA AND ON DIST PROT `ABC' PHASE, 186, 186, 186 AT NAJAFGARH.
71	28.01.10	11.29	220KV MEHRAULI – VASANT KUNJ CKT-II	28.01.10	11.40	CKT. TRIPPED WITHOUT INDICATION AT BOTH ENDS.
72	31.01.10	15.55	220KV PATPARGANJ – IP CKT-II	31.01.10	16.11	220KV BUS BAR PROTECTION OPERATED AT PATPARGANJ
73	31.01.10	15.53	220KV MAHARANI BAGH – PRAGATI CKT.	31.01.10	16.05	CKT. TRIPPED WITHOUT INDICATION AT MAHARANI BAGH.
74	31.01.10	16.29	220KV IP – PRAGATI CKT-I & II	01.02.10	15.55	CKT-I TRIPPED ON DIST PROT `ABC' PHASE, 86, 86T AND CKT-II TRIPPED ON DIST PROT ABC' ZONE-II , PHASE, 86X, 186 AT IP STATION.
75	31.01.10	16.29	220KV PATPARGANJ – IP CKT-I & II	31.01.10	17.03	CKT-I . TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT IP STATION. 220KV IP CKT-II TRIPPED AT PATPARGANJ DUE TO OPERATION OF 220KV BUS BAR PROTECTION AT PATPARGANJ.
76	31.01.10	16.29	220/33KV 100MVA PR. TR.-I & II AT PATPARGANJ.	31.01.10	16.47	220KV BUS BAR PROTECTION OPERATED AT PATPARGANJ

A) Report on Grid incident occurred in Delhi system on 02.01.2010 (early morning hours) due to fog.

The following trippings occurred in Delhi system.

(a) 400 kV Bamnauli Sub station:

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	400kV Bawana Ckt-I	186A&B, 152X, CNZ1	01.10	01.18	
2	400kV Bawana Ckt-I	186A&B, 152X, ANZ1	01.26	01.35	
3	400kV Ballabhgarh Ckt-I	30C, ANZ-1	01.27	01.42	
4	400kV Bawana Ckt-I	186A&B, 152X, ANZ1	01.37	10.04	
5	400kV Ballabhgarh Ckt-I	30C, ANZ-1	01.53	07.25	
6	400kV Ballabhgarh Ckt-II	186A&B, 30C, ANZ-1	01.57	02.40	
7	400kV Bawana Ckt-II	30CH, 195B&C	02.22	09.46	
8	400kV Ballabhgarh Ckt-II	186A&B, 30CH, Carrier lock out	02.55	04.22	
9	220kV Mehrauli Ckt-I	186A&B, SOTF	05.10	16:44	
10	220kV Mehrauli Ckt-II	Dist Prot `A' Phase Zone-I	06.47	08.35	
11	220kV Najafgarh Ckt-I & II	186A&B on both Ckts	07.04	07.28	
12	220kV Mehrauli Ckt-II	Dist Prot `A' Phase Zone-I, 186&B	08.24	08.35	

(b) 400 kV Bawana Sub station:--

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	400kV Mandola Ckt-I	Auto Reclose Operated	00:34	--	
2	400kV Abdullapur Ckt-II	CB No. 1352 & 1452 – Both tripped on Main-II, CNZ-I, 85L, 186a&B, Dist. 59.37KM	0:43	2:18	
3	400kV Abdullapur Ckt-I	Auto Reclose Operated	00:56	--	
4	400kV Abdullapur Ckt-I	CB No. 1152 tripped on Main-I, ABZ-I Dist. 5362KM. CB No. 1252 tripped on Main-II, CNZ-I, Dist. 6059KM	00:58	08:21	
5	220kV DSIDC Bawana Ckt-I	Tripped on BG Zone-I, 3-phase trip Dist 2.2KM	1:06	1:17	
6	400kV Bamnauli Ckt-II	Auto Reclose Operated	1:08	--	
7	400kV Bamnauli Ckt-I	Both CB tripped on Main-I & II, ANZ-I, Dist. 4.3KM	1:08	1:14	
8	220kV DSIDC Bawana Ckt-I	Tripped on CGZ-I Dist 2.58KM	1:23	10:20	
9	400kV Bamnauli Ckt-I	Main-I&II, ANZ-I, Dist 5.8KM	1:26	1:33	
10	400kV Bamnauli Ckt-II	Auto Reclose Operated	1:27	--	
11	220kV DSIDC Bawana Ckt-II	AGZ-I, Dist 1.63KM	1:29	10:20	
12	400kV Bamnauli Ckt-I	ANZ-I, 186a&B, Dist. 15.9KM	1:37	10:05	
13	400kV Bamnauli Ckt-II	Auto Reclose Operated	1:45	9:44	
14	220kV Najafgarh Ckt-II	AGZ-I, 3-phase trip, dist. 4.3KM	1:48	2:30	
15	400kV Bamnauli Ckt-II	Auto Reclose Operated	1:52	--	Auto Reclose Operated
16	400kV Bamnauli Ckt-II	Auto Reclose Operated	1:55	--	
17	400kV Bamnauli Ckt-II	Auto Reclose Operated	1:57	--	
18	400kV Bamnauli Ckt-II	Auto Reclose Operated	2:08	--	
19	400kV Bamnauli Ckt-II	Auto Reclose Operated	2:09	--	
20	220kV Shalimarbagh Ckt-II	C-phase, 186A&B	2:11	2:23	
21	220kV Shalimarbagh Ckt-I	C-phase, 186A&B	2:12	2:21	
22	22kV Rohini Ckt-II	C-phase, 186A&B	2:14	11:08	
23	22kV Rohini Ckt-I	Trip Phase-A, 186A&B	2:18	10:36	
24	220kV Shalimarbagh Ckt-II	A-phase, 186A&B	2:26	7:40	
25	220kV Najafgarh Ckt-II	AGZ-I, 3-phase trip, dist. 3.7KM	2:36	10:27	
26	220kV Shalimarbagh Ckt-I	C-phase, 186A&B	2:54	9:38	
27	400kV Abdullapur Ckt-II	Both CB tripped	02.55	05.29	
28	220kV Najafgarh Ckt-I	Dist Prot `C' Phase Zone-1, 86	03.12	03.27	Dist 9.87Kms
29	400kV Mandola Ckt-I	Both CB tripped ANZ1	03.22	03.32	Dist 11.5Kms
30	400/315MVA ICT-III	Main CB Trip, 86B, 95B, 199A&T	03.40	08.13	
31	220kV Najafgarh Ckt-II	CNZI	03.42	10.27	Dist 1.95Kms
32	400kV Mandola Ckt-I	Main-I& II : ANZ-I	04.41	04.43	Dist 2.8Kms

