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
2012-13

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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 220KV and 400KV level, besides up gradation operation and maintenance of EHV Network as per system requirements.

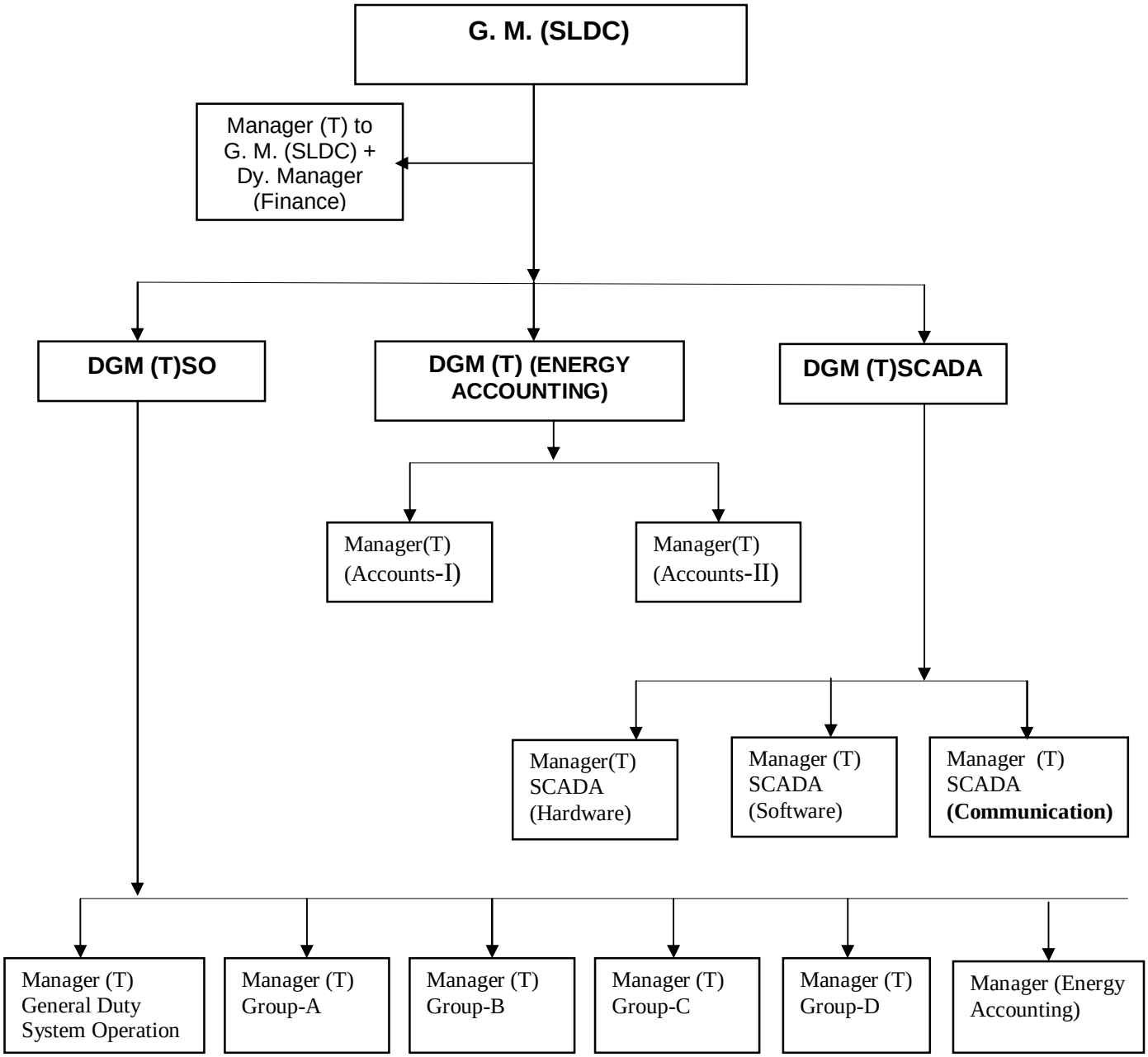
After the enactment of Electricity Act 2003, a new department under the name and style of **State Load Despatch Centre (SLDC)** under Delhi Transco Limited was created, as an Apex body to ensure integrated operation of the power system in Delhi. Earlier the department was part of O&M Department of Delhi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

2 LICENSEES OPERATING IN DELHI POWER SYSTEM

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

3 ORGANISATIONAL SETUP OF SLDC DEPARTMENT



4 Functions of various circles of SLDC

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

4.1 System Operation

System Operation Circle is mainly responsible for techno-economic 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).

4.2 Supervisory Control and Data Acquisition (SCADA)

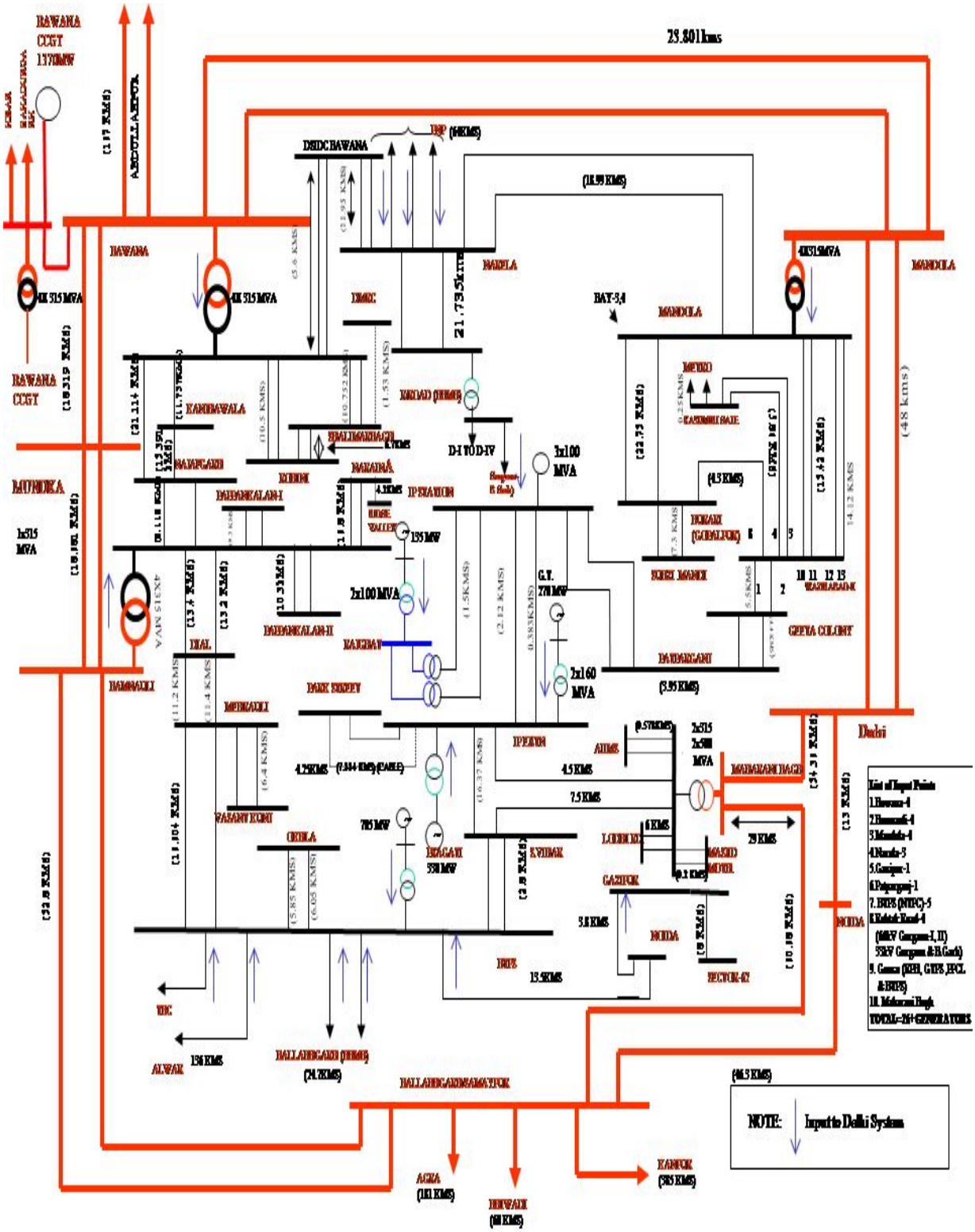
SLDC has a state of art Load despatch centre having SCADA (Supervisor Control And Data Acquisition) for retrieving information from generating stations and grid sub stations consisting of analog data (like Mega Watt, Voltage, Current, MVar) and digital status of various elements (like Circuit Breaker, 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. Recently scheduling software as per ABT, energy accounting and the transmission system availability have been developed and are in use.

4.3 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.

4.4 Single Line Diagram of Delhi Power System



5 MAJOR ACTIVITIES OF SLDC DURING 2012-13.

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 ub-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 (SSC)

5.1 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.

5.2 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.

5.3 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.

5.4 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 thrice 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	08.05.12		**6th Meeting of Grid Coordination Committee held on 08.05.2012**
		(i)	Protection Plan (as required as per Clause 16.3.2 of Delhi Grid Code) has been approved.
		ii)	It was decided to install 2nd 66/11kV 20MVA Pr. Tr.at 220kV Gazipur Grid S/Stn to provide N-1 contingency and amount be claimed in ARR under additional capitalization.
		iii)	Draft Guidelines prepared and submitted to DERC by DTL in consultation with all Stakeholders with regard to implementation of Intrastate Open Access in Delhi as stipulated in 10(4) Regulation of Intrastate Open Access notified on 03.01.2006, has been discussed and hoped that DERC would address the issues pointed out in the report while approving the same.
		iv)	GCC approved the draft Metering Procedures as required in Delhi Grid Code Regulations clause 31.1 and decided to place the same before DERC for its approval.
		v)	GCC approved the Transmission System Availability of DTL for the year 2011-12 as 98.58%.
		vi)	GCC noted the STU Charges of Delhi as Rs. 80/MWh from 03.04.12 for Open Access purposes till the State Commission decides the STU Charges for Open Access as indicated by NRLDC in their communication dated 20.04.2012.
		vii)	GCC decided that NRLDC should review the Late Payment Surcharge levied on Delhi SLDC for payment of NRLDC Charges related to Oct. 2010 to Feb. 2011 and Surcharges imposed on Delhi SLDC due to delay in payment for 2-3 days late than due date. It was further decided that all Delhi USERs of NRLDC should remit the amount pertaining to NRLDC Charges in 'SLDC Account' in respect of NRLDC Charges as per accounts issued by SLDC by 55th day of issues of the bill by NRLDC so that SLDC can remit the amount positively by 60th day of the issue of the bill to NRLDC to avoid late payment surcharges.
		viii)	IPGCL / PPCL intimated that as on 03.05.2012, both BRPL and BYPL owed Rs. 629 Crores to IPGCL and Rs. 448 Crores to PPCL. BRPL and BYPL intimated that payment would be released as and when funds are available through loan from Banks. DTL's dues were also reported as Rs. 333 Crores as on 03.05.2012. GCC advised the defaulting utilities to pay the dues so that the generating utilities and Transmission Utilities can supply power to the consumers' uninterruptidly.

S. No.	Date of meeting	Discussions and Decision on the issue(s)	
2	**31.10.12**		**7th Meeting of Grid Coordination Committee held on 30.10.2012**
		i)	GCC perused the outstanding dues of BRPL & BYPL to DTL as Rs.840 Crores & Rs.1840 Crores (including surcharges) as on 15.11.12 to IPGCL/PPCL. Chairperson, GCC requested DERC representative to apprise the Commission regarding the gist of the discussions and requested the Commission to intervene the matter as the case of non payment issue has been remanded to the Commission by APTEL, for the sake of overall interest of the Power Sector of Delhi.
		ii)	GCC perused the status of implementation of recommendations of Expert Committee on Grid Disturbances occurred on 30.07.2013 and 31.07.2012 in the Grid.
		iii)	GCC approved the Transmission System Availability of DTL for the year 2011-12 as 98.38%.
		iv)	GCC pursued Intrastate UI Account. It was found that huge outstanding amount (Rs. 419.49 Crores as receivable by Delhi from Inter State UI Account). GCC advised the Intrastate Utilities to take part the proceedings of CERC with regard to UI payment and place the submissions before it for securing UI receivables.
		v)	GCC approved the representation of TOWMCL for their nomination in GCC and in various Sub-Committees.
		vi)	GCC pursued the proposed Islanding Scheme to safeguard Delhi System safely island in the event of major Grid collapse.
3	**08.03.13**		**8th Meeting of Grid Coordination Committee held on 08.05.2012**
		i)	Huge outstanding dues with Generating and Transmission Utilities by BRPL and BYPL were pursued. BRPL and BYPL presented the whole scenario lead to the reach the problem. GCC decided to highlight the issue of payment issue in every meeting of GCC so that the concerned authorities could visualize the problems being faced by various utilities including Generating and Transmission utilities.
		ii)	The progress of implementation of Recommendations of Expert Committee on Grid Disturbances occurred on 30.07.2012 and 31.07.2012 was pursued. Power supply position of Summer 2013 was also reviewed.
		iii)	Suggestions to overcome the Transmission Constraints were drawn out by GCC and DTL was accordingly advised to do the needful.

S. No.	Date of meeting	Discussions and Decision on the issue(s)	
		iv)	GCC opined that CPRI (to whom the study of reactive power compensation was assigned) should carryout a comprehensive study for reactive power management looking into the variation in large peak (during summer) and low off peak (during winter nights) being the load characteristic of Delhi and large system augmentation work undertaken in Delhi System in recent time. It was also opined that if required, SVC like facilities are required to be adopted so that the facility can absorb and inject reactive power according to the requirement.
		v)	Intrastate UI Accounts were pursued. It was found that Rs. 301 Crores is receivable from Regional UI Pool Account as on 31.01.2013. It was also found that Rs. 81 Crores is receivable from BRPL. GCC requested BRPL to liquidate the arrears towards UI Pool. GCC also opined that due to stringent steps taken by CERC, the payment from NRLDC would definitely improve after improvement in payment position by defaulting states of Interstate UI Pool Account.

In addition to the above, there are number of coordination meetings 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	**03.04.12**		**Coordination meeting with Discoms, generators and Timarpur Okhla Water Management Ltd held at Plant site Okhla.** Chaired by Director (Operations), DTL. Scheduling and other related issues of TOWMCL Plant Okhla. The major decisions are :-
		i)	The plant is municipal solid waste and hence should be treated as `Must Run' and shall not be subjected to scheduling on merit order principles. It was decided that the actual generation of the plant would be treated as scheduled generation in 15 minutes time block for finalizating the injecting schedule of TOWMCL plant drawal scheduled of BRPL from the station for drawing out UI account of BRPL
		ii)	Energy Accounting Activities of TOWMCL would be done by SLDC.
		iii)	Open Access issue: The 50% of the exbus availability would be treated as the energy banked with BRPL for sale to other agency at open access.
		iv)	TOWMCL to be registered with SLDC Delhi as a user.
		v)	Settlement of Infirm power of the plant at UI rate and payment to be made by BRPL to the plant at UI rate based on the accounts issues by SLDC.

S. No.	Date of meeting	Discussions and Decision on the issue(s)	
		vi)	The charges for power consumed by TOWMCL to synchronization of the first unit i.e. up to 11.16hrs. on 27.01.2012 with BRPL Grid would be charged at temporary connection charges and after synchronization up to Commercial operation of the unit, the UI rate is applicable.
		vi)	TOWMCL to provide telemetry data to SLDC control room.
2	**29.05.12**		**Coordination meeting with Genco, DTL and SLDC to discuss the shut-down of 400kV Ballabhgarh – Bamnauli Ckt-I & II and 400kV Mundka – Bamnauli Ckt-I & II to pave way for establishment of upcoming 750MW Bamnauli CCGT Station (conversion of Overhead portion to under Ground).** It was decided to plan the shut-down during the period 15.10.2012 to 30.11.2012 after getting the approval of NRPC OCC.
3	**17.08.12**		**Coordination meeting with Discos, Aravali Jhajjar to finalize the Scheduling and other related issues of Aravali Jhajjar plant** The gist of discussions are
		i)	If the Aravali Jhajjar power is lying undispatched to avoid the over drawal of Delhi under low frequency and for Grid stability, the power be scheduled from Aravali Jhajjar to Delhi which further distributed to Delhi Discoms as per their retrospective share allocation from the station.
		ii)	BYPL was of the view that they are not liable to pay any charges as they have surrendered their share.
		iii)	BYPL and TPDDL did not oppose the billing methodology but echoed against exorbitant cost of the generation.
		iv)	APCPL was of the view that they raise the bills as per CERC Regulations. TPDDL was paying all charges but BYPL and BRPL do not pay.
		v)	APCPL was requested to immediately initiate steps to reallocate the surrendered share Delhi Discoms from Aravali Jhajjar to needy states. With regard to payment issues, APCPL was advised to approach appropriate Forum as per PPA provisions.
4	**26.11.12**		**Coordination meeting for Discomwise scheduling with Discoms and NRLDC** Meeting chaired by Director (Operations), DTL. The meeting was convened as per the decisions taken in the 77th NRPC OCC meeting held on 20.07.2012 and 22nd NRPC Commercial Sub-Committee meeting held on 13.09.2012 to resolve

S. No.	Date of meeting	Discussions and Decision on the issue(s)	
			the issues of Discom wise scheduling of various ISGSs. NRLDC representatives were of the view that for ISGSs and for the stations within Delhi, the discomwise scheduling is the responsibility of Delhi SLDC. As per IEGC, the scheduling of all sources to the state entities would be done considering the state as one control area. Director (Operations), DTL requested NRLDC to provide logistic support to SLDC for developing discomwise scheduling of ISGSs. NRLDC representatives agreed to take up the matter with their management in this regard.
5	**04.01.13**		**Coordination meeting with Discoms, NRLDC, DERC, Gencos with regard to Discomwise scheduling of ISGSs, and State Sector Generating Stations.** Director (Operations), DTL chaired the meeting.
		i)	It was explained that upto 28.12.2012 depending upon the Delhi requirement, Jhajjar power was scheduled by Delhi SLDC to Delhi and Distributed to Discoms as per their respective allocation from the station. From 29.12.2012, power was scheduled by Delhi SLDC as per Discomwise requirement. NRLDC's schedule from Jhajjar is different than that of Delhi SLDC's requirement to meet minimum technical level for the generator etc.
		ii)	BTPS was requested to generate as per requirement of Delhi due to its high cost.
		iii)	During lean season (February – March), the Stage-I unit of BTPS (95MW) be shut-down.
		iv)	Power arrangements for summer 2013 were also reviewed. Discoms were advised to make sufficient arrangements to meet peak demand of Delhi expected to be about 6000MW
6	**05.02.13**		**Meeting with Discoms, Gencos and DTL to review the Transmission and Distribution Constraints** Meeting chaired by Director (Operations), DTL. The Transmission and Distribution Constraints were reviewed and certain measures were suggested to overcome the same.

6 SALIENT FEATURES OF DELHI POWER SYSTEM

Sr. No.	Features	2011-12	2012-13
1	**Effective Generation Capacity within Delhi in MW**		
	Rithala	94.8	94.8
	Rajghat Power House	135	135
	Gas Turbine	270	270
	Pragati Power Corporation Ltd.	330	330
	Bawana CCGT	216	685
	Badapur Thermal Power Station	705	705
	Total	1750.8	2219.8
2	**Maximum Unrestricted Demand (MW)**	**5031**	**5727**
	Date	02.08.11	05.07.12
	Time	15:07:47	15:10:14
3	**Peak Demand met (MW)**	**5028**	**5642**
	Date	02.08.11	05.07.12
	Time	15:07:47	15:10:14
4	Peak Availability (MW)	4929	5461
5	Shortage (-) / Surplus (+) in MW	-99	-181
6	Percentage Shortage (-) / Surplus (+)	(-)1.97	(-)3.21
7	Maximum Energy Consume in a day (Mus)	100.742	107.365
8	Energy Consumed during the year	**26052**	**27235**
9	**Load Shedding in Mus**		
A)	Due to Grid Restrictions		
i)	Under Frequency Relay Operations	3.125	0.878
ii)	Load Shedding by		
	TPDDL	12.252	21.836
	BRPL	23.049	17.909
	BYPL	11.662	18.308
	NDMC	0.182	0.017
	MES	0.000	0.000
iii)	Due to Transmission Constraints in Central Sector System	0.042	37.990
	Total due to Grid Restriction	**50.312**	**96.938**
B)	Due to Constraints in System & in Mus		
	DTL	12.489	13.475
	TPDDL	11.011	8.643
	BRPL	4.618	12.613
	BYPL	3.531	5.143
	NDMC	0.028	0.003
	MES	0.000	0.000
	Other Agencies	0.994	1.370
	Total	**32.671**	**41.247**
11	**Total Load Shedding in MUs**	**82.983**	**138.185**
12	**Load shedding in percentage of Energy Consumption**	**0.32**	**0.51**

7. PERFORMANCE OF GENERATING STATIONS WITHIN DELHI DURING YEAR 2012-13

Power Station	Effective Capacity (MW)	Actual Generation In MUs	%age Availability	% PLF
Rithala CCTG	94.8	130.006	62.16	6.84
Rajghat TPS	135	690.356	66.94	66.26
Gas Turbine	270	1269.477	84.22	55.35
PPCL	330	2444.713	90.53	87.06
BTPS	705	4181.144	90.23	75.69
Bawana CCGT	685	1386.159	92.47	30.37
Total	**2219.8**	**10101.855**		

Details of generation from Renewable Sources.

Sr. No.	Source	Capacity in kW	Generation Ex-bus in MU
1	POOTH KHURD	54	0.079881
2	CENPEID	14.85	0.015518
3	CORPORATE OFFICE	3.96	0.004517
4	CENNET	25	0.030626
5	1 MW KPM	1000	1.238229348
6	NARELA A7 GRID	43	0.064287
7	Bawana CWG Grid	45	0.065568
8	Nareal DSIDC	60	0.064451
9	GTK	25	0.022327
10	RG-02	24.5	0.033821
11	RG-5	225	0.267244
12	RG-22	50	0.0644655
13	RG-23	55	0.069995
14	RG-24	24	0.037071
15	Thyagraj Stadium, (BRPL)	1000	1.116000
16	TOWMCL	16	83.47590972

Note :

1 Rithala CCGT Unit-1, II & STG declared on Commercial Operation on 05.02.2011, 05.02.2011 and on 04.09.2011 respectively

2 The modue of Bawana CCGT declare under Commercial Operation as under:-

Unit no.	Capacity in MW	Synchronization		Date of Commercial Operation	
		Date	Time (Hrs)	Date	Time (Hrs)
GT-1	216	11.10.2010	12.12	27.12.2011	00.00
GT-2	216	09.02.2011	22.32	16.07.2012	00.00
STG-1	253	03.10.2011	12.43	01.04.2012	0.00
GT-3	216	26.06.2012	17.31	--	--

8. DETAILS OF OUTAGES OF GENERATING STATIONS WITHIN DELHI FOR 2012-13

(A) RPH STATION

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
1	67.5	03.04.12	19.10	03.04.12	21.05	Unit tripped due to grid disturbance.
		10.04.12	17.00	10.04.12	18.05	
		11.04.12	5.50	11.04.12	6.30	Flame failure.
		11.04.12	6.55	11.04.12	7.40	
		11.04.12	7.55	11.04.12	11.45	Turbine trip.
		27.04.12	11.05	29.04.12	5.20	Unit desynchronised due to Boiler Tube Leakage.
		29.04.12	8.40	29.04.12	9.40	Unit tripped with heavy jerk, when AOP-1A started, emergency boerd incomer No. A tripped on earth fault.
		03.05.12	17.40	05.05.12	8.40	Unit desynchronized to attend the Condensor tube leakage.
		12.05.12	17.30	16.05.12	6.45	Unit tripped on system disturbance, later went on Boiler tube leakage.
		16.05.12	11.30	16.05.12	13.40	Unit tripped on system disturbance.
		20.05.12	12.05	20.05.12	12.35	Unit tripped due to electrical problem.
		23.05.12	10.30	23.05.12	11.55	Unit tripped due to furnace pr. high.
		25.05.12	17.10	25.05.12	21.55	Unit tripped due to electrical problem.
		26.05.12	11.10	26.05.12	12.15	Unit tripped due to drum level very low.
		26.05.12	17.05	27.05.12	3.25	Unit tripped due to electrical problem.
		27.05.12	3.40	27.05.12	4.10	Unit tripped due to master fuel trip.
		28.05.12	7.30	28.05.12	9.35	Unit tripped due to electrical problem.
		03.06.12	17.35	03.06.12	19.20	Unit tripped due to flame failure.
		07.06.12	3.05	07.06.12	5.50	Unit tripped on aux. supply failure due to Stn.-1 tripped.
		07.06.12	10.40	07.06.12	11.10	
		19.06.12	10.40	22.06.12	15.10	Unit tripped due to Boiler tube leakage.
		30.06.12	0.45	30.06.12	1.25	Unit tripped due to 33KV supply failure.
		06.07.12	18.35	09.07.12	15.00	Unit tripped on turbine trip, later on stopped due to low demand.
		10.07.12	8.10	01.09.12	20.40	Unit tripped on flame failure, later on the unit taken on Planned Outage as capital over haling w.e.f. 18/07/12 at 00.00hrs.
		10.09.12	23.10	10.09.12	23.40	Unit tripped due to loss of oil fuel.
		11.09.12	14.55	13.09.12	11.20	Unit desynchronised to attend the IBD-59 & 60.
		23.09.12	14.20	25.09.12	10.30	Unit desynchronised to attend the boiler tube leakage.
		08.10.12	1.15	10.10.12	7.30	
		27.10.12	10.20	27.10.12	12.20	Unit tripped due to grid disturbance.
		27.10.12	14.00	27.10.12	14.50	
		30.10.12	7.40	30.10.12	10.10	Unit tripped due to Monkey jumped in yard, Bay No. 10 to 22 tripped.
		30.10.12	11.00	30.10.12	13.05	Turbine trip.
		30.10.12	13.45	30.10.12	14.35	
		15.11.12	0.30	16.11.12	2.30	Unit desynchronised to attend the boiler tube leakage.
		08.12.12	7.40	09.12.12	22.55	
		15.12.12	13.00	15.12.12	13.35	Unit tripped due to drum level low.
		21.12.12	1.20	24.12.12	12.30	Unit desynchronised to attend the boiler tube leakage.
		07.01.13	20.10	07.01.13	22.20	Unit tripped due to turbine trip.
		26.01.13	14.05	26.01.13	19.40	Unit desynchronised to attend the CW v/v.
		23.02.13	0.30	24.02.13	22.45	Unit desynchronised to attend the Boiler tube leakage.
		28.02.13	9.30	06.03.13	21.10	Unit desynchronised due to shortage of coal fuel.
		16.03.13	8.00	17.03.13	20.50	Unit desynchronised to attend the CW line leakage.
		25.03.13	20.00	27.03.13	11.30	Unit tripped due to Boiler tube leakage.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
2	67.5	01.04.12	2.00	01.04.12	11.15	Unit stopped as MS pressure & temp. not maintained.
		03.04.12	19.10	03.04.12	20.50	Unit tripped due to grid disturbance.
		10.04.12	17.00	10.04.12	18.35	
		10.04.12	18.40	10.04.12	19.30	Excitation system problem.
		16.04.12	17.40	18.04.12	19.05	Unit desynchronised due to non-availability of coal mills.
		12.05.12	17.30	12.05.12	20.00	Unit tripped on system disturbance.
		16.05.12	11.30	16.05.12	12.50	Unit tripped on system disturbance.
		24.05.12	14.10	24.05.12	1.45	To attend the Economisor tube leakage.
		28.05.12	7.30	28.05.12	12.50	Unit tripped due to electrical problem.
		07.06.12	3.05	07.06.12	4.40	Aux. supply failure due to Stn transformer-I tripped.
		29.06.12	22.50	30.06.12	2.15	Unit tripped due to fire occurred on 33KV supply cable.
		02.07.12	12.50	05.07.12	11.30	Boiler Tube Leakage.
		06.07.12	21.35	06.07.12	23.35	33KV supply failure.
		07.07.12	8.00	09.07.12	14.00	Unit desynchronized due to low demand.
		09.07.12	15.25	09.07.12	16.05	Turbine vibration high.
		10.07.12	22.15	11.07.12	1.20	Electrical fault.
		13.07.12	1.30	13.07.12	14.10	Furnace pressure very high.
		17.07.12	12.05	17.07.12	13.45	
		20.07.12	4.45	20.07.12	5.45	
		22.07.12	10.10	22.07.12	11.05	Turbine vibration high.
		22.07.12	12.00	22.07.12	12.35	
		30.07.12	2.25	30.07.12	11.40	Grid failure.
		31.07.12	12.55	31.07.12	17.20	
		18.08.12	5.05	18.08.12	6.50	Grid disturbance.
		25.08.12	16.25	25.08.12	17.05	Drum level very high.
		25.08.12	22.55	26.08.12	10.00	Furnace pressure very high.
		30.08.12	9.05	30.08.12	10.10	
		30.08.12	15.35	30.08.12	16.25	
		30.08.12	20.35	30.08.12	21.30	
		04.09.12	13.40	09.09.12	12.00	Unit desynchronised to attend the boiler tube leakage.
		18.09.12	18.15	18.09.12	19.05	Furnace pressure very high.
		25.09.12	5.20	27.09.12	11.15	Unit desynchronised to attend the boiler tube leakage.
		14.10.12	3.20	14.10.12	6.30	Unit tripped due to furnace pr. very high.
		18.10.12	15.20	19.10.12	6.45	Unit desynchronised to attend the condensor tube leakage.
		24.10.12	15.00	25.10.12	10.55	Unit desynchronised due to low demand.
		27.10.12	10.20	27.10.12	12.15	Unit tripped due to grid disturbance.
		27.10.12	14.00	27.10.12	15.00	
		30.10.12	7.40	30.10.12	10.20	Unit tripped due to Monkey jumped in yard, Bay No. 10 to 22 tripped.
		11.11.12	14.20	11.11.12	15.45	Unit tripped due to bus coupler breaker not closed on auto.
		11.11.12	16.15	11.11.12	16.45	Unit tripped due to turbine vibration high.
		11.11.12	17.10	11.11.12	17.50	
		29.11.12	2.05	29.11.12	11.50	Unit tripped due to turbine trip.
		29.11.12	12.00	01.12.12	15.20	Unit tripped due to boiler tube leakage
		27.12.12	1235	27.12.12	13.40	Unit tripped due to turbine trip.
		07.01.13	20.10	07.01.13	20.35	
		08.01.13	13.30	08.01.13	14.40	Unit tripped due to monkey jumped near bay No. 7 in yard.
		09.01.13	9.20	10.01.13	23.00	To attend the economisor tube leakage.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
2	67.5	14.01.13	0.20	15.01.27	2.10	Unit desynchronised to attend the economisor tube leakage.
		18.01.13	12.25	18.01.13	14.30	Unit tripped due to generator transformer trip.
		20.01.13	2.40	20.01.13	3.50	Unit tripped due to turbine shaft vibration very high.
		20.01.13	8.00	20.01.13	8.50	Unit tripped due to turbine trip.
		20.01.13	10.05	20.01.13	10.45	Unit tripped due to, when UAT-2 try to taken I/S, but UAT-2 breaker not closed.
		20.01.13	11.20	20.01.13	12.00	Unit tripped due to turbine vibration high.
		26.01.13	14.30	27.01.13	1.45	Unit desynchronised to attend the CW v/v.
		02.02.13	3.05	02.02.13	3.55	Unit tripped due to excitation problem.
		02.02.13	4.05	02.02.13	4.30	Unit tripped due to drum level very low.
		10.02.13	16.20	10.02.13	16.50	Unit tripped due to turbine trip.
		10.02.13	17.25	10.02.13	18.20	Unit tripped due to electrical problem.
		01.03.13	15.35	01.03.13	16.25	Unit tripped due to Furnace pressure very high.
		01.03.13	17.10	01.03.13	18.10	Unit tripped due to Furnace pressure very high.
		06.03.13	3.55	24.03.13	16.30	Unit desynchronised due to shortage of coal fuel..
		29.03.13	11.50	29.03.13	12.25	Unit tripped due to Turbine trip.

(B) Gas Turbine Power Station

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
1	30	04.04.12	09.28	04.04.12	12.05	Machine tripped due to jerk as both 160MVA Tr. tripped on 86X.
		08.04.12	17.00	08.04.12	18.05	Machine tripped due to jerk as 160MVA Tr. No.2 tripped.
		10.04.12	00.05	10.04.12	12.25	Stopped due to low demand and high frequency.
		12.04.12	17.05	12.04.12	18.22	Machine tripped due to jerk as both 160MVA Trs. tripped at both ends on O/C and E/F at GT end on 160MVA Tr-I. Buch-Holtz relay operated on 160MVA Tx-II at IP Ext.end.
		06.05.12	10.49	06.05.12	16.30	Tripped on loss of flame, negative phase sequence alarm appeared in CRT.One controller got out of order.
		24.05.12	22.30	25.05.12	01.20	Stopped along with HRSG#I to change gen. absolute filter.
		09.06.12	10.05	06.09.12	10.25	Machine came on FSNL
		17.06.12	06.03	18.06.12	19.54	Stopped due to low demand and high frequency.
		19.06.12	21.02	20.06.12	11.30	
		20.06.12	11.30	20.06.12	19.00	Machine tripped during starting due to some elect. Problem.
		20.06.12	19.00	21.06.12	14.50	Stopped due to low demand and high frequency.
		13.07.12	12.38	13.07.12	13.01	GT#1 came on FSNL as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		30.07.12	02.35	30.07.12	04.00	Machine came on FSNL due to Grid disturbance as both 160 MVA ICT-I&II tripped
		31.07.12	13.02	31.07.12	13.11	Machine came on FSNL due to Grid disturbance as both 160 MVA ICT-I&II tripped
		31.07.12	13.50	31.07.12	13.58	Came on FSNL due to Grid disturbance as both 160 MVA ICT-I&II tripped on under frequency relay operated at 220 KV end.
		05.08.12	06.26	05.08.12	21.15	Machine stopped to attend CW line leakages.
		18.08.12	06.15	18.08.12	10.05	Machine tripped due to Grid disturbance
		29.08.12	00.05	29.08.12	21.35	Stopped due to low demand and high frequency
		02.09.12	10.45	03.09.12	11.10	
		03.09.12	19.02	03.09.12	20.25	
		04.09.12	01.16	10.09.12	09.20	
		13.09.12	09.45	13.09.12	10.00	Tripped due to 160MVA Txf.-2 manually tripped at I.P.Ext. without informing GTPS.
		28.09.12	20.55	30.09.12	12.20	Stopped due to low demand and high frequency
		01.10.12	00.00	01.10.12	02.35	
		01.10.12	05.20	03.10.12	11.50	
		22.10.12	19.00	25.10.12	13.45	
		25.10.12	13.45	31.10.12	19.15	Stopped due to problem in diesel engine.
		31.10.12	19.15	05.11.12	15.50	Stopped due to low demand and high frequency
		14.11.12	14.25	16.11.12	20.20	
		27.11.12	12.01	28.11.12	15.46	
		12.12.12	12.27	14.12.12	08.17	
		16.12.12	05.22	16.12.12	14.50	Tripped due to Grid disturbance.
		16.12.12	15.22	16.12.12	17.10	
		16.12.12	17.40	16.12.12	18.28	
		16.12.12	23.00	19.12.12	17.35	Stopped due to low demand and high frequency
		07.01.13	00.10	07.01.13	06.03	
		08.01.13	22.05	09.01.13	06.20	
		10.01.13	21.02	11.01.13	15.35	
		12.01.13	15.29	13.01.13	23.20	
		14.01.13	20.35	15.01.13	09.30	
		17.01.13	05.30	17.01.13	13.30	
		21.01.13	12.30	21.01.13	13.40	Tripped on failure of IO Pack.
		25.01.13	13.30	08.03.13	10.31	Stopped due to low demand and high frequency
		08.03.13	14.25	085.03.13	15.43	
		08.03.13	18.30	09.03.13	13.05	
		20.03.13	15.55	20.03.13	16.45	Tripped on loss of flame
		28.03.13	12.55	01.04.13	05.45	Stopped due to low demand and high frequency

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
2	30	08.04.12	17.00	08.04.12	18.06	Machine tripped due to jerk as 160MVA Tr-2 tripped.
		12.04.12	00.02	12.04.12	06.10	Stopped due to low demand and high frequency.
		12.04.12	09.31	12.04.12	18.32	
		12.04.12	19.45	12.04.12	20.31	Tripped on -ve phase sequence Elect. Trouble normal shut down.
		29.04.12	00.01	29.04.12	20.45	Stopped due to low demand and high frequency.
		30.04.12	13.52	30.04.12	21.35	
		06.06.12	12.35	08.06.12	12.10	
		06.07.12	18.02	06.07.12	18.58	During storm GAC shade fibre sheet fell on unit Trf. To avoid damage& protection of GT#2 66KV breaker &11KV breaker made open. GT#2 kept on FSNL.
		13.07.12	12.38	13.07.12	13.02	GT#2came on FSNL as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		21.07.12	21.16	22.07.12	17.50	Stopped due to low demand and high frequency.
		28.07.12	00.32	28.07.12	17.52	
		30.07.12	02.35	30.07.12	04.30	Came on FSNL due to Grid disturbance as both 160 MVA ICT-I&II tripped on under frequency relay operated at 220 KV end.
		31.07.12	13.09	31.07.12	15.23	Tripped on negative phase sequence and back up timer operated .
		05.08.12	06.40	16.08.12	20.25	Machine stopped to attend CW line leakages.Machine is not available due to problem in Diesel engine since 06/08/2012.
		18.08.12	04.54	18.08.12	05.25	Machine tripped due to Grid disturbance
		18.08.12	06.15	18.08.12	07.05	
		23.08.12	03.02	23.08.12	12.54	Stopped due to low demand and high frequency
		24.08.12	02.03	24.08.12	09.43	
		30.08.12	08.03	30.08.12	08.28	Machine tripped on condensate level high trip alarm.
		02.09.12	03.20	09.09.12	12.20	Stopped due to low demand and high frequency
		09.09.12	15.50	10.09.12	09.30	
		28.09.12	20.10	03.10.12	18.15	
		22.10.12	19.00	25.10.12	12.45	
		25.10.12	12.45	25.10.12	22.00	Not available due to problem in AC AOP.
		25.10.12	22.00	26.10.12	11.00	Stopped due to low demand and high frequency
		26.10.12	11.15	29.10.12	02.30	
		06.11.12	17.45	07.11.12	09.30	
		11.11.12	11.30	11.11.12	16.00	
		14.11.12	14.26	16.11.12	20.55	
		16.11.12	23.10	19.11.12	12.43	
		29.11.12	23.01	30.11.12	06.45	
		30.11.12	06.45	30.11.12	09.55	Not available due to problem in diesel engine
		16.12.12	17.40	16.12.12	18.00	Tripped due to Grid disturbance.
		16.12.12	23.00	19.12.12	17.36	Stopped due to low demand and high frequency
		23.12.12	07.11	23.12.12	08.35	Tripped due to TAD very high.
		23.12.12	17.15	24.12.12	14.42	Stopped due to low demand and high frequency
		24.12.12	15.02	24.12.12	15.45	Tripped on high exhaust temp. spread.
		27.12.12	15.45	29.12.12	00.12	Stopped due to low demand and high frequency
		31.01.13	16.58	09.03.13	19.45	
		27.03.13	08.44	01.04.13	05.35	
3	30	22.03.12	14.25	02.04.12	13.50	Stopped due to low demand and high frequency.
		03.04.12	12.27	03.04.12	17.44	Machine tripped on loss of flame.
		04.04.12	09.28	04.04.12	12.15	Machine tripped due to jerk as both 160MVA Trfs on 86X.
		05.04.12	10.05	30.04.12	06.15	Machine stopped due to HGPI.
		30.04.12	22.15	02.05.12	15.25	Stopped due to low demand and high frequency.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
3	30	04.05.12	04.58	04.05.12	07.54	Machine tripped on loss of Excitation
		06.05.12	17.06	06.05.12	17.50	Machine stopped to attend the leakages.
		20.05.12	10.02	20.05.12	21.55	Stopped due to low demand and high frequency.
		29.05.12	22.05	29.05.12	23.32	Stopped to attend hot gas leakage from compressor.
		30.05.12	03.45	30.05.12	13.16	Stopped due to low demand and high frequency.
		03.06.12	18.15	04.06.12	16.15	
		07.06.12	06.04	07.06.12	13.15	
		18.06.12	20.32	19.06.12	10.53	
		20.06.12	14.58	20.06.12	16.02	Machine stopped due to diverter damper problem.
		25.06.12	11.50	25.06.12	12.05	Hunting observed in load & Machine came on FSNL on turbine under speed alarm appeared.
		28.06.12	02.42	28.06.12	05.35	Tripped due to combined cycle tripped alarm.
		06.07.12	19.02	13.07.12	14.55	Stopped due to low demand and high frequency.
		14.07.12	01.35	16.07.12	07.40	
		27.07.12	14.45	27.07.12	17.55	
		30.07.12	02.35	30.07.12	06.40	Tripped due to grid disturbance as both 160 MVA ICT tripped.
		31.07.12	13.02	31.07.12	14.17	Unit came on FSNL due to Grid disturbance as both 160 MVA ICT-I&II tripped on under frequency.
		05.08.12	06.10	05.08.12	23.04	Machine stopped to attend CW line leakages.
		09.08.12	20.02	09.08.12	21.16	Machine tripped on exhaust temp. high ,exhaust over temp. trip
		18.08.12	04.54	18.08.12	07.05	Machine tripped due to Grid disturbance
		23.08.12	05.16	27.08.12	10.20	Stopped due to low demand and high frequency
		13.09.12	00.30	25.09.12	11.30	
		25.09.12	14.40	28.09.12	20.00	
		30.09.12	10.40	30.09.12	11.30	Tripped
		08.10.12	13.55	15.10.12	18.18	Stopped due to low demand and high frequency
		27.10.12	10.19	27.10.12	12.45	Tripped due to Grid disturbance
		27.10.12	14.03	27.10.12	14.45	
		27.10.12	17.32	27.10.12	18.30	
		11.11.12	16.35	12.11.12	12.45	Stopped due to low demand and high frequency
		19.11.12	13.35	21.11.12	21.07	
		24.11.12	20.32	25.11.12	15.03	
		27.11.12	12.01	28.11.12	15.05	
		29.11.12	23.01	30.11.12	05.59	
		01.12.12	20.05	04.12.12	08.30	
		06.12.12	12.50	12.12.12	08.05	
		16.12.12	06.18	16.12.12	08.21	Tripped due to Grid disturbance.
		16.12.12	17.40	16.12.12	19.15	
		23.12.12	00.05	23.12.12	14.20	Stopped due to low demand and high frequency
		23.12.12	21.40	23.12.12	22.15	Tripped due to TAD very high.
		23.12.12	22.45	24.12.12	10.30	Stopped due to low demand and high frequency
		24.12.12	20.05	25.12.12	00.25	Came on FSNL but TK fan tripped suddenly.
		31.12.12	01.55	31.12.12	05.50	Stopped due to low demand and high frequency
		01.01.13	23.30	02.01.13	12.57	
		03.01.13	03.55	03.01.13	20.50	
		04.01.13	21.02	05.01.13	20.59	
		06.01.13	18.02	07.01.13	19.05	
		08.01.13	18.15	20.01.13	10.10	
		22.01.13	05.02	23.01.13	10.34	
		24.01.13	01.35	24.01.13	22.25	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
3	**30**	02.02.13	13.40	06.02.13	12.05	Stopped due to low demand and high frequency
		11.02.13	13.40	16.02.13	16.20	
		18.02.13	12.13	19.02.13	09.56	
		20.02.13	14.05	26.02.13	03.05	
		28.02.13	22.32	06.03.13	10.36	
		17.03.13	21.40	17.03.13	22.35	Tripped due gas fuel pressure low alarm.
		20.03.13	14.35	01.04.13	07.30	Stopped due to low demand and high frequency
4	**30**	07.03.12	15.15	02.04.12	13.48	Stopped due to low demand and high frequency.
		04.04.12	09.28	04.04.12	11.40	Machine tripped due to jerk along with160MVA Trfs. Tripped on relay 86X.
		07.04.12	19.01	07.04.12	21.45	Stopped due to low demand and high frequency.
		12.04.12	17.05	12.04.12	17.45	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. tripped at both end. Over current & earth fault relay operated at GT end on 160MVA Tx-I. Buch-Holtz relay operated on 160MVA Tx-II at IP Ext.end.
		12.04.12	18.30	19.04.12	09.45	Stopped due to low demand and high frequency.
		25.04.12	21.35	26.04.12	08.40	
		28.04.12	10.02	30.04.12	14.45	
		20.05.12	10.02	20.05.12	20.12	
		02.06.12	21.03	04.06.12	16.15	Machine stopped as per SLDC message to maintain SG .
		04.06.12	16.15	05.06.12	05.45	Machine started but could not be taken on load due to problem in control ckt.
		05.06.12	05.45	06.06.12	11.40	Stopped due to low demand and high frequency.
		12.06.12	06.02	12.06.12	10.44	
		13.06.12	00.02	13.06.12	12.52	
		13.06.12	15.14	13.06.12	17.20	Tripped due to ignition problem.
		17.06.12	07.37	17.06.12	08.25	Tripped with following alarm appeared on CRT: IGV servo current -ve saturation alarm. Compressor bleed valve#1 open alarm. CPD measurement fault alarm.
		18.06.12	19.02	19.06.12	10.54	Stopped due to low demand and high frequency.
		06.07.12	18.28	06.07.12	19.00	Tripped on over temp. trip alarm.
		06.07.12	19.00	13.07.12	14.35	Stopped due to low demand and high frequency.
		14.07.12	01.35	16.07.12	08.09	
		16.07.12	10.25	16.07.12	15.30	
		17.07.12	03.32	17.07.12	07.50	
		18.07.12	02.30	18.07.12	11.50	
		23.07.12	23.01	24.07.12	09.50	
		26.07.12	00.47	26.07.12	11.05	
		27.07.12	18.16	30.07.12	08.30	
		31.07.12	04.02	01.08.12	19.25	
		02.08.12	00.02	04.08.12	12.20	
		04.08.12	17.16	05.08.12	06.00	
		05.08.12	06.00	06.08.12	02.07	Machine stopped to attend CW line leakages.
		12.08.12	09.17	12.08.12	23.59	Stopped due to low demand and high frequency.
		13.08.12	00.00	13.08.12	13.20	Machine not available.
		14.08.12	18.35	15.08.12	20.50	Stopped due to low demand and high frequency.
		16.08.12	07.43	16.08.12	10.56	Machine tripped on exhaust over temp.
		18.08.12	04.54	18.08.12	07.05	Machine tripped due to Grid disturbance
		21.08.12	15.58	21.08.12	16.47	Machine tripped on loss of excitation with HRSG#4.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
4	**30**	22.08.12	14.05	27.08.12	09.45	
		29.08.12	00.07	29.08.12	20.35	
		31.08.12	02.32	31.08.12	10.35	
		01.09.12	03.02	01.09.12	10.05	
		03.09.12	02.00	03.09.12	06.50	Stopped due to low demand and high frequency.
		05.09.12	03.50	07.09.12	13.01	
		12.09.12	23.32	28.09.12	15.52	
		04.10.12	01.32	04.10.12	08.45	
		07.10.12	01.30	15.10.12	18.15	
		27.10.12	10.19	27.10.12	11.42	
		27.10.12	14.03	27.10.12	14.13	Tripped due to Grid disturbance
		27.10.12	17.32	27.10.12	18.10	
		05.11.12	20.05	06.11.12	17.23	
		19.11.12	11.45	21.11.12	21.28	
		24.11.12	20.32	25.11.12	15.58	Stopped due to low demand and high frequency.
		01.12.12	20.05	04.12.12	08.40	
		06.12.12	12.50	14.12.12	08.20	
		16.12.12	17.40	16.12.12	19.10	Tripped due to Grid disturbance.
		23.12.12	00.08	24.12.12	10.10	Stopped due to low demand and high frequency
		25.12.12	01.30	25.12.12	15.35	Stopped due to high TAD.
		01.02.13	13.06	01.02.13	13.50	
		06.02.13	13.05	09.02.13	11.42	
		09.02.13	17.47	16.02.13	16.26	Stopped due to low demand and high frequency
		18.02.13	12.17	19.02.13	10.03	
		20.02.13	14.05	26.02.13	04.20	
		09.03.13	20.45	11.03.13	20.00	
		11.03.13	20.00	12.03.13	00.50	GT#4 could not be synch.due to gas pressure low in 11KV Braker.
		14.03.13	11.46	15.03.13	14.55	Stopped due to low demand and high frequency
		17.03.13	00.05	20.03.13	19.00	
		20.03.13	19.00	25.03.13	21.00	Stopped for CI inspection
		25.03.13	21.00	03.04.13	15.50	Stopped due to low demand and high frequency
5	**30**	17.03.12	00.32	02.04.12	15.45	Stopped due to low demand and high frequency.
		04.04.12	09.28	04.04.12	11.58	Machine tripped due to jerk along with160MVA Trfs. tripped on relay 86X.
		06.04.12	00.18	09.04.12	15.31	Machine stopped as generation available in open cycle mode
		12.04.12	17.05	12.04.12	18.20	Machine tripped due to jerk as both 160MVA Trfs. tripped at both ends. O/C & E/Fat GT end on 160MVA Tx-I and on Buch-Holtz relay on 160MVA Tx-II at IP Ext.end.
		29.04.12	21.37	02.05.12	13.15	Stopped due to low demand and high frequency
		04.05.12	22.07	04.05.12	22.55	Machine tripped on Field fail alarm and Electrical trouable norma
		04.05.12	23.24	09.05.12	17.10	Machine again tripped on Field fail alarm and Electrical trouble normal shut down. Machine inspected and Alternate DC supply provided but Diesel engine did not started-I decided to open the diesel Engine.
		09.05.12	22.10	10.05.12	02.20	Tripped on field fail alarm. Elect. Trouble normal shut down.
		06.06.12	13.30	06.06.12	14.00	Tripped on false LTTH high alarm. The Temperature switch is malfunctioning.
		07.06.12	13.36	09.06.12	06.15	Stopped due to low demand and high frequency
		13.07.12	12.38	13.07.12	12.50	GT#5 came on FSNL as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		17.07.12	17.35	17.07.12	22.57	Tripped on gas fuel hydraulic pressure low alarm.
		30.07.12	02.35	30.07.12	02.40	GT#5 came on FSNL as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		31.07.12	13.50	31.07.12	13.52	GT#5 came on FSNL due to under frequency

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
5	**30**	05.08.12	06.16	06.08.12	03.15	Machine stopped to attend CW line leakages.
		15.08.12	09.16	15.08.12	21.25	Stopped due to low demand and high frequency
		16.08.12	02.15	16.08.12	10.50	
		16.08.12	14.46	22.08.12	23.59	
		25.08.12	14.32	02.09.12	10.40	
		07.09.12	13.05	12.09.12	18.25	
		13.09.12	09.45	13.09.12	10.12	Tripped due to 160MVA Txf.-2 manually tripped at I.P.Ext.
		15.09.12	04.55	01.10.12	02.50	Stopped due to low demand and high frequency
		03.10.12	22.50	31.12.12	23.59	
		21.02.13	04.01	21.02.13	07.41	Machine tripped in false alarm of generator differential relay
		09.03.13	16.05	15.03.13	08.20	Stopped due to low demand and high frequency
6	**30**	17.03.12	00.32	02.04.12	15.50	Stopped due to low demand and high frequency
		04.04.12	05.01	04.04.12	19.42	
		06.04.12	00.18	09.04.12	15.35	
		10.04.12	00.07	10.04.12	11.50	
		12.04.12	17.05	12.04.12	21.25	Machine tripped on jerk as both 160MVA Trs. tripped at both end. Over current & earth fault relay operated at GT end on 160MVA Tx-I. Buch-Holtz relay operated on 160MVA Tx-II at IP Ext.end.
		25.04.12	01.45	25.05.12	20.25	Stopped due to low demand and high frequency
		30.04.12	09.45	02.05.12	14.25	
		22.05.12	12.52	22.05.12	22.20	Tripped due to failure of MOV,due to which battery voltage fluctuated at computer screen from 103V to 118V.The following alarms appeared:- -ve phase sequence & Condensate level high temp.
		03.06.12	02.16	03.06.12	07.55	Tripped due to failure of controllers.
		19.06.12	21.02	20.06.12	10.32	Stopped due to low demand and high frequency.
		28.06.12	17.20	28.06.12	19.20	Tripped manually due to sudden fire in window A/C of GT#6 which was installed in GAC(module side)
		13.07.12	12.38	13.07.12	13.43	GT#6 tripped on reverse power as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		26.07.12	22.03	27.07.12	11.00	Machine stopped due to leakage of lube oil observed in the TAC.
		26.07.12	22.03	27.07.12	10.55	Machine stopped due to oil leakages.
		30.07.12	00.15	30.07.12	05.40	Stopped due to low demand and high frequency.
		31.07.12	13.09	31.07.12	14.14	Tripped on under voltage
		05.08.12	06.14	05.08.12	21.15	Machine stopped to attend CW line leakages.
		15.08.12	09.18	15.08.12	21.28	Stopped due to low demand and high frequency.
		16.08.12	02.15	16.08.12	11.00	
		16.08.12	14.46	18.08.12	14.50	
		19.08.12	03.04	22.08.12	07.59	
		24.08.12	02.05	24.08.12	09.50	
		25.08.12	14.32	29.08.12	20.40	
		03.09.12	02.05	03.09.12	10.45	
		05.09.12	04.01	10.09.12	10.40	
		15.09.12	05.10	01.10.12	01.10	
		02.10.12	12.45	03.10.12	12.50	
		03.10.12	19.20	05.10.12	20.38	
		05.10.12	22.15	04.11.12	18.00	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
6	30	04.11.12	18.00	11.05.12	20.15	Not available due to problem in diesel engine.
		05.11.12	20.15	25.12.12	13.45	Stopped due to low demand and high frequency.
		26.12.12	00.15	08.01.13	15.40	
		09.01.13	03.05	09.01.13	15.30	
		17.01.13	21.30	01.02.13	12.25	
		01.02.13	13.25	02.02.13	12.44	
		02.02.13	14.50	02.02.13	16.45	Tripped on protection fuse failure 50 PR alarm appeared on panel.
		09.02.13	13.00	09.02.13	17.15	Stopped due to low demand and high frequency.
		06.03.13	11.55	20.03.13	12.32	Stopped for HGPI
		27.03.13	08.55	28.03.13	11.55	Stopped due to low demand and high frequency.
STG -1	30	04.04.12	09.28	04.04.12	15.20	Machine tripped on jerk as both 160MVA Trfs. tripped on 86X.
		08.04.12	17.00	08.04.12	20.18	Machine tripped on jerk as 160MVA Trf. No.2 tripped.
		08.04.12	22.32	08.04.12	23.20	Machine tripped due to low vaccum.
		12.04.12	17.05	12.04.12	20.57	Machine tripped due to jerk observed in C/R.Both 160MVA Trs. tripped at both end. Over current & earth fault relay operated at GT end on 160MVA Tx-I. Buch-Holtz relay operated on 160MVA Tx-II at IP Ext.end.
		22.04.12	07.46	22.04.12	15.05	Machine tripped suddenly, all parameters were normal. Following alarms appeared: control oil pressure very low,trip oil pressure very low & turbine shaft vibration very high 176.
		03.05.12	01.12	03.05.12	02.29	Tripped on hot well level very high.
		06.05.12	14.25	06.05.12	15.12	Stopped to attend lube oil leakages.
		08.05.12	22.12	08.05.12	22.55	Parameters of STG#1 got freezed. As per AM (C&I) all BKs & FV01 should be in line B. while checking all BKs & FV01 from CRA 01 to CRc 04 pannel were found in line A.While changing from A to Line B, machine tripped on Hot well level very high. Machine also tripped on same fault on 03/05/2012
		12.05.12	17.28	12.05.12	19.28	160 MVA Tx-I tripped in jerk at GT end due to which GT#1 & 2 came on FSNL and STG#1 tripped.
		23.05.12	14.05	23.05.12	18.05	Tripped due to false alarm of cond .Hot well level very high.
		24.05.12	22.35	24.05.12	23.20	Tripped on class-A relay appeared on DDC room pannel.
		27.05.12	19.20	27.05.12	20.35	Tripped due to false alarm of cond.Hot well level very high.The following relays appeared in DDC room: Gen. class A-timer for 32G2A,Gen.class-B-tripp relay86GB.
		06.06.12	12.40	06.06.12	15.25	Tripped in emergency while developing the load 20 MW load became zero.
		06.06.12	16.15	06.06.12	17.40	Tripped without any alarm .Relay 86GB appeared in DDC room.
		13.07.12	12.38	13.07.12	14.20	Machine tripped as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		30.07.12	02.35	30.07.12	08.15	Machine tripped as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		31.07.12	13.02	31.07.12	16.15	Machine tripped on low vaccum the load on GTs reduced due to tripping of 160 MVA ICT I& II on under frequency relay operated.
		05.08.12	06.24	05.08.12	23.25	Machine stopped to attend CW line leakages.
		18.08.12	04.54	18.08.12	09.10	Machine tripped due to Grid disturbance
		30.08.12	06.28	30.08.12	07.15	Machine tripped on class-A relay is operated. .
		30.08.12	08.10	30.08.12	08.50	
		02.09.12	03.45	02.09.12	04.23	Tripped due to malfunctioning of MS-13 valve
		02.09.12	10.45	10.09.12	14.45	Stopped due to low demand and high frequency
		13.09.12	09.45	13.09.12	11.12	Tripped due to 160MVA Txf.-2 manually tripped at I.P.Ext. without informing GTPS.
		28.09.12	20.55	03.10.12	16.55	Stopped due to low demand and high frequency
		12.10.12	17.44	12.10.12	19.43	Tripped due to C & I Problem
		22.10.12	19.00	25.10.12	12.45	Stopped due to low demand and high frequency
		25.10.12	12.45	25.10.12	22.00	Boiler #2 not available due to problem in AC AOP of G.T. -2

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
STG -1	30	14.11.12	14.26	16.11.12	23.00	Stopped due to low demand and high frequency
		13.12.12	12.05	13.12.12	15.00	Tripped at high vibration
		16.12.12	05.22	16.12.12	09.15	Tripped due to Grid disturbance.
		16.12.12	13.08	16.12.12	14.32	Tripped on class- A trip.
		16.12.12	15.22	16.12.12	17.20	Tripped due to Grid disturbance.
		16.12.12	17.40	16.12.12	18.00	.
		17.12.12	00.00	17.12.12	18.00	Due to disturbance of grid connectivity,STG#1 has developed problem. It is out of service.
		17.12.12	18.00	19.12.12	19.35	Stopped due to low demand and high frequency
		31.01.13	17.05	08.03.13	10.31	
		08.03.13	10.31	09.03.13	15.55	Machine stopped for inspection by C&I and M-II division
		12.03.13	06.36	12.03.13	08.05	Tripped due to Trip oil pressure very low class-A relay operated.
		13.03.13	06.46	13.03.13	08.18	Tripped on ESV closed .Relays 86GA1&86GA2 appeared.
		28.03.13	12.55	01.04.13	09.15	Stopped due to low demand and high frequency
STG -2	30	22.03.12	14.25	02.04.12	16.25	Stopped due to low demand and high frequency
		04.04.12	09.28	04.04.12	12.50	Machine tripped due to jerk along with160MVA Trfs. Tripped on relay 86X.
		07.04.12	19.01	04.07.12	22.45	Stopped due to low demand and high frequency.
		08.04.12	17.00	08.04.12	18.51	Machine tripped due to jerk observed in C/R.160MVA Trf. No.2 tripped.
		12.04.12	17.05	12.04.12	23.15	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. tripped at both end. Over current & earth fault relay operated at GT end on 160MVA Tx-I. Buch-Holtz relay operated on 160MVA Tx-II at IP Ext.end.
		12.04.12	23.15	19.04.12	12.25	Stopped due to low demand and high frequency
		25.05.12	21.35	26.4.12	10.40	
		28.04.12	10.02	30.04.12	09.30	
		20.05.12	10.02	20.05.12	18.00	Machine stopped to attend the leakages.
		20.05.12	18.00	20.05.12	22.15	Stopped due to low demand and high frequency
		03.06.12	18.15	04.06.12	18.25	
		18.06.12	20.32	19.06.12	12.58	
		20.06.12	14.58	20.06.12	15.21	Tripped due to sudden fall of vaccum
		28.06.12	02.32	28.06.12	03.54	Tripped due to hot well level high
		06.07.12	18.35	06.07.12	19.00	Tripped due to operation of Generator transformer standby earth fault 64SGT relay. It is expected that this relay operated due to atmospheric lightening.
		06.07.12	19.00	13.07.12	18.02	Stopped due to low demand and high frequency.
		14.07.12	01.35	16.07.12	10.20	
		30.07.12	02.35	30.07.12	08.40	Machine tripped as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		31.07.12	13.02	31.07.12	16.46	Machine tripped on low vaccum the load on GTs reduced due to tripping of 160 MVA ICT I& II on under frequency relay operated.
		05.08.12	06.05	06.08.12	00.58	Machine stopped to attend CW line leakages.
		18.08.12	04.54	18.08.12	09.10	Machine tripped due to Grid disturbance
		23.08.12	05.16	28.08.12	12.30	Stopped due to low demand and high frequency
		01.09.12	00.00	01.09.12	00.40	Machine stopped since turbine parameters were not available
		13.09.12	00.30	28.09.12	20.55	Stopped due to low demand and high frequency
		08.10.12	13.55	15.10.12	20.25	
		27.10.12	10.19	27.10.12	12.26	Tripped due to grid disturbance
		27.10.12	14.03	27.10.12	15.25	
		27.10.12	17.32	27.10.12	19.30	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
STG -2	**30**	19.11.12	13.35	22.11.12	00.07	Stopped due to low demand and high frequency
		24.11.12	20.32	25.11.12	18.40	
		01.12.12	20.05	04.12.12	11.52	
		06.12.12	12.50	12.12.12	12.25	
		14.12.12	09.40	14.12.12	09.55	Tripped on exhaust pressure very high.
		16.12.12	05.22	16.12.12	09.20	Tripped due to Grid disturbance.
		16.12.12	15.22	16.12.12	16.50	
		16.12.12	17.40	16.12.12	21.15	
		23.12.12	00.10	23.12.12	17.10	Stopped due to low demand and high frequency
		23.12.12	21.40	24.12.12	12.27	Tripped due to tripping of GT#3
		09.01.13	05.25	20.01.13	13.15	Stopped due to low demand and high frequency
		11.02.13	13.40	16.02.13	19.45	
		18.02.13	12.17	19.02.13	11.32	
		20.02.13	14.05	26.02.13	06.05	
		07.03.13	11.10	07.03.13	11.58	Tripped on 86GB appeared in DDC room.
		13.03.13	17.09	13.03.13	18.02	Tripped due to hot well level high,channel-I tripped ,Exhaust steam pressure high.
		17.03.13	21.40	17.03.13	23.05	Tripped due to tripping of GT# 3
		20.03.13	14.35	02.04.13	16.25	Stopped due to low demand and high frequency
STG -3	**30**	17.03.12	00.32	02.04.12	21.25	Stopped due to low demand and high frequency
		04.04.12	09.28	04.04.12	22.20	Machine tripped due to jerk observed in C/R.Both 160MVA Trfs. Tripped on relay 86X.
		06.04.12	00.18	09.04.12	18.15	Machine stopped due to non availability of DC EOP.
		12.04.12	17.05	12.04.12	19.48	Machine tripped on jerk as both 160MVA Trfs. tripped at both ends. On O/C & E/F at GT end on 160MVA Tx-I and on Buchholz on 160MVA Tx-II at IP Ext.end.
		20.04.12	14.00	20.04.12	15.50	Machine stopped to attend oil leakages in Governing system.
		30.04.12	09.45	02.05.12	18.35	Stopped due to low demand and high frequency
		26.05.12	14.05	26.05.12	17.35	Machine stopped to attend oil leakage.
		07.06.12	12.40	09.06.12	08.15	Stopped due to low demand and high frequency
		06.07.12	18.35	06.07.12	19.50	Tripped due to operation of Generator transformer standby earth fault 64SGT relay.
		13.07.12	12.38	13.07.12	15.58	Machine tripped as the 66 KV bus became dead due tripping of 160 MVA ICT I & II due to Grid disturbance
		30.07.12	02.35	30.07.12	08.35	
		31.07.12	13.02	31.07.12	16.22	Machine tripped on low vaccum the load on GTs reduced due to tripping of 160 MVA ICT I& II on under frequency relay.
		05.08.12	06.12	07.08.12	02.35	Machine stopped to attend CW line leakages.
		13.08.12	14.27	13.08.12	17.43	Machine tripped on high exhaust temperature. The vaccum reduced due to malfunctioning of MS-13.
		15.08.12	09.16	16.08.12	00.10	Stopped due to low demand and high frequency
		16.08.12	00.48	22.08.12	11.20	Machine tripped due to axial shift high alarm.
		25.08.12	14.32	30.08.12	00.10	Stopped due to low demand and high frequency
		30.08.12	14.05	30.08.12	16.25	Machine stopped to attend ejector leakages.
		07.09.12	13.05	10.09.12	12.40	Stopped due to low demand and high frequency
		15.09.12	05.10	01.10.12	03.35	Stopped due to low demand and high frequency
		03.10.12	22.48	09.01.13	04.20	Shutdown for major overhauling
		17.01.13	21.30	31.01.13	16.25	Stopped due to low demand and high frequency
		04.02.13	12.28	04.02.13	13.40	Tripped due to Hot well level high/low vaccum.
		10.02.13	20.36	10.02.13	21.45	Tripped turbine trip CH-2 alarm.
		10.02.13	22.55	11.02.13	01.35	Tripped turbine trip CH-2 alarm.
		09.03.13	16.05	15.03.13	12.25	Stopped due to low demand and high frequency

(C) PRAGATI STATION

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
1	104	14.04.12	14:22	16.04.12	5.40	Stopped due to low demand and high frequency
		27.05.12	3:00	27.05.12	11.44	
		28.05.12	6:25	28.05.12	17.03	Tripped on internal fault
		07.06.12	23:18	08.06.12	0.26	
		08.06.12	1:41	08.06.12	5.10	
		16.06.12	9:17	16.06.12	13.29	
		23.06.12	10:17	23.06.12	12.12	
		23.06.12	17:38	23.06.12	18.32	
		26.06.12	18:00	26.06.12	19.31	
		27.06.12	9:31	27.06.12	12.19	
		20.07.12	21:24	20.07.12	23.16	
		30.07.12	2:35	30.07.12	8.49	Grid Disturbance.
		31.07.12	13:02	31.07.12	15.43	
		10.08.12	6:00	17.08.12	0.41	Stopped for CI
		31.10.12	12:57	31.10.12	17.55	
		24.11.12	16:17	24.11.12	17.12	GT#1 & STG tripped on grid disturbance on bus-I dead
		30.11.12	3:07	30.11.12	4.13	
		15.12.12	9:45	15.12.12	14.17	GT#1 stopped for Inlet Air Filters replacement.
		16.12.12	5:25	16.12.12	7.28	Tripped due to Grid disturbance
		16.12.12	15:26	16.12.12	16.41	
		16.12.12	17:45	16.12.12	20.53	
		04.02.13	11:15	04.02.13	13.12	Tripped on internal fault
		11.03.13	18:42	14.03.13	19.12	
2	104	03.04.12	19:07	03.04.12	19.47	Tripped on on grid disturbance
		10.04.12	17:00	10.04.12	17.51	
		12.05.12	17:28	12.05.12	17.57	
		16.05.12	11:28	16.05.12	12.19	
		03.06.12	3:00	03.06.12	9.00	Stopped due to low demand and high frequency
		27.06.12	9:31	27.06.12	10.35	Tripped on internal fault
		01.07.12	4:00	01.07.12	10.43	Stopped due to low demand and high frequency
		06.07.12	18:50	07.07.12	12.28	
		13.07.12	12:40	13.07.12	13.35	Tripped due to Grid disturbance
		30.07.12	2:38	30.07.12	8.42	
		31.07.12	13:02	31.07.12	15.40	
		18.08.12	0:00	29.08.12	1.44	Stopped for HGPI
		31.08.12	22:38	31.08.12	23.00	Tripped on internal fault
		27.10.12	10:19	27.10.12	10.34	GT#2 & STG tripped on grid disturbance on bus-II
		27.10.12	14:03	27.10.12	14.22	
		27.10.12	17:36	27.10.12	18.00	
		14.12.12	9:57	14.12.12	15.06	GT#2 stopped for Inlet Air Filters replacement.
		16.12.12	5:25	16.12.12	6.48	
		16.12.12	15:26	16.12.12	16.36	
		16.12.12	17:26	16.12.12	20.50	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
STG	122	03.04.12	19:26	03.04.12	23.26	Tripped on on grid disturbance
		10.04.12	17:00	10.04.12	18.04.	
		12.05.12	17:28	12.05.12	18.48	
		16.05.12	11:28	16.05.12	12.25	
		10.06.12	3.05	10.06.12	9.46	Stopped due to low demand and high frequency
		10.06.12	12.30	10.06.12	15.12	Stopped due to internal fault
		27.06.12	9:31	27.06.12	11.15	Tripped on internal fault
		13.07.12	12:40	13.07.12	14.12	Tripped due to Grid disturbance
		30.07.12	2:35	30.07.12	13.41	
		31.07.12	13.02	31.07.12	20.58	
		09.08.12	9:43	09.08.12	16.40	Tripped on internal fault
		18.08.12	0:16	23.08.12	0.45	Stopped for PHE connection of Gt#1&GT#2
		31.08.12	22:38	01.09.12	12.56	Tripped on internal fault
		29.09.12	21:08	29.09.12	22.30	
		10.10.12	9:40	10.10.12	10.27	
		20.10.12	5:01	10.10.12	20.30	
		27.10.12	10:19	27.10.12	11.22	
		27.10.12	14:03	27.10.12	15.07	
		27.10.12	17:36	27.10.12	18.40	
		31.10.12	12:57	31.10.12	13.58	
		24.11.12	16:17	24.11.12	17.42	
		30.11.12	3.07	30.11.12	7.45	
		30.11.12	7.45	30.11.12	19.08	delayed due to leakage in generator cooler.
		05.12.12	4.55	05.12.12	13.24	Tripped on internal fault
		16.12.12	5.25	16.12.12	7.42	
		16.12.12	15.26	16.12.12	17.30	
		16.12.12	17.45	16.12.12	21.31	
		21.12.12	10.26	21.12.12	20.35	STG Stopped to attend High vibration of exciter.
		15.01.13	6.47	15.01.13	10.18	Tripped on internal fault
		16.01.13	2.38	16.01.13	5.28	
		17.01.13	8.27	17.01.13	13.05	
		23.01.13	14.45	24.01.13	01.24	To attend internal fault

(D) BADARPUR THERMAL POWER STATION

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
1	95	24-04-12	18:35	25-04-12	18:15	Reserve shutdown
		13-05-12	13:12	13-05-12	13:43	Furnace Disturbance
		26-05-12	8:32	26-05-12	11:10	Grid Disturbance
		26-05-12	12:37	29-05-12	1:25	Water wall Tube Leakage
		20-07-12	22:02	22-07-12	13:00	Water wall Tube Leakage
		22-07-12	13:00	23-07-12	3:07	CW Pump not available
		30-07-12	6:58	30-07-12	10:57	Grid Disturbance
		31-07-12	13:08	31-07-12	16:48	
		10-08-12	12:08	10-08-12	13:25	Control Supply Cable fault
		12-08-12	11:57	12-08-12	14:20	
		14-08-12	19:00	16-08-12	10:43	Reserve shutdown
		21-08-12	22:05	21-08-12	22:52	Furnace Disturbance
		06-09-12	16:10	07-09-12	10:53	Leakage in drum Manhole
		18-09-12	9:32	18-09-12	10:53	Furnace Disturbance
		28-09-12	23:43	01-10-12	12:25	Reserve shutdown
		05-10-12	5:45	05-10-12	6:22	Furnace Disturbance
		12-10-12	8:23	12-10-12	9:11	
		14-10-12	6:32	14-10-12	7:12	
		23-10-12	16:54	29-10-12	9:00	Reserve shutdown
		29-10-12	9:00	19-11-12	8:54	Planned shutdown
		19-11-12	10:21	19-11-12	10:47	Furnace Disturbance
		21-11-12	19:35	21-11-12	20:35	
		24-11-12	7:28	07-12-12	17:33	Reserve shutdown
		17.01.13	09.01	21.01.13	06.16	
		04.02.13	13.05	11.02.13	12.11	
		15.02.13	21.37	26.02.13	05.50	
		28.03.13	12.21	01.04.13	19.18	
2	95	05-04-12	3:30	05-04-12	12:27	Loss of excitation field
		15-05-12	12:05	19-05-12	18:30	CW Shortage
		26-05-12	8:32	26-05-12	11:43	Grid Disturbance
		06-06-12	19:08	06-06-12	19:55	PC feeder trip on Low LT Voltage caused by system jerk
		06-07-12	19:20	09-07-12	10:05	Reserve shutdown
		30-07-12	2:35	30-07-12	5:27	Grid Disturbance
		30-07-12	6:58	30-07-12	11:29	
		31-07-12	13:01	31-07-12	17:05	
		18-08-12	22:59	18-08-12	23:55	Furnace Disturbance
		29-08-12	9:30	01-09-12	10:00	Reserve shutdown
		01-09-12	10:00	17-09-12	0:17	Planed shutdown Boiler overhauling
		17-09-12	6:43	17-09-12	18:22	Unit stopped due to coal bunker chocking
		22-09-12	11:52	24-09-12	10:47	Reserve shutdown
		24-09-12	11:46	24-09-12	13:11	Low Condenser Vacuum
		29-09-12	13:40	01-10-12	10:24	Reserve shutdown
		13-10-12	0:00	13-10-12	19:24	
		16-10-12	23:05	16-10-12	23:54	Furnace Disturbance
		23-11-12	10:24	23-11-12	11:05	
		27-11-12	23:59	07-12-12	21:20	Reserve shutdown
		10-12-12	9:44	13-12-12	2:00	Platen SH Leakage
		11.02.13	06.31	19.02.13	00.00	LP Turbine Blade failure
		20.02.13	00.00	26.02.13	10.26	Reserve shutdown

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
3	95	01-04-12	23:45	22-04-12	17:12	Planned shutdown
		22-04-12	18:21	22-04-12	21:46	Generator Over Fluxing
		12-05-12	6:04	13-05-12	5:17	Economiser Tube leakage
		13-05-12	20:22	13-05-12	21:25	Furnace Disturbance
		26-05-12	8:32	26-05-12	15:20	Grid Disturbance
		27-05-12	7:20	27-05-12	8:05	Furnace Disturbance
		30-05-12	15:05	30-05-12	15:40	
		02-06-12	11:46	03-06-12	16:15	CW Shortage
		09-06-12	23:50	10-06-12	10:43	Fuurnace plate red hot near burner
		15-06-12	7:40	15-06-12	8:50	Furnace Disturbance
		28-06-12	6:15	28-06-12	12:55	Furnace Disturbance
		30-07-12	6:58	30-07-12	10:25	Grid Disturbance
		31-07-12	13:08	31-07-12	16:18	
		31-07-12	18:35	31-07-12	19:17	Low Condenser Vacuum
		31-07-12	20:05	01-08-12	0:40	Excitation System Problem
		04-08-12	1:32	04-08-12	5:40	Furnace Disturbance
		04-08-12	19:34	04-08-12	20:25	
		10-08-12	7:15	10-08-12	8:15	
		14-08-12	12:44	16-08-12	11:25	Reserve shutdown
		16-08-12	15:44	16-08-12	16:36	Furnace Disturbance
		18-08-12	6:15	19-08-12	1:05	Economiser Tube leakage
		21-08-12	22:28	21-08-12	23:18	Furnace Disturbance
		23-08-12	4:42	30-08-12	20:32	Reserve shutdown
		30-08-12	20:37	31-08-12	20:25	Generator Stator Earth Fault
		13-10-12	14:57	13-10-12	15:42	Furnace Disturbance
		14-10-12	6:52	14-10-12	7:50	
		20-10-12	9:36	20-10-12	10:15	
		21-10-12	8:27	29-10-12	6:43	Reserve shutdown
		14-11-12	8:56	24-11-12	5:08	
		29-11-12	5:05	29-11-12	6:06	Furnace Disturbance
		16-12-12	0:07	20-12-12	11:50	Reserve shutdown
		16.01.13	23.58	21.01.13	05.43	
		22.01.13	12.23	25.01.13	13.37	
		04.02.13	12.26	26.02.13	07.11	
4	210	21-05-12	7:12	23-05-12	15:35	CW Shortage
		26-05-12	8:32	26-05-12	11:28	Grid Disturbance
		06-07-12	7:35	06-07-12	9:33	Excitation System Problem
		30-07-12	2:35	30-07-12	18:00	Grid Disturbance
		31-07-12	13:01	31-07-12	17:25	
		09-08-12	22:57	12-08-12	7:52	Reheater Tube Leakage
		12-08-12	8:10	12-08-12	15:56	BFP 4C breaker bursting
		23-08-12	0:15	23-08-12	1:47	Furnace Disturbance
		23-08-12	2:55	23-08-12	4:05	
		23-08-12	9:37	23-08-12	13:45	
		25-08-12	23:18	26-08-12	0:48	
		18-09-12	2:05	18-09-12	4:05	
		18-09-12	4:05	18-09-12	14:35	Control Supply Cable fault
		26-11-12	9:22	26-11-12	21:18	Relay Malfunction
		07-12-12	21:47	10-12-12	16:30	Reserve shutdown
		10-12-12	16:30	10-12-12	17:00	Seal Oil system
		10-12-12	17:00	26-12-12	16:42	Planned shutdown
		31-12-12	13:32	02.01.13	17.50	Steam Cooled screen tube leakage
		24.02.13	09.10	24.02.13	11.14	Furnance disturbance
		05.03.13	16.25	05.03.13	18.52	Generator protection

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
5	210	28-04-12	12:40	30-04-12	6:25	Reserve shutdown
		19-05-12	14:48	21-05-12	5:45	CW Shortage
		26-05-12	8:32	26-05-12	11:35	Grid Disturbance
		03-06-12	11:46	27-06-12	20:37	Planned shutdown boiler overhauling
		25-07-12	20:34	26-07-12	21:57	Water wall Tube Leakage
		27-07-12	14:51	27-07-12	16:04	Both BFPs tripped
		30-07-12	6:58	30-07-12	15:10	Grid Disturbance
		31-07-12	13:12	31-07-12	18:01	
		01-08-12	19:30	01-08-12	22:15	Furnace Disturbance
		15-09-12	21:28	16-09-12	13:30	Water wall Tube Leakage
		16-09-12	13:30	17-09-12	9:08	Reserve shutdown
		03-10-12	11:33	04-10-12	16:00	Water wall Tube Leakage
		13-10-12	15:13	14-10-12	4:58	
		06-11-12	16:12	06-11-12	17:06	Furnace Disturbance
		14-12-12	9:27	15-12-12	19:46	Water wall Tube Leakage
		19-12-12	19:42	21-12-12	12:19	Generator Stator Earth Fault
		06.01.13	23.25	08.01.13	00.30	BTL – LTSH tube leakage
		24.02.13	14.53	24.02.13	21.53	Furnance disturbance
		26.03.13	21.57	28.03.13	09.13	Reserve shutdown

(E) BAWANA CCGT POWER STATION

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
1	216	20.04.12	15:41	20.04.12	19:25	Excessive Fuel Trip
		12.05.12	13:29	12.05.12	16:03	Auxiliary Failure due to bay 403 trip
		18.05.12	00:48	18.05.12	4:08	Lub Oil pressure low on GT#1 due to LT trippings
		27.05.12	18:13	27.05.12	20:18	High GT exhaust spread temperature
		31.05.12	19:00	01.06.12	0:26	GT#1 TRIP due to Combustion trouble and high exhaust temperature spread trip at frequency of 50.3Hz
		12.06.12	09:44	14.06.12	18:26	Rotor eath fault
		23.06.12	12:19	23.06.12	17:45	Fire protection trip
		25.06.12	06:01	26.06.12	8:29	High exhaust temperature trip
		18.07.12	2:23	18.07.12	4:20	High GT exhaust spread temperature
		31.07.12	13:00	31.07.12	16:05	Grid Failure
		03.08.12	14:56	03.08.12	16:20	Lub oil pressure low due to LT failure
		28.09.12	03:38	28.09.12	6:35	High GT exhaust temperature
		06.10.12	9:30	06.10.12	17:18	RST diagnostic alarm , 125V DC ground on GT,STG tripped on Customer Trip (GT trip)
		06.10.12	19:13	07.10.12	0:01	GT trip due to lub oil pr low
		15.10.12	14:49	15.10.12	18:08	Gas fuel inter valve press(P2) low
		15.10.12	19:24	15.10.12	21:35	Lub oil Pr low trip
		15.10.12	22:20	16.10.12	2:39	Rotor earth fault
		17.10.12	10:43	17.10.12	14:23	GT tripped on customer trip
		18.10.12	21:59	19.10.12	16:19	Generator Protection due to rotor earth fault
		8.11.12	13:16	08.11.12	18:06	Auxiliary Failure due to LT failure
		19.11.12	22:36	20.11.12	4:00	Loss of Flame
		30.11.12	18:50	30.11.12	20:24	Purge valve fault
		23.12.12	10:35	29.12.12	10:55	Tripped on high DP, After this GT#2 was taken into service,
		05.02.13	13.13	05.02.13	07.58	400 KV DTL lines tripped Generator frequency touched above 53Hz GT unloaded and tripped

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
2	216	19.07.12	11.34	19.07.12	15.45	Customer trip (IP Drum level low, D/D POSITION > 2%)
		27.02.13	14.28	Load on G.T.- 1		High fuel gas temperature
STG	253	20.04.12	15:41	20.04.12	19:25	HRSG #1 tripped due to GT#1 trip
		24.04.12	08:03	24.04.12	19:08	STG#1 tripped on very high transformer oil temperature
		12.05.12	13:29	13.05.12	3:27	HRSG tripped on GT#1 trip
		18.05.12	00:48	21.05.12	23:50	HRSG tripped on GT#1 trip
		27.05.12	18:13	27.05.12	23:21	ST trip due to GT Trip
		30.05.12	11:39	30.05.12	14:35	Generator cold gas temperature high due to PHE choking
		30.05.12	11:18	31.05.12	1:32	IP Drum level high
		31.05.12	19:00	31.05.12	1:32	ST trip due to GT trip
		12.06.12	9:44	14.06.12	18:26	GT Tripped
		23.06.12	12:19	23-01-00	17:45	ST trip due to GT trip
		02.07.12	19:45	03.07.12	1:39	Generator breaker tripped
		17.07.12	09:28	17.07.12	15:26	ST trip due to GT trip
		18.07.12	2:23	18.07.12	23:21	ST trip due to GT trip
		24.07.12	19:18	00-01-00	20:03	HMI emergency trip
		31.07.12	13:00	31.07.12	17:25	Grid Failure
		03.08.12	14:56	03.08.12	20:25	Lub oil pressure low
		28.09.12	03:38	29.09.12	14:18	ST trip due to GT trip
		06.10.12	09:30	07.10.12	1:46	RST diagnostic alarm , 125V DC ground on GT,STG tripped on Customer Trip (GT trip)
		15.10.12	14:49	16.10.12	4:10	ST trip due to GT trip
		17.10.12	10:43	17.10.12	16:19	GT tripped on customer trip
		18.10.12	21:59	29.10.12	11:44	STG trip on GT trip, under backing down also.
		08.11.12	13:16	08.11.12	20:13	LT breakers 1 DA, 2DA, 1KA tripped
		29.11.12	22:27	30.11.12	6:53	Rotor earth fault
		30.11.12	18:50	30.11.12	21:52	ST trip due to GT trip
		02.12.12	13:21	02.12.12	17:13	STG#1 tripped on low forward power relay(TMR became faulty & load jumped from 60MW to 90MW)
		08.12.12	17:08	08.12.12	19:28	STG#1 was running in stable condition It tripped due to HVCB opening
		18.12.12	03:25	18.12.12	10:43	Under Excitation fault
		23.12.12	10:31	24.12.12	0:44	STG #1 tripped on GT#1 trip
		26.12.12	21:35	27.12.12	6:40	Tripped due to speed pick up problem
		27.12.12	09:32	27.12.12	13:46	Tripped due to speed pick up problem
		29.12.12	18:02	29.12.12	18:58	24 Volt supply failure
		05.02.13	13:25	05.02.13	14:25	STG#1 was tripped through EPB when HRSG had tripped on high IP Drum level
		05.02.13	3:13	05.02.13	11:35	400 KV DTL lines tripped Generator frequency touched above 53HzGT unloaded and tripped
		09.02.13	16:33	09.02.13	18:04	STG#1 turbine tripped on tripping of HRSG#2 on high LP drum level protection, earlier HRSG#1 had tripped on high HP MS temperature
		11.02.13	17;49	11.02.13	20:29	STG#1 tripped on low vacuum.
		27.02.13	14:28	27.02.13	20:13	ST trip due to GT trip

(E) RITHALA POWER STATION

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
1	31.8	30.03.12	20:19	02.04.12	17:50	GT1 was started & synchronized with grid at 18:40hrs for STG start-up but it was stopped at 20:19 hrs as per management Decision(TPDDL)
		10.04.12	17:11	11.04.12	6:32	GT-01 circuit breaker got open on overvoltage due to fault at CENNET end
		28.04.12	23:15	01.05.12	15:09	Fuel Gas supplied by RIL was insufficient to run the plant.
		07.05.12	13:52	02.06.12	14:38	Due to HRSG-1 GFD trouble. Diverter damper got stuck at 56% open duing triping of STG.
		02.06.12	17:00	04.06.12	13:26	shutdown taken due to high vibration
		04.06.12	17:31	11.06.12	17:39	
		18.06.12	15:20	18.06.12	15:26	GCB opened manually for re-synchronizing as m/c was in islanding mode due to fault at CENNET end.
		22.06.12	19:26	23.06.12	2:53	GT-1 shut down was taken for GT-2 stat up
		23.06.12	23:43	25.06.12	10:56	Lower gas supply from KG Basin
		25.06.12	15:23	01.07.12	19:22	
		04.07.12	0:03	04.07.12	2:57	GT-1 tripped on "SRV NOT TACKING" alarm.
		04.07.12	11:58	07.07.12	3:19	
		12.07.12	10:42	12.07.12	22:44	Exhaust spread high
		12.07.12	23:07	13.07.12	0:06	Tripping reason not found
		14.07.12	5:42	14.07.12	6:55	At 05:40 hrs RG-5 line tripped and WHRB-1 GFD not closed.
		14.07.12	9:13	14.07.12	11:45	turbine bearing-2 drain oil temperature high(False value)
		17.07.12	2:48	20.07.12	21:40	Lower gas supplied from KG Basin
		22.07.12	3:41	23.07.12	11:15	
		24.07.12	2:35	30.07.12	9:02	
		30.07.12	14:50	30.07.12	15:23	Exhaust thermocouple
		31.07.12	1:39	31.07.12	17:24	Lower gas supplied by KG Basin
		31.07.12	17:29	31.07.12	18:46	'Exhaust thermocouple lock-out'
		31.07.12	18:59	31.07.12	20:18	
		02.08.12	2:35	09.08.12	10:55	Lower gas supplied from KG Basin
		10.08.12	00:46	14.08.12	8:58	
		15.08.12	0:48	21.08.12	10:27	No power Demand as cennet
		25.08.12	2:04	27.08.12	9:03	Lower gas supplied from KG Basin
		01.09.12	5:55	03.09.12	9:01	
		08.09.12	2:01	11.09.12	0:28	
		15.09.12	2:15	21.09.12	8:54	
		22.09.12	00:12	24.09.12	8:57	
		25.09.12	18:35	26.09.12	8:57	Heavy water leakage was observed from ACW pump-2 NRV body (crack formation)
		02.10.12	0:05	15.10.12	9:57	Lower gas supplied from KG Basin
		16.10.12	3:50	16.10.12	6:45	'SRV not tracking trip'
		18.10.12	7:50	22.10.12	9:52	
		24.10.12	5:09	29.10.12	4:07	No schedule have been given by SLDC on Spot gas
		02.11.12	00:08	05.11.12	8:35	
		08.11.12	22:00	10.11.12	5:57	
		10.11.12	02:01	18.11.12	0:27	
		18.11.12	16:09	29.11.12	14:17	
		30.11.12	20:04	10.12.12	9:53	
		10.12.12	16:21	10.12.12	18:14	load gear bearing -1 temp high shut down
		12.12.12	18:04	31.12.12	8:04	No schedule have been given by SLDC on Spot gas
		01.01.13	17.04	19.03.13	17.20	lube oil temperature high shutdown/No schedule have been given by SLDC on Spot gas after rectification of problem
		19.03.13	17.32	Contd.		No schedule have been given by SLDC on Spot gas

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	31.8	03.04.12	1:23	04.04.12	22:18	Lower gas supplied from KG Basin
		05.04.12	14:12	06.04.12	22:00	
		07.04.12	12:56	10.04.12	3:28	
		10.04.12	11:15	11.04.12	0:05	
		11.04.12	00:13	11.04.12	0:35	
		11.04.12	13:03	16.04.12	15:54	
		16.04.12	19:46	16.04.12	20:55	
		17.04.12	15:51	28.04.12	19:27	
		01.05.12	15:22	07.05.12	19:46	
		13.05.12	5:52	13.05.12	6:28	
		29.05.12	21:00	29.05.12	21:08	
		01.06.12	17:15	01.06.12	17:17	
		04.06.12	18:59	04.06.12	20:05	
		08.06.12	5:20	08.06.12	6:15	
		11.06.12	11:36	12.06.12	11:09	
		12.06.12	16:15	14.06.12	12:17	
		14.06.12	17:10	23.06.12	19:00	
		27.06.12	12:02	27.06.12	13:04	
		29.06.12	6:36	29.06.12	7:52	
		01.07.12	22:41	04.07.12	16:53	
		06.07.12	17:48	15.07.12	11:03	
		15.07.12	13:02	18.07.12	10:05	
		20.07.12	6:06	20.07.12	18:30	
		21.07.12	16:04	23.07.12	9:02	
		25.07.12	19:06	26.07.12	10:17	
		27.07.12	10:17	27.07.12	11:29	
		28.07.12	3:07	30.07.12	9:31	
		31.07.12	13:23	31.07.12	15:53	
		31.07.12	21:23	01.08.12	11:20	
		02.08.12	2:39	03.08.12	8:55	
		06.08.12	15:18	07.08.12	9:10	
		07.08.12	20:39	08.08.12	8:59	
		08.08.12	17:57	09.08.12	7:39	
		11.08.12	6:09	13.08.12	9:35	
		15.08.12	0:34	15.08.12	21:21	
		18.08.12	8:46	18.08.12	11:30	
		19.08.12	0:11	20.08.12	9:04	
		21.08.12	8:04	10.09.12	9:08	
		10.09.12	14:32	10.09.12	17:17	
		10.09.12	23:13	17.09.12	9:08	
		19.09.12	7:38	19.09.12	10:25	
		20.09.12	13:52	20.09.12	15:40	
		20.09.12	22:04	03.10.12	18:21	
		07.10.12	0:32	09.10.12	9:00	
		13.10.12	0:35	18.10.12	10:15	
		20.10.12	0:10	26.10.12	8:42	
		26.10.12	23:20	29.10.12	1:43	No schedule have been given by SLDC on Spot gas
		30.10.12	17:01	13.11.12	13:51	
		14.11.12	01:21	22.11.12	8:54	
		24.11.12	21:01	26.11.12	13:14	

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
2	31.8	28.11.12	00:05	04.12.12	9:58	No schedule have been given by SLDC on Spot gas
		06.12.12	20:59	17.12.12	10:09	
		19.12.12	20:04	24.12.12	9:30	
		26.12.12	19:03	03.01.13	06.44	
		04.01.13	15:12	07.01.13	6:01	
		07.01.13	17:07	08.01.13	8:58	
		08.01.13	17:08	09.01.13	8:00	
		09.01.13	17:06	10.01.13	6:16	
		10.01.13	17:04	11.01.13	5:54	
		11.01.13	20:02	16.01.13	9:12	
		17.01.13	08:18	21.01.13	2:46	
		22-01-13	00:12	24.01.13	6:53	
		25-01-13	00:09	29.01.13	5:54	
		30-01-13	15:03	31.01.13	7:58	
		01.02.13	12.06	07.02.13	07.56	
		08.02.13	08.11	20.02.13	10.02	
		20.02.13	10.09	25.02.13	10.37	Gas turbine started for checking of GCV and shut down taken in seven minute due to no despatch schedule given by SLDC
		27.02.13	00.08	05.03.13	11.31	Stopped on less demand, available on spot
		05.03.13	15.38	Contd.		No schedule have been given by SLDC on Spot gas
STG	31.8	03.04.12	1:23	04.04.12	22:18	Lower gas supplied from KG Basin
		05.04.12	14:12	06.04.12	22:00	
		07.04.12	12:56	10.04.12	3:28	
		10.04.12	11:15	11.04.12	0:05	
		11.04.12	00:13	11.04.12	0:35	
		11.04.12	13:03	16.04.12	15:54	
		16.04.12	19:46	16.04.12	20:55	
		17.04.12	15:51	28.04.12	19:27	
		01.05.12	15:22	07.05.12	19:46	
		13.05.12	5:52	13.05.12	6:28	
		29.05.12	21:00	29.05.12	21:08	
		01.06.12	17:15	01.06.12	17:17	
		04.06.12	18:59	04.06.12	20:05	
		08.06.12	5:20	08.06.12	6:15	
		11.06.12	11:36	12.06.12	11:09	
		12.06.12	16:15	14.06.12	12:17	
		14.06.12	17:10	23.06.12	19:00	
		27.06.12	12:02	27.06.12	13:04	
		29.06.12	6:36	29.06.12	7:52	
		01.07.12	22:41	04.07.12	16:53	
		06.07.12	17:48	15.07.12	11:03	
		15.07.12	13:02	18.07.12	10:05	
		20.07.12	6:06	20.07.12	18:30	
		21.07.12	16:04	23.07.12	9:02	
		25.07.12	19:06	26.07.12	10:17	
		27.07.12	10:17	27.07.12	11:29	
		28.07.12	3:07	30.07.12	9:31	
		31.07.12	13:23	31.07.12	15:53	
		31.07.12	21:23	01.08.12	11:20	

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time (Hrs)	Date	Time (Hrs)	
STG	31.8	02.08.12	2:39	03.08.12	8:55	
		06.08.12	15:18	07.08.12	9:10	
		07.08.12	20:39	08.08.12	8:59	
		08.08.12	17:57	09.08.12	7:39	
		11.08.12	6:09	13.08.12	9:35	
		15.08.12	0:34	15.08.12	21:21	
		18.08.12	8:46	18.08.12	11:30	
		19.08.12	0:11	20.08.12	9:04	
		21.08.12	8:04	10.09.12	9:08	
		10.09.12	14:32	10.09.12	17:17	
		10.09.12	23:13	17.09.12	9:08	
		19.09.12	7:38	19.09.12	10:25	
		20.09.12	13:52	20.09.12	15:40	
		20.09.12	22:04	03.10.12	18:21	
		07.10.12	0:32	09.10.12	9:00	
		13.10.12	0:35	18.10.12	10:15	
		20.10.12	0:10	26.10.12	8:42	
		26.10.12	23:20	29.10.12	1:43	No schedule have been given by SLDC on Spot gas
		30.10.12	17:01	29.10.12	5:42	
		02.11.12	00:01	05.11.12	12:38	
		08.11.12	21:56	10.11.12	9:45	
		10.11.12	01:55	13.11.12	17:50	
		14.11.12	01:15	18.11.12	6:25	
		18.11.12	16:06	22.11.12	13:59	
		24.11.12	21:01	26.11.12	16:57	
		28.11.12	00:01	29.11.12	17:44	
		30.11.12	04:31	30.11.12	6:35	STG electronic governor failure trip
		30.11.12	19:58	04.12.12	14:04	No schedule have been given by SLDC on Spot gas
		06.12.12	20:59	10.12.12	13:55	
		10.12.12	16:21	10.12.12	19:29	load gear bearing -1 temp high shut down(GT-1)
		12.12.12	17:59	17.12.12	14:05	No schedule have been given by SLDC on Spot gas
		19.12.12	20:00	24.12.12	13:26	
		26-12-12	19:00	31.12.12	11:54	
		01.01.13	17:04	03.01.13	10:05	lube oil temperature high shutdown
		04-01-13	15:08	07.01.13	9:28	No schedule have been given by SLDC on Spot gas
		07-01-13	17:04	08.01.13	11:45	
		08.01.13	17:05	09.01.13	10:45	
		09.01.13	17:03	10.01.13	8:53	
		10.01.13	17:01	11.01.13	8:51	
		11.01.13	19:58	16.01.13	13:35	
		17.01.13	08:15	21.01.13	6:49	
		22.01.13	00:08	24.01.13	10:23	
		25.01.13	00:07	29.01.13	10:00	
		30.01.13	15:01	31.01.13	10:41	
		01.02.13	12.04	07.02.13	11.32	
		08.02.13	08.08	25.02.13	15.09	
		27.02.13	00.01	Contd.		

9. POWER SUPPLY POSITION OF DELHI DURING 2012-13

9.1 Power supply position during the month of April 2012

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	78.640	76.251	77.832	75.465
2	**RIHAND-I**	53.055	51.442	52.304	50.712
3	**RIHAND-II**	87.774	85.153	86.289	83.710
4	**RIHAND-III**	0.000	0.000	0.000	0.000
5	**UNCHAHAR-I**	16.365	15.876	15.190	14.734
6	**UNCHAHAR-II**	17.490	16.944	16.227	15.717
7	**UNCHAHAR-III**	19.565	18.981	18.189	17.643
8	**DADRI(TH)**	515.450	500.053	432.364	419.528
9	**DADRI(TH)- Stage-II**	253.879	246.301	239.912	232.728
10	**FARAKA**	13.092	12.701	9.308	9.042
11	**KHELGAON**	29.943	29.044	24.393	23.664
12	**KHELGAON-II**	78.437	76.046	69.147	67.062
13	**ANTA (GT)**	21.648	20.985	14.230	13.796
14	**ANTA (Liquid)**	6.751	6.563	0.000	0.000
15	**ANTA (RLNG)**	0.000	0.000	0.000	0.000
16	**AURAIYA (GT)**	24.707	23.959	15.598	15.130
17	**AURAIYA(Liquid)**	16.300	15.842	0.000	0.000
18	**AURAIYA (RLNG)**	4.755	4.619	0.000	0.000
19	**DADRI (GT)**	52.611	51.040	34.848	33.814
20	**DADRI (Liquid)**	10.095	9.794	0.000	0.000
21	**DADRI (RLNG)**	0.000	0.000	0.000	0.000
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**1300.555**	**1261.594**	**1105.831**	**1072.745**
	NHPC STATIONS				
22	**TANAKPUR**	1.493	1.449	0.557	0.540
23	**CHAMERA-I**	20.070	19.480	7.759	7.535
24	**CHAMERA-II**	16.319	15.832	6.676	6.481
25	**CHAMERA-III**	0.000	0.000	0.000	0.000
26	**BAIRA SUIL**	12.092	11.727	4.738	4.598
27	**SALAL**	33.293	32.309	13.262	12.877
28	**DULASTI**	25.191	24.450	10.440	10.138
29	**DAULI GANGA**	6.100	5.916	2.394	2.324
30	**URI**	38.365	37.218	14.826	14.392
31	**SEWA -II**	9.636	9.343	3.536	3.430
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**162.557**	**157.723**	**64.188**	**62.316**
	NPC				
32	**NAPP**	20.611	19.996	20.611	19.996
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	38.160	37.021	38.160	37.021
C	**TOTAL NPC (33 TO 34)**	**58.771**	**57.017**	**58.771**	**57.017**
D	**NATHPA JHAKHRI (SJVNL)**	36.875	35.781	14.537	14.114

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
	THDC				
35	**TEHRI**	19.419	18.839	19.419	18.839
36	**KOTESHWAR**	8.267	8.022	8.267	8.022
E.	**TOTAL THDC (TOTAL 35 TO 36)**	27.687	26.861	27.687	26.861
F	**JHAJJAR**	51.919	50.495	14.349	13.956
G	**TALA HEP**	3.790	3.682	3.790	3.682
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	1642.153	1593.152	1289.151	1250.690
	BILATERAL IMPORT				
i)	**WEST BENGAL**	30.665	30.259	30.259	29.415
ii)	**MADHYA PRADESH**	0.000	0.000	0.000	0.000
iii)	**HARYANA(FOR TPDDL) LT**	1.443	1.414	1.414	1.299
iv)	**HARYANA**	29.689	29.245	29.245	28.370
v)	**DVC**	162.522	160.398	160.398	155.580
vi)	**DVC CTPS (BRPL)**	23.590	23.285	23.285	22.545
vii)	**DVC CTPS (BYPL)**	77.232	76.221	76.221	74.037
viii)	**DVC CTPS (TPDDL)**	20.801	20.529	20.529	19.899
ix)	**DVC METHON (TPDDL)**	97.855	96.574	96.574	93.674
x)	**PUNJAB**	3.641	3.591	3.591	3.497
xi)	**ANDHRA PRADESH**	0.000	0.000	0.000	0.000
xii)	**HIMACHAL PRADESH**	49.186	48.626	48.626	47.310
xiii)	**POWER EXCHANGE(IEX)**	0.106	0.103	0.106	0.103
xiv)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL BILATERAL IMPORT**	496.730	490.245	490.248	475.729
	BILATERAL EXPORT				
i)	**TO RAJASTHAN**	-2.411	-2.447	-2.447	-2.588
ii)	**TO UTTAR PRADESH**	-0.687	-0.701	-0.701	-0.763
iii)	**TO CHATTISHGARH**	-27.437	-28.061	-28.061	-28.926
iv)	**TO KERALA**	-1.350	-1.381	-1.381	-1.420
v)	**TO HIMACHAL PRADESH**	-6.816	-6.907	-6.907	-7.187
vi)	**TO WEST BENGAL**	-0.409	-0.413	-0.413	-0.425
vii)	**TO POWER EXCHANGE (IEX)**	-129.520	-133.566	-129.520	-133.566
viii)	**TO POWER EXCHANGE (PX)**	-10.105	-10.395	-10.105	-10.395
ix)	**TO SHARE PROJECT (HARYANA)**	-10.910	-11.227	-10.910	-11.227
x)	**TO POWER EXCHANGE (PUNJAB)**	-2.257	-2.320	-2.257	-2.320
J	**TOTAL EXPORT**	-191.902	-197.418	-192.702	-198.817
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**1946.981**	**1885.979**	**1586.697**	**1527.602**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-276.047
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				75.609
ii)	**GT**				117.843
iii)	**PRAGATI**				208.294
iv)	**RITHALA**				24.958
v)	**BAWANA (CCGT)**				106.315
vi)	**Timarpur - Okhla Waste Management**				5.860
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				538.879

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
viii)	**IMPORT FROM BTPS**				351.229
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				890.108
x)	**RENEWABLE SOLAR (TPDDL)**				0.210
xi)	**RENEWABLE SOLAR (BRPL)**				0.110
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				**0.320**
xiv)	**TOTAL AVAILABILITY (ix + xii)**				890.428
M	**TOTAL CONSUMPTION**				2141.985
N	**LOAD SHEDDING**				3.215
O	**REQUIREMENT**				2145.200
P	**% DEPENDENCE ON NORTHERN GRID**				73.57
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				23.169
R	**NET CONSUMPTION OF DELHI**				2118.816

9.2 Power supply position during the month of May 2012

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	87.089	84.935	87.059	84.905
2	**RIHAND-I**	65.639	64.020	65.615	63.997
3	**RIHAND-II**	86.937	84.792	86.902	84.758
4	**RIHAND-III**	0.000	0.000	0.000	0.000
5	**UNCHAHAR-I**	16.704	16.292	16.326	15.923
6	**UNCHAHAR-II**	33.600	32.771	32.852	32.041
7	**UNCHAHAR-III**	20.601	20.093	20.136	19.639
8	**DADRI(TH)**	439.406	428.556	417.980	407.657
9	**DADRI(TH)- Stage-II**	477.606	465.839	463.978	452.542
10	**FARAKA**	13.743	13.405	12.229	11.928
11	**KHELGAON**	30.341	29.593	29.325	28.601
12	**KHELGAON-II**	100.276	97.801	97.538	95.130
13	**ANTA (GT)**	17.441	17.011	16.289	15.888
14	**ANTA (Liquid)**	12.584	12.273	0.770	0.751
15	**ANTA (RLNG)**	0.000	0.000	0.000	0.000
16	**AURAIYA (GT)**	22.050	21.505	20.604	20.093
17	**AURAIYA(Liquid)**	23.858	23.270	1.336	1.302
18	**AURAIYA (RLNG)**	2.683	2.617	0.000	0.000
19	**DADRI (GT)**	39.710	38.731	36.932	36.021
20	**DADRI (Liquid)**	23.507	22.926	1.697	1.654
21	**DADRI (RLNG)**	0.000	0.000	0.000	0.000
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**1513.775**	**1476.428**	**1407.570**	**1372.831**
	NHPC STATIONS				
22	**TANAKPUR**	4.007	3.908	4.007	3.908
23	**CHAMERA-I**	21.452	20.923	21.452	20.923
24	**CHAMERA-II**	22.904	22.339	22.904	22.339
25	**CHAMERA-III**	0.000	0.000	0.000	0.000
26	**BAIRA SUIL**	11.774	11.484	11.774	11.484
27	**SALAL**	41.577	40.553	41.577	40.553
28	**DULASTI**	34.190	33.347	34.190	33.347
29	**DAULI GANGA**	12.894	12.576	12.894	12.576
30	**URI**	39.550	38.574	39.550	38.574
31	**SEWA -II**	7.927	7.731	7.927	7.731
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**196.274**	**191.435**	**196.274**	**191.435**
	NPC				
32	**NAPP**	14.920	14.553	14.920	14.553
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	31.170	30.403	31.170	30.403
C	**TOTAL NPC (32 TO 34)**	**46.089**	**44.956**	**46.089**	**44.956**
D	**NATHPA JHAKHRI (SJVNL)**	62.488	60.948	62.488	60.948
	THDC				
34	**TEHRI**	16.518	16.111	16.518	16.111
35	**KOTESHWAR**	8.056	7.857	8.056	7.857
E.	**TOTAL THDC**	24.574	23.968	24.574	23.968
F	**JHAJJAR**	113.629	110.814	26.458	25.803
G	**TALA HEP**	4.580	4.466	4.580	4.466
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	1961.410	1913.016	1768.034	1724.408

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
	BILATERAL IMPORT				
i)	**GUJRAT**	0.129	0.127	0.127	0.123
ii)	**WEST BENGAL**	1.716	1.694	1.694	1.651
iii)	**MADHYA PRADESH**	20.130	19.754	19.754	19.261
iv)	**HARYANA(FOR TPDDL) LT**	13.162	12.985	12.985	12.657
v)	**DVC**	171.017	168.791	168.791	164.626
vi)	**DVC CTPS (BRPL)**	38.269	37.772	37.772	36.842
vii)	**DVC CTPS (BYPL)**	23.913	23.603	23.603	23.022
viii)	**DVC CTPS (TPDDL)**	25.619	25.287	25.287	24.664
ix)	**DVC METHON (TPDDL)**	45.553	44.973	44.973	43.877
x)	**DVC (TATA STEEEL)**	4.062	4.008	4.008	3.908
xi)	**DVC MEJIA (LT-O8) BYPL**	70.351	69.441	69.441	67.734
xii)	**CHATTISHGARH**	118.837	117.017	117.017	114.131
xiii)	**ORISSA**	74.918	73.940	73.940	72.111
xiv)	**HIMACHAL PRADESH**	10.835	10.726	10.726	10.463
xv)	**JAMMU & KASHMIR**	58.062	57.479	57.479	56.060
xvi)	**POWER EXCHANGE(IEX)**	2.414	2.354	2.414	2.354
xvii)	**POWER EXCHANGE (PX)**	0.750	0.731	0.750	0.731
I	**TOTAL BILATERAL IMPORT**	679.767	670.713	670.793	654.247
	BILATERAL EXPORT				
i)	**TO JHARKHAND**	-0.476	-0.481	-0.481	-0.494
ii)	**TO POWER EXCHANGE (IEX)**	-187.702	-192.442	-187.702	-192.442
iii)	**TO POWER EXCHANGE (PX)**	-18.258	-18.717	-18.258	-18.717
iv)	**TO SHARE PROJECT (HARYANA)**	-18.025	-18.482	-18.025	-18.482
v)	**TO POWER EXCHANGE (PUNJAB)**	-2.743	-2.813	-2.743	-2.813
J	**TOTAL EXPORT**	-227.204	-232.935	-227.209	-232.947
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**2413.973**	**2350.794**	**2211.617**	**2145.707**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-334.415
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				68.548
ii)	**GT**				158.533
iii)	**PRAGATI**				214.310
iv)	**RITHALA**				21.655
v)	**BAWANA (CCGT)**				137.638
vi)	**Timarpur - Okhla Waste Management**				6.139
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				606.823
viii)	**IMPORT FROM BTPS**				370.683
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				977.506
x)	**RENEWABLE SOLAR (TPDDL)**				0.220
xi)	**RENEWABLE SOLAR (BRPL)**				0.120
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				**0.340**
xiv)	**TOTAL AVAILABILITY (ix + xii)**				977.846
M	**TOTAL CONSUMPTION**				2789.138
N	**LOAD SHEDDING**				11.286
O	**REQUIREMENT**				2800.424
P	**% DEPENDENCE ON NORTHERN GRID**				79.94
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				25.181
R	**NET CONSUMPTION OF DTL**				2763.957

9.3 Power supply position during the month of June 2012

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	90.859	88.595	90.859	88.595
2	**RIHAND-I**	63.889	62.302	63.889	62.302
3	**RIHAND-II**	78.776	76.833	78.776	76.833
4	**RIHAND-III**	0.000	0.000	0.000	0.000
5	**UNCHAHAR-I**	15.820	15.427	15.820	15.427
6	**UNCHAHAR-II**	32.313	31.511	32.313	31.511
7	**UNCHAHAR-III**	19.734	19.244	19.734	19.244
8	**DADRI(TH)**	514.119	501.351	503.363	490.859
9	**DADRI(TH)- Stage-II**	504.344	491.838	501.335	488.903
10	**FARAKA**	12.968	12.645	12.603	12.290
11	**KHELGAON**	28.577	27.867	28.516	27.806
12	**KHELGAON-II**	70.599	68.846	70.468	68.718
13	**ANTA (GT)**	13.589	13.252	13.416	13.083
14	**ANTA (Liquid)**	14.039	13.689	2.100	2.049
15	**ANTA (RLNG)**	0.000	0.000	0.000	0.000
16	**AURAIYA (GT)**	21.054	20.532	20.852	20.335
17	**AURAIYA(Liquid)**	20.989	20.465	3.186	3.108
18	**AURAIYA (RLNG)**	1.017	0.993	0.000	0.000
19	**DADRI (GT)**	32.551	31.744	32.224	31.425
20	**DADRI (Liquid)**	27.267	26.588	3.904	3.809
21	**DADRI (RLNG)**	0.000	0.000	0.000	0.000
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**1562.505**	**1523.722**	**1493.359**	**1456.298**
	NHPC STATIONS				
22	**TANAKPUR**	6.339	6.181	4.841	4.721
23	**CHAMERA-I**	26.291	25.636	20.784	20.272
24	**CHAMERA-II**	27.347	26.667	22.025	21.483
25	**CHAMERA-III**	0.471	0.458	0.471	0.458
26	**BAIRA SUIL**	8.983	8.761	7.269	7.090
27	**SALAL**	54.207	52.861	44.081	42.997
28	**DULASTI**	34.949	34.082	28.717	28.010
29	**DAULI GANGA**	20.955	20.436	16.437	16.034
30	**URI**	38.332	37.380	31.250	30.481
31	**SEWA -II**	5.921	5.774	5.049	4.924
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**223.795**	**218.236**	**180.923**	**176.471**
	NPC				
32	**NAPP**	19.598	19.111	19.598	19.111
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	18.670	18.206	18.670	18.206
C	**TOTAL NPC (32 TO 34)**	**38.267**	**37.317**	**38.267**	**37.317**
D	**NATHPA JHAKHRI (SJVNL)**	96.610	94.206	96.610	94.206
	THDC				
35	**TEHRI**	20.318	19.807	20.318	19.807
36	**KOTESHWAR**	9.847	9.601	9.847	9.601
E.	**TOTAL THDC**	30.165	29.408	30.165	29.408
F	**JHAJJAR**	134.205	130.877	99.774	97.292
G	**TALA HEP**	10.050	9.796	10.050	9.796
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	2095.597	2043.563	1949.148	1900.789

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
	BILATERAL IMPORT				
i)	**GUJRAT**	0.879	0.865	0.865	0.843
ii)	**WEST BENGAL**	12.215	12.048	12.048	11.737
iii)	**MADHYA PRADESH**	69.454	68.192	68.192	66.494
iv)	**HARYANA(FOR TPDDL) LT**	7.506	7.402	7.402	7.210
v)	**DVC**	154.282	152.254	152.254	148.468
vi)	**DVC CTPS (BRPL)**	29.999	29.605	29.605	28.868
vii)	**DVC CTPS (BYPL)**	19.075	18.825	18.825	18.357
viii)	**DVC METHON (TPDDL)**	7.899	7.784	7.784	7.574
ix)	**DVC MEJIA (LT-O8) BYPL**	59.966	59.178	59.178	57.704
x)	**DVC HARYANA (LT-O9)**	19.962	19.698	19.698	19.208
xi)	**JHARKHAND**	28.237	27.939	27.939	27.225
xii)	**CHATTISHGARH**	152.152	149.843	149.843	146.109
xiii)	**ANDHRA PRADESH**	10.095	9.869	9.869	9.621
xiv)	**HIMACHAL PRADESH**	65.538	64.879	64.879	63.280
xv)	**JAMMU & KASHMIR**	80.664	79.845	79.845	77.863
xvi)	**POWER EXCHANGE(IEX)**	25.964	25.313	25.964	25.313
xvii)	**POWER EXCHANGE (PX)**	0.008	0.008	0.008	0.008
I	**TOTAL BILATERAL IMPORT**	743.895	733.547	734.198	715.882
	BILATERAL EXPORT				
i)	**TO JAMMU & KASHMIR**	-0.580	-0.586	-0.586	-0.606
ii)	**TO POWER EXCHANGE (IEX)**	-97.912	-100.424	-97.912	-100.424
iii)	**TO POWER EXCHANGE (PX)**	-2.573	-2.637	-2.573	-2.637
iv)	**TO SHARE PROJECT (HARYANA)**	-9.980	-10.236	-9.980	-10.236
v)	**TO POWER EXCHANGE (PUNJAB)**	-8.130	-8.340	-8.130	-8.340
J	**TOTAL EXPORT**	-119.175	-122.223	-119.180	-122.243
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**2720.317**	**2654.887**	**2564.166**	**2494.427**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-187.485
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				76.398
ii)	**GT**				140.817
iii)	**PRAGATI**				200.942
iv)	**RITHALA**				18.692
v)	**BAWANA (CCGT)**				93.339
vi)	**Timarpur - Okhla Waste Management**				6.996
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				537.184
viii)	**IMPORT FROM BTPS**				285.834
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				823.018
x)	**RENEWABLE SOLAR (TPDDL)**				0.210
xi)	**RENEWABLE SOLAR (BRPL)**				0.120
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				**0.330**
xiv)	**TOTAL AVAILABILITY (ix + xii)**				823.348
M	**TOTAL CONSUMPTION**				3130.291
N	**LOAD SHEDDING**				15.185
O	**REQUIREMENT**				3145.476
P	**% DEPENDENCE ON NORTHERN GRID**				83.98
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				24.516
R	**NET CONSUMPTION OF DELHI**				3105.775

9.4 Power supply position during the month of July 2012

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	98.022	94.998	98.022	94.998
2	**RIHAND-I**	50.098	48.543	49.858	48.311
3	**RIHAND-II**	87.461	84.756	87.218	84.521
4	**RIHAND-III**	0.000	0.000	0.000	0.000
5	**UNCHAHAR-I**	14.961	14.499	14.269	13.828
6	**UNCHAHAR-II**	29.595	28.682	28.279	27.406
7	**UNCHAHAR-III**	18.663	18.087	17.849	17.298
8	**DADRI(TH)**	493.947	478.723	451.483	437.561
9	**DADRI(TH)- Stage-II**	464.188	449.877	444.340	430.634
10	**FARAKA**	8.737	8.467	7.833	7.590
11	**KHELGAON**	21.876	21.201	21.055	20.404
12	**KHELGAON-II**	70.577	68.399	68.923	66.794
13	**ANTA (GT)**	18.526	17.956	16.220	15.720
14	**ANTA (Liquid)**	11.513	11.157	1.546	1.496
15	**ANTA (RLNG)**	0.000	0.000	0.000	0.000
16	**AURAIYA (GT)**	14.580	14.132	12.097	11.725
17	**AURAIYA(Liquid)**	22.410	21.719	2.961	2.865
18	**AURAIYA (RLNG)**	0.000	0.000	0.000	0.000
19	**DADRI (GT)**	38.075	36.899	32.622	31.614
20	**DADRI (Liquid)**	18.975	18.391	2.888	2.796
21	**DADRI (RLNG)**	0.021	0.020	0.000	0.000
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**1482.223**	**1436.505**	**1357.461**	**1315.562**
	NHPC STATIONS				
22	**TANAKPUR**	8.237	7.982	4.648	4.504
23	**CHAMERA-I**	27.285	26.440	15.394	14.917
24	**CHAMERA-II**	28.576	27.692	16.122	15.624
25	**CHAMERA-III**	20.642	20.004	20.642	20.004
26	**BAIRA SUIL**	8.074	7.825	4.556	4.416
27	**SALAL**	54.112	52.440	30.531	29.588
28	**DULASTI**	31.401	30.429	17.716	17.168
29	**DAULI GANGA**	26.932	26.100	15.195	14.726
30	**URI**	38.018	36.841	21.449	20.785
31	**SEWA -II**	2.996	2.904	1.690	1.638
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**246.273**	**238.658**	**147.944**	**143.370**
	NPC				
32	**NAPP**	20.413	19.784	20.413	19.784
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	29.537	28.628	29.537	28.628
C	**TOTAL NPC (32 TO 34)**	**49.950**	**48.412**	**49.950**	**48.412**
D	**NATHPA JHAKHRI (SJVNL)**	112.935	109.452	112.935	109.452

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
	THDC				
35	**TEHRI**	17.227	16.697	17.227	16.697
36	**KOTESHWAR**	6.760	6.552	6.760	6.552
E.	**TOTAL THDC**	23.987	23.249	23.987	23.249
F	**JHAJJAR**	118.092	114.418	62.751	60.779
G	**TALA HEP**	21.581	20.913	21.581	20.913
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	2055.042	1991.608	1776.610	1721.738
	BILATERAL IMPORT				
i)	**RASJASTHAN**	27.228	26.778	26.778	25.939
ii)	**MADHYA PRADESH**	101.944	99.934	99.934	96.792
iii)	**HARYANA(FOR TPDDL) LT**	3.759	3.702	3.702	3.596
iv)	**SIKKIM**	14.322	14.125	14.125	13.691
v)	**NAGALAND**	9.782	9.594	9.594	9.294
vi)	**URS**	0.162	0.157	0.162	0.157
vii)	**KARNATAKA**	0.197	0.193	0.193	0.187
viii)	**DVC**	152.186	150.104	150.104	145.489
ix)	**DVC CTPS (BRPL)**	24.789	24.450	24.450	23.707
x)	**DVC CTPS (BYPL)**	15.493	15.281	15.281	14.816
xi)	**DVC METHON (TPDDL)**	109.735	108.234	108.234	104.890
xii)	**DVC MEJIA (LT-O8) BYPL**	50.771	50.077	50.077	48.508
xiii)	**DVC HARYANA (LT-O9)**	16.196	15.975	15.975	15.491
xiv)	**WEST BENGAL**	26.408	26.046	26.046	25.230
xv)	**UTTRANCHAL**	52.177	51.169	51.169	49.578
xvi)	**ORISSA**	54.758	54.013	54.013	52.358
xvii)	**ANDHRA PRADESH**	2.871	2.805	2.805	2.721
xviii)	**HIMACHAL PRADESH**	73.648	72.661	72.661	70.411
xix)	**JAMMU & KASHMIR**	70.491	69.544	69.544	67.387
xx)	**POWER EXCHANGE(IEX)**	21.102	20.451	21.102	20.451
xxi)	**POWER EXCHANGE (PX)**	0.409	0.397	0.409	0.397
I	**TOTAL BILATERAL IMPORT**	828.430	815.688	816.357	791.088
	BILATERAL EXPORT				
i)	**TO JAMMU & KASHMIR**	-2.229	-2.259	-2.259	-2.331
ii)	**TO POWER EXCHANGE (IEX)**	-84.919	-87.607	-84.919	-87.607
iii)	**TO POWER EXCHANGE (PX)**	-1.068	-1.102	-1.068	-1.102
iv)	**TO SHARE PROJECT (HARYANA)**	-11.800	-12.182	-11.800	-12.182
v)	**TO POWER EXCHANGE (PUNJAB)**	-10.592	-10.933	-10.592	-10.933
J	**TOTAL EXPORT**	-110.608	-114.083	-110.638	-114.155
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**2772.864**	**2693.213**	**2482.330**	**2398.671**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-241.670
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				35.799
ii)	**GT**				142.865
iii)	**PRAGATI**				209.595
iv)	**RITHALA**				16.171
v)	**BAWANA (CCGT)**				131.355
vi)	**Timarpur - Okhla Waste Management**				6.376
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				542.161

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
viii)	**IMPORT FROM BTPS**				384.935
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				927.096
x)	**RENEWABLE SOLAR (TPDDL)**				0.160
xi)	**RENEWABLE SOLAR (BRPL)**				0.090
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				**0.250**
xiv)	**TOTAL AVAILABILITY (ix + xii)**				927.346
M	**TOTAL CONSUMPTION**				3084.347
N	**LOAD SHEDDING**				55.212
O	**REQUIREMENT**				3139.559
P	**% DEPENDENCE ON NORTHERN GRID**				82.48
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				19.902
R	**NET CONSUMPTION OF DELHI**				3064.445

9.5 Power supply position during the month of August 2012

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	96.623	93.808	86.590	84.054
2	**RIHAND-I**	27.522	26.719	24.248	23.536
3	**RIHAND-II**	78.337	76.055	69.779	67.735
4	**RIHAND-III**	0.000	0.000	0.000	0.000
5	**UNCHAHAR-I**	13.855	13.449	12.260	11.899
6	**UNCHAHAR-II**	30.534	29.646	26.935	26.147
7	**UNCHAHAR-III**	17.169	16.666	15.372	14.919
8	**DADRI(TH)**	371.934	361.009	354.707	344.282
9	**DADRI(TH)- Stage-II**	395.360	383.804	358.885	348.335
10	**FARAKA**	7.497	7.279	6.539	6.350
11	**KHELGAON**	23.377	22.698	21.445	20.822
12	**KHELGAON-II**	75.030	72.861	71.658	69.583
13	**ANTA (GT)**	16.694	16.212	13.314	12.928
14	**ANTA (Liquid)**	5.094	4.944	0.138	0.134
15	**ANTA (RLNG)**	0.000	0.000	0.000	0.000
16	**AURAIYA (GT)**	18.961	18.418	12.901	12.527
17	**AURAIYA(Liquid)**	23.090	22.412	0.648	0.628
18	**AURAIYA (RLNG)**	0.000	0.000	0.000	0.000
19	**DADRI (GT)**	41.131	39.926	30.649	29.744
20	**DADRI (Liquid)**	18.318	17.784	0.424	0.411
21	**DADRI (RLNG)**	0.000	0.000	0.000	0.000
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**1260.526**	**1223.690**	**1106.495**	**1074.034**
	NHPC STATIONS				
22	**TANAKPUR**	8.575	8.326	4.839	4.698
23	**CHAMERA-I**	30.662	29.767	17.298	16.793
24	**CHAMERA-II**	26.380	25.605	14.883	14.446
25	**CHAMERA-III**	18.670	18.120	18.670	18.120
26	**BAIRA SUIL**	9.788	9.505	5.524	5.365
27	**SALAL**	53.985	52.408	30.458	29.568
28	**DULASTI**	34.077	33.086	19.226	18.667
29	**DAULI GANGA**	24.978	24.245	14.092	13.679
30	**URI**	30.431	29.543	17.170	16.669
31	**SEWA -II**	5.586	5.424	3.152	3.060
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**243.133**	**236.031**	**145.311**	**141.064**
	NPC				
32	**NAPP**	20.616	20.015	20.616	20.015
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	36.797	35.719	36.797	35.719
C	**TOTAL NPC (32 TO 34)**	**57.413**	**55.734**	**57.413**	**55.734**
D	**NATHPA JHAKHRI (SJVNL)**	98.411	95.512	98.411	95.512
	THDC				
34	**TEHRI**	47.254	45.916	47.254	45.916
35	**KOTESHWAR**	15.005	14.582	14.847	14.427
E.	**TOTAL THDC**	62.260	60.497	62.101	60.343
F	**JHAJJAR**	78.841	76.557	27.094	26.294
G	**TALA HEP**	22.686	22.024	22.686	22.024
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	1823.268	1770.045	1519.509	1475.005

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
	BILATERAL IMPORT				
i)	**RASJASTHAN**	1.394	1.371	1.371	1.328
ii)	**MADHYA PRADESH**	142.579	139.994	139.994	135.964
iii)	**HARYANA(FOR TPDDL) LT**	26.605	26.212	26.212	25.452
iv)	**DVC**	167.248	164.792	164.792	159.987
v)	**DVC CTPS (BRPL)**	37.626	37.074	37.074	36.000
vi)	**DVC CTPS (BYPL)**	21.795	21.474	21.474	20.849
vii)	**DVC METHON (TPDDL)**	179.433	176.793	176.793	171.615
viii)	**DVC MEJIA (LT-O8) BYPL**	50.388	49.652	49.652	48.233
ix)	**DVC HARYANA (LT-O9)**	26.104	25.720	25.720	24.976
x)	**HIMACHAL PRADESH**	71.047	70.170	70.170	68.120
xi)	**JAMMU & KASHMIR**	66.705	65.481	65.481	63.575
xii)	**POWER EXCHANGE(IEX)**	8.147	7.908	8.147	7.908
xiii)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL BILATERAL IMPORT**	799.070	786.642	786.880	764.006
	BILATERAL EXPORT				
i)	**TO UTTAR PRADESH**	-8.323	-8.444	-8.444	-8.678
ii)	**TO WEST BENGAL**	-5.914	-5.984	-5.984	-6.163
iii)	**TO POWER EXCHANGE (IEX)**	-117.203	-120.742	-117.203	-120.742
iv)	**TO POWER EXCHANGE (PX)**	-0.066	-0.068	-0.066	-0.068
v)	**TO SHARE PROJECT (HARYANA)**	-12.636	-13.025	-12.636	-13.025
vi)	**TO POWER EXCHANGE (PUNJAB)**	-12.906	-13.304	-12.906	-13.304
J	**TOTAL EXPORT**	-157.047	-161.566	-157.238	-161.979
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**2465.291**	**2395.121**	**2149.152**	**2077.032**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-183.555
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				39.356
ii)	**GT**				115.848
iii)	**PRAGATI**				148.862
iv)	**RITHALA**				15.347
v)	**BAWANA (CCGT)**				147.079
vi)	**Timarpur - Okhla Waste Management**				4.949
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				471.441
viii)	**IMPORT FROM BTPS**				359.750
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				831.191
x)	**RENEWABLE SOLAR (TPDDL)**				0.140
xi)	**RENEWABLE SOLAR (BRPL)**				0.080
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				**0.220**
xiv)	**TOTAL AVAILABILITY (ix + xii)**				831.411
M	**TOTAL CONSUMPTION**				2724.888
N	**LOAD SHEDDING**				4.939
O	**REQUIREMENT**				2729.827
P	**% DEPENDENCE ON NORTHERN GRID**				81.12
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				19.469
R	**NET CONSUMPTION OF DELHI**				2705.419