(e) 220 kV Najafgarh Sub station:-

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Bawana Ckt-II	186, AB Phase	01.50	02.37	
2	220kV Bamnauli Ckt-I & II	Supply failed	02.25	05.06	Ckt. Made off at 02.33hrs. at Najafgarh
3	220kV Bawana Ckt-II		02.37	10.28	
4	220kV Bawana Ckt-I	186A&B	03.12	03.20	
5	220kV Bawana Ckt-I	186A&B	03.35	10.28	
6	220kV Bamnauli Ckt-I & II	Supply failed	06.52	07.35	

(f) 220kV Rohini Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Bawana Ckt-II	Supply failed	02.14	7:50	
2	220kV Bawana Ckt-I	Supply failed	02.18	7:50	Both ckt made off at 02.20hrs. 220kV Bus coupler made on at 07.50hrs. and entire load normalized through 220kV Shalimar Bagh Ckt-I & II except 66kV Rohini Sec-24 Ckt-I & II due to load restriction.

(g) 220kv Narela Sub-station

S. NO	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Panipat Ckt-III	Microhm relay Dist Prot ABC Phase Zone-I, 30C, 86T	00.16	00.50	Ckt. also tripped at Panipat end.
2	220kV Panipat Ckt-I	Microhm relay Dist Prot 'C' Phase Zone-I, 30C, 186,	00.32	00.40	
3	220kV Panipat Ckt-I & II	Both Ckt. Tripped on Dist Prot `C' Phase	00.42	00.45	
4	220kV DSIDC Bawana Ckt-I	CVT disappeared	01.05	01.20	
5	220kV DSIDC Bawana Ckt-I & II	CVT disappeared	01.25	10.22	
6	220kV Mandola Ckt-I	Microhm, C' Phase 186	01.10	07.02	220kV Bus coupler made on at 08.15hrs and entire load normalized.
7	220kV Mandola Ckt-II	Supply failed	01..36	07.02	

(h) 220kV Gopalpur sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Mandola Ckt-I	General Trip RYB Phase, Fault loop L3-N, Zone-I, M2 RYB Ph.	01.50	02.02	Dist 1.4Kms.
2	220kV Mandola Ckt-I	General Trip RYB Phase, Fault loop L3-N, Zone-I, M1 RYB Ph.	02.06	08.49	Dist 5.4Kms
3	220kV Mandola Ckt-II	General Trip RYB Phase, Fault Loop L1-N, Zone-I	02.48	08.28	Dist 4.2Kms. load normalized through Bay-7

(i) 220kV Shalimar Bagh Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Bawana Ckt-II	186A&B, C-Phase	02.11	02.54	
2	220kV Bawana Ckt-I	Supply failed	02.11	02.24	
3	220kV Bawana Ckt-II	186A&B, C-Phase	02.54	07.43	
4	220kV Bawana Ckt-I	Supply failed	02.54	09.39	

(j) 220kV Wazirabad Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Mandola Ckt-IV	RXME18, Dist Prot Zone-I, Three Phase Trip, Fault Loop L1-N	03.52	23.55	Dist 9.3Kms. At Tower No. 28, Y-ϕ suspension string was found broken.
2	220kV Geeta Colony Ckt-I	RXME18, Dist Prot Zone-I, Three PhaTrip, Fault Loop L1-N	05.40	05.50	Dist.4.3Kms
3	220kV Mandola Ckt-I, II & III	Bus bar protection along with all 100MVA Pr. Trs.	07.10	Ckt-I – 7:23 Ckt-II– 7:16 Ckt-III-7:18	No tripping at Mandola end
4	220kV Kashmiri Gate Ckt-I & II	Bus bar protection	07.10	07.19	
5	220kV Geeta Colony Ckt-I& II	Bus bar protection	07.10	07.21	

(i) 220kV Patparganj Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV IP Ckt-I & II	186, 186, E/F	04.15	04.21	RPH,Pragati GT#1 and STG islanded from the grid and all units tripped.
2	220kV Geeta Colony Ckt-II	186, 186, E/F	04.15	04.23	
3	220kV IP Ckt-II	186, 86X, Trip Ph `C'Zone-I	05.20	05.58	
4	220kV IP Ckt-I	CVT Disappeared	05.40	05.52	
5	220kV Geeta Colony Ckt-I	CVT Disappeared	05.40	05.52	

(j) 220kV Geeta Colony Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Wazirabad Ckt-I	Dist. Prot. Zone-I, 3-ph. trip	5:40	5:52	
2	220kV Wazirabad Ckt-I &II	Supply failed	7:10	7:21	
3	220kV Patparganj Ckt-I & II	Supply failed	7:10	7:21	