9.6 Power supply position during the month of September 2012

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	83.520	81.340	68.404	66.616
2	**RIHAND-I**	50.383	49.081	42.187	41.094
3	**RIHAND-II**	80.220	78.134	67.943	66.179
4	**RIHAND-III**	0.000	0.000	0.000	0.000
5	**UNCHAHAR-I**	10.669	10.390	8.084	7.872
6	**UNCHAHAR-II**	32.202	31.364	24.324	23.690
7	**UNCHAHAR-III**	18.514	18.032	13.950	13.586
8	**DADRI(TH)**	407.566	396.950	317.795	309.510
9	**DADRI(TH)- Stage-II**	496.932	484.032	430.372	419.192
10	**FARAKA**	7.811	7.608	6.778	6.602
11	**KHELGAON**	28.991	28.239	18.342	17.865
12	**KHELGAON-II**	73.104	71.200	60.586	59.005
13	**ANTA (GT)**	20.137	19.614	7.775	7.571
14	**ANTA (Liquid)**	9.559	9.310	0.000	0.000
15	**ANTA (RLNG)**	0.000	0.000	0.000	0.000
16	**AURAIYA (GT)**	21.619	21.059	5.195	5.061
17	**AURAIYA(Liquid)**	19.642	19.128	0.000	0.000
18	**AURAIYA (RLNG)**	0.000	0.000	0.000	0.000
19	**DADRI (GT)**	35.935	35.003	9.594	9.346
20	**DADRI (Liquid)**	21.223	20.675	0.000	0.000
21	**DADRI (RLNG)**	0.000	0.000	0.000	0.000
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**1418.028**	**1381.158**	**1081.330**	**1053.188**
	NHPC STATIONS				
22	**TANAKPUR**	7.926	7.719	4.472	4.356
23	**CHAMERA-I**	27.550	26.835	15.542	15.139
24	**CHAMERA-II**	25.805	25.136	14.558	14.181
25	**CHAMERA-III**	18.083	17.615	18.083	17.615
26	**BAIRA SUIL**	8.367	8.150	4.722	4.599
27	**SALAL**	47.479	46.251	26.788	26.095
28	**DULASTI**	33.766	32.888	19.051	18.556
29	**DAULI GANGA**	23.274	22.671	13.131	12.791
30	**URI**	33.609	32.737	18.963	18.471
31	**SEWA -II**	6.948	6.767	3.920	3.818
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**232.807**	**226.769**	**139.231**	**135.620**
	NPC				
32	**NAPP**	20.077	19.555	20.077	19.555
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	38.969	37.956	38.969	37.956
C	**TOTAL NPC (32 TO 34)**	**59.046**	**57.510**	**59.046**	**57.510**
D	**NATHPA JHAKHRI (SJVNL)**	86.526	84.282	86.526	84.282

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
	THDC				
35	**TEHRI**	58.850	57.328	58.850	57.328
36	**KOTESHWAR**	19.024	18.531	19.024	18.531
E.	**TOTAL THDC**	77.874	75.859	77.874	75.859
F	**JHAJJAR**	156.615	152.543	4.372	4.258
G	**TALA HEP**	20.552	20.019	20.552	20.019
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	2051.448	1998.139	1468.931	1430.736
	BILATERAL IMPORT				
i)	**RASJASTHAN**	66.526	65.610	65.610	63.911
ii)	**MADHYA PRADESH**	90.346	88.852	88.852	86.551
iii)	**HARYANA(FOR TPDDL) LT**	30.583	30.166	30.166	29.378
iv)	**DVC**	157.307	155.172	155.172	151.131
v)	**DVC CTPS (BRPL)**	22.707	22.396	22.396	21.813
vi)	**DVC CTPS (BYPL)**	13.282	13.100	13.100	12.760
vii)	**DVC CTPS (TPDDL)**	0.000	0.000	0.000	0.000
viii)	**DVC METHON (TPDDL)**	178.645	176.226	176.226	171.651
ix)	**DVC (TATA STEEEL)**	0.000	0.000	0.000	0.000
x)	**DVC MEJIA (LT-O8) BYPL**	84.169	83.027	83.027	80.868
xi)	**DVC HARYANA (LT-O9)**	16.694	16.466	16.466	16.037
xii)	**HIMACHAL PRADESH**	3.427	3.390	3.390	3.301
xiii)	**JAMMU & KASHMIR**	73.701	72.903	72.903	71.008
xiv)	**POWER EXCHANGE(IEX)**	1.645	1.603	1.645	1.603
xv)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL BILATERAL IMPORT**	739.032	728.911	728.953	710.012
	BILATERAL EXPORT				
i)	**TO RAJASTHAN**	-0.378	-0.382	-0.382	-0.392
ii)	**TO GUJRAT**	-1.394	-1.417	-1.417	-1.457
iii)	**TO ANDHRA PRADESH**	-0.352	-0.359	-0.359	-0.368
iv)	**TO JAMMU & KASHMIR**	-2.214	-2.239	-2.239	-2.301
v)	**TO HIMACHAL PRADESH**	-0.924	-0.935	-0.935	-0.961
vi)	**TO MAHARASHTRA**	-0.006	-0.006	-0.006	-0.006
vii)	**TO MADHYA PRADESH**	-0.527	-0.534	-0.534	-0.548
viii)	**TO WEST BENGAL**	-15.473	-15.633	-15.633	-16.049
ix)	**TO HARYANA**	-0.107	-0.108	-0.108	-0.111
x)	**TO POWER EXCHANGE (IEX)**	-101.081	-103.807	-101.081	-103.807
xi)	**TO POWER EXCHANGE (PX)**	-2.391	-2.452	-2.391	-2.452
xii)	**TO SHARE PROJECT (HARYANA)**	-1.711	-1.758	-1.711	-1.758
xiii)	**TO POWER EXCHANGE (PUNJAB)**	-0.094	-0.097	-0.094	-0.097
J	**TOTAL EXPORT**	-126.652	-129.729	-126.891	-130.309
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**2663.828**	**2597.321**	**2070.993**	**2010.439**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-137.228
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				60.921
ii)	**GT**				76.270
iii)	**PRAGATI**				208.148
iv)	**RITHALA**				12.094
v)	**BAWANA (CCGT)**				17.913

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
vi)	**Timarpur - Okhla Waste Management**				7.316
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				382.662
viii)	**IMPORT FROM BTPS**				331.922
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				714.584
x)	**RENEWABLE SOLAR (TPDDL)**				0.180
xi)	**RENEWABLE SOLAR (BRPL)**				0.100
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				**0.280**
xiv)	**TOTAL AVAILABILITY (ix + xii)**				714.864
M	**TOTAL CONSUMPTION**				2588.075
N	**LOAD SHEDDING**				3.317
O	**REQUIREMENT**				2591.392
P	**% DEPENDENCE ON NORTHERN GRID**				82.80
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				19.300
R	**NET CONSUMPTION OF DELHI**				2568.775

9.7 Power supply position during the month of October 2012

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	89.651	87.150	88.053	85.598
2	**RIHAND-I**	61.080	59.381	59.666	58.008
3	**RIHAND-II**	90.583	88.070	88.822	86.360
4	**RIHAND-III**	0.000	0.000	0.000	0.000
5	**UNCHAHAR-I**	17.071	16.597	15.291	14.869
6	**UNCHAHAR-II**	33.449	32.521	30.252	29.416
7	**UNCHAHAR-III**	20.700	20.126	18.687	18.171
8	**DADRI(TH)**	527.632	512.986	470.452	457.402
9	**DADRI(TH)- Stage-II**	287.262	279.262	277.465	269.742
10	**FARAKA**	8.858	8.612	7.862	7.645
11	**KHELGAON**	31.193	30.326	28.183	27.400
12	**KHELGAON-II**	75.792	73.684	72.873	70.848
13	**ANTA (GT)**	15.643	15.207	6.985	6.791
14	**ANTA (Liquid)**	15.594	15.163	0.000	0.000
15	**ANTA (RLNG)**	0.000	0.000	0.000	0.000
16	**AURAIYA (GT)**	16.794	16.327	7.095	6.899
17	**AURAIYA(Liquid)**	26.215	25.480	0.000	0.000
18	**AURAIYA (RLNG)**	0.000	0.000	0.000	0.000
19	**DADRI (GT)**	37.913	36.857	16.459	16.004
20	**DADRI (Liquid)**	27.608	26.845	0.003	0.003
21	**DADRI (RLNG)**	0.000	0.000	0.000	0.000
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**1383.039**	**1344.594**	**1188.149**	**1155.154**
	NHPC STATIONS				
22	**TANAKPUR**	7.366	7.163	4.156	4.042
23	**CHAMERA-I**	8.716	8.476	4.917	4.782
24	**CHAMERA-II**	11.255	10.946	6.350	6.175
25	**CHAMERA-III**	7.164	6.966	7.164	6.966
26	**BAIRA SUIL**	3.527	3.430	1.990	1.935
27	**SALAL**	21.931	21.329	12.373	12.034
28	**DULASTI**	24.096	23.434	13.595	13.221
29	**DAULI GANGA**	10.328	10.044	5.829	5.668
30	**URI**	19.199	18.674	10.832	10.536
31	**SEWA -II**	2.548	2.479	1.437	1.398
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**116.131**	**112.942**	**68.643**	**66.757**
	NPC				
32	**NAPP**	21.503	20.906	21.503	20.906
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	40.564	39.437	40.564	39.437
C	**TOTAL NPC (32 TO 34)**	**62.066**	**60.343**	**62.066**	**60.343**
D	**NATHPA JHAKHRI (SJVNL)**	38.800	37.731	38.800	37.731
	THDC				
35	**TEHRI**	16.551	16.094	16.551	16.094
36	**KOTESHWAR**	5.253	5.108	5.253	5.108
E.	**TOTAL THDC**	21.804	21.201	21.804	21.201
F	**JHAJJAR**	148.238	144.151	14.116	13.731
G	**TALA HEP**	11.351	11.040	11.351	11.040
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	1781.429	1732.002	1404.929	1365.958

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
	BILATERAL IMPORT				
i)	**HARYANA(FOR TPDDL) LT**	23.061	22.770	22.770	22.144
ii)	**DVC**	168.672	166.553	166.553	161.932
iii)	**DVC CTPS (BRPL)**	23.912	23.611	23.611	22.970
iv)	**DVC CTPS (BYPL)**	14.792	14.605	14.605	14.209
v)	**DVC METHON (TPDDL)**	182.255	179.962	179.962	174.967
vi)	**DVC MEJIA (LT-O8) BYPL**	86.473	85.386	85.386	83.017
vii)	**DVC HARYANA (LT-O9)**	23.364	23.072	23.072	22.431
viii)	**POWER EXCHANGE(IEX)**	1.690	1.645	1.690	1.645
ix)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL BILATERAL IMPORT**	524.218	517.605	517.649	503.315
	BILATERAL EXPORT				
i)	**TO RAJASTHAN**	-0.448	-0.453	-0.453	-0.465
ii)	**TO UTTAR PRADESH**	-78.454	-79.609	-79.609	-81.854
iii)	**TO PUNJAB**	-6.537	-6.612	-6.612	-6.797
iv)	**TO CHANDIGARH**	-7.991	-8.085	-8.085	-8.314
v)	**TO JAMMU & KASHMIR**	-46.783	-47.378	-47.378	-48.804
vi)	**TO KERALA**	-2.567	-2.613	-2.613	-2.688
vii)	**TO TAMILNADU**	-1.196	-1.215	-1.215	-1.250
viii)	**TO MAHARASHTRA**	-18.291	-18.603	-18.603	-19.143
ix)	**TO MADHYA PRADESH**	-5.819	-5.902	-5.902	-6.072
x)	**TO WEST BENGAL**	-17.048	-17.215	-17.215	-17.694
xi)	**TO POWER EXCHANGE (IEX)**	-322.264	-331.630	-322.264	-331.630
xii)	**TO POWER EXCHANGE (PX)**	-1.104	-1.134	-1.104	-1.134
xiii)	**TO SHARE PROJECT (HARYANA)**	-14.380	-14.765	-14.380	-14.765
xiv)	**TO POWER EXCHANGE (PUNJAB)**	-6.901	-7.087	-6.901	-7.087
J	**TOTAL EXPORT**	-529.783	-542.300	-532.334	-547.697
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**1775.865**	**1707.307**	**1390.244**	**1321.576**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-102.727
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				79.743
ii)	**GT**				88.778
iii)	**PRAGATI**				219.187
iv)	**RITHALA**				10.730
v)	**BAWANA (CCGT)**				124.995
vi)	**Timarpur - Okhla Waste Management**				8.062
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				531.495
viii)	**IMPORT FROM BTPS**				369.773
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				901.268
x)	**RENEWABLE SOLAR (TPDDL)**				0.190
xi)	**RENEWABLE SOLAR (BRPL)**				0.090
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				**0.280**
xiv)	**TOTAL AVAILABILITY (ix + xii)**				901.548
M	**TOTAL CONSUMPTION**				2120.398
N	**LOAD SHEDDING**				3.212
O	**REQUIREMENT**				2123.610
P	**% DEPENDENCE ON NORTHERN GRID**				66.57
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				23.532
R	**NET CONSUMPTION OF DELHI**				2096.886

9.8 Power supply position during the month of November 2012

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	100.741	97.169	100.525	96.962
2	**RIHAND-I**	33.688	32.500	33.585	32.400
3	**RIHAND-II**	84.369	81.390	83.615	80.665
4	**RIHAND-III**	5.390	5.185	5.390	5.185
5	**UNCHAHAR-I**	15.680	15.123	15.101	14.564
6	**UNCHAHAR-II**	32.290	31.148	31.137	30.035
7	**UNCHAHAR-III**	20.071	19.361	19.356	18.672
8	**DADRI(TH)**	524.534	505.984	499.497	481.842
9	**DADRI(TH)- Stage-II**	526.500	507.879	521.510	503.077
10	**FARAKA**	11.328	10.922	10.814	10.426
11	**KHELGAON**	31.725	30.602	31.505	30.390
12	**KHELGAON-II**	64.682	62.402	64.292	62.026
13	**ANTA (GT)**	18.234	17.593	15.287	14.742
14	**ANTA (Liquid)**	8.694	8.394	0.301	0.290
15	**ANTA (RLNG)**	0.000	0.000	0.000	0.000
16	**AURAIYA (GT)**	13.652	13.161	11.881	11.451
17	**AURAIYA(Liquid)**	37.735	36.407	0.840	0.811
18	**AURAIYA (RLNG)**	0.000	0.000	0.000	0.000
19	**DADRI (GT)**	33.030	31.869	26.590	25.643
20	**DADRI (Liquid)**	32.903	31.733	0.704	0.679
21	**DADRI (RLNG)**	0.000	0.000	0.000	0.000
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**1595.246**	**1538.823**	**1471.931**	**1419.859**
	NHPC STATIONS				
22	**TANAKPUR**	3.713	3.583	1.084	1.046
23	**CHAMERA-I**	5.592	5.396	1.632	1.575
24	**CHAMERA-II**	6.812	6.573	1.988	1.918
25	**CHAMERA-III**	3.958	3.819	2.880	2.779
26	**BAIRA SUIL**	2.264	2.185	0.661	0.638
27	**SALAL**	12.229	11.799	3.568	3.443
28	**DULASTI**	13.864	13.377	4.045	3.903
29	**DAULI GANGA**	5.969	5.760	1.742	1.681
30	**URI**	9.276	8.951	2.706	2.611
31	**SEWA -II**	1.084	1.046	0.316	0.305
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**64.762**	**62.491**	**20.622**	**19.899**
	NPC				
32	**NAPP**	21.393	20.636	21.393	20.636
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	40.018	38.603	40.018	38.603
C	**TOTAL NPC (32 TO 34)**	**61.411**	**59.239**	**61.411**	**59.239**
D	**NATHPA JHAKHRI (SJVNL)**	25.545	24.647	25.545	24.647
	THDC				
35	**TEHRI**	17.819	17.183	17.819	17.183
36	**KOTESHWAR**	4.527	4.366	4.527	4.366
E.	**TOTAL THDC**	22.346	21.549	22.346	21.549
F	**JHAJJAR**	113.987	110.009	22.211	21.421
G	**TALA HEP**	4.267	4.119	4.267	4.119
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	1887.564	1820.877	1628.334	1570.734

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
	BILATERAL IMPORT				
i)	**HARYANA(FOR TPDDL) LT**	27.974	28.428	28.428	27.415
ii)	**DVC**	161.067	158.992	158.992	153.366
iii)	**DVC CTPS (BRPL)**	21.919	21.642	21.642	20.897
iv)	**DVC CTPS (BYPL)**	12.656	12.495	12.495	12.060
v)	**DVC METHON (TPDDL)**	153.827	151.856	151.856	146.530
vi)	**DVC MEJIA (LT-O8) BYPL**	70.346	69.441	69.441	66.993
vii)	**DVC HARYANA (LT-O9)**	23.831	23.524	23.524	22.693
viii)	**POWER EXCHANGE(IEX)**	0.142	0.136	0.142	0.136
ix)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL BILATERAL IMPORT**	471.763	466.514	466.519	450.091
	BILATERAL EXPORT				
i)	**TO RAJASTHAN**	-34.828	-35.389	-35.389	-36.686
ii)	**TO GUJRAT**	-0.422	-0.430	-0.430	-0.448
iii)	**TO UTTAR PRADESH**	-40.783	-41.585	-41.585	-43.148
iv)	**TO JAMMU & KASHMIR**	-169.082	-171.803	-171.803	-178.105
v)	**TO JHARKHAND**	-28.545	-28.829	-28.829	-29.886
vi)	**TO TAMILNADU**	-2.175	-2.217	-2.217	-2.299
vii)	**TO HIMACHAL PRADESH**	-45.133	-45.865	-45.865	-47.560
viii)	**TO MAHARASHTRA**	-150.625	-153.523	-153.523	-159.148
ix)	**TO MADHYA PRADESH**	-147.798	-150.184	-150.184	-155.694
x)	**TO WEST BENGAL**	-0.291	-0.294	-0.294	-0.305
xi)	**TO UTTRANCHAL**	-17.364	-17.643	-17.643	-18.290
xii)	**TO POWER EXCHANGE (IEX)**	-464.909	-481.894	-464.909	-481.894
xiii)	**TO POWER EXCHANGE (PX)**	-3.748	-3.888	-3.748	-3.888
xiv)	**TO SHARE PROJECT (HARYANA)**	-17.747	-18.391	-17.747	-18.391
xv)	**TO POWER EXCHANGE (PUNJAB)**	-0.336	-0.347	-0.336	-0.347
J	**TOTAL EXPORT**	-1123.785	-1152.283	-1134.503	-1176.089
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**1235.542**	**1135.108**	**960.350**	**844.736**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-97.111
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				77.782
ii)	**GT**				94.858
iii)	**PRAGATI**				224.408
iv)	**RITHALA**				7.016
v)	**BAWANA (CCGT)**				181.258
vi)	**Timarpur - Okhla Waste Management**				8.423
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				593.745
viii)	**IMPORT FROM BTPS**				337.866
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				931.611
x)	**RENEWABLE SOLAR (TPDDL)**				0.110
xi)	**RENEWABLE SOLAR (BRPL)**				0.060
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				**0.170**
xiv)	**TOTAL AVAILABILITY (ix + xii)**				931.781
M	**TOTAL CONSUMPTION**				1679.406
N	**LOAD SHEDDING**				4.528
O	**REQUIREMENT**				1683.934
P	**% DEPENDENCE ON NORTHERN GRID**				52.04
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				23.295
R	**NET CONSUMPTION OF DELHI**				1656.111

9.9 Power supply position during the month of December 2012

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	108.673	104.350	108.263	103.959
2	**RIHAND-I**	61.944	59.461	61.736	59.263
3	**RIHAND-II**	90.803	87.197	90.401	86.814
4	**RIHAND-III**	25.930	24.893	25.766	24.736
5	**UNCHAHAR-I**	17.223	16.538	16.872	16.202
6	**UNCHAHAR-II**	33.558	32.222	32.857	31.550
7	**UNCHAHAR-III**	17.678	16.960	17.346	16.643
8	**DADRI(TH)**	517.773	497.393	483.597	464.496
9	**DADRI(TH)- Stage-II**	504.718	484.917	491.142	471.842
10	**FARAKA**	15.057	14.458	14.914	14.320
11	**KHELGAON**	32.775	31.481	32.356	31.078
12	**KHELGAON-II**	91.930	88.254	91.232	87.583
13	**ANTA (GT)**	16.906	16.237	16.331	15.684
14	**ANTA (Liquid)**	12.630	12.112	0.129	0.124
15	**ANTA (RLNG)**	0.000	0.000	0.000	0.000
16	**AURAIYA (GT)**	18.038	17.325	17.202	16.523
17	**AURAIYA(Liquid)**	35.837	34.405	0.295	0.285
18	**AURAIYA (RLNG)**	0.000	0.000	0.000	0.000
19	**DADRI (GT)**	24.701	23.727	23.552	22.623
20	**DADRI (Liquid)**	44.099	42.337	0.348	0.336
21	**DADRI (RLNG)**	0.000	0.000	0.000	0.000
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**1670.272**	**1604.267**	**1524.337**	**1464.057**
	NHPC STATIONS				
22	**TANAKPUR**	2.133	2.049	0.622	0.597
23	**CHAMERA-I**	5.028	4.827	1.467	1.408
24	**CHAMERA-II**	5.405	5.191	1.577	1.515
25	**CHAMERA-III**	2.996	2.877	2.180	2.094
26	**BAIRA SUIL**	1.874	1.800	0.547	0.525
27	**SALAL**	11.192	10.747	3.265	3.136
28	**DULASTI**	11.256	10.811	3.285	3.155
29	**DAULI GANGA**	4.707	4.521	1.374	1.319
30	**URI**	9.762	9.374	2.848	2.734
31	**SEWA -II**	1.554	1.494	0.453	0.436
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**55.906**	**53.692**	**17.617**	**16.919**
	NPC				
32	**NAPP**	20.848	20.009	20.848	20.009
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	36.031	34.644	36.031	34.644
C	**TOTAL NPC (32 TO 34)**	**56.879**	**54.652**	**56.879**	**54.652**
D	**NATHPA JHAKHRI (SJVNL)**	21.829	20.965	21.829	20.965
	THDC				
35	**TEHRI**	26.591	25.515	26.591	25.515
36	**KOTESHWAR**	8.825	8.469	8.825	8.469
E.	**TOTAL THDC**	35.416	33.984	35.416	33.984

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
F	**JHAJJAR**	145.889	140.072	33.892	32.547
G	**TALA HEP**	2.263	2.176	2.263	2.176
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	1988.454	1909.807	1692.234	1625.299
	BILATERAL IMPORT				
i)	**GUJRAT**	0.155	0.152	0.152	0.146
ii)	**HARYANA(FOR TPDDL) LT**	37.756	38.437	38.437	37.083
iii)	**DVC**	172.419	169.520	169.520	162.768
iv)	**DVC CTPS (BRPL)**	12.867	12.660	12.660	12.192
v)	**DVC CTPS (BYPL)**	9.520	9.367	9.367	9.019
vi)	**DVC METHON (TPDDL)**	202.510	199.083	199.083	191.117
vii)	**DVC MEJIA (LT-O8) BYPL**	70.101	68.925	68.925	66.189
viii)	**DVC HARYANA (LT-O9)**	27.774	27.306	27.306	26.210
ix)	**POWER EXCHANGE(IEX)**	2.305	2.195	2.305	2.195
x)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL BILATERAL IMPORT**	535.406	527.646	527.756	506.921
	BILATERAL EXPORT				
i)	**TO RAJASTHAN**	-35.878	-36.646	-36.646	-37.992
ii)	**TO ASSAM**	-4.993	-4.909	-4.909	-4.735
iii)	**TO GUJRAT**	-5.392	-5.482	-5.482	-5.696
iv)	**TO UTTAR PRADESH**	-28.420	-29.104	-29.104	-30.159
v)	**TO NEPAL**	-2.157	-2.217	-2.217	-2.304
vi)	**TO JAMMU & KASHMIR**	-130.075	-132.810	-132.810	-137.652
vii)	**TO TAMILNADU**	-6.459	-6.625	-6.625	-6.869
viii)	**TO MEGHALAYA**	-14.978	-15.319	-15.319	-15.920
ix)	**TO HIMACHAL PRADESH**	-56.063	-57.086	-57.086	-59.182
x)	**TO MAHARASHTRA**	-102.941	-105.250	-105.250	-109.088
xi)	**TO MADHYA PRADESH**	-199.407	-202.744	-202.744	-210.232
xii)	**TO UTTRANCHAL**	-41.428	-42.445	-42.445	-44.003
xiii)	**TO POWER EXCHANGE (IEX)**	-396.827	-412.942	-396.827	-412.942
xiv)	**TO POWER EXCHANGE (PX)**	-3.145	-3.265	-3.145	-3.265
xv)	**TO SHARE PROJECT (HARYANA)**	-11.548	-12.033	-11.548	-12.033
xvi)	**TO POWER EXCHANGE (PUNJAB)**	-5.679	-5.926	-5.679	-5.926
J	**TOTAL EXPORT**	-1045.390	-1074.800	-1057.834	-1097.995
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**1478.470**	**1362.652**	**1162.155**	**1034.225**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-90.257
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				77.276
ii)	**GT**				89.487
iii)	**PRAGATI**				235.879
iv)	**RITHALA**				5.209
v)	**BAWANA (CCGT)**				142.441
vi)	**Timarpur - Okhla Waste Management**				7.474
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				557.766
viii)	**IMPORT FROM BTPS**				302.439

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				860.205
x)	**RENEWABLE SOLAR (TPDDL)**				0.130
xi)	**RENEWABLE SOLAR (BRPL)**				0.070
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				**0.200**
xiv)	**TOTAL AVAILABILITY (ix + xii)**				860.405
M	**TOTAL CONSUMPTION**				1804.373
N	**LOAD SHEDDING**				11.962
O	**REQUIREMENT**				1816.335
P	**% DEPENDENCE ON NORTHERN GRID**				59.13
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				22.830
R	**NET CONSUMPTION OF DELHI**				1781.543

9.10 Power supply position during the month of January 2013

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	106.440	100.947	105.834	100.370
2	**RIHAND-I**	67.048	63.598	66.182	62.775
3	**RIHAND-II**	91.003	86.305	88.602	84.026
4	**RIHAND-III**	21.971	20.880	20.483	19.466
5	**UNCHAHAR-I**	17.223	16.334	15.506	14.703
6	**UNCHAHAR-II**	33.691	31.952	30.506	28.928
7	**UNCHAHAR-III**	20.753	19.682	18.866	17.890
8	**DADRI(TH)**	508.225	481.964	442.865	419.984
9	**DADRI(TH)- Stage-II**	487.725	462.416	452.451	428.980
10	**FARAKA**	13.669	12.979	12.041	11.430
11	**KHELGAON**	26.355	25.000	25.608	24.289
12	**KHELGAON-II**	84.891	80.530	84.079	79.759
13	**ANTA (GT)**	10.407	9.856	8.437	7.992
14	**ANTA (Liquid)**	16.111	15.283	0.211	0.200
15	**ANTA (RLNG)**	7.035	6.681	0.000	0.000
16	**AURAIYA (GT)**	16.593	15.747	13.773	13.067
17	**AURAIYA(Liquid)**	29.410	27.916	0.398	0.378
18	**AURAIYA (RLNG)**	7.824	7.392	0.001	0.001
19	**DADRI (GT)**	23.219	22.023	19.243	18.248
20	**DADRI (Liquid)**	38.359	36.409	0.567	0.538
21	**DADRI (RLNG)**	6.924	6.536	0.018	0.017
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**1634.876**	**1550.432**	**1405.669**	**1333.041**
	NHPC STATIONS				
22	**TANAKPUR**	1.526	1.446	0.702	0.665
23	**CHAMERA-I**	5.021	4.762	2.229	2.115
24	**CHAMERA-II**	4.686	4.445	2.065	1.960
25	**CHAMERA-III**	2.425	2.301	2.123	2.014
26	**BAIRA SUIL**	1.595	1.512	0.709	0.673
27	**SALAL**	10.713	10.158	4.846	4.596
28	**DULASTI**	4.784	4.530	1.396	1.322
29	**DAULI GANGA**	3.921	3.718	1.736	1.647
30	**URI**	12.014	11.401	5.562	5.280
31	**SEWA -II**	1.398	1.326	0.624	0.592
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**48.084**	**45.600**	**21.992**	**20.863**
	NPC				
32	**NAPP**	15.326	14.538	15.326	14.538
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	32.342	30.680	32.342	30.680
C	**TOTAL NPC (32 TO 34)**	**47.668**	**45.218**	**47.668**	**45.218**
D	**NATHPA JHAKHRI (SJVNL)**	17.743	16.825	17.743	16.825
	THDC				
35	**TEHRI**	30.836	29.242	30.836	29.242
36	**KOTESHWAR**	10.612	10.065	10.612	10.065
E.	**TOTAL THDC**	41.448	39.307	41.448	39.307

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
F	**JHAJJAR**	114.605	108.577	15.517	14.733
G	**TALA HEP**	1.257	1.193	1.239	1.176
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	1905.681	1807.152	1551.276	1471.162
	BILATERAL IMPORT				
i)	**GUJRAT**	0.332	0.327	0.327	0.308
ii)	**HARYANA(FOR TPDDL) LT**	27.673	26.993	26.993	25.581
iii)	**DVC**	169.569	166.396	166.396	157.799
iv)	**DVC CTPS (BRPL)**	17.822	17.490	17.490	16.558
v)	**DVC CTPS (BYPL)**	13.169	12.924	12.924	12.230
vi)	**DVC METHON (TPDDL)**	197.791	194.089	194.089	184.062
vii)	**DVC MEJIA (LT-O8) BYPL**	60.818	59.682	59.682	56.549
viii)	**DVC HARYANA (LT-O9)**	18.319	17.976	17.976	17.014
ix)	**WEST BENGAL**	6.366	6.264	6.264	5.976
x)	**POWER EXCHANGE(IEX)**	16.414	15.507	16.414	15.507
xi)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL BILATERAL IMPORT**	528.273	517.649	518.555	491.585
	BILATERAL EXPORT				
i)	**TO RAJASTHAN**	-18.993	-19.524	-19.524	-20.587
ii)	**TO GOA**	-0.046	-0.047	-0.047	-0.049
iii)	**TO GUJRAT**	-1.617	-1.645	-1.645	-1.732
iv)	**TO UTTAR PRADESH**	-20.503	-21.142	-21.142	-22.294
v)	**TO JAMMU & KASHMIR**	-93.791	-96.414	-96.414	-101.663
vi)	**TO TRIPURA**	-0.058	-0.059	-0.059	-0.061
vii)	**TO MEGHALAYA**	-24.546	-25.159	-25.159	-26.524
viii)	**TO HIMACHAL PRADESH**	-38.808	-39.771	-39.771	-41.936
ix)	**TO MAHARASHTRA**	-15.530	-15.872	-15.872	-16.738
x)	**TO MADHYA PRADESH**	-161.972	-164.499	-164.499	-173.454
xi)	**TO UTTRANCHAL**	-133.168	-137.301	-137.301	-144.745
xii)	**TO POWER EXCHANGE (IEX)**	-230.813	-243.262	-230.813	-243.262
xiii)	**TO POWER EXCHANGE (PX)**	-5.405	-5.682	-5.405	-5.682
xiv)	**TO SHARE PROJECT (HARYANA)**	-12.822	-13.517	-12.822	-13.517
xv)	**TO POWER EXCHANGE (PUNJAB)**	-13.066	-13.774	-13.066	-13.774
J	**TOTAL EXPORT**	-771.138	-797.666	-783.537	-826.018
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**1662.816**	**1527.135**	**1286.294**	**1136.729**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-113.553
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				80.120
ii)	**GT**				101.862
iii)	**PRAGATI**				232.709
iv)	**RITHALA**				4.954
v)	**BAWANA (CCGT)**				154.850
vi)	**Timarpur - Okhla Waste Management**				4.505
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				579.000
viii)	**IMPORT FROM BTPS**				394.356

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				973.356
x)	**RENEWABLE SOLAR (TPDDL)**				0.130
xi)	**RENEWABLE SOLAR (BRPL)**				0.070
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				**0.200**
xiv)	**TOTAL AVAILABILITY (ix + xii)**				973.556
M	**TOTAL CONSUMPTION**				1996.732
N	**LOAD SHEDDING**				20.757
O	**REQUIREMENT**				2017.489
P	**% DEPENDENCE ON NORTHERN GRID**				59.09
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				23.055
R	**NET CONSUMPTION OF DELHI**				1973.677

9.11 Power supply position during the month of February 2013

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	93.692	90.221	80.858	77.846
2	**RIHAND-I**	57.991	55.848	51.551	49.639
3	**RIHAND-II**	82.599	79.546	71.177	68.535
4	**RIHAND-III**	35.156	33.843	31.980	30.785
5	**UNCHAHAR-I**	15.609	15.032	13.190	12.702
6	**UNCHAHAR-II**	30.873	29.732	26.685	25.701
7	**UNCHAHAR-III**	18.745	18.053	16.798	16.177
8	**DADRI(TH)**	487.562	469.542	414.607	399.265
9	**DADRI(TH)- Stage-II**	488.753	470.688	427.705	411.874
10	**FARAKA**	11.339	10.920	10.678	10.282
11	**KHELGAON**	28.712	27.650	26.106	25.140
12	**KHELGAON-II**	82.937	79.876	80.568	77.592
13	**ANTA (GT)**	17.439	16.805	10.840	10.441
14	**ANTA (Liquid)**	9.078	8.740	0.000	0.000
15	**ANTA (RLNG)**	3.218	3.091	0.000	0.000
16	**AURAIYA (GT)**	21.748	20.944	17.656	17.005
17	**AURAIYA(Liquid)**	26.552	25.569	0.000	0.000
18	**AURAIYA (RLNG)**	0.341	0.329	0.000	0.000
19	**DADRI (GT)**	28.760	27.704	23.216	22.365
20	**DADRI (Liquid)**	32.462	31.255	0.000	0.000
21	**DADRI (RLNG)**	0.115	0.111	0.000	0.000
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**1573.682**	**1515.497**	**1303.615**	**1255.351**
	NHPC STATIONS				
22	**TANAKPUR**	2.048	1.973	1.155	1.113
23	**CHAMERA-I**	5.496	5.295	2.886	2.780
24	**CHAMERA-II**	5.179	4.990	2.730	2.630
25	**CHAMERA-III**	2.721	2.622	2.501	2.410
26	**BAIRA SUIL**	3.071	2.959	1.732	1.670
27	**SALAL**	16.359	15.767	9.230	8.895
28	**DULASTI**	0.000	0.000	0.000	0.000
29	**DAULI GANGA**	3.568	3.437	2.013	1.939
30	**URI**	19.903	19.178	11.230	10.820
31	**SEWA -II**	6.671	6.428	3.764	3.627
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**65.016**	**62.649**	**37.242**	**35.885**
	NPC				
32	**NAPP**	19.184	18.481	19.184	18.481
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	36.669	35.314	36.669	35.314
C	**TOTAL NPC (32 TO 34)**	**55.853**	**53.794**	**55.853**	**53.794**
D	**NATHPA JHAKHRI (SJVNL)**	15.950	15.361	15.950	15.361
	THDC				
35	**TEHRI**	19.738	19.006	19.738	19.006
36	**KOTESHWAR**	7.400	7.125	7.400	7.125
E.	**TOTAL THDC**	27.138	26.131	27.138	26.131

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
F	**JHAJJAR**	65.852	63.418	2.428	2.339
G	**TALA HEP**	0.942	0.908	0.942	0.908
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	1804.433	1737.758	1443.168	1389.770
	BILATERAL IMPORT				
i)	**HARYANA(FOR TPDDL) LT**	32.485	31.947	31.947	30.768
ii)	**DVC**	177.280	174.061	174.061	167.650
iii)	**DVC CTPS (BRPL)**	7.268	7.135	7.135	6.872
iv)	**DVC CTPS (BYPL)**	8.485	8.330	8.330	8.021
v)	**DVC METHON (TPDDL)**	162.323	159.378	159.378	153.503
vi)	**DVC MEJIA (LT-O8) BYPL**	61.424	60.308	60.308	58.084
vii)	**DVC HARYANA (LT-O9)**	14.213	13.953	13.953	13.436
viii)	**POWER EXCHANGE(IEX)**	3.980	3.834	3.980	3.834
ix)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL BILATERAL IMPORT**	467.459	458.945	459.092	442.167
	BILATERAL EXPORT				
i)	**TO RAJASTHAN**	-73.905	-75.396	-75.396	-78.319
ii)	**TO ASSAM**	-6.232	-6.388	-6.388	-6.623
iii)	**TO GUJRAT**	-42.709	-43.415	-43.415	-45.073
iv)	**TO UTTAR PRADESH**	-53.189	-54.419	-54.419	-56.509
v)	**TO JAMMU & KASHMIR**	-111.254	-113.475	-113.475	-117.823
vi)	**TO TRIPURA**	-1.504	-1.532	-1.532	-1.592
vii)	**TO MEGHALAYA**	-23.432	-24.065	-24.065	-24.989
viii)	**TO HIMACHAL PRADESH**	-50.162	-51.008	-51.008	-52.966
ix)	**TO MAHARASHTRA**	-1.251	-1.279	-1.279	-1.327
x)	**TO MADHYA PRADESH**	-63.127	-64.166	-64.166	-66.629
xi)	**TO WEST BENGAL**	-5.972	-6.063	-6.063	-6.291
xii)	**TO UTTRANCHAL**	-70.826	-72.469	-72.469	-75.263
xiii)	**TO POWER EXCHANGE (IEX)**	-319.596	-331.916	-319.596	-331.916
xiv)	**TO POWER EXCHANGE (PX)**	-6.568	-6.816	-6.568	-6.816
xv)	**TO SHARE PROJECT (HARYANA)**	-6.772	-7.030	-6.772	-7.030
xvi)	**TO POWER EXCHANGE (PUNJAB)**	-15.360	-15.948	-15.360	-15.948
J	**TOTAL EXPORT**	-851.860	-875.385	-861.972	-895.115
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**1420.032**	**1321.319**	**1040.288**	**936.822**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-77.083
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				72.531
ii)	**GT**				78.672
iii)	**PRAGATI**				202.008
iv)	**RITHALA**				1.534
v)	**BAWANA (CCGT)**				144.745
vi)	**Timarpur - Okhla Waste Management**				7.591
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				507.081
viii)	**IMPORT FROM BTPS**				267.903
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				774.984
x)	**RENEWABLE SOLAR (TPDDL)**				0.150

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
xi)	**RENEWABLE SOLAR (BRPL)**				0.080
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				**0.230**
xiv)	**TOTAL AVAILABILITY (ix + xii)**				775.214
M	**TOTAL CONSUMPTION**				1634.953
N	**LOAD SHEDDING**				1.699
O	**REQUIREMENT**				1636.652
P	**% DEPENDENCE ON NORTHERN GRID**				60.16
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				20.705
R	**NET CONSUMPTION OF DELHI**				1614.248

9.12 Power supply position during the month of March 2013

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	108.759	105.804	31.334	30.482
2	**RIHAND-I**	59.228	57.599	17.667	17.181
3	**RIHAND-II**	90.896	88.424	26.136	25.424
4	**RIHAND-III**	40.816	39.706	40.048	38.957
5	**UNCHAHAR-I**	16.637	16.189	15.192	14.783
6	**UNCHAHAR-II**	34.188	33.259	32.010	31.138
7	**UNCHAHAR-III**	17.821	17.330	17.125	16.652
8	**DADRI(TH)**	524.829	510.533	487.485	474.216
9	**DADRI(TH)- Stage-II**	498.352	484.742	274.727	267.222
10	**FARAKA**	11.818	11.496	11.626	11.310
11	**KHELGAON**	34.089	33.161	32.380	31.498
12	**KHELGAON-II**	97.960	95.284	95.800	93.183
13	**ANTA (GT)**	26.560	25.836	14.499	14.116
14	**ANTA (Liquid)**	5.109	4.971	0.000	0.000
15	**ANTA (RLNG)**	0.000	0.000	0.000	0.000
16	**AURAIYA (GT)**	11.276	10.968	8.439	8.205
17	**AURAIYA(Liquid)**	40.221	39.126	0.000	0.000
18	**AURAIYA (RLNG)**	0.489	0.476	0.000	0.000
19	**DADRI (GT)**	33.818	32.902	24.874	24.188
20	**DADRI (Liquid)**	31.463	30.603	0.001	0.001
21	**DADRI (RLNG)**	0.047	0.046	0.000	0.000
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**1684.374**	**1638.454**	**1129.343**	**1098.555**
	NHPC STATIONS				
22	**TANAKPUR**	1.529	1.488	0.862	0.839
23	**CHAMERA-I**	9.699	9.435	2.831	2.754
24	**CHAMERA-II**	9.460	9.206	2.760	2.686
25	**CHAMERA-III**	5.409	5.265	5.409	5.265
26	**BAIRA SUIL**	6.457	6.282	3.644	3.545
27	**SALAL**	23.543	22.900	13.283	12.920
28	**DULASTI**	11.515	11.206	6.497	6.322
29	**DAULI GANGA**	4.704	4.577	2.655	2.583
30	**URI**	38.593	37.547	21.774	21.183
31	**SEWA -II**	11.560	11.245	6.522	6.344
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**122.470**	**119.149**	**66.236**	**64.441**
	NPC				
32	**NAPP**	23.864	23.214	23.864	23.214
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	40.600	39.496	40.600	39.496
C	**TOTAL NPC (32 TO 34)**	**64.464**	**62.710**	**64.464**	**62.710**
D	**NATHPA JHAKHRI (SJVNL)**	22.797	22.184	22.797	22.184
	THDC				
35	**TEHRI**	26.686	25.964	26.686	25.964
36	**KOTESHWAR**	10.252	9.975	10.252	9.975
E.	**TOTAL THDC**	36.938	35.939	36.938	35.939

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
F	**JHAJJAR**	123.847	120.583	39.474	38.470
G	**TALA HEP**	1.153	1.122	1.153	1.122
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	2056.043	2000.141	1360.405	1323.421
	BILATERAL IMPORT				
i)	**MADHYA PRADESH**	1.440	1.417	1.417	1.381
ii)	**HARYANA(FOR TPDDL) LT**	33.112	32.728	32.728	31.836
iii)	**DVC**	234.421	230.835	230.835	224.545
iv)	**DVC CTPS (BRPL)**	4.702	4.633	4.633	4.516
v)	**DVC CTPS (BYPL)**	6.832	6.726	6.726	6.537
vi)	**DVC METHON (TPDDL)**	189.684	186.781	186.781	181.696
vii)	**DVC MEJIA (LT-O8) BYPL**	86.013	84.697	84.697	82.391
viii)	**DVC HARYANA (LT-O9)**	11.903	11.720	11.720	11.400
ix)	**UTTRANCHAL**	0.171	0.169	0.169	0.164
x)	**PUNJAB**	0.051	0.051	0.051	0.049
xi)	**HIMACHAL PRADESH**	0.411	0.406	0.406	0.394
xii)	**JAMMU & KASHMIR**	0.358	0.354	0.354	0.345
xiii)	**POWER EXCHANGE(IEX)**	11.768	11.453	11.768	11.453
xiv)	**POWER EXCHANGE (PX)**	0.000	0.000	0.000	0.000
I	**TOTAL BILATERAL IMPORT**	580.866	571.971	572.286	556.709
	BILATERAL EXPORT				
i)	**TO RAJASTHAN**	-77.047	-78.193	-78.193	-80.395
ii)	**TO ASSAM**	-28.563	-29.161	-29.161	-29.977
iii)	**TO GUJRAT**	-35.801	-36.366	-36.366	-37.384
iv)	**TO UTTAR PRADESH**	-22.904	-23.326	-23.326	-24.007
v)	**TO JAMMU & KASHMIR**	-65.871	-66.859	-66.859	-68.758
vi)	**TO KERALA**	-8.850	-9.070	-9.070	-9.337
vii)	**TO TRIPURA**	-0.406	-0.413	-0.413	-0.425
viii)	**TO MEGHALAYA**	-31.719	-32.482	-32.482	-33.424
ix)	**TO HIMACHAL PRADESH**	-22.344	-22.611	-22.611	-23.256
x)	**TO MAHARASHTRA**	-4.559	-4.659	-4.659	-4.786
xi)	**TO MADHYA PRADESH**	-71.933	-73.067	-73.067	-75.105
xii)	**TO WEST BENGAL**	-54.418	-55.066	-55.066	-56.486
xiii)	**TO UTTRANCHAL**	-83.969	-85.475	-85.475	-87.876
xiv)	**TO POWER EXCHANGE (IEX)**	-293.041	-301.508	-293.041	-301.508
xv)	**TO POWER EXCHANGE (PX)**	-4.090	-4.211	-4.090	-4.211
xvi)	**TO SHARE PROJECT (HARYANA)**	-3.561	-3.674	-3.561	-3.674
xvii)	**TO POWER EXCHANGE (PUNJAB)**	-5.601	-5.782	-5.601	-5.782
J	**TOTAL EXPORT**	-814.678	-831.923	-823.042	-846.390
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**1822.231**	**1740.188**	**1109.649**	**1033.739**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-56.661
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				48.679
ii)	**GT**				102.024
iii)	**PRAGATI**				204.573
iv)	**RITHALA**				0.114
v)	**BAWANA (CCGT)**				53.562

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
vi)	**Timarpur - Okhla Waste Management**				9.783
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				418.735
viii)	**IMPORT FROM BTPS**				405.776
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				824.511
x)	**RENEWABLE SOLAR (TPDDL)**				0.230
xi)	**RENEWABLE SOLAR (BRPL)**				0.130
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				**0.360**
xiv)	**TOTAL AVAILABILITY (ix + xii)**				824.871
M	**TOTAL CONSUMPTION**				1801.951
N	**LOAD SHEDDING**				2.873
O	**REQUIREMENT**				1804.824
P	**% DEPENDENCE ON NORTHERN GRID**				60.10
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				17.833
R	**NET CONSUMPTION OF DELHI**				1784.118

9.13 Consolidated Power Supply Position for 2012-13

All figures in MUs

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
1	**SINGRAULI**	1142.709	1105.567	1023.634	989.850
2	**RIHAND-I**	651.567	630.494	588.489	569.217
3	**RIHAND-II**	1029.758	996.656	925.661	895.560
4	**RIHAND-III**	129.264	124.507	123.668	119.130
5	**UNCHAHAR-I**	187.817	181.746	173.102	167.504
6	**UNCHAHAR-II**	373.783	361.751	344.377	333.279
7	**UNCHAHAR-III**	230.016	222.615	213.408	206.533
8	**DADRI(TH)**	5832.976	5645.042	5276.196	5106.602
9	**DADRI(TH)- Stage-II**	5385.618	5211.596	4883.822	4725.070
10	**FARAKA**	135.916	131.493	123.224	119.215
11	**KHELGAON**	347.953	336.860	319.215	308.959
12	**KHELGAON-II**	966.215	935.183	927.165	897.283
13	**ANTA (GT)**	213.225	206.565	153.622	148.753
14	**ANTA (Liquid)**	126.755	122.600	5.194	5.044
15	**ANTA (RLNG)**	10.253	9.773	0.000	0.000
16	**AURAIYA (GT)**	221.072	214.077	163.293	158.021
17	**AURAIYA(Liquid)**	322.258	311.739	9.664	9.376
18	**AURAIYA (RLNG)**	17.109	16.426	0.001	0.001
19	**DADRI (GT)**	421.453	408.425	310.801	301.035
20	**DADRI (Liquid)**	326.279	315.339	10.537	10.226
21	**DADRI (RLNG)**	7.106	6.712	0.018	0.017
A.	**TOTAL NTPC (TOTAL 1 TO 21)**	**18079.102**	**17495.164**	**15575.090**	**15070.677**
	NHPC STATIONS				
22	**TANAKPUR**	54.891	53.269	31.944	31.030
23	**CHAMERA-I**	192.863	187.271	114.191	110.991
24	**CHAMERA-II**	190.128	184.622	114.639	111.438
25	**CHAMERA-III**	82.540	80.046	80.123	77.723
26	**BAIRA SUIL**	77.866	75.620	47.866	46.538
27	**SALAL**	380.621	369.522	233.264	226.702
28	**DULASTI**	259.089	251.639	158.157	153.809
29	**DAULI GANGA**	148.328	144.002	89.491	86.967
30	**URI**	327.053	317.419	198.159	192.537
31	**SEWA -II**	63.828	61.962	38.389	37.305
B	**TOTAL NHPC (TOTAL 22 TO 31)**	**1777.208**	**1725.373**	**1106.223**	**1075.040**
	NPC				
32	**NAPP**	238.351	230.797	238.351	230.797
33	**RAPP 'B'**	0.000	0.000	0.000	0.000
34	**RAPP 'C'**	419.526	406.107	419.526	406.107
C	**TOTAL NPC (32 TO 34)**	**657.877**	**636.904**	**657.877**	**636.904**
D	**NATHPA JHAKHRI (SJVNL)**	636.507	617.895	614.169	596.227
	THDC				
35	**TEHRI**	317.808	307.701	317.808	307.701
36	**KOTESHWAR**	113.830	110.253	113.672	110.099
E.	**TOTAL THDC**	431.638	417.954	431.480	417.799

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
F	**JHAJJAR**	1365.717	1322.513	362.437	351.622
G	**TALA HEP**	104.472	101.457	104.454	101.440
H	**TOTAL CENTRAL SECTOR (A+B+C+D+E+F+G)**	23052.522	22317.259	18851.730	18249.709
	BILATERAL IMPORT				
i)	**RASJASTHAN**	95.148	93.759	93.759	91.178
ii)	**GUJRAT**	1.494	1.470	1.470	1.421
iii)	**WEST BENGAL**	44.596	44.001	44.001	42.803
iv)	**MADHYA PRADESH**	425.893	418.142	418.142	406.443
v)	**HARYANA(FOR TPDDL) LT**	265.119	263.184	263.184	254.419
vi)	**HARYANA**	29.689	29.245	29.245	28.370
vii)	**SIKKIM**	14.322	14.125	14.125	13.691
viii)	**NAGALAND**	9.782	9.594	9.594	9.294
ix)	**URS**	0.193	0.186	0.193	0.186
x)	**KARNATAKA**	0.197	0.193	0.193	0.187
xi)	**DVC**	2047.990	2017.868	2017.868	1953.342
xii)	**DVC CTPS (BRPL)**	265.471	261.753	261.753	253.781
xiii)	**DVC CTPS (BYPL)**	236.245	232.952	232.952	225.918
xiv)	**DVC CTPS (TPDDL)**	46.420	45.816	45.816	44.563
xv)	**DVC METHON (TPDDL)**	1707.509	1681.734	1681.734	1625.156
xvi)	**DVC (TATA STEEEL)**	4.062	4.008	4.008	3.908
xvii)	**DVC MEJIA (LT-O8) BYPL**	750.819	739.814	739.814	716.270
xviii)	**DVC HARYANA (LT-O9)**	198.360	195.410	195.410	188.896
xix	**WEST BENGAL**	32.774	32.310	32.310	31.206
xx)	**JHARKHAND**	28.237	27.939	27.939	27.225
xxi)	**CHATTISHGARH**	270.989	266.860	266.860	260.240
xxii)	**UTTRANCHAL**	52.348	51.338	51.338	49.742
xxiii)	**ORISSA**	129.676	127.953	127.953	124.469
xxiv)	**PUNJAB**	3.692	3.642	3.642	3.546
xxv)	**ANDHRA PRADESH**	12.966	12.674	12.674	12.342
xxvi)	**HIMACHAL PRADESH**	274.092	270.858	270.858	263.279
xxvii)	**JAMMU & KASHMIR**	349.982	345.606	345.606	336.237
xxviii)	**POWER EXCHANGE(IEX)**	95.676	92.504	95.676	92.504
xxix)	**POWER EXCHANGE (PX)**	1.167	1.136	1.167	1.136
I	**TOTAL BILATERAL IMPORT**	7394.909	7286.075	7289.285	7061.752
	BILATERAL EXPORT				
i)	**TO RAJASTHAN**	-243.889	-248.429	-248.429	-257.424
ii)	**TO ASSAM**	-39.788	-40.458	-40.458	-41.335
iii)	**TO GOA**	-0.046	-0.047	-0.047	-0.049
iv)	**TO GUJRAT**	-87.335	-88.755	-88.755	-91.789
v)	**TO UTTAR PRADESH**	-253.262	-258.330	-258.330	-267.411
vi)	**TO NEPAL**	-2.157	-2.217	-2.217	-2.304
vii)	**TO PUNJAB**	-6.537	-6.612	-6.612	-6.797
viii)	**TO CHANDIGARH**	-7.991	-8.085	-8.085	-8.314
ix)	**TO CHATTISHGARH**	-27.437	-28.061	-28.061	-28.926
x)	**TO ANDHRA PRADESH**	-0.352	-0.359	-0.359	-0.368
xi)	**TO JAMMU & KASHMIR**	-621.878	-633.822	-633.822	-658.043

S. no.	SOURCE	Availability at Power Plant bus	Availability at Delhi periphery	Allocation made by NRLDC at Power Plant	Allocation Made by NRLDC at Delhi periphery
xii)	**TO KERALA**	-12.767	-13.063	-13.063	-13.445
xiii)	**TO JHARKHAND**	-29.021	-29.311	-29.311	-30.380
xiv)	**TO TRIPURA**	-1.968	-2.004	-2.004	-2.078
xv)	**TO TAMILNADU**	-9.829	-10.058	-10.058	-10.418
xvi)	**TO MEGHALAYA**	-94.676	-97.024	-97.024	-100.858
xvii)	**TO HIMACHAL PRADESH**	-220.250	-224.184	-224.184	-233.048
xviii)	**TO MAHARASHTRA**	-293.203	-299.193	-299.193	-310.235
xix	**TO MADHYA PRADESH**	-650.584	-661.096	-661.096	-687.734
xx)	**TO WEST BENGAL**	-99.524	-100.667	-100.667	-103.413
xxi)	**TO UTTRANCHAL**	-346.755	-355.333	-355.333	-370.177
xxii)	**TO HARYANA**	-0.107	-0.108	-0.108	-0.111
xxiii)	**TO POWER EXCHANGE (IEX)**	-2745.786	-2841.739	-2745.786	-2841.739
xxiv)	**TO POWER EXCHANGE (PX)**	-58.520	-60.367	-58.520	-60.367
xxv)	**TO SHARE PROJECT (HARYANA)**	-131.892	-136.319	-131.892	-136.319
xxvi)	**TO POWER EXCHANGE (PUNJAB)**	-83.666	-86.669	-83.666	-86.669
J	**TOTAL EXPORT**	-6069.221	-6232.310	-6127.080	-6349.755
K	**TOTAL DRAWAL FROM THE NORTHERN GRID**	**24378.209**	**23371.024**	**20013.935**	**18961.706**
L	**OVER DRAWL(+)/UNDER DRAWAL(-) FROM THE GRID**				-1897.789
	AVAILABILITY FROM OWN SOURCES				
i)	**RPH**				792.762
ii)	**GT**				1307.857
iii)	**PRAGATI**				2508.915
iv)	**RITHALA**				138.474
v)	**BAWANA (CCGT)**				1435.490
vi)	**Timarpur - Okhla Waste Management**				83.476
vii)	**TOTAL AVAILABILITY FROM OWN SOURCES (i+ii+iii+iv+v+vi)**				6266.974
viii)	**IMPORT FROM BTPS**				4162.466
ix)	**TOTAL AVAILABILITY WITHIN DELHI (vii+viii)**				10429.440
x)	**RENEWABLE SOLAR (TPDDL)**				2.060
xi)	**RENEWABLE SOLAR (BRPL)**				1.120
xii)	**NON SOLAR (BRPL)**				0.000
xiii)	**TOTAL SOLAR ENERGY (ix+x+xi)**				3.180
xiv)	**TOTAL AVAILABILITY (ix + xii)**				10432.620
M	**TOTAL CONSUMPTION**				27496.537
N	**LOAD SHEDDING**				138.185
O	**REQUIREMENT**				27634.722
P	**% DEPENDENCE ON NORTHERN GRID**				**72.41**
Q	**AUXILIARY CONSUMPTION OF GENERATING UNITS OF DELHI**				262.787
R	**NET CONSUMPTION OF DELHI**				27233.748

9.14 LOAD SHEDDING DETAILS FOR 2012-13

Month	Number of Under Frequency Trippings	Load shedding due to under Frequency Relay Operation in MUs				
		BYPL	BRPL	TPDDL	NDMC	Total
Apr 2012	7	0.027	0.003	0.000	0.009	**0.039**
May 2012	6	0.290	0.155	0.002	0.000	**0.447**
Jun 2012	9	0.044	0.080	0.003	0.000	**0.127**
July 2012	11	0.056	0.190	0.001	0.000	**0.247**
Aug. 2012	1	0.007	0.000	0.000	0.000	**0.007**
Sept 2012	2	0.000	0.003	0.001	0.000	**0.004**
Oct. 2012	6	0.007	0.000	0.000	0.000	**0.007**
Nov. 2012	0	0.000	0.000	0.000	0.000	**0.000**
Dec. 2012	0	0.000	0.000	0.000	0.000	**0.000**
Jan. 2013	0	0.000	0.000	0.000	0.000	**0.000**
Feb. 2013	0	0.000	0.000	0.000	0.000	**0.000**
Mar. 2013	0	0.000	0.000	0.000	0.000	**0.000**
TOTAL	**42**	**0.431**	**0.431**	**0.007**	**0.009**	**0.878**

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**			
	BYPL	BRPL	TPDDL	NDMC	BYPL	BRPL	TPDDL	NDMC
Apr 2012	0.000	0.099	0.000	0.000	0.000	0.000	0.000	0.000
May 2012	0.548	0.920	1.646	0.000	0.000	0.000	0.000	0.000
Jun 2012	0.129	3.114	2.159	0.000	0.000	0.000	0.000	0.000
July 2012	1.290	2.735	6.378	0.017	0.000	0.000	0.000	0.000
Aug. 2012	0.385	0.407	0.641	0.000	0.000	0.000	0.000	0.000
Sept 2012	0.118	0.414	0.182	0.000	0.000	0.000	0.000	0.000
Oct. 2012	0.218	0.452	0.531	0.000	0.000	0.000	0.000	0.000
Nov. 2012	0.552	1.052	1.282	0.000	0.000	0.000	0.000	0.000
Dec. 2012	4.687	1.939	4.134	0.000	0.000	0.000	0.000	0.000
Jan. 2013	9.021	6.086	4.576	0.000	0.000	0.000	0.000	0.000
Feb. 2013	0.085	0.161	0.021	0.000	0.000	0.000	0.000	0.000
Mar. 2013	0.876	0.929	0.286	0.000	0.000	0.000	0.000	0.000
TOTAL	**17.909**	**18.308**	**21.836**	**0.017**	**0.000**	**0.000**	**0.000**	**0.000**

All figures in MUs

Month	Load Shedding due to Transmission Constraints in Central Sector Transmission System				Total	Total Shedding due to Grid Restrictions
	BYPL	BRPL	TPDDL	NDMC		
Apr 2012	0.000	0.000	0.000	0.000	**0.099**	**0.138**
May 2012	0.000	0.000	0.000	0.000	**3.114**	**3.561**
Jun 2012	0.000	0.000	0.000	0.000	**5.402**	**5.529**
July 2012	8.486	18.075	9.245	1.034	**47.260**	**47.507**
Aug. 2012	0.177	0.339	0.280	0.000	**2.229**	**2.236**
Sept 2012	0.020	0.221	0.083	0.000	**1.038**	**1.042**
Oct. 2012	0.000	0.000	0.000	0.000	**1.201**	**1.208**
Nov. 2012	0.005	0.025	0.000	0.000	**2.916**	**2.916**
Dec. 2012	0.000	0.000	0.000	0.000	**10.760**	**10.760**
Jan. 2013	0.000	0.000	0.000	0.000	**19.683**	**19.683**
Feb. 2013	0.000	0.000	0.000	0.000	**0.267**	**0.267**
Mar. 2013	0.000	0.000	0.000	0.000	**2.091**	**2.091**
TOTAL	**8.688**	**18.660**	**9.608**	**1.034**	**96.060**	**96.938**

All figures in MUs

Month	Load Shedding due to Trippings / Break-downs / Shut-downs / Constraints in DTL System					Total
	BYPL	BRPL	TPDDL	NDMC	MES	
Apr 2012	1.066	0.426	0.205	0.214	0.000	**1.911**
May 2012	0.999	2.122	0.715	0.114	0.000	**3.950**
Jun 2012	0.290	1.410	0.377	0.000	0.000	**2.077**
July 2012	0.952	0.935	0.482	0.056	0.000	**2.425**
Aug. 2012	0.146	0.432	0.118	0.000	0.000	**0.696**
Sept 2012	0.108	0.235	0.094	0.002	0.000	**0.439**
Oct. 2012	0.130	0.458	0.091	0.012	0.000	**0.691**
Nov. 2012	0.053	0.140	0.066	0.003	0.000	**0.262**
Dec. 2012	0.071	0.072	0.031	0.014	0.000	**0.188**
Jan. 2013	0.169	0.071	0.011	0.007	0.000	**0.258**
Feb. 2013	0.015	0.018	0.330	0.000	0.000	**0.363**
Mar. 2013	0.013	0.095	0.107	0.000	0.000	**0.215**
TOTAL	4.012	**6.414**	**2.627**	**0.422**	**0.000**	**13.475**

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				
	BYPL	BRPL	TPDDL	NDMC	BYPL	BRPL	TPDDL	NDMC	Total
Apr 2012	0.194	0.152	0.159	0.000	0.000	0.000	0.002	0.000	**0.002**
May 2012	0.497	1.775	0.385	0.000	0.143	0.197	0.028	0.000	**0.368**
Jun 2012	0.880	4.642	0.662	0.000	0.822	0.032	0.005	0.000	**0.859**
July 2012	1.332	2.946	0.532	0.003	0.005	0.000	0.018	0.000	**0.023**
Aug. 2012	0.438	0.803	0.237	0.000	0.000	0.000	0.002	0.000	**0.002**
Sept 2012	0.151	0.650	0.296	0.000	0.027	0.000	0.000	0.000	**0.027**
Oct. 2012	0.134	0.229	0.092	0.000	0.021	0.000	0.000	0.000	**0.021**
Nov. 2012	0.069	0.161	0.139	0.000	0.007	0.000	0.008	0.000	**0.015**
Dec. 2012	0.351	0.146	0.047	0.000	0.000	0.000	0.008	0.000	**0.008**
Jan. 2013	0.297	0.412	0.084	0.000	0.013	0.000	0.010	0.000	**0.023**
Feb. 2013	0.280	0.458	0.312	0.000	0.017	0.001	0.001	0.000	**0.019**
Mar. 2013	0.235	0.239	0.090	0.000	0.000	0.000	0.003	0.000	**0.003**
TOTAL	4.858	12.613	**3.035**	**0.003**	**1.055**	**0.230**	**0.085**	**0.000**	**1.370**

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	TPDDL						
Apr 2012	0.000	0.000	0.659	**3.077**	**3.215**	2118.816	3779	10.04.12	15.46.48
May 2012	0.000	0.000	0.750	**7.725**	**11.286**	2763.957	5155	30.05.12	15:23:40
Jun 2012	0.000	0.000	0.536	**9.656**	**15.185**	3105.775	5389	26.06.12	15:56:34
July 2012	0.000	0.000	0.444	**7.705**	**55.212**	3064.446	5642	05.07.12	15:10:14
Aug. 2012	0.000	0.000	0.527	**2.703**	**4.939**	2705.419	4652	03.08.12	15:20:35
Sept 2012	0.000	0.000	0.712	**2.275**	**3.317**	2568.776	4621	13.09.12	15:02:12
Oct. 2012	0.000	0.000	0.837	**2.004**	**3.212**	2096.866	3995	04.10.12	18:52:37
Nov. 2012	0.198	0.000	0.768	**1.612**	**4.528**	1656.111	3234	23.11.12	18:25:48
Dec. 2012	0.087	0.000	0.375	**1.202**	**11.962**	1781.543	3643	31.12.12	10:59:32
Jan. 2013	0.000	0.000	0.000	**1.074**	**20.757**	1973.677	4214	09.01.13	10:13:56
Feb. 2013	0.000	0.000	0.000	**1.432**	**1.699**	1614.248	3590	01.02.13	09:59:52
Mar. 2013	0.000	0.000	0.000	**0.782**	**2.873**	1784.118	3226	01.03.13	09:43:39
TOTAL	0.285	0.000	**5.608**	**41.247**	**138.185**	**27233.748**	**5642**	05.07.12	15:10:14

Month	Shedding at the time of Peak Demand in MW	Un-restricted Demand in MW	Maximum Un-restricted Demand in MW	Date	Time	Demand at that Time in MW	Shedding at that time in MW
Apr 2012	0	**3779**	**3779**	10.04.2012	15.46.48	3779	0
May 2012	38	**5193**	**5193**	30.05.2012	15:23:40	5155	38
Jun 2012	57	**5446**	**5472**	22.06.2012	15:49:32	5330	142
July 2012	85	**5727**	**5727**	05.07.2012	15.10.14	5642	85
Aug. 2012	9	**4661**	**4661**	03.08.2012	15.20.35	4652	9
Sept 2012	15	**4636**	**4636**	13.09.2012	15:02:12	4621	15
Oct. 2012	0	**3995**	**3995**	04.10.2012	18:52:37	3995	0
Nov. 2012	0	**3234**	**3234**	23.11.2012	18:25:48	3234	0
Dec. 2012	23	**3666**	**3836**	28.12.2012	10:33:03	3605	231
Jan. 2013	0	**4214**	**4266**	08.01.2013	10:32:29	4122	144
Feb. 2013	0	**3590**	**3590**	01.02.2013	09:59:52	3590	0
Mar. 2013	0	**3226**	**3236**	01.03.2013	19:00	3001	235
Max	85	**5727**	**5727**	05.07.2012	15.10.14	5642	85

9.15 DEMAND - AVAILABILITY-DEMAND POSITION OF DELHI AT THE TIME OF PEAK DEMAND MET DURING 2012-13

Month	Date	Time of peak demand	Generation within Delhi in MW							Import from the Grid in MW	Schedule from the Grid in MW	OD (-) / UD (+) in MW	Demand met in MW	Shedding in MW	Un-Restricted Demand in MW
			Rithala	RPH	GT	PPCL	BTPS	Bawana	Total						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)= (3) to (8)	(10)	(11)	(12)= (11) - (10)	(13)= (11)+ (12)	(14)	(15)= (13)+ (14)
Apr 12	10	15.46.48	32	105	182	281	491	261	1358	2421	2502	81	3779	0	**3779**
May 12	30	15:23:40	30	103	172	213	480	203	1251	3904	3775	-129	5155	38	**5193**
Jun 12	26	15:56:34	29	85	196	269	356	207	1142	4247	4199	-48	5389	57	**5446**
July 12	05	15:10:14	13	88	210	268	587	238	1404	4238	4057	-181	5642	85	**5727**
Aug. 12	03	15:20:35	39	47	176	277	509	-8	1040	3612	3160	-52	4652	9	**4661**
Sept 12	13	15:02:12	20	79	145	289	511	-1	1043	3578	3551	-27	4621	15	**4636**
Oct. 12	04	18:52:37	22	105	153	286	578	293	1437	2558	2941	383	3995	0	**3995**
Nov. 12	23	18:25:48	20	102	159	321	506	258	1366	1868	1863	-5	3234	0	**3234**
Dec. 12	31	10:59:32	0	103	160	322	609	222	1416	2227	2136	-91	3643	23	**3666**
Jan. 13	09	10:13:56	20	54	116	316	603	170	1279	2935	2813	-122	4214	0	**4214**
Feb. 13	01	09:59:52	21	104	126	319	592	318	1480	2110	2186	76	3590	0	**3590**
Mar. 13	01	09:43:39	0	49	125	313	567	289	1343	1883	1886	3	3226	0	**3226**
Max	05. 07. 12	15:10:14	13	88	210	268	587	238	1404	4238	4057	-181	5642	85	**5727**

9.16 POWER AVAILABILITY- DEMAND POSITION AT THE TIME OF OCCURRENCE OF MAXIMUM UNRESTRICTED DEMAND DURING 2012-13

Month	Date	Time of peak demand	Generation within Delhi in MW							Import from the Grid in MW	Schedule from the Grid in MW	OD (-) / UD (+)in MW in MW	Demand met in MW	Shedding in MW	Un-Restricted Demand in MW
			Rithala	RPH	GT	PPCL	BTPS	Bawana	Total						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)= (3) to (8)	(10)	(11)	(12)= (11) - (10)	(13)= (11)+ (12)	(14)	(15)= (13)+ (14)
Apr 12	10	15.46.48	32	105	182	281	491	261	1358	2421	2502	81	3779	0	**3779**
May 12	30	15:23:40	30	103	172	213	480	203	1251	3904	3775	-129	5155	38	**5193**
Jun 12	22	15:49:32	29	85	196	269	356	207	1142	4247	4199	-48	5330	142	**5472**
July 12	05	15.10.14	13	88	210	268	587	238	1404	4238	4057	-181	5642	85	**5727**
Aug. 12	03	15.20.35	39	47	176	277	509	-8	1040	3612	3160	-52	4652	9	**4661**
Sept 12	13	15:02:12	20	79	145	289	511	-1	1043	3578	3551	-27	4621	15	**4636**
Oct. 12	04	18:52:37	22	105	153	286	578	293	1437	2558	2941	383	3995	0	**3995**
Nov. 12	23	18:25:48	20	102	159	321	506	258	1366	1868	1863	-5	3234	0	**3234**
Dec. 12	28	10:33:03	0	105	119	319	615	222	1380	2225	2217	-8	3605	231	**3836**
Jan. 13	08	10:32:29	20	54	116	316	603	170	1279	2935	2813	-122	4122	144	**4266**
Feb. 13	01	09:59:52	21	104	126	319	592	318	1480	2110	2186	76	3590	0	**3590**
Mar. 13	01	19:00:00	0	49	125	313	567	289	1343	1883	1886	3	3001	235	**3236**
Max	05.07.12	15.10.14	13	88	210	268	587	238	1404	4238	4057	-181	5642	85	**5727**

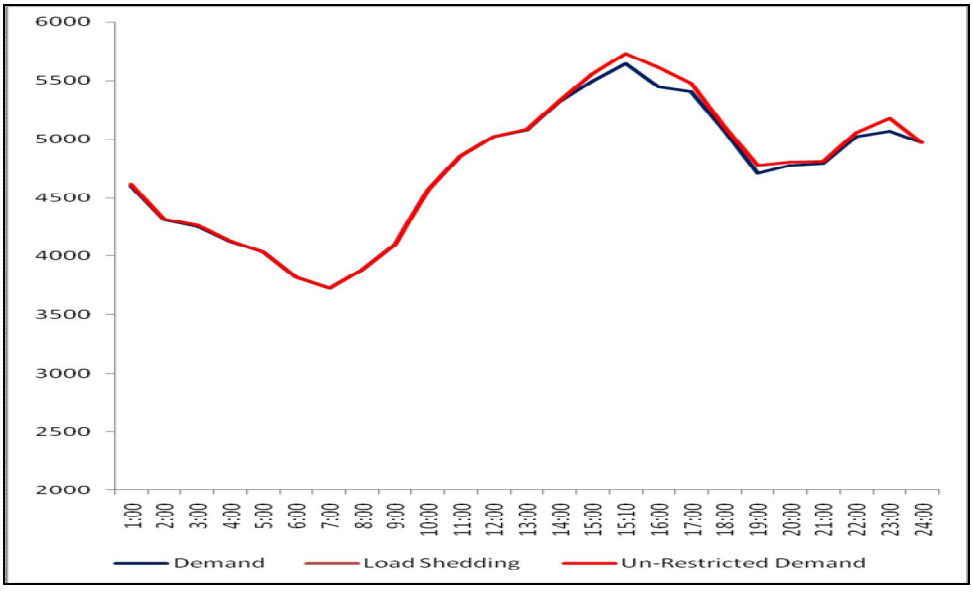
9.17 LOAD PATTERN

9.17.1 SUMMER SEASON

9.17.1.1 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM PEAK DEMAND MET DURING SUMMER 2012-13 – 05.07.2012 – 5642MW at 15:10:14Hrs.