(k) 220kV IP Switch Yard

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Patparganj Ckt-I & & II	Dist. Prot. 3-phase trip, 86	4:15	4:25	

(l) RPH Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV IP kt-II		4:15 5:40 7:12	4:30 5:56 7:24	No tripping indications has been provided by RPH

Details of tripping of units of generating stations:

S. No	Name of the station	Unit no.	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	RPH	1	04.15	02:16/03.01.10	
		2	04.15	20.00	
2	PRAGATI	1	04.15	05:10	
		STG	04:15	07:52	

Load affected during the incident is as under :-

Name of the Grid	Time		Load in MW
	From	To	
Najafgarh	03.12	03.20	120
	03.25	05.06	150
	06.52	07.30	180
Shalimar Bagh	02.11	02.24	23
	02.11	02.54	36
	02.54	03.00	60
	03.00	04.00	60
	04.00	05.00	60
	05.00	06.00	82
	06.00	07.00	100
	07.00	07.43	128
Rohini	02.14	04.00	100
	04.00	05.00	110
	05.00	06.00	130
	06.00	07.00	185
	07.00	07.50	215
	07.50	09.54	28
Gopalpur	01.50	02.02	38
	02.06	02.29	38
	03.30	05.00	100
	05.00	06.00	120
	06.00	07.00	150
	07.00	08.28	180
Narela	01.36	03.00	83
	03.00	05.00	90
	05.00	06.00	140
	06.00	07.00	150
	07.00	08.15	160
Wazirabad	07.10	07.20	300
Kanjhawala	03.12	03.26	29
	03.26	10.28	6
Patparganj	04.15	04.21	45
	05.20	05.58	35
	05.40	05.52	35
Mehrauli	02:22	03:23	49
	02:22	10:19	8
Vasant Kunj	02:22	03:23	33
Pappankalan-I	02:25	04:47	67
	06:52	07:07	119

Name of the Grid	Time		Load in MW
	From	To	
Pappankalan-II	02:22	02:50	15
	06:52	07:07	21
Naraina	02:20	02:50	25
	02:55	05:16	25
Rohtak Road	00:41	01:02	12
Geeta Colony	05:42	06:02	19
	07:13	07:25	100
I.P.	04:15	05:00	36
	05:42	05:52	45
RPH	04:15	05:00	25
	05:42	05:52	35

B) Report on Grid incident occurred in Delhi system on 02/03.01.2010 due to fog.

The following trippings occurred in Delhi system.

(a) 400 kV Bamnauli Sub station:

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs	Time of Restoration in Hrs.	Remarks
1	400kV Ballabhgarh Ckt-I	186A&B, 130E, 85LO	21.44	**13:38/04.01.10**	*
2	400kV Ballabhgarh Ckt-II	DIST. PROT. A-ϕ ZONE -1, AIDED TRIP, 85LO , 186A & B	21.44	23.09	
3	220kV Najafgarh Ckt-I&II	186A&B, DIST. PROT., 86	21.44	23.57	
4	315MVA ICT-III	86A1, B1, 97, 186 A&B	21.44	23.38	
5	315MVA ICT-IV	75A&C,86 A1&B1,67X,186 A&B	21.44	24.00	
6	220kV Naraina Ckt. I&II	DISTANCE PROT., 186 A&B	21.58	23.55	
7	400kV Bawana Ckt-I	85 LO, 30C, 86A&B	22.40	23.23	
8	400kV Bawana Ckt-II	85 LO, 30C, 86A&B	22.40	00.45 (03.01.10)	

* The ckt tried at 00.04hrs. on 03.01.2010 but tripped on SOTF, 196A&B. On patrolling, it was found that the earth wire between tower no. 270 to 277 got burnt and fall on conductors of Ckt-I

(b) 400 kV Bawana Sub station:--

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	400kV Hissar Ckt.	CB AUTO TRIP, DIST. PROT. CNZ1	21.44		FAULT DISTANCE 15.5K.M.
2	400kV Bahadurgarh Ckt.	Tripped	21.52	00.23 (03.01.10)	Relay indications could not be noted.
3	400kV Abdullapur Ckt-I	Tripped	21.53	23.36	
4	400kV Abdullapur Ckt-II	Tripped	21.53	05.07 (03.01.10)	
5	400kV Mandola Ckt-I	Manually made off	21.57	23.02	Arcing seen in 400kV yard
6	400kV Mandola Ckt-II	Manually made off	21.57	00.10 (03.01.10)	
7	400kV Bamnauli Ckt-I	Manually made off	22.40	23.25	
8	400kV Bamnauli Ckt-II	Manually made off	22.40	00.39 (03.01.10)	
9	ICT -1	Manually made off	21.59	00.14 (03.01.10)	
10	ICT-2	Manually made off	21.59	23.12	
11	ICT -3	Manually made off	21.59	23.12	
12	220kV Najafgarh Ckt-I	Manually made off	21.59	23.26	
13	220kV Najafgarh Ckt-II	Manually made off	21.59	00.21 (03.01.10)	
14	22kV Rohini Ckt-I	Manually made off	21.59	00.17 (03.01.10)	
15	22kV Rohini Ckt-II	Manually made off	21.59	00.17 (03.01.10)	
16	220kV Shalimarbagh Ckt-I	Manually made off	21.59	23.26	
17	220kV Narela Ckt-I	Manually made off	21.59	23.48	
18	220kV Narela Ckt-II	Manually made off	21.59	23.48	
19	100MVA PR. TR.	Manually made off	21.59	23.15	

(c) 220 kV Najafgarh Sub station:-

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Bamnauli Ckt-I & II	Supply failed	21.48	00.04 (3.1.10)	
2	100MVA Pr. Tr. I	E/F	21.48	23.39	
3	100MVA Pr. Tr. II	E/F	21.48	23.39	
4	100MVA Pr. Tr. III	E/F	21.48		
5	100MVA Pr. Tr. IV	E/F	21.48	01.50 (3.1.10)	
6	220kV Bawana Ckt-I	Supply failed	21.48	23.39	
7	220kV Bawana Ckt-II	Supply failed	21.48	00.10 (03.01.10)	
8	100MVA Pr. Tr. IV	differential	06.50 (03.01.10)	15:50	
9	220kV Bawana Ckt-II	86	09.38 (03.01.10)	19:46 03.01.10	Conductor snapped near Mundka Metro Station.

(d) 220kV Rohini Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Bawana Ckt-II	67NX, 186A&B	21.43	00.18 (03.01.10)	
2	100MVA 1 & II	86	21.43	23.40	
3	220kV Bawana Ckt-I	Supply failed	21.57	00.18 (03.01.10)	
4	Shalimarbagh Ckt. –II	Supply failed	23.27	23.38	

(e) 220kv Narela Sub-station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Mandola Ckt-I	Supply failed	21.45	22.40	
2	220kV Mandola Ckt-II	Supply failed	21.45	22.40	
3	220kV Panipat Ckt-I	95 CA, 95CC, 3-ϕ TRIP	21.50	23.38	
4	220kV Panipat Ckt-II	95 CA, 95CC, 3-ϕ TRIP	21.50	23.38	
5	220kV Panipat Ckt-III	95 CA, 95CC, 3-ϕ TRIP	21.50	23.38	
6	100MVA PR. TR.-I	186	21.53	22.43	
7	100MVA PR. TR -II	186	21.53	15:30 (03.01.10)	
8	100MVA PR. TR.-III	186	21.53	22.43	

(f) 220kV Gopalpur sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Mandola Ckt-I	Supply failed	21.45	00.19 (03.01.10)	

(g) 220kV Shalimar Bagh Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Bawana Ckt-I	Tripped without indication	21.55	23.30	
2	220kV Bawana Ckt-II		21.55	23.30	
3	100MVA PR. TR. –I		21.55	23.30	

(h) 220kV Wazirabad Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Geeta Colony Ckt-I	Tripped without indication	21.44	22.00	Caused the islanding of Pragati #1 and its STG from the grid and tripping of the units.
2	220kV Geeta Colony Ckt-II	Earth fault	21.44	22:30	
3	100MVA TR-I & III	Earth Fault	21.44	22.27	

(i) 220kV Patparganj Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Geeta Colony Ckt-I	Supply failed	21.44	22.22	
2	220kV Geeta Colony Ckt-II	Supply failed	21.44	22.34	
3	220kV IP Ckt-I & II	Supply failed	21.44	23:58	

(j) 220kV Geeta Colony Sub station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Wazirabad Ckt-I	Trip phase ABC, 27RYB, 86	21.44	22.15	
2	220kV Wazirabad Ckt-II	Supply failed	21.44	22.33	
3	220kV Patparganj Ckt-I	Supply failed	21.44	22.22	
4	220kV Patparganj Ckt- II	Supply failed	21.44	22.34	

(k) 220kV IP Switch Yard

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Patparganj Ckt-I & II	Supply failed	21.44	23:58	
2	220kV Pragati Ckt. –I	Manually made off	22.14	22.16	
3	220kV Pragati Ckt. –II	Manually made off	22.14	22.33	

(l) RPH Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV IP Ckt-II	Supply failed	21.50	22.30	

(m) Naraina Sub Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	100MVA PR. TR. -1	E/F	21.44	24:00	
2	100MVA PR. TR. I1	E/F	21.44	24:00	
3	220kV Bamnauli Ckt. I	Supply failed	21.55	23.55	
4	220kV Bamnauli Ckt. II	Supply failed	21.55	23.57	

(n) DSIDC Bawana Sub Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	100MVA PR. TR. II	E/F, 86	21.44	23.58	
2	100MVA PR. TR. II	E/F, 86	21.44	23.58	

(o) Papankalan _II Sub Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	100MVA PR. TR. -1	E/F, O/C	21.48	23.33	
2	100MVA PR. TR. I1	E/F, O/C	21.48	23.33	

(p) Papankalan –I Sub Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Bamnauli Ckt.-I	67 NX, Dist. Prot. 186 A&B	21.45	23.04	
2	220kV Bamnauli Ckt.-I	67 NX, Dist. Prot. 186 A&B	21.45	23.04	

(q) Mehrauli Sub Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV Vasant Kunj Ckt. -II	67NX 186A&B	21.44	02.20 (03.01.10)	
2	220kV Bamnauli Ckt. –II	186 A&B	21.44	02.20 (03.01.10)	
3	220kV Bamnauli Ckt. –I	64DX 186 A&B	21.44	02.20 (03.01.10)	

Details of tripping of units of generating stations:

S. No	Name of the station	Unit no.	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	PRAGATI	1	21.45	23.05	
		STG	21.45	00.01 (03.01.10)	

Load affected during the incident is as under :-

Name of the Grid	Time		Load in MW
	From	To	
Gopalpur	21:44	22:42	58
Subzimandi	21:44	22:13	65
Naraina	21:44	24:00	71
Pappankalan-II	21:48	23:33	36
Shalimarbagh	21:55	23:30	128
Rohini	21:43	23:41	130
Kanjhawala	21:45	23:32	21
Narela	21:45	22:47	205
Bawana	21:55	23:15	29
IP	21:44	22:33	124
	22:17	22:33	38
Pappankalan-I	21:52	23:52	216
Vasantkunj	21:45	22:35	95
Najafgarh	21:48	24:00	104
RPH	21:50	22:30	30
Patparganj	21:44	22:22	134
	22:22	22:34	60
Geeta Colony	21:44	22:28	52
	22:28	22:35	28
South of Wazirabad	21:44	22:20	145
	22:20	22:30	115