All figures in MW

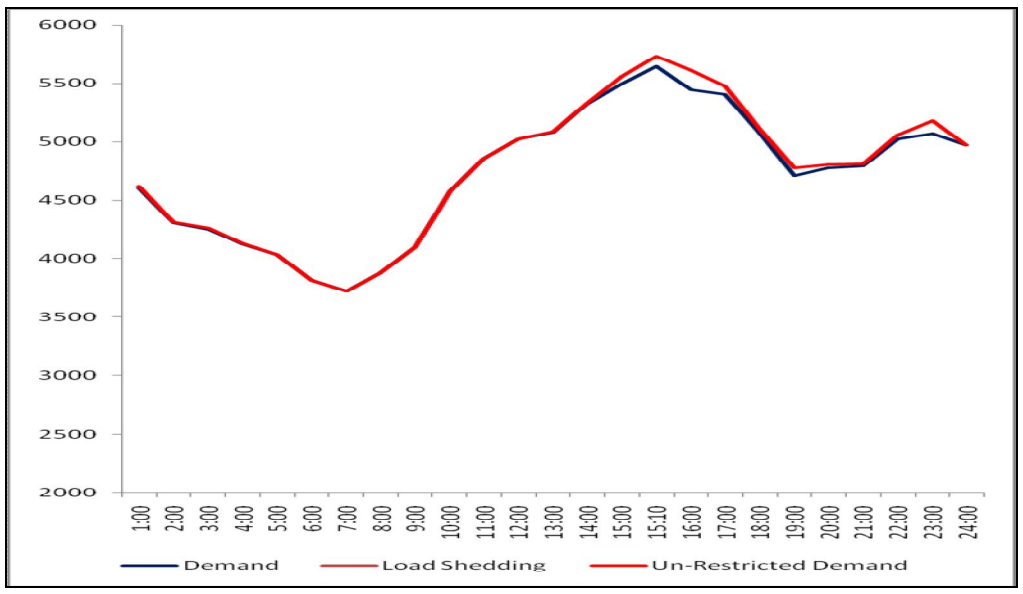
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	4600	17	4617
2:00	4305	9	4314
3:00	4252	9	4261
4:00	4126	5	4131
5:00	4035	2	4037
6:00	3818	0	3818
7:00	3727	0	3727
8:00	3879	0	3879
9:00	4099	0	4099
10:00	4575	0	4575
11:00	4861	0	4861
12:00	5023	0	5023
13:00	5080	8	5088
14:00	5318	8	5326
15:00	5497	59	5556
15:10:14	**5642**	85	5727
16:00	5446	163	5609
17:00	5405	73	5478
18:00	5076	30	5106
19:00	4711	65	4776
20:00	4780	26	4806
21:00	4794	19	4813
22:00	5023	34	5057
23:00	5071	104	5175
24:00	4970	0	4970
Total in Mus	111.872	0.833	112.705



9.17.1.2 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED DEMAND DURING SUMMER 2012-13 – 05.07.2012 – 5727MW at 15:10:14Hrs.

All figures in MW

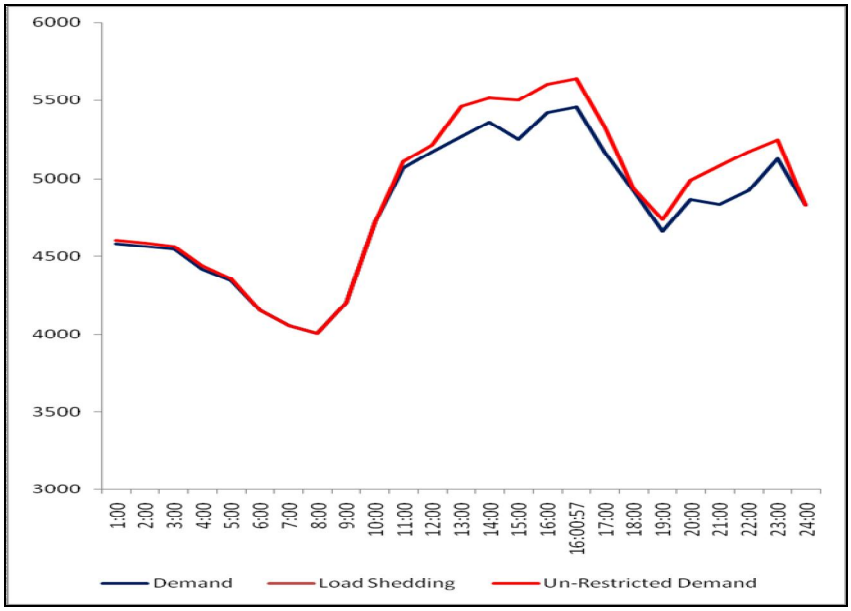
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	4600	17	4617
2:00	4305	9	4314
3:00	4252	9	4261
4:00	4126	5	4131
5:00	4035	2	4037
6:00	3818	0	3818
7:00	3727	0	3727
8:00	3879	0	3879
9:00	4099	0	4099
10:00	4575	0	4575
11:00	4861	0	4861
12:00	5023	0	5023
13:00	5080	8	5088
14:00	5318	8	5326
15:00	5497	59	5556
15:10:14	5642	85	**5727**
16:00	5446	163	5609
17:00	5405	73	5478
18:00	5076	30	5106
19:00	4711	65	4776
20:00	4780	26	4806
21:00	4794	19	4813
22:00	5023	34	5057
23:00	5071	104	5175
24:00	4970	0	4970
Total in Mus	111.872	0.833	112.705



9.17.1.3 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM ENERGY CONSUMED DURING SUMMER 2012-13 – 115.083MUs ON 02.07.2012

All figures in MW

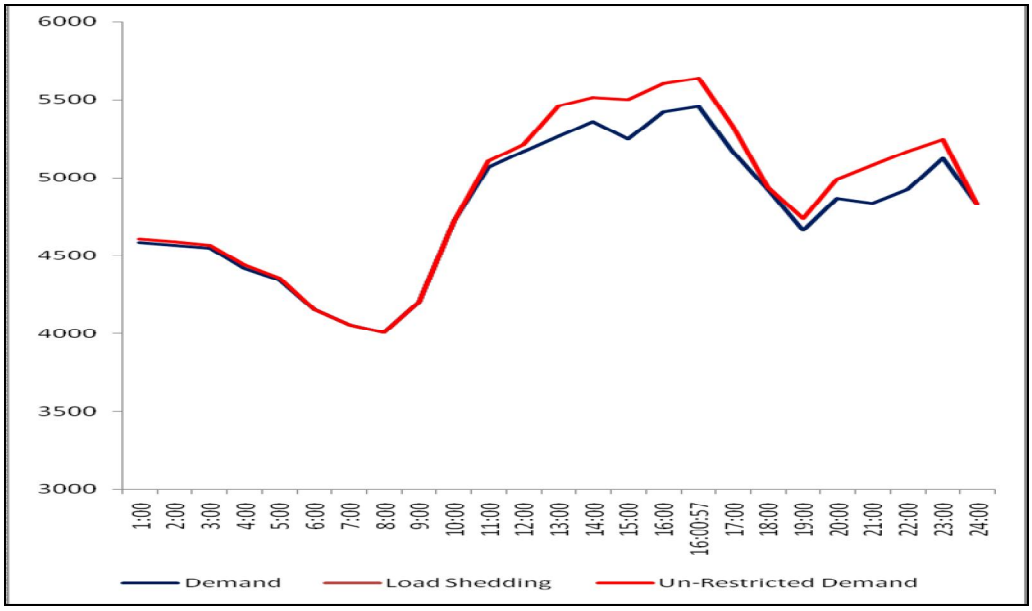
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	4582	25	4607
2:00	4565	21	4586
3:00	4547	17	4564
4:00	4421	20	4441
5:00	4343	13	4356
6:00	4153	0	4153
7:00	4054	0	4054
8:00	4009	0	4009
9:00	4200	0	4200
10:00	4725	0	4725
11:00	5066	39	5105
12:00	5166	44	5210
13:00	5264	196	5460
14:00	5356	157	5513
15:00	5247	251	5498
16:00	5418	184	5602
16:00:57	5454	184	5638
17:00	5168	162	5330
18:00	4923	15	4938
19:00	4663	74	4737
20:00	4868	123	4991
21:00	4834	243	5077
22:00	4924	242	5166
23:00	5124	120	5244
24:00	4829	0	4829
Total in Mus	**115.083**	2.393	117.476



9.17.1.4 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED ENERGY DEMAND DURING SUMMER 2012-13 – 117.476 MUs ON 02.07.2012

All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	4582	25	4607
2:00	4565	21	4586
3:00	4547	17	4564
4:00	4421	20	4441
5:00	4343	13	4356
6:00	4153	0	4153
7:00	4054	0	4054
8:00	4009	0	4009
9:00	4200	0	4200
10:00	4725	0	4725
11:00	5066	39	5105
12:00	5166	44	5210
13:00	5264	196	5460
14:00	5356	157	5513
15:00	5247	251	5498
16:00	5418	184	5602
16:00:57	5454	184	5638
17:00	5168	162	5330
18:00	4923	15	4938
19:00	4663	74	4737
20:00	4868	123	4991
21:00	4834	243	5077
22:00	4924	242	5166
23:00	5124	120	5244
24:00	4829	0	4829
Total in Mus	115.083	2.393	**117.476**



9.17.2 WINTER LOAD PATTERN

9.17.2.1 LOAD PATTERN OF DELHI ON THE DAY OF PEAK DEMAND MET DURING WINTER 2012-13 – 4214 MW ON 09.01.2013 at 10:13:56Hrs.

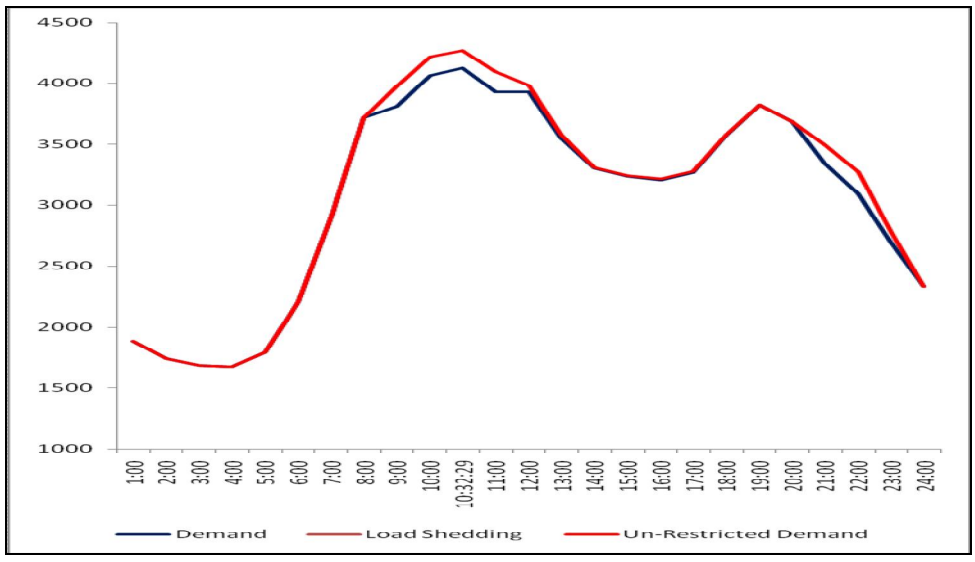
All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	1903	0	1903
2:00	1770	0	1770
3:00	1699	0	1699
4:00	1691	0	1691
5:00	1828	0	1828
6:00	2160	0	2160
7:00	2921	0	2921
8:00	3555	2	3557
9:00	3959	2	3961
10:00	4122	0	4122
10:13:56	4214	0	4214
11:00	4042	40	4082
12:00	3833	0	3833
13:00	3498	0	3498
14:00	3160	0	3160
15:00	3102	0	3102
16:00	3047	0	3047
17:00	3047	0	3047
18:00	3495	0	3495
19:00	3674	0	3674
20:00	3547	0	3547
21:00	3407	0	3407
22:00	3242	0	3242
23:00	2860	0	2860
24:00	2432	87	2519
Total in Mus	71.856	0.081	71.937

9.17.2.2 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UN-RESTRICTED DEMAND WINTER 2012-13 – 4266MW ON 08.01.2013 at 10:32:29Hrs.

All figures in MW

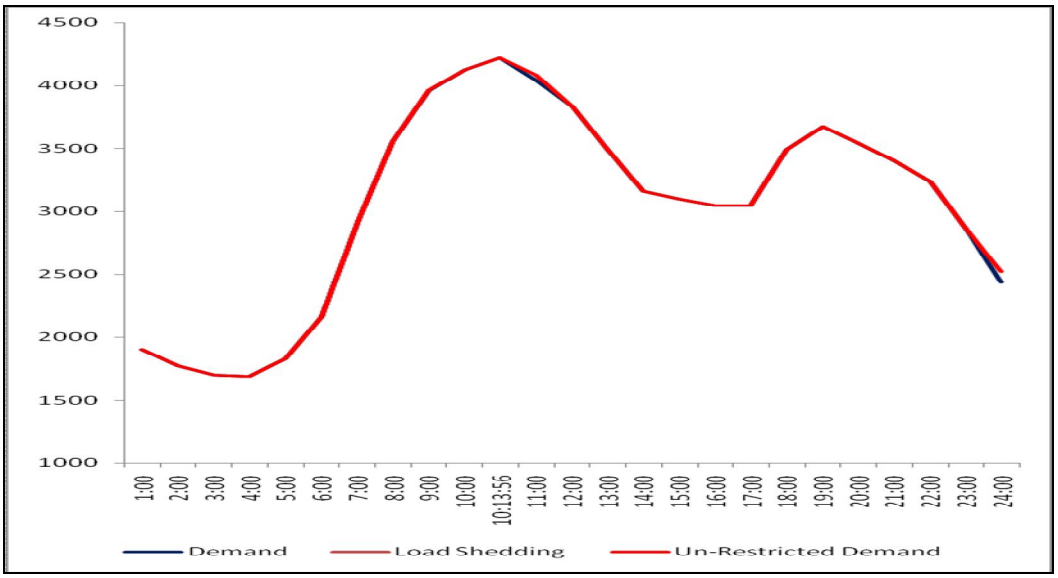
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	1886	0	1886
2:00	1739	0	1739
3:00	1682	0	1682
4:00	1674	0	1674
5:00	1792	0	1792
6:00	2206	0	2206
7:00	2912	0	2912
8:00	3721	0	3721
9:00	3814	162	3976
10:00	4059	156	4215
10:32:29	4122	144	**4266**
11:00	3928	163	4091
12:00	3925	54	3979
13:00	3552	30	3582
14:00	3303	6	3309
15:00	3235	6	3241
16:00	3201	12	3213
17:00	3264	12	3276
18:00	3577	6	3583
19:00	3822	0	3822
20:00	3690	0	3690
21:00	3338	156	3494
22:00	3087	183	3270
23:00	2688	88	2776
24:00	2328	0	2328
Total in Mus	73.150	1.250	74.400



9.17.2.3 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM ENERGY CONSUMED DURING WINTER 2012-13 – 71.856MUs ON 09.01.2013

All figures in MW

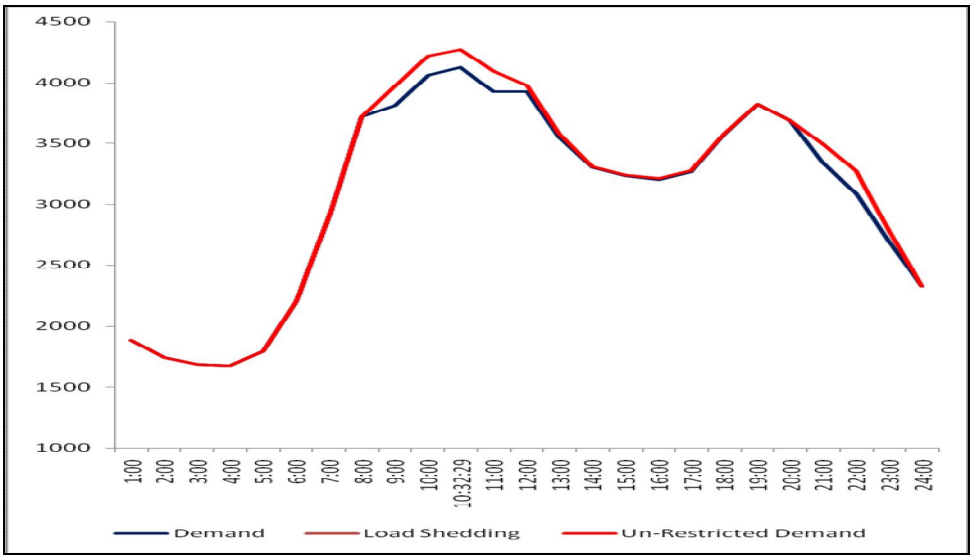
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1:00	1903	0	1903
2:00	1770	0	1770
3:00	1699	0	1699
4:00	1691	0	1691
5:00	1828	0	1828
6:00	2160	0	2160
7:00	2921	0	2921
8:00	3555	2	3557
9:00	3959	2	3961
10:00	4122	0	4122
10:13:56	4214	0	4214
11:00	4042	40	4082
12:00	3833	0	3833
13:00	3498	0	3498
14:00	3160	0	3160
15:00	3102	0	3102
16:00	3047	0	3047
17:00	3047	0	3047
18:00	3495	0	3495
19:00	3674	0	3674
20:00	3547	0	3547
21:00	3407	0	3407
22:00	3242	0	3242
23:00	2860	0	2860
24:00	2432	87	2519
Total in Mus	**71.856**	0.081	71.937



9.17.2.4 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED ENERGY DEMAND DURING WINTER 2012-13 – 74.400MUs ON 08.01.2013.

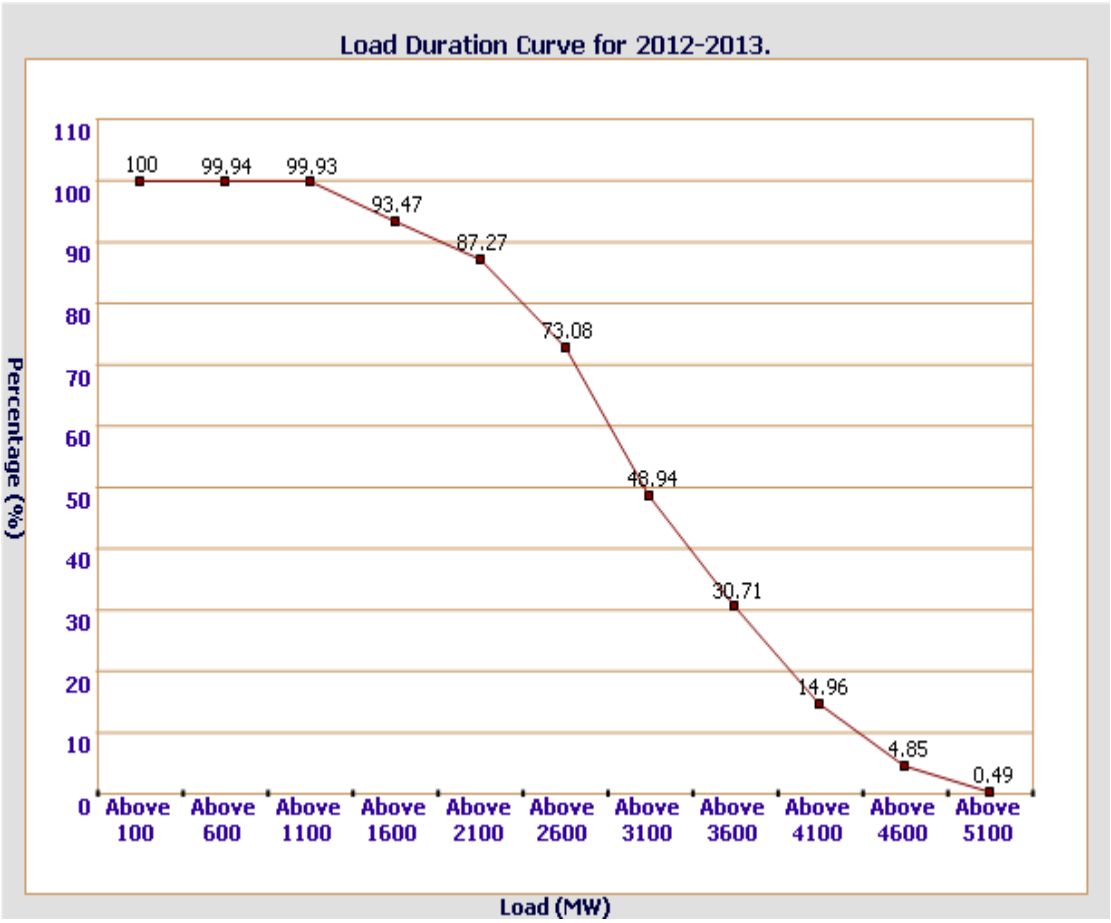
All figures in MW

Hrs.	Demand met	Load Shedding	Un-Restricted Demand
1:00	1886	0	1886
2:00	1739	0	1739
3:00	1682	0	1682
4:00	1674	0	1674
5:00	1792	0	1792
6:00	2206	0	2206
7:00	2912	0	2912
8:00	3721	0	3721
9:00	3814	162	3976
10:00	4059	156	4215
10:32:29	4122	144	4266
11:00	3928	163	4091
12:00	3925	54	3979
13:00	3552	30	3582
14:00	3303	6	3309
15:00	3235	6	3241
16:00	3201	12	3213
17:00	3264	12	3276
18:00	3577	6	3583
19:00	3822	0	3822
20:00	3690	0	3690
21:00	3338	156	3494
22:00	3087	183	3270
23:00	2688	88	2776
24:00	2328	0	2328
Total in Mus	73.150	1.250	**74.400**



9.18 LOAD DURATION CURVE FOR 2012-13 (Based on SCADA)

LOAD (MW)	% TIME
Above 100 MW	100.00
Above 600 MW	99.94
Above 1100 MW	99.93
Above 1600 MW	93.47
Above 2100 MW	87.27
Above 2600 MW	73.08
Above 3100 MW	48.94
Above 3600 MW	30.71
Above 4100 MW	14.96
Above 4600 MW	4.85
Above 5100 MW	0.49



9.19 SUBSTATION-WISE TRANSFORMER LOADING (CONNECTED LOAD) AT THE TIME OF OCCURRENCE OF MAXIMUM DEMAND (i.e.5642MW) IN DELHI SYSTEM ON 05.07.2012 AT 15:10:14HRS.

A) 400kV Sub-Station

S. NO.	SUB-STATION NAME	TRANSFORMER	MVA capacity	MW	MVAR	Bus Voltage		
						400kV	220kV	66kV
1	MANDOLA	400/220kV 315MVA ICT-1	315	277	52			
		400/220kV 315MVA ICT-2	315	280	44			
		400/220kV 315MVA ICT-3	315	274	52	389	207	-
		400/220kV 315MVA ICT-4	315	257	43			
		Total Load 1260MVA	**1260**	**1088**	**191**			
2	BAWANA	400/220kV 315MVA ICT-1	315	274	6			
		400/220kV 315MVA ICT-2	315	272	30			
		400/220kV 315MVA ICT-3	315	0	0	388	216	62.1
		400/220kV 315MVA ICT-4	315	264	4			
		400/220kV 315MVA ICT-5	315	265	0			
		Total Load 1575MVA	**1575**	**1075**	**40**			
3	BAMNAULI	400/220kV 315MVA ICT-1	315	259	30			
		400/220kV 315MVA ICT-2	315	269	31			
		400/220kV 315MVA ICT-3	315	266	28	388	211	-
		400/220kV 315MVA ICT-4	315	274	25			
		Total Load 1260MVA	**1260**	**1068**	**114**			
4	MAHARANIBAGH	400/220kV 315MVA ICT-1	315	102	10			
		400/220kV 315MVA ICT-2	315	102	10			
		400/220kV 500MVA ICT-3	500	220	15	402	223	-
		400/220kV 500MVA ICT-4	500	220	15			
		Total Load 1630MVA	**1630**	**644**	**50**			
5	MUNDKA	400/220kV 315MVA ICT-1	315	134	0	390	212	63
		Total Load 315MVA	**315**	**134**	**0**			

Total MVAR drawal = 395 MVAR

Total 400/220kV Transformation capacity = 6040 MVA

S. NO.	SUB-STATION NAME	TRANSFORMER	MVA capacity	MW	MVAR	Bus Voltage			
						220kV	66kV	33kV	11kV
1	NARELA	220/66KV 100MVA TX-1	100	70	0				
		220/66KV 100MVA TX-2	100	77	-5	212	65	32	10.9
		220/66KV 100MVA TX-3	100	79	-12				
		Total Load 300 MVA	**300**	**226**	**-17**				
2	GOPALPUR	220/66KV 100MVA TX-2	100	79	11				
		200/33KV 100MVA TX-1	100	64	0	217	61	31.3	10
		200/33KV 100MVA TX-3	100	71	13				
		Total Load 300 MVA	**300**	**214**	**24**				
3	ROHINI	220/66KV 100MVA TX-1	100	73	0				
		220/66KV 100MVA TX-2	100	74	0				
	(+) RITHALA	220/66KV 100MVA TX-3	100	69	-8	212	62	-	10.7
	GENERATION	220/66KV 100MVA TX-4	100	62	-5				
		Total Load 400 MVA	**400**	**278**	**-13**				
	CONNECTED LOAD			**291**	**-13**				

S. NO.	SUB-STATION NAME	TRANSFORMER	MVA capacity	MW	MVAR	Bus Voltage			
						220kV	66kV	33kV	11kV
4	SHALIMARBAGH	200/33KV 100MVA TX-1	100	61	34				
		200/33KV 100MVA TX-2	100	60	0	213	-	32.1	10.4
		200/33KV 100MVA TX-3	100	68	0				
		Total Load 300 MVA	**300**	**189**	**34**				
5	BAWANA	220/66KV 100MVA TX-1	100	68	18	212	61	-	-
		Total Load 100 MVA	**100**	**68**	**18**				
6	KANJHAWALA	220/66KV 100MVA TX-1	100	43	22				
		220/66KV 100MVA TX-2	100	29	16	213	65.4	-	11.1
		Total Load 200 MVA	**200**	**72**	**38**				
7	DSIDC BAWANA	220/66KV 100MVA TX-1	100	12	0				
		220/66KV 100MVA TX-2	100	64	-14	210	63	-	-
		Total Load 200 MVA	**200**	**76**	**-14**				
8	NAJAFGARH	220/66KV 100MVA TX-1	100	74	18				
		220/66KV 100MVA TX-2	100	79	6				
		220/66KV 100MVA TX-3	100	75	19	211	60	-	11
		220/66KV 100MVA TX-4	100	76	0				
		Total Load 400 MVA	**400**	**304**	**43**				
9	PAPPANKALAN-I	220/66KV 100MVA TX-1	100	84	23				
		220/66KV 100MVA TX-2	100	84	-23				
		220/66KV 100MVA TX-3	100	89	28	212	61	-	9.7
		220/66KV 100MVA TX-4	100	85	27				
		Total Load 400 MVA	**400**	**342**	**55**				
10	PAPPANKALAN-2	220/66KV 100MVA TX-1	100	80	23				
		220/66KV 100MVA TX-2	100	79	19	212	62	-	-
		Total Load 200 MVA	**200**	**159**	**42**				
11	NARAINA	220/33KV 100MVA TX-1	100	55	4				
		220/33KV 100MVA TX-2	100	50	5	210	-	30.2	10.7
		220/33KV 100MVA TX-3	100	54	19				
		Total Load 300 MVA	**300**	**159**	**28**				
12	MEHRAULI	220/66KV 100MVA TX-1	100	83	18				
		220/66KV 100MVA TX-2	100	89	0	211	61	-	10.1
		220/66KV 100MVA TX-3	100	86	17				
		Total Load 300 MVA	**300**	**258**	**35**				
13	OKHLA	220/66KV 100MVA TX-1	100	92	0				
		220/66KV 100MVA TX-2	100	91	0				
		220/33KV 100MVA TX-3	100	67	9				
		220/33KV 100MVA TX-4	100	71	12	206	63	31.8	10.1
		220/33KV 50MVA TX-5	50	41	0				
		220/33KV 50MVA TX-6	50	0	0				
		Total Load 500 MVA	**500**	**362**	**21**				
14	SARITA VIHAR	220/66KV 100MVA TX-1	100	76	6				
		220/66KV 100MVA TX-2	100	38	0	223	64	-	10.8
		Total Load 200 MVA	**200**	**114**	**6**				
	TOWCL Generation			**10**					
		Connected Load		**124**					

S. NO.	SUB-STATION NAME	TRANSFORMER	MVA capacity	MW	MVAR	Bus Voltage			
						220kV	66kV	33kV	11kV
15	LODHI ROAD	220/33KV 100MVA TX-1	100	79	38				
		220/33KV 100MVA TX-2	100	84	31	216	-	32.6	10.7
		Total Load 200 MVA	**200**	**163**	**69**				
16	VASANTKUNJ	220/66KV 100MVA TX-1	100	44	0				
		220/66KV 100MVA TX-2	100	45	0	207	61	-	10.6
		220/66KV 160MVA TX	160	109	0				
		Total Load 360 MVA	**360**	**198**	**0**				
17	WAZIRABAD	220/66KV 100MVA TX-2	100	79	10				
		220/66KV 100MVA TX-3	100	79	11	210	61.5	-	10.6
		220/66KV 100MVA TX-4	100	75	10				
		Total Load 300 MVA	**300**	**233**	**31**				
18	PATPARGANJ	220/66KV 100MVA TX-1	100	75	0				
		220/66KV 100MVA TX-2	100	75	0				
		220/33KV 100MVA TX-1	100	68	0				
		220/33KV 100MVA TX-2	100	21	5	206	64.2	31.4	10.1
		220/33KV 50MVA TX-3	50	36	0				
		220/33KV 100MVA TX-4	100	0	0				
		Total Load 550 MVA	**550**	**275**	**5**				
19	GEETA COLONY	220/33KV 100MVA TX-1	100	36	0				
		220/33KV 100MVA TX-2	100	49	20	209	-	31.4	-
		Total Load 200 MVA	**200**	**85**	**20**				
20	GAZIPUR	220/66KV 100MVA TX-1	100	70	-20				
		220/66KV 100MVA TX-2	100	65	-20	212	66	-	10.9
		Total Load 200 MVA	**200**	**135**	**-40**				
21	PARKSTREET	220/66KV 100MVA TX-1	100	66	10				
		220/66KV 100MVA TX-2	100	68	8				
		220/33KV 100MVA TX-3	100	75	12	215	62.3	31.7	-
		220/33KV 100MVA TX-4	100	71	10				
		Total Load 400 MVA	**400**	**280**	**40**				
22	PRAGATI (IP EXTN.)	220/66KV 160MVA TX	160	13	-2				
	(+) GT GENERATION	220/66KV 160MVA TX	160	-49	-10	204		-	-
		Total Load 320 MVA	**320**	**-36**	**-12**				
	CONNECTED LOAD AT GT			**174**	**10**				
23	SUBZIMANDI	220/33KV 100MVA TX-1	100	54	7				
		220/33KV 100MVA TX-2	100	56	0	210	-	33.8	9.7
		Total Load 200 MVA	**200**	**110**	**7**				
24	KASHMEREGATE	220/33KV 100MVA TX-1	100	47	11				
		220/33KV 100MVA TX-2	100	69	23	209	-	30.3	10.1
		Total Load 200 MVA	**200**	**116**	**34**				
25	IP STATION	220/33KV 100MVA TX-1	100	64	28				
		220/33KV 100MVA TX-2	100	70	17	207	-	30.5	-
		220/33KV 100MVA TX-3	100	56	0				
		Total Load 300 MVA	**300**	**190**	**45**				

S. NO.	SUB-STATION NAME	TRANSFORMER	MVA capacity	MW	MVAR	Bus Voltage			
						220kV	66kV	33kV	11kV
26	RIDGE VALLEY	220/66KV 160MVA TX-1	160	57	7				
		220/66KV 160MVA TX-2	160	0	0	211	-	-	-
		Total Load 320 MVA	**320**	**57**	**7**				
27	TRAUMA CENTER	220/33KV 100MVA TX-1	100	24	7				
		220/33KV 100MVA TX-2	100	0	0	217	--	32	--
		Total Load 200 MVA	**200**	**24**	**7**				
28	ELECTRIC LANE	220/33KV 100MVA TX-1	100	0	0				
		220/33KV 100MVA TX-2	100	0	0	--	--	--	--
		Total Load 200 MVA	**200**	**0**	**0**				
29	DIAL	220/66KV 160MVA TX-1	160	13	0				
		220/66KV 160MVA TX-2	160	13	-1	212	62	-	-
		Total Load 320 MVA	**200**	**26**	**-1**				
30	MASJID MOTH	220/33KV 100MVA TX-1	100	83	26				
		220/33KV 100MVA TX-2	100	83	30	215	-	31	-
		Total Load 200 MVA	**200**	**166**	56				
31	MUNDKA	220/66KV 160MVA TX	160	134	0	212	63	-	-
		Total Load 160 MVA	**160**	**134**	**0**				
32	RAJ GHAT POWER STATION (+) RPH GENERATION	220/33KV 100MVA TX-1	100	0	0				
		220/33KV 100MVA TX-2	100	22	0	205	-	32	-
		Total Load 200 MVA	**200**	**22**	**0**				
	CONNECTED LOAD			**109**					

Total MVAR drawal = 590 MVAR

Total 400/220kV Transformation capacity = 6040 MVA

Total 220/66 and 220/33kV Transformation capacity = 8810

Sl. No.	Generating station / Injecting feeders to the system at the time of peak	Injection to the system		
		In MW		In MVAR
1	RPH	87		30
2	GT	210		10
3	Rithala	13		--
4	220kV Narela-Rohtak Road Ckt-I&II	180		30

9.20 DETAILS OF CAPACITY UTILIZATION AT DIFFERENT SUB-STATIONS AT THE TIME OF OCCURRENCE OF PEAK DEMAND I.E. 5642MW ON 05.07.2012 AT 15:10HRS.

SL No	NAME OF THE GRID	220/66 & 220/33 KV , 100 MVA POWER TRANSFORMER		05.07.2012 AT 15:10:14HRS. PEAK LOAD 5642 MW		% usage
		INSTALLED CAPACITY (MVA)	INSTALLED CAPACITY (MW)			
	400kV S/Stn			**MW**	**MVAR**	
1	Bawana	1260	1071	1075	40	100.4
2	Bamnauli	1260	1071	1068	114	99.7
3	Mundka	315	268	134	0	50.0
	TOTAL	**2835**	**2410**	**2277**	**154**	94.5
	220kV S/Stn					
	NORTH DELHI					
1	Narela	300	255	226	-17	88.6
2	Gopalpur	300	255	214	24	83.9
3	Rohini	400	340	291	-13	85.6
4	Shalimarbagh	300	255	189	34	74.1
5	Bawana	100	85	68	18	80.0
6	Kanjhawala	200	170	72	38	42.4
7	DSIIDC Bawana	200	170	76	-14	44.7
8	Through Rohtak Road grid of BBMB	300	255	160	18	62.7
	TOTAL	**2100**	**1785**	**1296**	**88**	**72.6**
	WEST DELHI					
1	Najafgarh	400	340	304	43	89.4
2	Papankalan-1	400	340	342	55	100.6
3	Papankalan-2	200	170	159	42	93.5
4	Naraina	300	255	159	28	62.4
5	Mundka	160	136	134	0	98.5
	TOTAL	**1460**	**1241**	**1098**	**168**	**88.5**
	SOUTH DELHI & NDMC					
1	Mehrauli	300	255	258	35	101.2
2	Okhla	500	425	362	21	85.2
3	Masjid Moth	200	170	166	56	97.6
4	Sarita Vihar	200	170	124	6	72.9
5	Lodhi Road	200	170	163	69	95.9
6	Vasant Kunj	360	306	198	0	64.7
7	DIAL	320	272	26	-1	9.6
8	Ridge Valley	320	272	57	7	21.0
	TOTAL	**2400**	**2040**	**1354**	**193**	**66.4**
	EAST DELHI					
1	Wazirabad	300	255	233	31	91.4
2	Patparganj	500	425	275	5	64.7
3	Geeta colony	200	170	85	20	50.0
4	Gazipur	200	170	135	-40	79.4
	TOTAL	**1200**	**960**	**728**	**16**	**75.8**

SL No	NAME OF THE GRID	220/66 & 220/33 KV , 100 MVA POWER TRANSFORMER		05.07.2012 AT 15:10:14HRS. PEAK LOAD 5642 MW		% usage
		INSTALLED CAPACITY (MVA)	INSTALLED CAPACITY (MW)			
CENTRAL DELHI & NDMC						
1	Parkstreet	400	340	280	40	82.4
2	IPExtension (Pragati)	320	272	174	10	64.0
3	Subzimandi	200	170	110	7	64.7
4	Kashmerigate	200	170	116	34	68.2
5	IP Station	300	255	190	45	74.5
6	Rajghat	200	170	109	0	64.1
7	Trauma Center	200	170	24	7	14.1
8	Electric Lane	200	170	0	0	0.0
	TOTAL	**2020**	**1717**	**1003**	**143**	58.4
	GRAND TOTAL	**9180**	**7743**	**5479**	**608**	**70.8**

Note : The load of 220kV DMRC CKTs from Kashmeregate & 220kV DMRC CKT from Shalimarbagh not included in this report

At IPExtension (Pragati) the Txs are for evacution of power from GT S/STN. If load is more than generation at GT then it draws power from grid and vice-versa. The laod shown is total connected load at GT S/Stn.

MANDOLA	
VOLTAGE	**389kV**
IP	
VOLTAGE	**207kV**

9.21 DETAILS OF LINE LOADING AT THE TIME OF PEAK DEMAND I.E. 5642MW ON 05.07.2012 AT 15:10HRS.

SL. NO.	NAME OF THE ELEMENT	MW	MVAR	Remarks
	400kV Lines			
1	400kV BAWANA - MUNDKA CKT-I	-104	13	
2	400kV BAWANA - MUNDKA CKT-II	-102	7	
3	400kV MUNDKA - BAMNAULI CKT-I	170	151	
4	400kV MUNDKA - BAMNAULI CKT-II	116	148	
5	400kV BAWANA - MANDOLA CKT-I	-179	236	
6	400kV BAWANA - MANDOLA CKT-II	-171	244	
7	400kV BAMNAULI - BALLABH GARH CKT-I	-428	21	
8	400kV BAMNAULI - BALLABH GARH CKT-II	-442	36	
	220kV Lines			
1	220kV BAMNAULI - DIAL CKT-I	116	-9	
2	220kV BAMNAULI - DIAL CKT-II	115	-9	
3	220kV DIAL- MEHRAULI CKT-I	101	-12	
4	220kV DIAL- MEHRAULI CKT-II	103	-11	
5	220kV BAMNAULI-NAJAFGARH CKT-I	78	1	
6	220kV BAMNAULI-NAJAFGARH CKT-II	77	2	
7	220kV BAMNAULI-PAPPANKALAN-I CKT-I	173	53	
8	220kV BAMNAULI-PAPPANKALAN-I CKT-II	169	51	
9	220kV BAMNAULI-PAPPANKALAN-II CKT-I	80	19	
10	220kV BAMNAULI-PAPPANKALAN-II CKT-II	78	16	
11	220kV BAMNAULI-NARAINA CKT-I	134	2	
12	220kV BAMNAULI-NARAINA CKT-II	100	11	
13	220kV BAWANA - KANJHAWALA CKT	123	4	
14	220kV KANJHAWALA-NAJAFGARH CKT	51	21	
15	220KV BAWANA -NAJAFGARH CKT-II	103	17	
16	220KV BAWANA- ROHINI CKT-I	144	2	
17	220KV BAWANA- ROHINI CKT-II	134	-15	
18	220KV BAWANA-SHALIMARBAGH CKT-I	136	3	
19	220KV BAWANA-SHALIMARBAGH CKT-II	67	-2	
20	220kV BAWANA-DSIIDC BAWANA CKT-I	169	-20	
21	220kV BAWANA-DSIIDC BAWANA CKT-II	136	-11	
22	220kV DSIIDC BAWANA-NARELA CKT-I	105	0	
23	220kV DSIIDC BAWANA-NARELA CKT-II	125	-1	
24	220kV ROHINI-SHALIMARBAGH CKT-I	0	0	Duplicate source of SMB and Rohini and vice versa
25	220kV ROHINI-SHALIMARBAGH CKT-II	0	0	
26	220 KV GOPALPUR-WAZIRABAD CKT	0	0	Duplicate source of Gopalpur and Wazirabad and vice versa
27	220kV GOPALPUR-SUBZI MANDI CKT-I	55	-49	

SL. NO.	NAME OF THE ELEMENT	MW	MVAR	Remarks
28	220kV GOPALPUR-SUBZI MANDI CKT-II	65	12	
29	220kV GOPALPUR- MANDOLACKT-I	167	23	
30	220kV GOPALPUR- MANDOLACKT-II	169	26	
31	220kV NARELA - MANDOLA CKT-I	0	0	Load on Bawana to ease the over loading of Mandola system
32	220kV NARELA - MANDOLA CKT-II	0	0	
33	220kV WAZIRABAD - KASHMEREGATE CKT-I	48	10	
34	220kV WAZIRABAD - KASHMEREGATE CKT-II	79	20	
35	220KV WAZIRABAD - MANDOLA CKT-I	-189	-21	
36	220KV WAZIRABAD - MANDOLA CKT-II	-175	0	
37	220KV WAZIRABAD - MANDOLA CKT-III	-185	-27	
38	220KV WAZIRABAD - MANDOLA CKT-IV	-182	-23	
39	220KV WAZIRABAD - GEETA COLONY CKT-I	184	6	
40	220KV WAZIRABAD - GEETA COLONY CKT-II	190	9	
41	220kV GEETA COLONY- PATPARGANJ CKT-I	153	0	
42	220kV GEETA COLONY- PATPARGANJ CKT -II	148	0	
43	220 KV PATPARGANJ - I.P. CKT-I	-11	-10	
44	220 KV PATPARGANJ - I.P. CKT-II	-5	0	
45	220 KV I.P.- RPH CKT-I	-22	0	
46	220 KV I.P.- RPH CKT-II	6	-10	
47	220kV PRAGATI - I.P.CKT - I	111	26	
48	220kV PRAGATI - I.P.CKT - II	110	19	
49	220kV PRAGATI - PARK STREET CKT-I	147	9	
50	220kV PRAGATI - PARK STREET CKT-II	134	6	
51	220kV PRAGATI - SARITA VIHAR CKT	15	0	
52	220kV SARITA VIHAR - BTPS CKT.-I	0	0	Load on Maharanibagh source to ensure max evacuation from 400kV system to ease congestion of 220kV ring
53	220kV SARITA VIHAR - BTPS CKT.-II	0	0	
54	220kV OKHLA - BTPS CKT.- I	-175	-28	
55	220kV OKHLA - BTPS CKT. - II	-188	-9	
56	220kV MEHRAULI - BTPS CKT. - I	-127	-19	
57	220kV MEHRAULI - BTPS CKT. - II	-130	-18	
58	220kV MEHRAULI - VASANT KUNJ CKT.-I	93	0	
59	220kV MEHRAULI - VASANT KUNJ CKT.- II	110	0	
60	220kV MAHARANI BAGH - LODHI ROAD CKT-I	79	38	
61	220kV MAHARANI BAGH - LODHI ROAD CKT-II	84	31	
62	220kV MAHARANI BAGH - SARITA VIHAR CKT	105	7	
63	220kV MAHARANI BAGH - PRAGATI CKT	209	10	
64	220kV NARAINA-RIDGE VALLEY CKT-I	50	0	
65	220kV MAHARANIBAGH-MASJID MOTH CKT-I	84	51	
66	220kV MAHARANIBAGH-MASJID MOTH CKT-II	82	27	
67	220kV MAHARANIBAGH-TRAUMA CENTER CKT	24	0	
68	220kV BTPS-NOIDA-GAZIPUR CKT	135	40	

10 FREQUENCY SPECTRUM OF NORTHERN REGION [(NORTH-EAST-WEST)(NEW)] FOR 2012-13

Month	Frequency in Hz.			Frequency Variation inded (FVI)	Percentage of Time					
	Ave.	Max	Min.		Above 50.2Hz.	Between 50.2-49.7Hz.	Between 50.2-49.5Hz.	Below 49.7Hz.	Below 49.5Hz	Below 49.2Hz
Apr-12	49.91	50.69	49.08	0.46	4.02	80.57	93.66	15.41	2.32	0.00
May-12	49.76	50.75	48.81	1.00	1.36	61.73	88.19	36.91	10.45	0.00
Jun-12	49.70	50.68	48.75	1.58	1.40	49.14	78.01	49.46	20.59	0.00
Jul-12	49.69	51.21	48.79	1.68	2.00	42.19	74.75	55.81	23.24	0.00
Aug-12	49.95	50.65	48.82	0.96	7.80	81.01	90.67	11.19	1.53	0.00
Sep-12	50.03	50.65	49.04	0.33	13.67	82.47	85.86	3.87	0.48	0.00
Oct-12	49.99	50.61	49.37	0.79	6.31	90.17	93.58	3.52	0.11	0.00
Nov-12	50.04	50.64	49.33	0.26	10.23	87.40	89.71	2.36	0.05	0.00
Dec-12	50.01	50.71	49.25	0.31	11.62	83.73	88.12	4.64	0.25	0.00
Jan-12	50.02	50.78	49.30	0.35	13.31	81.33	86.42	5.36	0.28	0.00
Feb-12	50.09	50.75	49.40	12.76	19.62	78.92	80.35	1.46	0.03	0.00
Mar-12	50.06	50.73	49.35	0.26	10.47	88.37	89.49	1.16	0.04	0.00
2012-13	49.94	51.21	48.75	1.65	8.46	75.78	86.62	16.03	4.98	0.00

11 DETAILS OF UNDER FREQUECY RELAY TRIPPINGS OCCURRED IN 2012-13

MONTH	Flat Mode	df/dt (49.9Hz with slop 0.1, 0.2, 0.3Hz/Sec)	TOTAL
APRIL 2012	-	7	7
MAY 2012	-	25	25
JUNE 2012	9	-	9
JULY 2012	15	-	15
AUGUST 2012	1	-	1
SEPTEMBER 2012	-	2	2
OCTOBER 2012	-	-	-
NOVEMBER 2012	-	-	-
DECEMBER 2012	-	-	-
JANUARY 2013	-	-	-
FEBRUARY 2013	-	-	-
MARCH 2013	-	-	-
TOTAL 2012-13	**25**	**34**	**59**

12 INTRASTATE TRANSMISSION LOSSES

12.1 WEEK WISE INTRASTATE TRANSMISSION LOSSES FOR 2012-13 (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						
			RPH	GT	PRAGATI	BTPS	Bawana	Total	Total Consumption of Delhi at DTL periphery in Mus
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(10)=sum(4 to 8)	(11)=(3)+(10)
1	0.57	34.8895	1.8950	1.8693	6.9074	13.0389	0.4100	24.1446	59.0341
2	1.18	284.6536	16.7912	25.4147	48.3337	82.9465	36.3672	209.8533	494.5069
3	1.26	291.2501	16.4644	26.2812	43.3236	77.0829	16.9240	180.0761	471.3262
4	1.29	293.5506	13.9893	28.7789	47.4563	82.8293	25.3126	198.3663	491.9169
5	1.31	299.4930	14.5191	28.7802	49.3325	85.2827	23.2960	201.2105	500.7035
6	1.45	334.7639	13.7737	28.6037	48.9015	91.2581	12.6994	195.2364	530.0003
7	1.39	372.6958	14.5595	34.9594	47.9678	93.9450	35.2745	226.7063	599.4020
8	1.26	402.7027	13.0989	36.8149	47.6931	75.5089	30.7730	203.8888	606.5914
9	1.15	468.2861	10.8192	36.0705	45.6562	75.4838	35.0015	203.0312	671.3172
10	1.14	503.1571	16.1944	34.1320	44.0105	79.7878	25.4772	199.6018	702.7590
11	1.13	512.7403	16.3914	27.0048	45.2843	63.4509	-0.3995	151.7318	664.4721
12	1.23	536.8219	16.6029	33.6384	45.6716	62.9857	22.0927	180.9913	717.8132
13	1.33	559.1116	12.8313	31.4227	46.0326	64.8744	33.2258	188.3868	747.4985
14	1.37	546.1343	15.8291	35.5659	44.5903	76.2703	36.8269	209.0826	755.2169
15	1.22	518.3602	6.6664	32.7367	44.6879	85.0879	25.3443	194.5233	712.8835
16	1.13	478.2234	4.7876	25.4988	48.2747	87.7773	1.9439	168.2823	646.5057
17	1.25	499.4976	6.8133	33.8274	47.0015	93.0039	47.5350	228.1811	727.6788
18	1.16	486.0292	7.8043	33.1486	47.3658	89.7186	42.9145	220.9518	706.9809
19	1.17	383.3069	7.2297	27.9728	44.5068	80.8054	45.2382	205.7530	589.0599
20	1.11	428.0938	7.6976	30.2057	37.9169	80.2517	45.5899	201.6619	629.7557
21	1.16	448.2327	7.8509	24.2352	24.2485	83.8300	32.0591	172.2236	620.4563
22	1.10	419.7585	7.5090	21.4337	20.9971	80.9122	32.3412	163.1932	582.9517
23	1.10	436.9686	7.8694	24.5101	39.3039	75.4338	-0.5800	146.5372	583.5057
24	1.00	452.8994	9.1819	15.8347	47.5532	76.0770	2.5115	151.1583	604.0576
25	1.18	479.4856	12.5685	23.6680	47.6808	71.9940	-0.3177	155.5936	635.0791
26	1.11	423.9377	14.6677	13.0961	47.1394	78.4199	-0.2947	153.0283	576.9660
27	0.88	391.0935	12.5418	13.0312	47.8970	84.0119	13.9731	171.4550	562.5484

Week No.	Avg Trans. Loss in %age	Actual drawal from the grid in Mus	Actual Ex-bus generation with in Delhi in Mus						Total Consumption of Delhi at DTL periphery in Mus
			RPH	GT	PRAGATI	BTPS	Bawana	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=sum(4 to 8)	(10)=(3)+(9)
28	1.11	320.7335	17.2573	24.1441	49.0256	85.7904	39.1451	215.3625	536.0960
29	1.09	303.6823	13.6378	13.6901	49.7706	87.7459	40.6662	205.5106	509.1929
30	1.08	273.2451	16.6329	25.2575	47.4382	92.7851	16.5837	198.6972	471.9424
31	1.16	235.9430	15.1279	14.7131	46.9124	70.6698	10.0792	157.5025	393.4455
32	1.34	189.2836	17.0233	19.7074	48.9839	80.0767	38.2039	203.9952	393.2788
33	1.48	176.0005	16.6243	24.1639	50.7993	84.1813	41.6642	217.4331	393.4335
34	1.25	171.7082	14.5470	20.0463	50.8503	75.2056	41.9115	202.5607	374.2689
35	1.30	163.4944	17.1033	20.2907	52.3079	81.3484	43.4527	214.5030	377.9974
36	1.55	185.2409	13.6208	21.8288	51.7462	72.9273	31.0403	191.1634	376.4043
37	1.69	202.7750	14.7602	17.6098	52.4623	71.8362	29.8662	186.5347	389.3097
38	1.03	220.5700	17.2622	17.0623	49.0172	55.7330	30.7596	169.8342	390.4042
39	0.99	225.4594	12.6987	19.7672	52.5284	55.2868	32.7148	172.9959	398.4553
40	1.15	208.3890	16.3156	23.1987	53.3478	88.5144	33.1970	214.5735	422.9625
41	1.09	234.7279	16.9678	24.3723	53.0439	96.1897	35.0107	225.5845	460.3123
42	1.08	255.9844	14.4870	23.0532	52.6659	93.9766	30.2161	214.3987	470.3831
43	1.25	226.6768	15.3913	21.2883	49.7101	80.5443	34.1959	201.1299	427.8067
44	0.99	212.4418	16.0488	22.3550	50.1399	87.8017	36.1005	212.4459	424.8877
45	0.99	201.2277	17.0773	20.1038	50.9830	92.9413	37.3934	218.4989	419.7266
46	1.08	220.2233	16.4882	20.5668	50.3483	65.7903	35.1208	188.3144	408.5377
47	1.02	224.2778	16.8664	17.1428	50.6608	62.5283	28.6891	175.8873	400.1651
48	1.00	230.9573	14.1592	17.1980	47.0950	52.3848	35.8050	166.6420	397.5993
49	1.14	180.0686	11.6711	22.1343	47.7016	88.5292	37.6371	207.6732	387.7418
50	0.98	186.0860	8.2724	19.8677	46.2386	95.7298	36.4335	206.5420	392.6280
51	1.01	239.7291	6.7852	25.3181	38.0285	98.7456	-0.6890	168.1885	407.9175
52	1.20	251.5718	9.0266	26.5226	47.1225	91.4272	-0.2268	173.8721	425.4439
53	1.19	224.2464	14.7530	18.4831	47.1803	80.3856	-0.1830	160.6190	384.8654
Total 2012-13	1.17	17050.8811	681.0068	1268.4215	2441.8433	4181.1442	1396.3272	9968.7431	27019.6241

Week	Actual drawal of distribution licensees and deemed licensees in MUs								Trans. Loss in %
	TPDDL	BRPL	BYPL	NDMC	MES	IP	Total	Avg. Trans Loss in Mus	
(1)	(11)	(12)	(13)	(14)	(15)	(16)	(17)=sum(11 1 to 16)	(18)= (10)-(17)	(19)=(17)*100/ 10
1	16.7450	24.5515	14.2924	2.5806	0.4545	0.0090	58.6328	0.3372	0.57
2	140.9466	204.1707	116.4211	23.3539	3.7252	0.0729	488.6904	5.8165	1.18
3	130.5367	195.9397	110.9136	24.1957	3.7519	0.0725	465.4100	5.9162	1.26
4	136.8354	203.6008	116.6025	24.6049	3.8549	0.0724	485.5710	6.3459	1.29
5	137.7399	207.4493	119.1588	25.8193	3.9173	0.0718	494.1564	6.5471	1.31
6	142.3769	223.7951	125.3445	26.6187	4.0875	0.0718	522.2944	7.7059	1.45
7	161.0612	254.4805	140.9461	29.9355	4.5925	0.0718	591.0876	8.3144	1.39
8	165.1746	255.9314	142.9641	30.2207	4.6146	0.0718	598.9772	7.6142	1.26
9	181.9417	285.3386	158.4300	32.9562	4.8825	0.0729	663.6220	7.6952	1.15
10	190.4270	298.9108	165.6324	34.6330	5.0873	0.0730	694.7635	7.9955	1.14
11	180.6647	280.8858	158.2464	32.2380	4.8563	0.0729	656.9640	7.5081	1.13
12	193.9509	305.2923	170.0367	34.3817	5.2751	0.0729	709.0096	8.8035	1.23
13	203.0127	317.9452	175.1413	36.0242	5.4318	0.0155	737.5707	9.9278	1.33
14	203.0131	323.4955	176.2712	36.5206	5.5554	0.0178	744.8735	10.3434	1.37
15	191.7996	304.1449	167.4001	35.3151	5.4846	0.0141	704.1583	8.7252	1.22
16	179.6531	268.8070	154.1779	31.6536	4.9003	0.0141	639.2059	7.2998	1.13
17	197.2906	309.0222	171.8254	34.9178	5.5300	0.0148	718.6008	9.0780	1.25
18	195.7621	297.6332	165.8091	34.1351	5.4152	0.0129	698.7676	8.2133	1.16
19	162.4278	245.2872	140.7338	29.1657	4.5346	0.0121	582.1610	6.8989	1.17
20	175.8829	259.9178	151.9955	30.2195	4.7447	0.0129	622.7732	6.9825	1.11
21	172.7772	257.0086	148.8876	29.8833	4.7048	0.0135	613.2750	7.1813	1.16
22	164.8686	240.4360	137.8587	28.6390	4.7048	0.0129	576.5200	6.4316	1.10
23	162.2796	241.8624	139.1720	29.1341	4.6089	0.0135	577.0705	6.4353	1.10
24	168.9330	251.2794	143.0421	30.0473	4.7322	0.0130	598.0470	6.0106	1.00
25	176.2846	263.5434	151.3842	31.4197	4.9500	0.0135	627.5953	7.4838	1.18
26	162.5531	237.7486	137.0270	28.6912	4.5424	0.0127	570.5749	6.3911	1.11
27	158.7922	231.3741	135.4968	27.6131	4.2820	0.0127	557.5708	4.9776	0.88

Week	Total Consumption of Delhi at DTL periphery in Mus	Actual drawal of distribution licensees and deemed licensees in MUs							Trans. Loss in %
		TPDDL	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	150.7490	219.4701	130.4172	25.4707	4.0472	0.0132	530.1675	5.9285	1.11
29	146.5246	205.4911	123.7473	24.0897	3.7944	0.0126	503.6597	5.5332	1.09
30	136.6664	190.7325	113.5262	22.3163	3.6074	0.0130	466.8618	5.0806	1.08
31	116.3381	157.7097	93.6176	18.1357	3.0793	0.0116	388.8921	4.5534	1.16
32	116.4088	157.2557	92.8900	18.2254	3.2274	0.0129	388.0203	5.2586	1.34
33	117.0422	157.6352	91.9456	17.7182	3.2637	0.0121	387.6169	5.8166	1.48
34	104.2186	157.5062	88.0630	16.5636	3.2225	0.0111	369.5849	4.6840	1.25
35	111.0744	154.3606	87.2072	16.9704	3.4530	0.0110	373.0765	4.9209	1.30
36	110.9184	152.9485	86.1143	16.8622	3.7099	0.0106	370.5639	5.8404	1.55
37	114.7183	157.5933	88.6428	17.7253	4.0469	0.0106	382.7372	6.5725	1.69
38	115.9202	158.2323	90.0319	18.0796	4.1153	0.0113	386.3905	4.0137	1.03
39	119.0064	160.4834	91.6883	19.0086	4.3240	0.0105	394.5211	3.9341	0.99
40	122.5863	174.3197	96.4171	19.6854	5.0864	0.0116	418.1066	4.8559	1.15
41	129.9132	195.1506	101.0297	22.9980	6.2057	0.0123	455.3096	5.0027	1.09
42	132.9184	195.7804	106.6559	23.7296	6.1901	0.0121	465.2865	5.0967	1.08
43	123.8295	175.2072	97.4027	20.7254	5.2862	0.0123	422.4633	5.3434	1.25
44	121.7599	174.5451	97.4867	21.5421	5.3223	0.0123	420.6683	4.2195	0.99
45	123.2726	170.3130	95.9887	20.9441	5.0488	0.0121	415.5794	4.1472	0.99
46	120.5503	164.4781	94.1394	20.4464	4.4958	0.0123	404.1223	4.4154	1.08
47	120.1038	160.1493	88.3828	23.0530	4.3897	0.0123	396.0909	4.0742	1.02
48	119.3392	158.6873	88.5177	22.8627	4.2175	0.0116	393.6360	3.9634	1.00
49	117.8061	153.8540	86.0134	21.9018	3.7518	0.0107	383.3379	4.4040	1.14
50	120.6491	145.4753	87.2255	32.0175	3.4175	0.0105	388.7954	3.8325	0.98
51	124.5918	152.4726	93.6216	29.7198	3.3943	0.0096	403.8098	4.1077	1.01
52	128.2075	159.2618	98.5789	30.8142	3.4797	0.0107	420.3527	5.0911	1.20
53	111.0609	149.1887	88.2554	28.5555	3.2286	0.0105	380.2996	4.5658	1.19
Total 2012-13	7625.8370	11148.1534	6332.8182	1365.0784	230.6264	1.3130	26703.8265	315.7977	1.17

12.2 MONTH WISE TRANSMISSION LOSSES FOR 2012-13.

Month	TPDDL	BRPL	BYPL	NDMC	MES	IP	Total supply to disoms
1	2	3	4	5	6	7	8=sum(2 to 7)
Apr-12	582.20951	866.57892	494.31268	104.54724	16.29847	0.30881	2064.25563
May-12	740.43243	1159.55268	644.94291	136.53307	20.53266	0.31942	2702.31317
Jun-12	829.52981	1311.16622	726.51225	148.91033	22.53328	0.20804	3038.85993
Jul-12	833.16653	1283.58926	718.28615	148.13705	23.24604	0.06176	3006.48679
Aug-12	750.11364	1112.92274	642.38984	131.78962	20.81581	0.05773	2658.08937
Sep-12	714.21108	1056.04184	608.76749	124.99999	19.79491	0.05567	2523.87099
Oct-12	599.60553	841.62461	500.85681	98.20543	15.93410	0.05610	2056.28258
Nov-12	479.40257	668.92132	381.88490	73.71279	14.42093	0.04933	1618.39184
Dec-12	521.00442	719.68007	405.10034	82.08376	19.45597	0.04857	1747.37312
Jan-13	562.28048	813.51544	444.11136	98.56388	25.19167	0.05421	1943.71703
Feb-13	479.98299	642.98077	360.95059	87.64704	17.33027	0.04755	1588.93920
Mar-13	533.89803	671.57955	404.70288	129.94823	15.07225	0.04586	1755.24680
Total	7625.83701	11148.15341	6332.81820	1365.07844	230.62636	1.31304	26703.82647

Month	GT	RPH	PPCL	BTPS	Drawal from the Grid	Bawana
1	8	9	10	11	12	13
Apr-12	113.90776	65.32919	202.41095	352.61251	1252.78705	102.61766
May-12	153.82252	58.64892	208.20565	372.21916	1810.63408	133.11163
Jun-12	136.54839	66.05758	194.98376	287.34600	2303.78710	92.45383
Jul-12	138.77401	29.17141	203.06815	385.26989	2151.76279	134.20863
Aug-12	112.12697	32.91976	144.62484	361.43087	1893.50602	143.38268
Sep-12	73.35593	51.55057	202.44143	333.19030	1873.66038	15.76513
Oct-12	86.14594	69.04100	213.52570	371.11378	1218.28699	120.71836
Nov-12	92.17809	67.37984	218.86036	339.01926	746.98529	176.36602
Dec-12	86.87589	66.97854	230.35940	304.67244	942.22724	137.32604
Jan-13	98.82159	69.71490	227.34434	398.73847	1018.69325	151.22247
Feb-13	76.90292	62.85713	197.02631	268.71244	861.51901	138.17939
Mar-13	98.96154	41.35797	198.99242	406.81906	977.03196	50.97536
Total	1268.42154	681.00681	2441.84333	4181.14416	17050.88117	1396.32723

Month	Total Injection For supply to Discoms	Losses in MUs	Losses in %	Losses in % during previous year
1	14=Sum(8to13)	15=14-7	16=15*100/14	17
Apr-12	2089.66512	25.40949	1.22	1.32
May-12	2736.64196	34.32879	1.25	1.29
Jun-12	3081.17666	42.31673	1.37	1.15
Jul-12	3042.25488	35.76809	1.18	1.16
Aug-12	2687.99114	29.90176	1.11	1.19
Sep-12	2549.96373	26.09275	1.02	1.13
Oct-12	2078.83178	22.54919	1.08	1.29
Nov-12	1640.78886	22.39702	1.37	1.26
Dec-12	1768.43955	21.06643	1.19	1.23
Jan-13	1964.53503	20.81800	1.06	1.31
Feb-13	1605.19721	16.25801	1.01	1.18
Mar-13	1774.13831	18.89151	1.06	0.99
Total	**27019.62423**	**315.79776**	**1.17**	**1.21**

13 ALLOCATION OF POWER TO DISCOMS FOR 2012-13

13.1 ALLOCATION FROM CENTRAL SECTOR

i) Allocation to Delhi w.e.f.01.04.2012 to 20.04.2012 [@ 0% allocation from unallocated quota of Central Sector Generating Stations]

All figures in MW

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	0	0	130
Rihand-I	1000	150	100	87	0	0	87
Rihand Stage -II	1000	150	126	109	0	0	109
ANTA GPS	419	63	44	41	0	0	41
Auriya GPS	663.36	99	72	67	0	0	67
Dadri GPS	829.78	129	91	85	0	0	85
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Dadri NCTPS (Th) Stage-II	980	147	735	639	0	0	639
Unchahaar-I TPS	420	20	24	21	0	0	21
Unchahaar-II TPS	420	63	47	41	0	0	41
Unchahaar-III TPS	210	31	29	25	0	0	25
TOTAL	**8782**	**1152**	**2174**	**1902**	**0**	**0**	**1902**
NHPC							
Baira Suil HPS	180	0	20	19	0	0	19
Salal HPS	690	0	80	76	0	0	76
Tanakpur HEP	94	0	12	11	0	0	11
Chamera HEP	540	0	43	41	0	0	41
Chamera-II HEP	300	54	40	38	0	0	38
URI HEP	480	0	53	50	0	0	50
Sewa HEP	120	18	16	15	0	0	15
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**3074**	**172**	**351**	**333**	**0**	**0**	**333**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B)	440	66	0	0	0	0	0
RAPP (C)	440	64	56	49	0	0	49
TOTAL	**1320**	**194**	**103**	**89**	**0**	**0**	**89**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC							
Tehri Hydro	1000	99	103	89	0	0	89
Koteshwar HEP	400	40	39	37	0	0	37
TOTAL	**1400**	**139**	**142**	**127**	**0**	**0**	**127**
Total	**16076**	**1805**	**2912**	**2575**	**0**	**0**	**2575**

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
Allocation from ER and Tala HEP							
Farakka	1600	0	22	19	0	0	19
Kahalgaon	840	0	51	43	0	0	43
Talchar	1000	0	0	0	0	0	0
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1500	0	157	131	0	0	131
Total ER	**6210**	**153**	**290**	**242**	**0**	**0**	**242**
Joint Venture							
Jhajjar TPS	500	0	0	0	0	0	0
Grand Total	**22786**	**1958**	**3202**	**2817**	**0**	**0**	**2817**

Allocation of Delhi (231MW) from Jhajjar reallocated to Andhra Pradesh (181MW) and Kerala (50MW).

ii) Allocation to Delhi w.e.f. 21.04.2012 to 29.06.2012 [@ 0% allocation from unallocated quota of Central Sector Generating Stations].

All figures in MW

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	0	0	130
Rihand-I	1000	150	100	87	0	0	87
Rihand Stage -II	1000	150	126	109	0	0	109
ANTA GPS	419	63	44	41	0	0	41
Auriya GPS	663.36	99	72	67	0	0	67
Dadri GPS	829.78	129	91	85	0	0	85
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Dadri NCTPS (Th) Stage-II	980	147	735	639	0	0	639
Unchahaar-I TPS	420	20	24	21	0	0	21
Unchahaar-II TPS	420	63	47	41	0	0	41
Unchahaar-III TPS	210	31	29	25	0	0	25
TOTAL	**8782**	**1152**	**2174**	**1902**	**0**	**0**	**1902**
NHPC							
Baira Suil HPS	180	0	20	19	0	0	19
Salal HPS	690	0	80	76	0	0	76
Tanakpur HEP	94	0	12	11	0	0	11
Chamera HEP	540	0	43	41	0	0	41
Chamera-II HEP	300	54	40	38	0	0	38
URI HEP	480	0	53	50	0	0	50
Sewa HEP	120	18	16	15	0	0	15
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**3074**	**172**	**351**	**333**	**0**	**0**	**333**

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B)	440	66	0	0	0	0	0
RAPP (C)	440	64	56	49	0	0	49
TOTAL	**1320**	**194**	**103**	**89**	**0**	**0**	**89**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC							
Tehri Hydro	1000	99	103	89	0	0	89
Koteshwar HEP	400	40	39	37	0	0	37
TOTAL	**1400**	**139**	**142**	**127**	**0**	**0**	**127**
Total	**16076**	**1805**	**2912**	**2575**	**0**	**0**	**2575**
Allocation from ER and Tala HEP							
Farakka	1600	0	22	19	0	0	19
Kahalgaon	840	0	51	43	0	0	43
Talchar	1000	0	0	0	0	0	0
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1500	0	157	131	0	0	131
Total ER	**6210**	**153**	**290**	**242**	**0**	**0**	**242**
Joint Venture							
Jhajjar TPS	1000	76	231	201	0	0	201
Grand Total	**23286**	**2034**	**3433**	**3017**	**0**	**0**	**3017**

2nd unit of Jhajjar (500MW) declared under commercial operation from 00.00hrs. of 21.04.2013. Delhi has 462MW allocation from the project out of which 231MW remained allocated to Andhra Pradesh (181MW) and Kerala (50MW) and balance 231MW allocated to Delhi Discoms.

iii) Allocation to Delhi w.e.f. 30.06.2012 to 03.07.2012 [@ 0% allocation from unallocated quota of Central Sector Generating Stations].

All figures in MW

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	0	0	130
Rihand-I	1000	150	100	87	0	0	87
Rihand Stage -II	1000	150	126	109	0	0	109
ANTA GPS	419	63	44	41	0	0	41
Auriya GPS	663.36	99	72	67	0	0	67
Dadri GPS	829.78	129	91	85	0	0	85
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Dadri NCTPS (Th) Stage-II	980	147	735	639	0	0	639
Unchahaar-I TPS	420	20	24	21	0	0	21
Unchahaar-II TPS	420	63	47	41	0	0	41
Unchahaar-III TPS	210	31	29	25	0	0	25
TOTAL	**8782**	**1152**	**2174**	**1902**	**0**	**0**	**1902**
NHPC							
Baira Suil HPS	180	0	20	19	0	0	19
Salal HPS	690	0	80	76	0	0	76
Tanakpur HEP	94	0	12	11	0	0	11
Chamera HEP	540	0	43	41	0	0	41
Chamera-II HEP	300	54	40	38	0	0	38
Chamera-III HEP	154	23	20	19	0	0	19
URI HEP	480	0	53	50	0	0	50
Sewa HEP	120	18	16	15	0	0	15
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**3228**	**195**	**370**	**352**	**0**	**0**	**352**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B)	440	66	0	0	0	0	0
RAPP (C)	440	64	56	49	0	0	49
TOTAL	**1320**	**194**	**103**	**89**	**0**	**0**	**89**
Nathpa Jhakri HEP – SJVNL	1500	149	142	123	0	0	123
THDC							
Tehri Hydro	1000	99	103	89	0	0	89
Koteshwar HEP	400	40	39	37	0	0	37
TOTAL	**1400**	**139**	**142**	**127**	**0**	**0**	**127**
Total	**16230**	**1828**	**2932**	**2593**	**0**	**0**	**2593**

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
Allocation from ER and Tala HEP							
Farakka	1600	0	22	19	0	0	19
Kahalgaon	840	0	51	43	0	0	43
Talchar	1000	0	0	0	0	0	0
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1500	0	157	131	0	0	131
Total ER	**6210**	**153**	**290**	**242**	**0**	**0**	**242**
Joint Venture							
Jhajjar TPS – Joint Venture	1000	76	231	201	0	0	201
Grand Total	**23440**	**2057**	**3453**	**3036**	**0**	**0**	**3036**

Unit-2 & 3 (77MW each) of Chamera-III HEP declared under commercial operation w.e.f. 00.00hrs. of 30.6.2013.

iv) Allocation to Delhi w.e.f. 04.07.2012 to 18.11.2012 [@ 0% allocation from unallocated quota of Central Sector Generating Stations].

All figures in MW

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	0	0	130
Rihand-I	1000	150	100	87	0	0	87
Rihand Stage -II	1000	150	126	109	0	0	109
ANTA GPS	419	63	44	41	0	0	41
Auriya GPS	663.36	99	72	67	0	0	67
Dadri GPS	829.78	129	91	85	0	0	85
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Dadri NCTPS (Th) Stage-II	980	147	735	639	0	0	639
Unchahaar-I TPS	420	20	24	21	0	0	21
Unchahaar-II TPS	420	63	47	41	0	0	41
Unchahaar-III TPS	210	31	29	25	0	0	25
TOTAL	**8782**	**1152**	**2174**	**1902**	**0**	**0**	**1902**
NHPC							
Baira Suil HPS	180	0	20	19	0	0	19
Salal HPS	690	0	80	76	0	0	76
Tanakpur HEP	94	0	12	11	0	0	11
Chamera HEP	540	0	43	41	0	0	41
Chamera-II HEP	300	54	40	38	0	0	38
Chamera-III HEP	231	35	29	28	0	0	28
URI HEP	480	0	53	50	0	0	50
Sewa HEP	120	18	16	15	0	0	15
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**3305**	**206**	**380**	**361**	**0**	**0**	**361**

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B)	440	66	0	0	0	0	0
RAPP (C)	440	64	56	49	0	0	49
TOTAL	**1320**	**194**	**103**	**89**	**0**	**0**	**89**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC							
Tehri Hydro	1000	99	103	89	0	0	89
Koteshwar HEP	400	40	39	37	0	0	37
TOTAL	**1400**	**139**	**142**	**127**	**0**	**0**	**127**
Total	**16307**	**1840**	**2941**	**2603**	**0**	**0**	**2603**
Allocation from ER and Tala HEP							
Farakka	1600	0	22	19	0	0	19
Kahalgaon	840	0	51	43	0	0	43
Talchar	1000	0	0	0	0	0	0
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1500	0	157	131	0	0	131
Total ER	**6210**	**153**	**290**	**242**	**0**	**0**	**242**
Joint Venture							
Jhajjar TPS	1000	76	231	201	0	0	201
Grand Total	**23517**	**2069**	**3462**	**3045**	**0**	**0**	**3045**

Unit-1 (77MW) of Chamera-III HEP declared under commercial operation w.e.f. 00.00hrs. of 04.07.13.

v) Allocation to Delhi w.e.f. 19.11.2012 to 18.01.2013 [@ 0% allocation from unallocated quota of Central Sector Generating Stations].

All figures in MW

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	0	0	130
Rihand-I	1000	150	100	87	0	0	87
Rihand Stage -II	1000	150	126	109	0	0	109
Rihand Stage -III	500	75	66	57	0	0	57
ANTA GPS	419	63	44	41	0	0	41
Auriya GPS	663.36	99	72	67	0	0	67
Dadri GPS	829.78	129	91	85	0	0	85
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Dadri NCTPS (Th) Stage-II	980	147	735	639	0	0	639
Unchahaar-I TPS	420	20	24	21	0	0	21
Unchahaar-II TPS	420	63	47	41	0	0	41
Unchahaar-III TPS	210	31	29	25	0	0	25
TOTAL	**9282**	**1227**	**2240**	**1959**	**0**	**0**	**1959**

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NHPC							
Baira Suil HPS	180	0	20	19	0	0	19
Salal HPS	690	0	80	76	0	0	76
Tanakpur HEP	94	0	12	11	0	0	11
Chamera HEP	540	0	43	41	0	0	41
Chamera-II HEP	300	54	40	38	0	0	38
Chamera-III HEP	231	35	29	28	0	0	28
URI HEP	480	0	53	50	0	0	50
Sewa HEP	120	18	16	15	0	0	15
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**3305**	**206**	**380**	**361**	**0**	**0**	**361**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B)	440	66	0	0	0	0	0
RAPP (C)	440	64	56	49	0	0	49
TOTAL	**1320**	**194**	**103**	**89**	**0**	**0**	**89**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC							
Tehri Hydro	1000	99	103	89	0	0	89
Koteshwar HEP	400	40	39	37	0	0	37
TOTAL	**1400**	**139**	**142**	**127**	**0**	**0**	**127**
Total	**16807**	**1915**	**3007**	**2660**	**0**	**0**	**2660**
Allocation from ER and Tala HEP							
Farakka	1600	0	22	19	0	0	19
Kahalgaon	840	0	51	43	0	0	43
Talchar	1000	0	0	0	0	0	0
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1500	0	157	131	0	0	131
Total ER	**6210**	**153**	**290**	**242**	**0**	**0**	**242**
Joint Venture							
Jhajjar TPS	1000	76	231	201	0	0	201
Grand Total	**24017**	**2144**	**3528**	**3102**	**0**	**0**	**3102**

Unit-1 (500MW) of Rihand-III declared under commercial operation w.e.f. 00.00hrs. of 19.11.2012.

vi) Allocation to Delhi w.e.f. 19.01.2013 to 15.03.2013 [@ 0% allocation from unallocated quota of Central Sector Generating Stations].

All figures in MW

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	0	0	130
Rihand-I	1000	150	100	87	0	0	87
Rihand Stage -II	1000	150	126	109	0	0	109
Rihand Stage -III	500	75	66	57	0	0	57
ANTA GPS	419	63	44	41	0	0	41
Auriya GPS	663.36	99	72	67	0	0	67
Dadri GPS	829.78	129	91	85	0	0	85
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Dadri NCTPS (Th) Stage-II	980	147	735	639	0	0	639
Unchahaar-I TPS	420	20	24	21	0	0	21
Unchahaar-II TPS	420	63	47	41	0	0	41
Unchahaar-III TPS	210	31	29	25	0	0	25
TOTAL	**9282**	**1227**	**2240**	**1959**	**0**	**0**	**1959**
NHPC							
Baira Suil HPS	180	0	20	19	0	0	19
Salal HPS	690	0	80	76	0	0	76
Tanakpur HEP	94	0	12	11	0	0	11
Chamera HEP	540	0	43	41	0	0	41
Chamera-II HEP	300	54	40	38	0	0	38
Chamera-III HEP	231	35	29	28	0	0	28
URI HEP	480	0	53	50	0	0	50
Sewa HEP	120	18	16	15	0	0	15
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**3305**	**206**	**380**	**361**	**0**	**0**	**361**
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B)	440	66	0	0	0	0	0
RAPP (C)	440	64	56	49	0	0	49
TOTAL	**1320**	**194**	**103**	**89**	**0**	**0**	**89**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC							
Tehri Hydro	1000	99	103	89	0	0	89
Koteshwar HEP	400	40	39	37	0	0	37
TOTAL	**1400**	**139**	**142**	**127**	**0**	**0**	**127**
Total	**16807**	**1915**	**3007**	**2660**	**0**	**0**	**2660**

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
Allocation from ER and Tala HEP							
Farakka	1600	0	22	19	0	0	19
Kahalgaon	840	0	51	43	0	0	43
Talchar	1000	0	0	0	0	0	0
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1500	0	157	131	0	0	131
Total ER	**6210**	**153**	**290**	**242**	**0**	**0**	**242**
Joint Venture							
Jhajjar TPS	1000	76	100	87	0	0	87
Grand Total	**24017**	**2144**	**3397**	**2989**	**0**	**0**	**2989**

Allocation of Delhi from Jhajjar restricted to 10% (100MW) by reallocating 131MW to J&K w.e.f. 19.01.2013. Andhra Pradesh and Kerala have already been reallocated 181MW and 50MW respectively.

vii) Allocation to Delhi w.e.f. 16.03.2013 to 31.03.2013 [@ 0% allocation from unallocated quota of Central Sector Generating Stations].

All figures in MW

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	130	0	0	130
Rihand-I	1000	150	100	87	0	0	87
Rihand Stage -II	1000	150	126	109	0	0	109
Rihand Stage -III	500	75	66	57	0	0	57
ANTA GPS	419	63	44	41	0	0	41
Auriya GPS	663.36	99	72	67	0	0	67
Dadri GPS	829.78	129	91	85	0	0	85
Dadri NCTPS (Th)	840	0	756	657	0	0	657
Dadri NCTPS (Th) Stage-II	980	147	735	639	0	0	639
Unchahaar-I TPS	420	20	24	21	0	0	21
Unchahaar-II TPS	420	63	47	41	0	0	41
Unchahaar-III TPS	210	31	29	25	0	0	25
TOTAL	**9282**	**1227**	**2240**	**1959**	**0**	**0**	**1959**
NHPC							
Baira Suil HPS	180	0	20	19	0	0	19
Salal HPS	690	0	80	76	0	0	76
Tanakpur HEP	94	0	12	11	0	0	11
Chamera HEP	540	0	43	41	0	0	41
Chamera-II HEP	300	54	40	38	0	0	38
Chamera-III HEP	231	35	29	28	0	0	28
URI HEP	480	0	53	50	0	0	50
Sewa HEP	120	18	16	15	0	0	15
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
TOTAL	**3305**	**206**	**380**	**361**	**0**	**0**	**361**

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NPC							
Narora APS	440	64	47	41	0	0	41
RAPP(B)	440	66	0	0	0	0	0
RAPP (C)	440	64	56	49	0	0	49
TOTAL	**1320**	**194**	**103**	**89**	**0**	**0**	**89**
SVJNL							
Nathpa Jhakri HEP	1500	149	142	123	0	0	123
THDC							
Tehri Hydro	1000	99	103	89	0	0	89
Koteshwar HEP	400	40	39	37	0	0	37
TOTAL	**1400**	**139**	**142**	**127**	**0**	**0**	**127**
Total	**16807**	**1915**	**3007**	**2660**	**0**	**0**	**2660**
Allocation from ER and Tala HEP							
Farakka	1600	0	22	19	0	0	19
Kahalgaon	840	0	51	43	0	0	43
Talchar	1000	0	0	0	0	0	0
Tala HEP	1020	153	30	25	0	0	25
Mejia TPS Unit-6	250	0	29	25	0	0	25
Kahalgaon-II	1500	0	157	131	0	0	131
Total ER	**6210**	**153**	**290**	**242**	**0**	**0**	**242**
Joint Venture							
Jhajjar TPS	1000	76	231	201	0	0	201
Grand Total	**24017**	**2144**	**3528**	**3102**	**0**	**0**	**3102**

Allocation of Delhi from Jhajjar revised to 23.10% (231MW) as reallocation to J&K was upto 18.01.2013. Allocation from Jhajjar to Andhra Pradesh and Kerala remained same i.e. 181MW and 50MW respectively.

13.2 ALLOCATION OF POWER TO DELHI DISCOMS FROM VARIOUS SOURCES

(Allocation In %)

(A) 10.00hrs. to 17.00hrs.

SOURCES	LICENSEES					
	NDMC	MES	TPDDL	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	TPDDL	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

Note : Allocation from RPH has been done after allocation of 1MW from RPH to IP Station for auxiliary needs.

14 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 2012-13 has been as under :-

All figures in Ps/Unit

Month	Basic Price for Interdiscom Transfer of surplus power in Ps/Unit	Variation in Variable Charges in Ps/Unit	Total Rate for Inter Discom Transfer of power in Ps/unit
Apr-12	275.00	185.80	460.80
May-12	275.00	127.60	402.60
Jun-12	275.00	148.60	423.60
Jul-12	275.00	165.10	440.10
Aug-12 Upto 22.08.12	275.00	188.60	463.60
Aug-12 From 23.08.13	84.00	371.00	455.00
Sep-12	84.00	406.70	490.70
Oct-12	84.00	372.10	456.10
Nov-12	84.00	343.70	427.70
Dec-12	84.00	335.50	419.50
Jan-13	84.00	330.40	414.40
Feb-13	84.00	322.03	406.03
Mar-13	84.00	351.40	435.40

From 23.08.2012, the rate of Inter Discom Tranfer of surplus power is (Variable Charges of BTPS + Rs. 0.84 (Fixed Charges) + Rs. 0.10)/Unit as per decision of DERC.

14.1 The details of inter discom surplus sale of power for the year 2012-13

14.1.1 Military Engineering Services (MES)

All figures in MUs

From→	MES									
To→	BRPL		BYPL		TPDDL		NDMC		TOTAL	
Month	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose
Apr-12	2.873	0.179	1.267	0.027	0.020	0.054	0.020	0.000	4.181	0.260
May-12	2.189	0.861	1.442	0.048	0.045	0.342	0.045	0.046	3.722	1.297
Jun-12	0.546	0.280	0.335	0.049	0.003	0.133	0.003	0.004	0.886	0.466
Jul-12	0.155	1.467	0.107	0.438	0.000	1.028	0.000	0.147	0.262	3.080
Aug-12	5.091	2.134	1.432	0.700	0.132	1.482	0.132	0.072	6.787	4.389
Sep-12	0.772	0.010	0.063	0.000	0.000	0.000	0.055	0.005	0.890	0.015
Oct-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nov-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dec-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jan-13	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
Feb-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mar-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	**11.627**	**4.932**	**4.647**	**1.262**	**0.200**	**3.040**	**0.255**	**0.274**	**16.728**	**9.507**

14.1.2 New Delhi Municipal Council (NDMC)

All figures in MUs

From→	NDMC									
To→	BRPL		BYPL		TPDDL		MES		TOTAL	
Month	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose
Apr-12	11.216	0.529	3.884	0.034	0.000	0.161	0.000	0.000	15.100	0.724
May-12	6.435	5.914	3.997	0.287	0.000	2.655	0.007	0.004	10.438	8.860
Jun-12	14.941	11.324	9.800	2.815	0.000	6.188	0.128	0.187	24.868	20.515
Jul-12	7.517	2.356	5.074	0.464	0.000	1.413	0.138	0.000	12.730	4.233
Aug-12	18.076	7.253	4.307	1.728	0.000	4.970	0.000	0.001	22.383	13.952
Sep-12	2.081	0.057	0.139	0.000	0.000	0.000	0.000	0.000	2.220	0.057
Oct-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nov-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dec-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jan-13	0.000	1.681	0.000	1.160	0.000	0.000	0.000	0.000	0.000	2.841
Feb-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mar-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	**60.266**	**29.114**	**27.201**	**6.487**	**0.000**	**15.387**	**0.272**	**0.193**	**87.740**	**51.182**

14.1.3 BSES Rajdhani Power Ltd. (BRPL)

All figures in MUs

From→	BRPL									
To→	BYPL		TPDDL		NDMC		MES		TOTAL	
Month	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose
Apr-12	0.039	0.003	0.000	0.223	0.000	0.000	0.000	0.000	0.039	0.226
May-12	0.495	0.001	0.054	0.067	0.054	0.208	0.000	0.012	0.604	0.289
Jun-12	0.447	0.015	0.168	0.025	0.168	0.029	0.069	0.025	0.852	0.095
Jul-12	0.115	0.047	0.005	0.353	0.005	0.819	0.086	0.001	0.211	1.220
Aug-12	0.096	0.000	0.091	0.093	0.091	0.507	0.000	0.000	0.278	0.600
Sep-12	0.000	0.000	0.000	0.000	0.007	0.195	0.000	0.000	0.007	0.195
Oct-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nov-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dec-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jan-13	0.000	0.007	0.000	0.186	0.000	0.000	0.000	0.000	0.000	0.192
Feb-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mar-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	**1.192**	**0.073**	**0.318**	**0.947**	**0.325**	**1.758**	**0.156**	**0.039**	**1.991**	**2.818**

14.1.4 BSES Yamuna Power Ltd. (BYPL)

All figures in MUs

From→	BYPL									
To→	BRPL		TPDDL		NDMC		MES		TOTAL	
Month	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose
Apr-12	5.115	0.780	0.014	0.363	0.014	0.000	0.000	0.000	5.143	1.143
May-12	0.901	18.207	0.020	7.034	0.020	1.763	0.001	0.104	0.943	27.108
Jun-12	0.226	7.759	0.048	2.280	0.048	0.203	0.023	0.154	0.344	10.396
Jul-12	0.204	5.659	0.005	3.167	0.005	1.428	0.058	0.011	0.273	10.266
Aug-12	7.961	4.215	0.134	2.514	0.134	0.553	0.000	0.000	8.228	7.282
Sep-12	5.499	0.255	0.000	0.000	0.437	0.135	0.000	0.000	5.935	0.390
Oct-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nov-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dec-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jan-13	0.000	0.039	0.000	0.000	0.000	0.000	0.000	0.158	0.000	0.197
Feb-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mar-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	**19.906**	**36.914**	**0.221**	**15.358**	**0.658**	**4.083**	**0.081**	**0.428**	**20.866**	**56.783**

14.1.5 Tata Power Delhi Distribution Ltd. (TPDDL)

All figures in MUs

From→	TPDDL									
To→	BRPL		BYPL		NDMC		MES		TOTAL	
Month	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose	On Day Ahead basis	Final for Payment Purpose
Apr-12	5.699	0.834	0.831	0.020	0.001	0.000	0.000	0.000	6.531	0.854
May-12	1.425	3.656	0.708	0.003	0.039	0.508	0.000	0.011	2.172	4.177
Jun-12	2.035	1.606	1.585	0.007	0.195	0.051	0.098	0.069	3.914	1.733
Jul-12	0.285	0.589	0.148	0.033	0.005	0.615	0.030	0.003	0.468	1.241
Aug-12	3.434	0.451	0.143	0.000	0.012	0.463	0.000	0.000	3.588	0.913
Sep-12	16.685	0.293	1.436	0.000	1.277	0.157	0.000	0.000	19.397	0.450
Oct-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nov-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dec-12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jan-13	0.000	0.215	0.000	0.262	0.000	0.000	0.000	0.000	0.000	0.477
Feb-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mar-13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	**29.563**	**7.644**	**4.851**	**0.324**	**1.529**	**1.793**	**0.128**	**0.083**	**36.071**	**9.844**

15 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 :

15.1 For Intrastate (Meters provided by DTL) -As on 31/3/2013

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)	TPDDL	56	37	93	72	46	0	46	39	111
2)	BRPL	69	42	111	64	67	11	78	51	115
3)	BYPL	64	24	88	50	58	1	59	44	94
4)	NDMC	30	6	36	34	30	4	34	34	68
5)	MES	7	8	15	14	7	7	14	14	28
	TOTAL	**226**	**117**	**343**	**234**	**208**	**23**	**231**	**182**	**416**
	GRAND TOTAL			**574**	**416**					

15.2 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	PPCL BWN	0	4	4
02	RPH	12	2	2
03	G.T.	8	2	2
04	Pragati	3	3	-
05	BTPS	6	6	6
	TOTAL	**29**	**17**	**14**

a) No. of Meters involved for Intrastate =
234 (M)+ 182 (C)+26 (Local TX.)
ABT billing with DISCOMs

b) No of Meters involved for UI billing of Genco = 17 (M)+ 14 (C)

c) Overall meters dealt by DTL = 472

15.3 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	35	35
	Total		70

15.4 The details of the UI Transactions for 2012-13 at Intrastate Level are as under :

15.4.1 UI Transactions of TPDDL

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	UI amount as per Intrastate UI account in Rs. Lacs	Adjusted UI Amount to equivate the same with Interstate UI Issued by NRPC for the state Delhi as a whole in Rs. Lacs	Additional UI Amount in Rs. Lacs	Difference in UI Capp Amount in Rs. Lacs	Net UI Amount in Rs. Lacs	Avg. cost in Ps/ Unit
Apr-12	690.0157	582.2095	-107.8062	-2703.3933	-2976.7072	149.6949	0.0000	-2827.0123	262.23
May-12	830.9670	740.4324	-90.5345	-2820.0206	-3198.9132	287.2192	6.3232	-2905.3708	320.91
Jun-12	880.9969	829.5298	-51.4671	-1880.0347	-2212.0715	319.4811	37.5288	-1855.0617	360.44
Jul-12	920.1270	833.1665	-86.9604	-2765.7893	-3136.8809	493.6271	113.9910	-2529.2629	290.85
Aug-12	826.0135	750.1136	-75.8998	-1335.7253	-1474.4448	26.9809	0.2209	-1447.2430	190.68
Sep-12	780.3119	714.2111	-66.1008	-865.6384	-1024.5079	10.5261	0.2720	-1013.7098	153.36
Oct-12	586.8501	599.6055	12.7555	322.6985	-23.9933	0.5782	0.7241	-22.6909	-17.79
Nov-12	470.4887	479.4026	8.9139	362.4572	215.2377	3.1956	4.0914	222.5248	249.64
Dec-12	526.9180	521.0044	-5.9136	-0.0754	-69.3524	2.3784	5.5611	-61.4129	103.85
Jan-13	602.0970	562.2805	-39.8165	-735.6637	-914.9047	14.8668	3.4734	-896.5646	225.17
Feb-13	522.0378	479.9830	-42.0549	-607.0195	-699.8257	1.4549	0.0000	-698.3708	166.06
Mar-13	605.7705	533.8980	-71.8724	-960.8907	-1079.8006	2.0619	0.0000	-1077.7388	149.95
Total	8242.5940	7625.8370	-616.7570	-13989.0952	-16596.1644	1312.065	172.1858	-15111.9136	245.02

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.

15.4.2 UI Transactions of BRPL

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	UI amount as per Intrastate UI account in Rs. Lacs	Adjusted UI Amount to equivate the same with Interstate UI Issued by NRPC for the state Delhi as a whole in Rs. Lacs	Additional UI Amount in Rs. Lacs	Difference in UI Capp Amount in Rs. Lacs	Net UI Amount in Rs. Lacs	Avg. cost in Ps/ Unit
Apr-12	845.4770	866.5789	21.1019	561.3758	297.4665	6.3709	7.8989	311.7362	147.73
May-12	1212.5079	1159.5527	-52.9552	-1875.0551	-2142.9918	162.5558	15.6961	-1964.7400	371.02
Jun-12	1312.4539	1311.1662	-1.2877	300.5906	179.1141	83.3496	214.2978	476.7616	-3702.50
Jul-12	1245.0590	1283.5893	38.5303	2271.3786	2572.7127	50.8768	673.3414	3296.9309	855.67
Aug-12	1099.5180	1112.9227	13.4048	378.6799	227.6786	2.5844	5.6748	235.9378	176.01
Sep-12	1011.9103	1056.0418	44.1316	637.7709	384.2514	2.5373	5.0490	391.8377	88.79
Oct-12	835.9621	841.6246	5.6625	200.1086	-163.1417	0.1215	2.3452	-160.6750	-283.75
Nov-12	701.2399	668.9213	-32.3186	-492.1439	-544.6618	0.6597	1.3455	-542.6566	167.91
Dec-12	704.0050	719.6801	15.6750	527.6171	367.6840	0.4013	16.2822	384.3675	245.21
Jan-13	792.1586	813.5154	21.3569	711.1105	483.8956	1.9832	39.1593	525.0381	245.84
Feb-13	637.4411	642.9808	5.5396	241.9281	166.3937	0.0000	3.9130	170.3068	307.43
Mar-13	676.3297	671.5796	-4.7501	-104.0444	-154.1312	0.4066	0.7186	-153.0060	322.11
Total	11074.0624	11148.1534	74.0910	3359.3168	1674.2702	311.8470	985.7217	2971.8389	401.11

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

15.4.3 UI Transactions of BYPL

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	UI amount as per Intrastate UI account in Rs. Lacs	Adjusted UI Amount to equivate the same with Interstate UI Issued by NRPC for the state Delhi as a whole in Rs. Lacs	Additional UI Amount in Rs. Lacs	Difference in UI Capp Amount in Rs. Lacs	Net UI Amount in Rs. Lacs	Avg. cost in Ps/ Unit
Apr-12	601.3650	494.3127	-107.0523	-2625.1506	-2890.9637	129.2487	0.0000	-2761.7150	257.98
May-12	792.4005	644.9429	-147.4576	-4688.8690	-5436.0111	574.9198	0.8789	-4860.2123	329.60
Jun-12	858.4814	726.5122	-131.9691	-4548.0075	-5530.2664	906.6551	2.0222	-4621.5891	350.20
Jul-12	865.7689	718.2861	-147.4828	-5336.1822	-6446.5733	1415.9338	15.5654	-5015.0741	340.04
Aug-12	751.9905	642.3898	-109.6007	-2060.9618	-2288.2271	53.5412	0.0000	-2234.6860	203.89
Sep-12	709.9209	608.7675	-101.1534	-1481.2924	-1774.4937	15.2740	0.0000	-1759.2197	173.92
Oct-12	573.3985	500.8568	-72.5417	-1406.4427	-1865.5459	10.0611	0.0000	-1855.4848	255.78
Nov-12	425.1896	381.8849	-43.3047	-779.2505	-889.0522	6.9813	0.4114	-881.6595	203.59
Dec-12	474.9532	405.1003	-69.8529	-1528.3302	-1737.2695	26.3586	0.0000	-1710.9110	244.93
Jan-13	509.4693	444.1114	-65.3579	-1404.6964	-1690.3611	36.1666	0.5360	-1653.6585	253.02
Feb-13	393.1379	360.9506	-32.1873	-551.2147	-641.5989	2.6714	0.0000	-638.9275	198.50
Mar-13	389.8185	404.7029	14.8844	238.6608	186.1057	0.2278	0.2712	186.6047	125.37
Total	7345.8941	6332.8182	-1013.0759	-26171.7370	-31004.257	3178.0394	19.6851	-27806.5328	274.48

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

15.4.4 UI Transactions of NDMC

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	UI amount as per Intrastate UI account in Rs. Lacs	Adjusted UI Amount to equivate the same with Interstate UI Issued by NRPC for the state Delhi as a whole in Rs. Lacs	Additional UI Amount in Rs. Lacs	Difference in UI Capp Amount in Rs. Lacs	Net UI Amount in Rs. Lacs	Avg. cost in Ps/ Unit
Apr-12	144.5213	104.5472	-39.9741	-998.9870	-1107.3053	56.7494	0.0529	-1050.5030	262.80
May-12	154.8957	136.5331	-18.3626	-513.7784	-631.5630	72.8612	14.8655	-543.8364	296.17
Jun-12	153.8846	148.9103	-4.9743	-119.7588	-195.3359	64.9992	54.3468	-75.9899	152.77
Jul-12	177.4244	148.1371	-29.2873	-1056.7409	-1328.0940	325.9277	49.8248	-952.3416	325.17
Aug-12	139.2587	131.7896	-7.4691	-97.0755	-136.1018	5.3449	0.6990	-130.0579	174.13
Sep-12	133.9794	125.0000	-8.9794	-140.5951	-211.0788	2.5049	0.2993	-208.2746	231.95
Oct-12	119.4494	98.2054	-21.2440	-407.7795	-563.3159	3.5314	0.0000	-559.7845	263.50
Nov-12	77.3851	73.7128	-3.6723	-94.2235	-153.9249	3.3335	0.5995	-149.9919	408.44
Dec-12	89.2925	82.0838	-7.2087	-59.0163	-112.9356	4.5196	3.8839	-104.5320	145.01
Jan-13	112.9303	98.5639	-14.3664	-236.1575	-317.3888	10.7474	2.3770	-304.2644	211.79
Feb-13	72.6113	87.6470	15.0357	207.0102	134.1584	0.1693	0.8360	135.1638	89.90
Mar-13	87.4309	129.9482	42.5173	720.3492	585.9778	0.0000	1.9771	587.9549	138.29
Total	1463.0635	1365.0784	-97.9850	-2796.7531	-4036.9077	550.6885	129.7617	-3356.4575	342.55

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

15.4.5 UI Transactions of MES

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	UI amount as per Intrastate UI account in Rs. Lacs	Adjusted UI Amount to equivate the same with Interstate UI Issued by NRPC for the state Delhi as a whole in Rs. Lacs	Additional UI Amount in Rs. Lacs	Difference in UI Capp Amount in Rs. Lacs	Net UI Amount in Rs. Lacs	Avg. cost in Ps/ Unit
Apr-12	25.6421	16.2985	-9.3436	-238.0104	-267.8353	16.4923	0.0000	-251.3430	269.00
May-12	27.4824	20.5327	-6.9497	-217.3695	-246.6762	22.3297	0.1006	-224.2459	322.67
Jun-12	22.6624	22.5333	-0.1291	11.8523	4.4096	3.4962	12.5865	20.4923	-1587.18
Jul-12	26.4082	23.2460	-3.1621	-121.7748	-120.4364	18.7747	5.1739	-96.4878	305.13
Aug-12	24.0788	20.8158	-3.2630	-56.2141	-62.2596	1.3730	0.0272	-60.8593	186.51
Sep-12	23.9515	19.7949	-4.1566	-74.8101	-95.2354	1.3578	0.0266	-93.8511	225.79
Oct-12	28.4341	15.9341	-12.5000	-260.5008	-348.9479	3.3542	0.0000	-345.5938	276.48
Nov-12	27.8432	14.4209	-13.4223	-227.4246	-265.3043	2.3436	0.0000	-262.9607	195.91
Dec-12	24.5316	19.4560	-5.0757	-64.3395	-75.9372	1.1810	0.8703	-73.8858	145.57
Jan-13	31.1303	25.1917	-5.9386	-81.6857	-102.8975	1.6695	1.1722	-100.0559	168.48
Feb-13	21.9055	17.3303	-4.5752	-36.5421	-45.1209	0.2554	0.2531	-44.6124	97.51
Mar-13	28.5713	15.0722	-13.4990	-212.9437	-248.7678	1.5097	0.0000	-247.2581	183.17
Total	312.6414	230.6264	-82.0150	-1579.7629	-1875.0090	74.1371	20.2104	-1780.6615	217.11

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

15.4.6 UI Transactions of IP

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	UI amount as per Intrastate UI account in Rs. Lacs	Adjusted UI Amount to equivate the same with Interstate UI Issued by NRPC for the state Delhi as a whole in Rs. Lacs	Additional UI Amount in Rs. Lacs	Difference in UI Capp Amount in Rs. Lacs	Net UI Amount in Rs. Lacs	Avg. cost in Ps/ Unit
Apr-12	0.7200	0.3088	-0.4112	-9.9952	-11.1411	0.6133	0.0000	-10.5278	256.03
May-12	0.7440	0.3194	-0.4246	-13.5176	-16.5457	2.4657	0.0000	-14.0800	331.62
Jun-12	0.7200	0.2080	-0.5120	-17.5923	-23.5132	5.6457	0.0000	-17.8675	349.00
Jul-12	0.7440	0.0618	-0.6822	-24.9416	-32.5865	11.6119	0.0000	-20.9747	307.44
Aug-12	0.7440	0.0577	-0.6863	-13.0331	-14.6617	0.5411	0.0000	-14.1206	205.76
Sep-12	0.7200	0.0557	-0.6643	-10.1788	-12.4565	0.2184	0.0000	-12.2382	184.22
Oct-12	0.7440	0.0561	-0.6879	-13.9782	-18.6598	0.2031	0.0000	-18.4567	268.31
Nov-12	0.7200	0.0493	-0.6707	-11.7171	-13.7363	0.1714	0.0000	-13.5649	202.26
Dec-12	0.7440	0.0486	-0.6954	-13.4398	-15.6494	0.5419	0.0000	-15.1074	217.24
Jan-13	0.7440	0.0542	-0.6898	-13.5736	-16.8808	0.6912	0.0000	-16.1896	234.70
Feb-13	0.6720	0.0475	-0.6245	-8.3380	-9.7213	0.0699	0.0000	-9.6514	154.56
Mar-13	0.7440	0.0459	-0.6981	-10.9563	-12.7571	0.0766	0.0000	-12.6804	181.63
Total	8.7600	1.3130	-7.4470	-161.2615	-198.3093	22.8502	0.0000	-175.4591	235.61

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

15.4.7 UI Transactions of RPH

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	UI amount as per Intrastate UI account in Rs. Lacs	Adjusted UI Amount to equivate the same with Interstate UI Issued by NRPC for the state Delhi as a whole in Rs. Lacs	Additional UI Amount in Rs. Lacs	Difference in UI Capp Amount in Rs. Lacs	Net UI Amount in Rs. Lacs	Avg. cost in Ps/ Unit
Apr-12	65.5758	65.1492	-0.4266	7.6490	0.9391	-0.2894	0.1964	0.8462	-19.84
May-12	58.3042	58.4629	0.1587	-0.9182	-13.6458	2.7214	0.2147	-10.7097	-674.90
Jun-12	65.8565	65.8776	0.0211	5.8722	72.8880	-11.8225	2.2528	63.3183	30044.25
Jul-12	29.5652	28.9854	-0.5798	30.1808	57.0165	-23.3345	4.0248	37.7069	-650.33
Aug-12	33.2396	32.7338	-0.5059	8.5831	-3.4653	0.0070	0.0154	-3.4430	68.06
Sep-12	51.7318	51.3706	-0.3612	4.6739	-13.7243	0.0906	0.0106	-13.6230	377.18
Oct-12	69.1818	68.8550	-0.3268	10.9805	-5.1175	-0.0814	0.0036	-5.1953	158.99
Nov-12	67.6090	67.1998	-0.4092	7.0535	3.8496	-0.0859	0.0326	3.7963	-92.78
Dec-12	67.7450	66.7925	-0.9525	14.9922	11.1715	-0.7122	0.1728	10.6320	-111.63
Jan-13	70.4470	69.5289	-0.9181	14.9412	-27.0495	-0.4056	0.2038	-27.2513	296.82
Feb-13	63.7235	62.6891	-1.0344	11.5644	0.4623	-0.1552	0.0269	0.3340	-3.23
Mar-13	41.4388	41.1720	-0.2668	3.5362	1.5702	0.0371	0.0040	1.6113	-60.40
Total	684.4181	678.8168	-5.6013	119.1087	84.8947	-34.0305	7.1584	58.0226	-103.59

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.

15.4.8 UI Transactions of GT

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	UI amount as per Intrastate UI account in Rs. Lacs	Adjusted UI Amount to equivate the same with Interstate UI Issued by NRPC for the state Delhi as a whole in Rs. Lacs	Additional UI Amount in Rs. Lacs	Difference in UI Capp Amount in Rs. Lacs	Net UI Amount in Rs. Lacs	Avg. cost in Ps/ Unit
Apr-12	112.8455	113.9078	1.0622	-20.8154	-29.5943	0.0000	0.0498	-29.5445	-278.13
May-12	152.5369	153.8225	1.2856	-24.4610	-28.0372	0.0000	2.0063	-26.0309	-202.48
Jun-12	136.2846	136.5484	0.2638	-13.3254	-12.6423	0.0000	2.9988	-9.6435	-365.60
Jul-12	138.2532	138.7740	0.5208	-29.4976	-29.1443	0.0000	6.7910	-22.3533	-429.21
Aug-12	112.5088	112.1270	-0.3818	21.8587	-0.3945	0.0000	0.4756	0.0810	-2.12
Sep-12	76.5003	73.3559	-3.1443	52.3394	12.6017	0.0000	0.2860	12.8877	-40.99
Oct-12	85.8495	86.1459	0.2964	-1.5957	-14.1176	0.0000	0.0314	-14.0862	-475.25
Nov-12	92.0185	92.1781	0.1596	-2.3913	-5.0630	0.0000	0.0087	-5.0543	-316.70
Dec-12	87.7825	86.8759	-0.9066	18.3170	10.6524	0.0000	0.2255	10.8779	-119.99
Jan-13	99.0787	98.8216	-0.2571	3.9388	-59.2854	0.0000	0.4460	-58.8394	2288.73
Feb-13	76.3970	76.9029	0.5059	-5.9759	-15.3601	0.0000	0.0000	-15.3601	-303.61
Mar-13	98.9595	98.9615	0.0020	4.5908	2.1003	0.0000	0.0137	2.1140	10357.52
Total	1269.0150	1268.4215	-0.5934	2.9825	-168.2844	0.0000	13.3328	-154.9516	2611.06

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

15.4.9 UI Transactions of PPCL

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	UI amount as per Intrastate UI account in Rs. Lacs	Adjusted UI Amount to equivate the same with Interstate UI Issued by NRPC for the state Delhi as a whole in Rs. Lacs	Additional UI Amount in Rs. Lacs	Difference in UI Capp Amount in Rs. Lacs	Net UI Amount in Rs. Lacs	Avg. cost in Ps/ Unit
Apr-12	201.5740	202.4109	0.8369	-24.4736	-50.8436	0.0000	0.0591	-50.7845	-606.81
May-12	208.0122	208.2057	0.1935	-20.5598	-26.2865	0.0000	0.3501	-25.9365	-1340.58
Jun-12	194.7100	194.9838	0.2738	-37.8123	-51.9144	0.0000	4.5236	-47.3907	-1730.97
Jul-12	202.0748	203.0682	0.9933	-73.0287	-67.0769	0.0000	4.8822	-62.1947	-626.11
Aug-12	144.3179	144.6248	0.3070	-10.3243	-15.0788	0.0000	0.0070	-15.0717	-490.99
Sep-12	202.5743	202.4414	-0.1328	-0.2790	-63.7224	0.0000	0.0946	-63.6279	4790.68
Oct-12	212.9849	213.5257	0.5408	-18.3371	-27.1540	0.0000	0.0381	-27.1159	-501.38
Nov-12	217.9730	218.8604	0.8874	-19.1330	-22.9249	0.0000	0.0586	-22.8663	-257.69
Dec-12	229.4968	230.3594	0.8626	-12.7410	-15.7948	0.0000	0.4181	-15.3767	-178.27
Jan-13	226.2558	227.3443	1.0885	-21.1281	-34.7174	0.0000	0.6434	-34.0740	-313.03
Feb-13	196.2780	197.0263	0.7483	-5.2853	-9.8935	0.0000	0.0661	-9.8273	-131.33
Mar-13	198.1108	198.9924	0.8817	-15.2961	-19.1376	0.0000	0.0020	-19.1356	-217.04
Total	2434.3624	2441.8433	7.4809	-258.3983	-404.5447	0.0000	11.1429	-393.4018	-525.87

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

15.4.10 UI Transactions of BTPS

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	UI amount as per Intrastate UI account in Rs. Lacs	Adjusted UI Amount to equivate the same with Interstate UI Issued by NRPC for the state Delhi as a whole in Rs. Lacs	Additional UI Amount in Rs. Lacs	Difference in UI Capp Amount in Rs. Lacs	Net UI Amount in Rs. Lacs	Avg. cost in Ps/ Unit
Apr-12	346.4888	352.6125	6.1238	-266.8825	-324.5803	39.1344	0.4760	-284.9699	-465.35
May-12	375.5881	372.2192	-3.3689	41.4316	-155.2997	14.0552	4.8346	-136.4099	404.90
Jun-12	294.2280	287.3460	-6.8820	161.4332	118.4744	-4.6226	3.5376	117.3894	-170.57
Jul-12	388.0700	385.2699	-2.8001	8.9308	128.4155	43.3623	11.3247	183.1026	-653.91
Aug-12	368.8163	361.4309	-7.3854	107.2671	31.7329	0.4200	0.4097	32.5626	-44.09
Sep-12	337.2125	333.1903	-4.0222	3.6995	-73.7671	8.1840	0.0000	-65.5832	163.05
Oct-12	374.4000	371.1138	-3.2862	28.0329	-75.2339	1.6782	0.1127	-73.4430	223.49
Nov-12	347.1438	339.0193	-8.1245	105.7365	55.4782	-1.0690	0.4460	54.8552	-67.52
Dec-12	311.5938	304.6724	-6.9213	73.3378	46.1616	1.1156	0.5513	47.8285	-69.10
Jan-13	404.0823	398.7385	-5.3438	27.2162	-36.2327	5.5412	1.2389	-29.4525	55.12
Feb-13	274.6000	268.7124	-5.8876	43.3651	2.5717	2.3339	0.0087	4.9143	-8.35
Mar-13	407.5640	406.8191	-0.7449	-37.9330	-57.3650	2.8012	0.0000	-54.5638	732.46
Total	4229.7873	4181.1442	-48.6432	295.6350	-339.6444	112.9344	22.9404	-203.7695	41.89

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

15.4.10 UI Transactions of Bawana CCGT

Month	Scheduled drawal in Mus	Actual drawal in MUs in Mus	UI Energy in Mus	UI amount as per Intrastate UI account in Rs. Lacs	Adjusted UI Amount to equivate the same with Interstate UI Issued by NRPC for the state Delhi as a whole in Rs. Lacs	Additional UI Amount in Rs. Lacs	Difference in UI Capp Amount in Rs. Lacs	Net UI Amount in Rs. Lacs	Avg. cost in Ps/ Unit
Apr-12	88.0716	102.6177	14.5460	-255.5458	-278.0714	0.0000	0.6421	-277.4294	-190.73
May-12	123.7099	133.1116	9.4018	-300.0908	-357.2694	0.0000	1.7833	-355.4861	-378.11
Jun-12	88.2869	92.4538	4.1670	-113.0886	-152.4916	0.0000	6.7415	-145.7502	-349.78
Jul-12	128.3486	134.2086	5.8601	-302.1481	-271.3511	0.0000	26.5980	-244.7531	-417.66
Aug-12	146.4732	143.3827	-3.0905	6.5345	-33.6182	0.0000	0.0413	-33.5769	108.64
Sep-12	16.9728	15.7651	-1.2076	16.8785	-91.7906	0.0000	0.0666	-91.7240	759.55
Oct-12	121.2356	120.7184	-0.5173	-0.1903	-26.5994	0.0000	0.0058	-26.5936	514.12
Nov-12	179.0586	176.3660	-2.6925	22.4842	18.8714	0.0000	0.2227	19.0941	-70.91
Dec-12	139.1713	137.3260	-1.8453	-1.4008	-5.6388	0.0000	1.0316	-4.6071	24.97
Jan-13	153.1310	151.2225	-1.9085	-2.1363	-8.1454	0.0000	0.6266	-7.5188	39.40
Feb-13	140.7889	138.1794	-2.6095	6.5409	-2.8246	0.0000	0.0461	-2.7785	10.65
Mar-13	51.1308	50.9754	-0.1554	-1.8923	-4.9482	0.0000	0.0917	-4.8565	312.54
Total	1376.3790	1396.3272	19.9482	-924.0550	-1213.8773	0.0000	37.8972	-1175.9801	-589.52

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

16 CAPACITOR REQUIREMENT IN DELHI

16.1 CAPACITOR REQUIREMENT AND INSTALLED CAPACITY OF CAPACITORS IN DELHI AS PER NRPC STUDY FOR 2011-12 AND 2012-13

(All figures in MVAR)

Requirement		Installed Capacity		Working Capacity in MVAR	
2011-12	2012-13	2011-12	2012-13	2011-12	2012-13
4043	4410	3697	3662	3424	3468

[The above does not include LT Capacitors]

16.2 DETAILS OF THE CAPACITORS INSTALLED IN DELHI SYSTEM LUMPED TO THE NEAREST 220KV GRID SUB-STATIONS AS ON 31.03.2013 IS AS UNDER :-

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	TOTAL
1	**IP YARD**		30		**30**
1	Kamla Market			16.35	**16.35**
2	Minto Road				
3	GB Pant Hosp			15.88	**15.88**
4	Delhi Gate			10.9	**10.9**
5	Tilakmarg			5.04	**5.04**
7	Cannaught Place			10.08	**10.08**
8	Kilokri		10.08	10.48	**20.56**
9	NDSE				**0**
11	Nizamuddin				**0**
12	Exhibition-I				**0**
13	Exhibition-II				**0**
14	Defence Colony				**0**
15	IG Stadium		10.08	5.45	**15.53**
16	Lajpat Nagar				**0**
17	IP Estate			10.9	**10.9**
	LT BYPL				**5.6**
		0	**50.16**	**85.08**	**140.84**
2	**Electric Lane**				
1	Electric Lane			5.04	**5.04**
2	Scindia House			5.04	**5.04**
3	Raisina Road			10.08	**10.08**
4	Raja Bazar			10.08	**10.08**
		0	**0**	**30.24**	**30.24**
3	**RPH Station**		20		**20**
1	Lahori Gate			10.49	**10.49**
2	Jama Masjid			10.48	**10.48**
4	Kamla Market				**0**
5	Minto Road			10.9	**10.9**
6	GB Pant Hosp				**0**
7	IG Stadium				**0**
	LT BYPL				**3**
		0	**20**	**31.87**	**54.87**

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	TOTAL
4	**Parkstreet S/stn**	20	20		**40**
1	Shastri Park		10.896	5.45	**16.346**
2	Faiz Road			18.05	**18.05**
3	Motia Khan			16.3	**16.3**
4	Prasad Nagar			16.25	**16.25**
5	Anand Parbat			10.8	**10.8**
6	Shankar Road			5.04	**5.04**
7	Rama Road				**0**
8	Baird Road			10.08	**10.08**
9	Hanuman Road			5.04	**5.04**
10	Pusa			5.44	**5.44**
11	Ridge Valley				**0**
12	B. D. Marg				**0**
13	Nirman Bhawan			5.04	**5.04**
	LT BYPL				**30.1**
		20	**30.896**	**92.45**	**178.486**
5	**Naraina S/stn**		20	5.04	**25.04**
1	DMS		10.87	10.4	**21.27**
2	Mayapuri				**0**
3	Inderpuri		10	4.8	**14.8**
4	Rewari line				**0**
5	Khyber Lane				**0**
6	Kirbi Place				**0**
7	Payal			7.2	**7.2**
8	Saraswati Garden			10.88	**10.88**
		0	**40.87**	**38.32**	**79.19**
6	**Mehrauli S/stn**	80		5.04	**85.04**
1	Adchini			14.61	**14.61**
2	Andheria Bagh			10.85	**10.85**
3	IIT			10.9	**10.9**
4	JNU		10.03	10.03	**20.06**
5	Bijwasan			15.47	**15.47**
6	DC Saket			9.98	**9.98**
7	Malviya Nagar				**0**
8	C Dot			10.48	**10.48**
9	Vasant kunj B-Blk	21.79		10.9	**32.69**
10	Vasant kunj C-Blk	20.16		10.48	**30.64**
11	Palam				**0**
12	IGNOU			5.04	**5.04**
13	R. K. Puram-I			10.07	**10.07**
14	Vasant Vihar			19.25	**19.25**
15	Pusp Vihar			10.44	**10.44**
16	Bhikaji Cama Place		10.08	10.07	**20.15**
	LT BRPL				**25**
		121.95	**20.11**	**163.61**	**330.67**