17.11 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH FERUARY 2010

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.02.10	07.15	400KV BAWANA – BAHADURGARH CKT.	01.02.10	09.46	CKT. TRIPPED ON CB TROUBLE ALARM, CB TC-II FAULTY, T.C-II FAILURE, CB TC-I FAULTY, 295CA, 295CB,, 295CC, CARRIER 30CH-II, 185A-2C, 195CB, 195CC, CB-552 - `Y' POLE OIL LEAKAGE, HYDRAULIC PRESSURE LOCK OUT
02	01.02.10	16.58	220KV GEETA COLONY – PATPARGANJ CKT-II	01.02.10	18.20	CKT. TRIPPED ON DIST PROT ZONE-I AT GEETA OLONY.
03	05.02.10	15.56	220KV MAHARANI BAGH – PRAGATI CKT.	05.02.10	16.22	CKT. TRIPPED ON DIST PROT `R' PHASE ZONE-I AT MAHARANI BAGH AND ON ACTIVE GROUP-I, DIST PROT `ABC' PHASE ZONE-I AT PRAGATI
04	05.02.10	15.56	220KV SARITA VIHAR – PRAGATI CKT.	05.02.10	16.27	CKT. TRIPPED ON DIST PROT `AC' PHASE ZONE-I AT SARITA VIHAR AND ON 30C, HALF COMPRESSURE AC FAUL AT PRAGATI.
05	05.02.10	15.56	220/66KV 160MVA PR. TR. AT PRAGATI	05.02.10	16.06	TR. TRIPPED ON 86