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	TOTAL
7	**Vasantkunj S/stn**	40		5.04	**45.04**
1	R. K. Puram-II			10.08	**10.08**
2	Vasant kunj C-Blk				**0**
3	Vasant kunj D-Blk			9.63	**9.63**
4	Ridge Valley				**33.2**
	LT BRPL				
		40	**0**	**24.75**	**97.95**
8	**Okhla S/stn**	60	10	5.04	**75.04**
1	Balaji			10.8	**10.8**
2	East of Kailash			15.89	**15.89**
3	Alaknanda			16.3	**16.3**
4	Malviya Nagar	21.79		10.85	**32.64**
5	Masjid Moth			16.3	**16.3**
6	Nehru Place			21.34	**21.34**
7	Okhla Ph-I	21.79		16.3	**38.09**
8	Okhla Ph-II		20.93	15.47	**36.4**
9	Shivalik			10.8	**10.8**
10	Batra			15.9	**15.9**
11	VSNL			10.9	**10.9**
12	Siri Fort			10.49	**10.49**
13	Tuglakabad			10.85	**10.85**
	LT BRPL				**59**
		103.58	**30.93**	**187.23**	**380.74**
9	**Lodhi Road S/stn**		20		**20**
1	Defence Colony		14.85		**14.85**
2	Hudco		10.9		**10.9**
3	Lajpat Nagar		10.9		**10.9**
4	Nizamuddin		10.44		**10.44**
5	Vidyut Bhawan				**0**
6	Ex. Gr. II				**0**
7	IHC				**0**
	LT BRPL				**42**
		0	**67.09**	**0**	**109.09**
10	**Sarita Vihar S/stn**	20		5.04	**25.04**
1	Sarita Vihar			10.07	**10.07**
2	MCIE			10.06	**10.06**
3	Mathura Road	20.16		11.69	**31.85**
4	Jamia Millia			10.89	**10.89**
5	Sarai Julena		10.08	16.29	**26.37**
6	Jasola			5.44	**5.44**
	LT BRPL				**23.6**
		40.16	**10.08**	**69.48**	**143.32**
11	**Wazirabad**				
1	Bhagirathi		14.4	10.9	**25.3**
2	Ghonda	21.79	22.56	15.94	**60.29**
3	Seelam Pur		10.08	21.39	**31.47**
4	Dwarkapuri			15.46	**15.46**

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	TOTAL
5	Nandnagri	20.16		16.35	**36.51**
6	Yamuna Vihar			16.2	**16.2**
7	East of Loni Road			10.8	**10.8**
8	Shastri Park			10.9	**10.9**
9	Karawal Nagar			5.4	**5.4**
10	Sonia Vihar			7.2	**7.2**
	LT BYPL				**10**
		41.95	**47.04**	**130.54**	**229.53**
12	**Geeta Colony**				
1	Geeta Colony				**0**
2	Kanti Nagar			10.49	**10.49**
3	Kailash Nagar			10.9	**10.9**
4	Seelam Pur			15.48	**15.48**
5	Shakar Pur				**0**
	LT BYPL				**5.8**
		0	**0**	**36.87**	**42.67**
13	**Gazipur S/stn**	40		5.04	**45.04**
1	Dallupura	28.8		10.9	**39.7**
2	Vivek Vihar			9.57	**9.57**
3	GT Road			10.85	**10.85**
4	Kondli	20.16		10.85	**31.01**
5	MVR-I			10.9	**10.9**
6	MVR-II	20.16		10.9	**31.06**
7	PPG Ind. Area			10.06	**10.06**
	LT BYPL				**20.6**
		109.12	**0**	**79.07**	**208.79**
14	**Patparganj S/stn**	40	20	5.04	**65.04**
1	GH-I	19.89		10.45	**30.34**
2	GH-II	20.09		10.9	**30.99**
3	CBD		10.03	15.48	**25.51**
4	Guru Angad Nagar			15.49	**15.49**
5	Karkadooma		10.8	10.44	**21.24**
6	Preet Vihar			10.07	**10.07**
7	CBD-II			10.8	**10.8**
8	Shakarpur			10.8	**10.8**
9	Jhilmil			10.8	**10.8**
10	Dilshad Garden	20.16		16.35	**36.51**
11	Khichripur	21.79		10.49	**32.28**
12	Mother Dairy				**0**
13	Scope Building				**0**
14	Vivek Vihar				**0**
15	Akhardham			14.6	**14.6**
	LT BYPL				**23.3**
		121.93	**40.83**	**151.71**	**337.77**

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	TOTAL
15	**Najafgarh S/stn**	60		5.04	**65.04**
1	A4 Paschim Vihar			10.8	**10.8**
2	Nangloi	21.73		15.84	**37.57**
3	Nangloi W/W	20.89		10.85	**31.74**
4	Pankha Road			15.88	**15.88**
5	Jaffarpur			15.43	**15.43**
7	Inst. Area Janakpuri			17.6	**17.6**
8	Paschimpuri		10.05	15.47	**25.52**
9	Paschim Vihar	41.83		15.43	**57.26**
10	Mukherjee Park			20.83	**20.83**
11	Udyog Nagar			10.43	**10.43**
12	Choukhandi			10.07	**10.07**
	LT BRPL				**27**
		144.45	**10.05**	**163.67**	**345.17**
16	**Pappankalan-I S/stn**	20		5.04	**25.04**
1	Bindapur Grid G-3 PPK	21.73		15.85	**37.58**
2	Bodella-I	20.1		16.24	**36.34**
3	Bodella-II	21.73		17.64	**39.37**
4	DC Janakpuri			10.03	**10.03**
5	G-2 PPK			10.8	**10.8**
6	G-5 PPK			15.51	**15.51**
7	G-6 PPK			5.4	**5.4**
8	G-15 PPK			10.8	**10.8**
9	Harinagar	21.18		16.25	**37.43**
10	Rewari line			5.44	**5.44**
	LT BRPL				**13.5**
		104.74	**0**	**129**	**247.24**
17	**BBMB Rohtak Road**				
1	S.B. Mill			10.07	**10.07**
2	Rama Road			10.88	**10.88**
3	Ram Pura			10.48	**10.48**
4	Rohtak Road			8.04	**8.04**
5	Vishal			10.4	**10.4**
6	Tri Nagar			5.44	**5.44**
7	Madipur			10.43	**10.43**
8	Sudershan Park			10.08	**10.08**
9	Kirti Nagar			5.44	**5.44**
		0	**0**	**81.26**	**81.26**
18	**Shalimarbagh S/stn**		40	6	**46**
1	S.G.T. Nagar			5.44	**5.44**
2	Wazirpur-1			17.18	**17.18**
3	Wazirpur-2			11.39	**11.39**
4	Ashok Vihar			5.44	**5.44**
5	Rani Bagh			10.88	**10.88**
6	Haiderpur			11.39	**11.39**
7	SMB FC			5.44	**5.44**
8	SMB KHOSLA			5.44	**5.44**
	LT TPDDL				**30**
		0	**40**	**78.6**	**148.6**

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	TOTAL
19	**Subzimandi S/stn**			5.04	**5.04**
1	Shakti Nagar			5.94	**5.94**
2	Gulabibagh			10.88	**10.88**
3	Shahzadabagh			13.68	**13.68**
4	DU			5.44	**5.44**
5	Tripolia			10.88	**10.88**
	B. G. Road			5.4	**5.4**
	LT BYPL				**0.9**
	LT TPDDL				**20**
		0	**0**	**51.86**	**78.16**
20	**Narela S/stn**	40		5.04	**45.04**
1	A-7 Narela			10.88	**10.88**
2	AIR Kham pur			6	**6**
3	Ashok vihar			10.48	**10.48**
4	Azad Pur			5.44	**5.44**
5	Tri Nagar			5.44	**5.44**
6	Badli	20		5.95	**25.95**
7	DSIDC Narela-1			5.95	**5.95**
8	GTK			5.44	**5.44**
9	Jahangirpuri	20	10	0	**30**
10	Bhalswa			3.6	**3.6**
	LT TPDDL				**10**
		80	**10**	**64.22**	**164.22**
21	**Gopalpur S/stn**		30	5.04	**35.04**
1	Azad Pur			10.88	**10.88**
2	Hudson Lane			5.44	**5.44**
3	Wazirabad			2.4	**2.4**
4	Indra Vihar			5.44	**5.44**
6	GTK Road			5.94	**5.94**
7	Jahangirpuri		10	5.95	**15.95**
8	Civil lines			5.44	**5.44**
9	Pitam Pura-1			5.44	**5.44**
10	Pitam Pura-3			5.44	**5.44**
11	Air Khampur			5.95	**5.95**
12	SGT Nagar			5.95	**5.95**
13	Tiggipur			10.88	**10.88**
	LT TPDDL				**29**
		0	**40**	**80.19**	**149.19**
22	**Rohini S/stn**	40		6	**46**
1	Rohini Sec-22			10.88	**10.88**
2	Rohini Sec-23	20		5.44	**25.44**
3	Rohini Sec-24			5.44	**5.44**
4	Rohini-1			5.44	**5.44**
5	Rohini-3			5.95	**5.95**
6	Rohini-4			11.39	**11.39**
7	Rohini-5			11.39	**11.39**

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	TOTAL
8	Rohini-6			5.95	**5.95**
9	Mangolpuri-1			16.83	**16.83**
10	Mangolpuri-2	20		5.94	**25.94**
11	Pitam Pura-1	20		5.04	**25.04**
12	Pitam Pura-2			10.48	**10.48**
13	Rohini DC-1			14.4	**14.4**
	LT TPDDL				**30**
		100	**0**	**120.57**	**250.57**
23	**Kanjhawala S/stn**	20		5.04	**25.04**
1	Bawana Clear Water			10.88	**10.88**
2	Pooth Khoord			5.44	**5.44**
		20	**0**	**21.36**	**41.36**
24	**BAWANA S/stn**				
1	Bawana S/stn No. 6			10.88	**10.88**
2	Bawana S/stn No. 7				**0**
		0	**0**	**10.88**	**10.88**
25	**Kashmeregate S/stn**			5.04	**5.04**
1	Civil lines			5.44	**5.44**
2	Town Hall			8.64	**8.64**
3	Fountain			5.45	**5.45**
	LT BYPL				**2.7**
		0	**0**	**24.57**	**27.27**
26	**Pappankalan-II**				
1	DMRC-I				**0**
2	DMRC-II				**0**
27	**Trauma Center (AIIMS)**				
1	AIIMS		13.26	5.04	**18.3**
2	Trauma Center			10.08	**10.08**
3	Netaji Nagar			15.12	**15.12**
4	Sanjay Camp			10.08	**10.08**
5	Kidwai Nagar			5.04	**5.04**
6	SJ Airport			5.04	**5.04**
	Race Course			5.04	**5.04**
		0	**13.26**	**55.44**	**68.7**
28	**MUNDKA**				
	Rohini-2			11.39	**11.39**
	LT BRPL				**18.5**
		0	**0**	**11.39**	**29.89**
29	**DSIDC BAWANA**				
	DSIDC NRL-1	20			**20**
	DSIDC NRL-2			10.88	**10.88**
		20	**0**	**10.88**	**30.88**

Sl. No	SUB-STATION	INSTALLED CAPACITY IN MVAR			
		66KV	33kV	11kV	TOTAL
30	**RIDGE VALLEY**				
	Keventry Diary			10.08	**10.08**
	Nehru Park			5.04	**5.04**
	Bapu Dham			10.08	**10.08**
		0	**0**	**25.2**	**25.2**
31	**IP EXTN (PRAGATI)**				
	Vidyut Bhawan			10.08	**10.08**
	Dalhousie Road			5.04	**5.04**
	School Lane			5.04	**5.04**
		0	**0**	**20.16**	**20.16**
	TOTAL CAPACITY	**1067.9**	**461.3**	**2025.1**	**4082.9**

17. TRANSMISSION SYSTEM AVAILABILITY OF DELHI TRANSCO LTD. FOR THE YEAR 2012-13

Sl. No.	Name of Elements	Availability in %age
1	AVAILABILITY OF 12NOS. 400kV, 315MVA ICTs	98.75
2	AVAILABILITY OF 10NOS. 400kV LINES	99.68
3	AVAILABILITY OF 75NOS. 220kV LINES	99.43
4	AVAILABILITY OF 50NOS. 220/66kV ICTs	98.70
5	AVAILABILITY OF 33NOS. 220/33kV ICTs	94.76
6	AVAILABILITY OF 3NOS. 66/33kV ICTs	99.71
7	AVAILABILITY OF 24NOS. 66/11kV PR. TXS	99.42
8	AVAILABILITY OF 16NOS. 33/11kV PR. TXS	98.35
9	AVAILABILITY OF 119NOS. 66kV FEEDER BAYs	99.93
10	AVAILABILITY OF 146NOS. 33kV FEEDER BAYs	99.92
11	AVAILABILITY OF 205NOS. 11kV FEEDER BAYs	100.00
12	AVAILABILITY OF 59NOS. CAP. BANKS	87.83
TOTAL AVAILABILITY OF DTL SYSTEM =		**97.17**

$$\frac{(98.75*12+99.68*10+99.43*75+98.70*50+94.76*33+99.71*3+99.42*24+98.35*16+99.93*119+99.92*146+100*205+87.83*59)}{(12+10+75+50+33+3+24+16+119+146+205+59)} = 97.17\%$$

18. NEW ELEMENTS COMMISSIONED IN TRANSMISSION SYSTEM

The following elements added during the year 2012-13.

Sr No.	Name of the Element	Date of Commissioning
	400kV SYSTEM	
1	66KV PARK STREET – SCHOOL LANE CKT	26.06.2012 AT 17.35HRS.
2	66KV PARK STREET – DMRC CKT	07.06.2012 AT 14.32HRS.
3	220/33KV 100MVA PR. TR.-I AT ELECRIC LANE	23.08.2012 AT 16.05HRS.
4	220KV MAHARANI BAGH – ELECTRIC LANE CKT-I	23.08.2012 AT 11.32HRS.
5	220KV MAHARANI BAGH – ELECTRIC LANE CKT-II	27.08.2012 AT 14.02HRS.
6	33KV MASJID MOTH – SHIVALIK CKT.	02.06.2012 AT 17.20HRS.
7	33KV MASJID MOTH – SIRIFORT CKT.	09.06.2012 AT 16.45HRS.
8	33KV MASJID MOTH – ALAKNANDA CKT.	09.06.2012 AT 15.20HRS.
9	33KV MASJID MOTH – NEHRU PLACE CKT.	01.06.2012 AT 18.35HRS.
10	33KV MASJID MOTH – BALAJI CKT.	19.09.2012 AT 13.50HRS.
11	33KV TRAUMA CENTER- AIIMS CKT-I	19.02.2012 AT 18.45HRS.
12	33KV TRAUMA CENTER – AIIMS CKT-II	14.072012 AT 18.50HRS.
13	33KV TRAUMA CENTER– RAJIV GANDHI BHAWAN CKT	19.06.2012 AT 18.45HRS
14	33KV TRAUMA CENTER – NETAJI NAGAR CKT-III	19.07.2012 AT 17.08HRS.
15	33KV TRAUMA CENTER – STATE GUEST HOUSE CKT.	19.07.2012 AT 17.08HRS.
16	33KV ELECTRIC LANE – SCHOOL LANE CKT	30.01.2013 AT 12.45HRS.
17	33KV ELECTRIC LANE – SCINDIA HOUSE CKT.	30.01.2013 AT 12.12HRS.
18	33KV ELECTRIC LANE – B.D. MARG CKT.	04.10.2012 AT 13.10HRS.
19	33KV ELECTRIC LANE – MANDI HOUSE CKT	01.10.2012 AT 17.00HRS.
20	33KV ELECTRIC LANE – RAJA BAZAR CKT.	06.11.2012 AT 18.06HRS.
21	33KV ELECTRIC LANE – RAISINA ROAD CKT-I	06.11.2012 AT 18.00HRS.
22	33KV ELECTRIC LANE – RAISINA ROAD CKT-II	21.09.2012 AT 16.05HRS.

19 TRIPPINGS / BREAK-DOWNS IN 400/220KV SYSTEM FOR THE YEAR 2012-13

19.1 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH APRIL 2012

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.04.12	23.15	220KV BAMNAULI – NAJAFGRH CKT-I & II	01.04.12	23.47	BOTH CKTS. TRIPPED ON 86, BACK UP TRIP, 186A&B, UNDER FREQUENCY, UNDER VOLTAGE AT BAMNAULI. NO TRIPPING AT NAJAFGARH.
02	01.04.12	23.15	220KV BAMNAULI – NARAINA CKT-I & II	01.04.12	23.47	BOTH CKTS. TRIPPED ON 86, BACK UP TRIP, 186A&B, UNDER FREQUENCY, UNDER VOLTAGE AT BAMNAULI. NO TRIPPING AT NARAINA.
03	02.04.12	00.25	220KV NOIDA SEC-62 – GAZIPUR CKT.	02.04.12	02.30	SUPPLY FAILED FROM NOIDA SECTOR-62. NO TRIPPING AT GAZIPUR.
04	02.04.12	02.49	220KV MEHRAULI – DIAL CKT-I & II	02.04.12	07.00	BOTH CKTS TRIPPED AT DIAL ON FOLLOWING INDICATIONS :- REL GEPR, BFR, B MAIN-I, REC GEPR, BFR B MAIN-II, REC GEPR BFR Y MAIN-II, RED MAIN-I `B' PHASE TRIP, RED MAIN-I Y PHASE TRIP, RED MAIN-I R PHASE TRIP RED MAIN-I PROT TRIP RED MAIN-II B PHASE TRIP RED MAIN-II PROT TRIP AT 220KV MEHRAULI, DIAL CKT-I TRIPPED ON 186A&B, AUTO RECLOSE AND DIAL CKT-II TRIPPED ON 186A&B.
05	02.04.12	02.49	220KV BTPS – MEHRAULI CKT-II	02.04.12	03.34	CKT. TRIPPED ON 186 AT MEHRAULI. NO TRIPPING AT BTPS END .
06	02.04.12	02.49	220KV MEHRAULI – VASANT KUNJ CKT-I & II	02.04.12	03.38	CKT-I TRIPPED ON 186A, 186B, 96 AND CKT-II TRIPPED ON 295CC, 295CB, 195CB, 186A&B AT MEHRAULI. NO TRIPPING AT VASANT KUNJ. 220KV `B' PHASE CT OF 100MVA PR. TR.-I BLASTED.
07	02.04.12	02.49	220/66KV 100MVA PR. TR.-I AT MEHRAULI	03.04.12	18.04	TR. TRIPPED ON 64R HV SIDE, 87, 86X, 86. `B' PHASE CT OF 100MVA PR. TR.-I BLASTED.
08	02.04.12	02.49	400/220KV 315MVA ICT-III AT BAMNAULI	02.04.12	18.13	ICT TRIPPED ON GROUP-B RELAY 186B-I,
09	03.04.12	0324	400KV BAWANA – MUNDKA CKT-I	03.04.12	06.27	CB-420 OF THE CKT. TRIPPED ON POLE DISCREPANCY AT MUNDKA.
10	03.04.12	07.58	400KV BAWANA – DIPALPUPR CKT.	03.04.12	08.46	BREAKER NO. 1352 OF THE CKT. TRIPPED ON 186A&B, AUTO RECLOSE, 86B, GROUP-B AND BREAKER NO.1452 TRIPPED ON 186A&B, 2/AA AT BAWANA.
11	03.04.12	10.24	400KV BAWANA – DIPALPUPR CKT.	03.04.12	18.19	CKT. TRIPPED ON MAIN-I : CARRIER RECEIVED, 1352CB AUTO TRIP MAIN-II: SIGNAL CARRIER RECEIVED, AUX CARRIER 85X2, AX2, GROUP-B, 86B, AUTO RECLOSE 186A, 186B, TIMER AA/2, AUX CB 52X6 AT BAWANA. NO TRIPPING AT DIPALPUR.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
12	03.04.12	10.59	400KV MANDOLA – BAWANA CKT-I	04.04.12	16.35	CB-1552 OF THE CKT TRIPPED ON CB-I, AUTO TRIP, POLE DISCREPANCY, 186A&B AT BAWANA. BC-1552 OF THE TRIED TO CLOSE AT 11.14HRS. BUT DID NOT HOLD AND TRIPPED ALONG WITH CB-1652. CB-1652 TRIPPED ON 186A&B, 195B 2-C, CB ALARM. CKT. CHARGED THROUGH CB-1652. CB-1552 COULD BE CLOSED AT 16.35HRS. ON 04.04.2012.
13	03.04.12	19.08	VARIOUOS TRIPPINGS IN DTL SYSTEM	03.04.12		DETAILED REPORT ENCLOSED AT SR. NO.A BENEATH.
14	04.04.12	09.31	220/66KV 160MVA PR. TR.-I & II AT PRAGATI	04.04.12	11.42	TR-I TRIPPED ON 30D, OLTC BUCHLOZ, 30B, OIL TEMP HIGH, 30C, WINDING TEMP HIGH, SUDDEN PRESSURE RELAY, 86 TR-II TRIPPED ON 30D, OLTC BUCHLOZ, 30B, OIL TEMP HIGH, 30C, WINDING TEMP HIGH, 86. TX-I & II NORMALIZED AT 11.29HRS. AND 11.42HRS. RESPECTIVELY.
15	04.04.12	13.47	220KV BAWANA – DSIDC CKT-I	04.04.12	16.10	CKT. TRIPPED ON LOCK OUT, PT FUSE FAIL ALARM, AUTO RECLOSE LOCK OUT, NUMERICAL PROTECTION RELAY, DIST PROT `A' PHASE ZONE-I AT BAWANA. NO TRIPPING AT DSIDC END.
16	04.04.12	14.00	400KV BAWANA – DIPALPUR CKT	04.04.12	14.57	CB-1352 TRIPPED ON 86B, RX-II, 186A&B, 2/AA-I AND CB-1452 TRIPPED ON 186A&B, 2/AA-II AT BAWANA. NO TRIPPING AT DIPALPUR.
17	04.04.12	20.06	220KV BAWANA – NAJAFGARH CKT.	04.04.12	21.09	CKT. TRIPPED ON DIST PROT `C' PHASE, GROUP-I, AUTO RECLOSE LOCK OUT AT BAWANA AND ON 186 AT NAJAFGARH.
18	04.04.12	20.49	400KV BAWANA – DIPALPUR CKT.	04.04.12	12.50	CB-1352 TRIPPED ON MAIN-I & II : CARRIER RECEIVED, CB AUTO TRIP, DIRECT TRIP RECEIVED. CB-1452 MAIN-II CARRIER RECEIVED AT BAWANA.
19	08.04.12	05.10	220/33KV 100MVA PR. TR.-II AT MASJID MOTH	08.04.12	06.50	TR. TRIPPED ON 86 ALONG WITH 33KV I/C-II WHICH TRIPPED ON LV REF
20	08.04.12	07.22	220KV BAWANA – SHALIMAR BAGH CKT-II	08.04.12	15.33	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I, 186 AT BAWANA. NO TRIPPING AT SHALIMAR BAGH.
21	08.04.12	07.22	33/11KV 20MVA PR. TR.-II AT SHALIMAR BAGH	08.04.12	15.02	TR. TRIPPED ON E/F. 33KV `B' PHASE BUSHING FOUND DAMAGED.
22	08.04.12	10.56	66/11KV 20MVA PR. TR.-I & II AT KANJHAWALA	08.04.12	14.17	TR.-I TRIPPED ON O/C `ABC' PHASE, BACK UP PROTECTION, 86 AND TR-II TRIPPED ON 86, 87, HV/LV. 11KV I/C-I ALSO TRIPPED ON O/C `R&B PHASE.
23	08.04.12	11.44	400/220KV 315MVA ICT-III AT BAMNAULI	08.04.12	12.24	ICT TRIPPED ON B-I, 186A/GROUP A 95A1/ GROUP B 95B1.
24	08.04.12	11.44	200KV BAMNAULI – PAPPANKALAN-I CKT-I	08.04.12	12.17	CKT. TRIPPED ON DIST PROT `B&C' PHASE AT BAMNAULI. NO TRIPPING AT PAPPANKALAN-I.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
25	08.04.12	16.57	220/33KV 100MVA PR. TR.-I AT AIIMS TRAUMA CENTER	12.04.12	10.35	TR. TRIPPED ON 86A&B.
26	08.04.12	16.57	220/66KV 160MVA PR. TR.-II AT PRAGATI	08.04.12	20.22	TR. TRIPPED ON 86. IT TRIPPED ON E/F, O/C AT GT END.
27	08.04.12	16.57	220KV MAHARANI BAGH – SARITA VIHAR CKT.	08.04.12	23.02	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I, 186 AT SARITA VIHAR AND ON DIST PROT. AT MAHARANI BAGH. `B' PHASE LA BLASTED AT SARITA VIHAR.
28	09.04.12	01.44	220KV PANIPAT – NARELA CKT-II	09.04.12	02.07	CKT. TRIPPED ON DIST PROT DIST PROT `ABC' PHASE ZONE-I, 80D, 186 AT NARELA. RELAY INDICATIONS OF PANIPAT END NOT AVAILABLE.
29	09.04.12	12.25	220KV BTPS – MEHRAULI CKT-I	09.04.12	12.55	CKT. TRIPPED ON 186, 30C, 30G, AUXILIARY RELAY TRIPPED AT BTPS AND ON DIST PROT 'C' PHASE ZONE-I, 186A&B AT MEHRAULI.
30	10.04.12	16.48	220KV BAMNAULI – PAPPANKALAN-I CKT-I	10.04.12	18.10	CKT. TRIPPED ON DIST PROT 86A, 86C, , 186A, 186B, 186C AT BAMNAULI. NO TRIPPING AT PAPPANKALAN-I
31	10.04.12	16.48	220/66KV 100MVA PR. TR.IV AT PAPPANKALAN-I	12.04.12	19.35	TR. TRIPPED ON 195C, 295C, 86A, 86B, 86C
32	10.04.12	17.01	220KV WAZIRABAD - GEETA COLONY CKT-I & II	10.04.12	17.27	CKT-I TRIPPED ON MAIN-I GROUP-I, DIST PROT ABC' PHASE ZONE-I, O/C, MAIN-II, DIST PROT `ABC' PHASE ZONE-I,, 86, 27RYB AND CKT-II TRIPPED ON MAIN-I, 86, 27RYB, ACTIVE GROUP, DIST PROT `ABC' PHASE, MAIN-II DIST PROT `ABC' PHASE ZONE-I AT WAZIRABAD. NO TRIPPING AT GEETA COLONY.
33	10.04.12	16.56	220KV MANDOLA – GOPALPUR CKT-II	10.04.12	16.56	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-I AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR.
34	10.04.12	16.47	400KV BAWANA – MUNDKA CKT-I	10.04.12	18.12	CKT. TRIPPED ON DIST PROT CN ZONE-I, 186A&B AT BAWANA.
35	10.04.12	16.51	220KV BAWANA – DSIDC CKT-II	10.04.12	17.43	CKT. TRIPPED ON DIST PROT `BC' PHASE ZONE-I, AUTO RECLOSE LOCK OUT AT BAWANA. NO TRIPPING AT DSIDC.
36	10.04.12	16.56	220KV BAWANA – SHALIMAR BAGH CKT-I	10.04.12	17.43	CKT. TRIPPED ON DIST PROT `A' PHASE, 21Q, 186A&B AT BAWANA. NO TRIPPING AT SHALIMAR BAGH.
37	10.04.12	17.02	220KV MANDOLA – WAZIRABAD CKT-IV	10.04.12	17.28	AT WAZIRABAD CKT TRIPPED ON GENERAL TRIP RYB PHASE, SOTF NO TRIPPING AT MANDOLA.
38	12.04.12	17.03	220/66KV 160MVA PR. TR.-I & II AT PRAGATI	12.04.12	17.34	TR-I TRIPPED ON 86 AND TR.-II TRIPPED ON BUCHLOZ, 30D, PRV, 30E, 86. 66KV I/C-I & II TRIPPED ON O/C, E/F TR-I & II ENERGIZED AT 17.18HRS AND 17.34HRS RESPECTIVELY.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
39	13.04.12	10.43	33/11KV 16MVA PR. TR.-I AT SUBZI MANDI	13.04.12	11.55	TR. TRIPPED ON O/C `R&B' PHASE.
40	14.04.12	08.18	220KV PANIPAT – NARELA CKT-II	14.04.12	09.31	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT NARELA. RELAY INDICATIONS AT PANIPAT END NOT AVAILABLE.
41	17.04.12	01.34	220KV SARITA VIHAR - MAHARANI BAGH CKT	17.04.12	02.35	CKT. TRIPPED ON DIST PROT `R' PHASE AT MAHARANI BAGH. CKT. ALSO TRIPPED AT SARITA VIHAR BUT RELAY INDICATIONS COULD NOT BE READ.
42	17.04.12	10.31	220KV NARELA – ROHTAK ROAD CKT II	17.04.12	11.34	CKT. TRIPPED ON DIST PROT `ABC' PHASE AT NARELA. NO TRIPPING AT ROHTAK ROAD.
43	19.04.12	10.20	66/11KV 20MVA PR. TR.-I AT NAJAFGARH	19.04.12	18.31	TR. TRIPPED ON O/C, 51ABC, 86.
44	19.04.12	16.01	400/220KV 315MVA ICT-IV AT MUNDKA	19.04.12	20.44	ICT TRIPPED ON 86.
45	20.04.12	13.28	400/220KV 315MVA ICT-III AT BAMNAULI	20.04.12	14.12	ICT TRIPPED ON 186A, 186B, 86, GROUP-B, BACK UP RELAY, P127
46	20.04.12	13.28	220KV MEHRAULI – DIAL CKT-I & II	20.04.12	17.55	THE FOLLOWING RELAY INDICATIONS OBSERVED : AT DIAL : 220KV MEHRAULI CKT-I : M-I, REC, GETR, BSR, B-MAIN-I, REC, GETR, BSR, RYB, MAIN-II REL MAIN2 PROTECTION TRIP, B PHASE FAULTY, REL MAINII B PHASE TRIP, REL MAIN-II ZONE-II, RED MAIN-I, RYB TRIP, RED MAIN-I PROTECTION TRIP 220KV MEHRAULI CKT-II : REC GETR, BFR, B MAIN-I, GETR, BFR, RYB, MAIN-II RED MAIN-I, PROTECTION TRIP, RED MAIN-I, PROTECTION TRIP RED COMMUNICATION FAIL, REL MAIN-II, B PHASE TRIP, REL MAIN-II, PROTECTION TRIP, REL B PHASE FAULTY AT MEHRAULI : 220KV DIAL CKT-I : NO TRIPPING 220KV DIAL CKT-II : ACTIVE GROUP-I, DIST PROT `C' PHASE ZONE-I, 86, 186 BOTH CKTS CHARGED AT 17.55HRS. FROM DIAL AND NORMALIZED AT MEHRAULI.
47	22.04.12	00.29	220KV PANIPAT – NARELA CKT-I	22.04.12	00.48	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-I, 186 AT NARELA. NO TRIPPING AT PANIPAT.
48	22.04.12	06.46	220/33KV 100MVA PR. TR.-I AT IP	22.04.12	06.53	TR. TRIPPED ON TRIPPING RELAY.
49	22.04.12	11.38	220/33KV 100MVA PR. TR -I & II AT PARK STREET	22.04.12	12.37	BOTH TRS TRIPPED DUE TO BLAST IN `R&Y' PHASE CTS OF MOTIA KHAN CKT-I
50	22.04.12	16.54	220/33KV 100MVA PR. TR -I & II AT PARK STREET	22.04.12	17.00	BOTH TR. TRIPPED ON 86 ALONG WITH THEIR 33KV I/CS WHICH ALSO TRIPPED ON 86.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
51	23.04.12	05.39	66/33KV 30MVA PR. TR-I & II AT PARK STREET	23.04.12	14.10	30MVA PR. TR.-I TRIPPED ON DIFFERENTIAL, A&C PHASE, LBB PROTECTION, 86 AND 30MVA PR. TR.-II TRIPPED ON 87 RYB, HIGH SPEED RELAY, 871RYB, 64RLV, 86. 33KV I/C-II ALSO TRIPPED DUE TO FLASH. 66KV I/C-I ALSO TRIPPED AT 05.39HRS. WHICH CHARGED AT 06.52HRS. 30MVA PR. TR.-I & II CHARGED AT 14.10HRS. AND 19.15HRS. RESPECTIVELY.
52	23.04.12	05.43	220/33KV 100MVA PR. TR.-I & II AT PARK STREET	23.04.12	07.11	BOTH TRS. TRIPPED ON 86A. 33KV I/C-I & II ALSO TRIPPED. 33KV I/C-I TRIPPED ON 51C, O/C, 86 AND 33KV I/C-II TRIPPED ON 51N, E/F, 86. BOTH TRS CHARGED AT 07.11HRS.
53	23.04.12	15.55	220/33KV 100MVA PR. TR.-III & IV AT PARK STREET	23.04.12	19.10	BOTH TR. TRIPPED ON E/F. MONKEY FOUND DEAD IN YARD.
54	23.04.12	17.25	220/33KV 100MVA PR. TR.-IV AT OKHLA	23.04.12	18.35	TR-IV TRIPPED ON O/C, 86 ALONG WITH 33KV I/C-III & IV. 33KV I/C-III TRIPPED ON 51A, 86 AND 33KV I/C-IV TRIPPED ON 86LV. 33KV `Y' PHASE JUMPER OF 33KV EAST OF KAILASH CKT. SNAPPED. 33KV I/C-III & IV CHARGED AT 18.31HRS. AND 18.35HRS RESPECTIVELY.
55	24.04.12	13.28	220/33KV 100MVA PR. TR.-II AT NARAINA	24.04.12	14.27	TR. TRIPPED WITHOUT INDICATION.
56	24.04.12	14.00	33/11KV 16MVA PR. TR.-I AT SUBZI MANDI.	24.04.12	15.39	TR. TRIPPED ON PRV, SPRV, AUX. RELAY FUNCTION, 86, 30ABCEF.
57	24.04.12	14.48	220KV MAHARANI BAGH – PRAGATI CKT.	25.04.12	14.03	CKT. TRIPPED ON POLE DISCREPANCY AT PRAGATI. NO TRIPPING AT MAHARANI BAGH.
58	25.04.12	06.36	400/220KV 315MVA ICT-I AT BAMNAULI	25.04.12	18.17	TR. TRIPPED ON DIFFERENTIAL A&C PHASE. `R' PHASE 220KV SIDE DISC FOUND FLASHED.
59	25.04.12	06.36	220KV NARAINA – RIDGE VALLEY CKT	25.04.12	07.02	CKT. TRIPPED ON E/F AT NARAINA. NO TRIPPING AT RIDGE VALLEY.
60	25.04.12	06.36	220KV BAMNAULI – NAJAFGARH CKT-II	25.04.12	07.15	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-I AT BAMNAULI. NO TRIPPING AT NAJAFGARH.
61	25.04.12	06.35	220/66KV 100MVA PR. TR.-I AT PAPPANKALAN-II	25.04.12	11.05	TR. TRIPPED ON 186, E/F
62	27.04.12	18.28	220/33KV 100MVA PR. TR.-II AT PARK STREET	27.04.12	18.38	TR. TRIPPED ON 86A ALONG WITH ITS 33KV I/C-II WHICH TRIPPED ON 86, E/F.
63	29.04.12	10.51	220KV BAMNAULI – PAPPANKALAN-II CKT-II	29.04.12	12.15	CKT. TRIPPED ON DIST PROT `A&B' PH, 186A&B, AUTO RECLOSE LOCK OUT. NO TRIPPING AT PAPPANKALAN-II
64	29.04.12	11.48	220KV BAMNAULI – PAPPANKALAN-I CKT-I	29.04.12	12.08	CKT. TRIPPED ON DIST PROT `B&C' PHASE, AUTO RECLOSE LOCK OUT, 186A&B AT BAMNAULI. NO TRIPPING AT PAPPANKALAN-I.
65	30.04.12	13.44	220KV BTPS – OKHLA CKT-II	30.04.12	20.39	CKT. TRIPPED ON E/F, ZONE-I, 30A, 30G AT BTPS AND ON `R'PHASE ZONE-I AT OKHLA.

A Report on trippings occurred in Delhi System at 19:07:48hrs. on 03.04.2012

On 03.04.2013 at 19:07:48hrs, B-Φ Conductor of Ckt-IV snapped between tower no. 53 & 54 (near Gadi Mandu Village) and fallen on Y-Φ of the same Ckt resulting into trippings of various circuits. The detailed report is given hereunder :-

S. No	Name of the feeder/ Transformer tripped	Time in Hrs		Relay indication	Remarks
		Tripping	Restoration		
01	220kV Mandola – Wazirabad Ckt-I	19:07:48	21:35	At Mandola : Dist Prot. Zone-I `Y&B' Φ. Dist 14.06Kms At Wazirabad : No tripping	
02	220kV Mandola – Wazirabad Ckt-II	19:07:48	21:36	At Mandola : Dist Prot. Zone-I `Y&B' Φ. Dist 14.29Kms At Wazirabad : No tripping	
03	220kV Mandola – Wazirabad Ckt-III	19:07:48	14:17 04.04.12	At Mandola : Dist Prot. Zone-I `Y&B' Φ. Dist 14.71Kms At Wazirabad : No tripping	
04	220kV Mandola – Wazirabad Ckt-IV	19:07:48	15:21 04.04.12	At Mandola: CB Auto Trip, Carrier Signal Received, Dist Prot. Zone-I, B to N Φ. Dist 11.43Kms. I_B 3.594KA, I_C OKA, I_A 625.4KA At Wazirabad : Dist Prot, Zone-I, 3-Φ trip, BΦ-N	**B-Φ Conductor of Ckt-IV snapped between tower no. 53 & 54 (near Gadi Mandu Village) and fallen on Y-Φ**

RPH Unit-1 & 2 and Pragati unit #2 & STG were connected to the grid through 220kV Pragati-I.P. - Patparganj - Geeta Colony - Wazirabad - Mandola link. 220kV Bus coupler was open at Pragati. Conductor of Mandola-SOW Ckt-IV snapped between Tower No. 53 & 54 (near Gadi Mandu Village) resulting in tripping of all the four Ckts. emanating from 400kV Mandola to Wazirabad causing the islanding of the Pragati Units & RPH Units from the Grid and subsequent tripping of the units of Pragati & RPH generating stations.

The generating units affected due to tripping are as under :-

Name of the Station	Unit no.	Generation prior to the incident	Time of tripping in Hrs.	Restoration time Hrs.
RPH	#1	46	19:08	21:05
	#2	56	19:08	20:50
Pragati	#2	86	19:08	19:47
	STG	104	19:08	20:42

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
Wazirabad	159	--
I.P.	118	--
RPH	85	102
Pragati	--	190
Patparganj	159	--
Geeta Colony	79	--
Kashmeregate	31	--
Total	**631**	**292**

Load affected during the time of tripping are as under :-

Timing (Hrs.)		Load affected in MW	Name of the grid	Remarks
From	To			
19:08	20:00	97	RPH	
20:00	21:00	71		
21:00	22:00	20		
19:08	21:00	24	Kashmeregate	DMRC load changed over to Rithala by DMRC
21:00	21:20	4		
19:08	21:10	79	Geeta Colony	
19:08	21:00	133	Wazirabad	
21:00	21:40	83		
19:08	20:00	161	Patparganj	
20:00	21:00	141		
21:00	22:00	62		
19:08	19:45	127	IP	

Load affected due to Under Frequency relay operation at RPH in the island are as under:-

Timing (Hrs.)		Load affected in MW	Name of the grid / Bay
From	To		
19:08	20:55	No Load	BAY NO. 1 - (Motia Khan)
19:08	20:56	3	BAY NO. 2 - (Lahori Gate)
19:08	20:57	5	BAY NO. 5 - (JAMA MASJID)
Total		**8**	

Revival :

The startup supply was extended to RPH and Pragati station by closing 220kV bus coupler at Pragati S/stn at 19:34hrs after doing necessary load management to avoid over loading of 220kV Pragati – Maharanibagh Ckt which was the only available grid supply.

It was a general feeling in the protection Sub-committee meeting that the tripping of Ckts Mandola-Wazirabad Ckt-I,II&III at Mandola end occurred due to lower setting of relays causing over reaching and this setting of the relay is required to be raised in coordination with DTL.

19.2 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH MAY –2012

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.05.12	12.40	220/66KV 100MVA PR.TR.-I AT NARELA	01.05.12	14.53	TR. TRIPPED ON 186, PRV
02	02.05.12	19.11	400KV BAWANA – MUNDKA CKT-I	02.05.12	21.58	BOTH CB OF THE CKT TRIPPED ON 186, POLE DISCREPANCY AT BAWANA. NO TRIPPING AT MUNDKA.
03	04.05.12	14.55	220KV BAMNAULI – NARAINA CKT-I	04.05.12	14.57	CKT. TRIPPED ON DIST PROT AT NARAINA. NO TRIPPING AT BAMNAULI.
04	07.05.12	11.46	400/220KV 315MVA ICT-IV AT MUNDKA	07.05.12	12.44	TR. TRIPPED ON OLTC BUCHLOZ 86A&B, 400KV CB-41652 TRIPPED ON OIL TEMP ALARM, LV SIDE WINDING TEM, LOW OIL LEVEL, HV SIDE WINDING TEMP.LV & HV SIDE TEMP ALARM, BUCHLOZ ALARM AND 220KV CB-21252 TRIPPED ON MASTER TRIP A&B RELAY,
05	07.05.12	12.09	220KV BTPS – OKHLA CKT-I	07.05.12	15.33	CKT. TRIPPED ON 30C, 64DX, DIST PROT ZONE-I, 186 MASTER RELAY AT BTPS. NO TRIPPING AT OKHLA.
06	07.05.12	13.51	220KV BAWANA – SHALIMAR BAGHCKT-II	07.05.12	18.11	CKT. TRIPPED ON CB AUTO TRIP, AUTO RECLOSE LOCK OUT, B&C PHASE, DIST PROT ZONE-II AT BAWANA. FIRE OBSERVED ON BUS ISOLATOR 1689B AT BAWANA.
07	07.05.12	18.43	220KV WAZIRABAD – KASHMIRI GATE CKT-I	07.05.12	20.28	CKT. TRIPPED ON DIST PROT `RYB' PHASE, ZONE-I AT WAZIRABAD. NO TRIPPING AT KASHMIRI GATE.
08	08.05.12	04.04	33/11KV 16MVA PR. TR.-I AT SUBZI MANDI	07.05.12	07.52	TR. TRIPPED ON 86, 87RYB, DIFFERENTIAL.
09	08.05.12	11.10	220KV BAWANA – ROHINI CKT-II	08.05.12	11.21	CKT. TRIPPED ON 186A&B, DIST PROT `A' PHASE AT BAWANA. NO TRIPPING AT ROHINI.
10	08.05.12	11.18	400/220KV 315MVA ICT-V AT BAWANA	08.05.12	15.50	ICT TRIPPED ON 86, DIRECTIONAL O/C.
11	08.05.12	23.26	33/11KV 20MVA PR. TR. AT SHALIMAR BAGH	08.05.12	23.44	TR. TRIPPED ON O/C `R' PHASE
12	09.05.12	03.19	220/66KV 100MVA PR. TR.-II AT NAJAFGARH	09.05.12	23.47	TR. TRIPPED ON 186, 87 ALONG WITH 66KV I/C-II & IV. 66KV I/C-II TRIPPED ON 64RLV AND 66KV I/C-IV TRIPPED ON INTER TRIPPING. 66KV `B' PHASE CT DAMAGED.
13	09.05.12	03.27	220/66KV 100MVA PR. TR.-I AT GAZIPUR	09.05.12	19.10	TR. TRIPPED ON E/F, O/C, TRIP CKT FAULTY ALONG WITH 66KV I/C-I WHICH TRIPPED ON E/F.
14	09.05.12	18.34	220KV MEHRAULI – VASANT KUNJ CKT-I	09.05.12	18.52	CKT. TRIPPED ON DIST PROT ZONE-I, 186A&B, 195 AT MEHRAULI. NO TRIPPING AT VASANT KUNJ.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
15	09.05.12	23.19	220/66KV 100MVA PR. TR.-IV AT PAPPANKALAN-I	10.05.12	05.26	TR. TRIPPED ON CB TC HALF FAULTY, 295A ALONG WITH 66KV I/C-IV WHICH TRIPPED ON O/C. 66KV CT OF BINDAPUR CKT-I DAMAGED.
16	09.05.12	23.19	220KV BAMNAULI – PAPPANKALAN-I CKT-I & II	09.05.12	23.42	BOTH CKT. TRIPPED ON DIST PROT `C' PHASE, 186A&B AT BAMNAULI. NO TRIPPING AT PAPPANKALAN-I
17	10.05.12	18.46	220KV BAWANA – NAJAFGARH CKT.	10.05.12	18.50	CKT. TRIPPED ON 186 AT NAJAFGARH. NO TRIPPING AT BAWANA.
18	10.05.12	18.46	220KV BAMNAULI – NAJAFGARH CKT-I & II	10.05.12	19.00	BOTH CKTS TRIPPED ON 186 AT NAJAFGARH. NO TRIPPING AT BAMNAULI.
19	10.05.12	18.45	400KV MUNDKA – JHAJJAR CKT-I & II	10.05.12	23.33	THE FOLLOWOING TRIPPING OCCURRED AT MUNDKA 400KV JHAJJAR CKT-I (BOTH CB.): 86A&B, LO. 400KV JHAJJAR CKT-II (BOTH CB): 86A&B, LO
20	11.05.12	12.35	220KV MASJID MOTH - MAHARANI BAGH CKT-I	11.05.12	17.20	CKT. TRIPPED ON REL670 AT MAHARANI BAGH END ONLY.
21	12.05.12	16.14	400KV MUNDKA – JHAJJAR CKT-I	12.05.12	18.32	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-I, 86, LOCK OUT, CHANNEL-I & II BLOCK SIGNAL, AUTO RECLOSE LOCK OUT AT MUNDKA AND ON AUTO RECLOSE LOCK OUT, 86, DIST PROT ZONE-I `B' PHASE, CHANNEL-I & II BLOCKING SIGNAL AT JHAJJAR.
22	12.05.12	16.46	33/11KV 16MVA PR. TR.-I AT SUBZI MANDI	12.05.12	17.08	TR. TRIPPED ON O/C, 86
23	12.05.12	17.07	220KV MANDOLA – GOPALPUR CKT-II	12.05.12	17.56	CKT.TRIPPED ON DIST PROT `B' PHASE ZONE-I AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR
24	12.05.12	17.02	220KV NARELA – ROHTAK ROAD CKT-I	12.05.12	18.49	CKT. TRIPPED ON DIST PROT ZONE-I, 86 AND O/C AT NARELA.
25	12.05.12	17.19	220KV PANIPAT – NARELA CKT-III	12.05.12	19.19	CKT. TRIPPED ON DIST PROT ABC' PHASE ZONE-I, 86T AT NARELA. RELAY INDICATIONS AT PANIPAT END ARE NOT AVAILABLE.
26	12.05.12	16.54	220/66KV 100MVA PR. TR.-II AT WAZIRABAD	12.05.12	19.44	TR. TRIPPED WITHOUT INDICATION. ALONG WITH 66KV I/C-I, II & II. 66KV I/C-I TRIPPED ON E/F, 86, 66KV I/C-II TRIPPED ON E/F, 86 AND 66KV I/C-III TRIPPED ON 86, O/C, E/F. 66KV I/C-I & II CHARGED AT 17.15HRS. AND 66KV I/C-II CHARGED AT 19.44HRS. DUE TO THE TRIPPING, RPH AND PRAGATI (UNIT-2 & STG) ISLANDED FROM THE GRID AND TRIPPED. THE SEPARATE REPORT IS ENCLOSED.
27	12.05.12	17.42	220KV MANDOLA – WAZIRABAD CKT-I, II, III & IV	12.05.12	19.32	220KV WAZIRABAD CKT-I, II & III TRIPPED ON DIST PROT ABC PH ZONE-II & 220KV WAZIRABAD CKT-IV TRIPPED ON DIST PROT `BC' PH AT MANDOLA. NO TRIPPING AT WAZIRABAD.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
28	12.05.12	17.23	400/220KV 315MVA ICT-I, II, III & IV AT BAWANA	12.05.12	18.30	THE FOLLOWOING TRIPPINGS OCCURRED ICT-I : MAIN CB AUTO TRIP 220KV I/C-I : CB TRIP ICT-II : MAIN CB AUTO TRIP 220KV I/C-II : MAIN CB AUTO TRIP ICT-III : MAINCB AUTO TRIP, GROUP-I & II TRIP RELAY CKT. FAULTY I/C-III : CB AUTO TRIP ICT-IV : MAIN CB AUTO TRIP 220KV I/C-IV : MASTER TRIP RELAY ICT-I, II & III CHARGED AT 18.26HRS. AND ICT-IV CHARGED AT 17.56HRS.
29	12.05.12	17.28	400KV BAWANA – DIPALPUR CKT.	12.05.12	20.59	CKT. TRIPPED ON 86 AT BAWANA. RELAY INDICATIONS AT DIPALPUR END ARE NOT AVAILABLE.
30	12.05.12	17.05	220/33KV 100MVA PR. TR.-I AT IP	12.05.12	18.33	TR. TRIPPED ON DIFFERENTIAL.
31	12.05.12	17.30	220KV IP – PRAGATI CKT.-I	12.05.12	17.55	CKT. TRIPPED ON DIRECTIONAL E/F AT IP
32	12.05.12	17.43	220/33KV 100MVA PR. TR.-III AT IP	12.05.12	19.10	TR. TRIPPED ON E/F AT 33KV SIDE.
33	12.05.12	17.25	220KV PATPARGANJ – GEETA COLONY CKT-I & II	12.05.12	17.55	BOTH CKT TRIPPED ON 186 AT PATPARGANJ.NO TRIPPING AT GEETA COLONY.
34	13.05.12	18.49	220KV MANDOLA – GOPALPUR CKT-II	13.05.12	19.22	CKT. TRIPPED ON DIST PROT ZONE-II AT MANDOLA. NO TRIPPING ON GOPALPUR.
35	15.05.12	15.17	220KV BTPS –OKHLA CKT-I	15.05.12	15.50	CKT. TRIPPED ON DIST PROT `Y' PHASE, E/F, 86X1, 86X2 AT BTPS. NO TRIPPING AT OKHLA
36	16.05.12	11.29	220KV MANDOLA – WAZIRABAD CKT-I, III & IV	16.05.12	11.35	THE FOLLOWING TRIPPINGS OCCURRED AT MANDOLA :- 220KV WAZIRABAD CKT-I: DIST PROT `B' PHASE ZONE-III 220KV WAZIRABAD CKT-III : DIST PROT `B' PHASE ZONE-II 220KV WAZIRABAD CKT-IV : DIST PROT `B' PHASE ZONE-III NO TRIPPINGS OCCURRED AT WAZIRABAD ON MANDOLA CKTS. ALL THREE CKTS CHARGED AT 11.38HRS.
37	16.05.12	11.09	220/66KV 100MVA PR. TR.-I & III AT WAZIRABAD	16.05.12	11.50	BOTH TXS TRIPPED ON E/F ALONG WITH 66KV I/C-I, II & III WHICH TRIPPEDO ON O/C, `B' PHASE, 86. BOTH TXS. CHARGED AT 11.50HRS.
38	16.05.12	11.29	220KV WAZIRABD – GEETA COLONY CKT-I	16.05.12	15.14	CKT. TRIPPED ON ACTIVE GROUP-I, DIST PROT `C' PHASE AT GEEA COLONY AND ON O/C, `B' PHASE AT WAZIRABAD. `B' PHASE LA DAMAGED A WAZIRABAD.
39	16.05.12	11.27	220KV GEETA COLONY –PATPARGANJ CKT-I & II	16.05.12	11.59	BOTH CKT. TRIPPED ON 186 AT PATPARGANJ. DETAILED REPORT IS GIVEN BELOW AT SR. NO.A

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
40	16.05.12	11.29	220KV PATPARGANJ – IP CKT.-II	16.05.12	11.54	CKT. TRIPPED ON DIRECTIONAL E/F, 186 AT IP. NO TRIPPING AT PATPAR GANJ. DUE TO TRIPING OF PRAGATI UNIT-II & STG, RPH UNITS ISLANDED FROM THE GRID AND TRIPPED.
41	16.05.12	11.29	220KV WAZIRABAD – KASHMIRI GATE CKT-I	16.05.12	11.29	CKT. TRIPPED ON DIST PROT `C' PHASE, 86ABC AT KASHMIRI GATE.
42	16.05.12	04.00	220/33KV 100MVA PR.TR.-I AT IP	16.05.12	04.47	TR. TRIPPED ON INSTANTENOUS E/F, LOCK OUT.
43	17.05.12	11.07	220KV BTPS – MEHRAULI CKT-II	17.05.12	13.45	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT MEHRAULI.
44	17.05.12	11.07	220KV MEHRAULI – DIAL CKT-I & II	17.05.12	11.18	BOTH CKTS TRIPPED ON O/C `R' PHASE AT DIAL. NO TRIPPING AT MEHRAULI.
45	17.05.12	23.32	220/33KV 100MVA PR. TR.I AT IP	17.05.12	23.58	TX. TRIPPED ON INSTANTENOUS E/F, REF TRIPPING RELAY ALONGWITH 33KV I/-I WHICH TRIPPED WITHOUT INDICATION.
46	18.05.12	21.32	220/33KV 100MVA PR. TR.-I AT IP	18.05.12	21.47	TR TRIPPED ON E/F LV SIDE.
47	20.05.12	16.29	220KV BAMNAULI – DIAL CKT-II	20.05.12	17.05	CKT. TRIPPED ON DIST PROT `C' PHASE, 186A&B AT BAMNAULI AND ON DIST PROT `B' PHASE ZONE-I AT DIAL
48	20.05.12	16.28	220KV BAWANA – KANJHAWALA CKT.	20.05.12	19.50	CKT. TRIPPED ON DIST PROT `AB' PHASE ZONE-I AT BAWANA AND ON DIST PROT `RYB' PHASE ZONE-I AT KANJHAWALA.
49	20.05.12	16.28	220KV BAWANA – NAJAFGARH CKT.	20.05.12	17.07	CKT. TRIPPED ON DIST PROT `YB' PHASE, ZONE-A AT BAWANA. NO TRIPPING AT NAJAFGARH.
50	20.05.12	20.19	220KV BTPS – MEHRAULI CKT-II	20.05.12	20.37	CKT. TRIPPED ON `A' PHASE E/F ZONE-I AT BTPS AND ON DIST PROT ABC' PHASE ZONE-I AT MEHRAULI.
51	21.05.12	00.46	220/66KV 100MVA PR TR.-I & II AT NARELA	21.05.12	01.16	TR.-I TRIPPED ON 86 AND TR.-II TRIPPED ON OVER-LOADING
52	21.05.12	12.34	400KV MUNDKA – JHAJJAR CKT-I	21.05.12	13.30	CKT. TRIPPED ON DIST PROT `A&B' PHASE ZONE-I, 86 AT MUNDKA AND ON `B' PHASE FUSE FAILURE AT JHAJJAR.
53	22.05.12	11.28	220KV PATPARGANJ – IP CKT-I	22.05.12	11.44	CKT. TRIPPED WITHOUT INDICATION AT PATPARGANJ.
54	24.05.12	15.23	400/220KV 315MVA ICT-IV AT MUNDKA	24.05.12	18.18	ICT TRIPPED ON HV/LV TEMP ALARM, BUCHLOZ.
55	25.05.12	01.53	400/220KV 315MVA ICT-IV AT BAWANA	25.05.12	12.40	ICT TRIPPED ON FACIA, TIE CB LOCK OUT, AUTO RECLOSE, 186A, GROUP-A, 86A&B, 86B-1, CTR, 86, GROUP- R, 30XYZ ALOG WITH ITS 220KV WHICH TRIPPED ON INTER TRIPPING.
56	25.05.12	12.10	66/33KV 30MVA PR. TR.-I AT PARK STREET	25.05.12	17.35	TR. TRIPPED ON BUCHLOZ, 86.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
57	25.05.12	23.02	220/33KV 100MVA PR. TR.-I AT IP	25.05.12	23.17	TR. TRIPPED ON 186 ALONG WITH 33KV I/C-I WHCH TRIPPED ON REF
58	26.05.12	08.33	220KV BTPS – MEHRAULI CKT-I & II	25.05.12	12.18	NO TRIPPING AT MEHRAULI. SUPPLY FAILED DUE TO TRIPPING OF ALL FIVE UNITS AT BTPS DUE TO FAULT IN 220KV BTPS– BALLABHGARH CKT-I & II
59	26.05.12	08.33	220KV BTPS – OKHLA CKT-I & II	25.05.12	11.30	NO TRIPPING AT OKHLA. SUPPLY FAILED DUE TO TRIPPING OF ALL FIVE UNITS AT BTPS DUE TO FAULT IN 220KV BTPS–BALLABHGARH CKT-I & II
60	26.05.12	08.33	220KV BTPS – SARITA VIHAR CKT-I & II	25.05.12	12.53	NO TRIPPING AT SARITA VIHAR. SUPPLY FAILED DUE TO TRIPPING OF ALL FIVE UNITS AT BTPS DUE TO FAULT IN 220KV BTPS– BALLABHGARH CKT-I & II. CKT-I & II CHARGED AT 11.46HRS. & 12.53HRS. RESPECTIVELY.
61	26.05.12	15.32	220KV MEHRAULI – DIAL CKT-I & II	25.05.12	15.38	THE FOLLOWING TRIPPINGS OCCURRED :- AT MEHRAULI 220KV DIAL CKT-I : NO TRIPPING 220KV DIAL CKT-II : DIST PROT `C' PHASE ZONE-I AT DIAL 220KV MEHRAULI CKT-I : RED COMMUNICATION FAIL 220KV MEHRAULI CKT-II: REL FUSE FAIL
62	27.05.12	16.27	220/33KV 100MVA PR. TR-I AT PATPARGANJ	27.05.12	17.30	TR. TRIPPED ON 86, O/C `B' PHASE ALONG WITH 33KV I/C-I, II & III. 33KV I/C-I, II & III CHARGED AT 17.31HRS, 20.42HRS AND 20.25HRS RESPECTIVELY.
63	27.05.12	16.37	400KV MUNDKA – JHAJJAR CKT-II	28.05.12	19.40	BOTH CB OF THE CKT. TRIPPED ON AUTO RECLOSE, 86O, 86A, 86B AT MUNDKA. CKT. TRIED TO CLOSE AT 17.00HRS BUT COULD NOT BE HOLD. CKT. FINALLY CHARGED AT 19.40HRS. ON 28.05.2012
64	27.05.12	18.23	400/220KV 315MVA ICT-IV AT MUNDKA	27.05.12	19.55	TX. TRIPPED ON 86B, OLTC BUCHLOZ, SUPERVISION, LV SIDE WINDING TEMP ALARM ALONG WITH ITS 220KV I/C WHICH TRIPPED ON INTER TRIPPING.
65	28.05.12	14.00	220/33KV 100MVA PR. TR.-I AT IP	28.05.12	19.23	TR. TRIPPED ON REFLV LOCK OUT, DIFFERENTIAL ALONG WITH 33KV I/C-I WHICH TRIPPED ON INTER TRIPPING.
66	30.05.12	09.20	400/220KV 315MVA ICT-IV AT MUNDKA	30.05.12	15.15	ICT TRIPPED ON 86A ALONG WITH ITS 220KV WHICH ALSO TRIPPED ON SAME INDICATION.
67	30.05.12	11.35	220/66KV 100MVA PR TR -II AT DSIDC BAWANA	30.05.12	11.50	TR. TRIPPED DUE TO LOW GAS PRESSURE, POLE DISCREPANCY
68	30.05.12	14.12	220/66KV 100MVA PR. TR-II AT ROHINI	30.05.12	14.57	TR. TRIPPED ON WINDING TEMP. ALARM, 30B, 86 ALONG WITH 66KV I/C-I & II WHICH TRIPPED WITHOUT INDICATION.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
69	31.05.12	00.46	400KV MANDOLA – BAWANA CKT-I	31.05.12	01.25	CB-1552 TRIPPED ON 195BC,295AC, 30F, 186A&B AND CB-1652 TRIPPED ON 30F, 186AB AT BAWANA. NO TRIPPING AT MANDOLA.
70	31.05.12	02.07	400KV MANDOLA – BAWANA CKT-I	31.05.12	02.26	CB-1552 TRIPPED ON 85LD, 295AC, SUPERVISION, 186A&B AND CB-1652 TRIPPEDON 195BC, 186A&B AT BAWANA END. NO TRIPPING AT MANDOLA.
71	31.05.12	13.44	220KV BTPS – OKHLA CKT-II	31.05.12	18.19	CKT. TRIPPED ON `B' PHASE E/F AT BTPS. NO TRIPPING AT OKHLA. CKT. TRIED TO CLOSE AT 13.51HRS. BUT AGAINS TRIPPED ON 86T.
72	31.05.12	14.43	400KV MUNDKA – JHAJJAR CKT-I	31.05.12	15.35	CKT. TRIPPED ON DIST PROT ZONE-I AT MUNDKA. CKT. ALSO TRIPPED AT JHAJJAR END BUT RELAY INDICATIONS ARE NOT AVAILABLE.
73	31.05.12	14.12	220KV BTPS – MEHRAULI CKT-II	31.05.12	22.45	CKT. TRIPPED ON DIST PROT `ABC' ZONE-I, 186 AT MEHRAULI AND ON `R' PH E/F AT BTPS. CKT. TRIED TO CLOSE AT 14.29HRS. BUT AGAIN TRIPPED ON SAME INDICATIONS. FIRE REPORTED BROKEN OUT UNDER TOWER OF THE CKT. NEAR SANGAM VIHAR AREA.
74	31.05.12	14.12	220KV MEHRAULI – DIAL CKT-II	31.05.12	14.35	CKT. TRIPPED ON REC GETR `B' PHASE TRIP AT DIAL. NO TRIPPING AT MEHRAULI.
75	31.05.12	15.40	220/66KV 160MVA PR. TR. AT MUNDKA	02.06.12	21.20	TR. TRIPPED ON PRV, 86B ALONG WITH 66KV I/C WHICH TRIPPED ON 86.