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
06	05.02.10	15.56	220/66KV 100MVA PR. TR. AT PRAGATI	05.02.10	16.41	TR. TRIPPED ON 86
07	05.02.10	15.59	220KV PRAGATI – PARK STREET CKT-I & II	05.02.10	16.02	SUPPLY FAILED FROM PRAGATI. NO TRIPPING AT PARK STREET.
08	06.02.10	10.37	220KV WAZIRABAD – GEETA COLONY CKT-I	06.02.10	10.48	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT GEETA COLONY.
09	06.02.10	10.37	220KV WAZIRABAD – GEETA COLONY CKT-II	06.02.10	16.08	CKT TRIPPED ON GSC STF WL2, ZM-1 TRIP, ZM-2 TRIP, ZM3 START, DIST PROT AT WAZIRABAD. CKT. TRIED TO CLOSE AT 10.43HRS. BUT DID NOT HOLD. JUMPER FOUND OPENED NEAR METRO STATION, SHASTRI PARK.
10	06.02.10	10.37	220/66KV 100MVA PR. TR.-III AT WAZIRABAD	06.02.10	18.25	TR. TRIPPED ON E/F
11	06.02.10	10.37	220KV PATPARGANJ – GEETA COLONY CKT-I & II	06.02.10	10.53	BOTH CKTS TRIPPED ON 186. CKT-I&II CHARGED AT 10.48. & 10.53HRS RESPECTIVELY.
12	06.02.10	13.18	220/33KV 100MVA PR. TR-I & IV AT PATPARGANJ	06.02.10	13.24	TR.-I TRIPPED ON 86, O/C AND TR.-IV TRIPPED ON 86, E/F ALONG WITH 33KV I/C-II WHICH TRIPPED ON O/C, E/F.
13	07.02.10	08.23	66/11KV 20MVA PR. TR.-I AT NAJAFGARH	07.02.10	08.50	TR. TRIPPED ON 86 ALONG WITH 11KV O/G PUMPING STN. FEEDER WHICH TRIPPED ON E/F
14	08.02.10	13.52	220KV GOPALPUR – SUBZI MANDI CKT-I	08.02.10	14.18	CKT. TRIPPED ON DIST PROT `RYB' PH. ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
15	08.02.10	14.42	220KV GOPALPUR – SUBZI MANDI CKT-II	08.02.10	15.45	CKT. TRIPPED ON DIST PROT `RYB' PHASE AT GOPALPUR.
16	08.02.10	14.46	220KV GOPALPUR – SUBZI MANDI CKT-I	08.02.10	16.27	CKT. TRIPPED ON DIST PROT `RYB' PHASE AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
17	09.02.10	00.30	400KV BAWANA – HISSAR CKT.	09.02.10	06.37	CKT. TRIPPED ON FACIA CB AUTO TRIP, DIRECT TRIP RECEIVED, 86, 186A&B, TIMER 2/AA AT BAWANA.
18	09.02.10	02.07	220KV BAMNAULI - PAPPANKALAN-I CKT-I	09.02.10	11.50	CKT.TRIPPED ON DIST PROT `B' PH, 186A&B, CB AUTOTRIP AT BAMNAULI. NO TRIPPING AT PAPPANKALAN-I. `Y' PH LA DAMAGED AT BAMNAULI END.
19	09.02.10	02.07	220KV BAMNAULI – NAJAFGARH CKT-I	09.02.10	02.15	CKT. TRIPPED ON DIST PROT `B' PHASE, 186 AT NAJAFGARH.
20	09.02.10	02.55	220KV BTPS – MEHRAULI CKT-II	09.02.10	18.49	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT MEHRAULI.
21	09.02.10	02.55	220KV BTPS – OKHLA CKT II	09.02.10	17.05	CKT. TRIPPED ON DIST PROT `ANZ-I AT OKHLA.
22	09.02.10	03.15	220/66KV 100MVA PR. TR.-I AT PATPARGANJ	12.02.10	12.55	TR. TRIPPED ON 95CA, 95CC, 86, 87 ALONGWITH 66KV I/C-I WHICH TRIPPED WITHOUT INDICATION.
23	10.02.10	11.45	400KV MANDOLA – BAWANA CKT-II	10.02.10	19.37	CKT. TRIPPED ON DIST PROT `A' PH ZONE-I, E/F AT BAWANA AND ON `R' PH. E/F AT MANDOLA.
24	14.02.10	16.13	220KV GOPALPUR – SUBZI MANDI CKT-II	14.02.10	16.32	CKT. TRIPPED ON DIST PROT `RYB' PH. ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
25	14.02.10	17.23	220KV GOPALPUR – SUBZI MANDI CKT-I	14.02.10	17.39	CKT. TRIPPED ON DIST PROT `RYB' PH. ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
26	14.02.10	17.38	220KV MANDOLA – WAZIRABAD CKT-I, II & III	14.02.10	18.35	CKT-I & II TRIPPED ON DIST PROT `B' PHASE ZONE-III AND CKT-I TRIPPED ON DIST PROT `B' PHASE ZONE-I AT MANDOLA. NO TRIPPING AT WAZIRABAD END. CKT-I, II & III CHARGED AT 18.35HRS, 18.35HRS, 18.30HRS RESPECTIVELY.
27	14.02.10	17.38	220KV WAZIRABAD – KASHMIRI GATE CKT-I & II	14.02.10	18.45	CKT-I TRIPPED ON E/F, 67N, L2G AND CKT-II TRIPPED ON DIRECTIONAL E.F, 67N AT WAZIRA BAD. NO TRIPPING AT KASHMIRI GATE.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
28	14.02.10	17.38	220/66KV 100MVA PR. TR.-I, II & III AT WAZIRABAD	14.02.10	18.43	TR.-I, II & III TRIPPED ON E/F ALONGWITH 66KV I/C-I, II & III. 66KV I/C-I & II TRIPPED ON 86 AND 66KV I/C-III TRIPPED WITHOUT INDICATION. TR.-I, II & III CHARGED AT 18.43HRS.
29	14.02.10	17.38	220KV WAZIRABAD – GEETA COLONY CKT-I & II	14.02.10	19.09	FOLLOWING TRIPPING OCCURRED : AT GEETA COLONY WAZIRABAD CKT-I:DIST PROT `ABC' PH ZONE-II MAIN-1 : DISTY PROT `C' PHASE ZONE-I, MAIN-II : OB, START NC WAZIRABAD CKT-II: ACTIVE GROUP-I, DIST PROT `ABC'PHASE, 27RYB, 86 MAIN-II : DIST PROT `ABC' PHASE ZONE-I, 38Y CKT.-I & II CHARGED AT 19.09HRS. AND 18.49HRS. RESPECTIVELY.
30	14.02.10	17.38	220KV PATPARGANJ – GEETA COLONY CKT-II	14.02.10	17.58	CKT. TRIPPED ON UNDER FREQUENCY, 86 AT PATPARGANJ.
31	14.02.10	17.38	220/33KV 50MVA PR. TR.-II AND 220/33KV 100MVA PR. TR.-IV AT PATPARGANJ	14.02.10	17.59	BOTH TXSS TRIPPED ON REF LV SIDE, 86 ALONG WITH THEIR 33KV I/CS WHICH TRIPPED ON E/F. TR.-II & IV CHARGED AT 17.59HRS.
32	14.02.10	17.38	220KV PATPARGANJ – IP CKT-I & II	14.02.10	17.52	SUPPLY FAILED FROM PATPARGANJ. NO TRIPPING AT IP.
33	15.02.10	09.50	220/33KV 100MVA PR. TR.-III AT OKHLA	15.02.10	13.10	TR. TRIPPED WITHOUT INDICATION.
34	15.02.10	16.02	220KV GOPALPUR – SUBZI MANDI CKT-I	15.02.10	17.39	CKT. TRIPPED ON DIST PROT `RYB' PH. ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
35	15.02.10	20.41	220KV MANDOLA – WAZIRABAD CKT-I	15.02.10	21.05	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD.
36	18.02.10	14.12	220KV WAZIRABAD – KASHMIRI GATE CKT-II	18.02.10	15.42	CKT. TRIPPED ON DIST PROT ZONE-I AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE
37	18.02.10	15.43	220KV BAMNAULI – MEHRAULI CKT-I	18.02.10	16.03	CKT. TRIPPED ON DIST PROT `R' PHASE ZONE-I, 186A&B AT BAMNAULI AND ON DIST PROT ZONE-I AT MEHRAULI.
38	20.02.10	14.30	220KV WAZIRABAD – KASHMIRI GATE CKT-II	20.02.10	16.24	CKT. TRIPPED ON GENERAL TRIP GFC STF W1, ZM-I TRIP, ZM-2 & ZM3 START AT WAZIRABAD. NO TRIPPING A KASHMIRI GATE.
39	21.02.10	12.57	220KV WAZIRABAD – KASHMIRI GATE CKT-II	21.02.10	13.15	CKT. TRIPPED ON RXME18, GENERAL TRIP, GFC-STFWL1, GFC-STFWL2 & WL3, ZM-1 TRIPPED, M2 START, M3 START AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE.
40	22.02.10	15.32	220KV MANDOLA – WAZIRABAD CKT-IV	22.02.10	16.08	CKT. TRIPPED ON `RYB' PH, Z1 TRIP, Z2 TRIP, ZM START, ZM2 START, FAULT LOOP L1-L2 AT WAZIRABAD & ON DIST PROT `R-Y' PH. AT MANDOLA.
41	23.02.10	17.34	220KV MANDOLA – WAZIRABAD CKT-IV	24.02.10	15.26	CKT.TRIPPED ON DIST PROT`B'PH. ZONE-I,86 RYB, 186A&B AT MANDOLA AND ON RXME18, 3 PH.,GENERAL TRIP, RYB PH., DIST PROT ZONE-I AT WAZIRABAD. CKT. TRIED TO CLOSE AT 20.23HRS. AFTER GETTING CLEARANCE FROM LINE DEPARTMENT BUT DID NOT HOLD AND AGAIN TRIPPED ON SAME INDICATION AT WAZIRABAD. CKT. FINALLY CHARGED AT 15.26HRS. ON 24.02.10
42	23.02.10	18.15	220/66KV 100MVA PR. TR.-II AT PARK STREET	23.02.10	18.40	TR. TRIPPED ON DIFFERENTIAL
43	24.02.10	22.08	33/11KV 16MVA PR. TR.-II AT SUBZI MANDI	25.02.10	00.27	TR. TRIPPED ON SPR/PRV, 86, AUXILIARY RELAY, 30ABC, DIFFERENTIAL
44	24.02.10	11.20	220KV MAHARANI BAGH – PRAGATI CKT.	24.02.10	11.20	CKT. TRIPPED WITHOUT INDICATION AT MAHARANI BAGH.