19.3 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH JUNE – 2012

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.06.12	06.24	400KV MANDOLA – BAWANA CKT-I	01.06.12	15.51	CB-1552 OF THE CKT. TRIPPED ON POLE DISCREPANY AT BAWANA.
02	01.06.12	16.31	220KV MANDOLA – GOPALPUR CKT-I	02.06.12	02.11	CKT. TRIPPED ON DIST PROT `R' PHASE, 186B, 86R, 86T AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR.
03	01.06.12	20.38	220KV BAMNAULI – PAPPANKALAN-II CKT-II	01.06.12	21.00	CKT. TRIPPED ON DIST PROT `A' PHASE, 186A&B AT BAMNAULI. NO TRIPPING AT PAPPANKALAN-II
04	01.06.12	22.57	220/66KV 100MVA PR. TR-III AT ROHINI	01.06.12	23.57	TR. TRIPPED ON CB AUTO TRIP, 86A-B GROUP, OIL TEMP. TRIP ALONG WITH 66KV I/C-III WHICH TRIPPED ON AUTO TRIP. 66 I/C-I, II & IV ASLO TRIPPED ON 86, 51C. 66KV I/C-I, II, III & IV CHARGED AT 23.07HRS, 23.08HRS, 23.50HRS. AND 23.12HRS RESPECTIVELY.
05	02.06.12	01.22	220/66KV 100MVA PR. TR.-I AT GAZIPUR	02.06.12	14.38	TR. TRIPPED ON TRIP CKT FAULTY ALONG WITH 66KV I/C-I & II. 66KV I/C-I TRIPPED WITHOUT INDICATION AND 66KV I/C-II TRIPPED ON 86, O/C. `B' PHASE CT OF 66KV I/C-I BLASTED AND CAUGHT FIRE. 66KV I/C-II CHARGED AT 02.25HRS. AND I/C-I COULD BE CHARGED AT 14.38HRS.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
06	02.06.12	18.32	220KV PANIPAT – NARELA CKT-III	02.06.12	19.04	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT NARELA. RELAY INDICATIONS AT PANIPAT END ARE NOT AVAILABLE
07	02.06.12	19.34	400KV MANDOLA – BAWANA CKT-I	02.06.12	23.10	CB-1552 TRIPPED ON CARRIER LOCK OUT, 85LO, 186AB, 295AC AND CB-1652 TRIPPED ON 186A&B AT BAWANA. NO TRIPPING AT MANDOLA.
08	02.06.12	20.51	220KV BTPS – MEHRAULI CKT-I	02.06.12	21.40	CKT. TRIPPED ON 186, 86X1, Y2, 30AB AT BTPS AND ON 186, 186, ACTIVE GROUP, DIST PROT `ABC' PHASE ZONE-I AT MEHRAULI.
09	02.06.12	20.54	220KV MANDOLA – GOPALPUR CKT-II	02.06.12	21.08	CKT. TRIPPED ON DIST PROT `RYB' PHASE AT MANDOLA AND ON DIST PROT `B' PHASE ZONE-I AT GOPALPUR.
10	02.06.12	22.45	400KV BAWANA – MUNDKA CKT-II	02.06.12	23.52	CB-452 TRIPPED ON AN ZONE-I, AIDED TRIP, 85LO, 186 AND CB-453 TRIPPED MANNULAY AT BAWANA DUE TO UNBALANCING OF LOAD REPORTED AT MUNDKA ON BAWANA CKT-II.
11	02.06.12	22.38	220KV BTPS – MEHRAULI CKT-I	03.06.12	09.31	CKT. TRIPPED ON 30AB, E/F AT BTPS AND ON DIST PROT `ABC' PHASE AT MEHRAULI. CKT. BACK CHARGED AT 23.59HRS. AND HELD OK. BUT BTPS DID NOT CLOSE THE CKT. AT BTPS. BTPS COULD CLOSE THE CKT. AT 09.31HRS. ON 03.06.2012.
12	02.06.12	23.05	220KV NAJAFGARH – KANJHAWALA CKT.	02.06.12	23.05	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT NAJAFGARH. 220KV BUS COUPLER TRIPPED ON 50/51R, 50/51N, 86 AT KANJHAWALA.
13	03.06.12	23.25	220KV BTPS – NOIDA – GAZIPUR CKT.	03.06.12	23.45	CKT. TRIPPEDO N `R' PHASE E/F AT BTPS. NO TRIPPING AT GAZIPUR.
14	03.06.12	03.24	220KV BTPS – OKHLA CKT-I	03.06.12	03.58	CKT. TRIPPED ON 30C, `B' PHASE E/F AT BTPS. NO TRIPPING AT OKHLA.
15	03.06.12	09.48	220KV NARELA – ROHTAK ROAD CKT-II	03.06.12	10.45	CKT. TRIPPED WITHOUT INDICATION AT NARELA. NO TRIPPING AT ROHTAK ROAD.
16	03.06.12	21.10	220KV BTPS – MEHRAULI CKT-I	04.06.12	20.49	CKT. TRIPPED ON `R' PHASE E/F , 30AB AT BTPS AND ON DIST PROT `RYB' PHASE AT MEHRAULI.
17	04.06.12	18.58	220KV MANDOLA – GOPALPUR CKT-I	04.06.12	19.39	CKT. TRIPPED ON DIST PROT `R&Y' PHASE ZONE-I AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR.
18	05.06.12	15.22	220KV MANDOLA – GOPALPUR CKT-II	05.06.12	17.07	CKT. TRIPPED ON DIST PROT `RYB' PHASE, ZONE-II AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR.
19	05.06.12	15.25	220KV MAHARANI BAGH – SARITA VIHAR CKT.	05.06.12	15.38	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-II AT MAHARANI BAGH AND ON 195CA, 195CB, 186X, 186A&B AT SARITA VIHAR.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
20	05.06.12	18.18	220KV MANDOLA – WAZIRABAD CKT-I	05.06.12	18.54	CKT. TRIPPED ON DIST PROT `RY' PHASE ZONE-I, 186A&B, 86A&B AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD.
21	06.06.12	18.21	220KV BTPS – MEHRAULI CKT-I	06.05.12	23.09	CKT. TRIPPED ON ACTIVE GROUP-I, DIST PROT `ABC' PHASE ZONE-I AT MEHRAULI. CKT. CLOSED AT 19.02HRS. BUT AGAIN TRIPPED AT 19.07HRS. ON `R' PHASE E/F AT BTPS AND ON DIST PROT `ABC' PHASE ZONE-II AT MEHRAULI. JUMPER FOUND SNAPPED NEAR BTPS END. CKT. FINALLY CHARGED AT 23.09HRS.
22	06.06.12	19.26	220KV PANIPAT – NARELA CKT-III	06.06.12	20.15	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT NARELA. RELAY INDICATIONS AT PANIPAT END ARE NOT AVAILABLE.
23	07.06.12	17.36	220KV BAWANA – SHALIMAR BAGH CKT-II	08.06.12	06.25	CKT. TRIPPED ON DIST PROT 186A&B AT BAWANA. NO TRIPPING AT SHALIMAR BAGH
24	07.06.12	17.26	220KV NARELA – DSIDC CKT-I	07.06.12	17.40	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT NARELA. NO TRIPPING AT DSIDC.
25	07.06.12	18.10	220KV NAELA – ROHTAK ROAD CKT-I	07.06.12	18.11	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT NARELA. NO TRIPPING AT ROHTAK ROAD.
26	09.06.12	10.50	33/11KV 16MVA PR. TR.-I AT SUBZI MANDI	10.06.12	00.37	TR. TRIPPED ON 87RYB, 86.
27	10.06.12	06.48	220KV BAMNAULI – PAPPANKALAN-I CKT-II	10.06.12	07.08	CKT. TRIPPED ON DIST PROT `C' PHASE, 186A&B AT BAMNAULI. NO TRIPPING AT PAPPANKALAN-I.
28	12.06.12	07.05	220/33KV 100MVA PR. TR-I AT IP	12.06.12	07.17	TR. TRIPPED ON O/C `B' PHASE.
29	12.06.12	22.55	33/11KV 20MVA PR. TR.-I AT SHALIMAR BAGH	13.06.12	23.14	TR. TRIPPED ON 74C WINDING TEMP AND 30C.
30	12.06.12	23.44	33/11KV 20MVA PR. TR.-I AT SHALIMAR BAGH	13.06.12	23.52	TR. TRIPPED ON 74C WINDING TEMP AND 30C.
31	13.06.12	07.05	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-II	13.06.12	16.25	TR. TRIPPED ON DIFFERENTIAL PROTECTION B' PHASE, LBB PROTECTION.
32	15.06.12	08.43	220KV BTPS – NOIDA – GAZIPUR CKT.	15.06.12	09.30	CKT. TRIPPED ON BN, BC, CN ZONE-II, 186A&B AT BTPS. NO TRIPPING AT GAZIPUR.
33	15.06.12	09.45	220/66KV 100MVA PR TR.-I AT GAZIPUR	15.06.12	10.00	TR. TRIPPED ON DIFFERENTIAL THREE PHASE ALONG WITH 66KV I/C-I.
34	16.06.12	02.24	220/66KV 100MVA PR TR. -II AT DSIDC BAWANA	16.06.12	13.01	TR. TRIPPED ON REF DIFFERENTIAL, 86 ALONG WITH 66KV I/C-II WHICH TRIPPED ON INTER TRIPPING. `R' PHASE LA DAMAGED.
35	17.06.12	14.00	400/220KV 315MVA ICT-III AT BAMNAULI	17.06.12	15.18	ICT TRIPPED ON BUCHLOZ.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
36	17.06.12	14.35	220/33KV 100MVA PR. TR.-II AT LODHI ROAD	17.06.12	21.10	TR. TRIPPED ON O/C, 86B, 87AX.
37	17.06.12	14.50	220KV BTPS – NOIDA – GAZIPUR CKT.	18.06.12	11.50	CKT. TRIPPED ON `C' PHASE E/F AT BTPS. NO TRIPPING AT GAZIPUR. CONDUCTOR SNAPPED NEAR KALINDI KUNJ.
38	18.06.12	07.59	220KV PANIPAT – NARELA CKT-II	18.06.12	09.01	CKT. TRIPPED ON DIST PROT `RYB' PHASE ZONE-I AT NARELA. RELAY INDICATIONS AT PANIPAT END NOT AVAILABLE.
39	18.06.12	18.55	220KV BTPS – NOIDA – GAZIPUR CKT.	19.06.12	18.05	CKT. TRIPPED ON `B' PHASE E/F AT BTPS. NO TRIPPING AT GAZIPUR.
40	19.06.12	01.00	220/33KV 100MVA PR. TR.-I AT NARAINA	19.06.12	14.03	TR. TRIPPED ON 51N (E/F), 86B.
41	19.06.12	07.35	220KV PRAGATI – SARITA VIHAR CKT.	19.06.12	08.02	CKT. TRIPPED ON DIST PROT `C' PHASE, ZONE-I, AUTO RECLOSE LOCK OUT AT SARITA VIHAR AND ON DIST PROT `C' PHASE ZONE-I AT PRAGATI.
42	19.06.12	23.36	33/11KV 20MVA PR. TR. AT SHALIAR BAGH	19.06.12	23.53	TR. TRIPPED ON HIGH WINDING TEMP. ALARM.
43	20.06.12	15.20	220KV BTPS – NOIDA – GAZIPUR CKT.	20.06.12	16.02	CKT. TRIPPED ON DIST PROT `AB' PHASE ZONE-I AT GAZIPUR.
44	20.06.12	19.28	220/66KV 160MVA PR. TR AT MUNDKA	20.06.12	20.30	TR.T RIPPED ON SF6 GAS PRESSURE LOW.
45	20.06.12	21.06	66/11KV 20MVA PR. TR.-I AT OKHLA	20.06.12	21.35	TR. TRIPPED ON O/C `B' PHASE.
46	21.06.12	07.55	220KV BTPS – NOIDA – GAZIPUR CKT.	21.06.12	19.58	CKT. TRIPPED ON CA, CN, 186A&B, 86C AT BTPS. NO TRIPPING AT GAZIPUR. JUMPER FOUND BROKEN AT TOWER NO.7 NEAR BTPS.
47	22.06.12	13.30	220/33KV 100MVA PR. TR.-III & IV AT OKHLA	22.06.12	17.58	100MVA PR. TR.-III TRIPPED O/C AND 100MVA PR. TR.-IV TRIPPED ON 86. 33KV I/C-I, III & IV ALSO TRIPPED ALONGWITH TRANSFOREMRS. 33KV I/C-I TRIPPED ON E/F, 95, 86, 33KV I/C-III TRIPPED ON 86, 81C, 51A AND 33KV I/-IV TRIPPED ON E/F
48	22.06.12	14.03	220KV MANDOLA – GOPALPUR CKT-I	22.06.12	14.16	CKT. TRIPPED ON DIST PROT `R' PHASE AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I, GENERAL TRIPPED AT GOPALPUR.
49	24.06.12	20.19	220KV NAJAFGARH – KANJHAWALA CKT.	25.06.12	14.45	CKT. TRIPPED ON E/F AT KANJHAWALA AND ON DIST PROT `ABC' PHASE, 186 AT NAJAFGARH. CKT. TRIED TO CLOSE AT 23.55HRS. BUT DID NOT HOLD. JUMPER FOUND SNAPPED AT TOWER NO. 175 NEAR MUNDK RAILWAY CROSSING. CKT. FINALLY CHARGED AT 14.45HRS ON 25.06.2012
50	24.06.12	18.00	220KV MANDOLA – GOPALPUR CKT-I	26.06.12	18.16	CKT. TRIPPED ON DIST PROT `R' PHASE AT MANDOLA. NO TRIPPING AT GOPALPUR.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
51	30.06.12	11.01	220KV LODHI ROAD – MAHARANI BAGH CKT-II	01.07.12	01.04	CKT. TRIPPED ON L-2 L-3 FAULT LOOP AT MAHARANI AND ON DIST PROT 21QRC, 86A&B AT LODHI ROAD.
52	30.06.12	16.02	220KV LODHI ROAD – MAHARANI BAGH CKT-I	30.06.12	17.46	CKT. TRIPPED ON FAULT LOOP L1-L2 AT MAHARANI BAGH. NO TRIPPING AT LODHI ROAD.
53	30.06.12	17.22	400KV MANDOLA – BAWANA CKT-II	30.06.12	19.50	CKT. TRIPPED ON AUTO RECLOSE, CB DISCREPANCY AT BAWANA.

19.4 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH JULY -2012

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.07.12	15.27	400KV BAWANA – DIPALPUR CKT.	01.07.12	18.52	CB-1352 OF THE CKT. TRIPPED ON CB AUTO TRIP AND CB-1452 ON TC-1 FAULTY. RELAY 86A&B, TIMER 2/AA AT BAWANA.
02	01.07.12	18.47	220/66KV 160MVA PR. TR-II AT RIDGE VALLEY	01.07.12	22.52	TR. TRIPPED OF RET 670, GENERAL TRIP, 86A&B ALONG WITH 66KV I/C WHICH TRIPPED ON 86B.
03	02.07.12	06.39	400KV MANDOLA - BAWANA CKT.-I	02.07.12	16.29	CB-152 OF THE CKT. TRIPPED ON POLE DISCREPANCY, 186A&B. CB-152 TRIED TO CLOSE AT 07.02HRS. BUT AGAIN TRIPPED ON SAME INDICATION. CB-252 ALSO TRIPPED ON 186.
04	03.07.12	17.50	66/11KV 20MVA PR. TR.-I AT MEHRAULI	03.07.12	19.15	TR. TRIPPED ON 86.
05	04.07.12	12.43	220/66KV 100MVA PR. TR-IV AT NAJAFGARH	04.07.12	13.00	TR. TRIPPED ON E/F.
06	04.07.12	12.43	220KV BAMNAULI – NAJAFGARH CKT-II	04.07.12	19.15	CKT. TRIPPED ON 186 AT NAJAFGARH AND ON E/F, 186, DIST PROT, 21Q AT BAMNAULI.
07	04.07.12	12.43	220KV BAWANA – NAJAFGARH CKT.	04.07.12	20.25	CKT. TRIPPED ON 186 AT NAJAFGARH. CKT. TRIPPED ON E/F, 186, DIST PROT AT BAMNAULI.
08	04.07.12	12.43	220KV KANJHAWALA – NAJAFGARH CKT.	04.07.12	12.52	CKT. TRIPPED ON 186 AT NAJAFGARH.
09	04.07.12	15.10	220/66KV 100MVA PR. TR.-II AT GAZIPUR	04.07.12	15.25	TR. TRIPPED WITHOUT INDICATION.
10	04.07.12	16.50	220/66KV 160MVA PR. TR.-III AT MUNDKA	04.07.12	17.06	TR. TRIPPED ON BUS BAR PROTECTION, 186A&B ALONG WITH 66KV I/C-III WHICH TRIPPED ON INTER TRIPPING. 220KV I/C-IV OF 315MVA PR. TR.-IV ALSO TRIPPED ON BUS BAR PROTECTION, 186A&B
11	05.07.12	14.57	400/220KV 315MVA PR. TR.-III AT BAWANA	06.07.12	04.01	TR. TRIPPED ON 86B-I, GROUP-I, 99A/ OVER FLUX, 95A, SUPERVISION, 199A/ OVERFLUX,

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
12	05.07.12	18.09	400/220KV 315MVA PR. TR.-II AT BAWANA	06.07.12	19.47	CB-952 OF TR.TRIPPED ON 86 ALONG WITH 220KV I/C-II WHICH TRIPPED ON AUTO TRIP.
13	06.07.12	04.20	400/220KV 315MVA ICT-III AT BAWANA	06.07.12	13.25	ICT TRIPPED ON 95A, 652, 186A&B, 86A, GROUP31.
14	06.07.12	07.28	400KV BAWANA – MUNDKA CKT.-I	06.07.12	12.12	CB-42052 OF 400KV BAWANA – MUNDKA CKT-I TRIPPED ON POLE DISCREPANCY AT MUNDKA.
15	06.07.12	10.44	220/33KV 50MVA PR. TR. AT PATPARGANJ	06.07.12	11.10	TR. TRIPPED OF E/F (REF) & 86.
16	06.07.12	17.35	400KV BAWANA – ABDULLAPUR CKT.	06.07.12	18.08	CB-1152 OF THE CKT. TRIPPED ON 186, 52X AND CB-1252 TRIPPED ON AC SUPPLY FAIL, 186, TIMER, 2/AA AT BAWANA. NO TRIPPING AT ABDULLAPUR.
17	06.07.12	18.02	220KV SARITA VIHAR – PRAGATI CKT.	06.07.12	19.55	CKT. TRIPPED ON DIST PROT `B' ZONE-I AT SARITA VIHAR AND ON DIST PROT ZONE-I AT PRAGATI.
18	06.07.12	18.01	220/66KV 100MVA PR. TR.-III AT ROHINI	06.07.12	19.45	TR. TRIPPED ON 30E, 86B,
19	06.07.12	18.00	400/220KV 315MVA ICT-V AT BAWANA	07.07.12	17.02	ICT TRIPPED ON 86A, 86B, BUCHLOZ,
20	06.07.12	18.11	400/220KV 315MVA ICT-II AT BAMNAULI	06.07.12	23.05	ICT TRIPPED ON TRIP GROUP-I, 86A-I, TRIP GROUP-II, 86-I, 30L,OLTC BUCHLOZ B' PHASE.
21	06.07.12	18.13	220KV MEHRAULI – VASANT KUNJ CKT-I	06.07.12	18.45	CKT. TRIPPED ON DIST PROT `B' PHASE, 186B AT MEHRAULI. NO TRIPPING AT VASANT KUNJ.
22	06.07.12	18.50	220KV MEHRAULI – VASANT KUNJ CKT-II	06.07.12	18.50	CKT. TRIPPED ON DIST PROT `A' PHASE ZONE-II, 186A&B, 86B AT MEHRAULI. NO TRIPPING AT VASANT KUNJ.
23	06.07.12	18.18	220/33KV 100MVA PR. TR.-III AT IP	07.07.12	15.25	TR. TRIPPED ON E/F. 33KV I/C-II ALSO TRIPPED ON E/F ALONG WITH TR.
24	06.07.12	18.46	220KV MAHRANI BAGH – SARITA VIHAR CKT.	06.07.12	22.52	CKT. TRIPPED ON L2E, 13.31KA AT MAHARANI BAGH AND ON POLE DISCREPANCY AT SARITA VIHAR.
25	06.07.12	17.55	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-II	06.07.12	19.32	TR. TRIPPED ON PRV, SRV, 86
26	06.07.12	18.33	220KV GEETA COLONY – PATPARGANJ CKT-II	06.07.12	19.00	CKT. TRIPPED ON DIST PROT `A' PHASE, E/F, O/C, 27RYB AT GEETA COLONY AND ON 86, 86, E/F AT PATPARGANJ.
27	06.07.12	18.33	220KV PATPARGANJ – IP CKT.-II	06.07.12	19.00	CKT. TRIPPED ON DIRECTIONAL E/F AT IP AND ON E/F AT PATPARGANJ.
28	06.07.12	18.33	220KV IP – PRAGATI CKT-II	06.07.12	18.40	CKT. TRIPPED ON 67NX, 86 AT PRAGATI. NO TRIPPING AT IP.
29	07.07.12	04.56	66/11KV 20MVA PR. TR.-II AT MEHRAULI	07.07.12	13.40	TR. TRIPPED ON WINDING FUSE TRIP, INSTANTENEOUS E/F ALONG WITH 11KV I/C-II WHICH TRIPPED WITHOUT INDICATION.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
30	07.07.12	05.55	220/33KV 50MVA PR. TR. AT PATPARGANJ	07.07.12	10.55	TR. TRIPPED ON 86
31	07.07.12	15.39	400/220KV 315MVA ICT-III AT BAWANA (CB-752)	09.07.12	17.10	CB-752 OF THE ICT TRIPPED ON CB AUTO TRIP, 295AB, 195CA, CB. ICT REMAINED CHARGED THROUGH CB-652
32	08.07.12	10.05	33/11KV 16MVA PR. TR. AT PATPARGANJ	08.07.12	11.45	TR. TRIPPED ON DIFFERENTIAL ALONG WITH ITS 11KV I/C WHICH TRIPPED ON INTER TRIPPING.
33	08.07.12	11.15	220KV IP – RPH CKT-I	08.07.12	16.23	CKT. TRIPPED ON 186A&B AT RPH.
34	08.07.12	11.57	220KV WAZIRABAD - GOPALPUR CKT-I	08.07.12	19.50	CKT. TRIPPED ON E/F AT WAZIRABAD. TOP PHASE JUMPER SNAPPED ON TOWER NO. 331
35	09.07.12	10.47	400KV BAWANA – BAHADURGARH CKT.	09.07.12	17.20	CB-552 OF THE CKT. TRIPPED WITHOUT INDICATION.
36	09.07.12	15.17	220/33KV 100MVA PR. TR.-III AT IP	09.07.12	15.50	TR. TRIPPED ON O/C, E/F, AC SUPERVISION RELAY ALONG WITH ITS 33KV I/C-III
37	09.07.12	17.05	220/66KV 100MVA PR. TR.-I AT GAZIPUR	09.07.12	17.28	TR. TRIPPED WITHOUT INDICATION.
38	09.07.12	17.20	220/66KV 100MVA PR. TR.-II AT GAZIPUR	09.07.12	17.28	TR. TRIPPED WITHOUT INDICATION
39	10.07.12	15.20	220/66KV 100MVA PR. TR.-II & III AT DSIDC	10.07.12	15.59	TR-II & III TRIPPED ON 86 ALONG WITH 66KV I/C-II & III. 66KV I/C-II TRIPPED ON 86, E/F, O/C AND 66KV I/C-III TRIPPED ON 86. 100MVA PR.TR-I & II CHARGED AT 15.35HRS.
40	10.07.12	17.03	220KV MANDOLA – GOPALPUR CKT-I	10.07.12	17.11	CKT. TRIPPED ON `R' PHASE O/C AT MANDOLA. NO TRIPPING AT GOPALPUR.
41	11.07.12	09.41	400KV MUNDKA – JHAJJAR CKT-II	11.07.12	09.59	CB-41352 OF THE CKT. TRIPPED ON POLE DISCREPANCY AT MUNDKA.
42	11.07.12	19.22	400/220KV 315MVA ICT AT MUNDKA	11.07.12	19.53	TR. TRIPPED ON 86A&B
43	12.07.12	10.39	220KV PANIPAT – NARELA CKT-III	12.07.12	11.25	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I, 30B
44	13.07.12	04.40	220KV BAMNAULI – NARAINA CKT-I	13.07.12	05.11	CKT. TRIPPED ON DIST PROT `A' PHASE, 186A&B AT BAMNAULI. NO TRIPPING AT NARAINA.
45	13.07.12	12.40	220KV WAZIRABAD – GEETA COLONY CKT-I & II	13.07.12	19.05	THE FOLLOWING TRIPPINGS OCCURRED :- AT WAZIRABAD :- GEETA COLONY CKT-I : DIST PROT `ABC' PHASE ZONE-I GEETA COLONY CKT-II : NO TRIPPING AT GEETA COLONY WAZIRABAD CKT-I : NO TRIPPING WAZIRABAD CKT-II : MAIN-I ACTIVE GROUP-I, DIST PROT `ABC' PHASE ZONE-I, O/C, MAIN-II DIST PROT `AB' PHASE ZONE-I. R' PHASE JUMPER AT TOWR NO. 355 SNAPPED. CKT-I CHARGED AT 12.52HRS AND CKT-II CHARGED AT 19.05HRS.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
46	13.07.12	12.48	220/66KV 100MVA PR. TR.-II AT PAPPANKALAN-II	13.07.12	13.12	TR. TRIPPED ON LBB PROTECTION ALONG WITH 66KV I/C-II WHICH TRIPPED ON LBB MASTER TRIP, IDMT O/C, 86
47	13.07.12	23.28	66/11KV 20MVA PR. TR.-II AT DSIDC	14.07.12	05.05	TR. TRIPPED ON 30D, SUDDEN PRESSURE RELAY ALONG WITH 11KV I/C-II.
48	15.07.12	14.12	220KV PRAGATI – SARITA VIHAR CKT.	13.07.12	16.45	CKT. TRIPPED ON DIST PROT `A' PHASE AT PRAGATI AND ON 186A&B, DIST PROT ZONE-I AT SARITA VIHAR.
49	15.07.12	20.25	220KV MANDOLA – GOPALPUR CKT-I	15.07.12	20.42	CKT. TRIPPED ON DIST PROT `R' PHASE ZONE-I AT MANDOLA END ONLY.
50	18.07.12	08.59	220KV PRAGATI – SARITA VIHAR CKT.	18.07.12	09.26	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-I AT SARITA VIHAR AND ON ACTIVE GROUP-I, DIST PROT `C' PHASE ZONE-I AT PRAGATI.
51	18.07.12	10.00	400KV MANDOLA – BAWANA CKT-I & II	18.07.12	14.02	THE FOLLOWING TRIPPINGS OCCURRED :- AT MANDOLA 400KV BAWANA CKT-I : DIST PROT `RY' PHASE ZONE-II 400KV BAWANA CKT-II : DIST PROT `B' PHASE ZONE-II AT BAWANA 400KV MANDOLA CKT-I : (CB-1552 & 1652) : CB-I LBB PROTECTION, CB-II FAULTY, DC-II FAIL, CB-I FAIL, CB-I AUTO TRIP, CB-II AUTO TRIP, 130 BREAKER ALARM, 186A&B BOTH CB, 285A-IC. LBB PROTECTION OPERATED ON 400KV BUS-I DUE TO WHICH CB-152 (MANDOLA CKT-I), CB-352 (MANDOLA CKT-II), CB-852 (HISSAR CKT), CB-552 (BAHADURGARH CKT), CB-452 (ABDULLAPUR CKT) AND CB-352(DIPALPUR CKT) ALSO TRIPPED. `R' PHASE CT OF CB-1552 CONTROLLING 400KV MANDOLA – BAWANA CKT-I BLASTED. `B' PHASE CT OF CB-1752 CONTROLLING 400KV MANDOLA – BAWANA CKT-II OBSERVED FAULTY. 315MVA ICT-III CHARGED AT 10.32HRS AND ICT-IV CHARGED AT 14.03HRS. 400KV MANDOLA – BAWANA CKT-II CHARGED AT 10.41HRS. 400KV BUS-I CHARGED AT 14.02HRS, CB-1652 CHARGED AT 14.50HRS, CB-1352 CHARGED AT 15.05HRS.
52	18.07.12	10.00	400KV MUNDKA – BAWANA CKT-I & II	18.07.12	11.27	THE FOLLOWING TRIPPINGS OCCURRED :- AT MUNDKA BAWANA CKT-I – CB-41952 : INTER TRIPPING CHANNEL-I & II CB-42052 : P OLE DISCREPANCY BAWANA CKT-II : CB-41752 : INTER TRIPPING CHANNEL-I & II, 186LO CB-41852 : 286LO CB-41952 AND 41852 CHARGED AT 10.30HRS. AND 41752 CHARGED AT 11.27HRS.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
53	18.07.12	11.42	220KV MANDOLA – WAZIRABAD CKT-II	18.07.12	10.07	CKT. TRIPPED ON DIST PROT AT WAZIRABAD. NO TRIPPING AT MANDOLA
54	18.07.12	22.55	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-I	18.07.12	22.58	TR. TRIPPED ON 86 ALONG WITH ITS 66KV I/C WHICH TRIPPED ON O/C
55	19.07.12	00.10	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-I	19.07.12	00.12	TR. TRIPPED ON 86
56	19.07.12	15.30	33/11KV 20MVA PR. TR. AT SHALIMAR BAGH	19.07.12	19.15	TR. TRIPPED ON DIFFERENTIAL ALONG WITH ITS 11KV I/C
57	20.07.12	18.27	220KV GEETA COLONY – PATPARGANJ CKT-I	20.07.12	19.26	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT PATPARGANJ AND ON DIST PROT `AB' PHASE, 27RYB, 186 AT GEETA COLONY
58	23.07.12	07.48	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-II	23.07.12	10.55	TR. TRIPPED ON 86, 87, LBB PROTECTION.
59	23.07.12	09.25	220KV BAWANA – SHALIMAR BAGH CKT-II	23.07.12	09.48	CKT. TRIPPED ON DIST PROT `C' PHASE, 186A&B AT SHALIMAR BAGH AND ON DIST PROT `C' PHASE 186
60	23.07.12	19.57	400KV BAWANA – BAHADUR GARH CKT			CB-552 TRIPPED ON 30CH-2, 186A&B CKT. TRIED TO CLOSE AT 20.27 BUT COULD NOT HELD AND TRIPPED ON POLE DISCREPANCY. CB-552 IS STILL OUT. CKT. IS CHARGED THROUGH CB-652.
61	24.07.12	06.25	220/33KV 100MVA PR. TR.-III AT IP	06.09.13	19.10	TR. TRIPPED ON BUCHLOZ, 86, SUPERVISION RELAY. JUMPER OF WEST BUS BROKEN
62	24.07.12	06.30	220/33KV 100MVA PR. TR.-II AT IP	24.07.12	06.40	TR. TRIPPED ON 51N
63	24.07.12	14.53	400KV MUNDKA – JHAJJAR CKT-I	24.07.12	19.14	CKT. TRIPPED ON 86B, CH-2 (BOTH CB) AT MUNDKA. CKT. TRIED AT 16.10HRS. BUT COULD NOT HOLD AND TRIPPED SAME INDICATION.
64	24.07.12	15.37	220KV BAMNAULI – PAPPANKALAN-II CKT-I	24.07.12	15.44	CKT. TRIPPED ON DIRECTIONAL O/C, 67C, 186A&B AT BAMNAULI. NO TRIPPING AT P APPANKALAN-II
65	24.07.12	16.44	220/66KV 100MVA PR.TR-II AT PARK STREET	03.08.12	14.48	TR. TRIPPED ON BUCHLOZE, DIFFERENTIAL, E/F. LV SIDE `R&Y' PHASE BUSHING DAMAGED.
66	24.07.12	19.29	220KV MAHARANI BAGH – SARITA VIHAR CKT.	24.08.12	20.13	CKT. TRIPPED ON DIST PROT AT SARITA VIHAR AND ON PHASE TO PHASE FAULT L1-L2 AT MAHARANI BAGH.
67	25.07.12	10.05	220KV BAMNAULI – NARAINA CKT-I & II	25.07.12	10.14	THE FOLLOWING TRIPPINGS OCCURRED : AT BAMNAULI : NARAINA CKT-I: 86BU, 3 PHASE, A/R, 86A&B NARAINA CKT-II : 86BU, 3 PHASE, A/R, 86A&B AT NARAINA : NO TRIPPING CKT-I & II CHARGED AT 10.14HRS. AND 10.13HRS. RESPECTIVELY

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

Subject : Report on trippings occurred in Delhi System at 02:33hrs. on 30.07.12

At 02:33Hrs. there was a jerk observed in the system resulting supply failure at all 400kV S/stns. **Initially BTPS system survived with radial load of Okhla and Gazipur but collapsed at 02.33hrs.**

The details of trippings occurred and operation carried out at various S/stns of Delhi are as under:

(1) 400kV 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-II	SUPPLY FAILED	2:33	08:04	
2	400kV BALLABHGARH CKT-I	SUPPLY FAILED	2:33	08:04	
3	400kV MUNDKA CKT- I	SUPPLY FAILED	2:33	08:17	
4	400kV MUNDKA CKT- II	SUPPLY FAILED	2:33	8:18	
5	400/220kV 315MVA ICT-II,III&IV	SUPPLY FAILED	2:33		
6	400 kV BALLABHGARH CKT-I & II	SUPPLY FAILED	2:33	8:04	
7	220kV NAJAFGARH CKT-I&II	UNDER FREQUENCY OPERATION	2:33	9:02	87MW
8	220kV PPK-II CKT-I&II	SUPPLY FAILED	2:33	08:06	
9	220kV PPK-I CKT-I&II	SUPPLY FAILED	2:33	08:06	
10	220kV NARAINA CKT-I & II	UNDER FREQUENCY OPERATION	2:33	8:52	174MW
11	220kV DIAL CKT-I	SUPPLY FAILED	2:33		
12	220kV DIAL CKT- II	SUPPLY FAILED	2:33	8:21	

(2) 400kV Mundka 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 Jhajjar-I				
	CB-414-52	DT receive CH.1&2, 86A&B,	3:05	8:26	
	Tie CB-415-52	Due to tripping of CB-414-52.	3:05	8:15	
2	400 KV Jhajjar-II				
	CB-411-52	DT receive CH.1, 86A	3:07	7:48	
	Tie CB-412-52	Due to tripping of CB-412-52	3:07	8:24	
	CB-411-52	MADE OFF.	6:51	8:24	
3	400 KV Bamnauli-I				
	CB-401-52	MADE OFF.	6:43	8:22	
	CB-402-52	MADE OFF.	6:43	7:59	
4	400 KV Bamnauli-II				
	CB-403-52	MADE OFF.	6:44	8:09	
	CB-404-52	MADE OFF.	6:44	8:10	
5	400KV Bawana-I				
	CB-419-52	MADE OFF.	6:48	7:23	
	CB-420-52	MADE OFF.	6:48	7:24	
6	400 KV Bawana -II				
	CB-417-52	MADE OFF.	7:08	10:10	
	CB-418-52	MADE OFF.	6:47	7:42	
	400/220kV ICTs				
	400/220kV 315 MVA ICT-IV	MADE OFF			
	CB-416-52		6:46	7:39	
8	66kV NANGLOI W/W	MADE OFF.	7:29	9:04	**Water works supply restored**
9	66kV DMRC CKT	MADE OFF.	7:29	7:51	
10	66kV MANGOLPURI	MADE OFF.	7:29	9:23	
11	66KV GHEVRA CKT	MADE OFF.	7:29	12:06	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	7:51	79	0.419
7:51	9:23	78	0.120

(3) 400kV 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 Mundka Ckt-1	Tripped off:Both CB,Facia:-CB1 Trouble alarm, CB2 Trouble alarm,CB2 Auto Trip, Relay:- Main-2 Protn.SOTF,186A&186B(Both CB)	2.33	7.22	
2	400kV Mundka Ckt-2	Tripped off: Both CB,Facia:-CB1 Trouble alarm,CB2 Auto Trip, Relay:- Main-2 Protn.SOTF,186A&186B(Both CB)	2.33	7.42	
3	400kV Bahadur Garh	Tripped off: Both CB (Main552 &Tie652) Relay: - Main-1 Protn. SOTF,186A&B(Both CB), 86GRA Trip	2.33	9.34	
4	400kV Abdulla pur	Tripped off:Both CB(1152& 1252),Relay:- SOTF, 186A& 186B(Both CB),Power swing Trip, Carrier send, Group B Trip 86 B,85Y	2.33	7.25	
5	400kV Mondola Ckt-1	MADE OFF	6:27	7.32	
6	400kV Mondola Ckt-2	MADE OFF	6:27	6.46	
7	400kV Mahender Garh	MADE OFF	6:30	11.54	
8	400kV Mahender Garh	MADE OFF	12:03	12.43	
9	400kV Dipalpur	MADE OFF	6:30	912	
10	220KVBAWANA- ROHINI CKT-I	MADE OFF	6:30	6.48	
11	220KVBAWANA- ROHINI CKT-II	MADE OFF	6:30	6.48	
12	220KV BAWANA-SHALIMARBAGH CKT-I	MADE OFF	6:30	6.52	
13	220KV BAWANA-SHALIMARBAGH CKT-II	MADE OFF	6:30	6.52	
14	220kV BAWANA-DSIIDC BAWANA CKT-I	MADE OFF	6:30	10.01	
15	220kV BAWANA-DSIIDC BAWANA CKT-II	MADE OFF	6:30	10.01	
16	220kV BAWANA-KANJHAWALA CKT	MADE OFF	6:30	7.45	
17	220kV BAWANA-NAJAFGARH CKT	MADE OFF	6:30	9.51	
18	66kV Incommer	MADE OFF	6:30	8.18	
19	66kV Bawana-6	MADE OFF	6:30	10.46	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	10:46	42	0.378

(4) 220kV Pappankalan-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&II	SUPPLY FAILED	2:33	8:23	
2	66kV BINDA PUR CKT-I&II	UFR	2:33	11:52	58MW
3	66kV REWARI LINE		2:33	9:23	31MW
4	66kV G-6 CKT-I&II		2:33	12:10	NO LOAD
5	66kV G-2 CKT-I&II		2:33	11:13	88MW
6	66kV BODELA CKT.		2.33	11.52	30MW
7	66kV DMRC	MADE OFF	2.33	8:08	DMRC SUPPLY RESTORED
8	11kV LOAD	SUPPLY FAILED	2.33	11:13	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	8.08	267	1.491
8.08	9.23	240	0.300
9.23	11.13	209	0.383
11.13	11.52	101	0.066
11.52	12.10	13	0.004

(5) 220kV Pappankalan-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	220kV BAMNAULI CKT-I&II	SUPPLY FAILED	2:33	8:08	DMRC SUPPLY RESTORED

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
02:33	03:00	114	0.051
03:00	04:00	110	0.110
04:00	05:00	102	0.102
05:00	06:00	98	0.098
06:00	07:00	96	0.096
07:00	08:00	90	0.090

(6) 220kV Vasant Kunj 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 MEHRAULI CKT-I	Supply failed	2:34	11:55	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
02:33	03:00	87	0.039
03:00	04:00	80	0.080
04:00	05:00	80	0.080
05:00	06:00	73	0.073
06:00	07:00	72	0.072
07:00	08:00	70	0.070
08:00	09:00	70	0.070
09:00	10:00	75	0.075
10:00	11:00	75	0.075

(7) 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 SOW CKT-I&II	SUPPLY FAILED	2:33	05:18	
2	220kV PATPARGANJ CKT-I&II	SUPPLY FAILED	2:33	05:18	
3	220kV SOW CKT-I&II	CVT DISAPPEARED	6:59	7:06	
4	220kV PATPARGANJ CKT-I&II	CVT DISAPPEARED	6:59	7:06	
5	33kV SHAKARPUR	UFR	2:33	8:35	NO LOAD
6	33kV KANTI NAGAR CKT. I & II	UFR	2:33	8:35	19MW
7	33kV GEETA COLONY CKT I&II	UFR	2:33	8:35	25MW
8	33kV KAILASH NAGAR CKT I&II	SUPPLY FAILED	2:33	8:35	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
02:35	8:35	57	0.630

(8) 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-I&II	SUPPLY FAILED	2:33	6:48	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
02:33	6.48	233	0.990

(9) 220kV Sarita Vihar S/Station

`	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping	Time of Restorati	Remarks

			in Hrs.	on in Hrs.	
1	6NOS. 11kV LOAD	UFR	2:33	12:28	14MW
2	66kV MATHURA ROAD CKT-I&II	UFR	2:33	12:28	50MW

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
02:33	12:28	64	0.635

(10) 220kV Shalimarbagh 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&II	SUPPLY FAILED	2:34	6:57	
2	33kV RANI BAGH CKT-I&II & SGT NAGAR	UFR	8:57	8:58	17MW
3	33kV RANI BAGH CKT-I&II	UFR	9:26	10:02	17MW

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
02:35	03:00	148	0.074
03:00	04:00	141	0.141
04:00	05:00	134	0.134
05:00	06:00	128	0.128
06:00	07:00	127	0.127

(11) 220kV Kashmiri Gate S/Station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV SOW CKT-I&II	SUPPLY FAILED	2:35	5:18	DMRC SUPPLY RESTORED

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
02:35	06:05	60	0.210
06:05	07:12	44	0.049
7:12	10:03	41	0.117

(12) 220kV Ridge Valley 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 NARAINA CKT	SUPPLY FAILED	02:25	8:45	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
02:35	08.45	81	0.500

(13) 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	2:33	6:54	
2	220kV MANDOLA CKT-II	SUPPLY FAILED	2:33	8:20	
3	220kV PANIPAT CKT-I,II&III	SUPPLY FAILED	2:33	9:34	MADE OFF AT 8:57HRS. & 220kV BUS COUPLER MADE ON. SUPPLY EXTENDED TO ROHTAK ROAD
4	220kV DSIDC BAWANA CKT-I,II	SUPPLY FAILED	2:33	10:05	
5	220kV PANIPAT CKT-I,II&III	MADE OFF	2:33	8:57	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
02:35	03:00	132	0.066
03:00	04:00	127	0.127
04:00	05:00	113	0.113
05:00	06:00	128	0.128

(14) 220kV Okhla 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 BTPS CKT-I	SUPPLY FAILED	6:57	10:48	
2	220kV BTPS CKT-II	SUPPLY FAILED	6:57	9:48	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
07:00	9:48	200	0.568
08:00	09:00	185	0.185
09:00	10:00	200	0.200
10:00	11:00	220	0.220
11:00	12:00	248	0.248

(15) 220kV Parkstreet Sub-station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	33kV PRASAD NAGAR	UFR	2:33	10:15	16MW
2	33kV SHANKAR ROAD	UFR	2:33	11:49	11MW
3	33kV FAIZ ROAD CKT-I&II	UFR	2:33	10:14	13MW
4	33kV MOTIA KHAN CKT-I&II	UFR	2:33	12:05	23MW
5	33kV SHASTRI PARK CKT-I&II	UFR	2:33	11:47	34MW
6	220kV PRAGATI CKT-I	SUPPLY FAILED	2:39	7:02	
7	220kV PRAGATI CKT-II	SUPPLY FAILED	2:39	7:48	
8	220kV PRAGATI CKT-II	SUPPLY FAILED	8:18	8:22	
9	STATE GUEST HOUSE, SCHOOL LANE,	MADE OFF	2:33	8:33	
10	33kV HANUMAN ROAD, BAIRD ROAD I & II	MADE OFF	2:33	7:55	
11	NIRMAN BHAWAN, RIDGE VALLEY I & II , B.D.MARG	MADE OFF	2:33	08.02	
12	66kV DMRC CKT, DAMPLE	MADE OFF	2:33	9:38	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	7.55	135	0.725
7.55	8.00	109	0.009
8.00	8.33	104	0.057
8.33	9.38	100	0.108
9.38	10.15	71	0.044
10.15	11.49	26	0.041
11.49	12.05	23	0.006

(16) 220kV 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 BTPS CKT-I & II	186	2:33	3:48	
2	220kV DIAL CKT-I&II	186	2:33	3:59	
3	220kV BTPS CKT-I & II	SUPPLY FAILED	6:59	11:53	
4	220kV DIAL CKT-I&II	SUPPLY FAILED	6:59	18:18	
5	220kV VASANTKUNJ CKT-I&II	SUPPLY FAILED	2:33	11:54	
6	66KV IOC CKT	MADE OFF	2:33	6:37	
7	66kV VASANT KUNJ `C' BLK CKT-I&II	UFR	2:33	12:08	25MW
8	66kV VASANT KUNJ `D' BLK CKT-I&II	UFR	2:33	12:08	NO LOAD
9	66KV PALAM CKT.	MADE OFF	2:33	5:17	AIRPORT SUPPLY RESTORED
10	66KV MALVIYA NAGAR CKT.-I	MADE OFF	2:33	9:05	
11	66KV MALVIYA NAGAR CKT.-II	MADE OFF	2:33	8:49	
12	66KV C-DOT CKT-I & II	MADE OFF	2:33	11:08	
13	11KV FEEDERS	UFR	2:33	6:20	5MW
14	66KV DMRC CKT.	SUPPLY FAILED			DMRC SUPPLY RESTORED

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	5:17	178	0.487
5:17	6:37	168	0.168
6:37	9:00	113	0.113
9:00	11:08	86	0.086
11:08	12:08	21	0.021

(17) 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
1	220kV GOPALPUR CKT-I &II	SUPPLY FAILED	2:33	9:06	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	9:06	70	0.459

(18) 220kV Gazipur 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 NOIDA SEC-62	CVT DISAPPEARED	2:33	9:54	
2	220kV BTPS CKT	SUPPLY FAILED	6:58	10:37	
3	66kV KONDLI CKT-I&II, VIVEK VIHAR CKT-I		6:58	10:55	
4	66kV VIVEK VIHAR CKT-I		6:58	12:33	
5	ALL 11KV FEEDERS		6:58	12:25	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
6:58	10:55	50	0.200
10:55	12:33	14	0.022

(19) 220kV LODHI ROAD S/STATION

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV MAHARANIBAGH CKT-I	SUPPLY FAILED	2:33	8:29	
2	220kV MAHARANIBAGH CKT-II		2:33	8:29	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	8:29	93	0.559

(20) 220kV Masjid Moth 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 MAHARANI BAGH CKT-I	SUPPLY FAILED	2:33	9:20	
2	220kV MAHARANI BAGH CKT-II		2:33	9:20	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	9:20	106	0.735

(21) 220kV TRAUMA CENTER S/STATION

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV MAHARANIBAGH CKT-I&II	SUPPLY FAILED	2:33	8:17	
2	220kV MAHARANIBAGH CKT-I&II		8:21	8:29	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	8:17	12	0.065
8:17	8:29	12	0.002

(22) 220kV DIAL 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 MEHRAULI CKT-I&II	SUPPLY FAILED	2:33	3:58	AIRPORT SUPPLY RESTORED
2	220kV BAMNAULI CKT-I&II		2:33	8:18	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	3:58	20	0.022

(23) 220kV 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-I&II	SUPPLY FAILED	2:33	3:32	
2	220kV IP CKT-I&II		6:59	8:20	
3	33kV BAY NO.5&6 (JAMA MASJID), BAY NO. 2, 13 & 18	UFR	2:33	9:55	2MW

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	3:54	37	0.050
3:54	8:20	25	0.111
8.20	8.52	20	0.154
8.52	9.25	20	0.350

(24) 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&II	SUPPLY FAILED	2:33	8:38	
2	220kV SUBZI MANDI CKT-I&II		2:33	8:40	
3	220kV WAZIRABAD CKT-I		2:33	6:15	
4	66kV JAHANGIR PURI CKT-I&II		2:33	6:17	
5	33kV WAZIRABAD CKT-I&II		2:33	6:17	WATER PLANT SUPPLY RESTORED
6	33kV INDRA VIHAR CKT-I&II, DIFR		2:33	8:40	
7	33kV CIVIL LINES CKT		2:33	8:38	
8	33kV AZAD PURCKT-I & II		2:33	8:42	
9	11kV LOAD		2:33	8:44	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	6:17	148	0.553
6:17	8:38	81	0.190
8.38	8.44	37	0.053

(25) 220kV 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	SUPPLY FAILED	2:33	9:52	
2	220kV KANJHAWALA CKT		2:33	10:00	
3	220kV BAMNAULI CKT-I & II		2:33	9:08	
4	66kV BODELA CKT-II		2:33	9:08	
5	66kV JAFFARPUR CKT-I & II		2:33	9:08	
6	66kV NANGLOI CKT.NANGLOI WATER WORK CKT. 11KV LOAD		2:33	9:08	
7	66KV G-5 PAPANKALAN CKT.	UFR	2:33	10.28	36MW
8	11kV LOAD	UFR	2:33	9:08	10MW

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	9:08	232	1.527
9:08	10:28	36	0.048

(26) 220kV SOW 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	2:33	7:03	
2	220kV MANDOLA CKT-II		2:33	7:25	
3	220kV MANDOLA CKT-III		2:33	8:31	
4	220kV MANDOLA CKT-IV		2:33	8:32	
5	220kV GEETA COLONY CKT-I&II		2:33	5:18	WATER PLANT RESTORED
6	220kV KASHMEREGATE CKT-I&II		2:33	7:03	
7	11KV FEEDERS, 66KV SHASTRI PARK I&II, 66KV GHONDA	UFR	2:33	8:00	98MW

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	5:18	202	0.556
5:18	5.40	150	0.055
5.40	7.25	128	0.224
7:25	8:00	86	0.050
8.00	8.10	51	0.008

(27) 220kV 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	220kV BAMNAULI CKT-I	SUPPLY FAILED	2:33	8:54	
2	220kV BAMNAULI CKT-II		2:33	8:54	
3	33KV KHEBER LANE-I&II, SHEKHA WATI,KIRBI PLACE		2:33	8:55	MES SUPPLY RESTORED
4	33kV INDER PURI-I & II		2:33	8:59	
5	33 kV PAYAL, 33kV REWARI LINE, 11kV LOAD		2:33	9:54	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	8:55	105	0.669
8.55	8.59	80	0.005
8.59	9.54	42	0.039

(28) 220kV Kanjhawala 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 BAWANA CKT	SUPPLY FAILED	2:33	7:49	
02	220kV NAJAFGARH CKT		2:33	9:59	
03	66kV CLEAR WATER BAWANA		2:33	11:10	SUPPLY RESTORED TO WATER PLANT
04	66kV POOTH KHURD		2:33	9:58	
05	66kV GHEVRA CKT		2:33	12:08	
06	66kV DMRC, 11kV LOAD		2:33	12.12	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	9:59	53	0.349
9:59	11:10	35	0.041
11:10	12:08	19	0.018

(29) 220kV DSIDC BAWANA S/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&II	SUPPLY FAILED	2:33	10:03	
2	220kV NARELA CKT-I&II		2:33	6:56	
3	220kV NARELA CKT-I&II		6:59	10:05	
5	66KV DSIDC II NARELA CKT-I&II, 11KV LOAD		2:33	10:04	RAILWAY SUPPLY RESTORED

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	10:04	39	0.317

(30) 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 I.P. CKT. I & II	SUPPLY FAILED	2:33		5:12hrs.CVT APPEARED
2	220kV GEETA COLONY CKT-I&II	SUPPLY FAILED	2:33	5:18	
3	220kV I.P. CKT. I & II	SUPPLY FAILED	6:59	7:01	
4	220kV GEETA COLONY CKT-I&II	SUPPLY FAILED	6:59	7:01	
5	220kV GEETA COLONY CKT-I&II	186, 186	8:18	8:22	
6	3NOS 11KV FEEDERS	UFR	2:33	5:18	10MW
7	33KV PREET VIHAR, 33kV MOTHER DIARY, 33kV SHAKARPUR	UFR	2:33	5:55	21MW 3MW 20MW
8	66kV VIVEK VIHAR CKT-1&2	UFR	2:33	8:15	70MW
9	66kV GH –I CKT. I & II	UFR	2:33	8:25	
10	66kV VIVEK VIHAR CKT. I & II	SUPPLY FAILED	8:18	8:25	
11	33KV GURU ANGAD NAGAR I&II,	UFR	2:33	8:25	29MW
12	GEETA COLONY	UFR	2:33	8:25	NO LOAD
13	33kV SCOPE BLDG	UFR	2:33	8:25	NO LOAD
14	33kV KARKADOOMA	UFR	2:33	8:25	25MW
15	666kV MAYUR VIHAR-I	SUPPLY FAILED	2:33	8:25	
16	33kV CBD SHAHDARA	UFR	2:33	8:45	12MW
17	33KV PREET VIHAR	SUPPLY FAILED	6:59	8:15	
18	3NOS 11KV FEEDERS	SUPPLY FAILED	6:59	8:25	
19	11kV LOAD	SUPPLY FAILED	6:59	8:25	
20	33kV MOTHER DIARY, 33kV SHAKARPUR	SUPPLY FAILED	6:59	8:25	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	5:18	236	0.649
5:15	5:55	182	0.121
5:55	8:15	91	0.212
8:15	8:25	12	0.002

(31) 220kV MAHARANIBAGH S/Station

S.No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV LODHI ROAD CKT-I & II	SUPPLY FAILED	2:33	8:30	
2	220kV SARITA VIHAR CKT		2:33	8:30	
3	220kV PRAGATI CKT		2:33	8:30	
4	220kV MASJID MOTH CKT-II		2:33	8:30	
5	220kV MASJID MOTH CKT-I		2:33	8:30	
6	220kV TRAUMA CENTER CKT-II		2:33	8:30	
7	220kV TRAUMA CENTER CKT-I		2:33	8:30	
8	220kV ELECTRIC LANE CKT-I&II		2:33	8:30	

(32) 220kV Pragati Sub-station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	160MVA PR. TR. I & II	TRIPPED ON 86, 86	2:33	3:15	
2	220kV MAHARANI BAGH CKT,	MADE OFF MANUALLY	3:05	03.27	SUPPLY FAILED AT 2:33hrs.
3	220kV SARITA VIHAR,		3:05	3:35	SUPPLY FAILED AT 2:33hrs, CVT APPEARED AT 3:25hrs.
4	220kV I.P. CKT. I & II,		3:05	3:27	SUPPLY FAILED AT 2:33hrs.
5	220kV PARK STREET CKT. I&II,		3:05	6:22	SUPPLY FAILED AT 2:33hrs.
6	220kV BUS COUPLER	PUT ON	3:34		
7	160MVA PR. TR. I & II	TRIPPED ON 86, 86	3:35	3:37	
8	160MVA PR. TR. I & II	TRIPPED ON 86, 86	6:59	7:10	
9	160MVA PR. TR. I & II	TRIPPED ON 86, 86	8:18	8:26	
10	220kV MAHARANI BAGH CKT,	SUPPLY FAILED	6:59	12:09	
11	220kV SARITA VIHAR,		6:59	7:08	
12	220kV I.P. CKT. I & II,		6:59	7:08	
13	220kV PARK STREET CKT. I&II,		6:59	7:08	

(33) 220kV IP 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 PRAGATI CKT-I&II	SUPPLY FAILED	2:33	3:30	
2	220kV PATPARGANJ CKT-I&II	SUPPLY FAILED	2:33	5:10	
3	100MVA PR. TR. I	SUPPLY FAILED	2:33	8:05	
4	100MVA PR. TR. II	SUPPLY FAILED	2:33	4:15	
5	220kV RPH CKT-I&II	SUPPLY FAILED	2:33	3:30	
6	33kV NIRMAN BHAWAN-(BAY-2)	SUPPLY FAILED	2:33	4:15	
7	220kV PRAGATI CKT-I&II	SUPPLY FAILED	6:59	7:04	
8	TILAK MARG (BAY-6)	SUPPLY FAILED	6:59	7:15	
9	BAY NO. 28, 42 & 38,(CP) BAY NO. 4 & 10 (ELECTRIC LANE), BAY NO. 2 & 16 (NIRMAN BHAWAN) BAY NO. 6 (TILAK MARG) BAY NO. 34 (MINTO ROAD)	SUPPLY FAILED	6:59	8:05	
10	220kV PRAGATI CKT-I&II	SUPPLY FAILED	8:20	8:25	
11	BAY NO. 29 (I.G.STADIUM)	SUPPLY FAILED	8:20	9:30	
12	BAY NO. 25 & 37 (KILOKRI)	SUPPLY FAILED	2:33	9:35	
13	BAY NO. 1 (KILOKRI)	SUPPLY FAILED	2:33	9:38	
14	BAY NO. 17 (DELHI GATE)	SUPPLY FAILED	2:33	10:20	LOAD NORMALIZED THROUGH RPH
15	BAY NO. 30 (KAMLA MARKET)	SUPPLY FAILED	2:33	12:00	
16	BAY NO. 19 (I.G.STADIUM)	SUPPLY FAILED	2:33	19:40	
17	BAY NO. 7 (EXHIBITION GROUND –I)	SUPPLY FAILED	2:33	12:55	LOAD NORMALIZED THROUGH LODHI ROAD
18	BAY NO. 13 (NIZAMUDDIN)	SUPPLY FAILED	2:33	14:55	
19	BAY NO. 9 (EXHIBITION GROUND-II)	SUPPLY FAILED	2:33	17:40	
20	BAY NO. 24 (DEFENCE COLONY)	SUPPLY FAILED	2:33	18:20	
21	BAY NO. 5 (LAJPAT NAGAR)	SUPPLY FAILED	2:33	18:47	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
2:33	3:30	107	0.102
3:30	4:15	105	0.079
4:15	6:59	101	0.276
6:59	7:15	98	0.026
7:15	8:05	78	0.065
8:05	9:38	50	0.077

TOTAL LOAD LOSS IN MUs = 21.035
TOTAL GENERATION LOSS IN MUs = 8.116

Load relief through Under Frequency Relay operation

Name of S/stn	Load in MW
Bamnauli	261
Pappankalan-I	207
Geeta Colony	44
Sarita Vihar	64
Shalimarbagh	34
Parkstreet	97
Mehrauli	30
RPH	2
Wazirabad	98
Patparganj	190
Najafgarh	46
TOTAL	**1073**

RESTORATION OF IMPORTANT SERVICES

DMRC

Sl. No.	Feeding Source	Time of tripping	Time of restoration	Remarks
1	220kV Pappankalan- I	2.33	8:08	Noida City Center-Dwarka : Line-3 Yamuna Bank-Vaishali : Line-4 Mundka-Inderlok-Kirti Nagar : Line-5
2	400kV Mundka	2.33	7:51	Mundka-Inderlok-Kirti Nagar : Line-5
3	220kV Mehrauli	2.33	3:28	Jahangirpuri-Huda City Center : Line-2
4	220kV Kanjhawala	2.33	12:12	Mundka-Inderlok-Kirti Nagar : Line-5
5	220kV Rohini	2.33	6:48	Rithala – Dilshad Garden : Line-1 Mundka-Inderlok-Kirti Nagar : Line-5
6	220kV Sarita Vihar	2.33	8:22	Central Sectt-Badarpur : Line-6
7	220kV Shalimarbagh	2.33	6:57	Jahangirpuri-Huda City Center : Line-2
8	220kV Kashmiri Gate	2.33	5:18	Rithala – Dilshad Garden : Line-1
9	220kV Pappankalan-2	2.33	8:08	Noida City Center-Dwarka : Line-3 Yamuna Bank-Vaishali : Line-4 Mundka-Inderlok-Kirti Nagar : Line-5
10	220kV Parkstreet	2.33	9:38	Central Sectt-Badarpur : Line-6
11	GT	2.33	5:20	Jahangirpuri-Huda City Center : Line-2 Yamuna Bank-Vaishali : Line-4

AIRPORT

Sl. No.	Feeding Source	Time of tripping	Time of restoration	Remarks
1	220kV DIAL	2.33	3:58	After Getting Supply from 400kV Bamnauli

Water Works

Sl. No.	Feeding Source	Time of tripping	Time of restoration	Remarks
1	220kV Wazirabad	2.33	5:18	Sonia Vihar Water Treatment plant
2		2.33	5:18	Bhagirath Water Treatment plant
3	220kV Shalimarbagh	2.33	6:57	Hiaderpur Water Treatment plant
4	220kV Patparganj	2.33	5:18	Rainywell
5	220kV Gopalpur	2.33	6:17	Wazirabad Water Treatment plant
6		2.33	8:38	Chandrawal Water Treatment plant
7	400kV Mundka	2.33	9:04	Nanagloi Water Works

Indian Railways

Sl. No.	Feeding Source	Time of tripping	Time of restoration	Remarks
1	220kV Narela	2.33	6:55	After Getting Supply from 400kV Bawana
2	220kV DSIDC Bawana	2.33	10:04	After Getting Supply from 400kV Bawana
3	220kV Ridge Valley	2.33	8:45	After Getting Supply from 400kV Bamnauli

GENERATION LOSS

Station name	Unit	Generation in MW	Time of tripping	Time of restoration	Remarks
Pragati	1	97	2:33	8:49	
	2	98	2:33	8:42	FSNL
	STG	105	2:33	10:55	
Gas Turbine	1	27	2:33	4:25	FSNL
	2	27	2:33	4:30	FSNL
	3	28	2:33	6:40	
	5	28	2:33	2:50	FSNL
	STG1	22	2:33	8:15	

	STG2	12	2:33	8:40	
	STG3	12	2:33	8:10	
RPH	1	--	--	--	
	2	55	2:33	11:42	
BTPS	1	75	6:58	10:57	
	2	75	6:58	11:29	
	3	65	6:58	10:25	
	4	180	2:35	18:00	
	5	170	6:58	15:10	
BAWANA CCGT	1	--	--	--	UNITS WERE NOT RUNNING
	STG1	--	--	--	
RITHALA	2	--	--	--	
	STG	--	--	--	

Subject : Report on trippings occurred in Delhi System at 13:01hrs. on 31.07.12

At 13:01Hrs. there was a jerk observed in the system resulting supply failure at all 400kV S/stns. Initially BTPS system survived with radial load of Okhla and Gazipur but collapsed at 13:10hrs.