17.12 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH MARCH – 2010

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.03.10	12.01	220KV MANDOLA – GOPALPUR CKT-II	01.03.10	12.14	CKT. TRIPPED ON DIST. PROT. `B' PHASE ZONE-I AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR.
02	02.03.10	14.58	220KV SARITA VIHAR - MAHARANI BAGH CKT	02.03.10	15.08	CKT. TRIPPED ON DIST PROT `AB' PHASE ZONE-I AT SARITA VIHAR AND ON DIST PROT ZONE-I AT MAHARANI BAGH.
03	02.03.10	15.30	220KV SARITA VIHAR - MAHARANI BAGH CKT	02.03.10	17.02	CKT. TRIPPED ON DIST PROT ZONE-I, 186A, 186B AT SARITA VIHAR AND ON DIST PROT ZONE-I AT MAHARANI BAGH.
04	02.03.10	16.22	220KV PRAGATI – SARITA VIHAR CKT.	02.03.10	16.50	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT SARITA VIHAR AND ON ACTIVE GROUP-I, DIST PROT ABC' PHASE ZONE-I, 86, 186 AT PRAGATI
05	02.03.10	22.17	220KV IP – RPH CKT-II	02.03.10	23.32	CKT. TRIPPED ON 86A, 86B, 86X, 195C, DIST PROT `BC' PH ZONE-II, 195C AT IP. NO TRIPPING AT RPH
06	03.03.10	16.18	220/66KV 100MVA PR. TR.-II AT PARK STREET	04.03.10	03.35	TR. TRIPPED ON DIFFERENTIAL, 86A, 86 ALONG WITH 66KV I/C-II WHICH TRIPPED WITHOUT INDICATION
07	03.03.10	22.39	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-II	04.03.10	01.19	TR. TRIPPED ON LBB PROTECTION, 86, OIL TEMP HIGH ALARM
08	03.03.10	23.43	220/33KV 100MVA PR. TR.-II AT PARK STREET	03.03.10	23.58	TR. TRIPPED ON 64REF, 86B ALONG WITH 33KV I/C-II WHICH TRIPPED WITHOUT INDICATION. 33KV BUS COUPLER ALSO TRIPPED ON 80C, 27AB. TR. TRIPPED WHILE ARRANGING SHUT-DOWN ON 33KV BUS-I.
09	06.03.10	13.50	220KV BAMNAULI – MEHRAULI CKT-I	06.03.10	13.54	CKT. TRIPPED ON DIST PROT. `A' PHASE ZONE-II AT BAMNAULI. NO TRIPPING AT MEHRAULI.
10	07.03.10	18.30	220KV PATPARGANJ – IP CKT-I	07.03.10	18.39	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT IP AND ON 186, 186, AT PATPARGANJ DUE TO OPERATION OF BUS BAR PROTECTION
11	07.03.10	18.30	220KV PATPARGANJ – GEETA COLONY CKT-I	07.03.10	20.07	AT PATPARGANJ CKT TRIPPED DUE TO OPERATION OF BUS BAR PROTECTION
12	07.03.10	18.30	220/33KV 100MVA PR. TR.-I AND 220/33KV 50MVA PR. TR AT PATPARGANJ	07.03.10	19.15	TX. TRIPPED DUE TO OPERATION OF BUS BAR PROT. 100MVA & 50MVA PR. TR. ENERGIZED AT 19.12HRS. AND 19.15HRS. RESPECTIVELY
13	08.03.10	17.58	220/66KV 100MVA PR. TR.-I AT PAPPANKALAN-II	08.03.10	18.52	TR. TRIPPED ON LBB PROTECTION, MASTER TRIP ALONG WITH 66KV I/C-I WHICH TRIPPED ON E/F, LBB PROTECTION, IDMT, E/F.
14	08.03.10	20.48	66/33KV 30MVA PR. TR.-II AT PARK STREET	08.03.10	21.34	TR. TRIPPED WHILE NORMALIZING 33KV BUS-I.
15	08.03.10	20.56	66/33KV 30MA PR. TR.-II AT PARK STREET	08.03.10	20.56	TR. TRIPPED ON O/C, E/F, 86.
16	09.03.10	09.37	220KV BAMNAULI – NAJAFGARH CKT-I & II	09.03.10	09.40	AT NAJAFGARH CKT. TRIPPED ON 186. NO TRIPPING AT BAMNAULI
17	09.03.10	18.30	220KV GOPALPUR – SUBZI MANDI CKT-I	09.03.10	18.38	AT GOPALPUR CKT. TRIPPED WITHOUT INDICATION. NO TRIPPING AT SUBZI MANDI
18	10.03.10	12.43	220/33KV 100MVA PR. TR.-I AT GEETA COLONY	10.03.10	18.01	TR. TRIPPED ON BUCHOLTZ, 86, 30E ALONG WITH 33KV I/C-I WHICH TRIPPED ON 30.
19	10.03.10	12.32	220KV MANDOLA – WAZIRABAD CKT-IV	10.03.10	17.45	CKT. TRIPPED ON DIST PROT `YB' PHASE ZONE-I AT MANDOLA AND ON RXME18, DIST PROT `RB' PHASE ZONE-I AT WAZIRABAD.
20	13.03.10	10.16	220KV SARITA VIHAR – PRAGATI CKT.	13.03.10	10.42	CKT. TRIPPED ON ACTIVE GROUP-I, DIST PROT `C' PHASE ZONE-I AT PRAGATI AND ON AUTO RECLOSE LOCK OUT, 186A&B, DIST PROT ABC PHASE ZONE-I AT SARITA VIHAR.
21	14.03.10	15.37	220KV WAZIRABAD – GEETA COLONY CKT-I	14.03.10	23.05	CKT. TRIPPED ON GENERAL TRIP, DIST PROT `RYB'PHASE AT WAZIRABAD AND ON DIST PROT ABC' PHASE ZONE-I AT GEETA COLONY.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
22	14.03.10	17.11	220KV WAZIRABAD – KASHMIRI GATE CKT-II	14.03.10	18.18	CKT. TRIPPED ON GSC'FTWL1, L2, L3 ZONE-I AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE
23	17.03.10	18.28	33/11KV 20MVA PR. TR.-I AT LODHI ROAD	18.03.10	00.35	11KV ½ BUS BAR FLASHED DUE TO FAULT IN 11KV O/G CABINET FEEDER.
24	21.03.10	12.28	33/11KV 16MVA PR.TR.-II AT NARAINA			
25	21.03.10	12.48	220KV BTPS – MEHRAULI CKT-I	21.03.10	13.02	CKT. TRIPPED ON O/C `C' PHASE AT BTPS. NO TRIPPING AT MEHRAULI
26	21.03.10	14.39	220KV PATPARGANJ – GEETA COLONY CKT-II	21.03.10	15.15	CKT. TRIPPED ON 186, 85/VAA, E/F, ACTIVE GROUP-I, DIST PRROT ABC' PHASE ZONE-I AT PATPARGANJ AND ON MAIN –I & II ACTIVE GROUP-I, DIST PROT ZONE-I, 3-ϕ TRIP AT GEETA COLONY
27	21.03.10	14.45	220KV GOPALPUR – SUBZI MANDI CKT-I	21.03.10	15.02	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR. NO TRIPPING AT SUBZI MANDI.
28	22.03.10	21.51	220KV MANDOLA – NARELA CKT-II	24.03.10	17.31	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT MANDOLA. NO TRIPPING AT NARELA
29	23.03.10	14.45	220KV NARELA – ROHTAK ROAD CKT.-I	24.03.10	17.29	CKT. TRIPPED ON MAIN-I DIST PROT `ABC' PHASE ZONE-I MAIN-II DIST PROT ABC' PHASE ZONE-I, 186 AT NARELA.
30	25.03.10	12.23	220/66KV 100MVA PR. TR.-IV AT NAJAFGARH	25.03.10	12.37	TR. TRIPPED ON 86, 30A
31	26.03.10	13.15	220KV BTPS – NOIDA – GAZIPUR CKT.	26.03.10	13.17	CKT. TRIPPED ON AUXILIARY RELAY, 186A&B AT BTPS. NO TRIPPING AT GAZIPUR
32	27.03.10	09.00	220KV PANIPAT – NARELA CKT.-III	27.03.10	09.04	CKT. TRIPPED ON 30C, E/F `B' PHASE AT NARELA.
33	27.03.10	14.01	220KV MANDOLA – WAZIRABAD CKT-IV	27.03.10	18.53	CKT. TRIPPED ON GENERATL TRIP, DIST PROT `RYB' PHASE FAULT LOOP L1-L2 AT WAZIRABAD.
34	27.03.10	14.30	220KV WAZIRABAD – KASHMIRI GATE CKT-II	27.03.10	17.19	CKT. TRIPPED ON GFC, STF WL1, WL2 AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE.
35	27.03.10	15.27	220KV MAHARANI BAGH – SARITA VIHAR CKT.	27.03.10	15.47	CKT. TRIPPED ON DIST PROT `R&B' PHASE ZONE-I AT MAHARANI BAGH AND ON DIST PROT `ABC' PHASE ZONE-I AT SARITA VIHAR.
36	28.03.10	09.20	66/11KV 20MVA PR. TR.-III AT NAJAFGARH	28.03.10	09.35	TR. TRIPPED ON WINDING TEMP ALARM 30B.
37	29.03.10	02.59	220/66KV 160MVA PR. TR. AT GT	29.03.10	13:15	`Y' PHASE LEAD BETWEEN 66KV CB AND 160MVA TR. FLASHED.
38	29.03.10	23.45	66/11KV 20MVA PR. TR.-III AT NAJAFGARH	29.03.10	23.58	TR. TRIPPED ON WINDING TEMP ALARM.
39	30.03.10	00.33	66/11KV 20MVA PR. TR.-III AT NAJAFGARH	29.03.10	07.53	TR. TRIPPED ON WINDING TEMP ALARM.
40	30.03.10	10.20	66/11KV 20MVA PR. TR.-III AT NAJAFGARH	29.03.10	11.10	TR. TRIPPED ON 30B