The details of trippings occurred and operation carried out at various S/stns of Delhi are as under :

(1) 400kV 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-II	DIST. PROT. MAIN-I&II, SOTF, 186A&B	13:01	14:22	
2	400kV BALLABHGARH CKT-I	DIST. PROT. MAIN-I&II, 186A&B	13:01	14:12	
3	400kV MUNDKA CKT- I & II	MADE OFF	13:01	14:26	
4	400/220kV 315MVA ICT-II,III&IV	MADE OFF	13:01	14:13	
5	400 kV BALLABHGARH CKT-I	MADE OFF	15:24	15:54	TO CONTROL HIGH VOLTAGE
6	220kV NAJAFGARH CKT-I&II	UNDER FREQUENCY RELAY	13:01	15:50	
7	220kV PPK-II CKT-I&II	MADE OFF	13:01	14:14	
8	220kV PPK-I CKT-I&II	MADE OFF	13:01	14:13	
9	220kV NARAINA CKT-I & II	UNDER FREQUENCY RELAY	13:01	14:43	212MW
10	220kV DIAL CKT-I	MADE OFF	13:01	14:17	
11	220kV DIAL CKT- II	MADE OFF	13:01	14:24	

(2) 400kV Mundka 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 Jhajjar-I				
	CB-414-52	DT receive CH.1&2,	13:27	14:28	
	Tie CB-415-52	Due to tripping of CB-414-52.	13:27	14:43	
	CB-414-52	Not hold Trip 86A&B	14:28	14:32	
	CB-414-52	Not hold Trip 86A&B, CH.1&2	14:32	14:45	
	CB-414-52	Not hold Trip on Pole discrepancy	14:45	14:49	
2	400 KV Jhajjar-II				
	CB-411-52	DT receive CH.1&2	13:27	14:30	
	Tie CB-412-52	DT receive CH 1&2	13:27	15:10	
	CB-411-52	Not hold Trip 86A&86B Relay CH.1&2 Receive	14:30	14:35	
3	400 KV Bamnauli-I				
	CB-401-52	MADE OFF.	14:21	14:30	
	CB-402-52	MADE OFF.	14:21	14:28	
4	400 KV Bamnauli-II				
	CB-403-52	MADE OFF.	14:22	14:27	
	CB-404-52	MADE OFF.	14:22	14:27	
5	400KV Bawana-I				
	CB-419-52	DT receive CH.1&2 86B	14:11	14:33	
	CB-420-52	DT receive CH.1&2 86B	14:11	14:33	
	CB-419-52	Trip on 86B	14:33	14:34	
	CB-420-52	Trip on 86B	14:33	14:34	
	CB-419-52	DT receive CH.1&2 86B	14:35	14:37	
	CB-420-52	DT receive CH.1&2 86B	14:35	14:37	
	CB-419-52	DT receive CH.1&2, 86A&B	15:02	15:09	
	CB-420-52	DT receive CH.1&2,86A& 86B	15:02	15:10	
	CB-419-52	DT receive CH.1&2,86A& 86B	15:13	18:05	
	CB-420-52	DT receive CH.1&2,86A&B	15:13	18:05	
6	400 KV Bawana -II				
	CB-417-52	MADE OFF.	14:24	14:42	
	CB-418-52	MADE OFF.	14:22	14:34	
7	66kV NANGLOI	SUPPLY FAILED	13:01	17:14	
8	66kV NANGLOI W/W	SUPPLY FAILED	13:01	15:18	
9	66kV MANGOLPURI	SUPPLY FAILED	13:01	21:00	
10	66KV GHEVRA CKT	SUPPLY FAILED	13:01	21:00	
11	66kV DMRC CKT	SUPPLY FAILED	13:01	14:49	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	15:18	60	0.137

(3) 400kV 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	66kV Incomer	MADE OFF	13.08	15.38	
2	400kV Bahadur garh	Trip Off:-Both CB (552 & 652), Relay:-86 GRA, 30CH-2, 186A&B	13.08	15.33	
3	400kV Mondola ckt-2	Trip Off:-Only CB 1852,Facia:-Direct Trip Record, Relay:-85 LO ,186A&186B.	13.13	15.13	
4	400kV Mahender Garh	Trip Off:-Both CB (852 &952) Relay:-Main-1 SOTF, 186A&B, Relay on Tie CB952:-186A&186B	13.14	17.37	
5	220kV Bawana-Kanjhawala Ckt	MADE OFF	14.02	15.58	
6	220kV Bawama – Najafgarh Ckt	MADE OFF	14.02	15.58	
7	220kV Bawana – Rohini Ckt-I	MADE OFF	14.02	14.48	
8	220kV Bawana – Rohini Ckt-II	MADE OFF	14.02	14.48	
9	100 MVA TR	MADE OFF	14.02	14.43	
10	220kV Bawana–Shalimarbagh Ckt-I	MADE OFF	14.02	14.48	
11	220kV Bawana–Shalimarbagh Ckt-II	MADE OFF	14.02	14.48	
12	220kV Bawana-DSIIDC Ckt-I	MADE OFF	14.02	14.45	
13	220kV Bawana-DSIIDC Ckt-II	MADE OFF	14.02	14.45	
14	400kV Abdulla pur	Both CB (1152& 1252), Relay:-186A&186B (Both CB),Group B 86 Trip, Aux A/R L/O,96Y,2 AA1, 2AA2	14.09	15.29	
15	400kV Mundka ckt-1	MADE OFF	14.11	14.4	
16	400kV Mundka ckt-2	MADE OFF	14.11	14.4	
17	315 MVA ICT-3	MADE OFF CB 752	14.11	14.4	
18	315 MVA ICT-2	MADE OFF CB 1052	14.11	14.4	
19	315 MVA ICT-1	MADE OFF CB 2152	14.11	14.4	
20	315 MVA ICT-4	MADE OFF CB 2352	14.11	14.4	
21	400 KV Dipalpur	Switch off Both CB(1352 &1452)	14.11	15.35	
22	400 kV Mondola ckt-1	MADE OFF CB 1652	14.11	15.13	
23	315 MVA ICT-5	MADE OFF	14.11	14.44	
24	220KV Incomer-1	MADE OFF	14.11	14.41	
25	220KV Incomer-2	MADE OFF	14.11	14.41	
26	220KV Incomer-3	MADE OFF	14.11	14.41	
27	220KV Incomer-4	MADE OFF	14.11	14.41	
28	220KV Incomer-5	MADE OFF	14.11	14.44	
29	400kV Mundka ckt-1	Trip Off:-Both CB(152&252) Due to Over Voltage	15.04	15.11	
30	400kV Mundka ckt-1	Trip Off:-BothCB(152&252),Due to Over Voltage	15.14	15.32	
31	400KV Mandola ckt-1	Trip Off:-Only CB 1652,Due to Over Voltage	15.14	15.33	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:08	15:38	57	0.143
15:38	15:57	32	0.010

(4) 220kV Pappankalan-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&II	SUPPLY FAILED	13:01	14:14	DMRC SUPPLY RESTORED
2	66kV BODELA CKT-I	UNDER FREQUENCY RELAY	13:01	14:19	33MW
3	66kV BINDA PUR CKT-I&II		13:01	14:19	45MW
4	66kV REWARI LINE		13:01	14:19	24MW
5	66kV G-6 CKT-I&II		13:01	14:19	
6	66kV G-2 CKT-I&II		13:01	14:19	64MW
7	66kV DMRC CKT-I&II	SUPPLY FAILED	13:01	14:14	
8	66kV BODELA CKT-I, 66kV BINDA PUR CKT-I&II & 11kV LOAD	MADE OFF MANUALLY ON THE INSTRUCTION OF NRLDC	15:01	17:55	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	14:14	196	*0.238*
14:14	14:19	184	*0.015*
14:19	17:55	18	*0.065*

(5) 220kV 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	220kV BAMNAULI CKT-I & II	SUPPLY FAILED	13:01	14:44	
2	33kV KHYBER LANE CKT-I&II	SUPPLY FAILED	13:01	14:47	MES SUPPLY RESTORED
3	33kV KIRBI PLACE CKT-I&II	SUPPLY FAILED	13:01	14:47	
4	33kV SHEKHAWATI PLACE CKT	SUPPLY FAILED	13:01	14:47	
5	33kV REWARI LINE PLACE CKT	SUPPLY FAILED	13:01	17:23	
6	33kV PAYAL CKT	SUPPLY FAILED	13:01	17:23	
7	33kV DMS CKT	SUPPLY FAILED	13:01	17:23	
8	33kV INDERPURI CKT-I&II	SUPPLY FAILED	13:01	17:23	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	14:47	95	*0.168*
14:47	17:23	65	*0.169*

(6) 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-I	SUPPLY FAILED	13:01	15:07	SUPPLY OF SONIA VIHAR WATER TREATMENT PLANT RESTORED
2	220kV MANDOLA CKT-II		13:01	15:25	
3	220kV MANDOLA CKT-III		13:01	15:49	
4	220kV MANDOLA CKT-IV		13:01	15:49	
5	220kV GEETA COLONY CKT-I		13:01	15:15	
6	220kV GEETA COLONY CKT-II		13:01	15:15	
7	220kV GOPALPUR CKT-I		13:01	15:25	
8	220kV KASHMEERGATE CKT-I		13:01	15:07	
9	220kV KASHMEERGATE CKT-II		13:01	15:07	
10	66kV YAMUNA VIHAR CKT-I&II		13:01	15:15	
11	66kV GHONDA CKT	UNDER FREQUENCY	13:01	15:21	34 MW SUPPLY OF BHAGIRATHI WATER TREATMENT PLANT RESTORED
12	66kV SHASTRI PARK CKT-I&II		13:01	15:50	41MW
13	ALL 11KV FEEDERS		13:01	15:50	10MW
14	66kV SHASTRI PARK CKT-I&II	MADE OFF MANUALLY	16:04	16:27	TO REGULATE THE LOAD ON THE NRLDC's INSTRUCTION
15	66kV SHASTRI PARK CKT-I&II, 11KV FEEDERS		18:57	19:58	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	15:07	150	*0.315*
15:07	15:15	90	*0.012*
15:15	15:21	56	*0.006*
15:21	15:50	51	*0.025*
16:04	16:27	21	*0.008*
18:57	19:58	76	*0.077*

(7) 220kV Vasant Kunj 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 MEHRAULI CKT-I & II	Supply failed	13:01	14:30	
2	66KV Vasant Kunj `C' Blk Ckt-I & II	MADE OFF	14:20	17:38	
3	66KV Vasant Kunj `D' Blk Ckt-I & II		14:20	17:43	
4	66KV Palam Ckt		14:20	19:25	
5	66KV Ridge Valley Ckt-II		14:20	14:40	
6	11KV FEEDERS		14:20	17:43	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	17:38	75	*0.346*
17:38	17:43	19	*0.002*

(8) 220kV Masjid Moth 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 MAHARANI BAGH CKT-I	SUPPLY FAILED	13:01	17:40	
2	220kV MAHARANI BAGH CKT-II		13:01	17:40	
3	33KV I/C-I	MADE OFF	13:15	17:00	
4	33KV I/C-II		13:15	17:00	
5	33KV BSNL CKT.		17:20	17:40	
6	33KV SHIVALIK CKT.		17:20	17:40	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	Mus
13:01	17:40	121	0.567

(9) 220kV Okhla 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 BTPS CKT-I	SUPPLY FAILED	13:08	16:55	
2	220kV BTPS CKT-II		13:08	16:55	
3	66KV MALVIYA NAGAR CKT-I,II&III	MADE OFF	13:20	17:27	
4	66KV OKHLA PHASE-I CKT-I & II		13:20	17:42	
5	33KV MASJID MOTH CKT.	MADE OFF	13:20	17:58	
6	33KV OKHLA PHASE-II CIT-I & II		13:20	17:30	
7	33KV BALAJI CKT-I & II		13:20	17:01	
8	33KV NEHRU PLACE CKT-II		13:20	16:56	
9	33KV ALAKNANDA CKT-I & II		13:20	17:05	
10	33KV EAST OF KAILASH CKT.		13:20	17:22	
11	33KV TUGLAKABAD CKT.		13:20	17:30	
12	33KV NEHRU PLACE CKT-IV		13:20	17:22	
13	11KV I/C-I & II		13:20	17:33	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:08	16:56	200	*0.760*
16:56	17:05	190	*0.028*
17:05	17:22	175	*0.050*
17:22	17:27	155	*0.013*
17:27	17:30	95	*0.005*
17:30	17:33	52	*0.003*
17:33	17:42	42	*0.006*

(10) 220kV 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 DIAL CKT-I	186	13:01	14:20	DMRC SUPPLY RESTORED
2	220kV DIAL CKT-II		13:01	14:20	
3	220kV BTPS CKT-I		13:01	14:30	
4	220kV BTPS CKT-II		13:01	14:30	
5	220kV VASANT KUNJ CKT-I	MADE OFF	14:15	14:32	
6	220kV VASANT KUNJ CKT-II		14:15	14:32	
7	66kV Vasant Kunj `C' Blk Ckt-I&II	UNDER FREQUENCY	13:01	15:48	17MW
8	66kV Vasant Kunj `D' Blk Ckt-I&II		13:01	15:48	
9	66KV PALAM CKT.	MADE OFF	14:14	15:00	
10	66KV IOC CKT.		14:14	15:00	
11	66KV MALVIYA NAGAR CKT.-I		14:14	16:20	
12	66KV MALVIYA NAGAR CKT.-II		14:14	15:48	
13	66KV C-DOT CKT-I & II		14:14	15:48	
14	220/66KV 100MVA PR. TR.-I, II & III	WITHOUT INDICATION	14:20	14:33	
15	66/11KV 20MVA PR. TR.-I & II	TRIPPED MANUALLY	14:14	14:39	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	14:33	129	*0.198*
14:33	15:00	99	*0.045*
15:00	15:48	60	*0.048*

(11) 220kV SUBZI MANDI S/Stn.

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV GOPALPUR CKT-I	SUPPLY FAILED	13:01	16:00	
2	220kV GOPALPUR CKT-II		13:01	16:00	
3	ALL 33KV FEEDERS	MADE OFF	13:01	18:32	33KV I/C-I & II CHARGED AT 16.00HRS. BUT O/G FEEDERS REMAINED OFF UPTO 18:32HRS.DUE TO LOAD RESTRICTIONS
4	ALL 11KV FEEDERS		13:01	18:32	11KV I/C-I & II CHARGED AT 16:00HRS. BUT O/G FEEDERS REMAINED OFF EXCEPT STEPHENS HOSPITAL,HINDU RAO HOSPITAL, AND NEW COURT AT 16.00HRS.

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	16:00	68	*0.203*
16:00	18:32	63	*0.160*

(12) 220kV Kanjhawala 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 BAWANA CKT.	SUPPLY FAILED	13:01	15:58	DMRC LOAD RESTORED
02	220kV NAJAFGARH CKT		13:01	15:58	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	15:58	44	*0.130*
15:58	18:02	34	*0.070*

(13) 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-I	SUPPLY FAILED	13:01	16:05	
2	220kV PANIPAT CKT-II		13:01	16:05	
3	220kV PANIPAT CKT-III		13:01	16:05	
4	220kV MANDOLA CKT-I		13:01	15:44	
5	220kV MANDOLA CKT-II		13:01	15:44	
6	220kV DSIDC CKT-I		13:01	14:58	RAILWAY SUPPLY RESTORED
7	220kV DSIDC CKT-II		13:01	14:58	
8	220kV ROHTAK ROAD CKT-I		13:01	15:56	
9	220kV ROHTAK ROAD CKT-II		13:01	15:56	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW (Narela)	Load affected in MW (Rohtak Rd.)	MUs
13:01	14:58	148	140	0.562
14:58	15:44	0	140	0.107

(14) 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-I&II	SUPPLY FAILED	13:01	14:48	DMRC SUPPLY RESTORED
2	66KV RG5 CKT-I&II		13:01	14:50	
3	66KV RG6 CKT-I&II, 66KV RG4 CKT-I&II, ROHINI 24 CKT-I&II, 66KV DC CKT-I&II		13:01	15:45	
4	66KV RG6 CKT-I&II	MADE OFF	16:02	16:30	TO REGULATE LOAD
5	66KV RG6 CKT-I&II & 11KV LOAD		18:57	19:57	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	14:48	192	*0.342*
14:48	14:50	145	*0.005*
14:50	15:45	3	*0.003*
16:02	16:30	47	*0.022*
18:57	19:57	43	*0.043*

(15) 220kV Sarita Vihar S/Station

S.No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV MAHARANIBAGH CKT	SUPPLY FAILED	13:01	20:32	
2	220kV PRAGATI CKT		13:01	15:08	
3	220kV BTPS CKT-I		13:10	14:38	DMRC SUPPLY RESTORED
4	220kV BTPS CKT-II		13:10	16:40	
5	66KV MATHURA ROAD CKT-I&II	UNDER FREQUENCY RELAY OPERATION	13:01	15:56	46MW
6	6NOS. 11KV FEEDERS		13:01	17:35	10MW

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	14:38	57	*0.092*
14:38	15:56	50	*0.065*
15:56	17:35	8	*0.013*

(16) 220kV Shalimarbagh 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&II	SUPPLY FAILED	13:01	14:48	DMRC SUPPLY RESTORED
2	33kV RANI BAGH CKT-I&II & SGT NAGAR, WAZIRPUR CKT-2, SMB KHOSLA O/H CKT-2	UNDER FREQUENCY RELAY OPERATION	13:01	15:20	70MW
3	33kV WAZIRPUR CKT-1, WAZIRPUR CKT-3, SMB KHSOLA U/G, HAIDERPUR CKT-I&II, SMB FACILITY CENTER	MADE OFF	14:48	15:20	SUPPLY OF HAIDERPUR WATER TREATMENT PLANT RESTORED
4	11KV FEEDERS	MADE OFF	14:51	15:45	
5	33kV RANI BAGH CKT-I&II & SGT NAGAR	UNDER FREQUENCY RELAY OPERATION	15:38	15:45	13MW

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	14:48	171	*0.305*
14:48	15:20	165	*0.088*
15:20	15:45	13	*0.005*

(17) 220kV DSIDC BAWANA S/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&II	SUPPLY FAILED	13:01	14:58	
2	220kV NARELA CKT-I&II		13:01	14:58	
3	66KV DSIDC II NARELA CKT-I&II		13:01	14:58	RAILWAY SUPPLY RESTORED
4	11KV LOAD		13:01	14:58	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	14:58	65	0.127

(18) 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&II	SUPPLY FAILED	13:01	15:50		
2	220kV IP CKT- I & II	SUPPLY FAILED	13:01	23:40		
3	66KV GH-I CKT-I&II	UNDER FREQUENCY RELAY OPERATION	13:01	15:50	30MW	
4	33KV GURU ANGAD NAGAR I&II,		13:01	16:37	22MW	
5	33KV PREET VIHAR, 3NOS 11KV FEEDERS		13:01	15:50	29 MW	SUPPLY OF RAINEY WELL RESTORED
6	33kV SHAKARPUR,GEETA COLONY		13:01	16:37	15MW	
7	33kV SCOPE BLDG	SUPPLY FAILED	13:01	16:37		
8	33kV MOTHER DIARY		13:01	16:37		
9	33kV KARKADOOMA		13:01	15:50		
10	66kV VIVEK VIHAR CKT-1&2		13:01	17:40		
11	33kV CBD SHAHDARA		13:01	17:45		
12	666kV MAYUR VIHAR-I		13:01	20:25		
13	220kV GEETA COLONY CKT-II		17:10	21:22	R-Φ WAVE TRAP JUMPER SNAPPED	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	15:50	212	*0.597*
15:50	16:35	131	*0.098*
16:35	16:37	89	*0.003*
16:37	17:40	26	*0.027*
17:40	17:45	16	*0.001*
17:45	20:25	7	*0.019*

(19) 220kV LODHI ROAD S/STATION

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV MAHARANIBAGH CKT-I	SUPPLY FAILED	13:01	16:52	
2	220kV MAHARANIBAGH CKT-II		13:01	17:48	
3	33kV NIZAMUDDIN CKT & EXHIBITION-II, LAJPAT NAGAR-I, 33/11KV 20MVA TX-1&2		13:01	16:52	
4	33kV HUDCO CKT, IHC I&II DEFENCE COLONY, NDSE VIDYUT BHAWAN, LAJPAT NAGAR-II, 33/11KV 16MVA TX-3&4		13:01	16:59	
5	33kV HUDCO CKT, DEFENCE COLONY	MADE OFF	17:12	17:50	TO REGULATE LOAD

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	16:52	160	*0.616*
16:52	16:59	125	*0.015*
17:12	17:50	35	*0.022*

(20) 220kV TRAUMA CENTER S/STATION

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV MAHARANIBAGH CKT-I&II	SUPPLY FAILED	13:01	17:34	
2	220kV MAHARANIBAGH CKT-I&II	SUPPLY FAILED	17:35	18:00	
3	220kV MAHARANIBAGH CKT-II	TRIPPED	18:44	19:09	
4	33kV TRAUMA CENTER CKT-I&II, STATE GUEST HOUSE, RAJIV GANDHI BHAWAN	SUPPLY FAILED	13:01	17:35	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	17:35	19	0.087

(21) 220kV Kashmeregate S/Station

S.No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV SOW CKT-I&II	SUPPLY FAILED	13:01	15:07	DMRC SUPPLY RESTORED
2	220kV DMRC CKT-I&II	SUPPLY FAILED	13:01	15:07	
3	33kV FOUNTAIN CKT, LAHORI GATE, JAMA MASJID, TOWN HALL, 5NOS. 11KV FEEDERS	UNDER FREQUENCY RELAY OPERATION	13:01	17:02	60MW
4	33kV CIVIL LINES CKT-I&II & 3NOS. 11KV FEEDERS	SUPPLY FAILED	13:01	17:02	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	15:07	75	*0.158*
15:07	17:02	61	*0.117*

(22) 220kV MAHARANIBAGH S/Station

S.No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220kV LODHI ROAD CKT-I	SUPPLY FAILED	13:01	16:52	
2	220kV LODHI ROAD CKT-I & II		13:01	17:47	
3	220kV SARITA VIHAR CKT		13:01	19:35	
4	220kV PRAGATI CKT		13:01	19:35	
5	220kV MASJID MOTH CKT-II		13:01	17:40	
6	220kV MASJID MOTH CKT-I		13:01	17:41	
7	220kV TRAUMA CENTER CKT-II		13:01	17:35	
8	220kV TRAUMA CENTER CKT-I		13:01	17:36	
9	220kV ELECTRIC LANE CKT-I&II		13:01	22:50	

(23) 220kV 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	SUPPLY FAILED	13:01	16:00	
2	220kV KANJHAWALA CKT		13:01	16:00	
3	220kV BAMNAULI CKT-I & II		13:01	15:55	
4	ALL 11KV FEEDERS		13:01	18:35	
5	66kV NANGLOI & NANGLOI W/W CKT		13:01	18:38	
6	66kV G-5 PPK-I&II, BUDHELA CKT-I&II, JAFFERPUR CKT-I&II		13:01	18:50	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	18:35	223	*1.241*
18:35	18:38	205	*0.010*
18:38	18:50	145	*0.029*

(24) 220kV Gazipur 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 NOIDA SEC-62	CVT DISAPPEARED	13:05	19:00	
2	220kV BTPS CKT	SUPPLY FAILED	13:10	16:10	
3	66kV KONDLI CKT-I&II, VIVEK VIHAR CKT-I	SUPPLY FAILED	13:10	17:50	
4	ALL 11KV FEEDERS	SUPPLY FAILED	13:10	16:13	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:10	16:13	53	*0.162*
16:13	17:50	48	*0.078*

(25) 220kV Pragati Sub-station

S. No	Name of the feeder/ Transformer tripped	Relay indications	Time of tripping in Hrs.	Time of Restoration in Hrs.	Remarks
1	220/66kV 160MVA TX-I&II	86	13:01	15:12	
2	220kV SARITA VIHAR CKT	SUPPLY FAILED	13:01	15:11	
3	220kV MAHARANIBAGH CKT	SUPPLY FAILED	13:01	20:33	
4	220kV PARKSTREET CKT-I&II	MADE OFF	13:01	15:37	
5	220kV IP CKT-I&II	MADE OFF	13:01	15:20	220kV BUS COUPLER CLOSED AT 15:10HRS. AND SUPPLY EXTENDED TO IP

(26) 220kV DIAL 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	13:01	14:16	AIRPORT SUPPLY RESTORED
2	220kV MEHRAULI CKT-I&II	SUPPLY FAILED	13:01	14:16	
3	220/66kV 160MVA TX-II	TRIPPED ON OVERFLAUX, STG-1	14:45	16:14	

(27) 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 SOW CKT-I&II	SUPPLY FAILED	13:01	15:18	
2	220kV PATPARGANJ CKT-I&II	SUPPLY FAILED	13:01	15:18	
3	33kV KANTI NAGAR CKT-I&II	UNDER FREQUENCY RELAY OPERATION	13:01	16:51	18MW
4	33kV KAILASH NAGAR CKT-I&II		13:01	17:17	26MW
5	33kV GEETA COLONY CKT-I		13:01	15:58	8MW
6	33kV GEETA COLONY CKT-II		13:01	16:51	17MW
7	33kV SHAKARPUR CKT-I		13:01	16:48	
8	220kV PATPARGANJ CKT-II	E/F, DIST. PROT. ZONE-2, DIST. 4.383KM	17:08	21:22	R-Φ WAVE TRAP JUMPER SNAPPED AT PPG YARD

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	15:58	67	*0.198*
15:58	16:48	59	*0.049*
16:48	16:51	16	*0.001*
16:51	17:10	51	*0.016*
17:10	17:17	67	*0.008*

(28) 220kV Ridge Valley 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 NARAINA CKT	SUPPLY FAILED	13:01	14:36	RAILWAY SUPPLY RESTORED

(29) 220kV IP 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 PATPARGANJ CKT-I&II	SUPPLY FAILED	13:01	15:21	
2	220kV PRAGATI CKT-I&II	SUPPLY FAILED	13:01	15:21	
3	220kV RPH CKT-I&II	SUPPLY FAILED	13:01	15:21	
4	33kV IG STADIUM – (BAY-29 &33), KAMLA MARKET (BAY-30)	SUPPLY FAILED	13:01	15:50	
5	33kV NIRMAN BHAWAN-(BAY-2& 16), ELECTRIC LANE (BAY-4 & 10), TILAK MARG (BAY-6), CP-(BAY-28 & 38)	SUPPLY FAILED	13:01	15:55	
6	33kV KILOKRI-(BAY-1,25&37), LAJ PAT NAGAR(BAY-5), EXHIBITION (BAY-7&9), NIZAMUDDIN(BAY-13), DELHI GATE (BAY-17), GB PANT (BAY-19), DEFENCE COLONY (BAY-24)	SUPPLY FAILED	13:01	16:00	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	15:50	105	*0.296*
15:50	15:55	94	*0.008*
15:55	16:00	36	*0.003*

(30) 220kV 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-I&II	SUPPLY FAILED	13:01	15:17	
2	33kV JAMA MASJID (BAY-5 &6)	UNDER FREQUENCY RELAY OPERATION	13:01	16:10	NO LOAD
	33kV GB PANT (BAY-13), TOWN HALL (BAY-18), LAHORI GATE (BAY-2)		13:01	17:35	29MW

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	16:10	85	*0.268*
16:10	17:35	56	*0.079*

(31) 220kV Pappankalan-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	220kV BAMNAULI CKT-I&II	SUPPLY FAILED	13:01	14:14	
2	66kV G-15 CKT-I & II		13:01	14:25	
3	66kV G-5 MATIALA CKT		13:01	14:25	ON
4	66kV DMRC CKT-I&II		13:01	14:14	
5	11kV LOAD		13:01	14:25	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	14:14	61	*0.074*
14:14	14:25	53	*0.010*

(32) 220kV Parkstreet 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 PRAGATI CKT-I & II	SUPPLY FAILED	13:01	15:37	
2	33kV PRASAD NAGAR	UNDER FREQUENCY RELAY OPERATION	13:01	18:16	20MW
3	33kV SHANKAR ROAD		13:01	18:16	10MW
4	33kV FAIZ ROAD CKT-I&II		13:01	15:48	21MW
5	33kV MOTIA KHAN CKT-II		13:01	15:59	6MW
6	66kV SHASTRI PARK CKT-I		13:01	18:12	30MW
7	66kV SHASTRI PARK CKT-II		13:01	19:34	23MW
8	66kV B D MARG I&II, STATE GUEST HOUSE, SCHOOL LANE, DAMEPL, DMRC	MADE OFF	13:01	15:50	
9	33kV HANUMAN ROAD, NIRMAN BHAWAN, BAIRD ROAD I & II, MOTIA KHAN-I	MADE OFF	13:01	15:46	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	15:48	195	*0.543*
15:48	15:50	123	*0.004*
15:50	15:59	103	*0.015*
15:59	18:12	73	*0.162*
18:12	18:16	43	*0.003*
18:16	19:34	23	*0.030*

(33) 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&II	SUPPLY FAILED	13:01	15:52	
2	220kV SUBZI MANDI CKT-I&II		13:01	15:58	
3	66kV JAHANGIR PURI CKT-I&II		13:01	17:07	
4	33kV WAZIRABAD CKT-I&II		13:01	15:54	
5	33kV INDRA VIHAR CKT-I&II, DIFR		13:01	17:17	
6	33kV CIVIL LINES CKT		13:01	16:25	
7	33kV AZAD PURCKT-I		13:01	20:42	
8	33kV AZAD PURCKT-II		13:01	17:27	UNDER B/D
9	11kV LOAD		13:01	17:27	

Load affected during the trippings

Time of tripping	Time of restoration	Load affected in MW	MUs
13:01	15:54	101	*0.291*
15:54	16:25	92	*0.048*
16:25	17:07	58	*0.041*
17:07	17:17	27	*0.005*
17:17	17:27	7	*0.001*

TOTAL LOAD LOSS IN MUs = 11.234

TOTAL GENERATION LOSS IN MUs = 5.507

Load relief through Under Frequency Relay operation

Name of S/stn	Load in MW
Bamnauli	212
Pappankalan-I	166
Wazirabad	85
Sarita Vihar	56
Shalimarbagh	70
Patparganj	96
Kashmeregate	60
Geeta Colony	69
RPH	29
Parkstreet	110
TOTAL	**953**

RESTORATION OF IMPORTANT SERVICES

DMRC

Sl. No.	Feeding Source	Time of tripping	Time of restoration	Remarks
1	220kV Pappankalan- I	13:01	14:14	Noida City Center-Dwarka : Line-3 Yamuna Bank-Vaishali : Line-4 Mundka-Inderlok-Kirti Nagar : Line-5
2	400kV Mundka	13:01	14:49	Mundka-Inderlok-Kirti Nagar : Line-5
3	220kV Mehrauli	13:01	14:20	Jahangirpuri-Huda City Center : Line-2
4	220kV Kanjhawala	13:01	15:58	Mundka-Inderlok-Kirti Nagar : Line-5
5	220kV Rohini	13:01	14:48	Rithala – Dilshad Garden : Line-1 Mundka-Inderlok-Kirti Nagar : Line-5
6	220kV Sarita Vihar	13:10	14:38	Central Sectt-Badarpur : Line-6
7	220kV Shalimarbagh	13:01	14:48	Jahangirpuri-Huda City Center : Line-2
8	220kV Kashmeregate	13:01	15:07	Rithala – Dilshad Garden : Line-1
9	220kV Pappankalan-2	13:01	14:14	Noida City Center-Dwarka : Line-3 Yamuna Bank-Vaishali : Line-4 Mundka-Inderlok-Kirti Nagar : Line-5
10	220kV Parkstreet	13:01	15:50	Central Sectt-Badarpur : Line-6
11	GT	13:01	13:17	Jahangirpuri-Huda City Center : Line-2 Yamuna Bank-Vaishali : Line-4

AIRPORT

Sl. No.	Feeding Source	Time of tripping	Time of restoration	Remarks
1	220kV DIAL	13:01	14:16	After Getting Supply from 400kV Bamnauli

Water Works

Sl. No.	Feeding Source	Time of tripping	Time of restoration	Remarks
1	220kV Wazirabad	13:01	15:07	Sonia Vihar Water Treatment plant
2		13:01	15:21	Bhagirath Water Treatment plant
3	220kV Shalimarbagh	13:01	15:20	Hiaderpur Water Treatment plant
4	220kV Patparganj	13:01	15:50	Rainywell Water Treatment plant
5	220kV Gopalpur	13:01	15:54	Wazirabad Water Treatment plant
6		13:01	16:25	Chandrawal Water Treatment plant
7	400kV Mundka	13:01	15:58	Nanagloi Water Works

Indian Railways

Sl. No.	Feeding Source	Time of tripping	Time of restoration	Remarks
1	220kV Narela	13:01	14:58	After Getting Supply from 400kV Bawana
2	220kV DSIDC Bawana	13:01	14:58	After Getting Supply from 400kV Bawana
3	220kV Ridge Valley	13:01	14:36	After Getting Supply from 400kV Bamnauli

AIIMS SUPPLY RESTORED AT 14:56 HRS AFTER GETTING SUPPLY FROM BAMNAULI.

GENERATION LOSS

Station name	Unit	Generation in MW	Time of tripping	Time of restoration	Remarks
Pragati	1	99	13:01	15:43	FSNL
	2	99	13:01	15:40	TURBINE OVER SPEED PROT.
	STG	107	13:01	20:58	
Gas Turbine	1	30	13:01	13:11	FSNL
	2	27	13:09	14:45	
	3	28	13:01	14:17	FSNL
	5	29	13:01	13:10	
	6	30	13:09	14:14	
	STG1	23	13:01	16:15	
	STG2	11	13:01	16:46	
	STG3	22	13:01	16:22	
RPH	1	NIL			UNDER SHUTDOWN
	2	55	13:01	17:20	
BTPS	1	75	13:05	16:48	
	2	80	13:01	17:05	
	3	80	13:05	16:18	
	4	160	13:01	17:25	
	5	180	13:07	18:01	
BAWANA CCGT	1	151	13:02	16:05	
	STG1	82	13:02	17:25	
RITHALA	2	19	13:23	21:23	
	STG		13:01	21:25	

19.5 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH AUGUST – 2012

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.08.12	11.49	400KV BAWANA – BAHADURGARH CKT.	01.08.12	14.34	CB-552 OF THE CKT. TRIPPED ON 186A&B, 30CH, POLE DISCREPANCY
02	02.08.12	17.48	400KV CB-41652 AT MUNDKA	02.08.12	18.52	CB-41652 CONTROLLING ICT-IV TRIPPED ON BUS BAR PROTECTION CONTROL RELAY.
03	02.08.12	18.01	400KV BAWANA – BAHADURGARH CKT.	09.08.12	16.30	CB-552 OF THE CKT. TRIPPED ON 186A&B, 30CH-2, POLE DISCREPANCY, 96Y
04	03.08.12	04.33	33/11KV 16MVA PR. TR.-I AT SUBZI MANDI	03.08.12	06.52	TR. TRIPPED ON DIFFERENTIAL ALONG WITH ITS 11KV I/C WHICH TRIPPED WITHOUT INDICATION.
05	03.08.12	15.37	400KV BAWANA – BAHADURGARH CKT.	03.08.12	15.40	CB-652 OF THE CKT. TRIPPED WHILE TESTING AT BAWANA END ONLY. CB-552 WAS ALREADY ON SHUT-DOWN.
06	04.08.12	14.46	220KV MANDOLA – WAZIRABAD CKT-I	04.08.12	17.20	CKT. TRIPPED DIST PROT `Y&B' PHASE ZONE-I AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT WAZIRABAD
07	05.08.12	07.57	220/33KV 100MVA PR. TR-II AT SUBZI MANDI	05.08.12	15.18	TR. TRIPPED ON 87 ALONG WITH ITS 33KV I/C-II WHICH TRIPPEDO N 95ABC, 86
08	06.08.12	10.58	220/66KV 100MVA PR. TR.-I AT KANJHAWALA	06.08.12	13.42	TR. TRIPPED ON PRV
09	07.08.12	20.12	220/33KV 100MVA PR. TR.-IV AT OKHLA	07.08.12	20.36	TR. TRIPPED ON 86, ALONG WITH 33KV I/C-III & IV. 33KV I/C-III TRIPPED ON 86, 51C AND 33KV I/C-IV TRIPPED ON 86. 33KV I/C-III & IV CHARGED AT 20.32HRS. AND 20.36HRS RESPECTIVELY.
10	11.08.12	14.07	220K BTPS – NOIDA – GAZIPUR CKT.	11.08.12	14.18	CKT. TRIPPED ON DIST PROT ZONE-III AT GAZIPUR. NO TRIPPING AT NOIDA AND BTPS.
11	11.08.12	14.10	220/66KV 100MVA PR.TR.-I & II AT DSIDC	11.08.12	15.29	TR.-I & II TRIPPED ON 86 ALONG WITH 66KV I/C-I & II. 66KV I/C-I TRIPPED ON O/C, E/F, LBB PROTECTION AND 66KV I/C-II TRIPPED WITHOUT INDICATION. 66KV I/C-I & II CHARGED AT 14.38HRS. AND 15.29HRS. RESPECTIVELY.
12	13.08.12	19.02	220KV MEHRAULI – DIAL CKT-I & II	14.08.12	08.24	THE FOLLOWOING TRIPPINGS OCCURRED : AT MEHRAULI 220KV DIAL CKT-I : NO TRIPPING 220KV DIAL CKT-II : 186, DIST PROT `A' PHASE, ZONE-I AT DIAL 220KV MEHRAULI CKT-I : DIST PROT `R' PHASE ZONE-I 220KV MEHRAULI CKT-II : DIST PROT `R' PHASE ZONE-I CKT-I CHARGED AT 19.50HRS. AND CKT-II COULD BE CHARGED AT 08.24HRS. ON 14.08.2012.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
13	14.08.12	04.28	220/33KV 100MVA PR. TR.-III AT SUBZIMANDI	14.08.12	08.40	TR. TRIPPED ON 87X, 86 ALONG WITH 33KV I/C-III WHICH TRIPPED ON 67RLV, LV REF.
14	14.08.12	11.30	220/33KV 100MVA PR TR .-III AT PATPAR GANJ	14.08.12	12.30	TR. TRIPPED ON 64RLV 86.
15	14.08.12	17.00	220KV MAHARANI BAGH – MASJID MOTH CKT-I	14.08.12	17.15	CKT TRIPPED ON A/C PROTECTION DIVISION
16	15.08.12	0725	220KV MANDOLA – WAZIRABAD CKT-I	15.08.12	10.13	CKT. TRIPPED ON DIST PROT `B&C' PH. ZONE-I AT MANDOLA AND ON DIST PROT RYB' PH. ZONE-I AT WAZIRABAD.
17	15.08.12	10.48	220KV BAWANA – ROHINI CKT-II	15.08.12	11.11	CKT. TRIPPED ON DIST PROT `A&B' PHASE AT BAWANA. NO TRIPPING AT ROHINI.
18	15.08.12	13.15	400KV MUNDKA – JHAJJAR CKT-II	15.08.12	14.54	CKT. TRIPPED ON DIST PROT `Y' PHASE ZONE-I, 86A&B AT MUNDKA.
19	15.08.12	13.24	400KV MUNDK A– BAWANA CKT-I	15.08.12	14.06	CKT. TRIPPED ON DIST PROT `Y' PHASE ZONE-I, 186A&B AT MUNDKA AND ON DIST PROT `A&B' PHASE ZONE-I AT BAWANA.
20	15.08.12	13.24	400KV MANDOLA – BAWAA CKT-I	15.08.12	13.43	CKT. TRIPPED ON DIST PROT `R&B' PHASE ZONE-III AT MANDOLA. NO TRIPPING AT BAWANA.
21	15.08.12	16.03	220KV MAHARANI BAGH – LODHI ROAD CKT-II	15.08.12	16.38	CKT. TRIPPED ON FAULT LOOP L2-L3 AT MAHARANI BAGH. NO TRIPPING AT LODHI ROAD
22	15.08.12	17.38	220KV MAHARANI BAGH – LODHI ROAD CKT-II	15.08.12	17.49	CKT. TRIPPED ON FAULT LOOP L1-L3 AT MAHARANI BAGH. NO TRIPPING AT LODHI ROAD
23	16.08.12	16.40	220KV MAHARANI BAGH – ELECTRIC LANE CKT-II	17.08.12	12.08	CKT. TRIPPED ON 186A&B AT MAHARANI BAGH.
24	16.08.12	22.52	66/11KV 20MVA PR. TR.-I AT KANJHAWALA	17.08.12	15.23	TR. TRIPPED ON 87ABC, 64LV REF, 86 ALONG WITH ITS 11KV I/C-II WHICH TRIPPED ON O/C `B' PHASE E/F
25	17.08.12	07.40	220KV PATPARGANJ – IP CKT-I	17.08.12	11.12	CKT. TRIPPED ON 86, 186. DIRECTIONAL E/F AT IP AND ON 186, 186X, ACTIVE GROUP-I, DIST PROT `ABC' PHASE ZONE-III AT PATPARGANJ. 220KV BUS COUPLER TRIPPED ON E/F AT IP
26	17.08.12	07.36	220KV IP – PRAGATI CKT-I	17.08.12	08.10	CKT. TRIPPED ON 86, GROUP-I, DIST PROT `ABC' PHASE AT PRAGATI.
27	18.08.12	00.25	220KV BAMNAULI – NAJAFGARH CKT-I & II	18.08.12	19.00	BOTH CKTS TRIPPED ON 186 AT NAJAFGARH.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
28	18.08.12	04.55	220KV IP – PATPARGANJ CKT-I	18.08.12	05.00	CKT. TRIPPED ON DIRECTIONAL E/F, 186 AT IP AND ON E/F AT PATPARGANJ
29	18.08.12	04.55	220KV IP – PRAGATI CKT-I & II	18.08.12	11.34	THE FOLLOWOING TRIPPINGS OCCURRED : AT IP 220KV PRAGATI CKT-I : DID NOT TRIP 220KV PRAGATI CKT-II: DIST PROT `ABC' PHASE ZONE-II, 86 AT PRAGATI 220KV IP CKT-I : DIST PROT `X&Y' PHASE ZONE-III 220KV IP CKT-II : NO TRIPPING
30	18.08.12	14.42	220KV BAWANA – DSIDC CKT-I	18.08.12	18.43	CKT. TRIPPED ON AUX RELAY, 21XR-I, 21XR-2, B-II AUX RELAY AT BAWANA. NO TRIPPING AT DSIDC. `Y' PHASE LA OF 220KV DSIDC CKT-I DAMAGED AT BAWANA.
31	18.08.12	14.42	400/220KV 315MVA ICT-V & VI AT BAWANA	18.08.12	15.57	BOTH ICTS TRIPPED ON 86, E/F ALONG WITH 220KV I/C-V & VI. BOTH I/CS TRIPPED ON DIRECT TRIP, 86
32	19.08.12	11.18	220KV MANDOLA – WAZIRABAD CKT-I	19.08.12	15.04	CKT. TRIPPED ON DIST PROT `R' PHASE ZONE-I AT MANDOLA AND ON DIST PROT `R' PHASE ZONE-I AT WAZIRABAD. CONDUCTOR BETWEEN TOWER NO. 37-38 FOUND SNAPPED.
33	19.08.12	17.28	220KV PRAGATI – SARITA VIHAR CKT.	19.08.12	18.12	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-I, 186A&B AT SARITA VIHAR AND ON DIST PROT `ABC' PHASE ZONE-II, 186A&B, 86X AT PRAGATI.
34	19.08.12	18.47	220KV GOPALPUR – SUBZI MANDI CKT-II	19.08.12	20.50	CKT. TRIPPED ON DIST PROT `R&B' PHASE ZONE-II AT GOPALPUR. KITE THREAD FOUND ON 220KV GOPALPUR CKT-II AT SUBZI MANDI.
35	20.08.12	13.04	220KV IP – RPH CKT-II	20.08.12	17.05	CKT. TRIPPED ON 86, 186X, 195AC, 195BC ZONE-I AT IP AND ON DIST PROT ZONE-III AT RPH. `B' PHASE COMMON JUMPER FOUND SPARKING AT IP STATION.
36	20.08.12	13.00	220KV BTPS – OKHLA CKT-I	20.08.12	14.50	CKT. TRIPPED ON 86 AT BTPS. NO TRIPPING AT OKHLA CKT TRIED TO CLOSE AT 14.20HRS BUT AGAIN TRIPPED ON POLE DISCREPANCY.
37	21.08.12	01.49	66/11KV 20MVA PR. TR.-III AT WAZIRABAD	21.08.12	12.10	TR. TRIPPED ON E/F ALONG WITH ITS 11KV I/C-II WHICH ALSO TRIPPED ON E/F.
38	21.08.12	22.25	400KV BAWANA – BAHADURGARH CKT.	23.08.12	19.49	400KV CB-552 OF THE CKT. TRIPPED ON POLE DISCREPANCY, 186 AT BAWANA.
39	23.08.12	17.10	400KV BAWANA – BAHADURGARH CKT.	23.08.12	17.18	CB-652 OF THE CKT. TRIPPED ON CB AUTO RECLOSE, 2AA TIMER AT BAWANA. NO TRIPPING AT BAHADURGARH.
40	24.08.12	11.38	220/33KV 100MVA PR. TR.-I AT PARK STREET	24.08.12	13.13	TR. TRIPPED ON 30D, 86B ALONG WITH ITS 33KV I/C-I WHICH TRIPPED WITHOUT INDICATION.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
41	25.08.12	14.51	400KV BAWANA – HISSAR CKT.	26.08.12	18.17	CB-852 OF THE CKT. TRIPPED ON 2/AA AT BAWANA.
42	27.08.12	18.08	220KV PATPARGANJ – GEETA COLONY CKT-I	28.08.12	09.26	CKT. TRIPPED ON DIST PROT `BC' PHASE, ACTIVE GROUP-I AT GEETA COLONY AND ON 186, ABC AT PATPARGANJ.
43	28.08.12	10.56	220/33KV 100MVA PR. TR-II AT GEETA COLONY	28.08.12	13.14	TR. TRIPPED ON SPR, 86, 30EG
44	28.08.12	13.06	220/33KV 100MVA PR. TR.-IV AT PATPARGANJ	28.08.12	15.45	TR. TRIPPED ON REF
45	29.08.12	06.24	400KV MUNDKA – JHAJJAR CKT-I	29.08.12	06.51	BOTH CB OF THE CKT. TRIPPEDON DISTANCE PROTECTION, 21, 86 AT MUNDKA. NO TRIPPING AT JHAJJAR.
46	29.08.12	13.35	220/66KV 100MVA PR. TR.-IV AT PAPPANKALAN-I	29.08.12	17.05	TR. TRIPPED ON 195ABC, 295ABC, FACIA TRIP CKT FAULTY.
47	29.08.12	18.09	220/66KV 100MVA PR. TR.-I & II AT VASANT KUNJ	29.08.12	23.54	BOTH TRANSFORMERS TRIPPED ON 96. 220KV BBUS BAR PROTECTION OPERATED ON 220KV BUS.-I.
48	29.08.12	20.34	220/66KV 160MVA PR. TR. AT VASANT KUNJ	29.08.12	23.04	TR. TRIPPED ON INTER TRIPPING ALONG WITH 66KV I/C-III WHICH ALSO TRIPPED ON INTER TRIPPING.
49	30.08.12	12.56	400KV MANDOLA – BAWANA CKT-I	30.08.12	13.28	CB-1652 OF THE CKT. TRIPPED ON 186A&B AT BAWANA END ONLY
50	31.08.12	04.20	220KV SARITA VIHAR – MAHARANI BAGH CKT.	31.08.12	09.28	CKT TRIPPEDON 186A&B, AUTO RECLOSE, BUS BAR PROTECTION AT SARITA VIHAR
51	31.08.12	04.20	220KV SARITA VIHAR – PRAGATI CKT.	31.08.12	06.10	CKT TRIPPEDON 186A&B, AUTO RECLOSE, BUS BAR PROTECTION AT SARITA VIHAR. NO TRIPPING AT PRAGATI

19.6 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH SEPTEMBER -2012

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.09.12	10.51	400KV BAWANA – BAHADURGARH CKT.	01.09.12	11.24	BOTH CB TRIPPED ON 2/AA, CB TROUBLE AT BAWANA.
02	01.09.12	12.04	220KV SARITA VIHAR – MAHARANI BAGH CKT	01.09.12	12.25	CKT. TRIPPED ON 186A&B, AUTO RECLOSE LOCK OUT AT SARITA VIHAR AND ON DIST PROT AT MAHARANI BAGH
03	01.09.12	12.31	220KV BAWANA – SHALIMAR BAGH CKT-II	01.09.12	19.26	CKT. TRIPPED ON AUTO RECLOSE LOCK OUT, 186A&B AT BAWANA AND ON DIST PROT `B' PH, 186A&B AT SHALIMAR BAGH. `Y' PHASE LA DAMAGED AT SHALIMAR BAGH.
04	01.09.12	12.49	33/11KV 16MVA PR. TR.-I AT GOPALPUR	01.09.12	13.04	TR. TRIPPED ON O/C
05	03.09.12	14.55	400KV BAWANA – BAHADURGARH CKT.	03.09.12	15.21	BOTH CB TRIPPED ON 186, TIE CB AUTO TRIP, AUTO RECLOSE LOCK OUT, TIMER 2/AA AT BAWANA.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
06	03.09.12	15.31	400KV BAWANA – BAHADURGARH CKT.	04.09.12	17.21	CB-552 OF THE CKT.TRIPPED ON POLE DISCREPANCY, 186AB, TRIP CKT SUPERVISION, 1952A, 1952B, 195CC AT BAWANA.
07	05.09.12	08.24	220KV WAZIRABAD – GEETA COLONY CKT-I	05.09.12	08.53	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT WAZIRABAD AND ON ACTIVE GROUP-I, DIST PROT `ABC' PHASE ZONE-I, 27RYB, 30A, 86 AT GEETA COLONY
08	05.09.12	11.03	220KV BTPS – NOIDA – GAZIPUR CKT.	05.09.12	11.34	SUPPLY FAILED FROM BTPS. NO TRIPPING AT GAZIPUR.
09	05.09.12	13.16	220/33KV 100MVA PR. TR.-II AT PARK STREET	05.09.12	16.48	TR. TRIPPED ALONG WITH 33KV I/C-II ON 86, 51N, E/F
10	06.09.12	15.46	220/33KV 100MVA PR. TR.-II AT IP	06.09.12	16.20	TR. TRIPPED ON E/F. EARTH LINK FOUND BROKEN.
11	08.09.12	08.21	400KV MUNDKA – JHAJJAR CKT-II	08.09.12	09.55	NO TRIPPING AT MUNDKA. CKT. TRIPPED AT JHAJJAR. RELAY INDICATIONS ARE NOT AVAILABLE.
12	08.09.12	11.09	220KV SARITA VIHAR – MAHARANI BAGH CKT	08.09.12	14.13	CKT. TRIPPED ON DIST PROT `ABC' PHASE, AUTO RECLOSE LOCK OUT, 186X, 186A&B AT SARITA VIHAR
13	08.09.12	23.56	220KV MAHARANI BAGH – LODHI ROAD CKT-I & II	09.09.12	18.21	BOTH CKT. TRIPPED ON DIST PROT AT MAHARANI BAGH. NO TRIPPING AT LODHI ROAD. `B' PHASE CVT OF 220KV MAHARANI BAGH CKT-II. BURNT AT LODHI ROAD YARD. `B' PHASE JUMPER OF MAHARANI BAGH CKT-II BROKEN AT LODHI ROAD. CKT-I CHARGED AT 00.24HRS (09.09.2012) AND CKT-II CHARGED AT 18.21HRS ON 09.09.2012.
14	10.09.12	07.58	220KV MANDOLA – WAZIRABAD CKT-I	10.09.12	08.15	CKT. TRIPPED ON DIST PROT ZONE-I AT WAZIRABAD. NO TRIPPING AT MANDOLA.
15	12.09.12	11.06	400/315MVA ICT-V & VI AT BAWANA	12.09.12	13.06	CB-424 & 42652 OF 315MVA ICT-V & VI RESPECTIVELY TRIPPED ON 86A, 86B, O/C, E/F DM-II. TIE CB NO. 42552 ALSO TRIPPED ALONG WITH 220KV I/C-V & VI WHICH ALSO TRIPPED ON SAME INDICATION.
16	12.09.12	11.06	220KV BAWANA – DSIDC CKT-II	12.09.12	13.34	CKT. TRIPPED ON AUTO RECLOSE LOCK OUT, 21XRI, 21XRBI, 21XYI, NUMERICALDIST.RELAY PROT, 21, CG-I, ZONE-I, AUX RELAY 2.30ABC, TRIP AUX RELAY AT BAWANA. NO TRIPPING AT DSIDC.
17	13.09.12	10.48	220KV BAMNAULI – DISL CKT-I	13.09.12	11.28	CKT. TRIPPED ON 186A, 186B, DIFFERENTIAL TRIPPED `R' PHASE AT BAMNAULI AND ON DIST PROT ZONE-I AT DIAL.
18	13.09.12	11.40	220KV BAMNAULI – DIAL CKT-I & II	13.09.12	18.10	BOTH CKT. TRIPPED ON DIST PROT `A' PHASE, 186A&B AT DIAL AND ON AUTO RECLOSE LOCK OUT AT BAMNAULI. `R' PHASE CONDUCTOR BROKEN IN YARD AT BAMNAULI.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
19	13.09.12	11.00	220/33KV 100MVA PR. TR.-I AT IP	13.09.12	11.35	TR. TRIPPED ON E/F, O/C AT IP
20	13.09.12	15.27	33/11KV 16MVA PR. TR.-II AT SUBZI MANDI	13.09.12	15.50	TR. TRIPPED ON O/C, E/F/
21	14.09.12	09.48	220KV BTPS – MEHRAULI CKT-II	14.09.12	17.53	CKT TRIPPED ON E/F, 186 AT BTPS AND ON DIST PROT `ABC' PHASE ZONE-I AT MEHRAULI.
22	15.09.12	14.06	220KV BAMNAULI – DIAL CKT-II	15.09.12	17.10	CKT. TRIPPED ON DIST PROT `C' PHASE, 186A&B AT BAMNAULI AND ON DIST PROT `B' PHASE ZONE-I AT DIAL.
23	17.09.12	15.45	220KV NARAINA – RIDGE VALLEY CKT	12.04.13	18.20	CKT TRIPPED ON TEF, TOC, TRIP COMMON FAIL AT NARAINA AND ON GENERAL TRIP, E/F, 86A, 86B, DIST PROT `B' PHASE ZONE-I AT RIDGE VALLEY. CABLE FAULTY.
24	17.09.12	15.45	220/66KV 160MVA PR.TR.-I & II AT RIDGE VALLEY	27.09.12	19.39	BOTH TRS. TRIPPED ON GENERAL TRIP, E/F ALONG WITH 66KV I/C-I & II. BOTH 66KV I/CS TRIPPED ON E/F. TRS BACK CHARGED THROUGH 66KV SUPPLY.
25	18.09.12	06.00	400/220KV 315MVA ICT-I AT BAWANA	18.09.12	07.14	CB-2152 TRIPPED ON CB LOCK OUT, 195BC, 30C, 30E, 30F
26	18.09.12	14.35	220KV NARELA – ROHTAK ROAD CKT-I	18.09.12	15.14	CKT. TRIPPED ON DIST PROT `ABC' PHASE AT NARELA.
27	18.09.12	15.10	220KV BAWANA – SHALIMAR BAGH CKT-II	18.09.12	15.41	CKT. TRIPPED ON DIST PROT `C' PHASE, 186A&B, CB AUTO TRIP AT BAWANA. NO TRIPPING AT SHALIMAR BAGH.
28	18.09.12	15.10	220/33KV 100MVA PR. TR-I AT SHALIMAR BAGH	18.09.12	15.25	TR. TRIPPED ON 51A, 86 ALLONG WITH 33KV I/C-I & II. 33KV I/C-I & II TRIPPED ON 51A, O/C, `R' PHASE, 51NX.
29	18.09.12	16.30	220/33KV 100MVA PR. TR.-I AT PATPARGANJ	18.09.12	17.20	TR. TRIPPED ON PRESSURE RELEASE VALVE PROBLEM.
30	19.09.12	14.05	220KV NAJAFGARH – KANJHAWALA CKT.	19.09.12	14.20	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT NAJAFGARH. NO TRIPPING AT KANJHAWALA.
31	22.09.12	04.00	220KV BAMNAULI – NAJAFGARH CKT-I	22.09.12	11.51	CKT.T RIPPED ON 186 AT NAJAFGARH. NO TRIPPING AT BAMNAULI.
32	22.09.12	10.53	220KV MEHRAULI – DIAL CKT-I & II	22.09.12	15.50	BOTH CKT. TRIPPED ON O/C, DIST PROT ZONE-I AT DIAL AND ON DIST PROT ZONE-I AT MEHRAULI. SPARK OBSERVED IN CT AT MEHRAULI.
33	23.09.12	13.02	220/33KV 100MVA PR. TR.-IV AT IP	23.09.12	21.01	TR. TRIPPED ON DIFFERENTIAL, CTR, 86, 164E/F. `R' PHASE PT BURNT
34	23.09.12	14.42	200/33KV 100MVA PR. TR.-I & II AT GEETA COLONY	23.09.12	20.58	TR-I TRIPPED ON 30E, 30G, 86 AND TR.-II TRIPPED ON 30E, 86 ALONG WITH 33KV I/C-II WHICH TRIPPED. TR-I & II CHARGED AT 17.28HRS AND …….HRS RESPECTIVELY
35	25.09.12	07.36	220KV BAMNAULI – NARAINA CKT-II	25.09.12	08.07	CKT. TRIPPED ON DIST PROT `R' PHASE, 186 AT BAMNAULI AND ON DIST PROT `RYB' PHASE, 86 AT NARAINA.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
36	25.09.12	14.12	400/220KV 315MVA ICT-II AT BAWANA	25.09.12	14.53	ICT-II TRIPPED ON 67A (O/C), 30F, 186A&B ALONG WITH 220KV I/C-II WHICH TRIPPED ON 30D.
37	25.09.12	14.12	220KV BAWANA – SHALIMAR BAGH CKT-I	25.09.12	15.05	CKT. TRIPPED ON 295C, TRIP CKT SUPERVISON, 186A&B AT BAWANA AND ON DIST PROT `R' PHASE, 186A&B AT SHALIMAR BAGH.
38	25.09.12	14.14	220KV BAWANA – NAJAFGARH CKT	25.09.12	15.33	CKT. TRIPPED ON DIST PROT ZONE-I, 186 AT NAJAFGRH
39	27.09.12	08.58	33/11KV 20MVA PR. TR. AT SHALIMAR BAGH	27.09.12	16.04	TR. TRIPPED ON DIFFERENTIAL
40	27.09.12	17.53	220/66KV 100MVA PR. TR.-I AT GAZIPUR	27.09.12	18.10	TR. TRIPPED WITHOUT INDICATION.
41	30.09.12	18.20	400KV BAMNAULI – JHATIKARA CKT-I	01.10.12	03.56	CKT. TRIPPED ON 295BC, 195BC, 186A&B

19.7 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH OCTOBER -2012

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	02.10.12	13.44	220KV BTPS – OKHLA CKT-I	02.10.12	14.40	CKT.T RIPPED DURING ONLINE TESTING BY PROTECTION DEPARTMENT.
02	02.10.12	13.44	220/66KV 100MVA PR. TR.-II AT OKHLA	02.10.12	14.40	TR. TRIPPED DUE TO AIR PRESSURE LOW.
03	04.10.12	05.02	220KV KANJHAWALA – NAJAFGARH CKT.	04.10.12	18.28	CKT. TRIPPED ON DIST PROT THREE PHASE ZONE-I AT NAJAFGARH. AND ON DIST PROT `RYB' PHASE AT KANJHAWALA. `R' PHASE BUS-I PT BLAST AT KANJHAWALA.
04	04.10.12	13.43	220KV PRAGATI – SARITA VIHAR CKT.	04.10.12	19.31	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-I AT SARITA VIHAR AND ON DIST PROT `C' PHASE ZONE-I AT PRAGATI.
05	05.10.12	13.49	400/220KV 315MVA ICT-II AT BAWANA	05.10.12	15.05	TR. TRIPPED ON 86A-I, 95A-I, 95B-I ALONG WITH 220KV I/C-II WHICH TRIPPED ON 30D
06	05.10.12	13.49	220KV BAWANA – SHALIMAR BAGH CKT-I	05.10.12	15.05	CKT. TRIPPED ON DIST PROT `A' PHAS, 186A&B AT BAWANA AND ON DIST PROT `R' PH. AT SHALIMAR BAGH
07	05.10.12	13.49	220KV BAWANA – NAJAFGARH CKT-I	05.10.12	14.08	CKT TRIPPED ON DIST PROT `A' PHASE ZONE-I, 186 AT NAJAFGARH.
08	09.10.12	12.10	220KV BAWANA – DSIDC CKT-I	09.10.12	12.52	CKT. TRIPPED ON DIST PROT `A' PHASE AT DSIDC AND ON DIST PROT `A' PHASE ZONE-I AT BAWANA.
09	09.10.12	12.10	220KV NARELA – DSIDC CKT-I	09.10.12	12.21	CKT. TRIPPED ON O/C `B' PHASE AT NARELA
10	14.10.12	12.05	220/66KV 100MVA PR. TR-I AT VASANT KUNJ	15.10.12	02.55	TR. TRIPPED ON 30DEF ALONG WITH 66KV I/C-I
11	14.10.12	17.01	400/220KV 315MVA ICT-IV AT BAWANA.	14.10.12	17.44	TR. TRIPPED ON 86A, 86B ALONG WITH 220KV I/C-IV WHICH TRIPPED 86A&B.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
12	14.10.12	19.36	220KV BTPS – NOIDA – GAZIPUR CKT.	22.10.12	11.58	CKT TRIPPED ON DIST PROT `B' PHASE, 86B, 186A, 186B AT BTPS. NO TRIPPING AT GAZIPUR.
13	15.10.12	06.40	220/33KV 100MVA PR. TR.-IV AT PATPARGANJ	15.10.12	18.23	TR. TRIPPED ON 86, 64RLV, 86.
14	15.10.12	13.33	220KV MANDOLA – NARELA CKT-II	15.10.12	15.00	CKT. TRIPPED ON DIST PROT `B' PHASE ZONE-II AT MANDOLA AND ON DIST PROT ZONE-I, 186 AT NARELA.
15	16.10.12	14.25	220/66KV 100MVA PR. TR-II AT OKHLA	10.05.13	12.32	TR. DAMAGED DUE TO FIRE.
16	17.10.12	16.44	220KV BAMNAULI – NAJAFGARH CKT-I & II	17.10.12	16.59	220KV BAMNAULI CKT-I & II TRIPPED ON DIST PROT `A' PHASE, 186A&B AT NAJAFGARH. NO TRIPPING AT BAMNAULI. 66KV `B' PHASE CT OF BODELLA-II CKT-II DAMAGED.
17	18.10.12	22.01	220KV MANDOLA – WAZIRABAD CKT-I	19.10.12	06.06	CKT. TRIPPED OF RXME18, DIST PROT `RYB' PHASE ZONE-I, II & III AT WAZIRABAD. NO TRIPPING AT MANDOLA.
18	18.10.12	22.01	66/11KV 20MVA PR. TR-III & IV AT WAZIRABAD	18.10.12	06.06	TR-III TRIPPED ON 86, DIRETIONAL O/C AND TR.-IV TRIPPED ON 86, O/C `AB' PHASE. TR-III &IV CHARGED AT 06.06HRS. AND 03.04HRS. ON 19.10.2012 RESPECTIVELY
19	21.10.12	20.15	220KV BTPS – NOIDA - GAZIPUR CKT.	22.10.12	11.58	CKT. TRIPPED ON 86A&B AT BTPS. NO TRIPPING AT GAZIPUR.
20	22.10.12	00.12	220KV BAWANA – ROHINI CKT-I	22.10.12	11.04	CKT. TRIPPED ON AUTO RECLOSE LOCK OUT, 186A&B AT BAWANA. NO TRIPPING AT ROHINI.
21	22.10.12	19.51	220KV PANIPAT – NARELA CKT-I	22.10.12	20.21	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT NARELA. NO TRIPPING AT PANIPAT.
22	23.10.12	11.25	220KV BAMNAULI – NAREINA CKT-I	23.10.12	15.25	CKT. TRIPPED ON DIST PROT `A' PHASE AT NARAINA. NO TRIPPING AT BAMNAULI. ``B' PHASE LA OF 33KV INDER PURI CKT-I BLASTED AT NARAINA. 220KV BAMNAULI CKT-I CHARGED AT 11.44HRS. BUT AGAIN TRIPPED ON DIST PROT `B' PHASE.
23	23.10.12	13.05	220KV MANDOLA – WAZIRABAD CKT-I	23.10.12	16.01	CKT. TRIPPED ON SOFT AT MANDOLA ALONG WITH 400/220 KV ICT-I & II AT MANDOLA.. NO TRIPPING AT WAZIRABAD.
24	23.10.12	13.05	220KV MANDOLA – NARELA CKT-II	24.10.12	15.35	`B' PHASE LA OF THE CKT. BLASTED AT MANDOLA. NO TRIPPING AT NARELA.
25	23.10.12	14.33	220KV SARITA VIHAR - MAHARANI BAGH CKT.	23.10.13	16.00	CKT. TRIPPED ON DIST PROT `ABC' PHASE ZONE-I AT SARITA VIHAR AND ON DIST PROT AT MAHARANI BAGH.
26	24.10.12	08.25	66/33KV 30MVA PR. TR.-I AT PARK STREET	24.10.13	13.30	TR. TRIPPED ON BUCHLOZ, OLTC, LBB PROTECTION, 86
27	26.10.12	03.10	33/11KV 20MVA PR. TR. AT SHALIMAR BAGH	26.10.12	10.55	TR. TRIPPED ALONG WITH 11KV I/-I WHICH TRIPPED ON `R&B' PHASE O/C.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
28	27.10.12	10.16	220KV IP – PRAGATI CKT-I			DETAILED REPORT ENCLOSED.
29	28.10.12	15.04	220KV BAWANA – DSIDC CKT-I	28.10.12	17.58	CKT. TRIPPED ON DIST PROT `AB' PHASE ZONE-I AT BAWANA AND ON DIST PROT ABC PHASE ZONE-I AT DSIDC.
30	28.10.12	15.04	220KV DSIDC – NARELA CKT-I	28.10.12	15.13	CKT. TRIPPED ON DIST PROT 186 AT NARELA.
31	28.10.12	17.48	400KV BAWANA – DIPALPUR CKT.	28.10.12	18.06	CKT. TRIPPED ON 86A GROUP, 186A&B ON BOTH CB AT BAWANA. NO TRIPPING AT DIPALPUR.
32	29.10.12	11.20	220KV MAHARANI BAGH – MASJID MOTH CKT-II	29.10.12	17.00	CKT. TRIPPED ON SOS RELAY, L1, L2, L3 RELAY AT MAHARANI BAGH. NO TRIPING AT MASJID MOTH.
33	31.10.12	12.40	220KV MANDOLA – GOPALPUR CKT-I & II	31.10.12	14.40	NO TRIPPING AT GOPALPUR. DETAIL OF MANDOLA END NOT AVAILABLE.
34	31.10.12	13.00	220/33KV 100MVA PR. TR.-I & II AT MASJID MOTH	31.10.12	13.28	BOTH TR. TRIPPED ON 86.
35	31.10.12	13.50	220KV MANDOLA – NARELA CKT-I & II	31.10.12	15.48	BOTH CKT. TRIPPED ON BACK UP PROTECTION AT MANDOLA. NO TRIPPING AT NARELA.

Subject : Report on trippings occurred at 220kV Pragati S/Stn and IP S/Stn. on 27.10.20

a) Tripping at 10.17hrs.

Prior to the incident, the 220kV bus coupler at Pragati S/Stn. was in off position. The bus configuration at Pragati was as under:

Name of S/Stn	**Elements charged on 220kV Bus-I**	**Elements charged on 220kV Bus-I**
Pragati 220kV	220kV Maharani Bagh Ckt. 220kV Sarita Vihar Ckt. 220kV Park Street Ckt-I & II Pragati Unit-I	220kV IP Ckt-I & II 220/66kV 160MVA Tx-I & II Pragati Unit-II Pragati Unit-III (STG)

In order to facilitate the emergency shut-down of 220kV IP – Pragati Ckt-II for replacing `B' Phase Ckt breaker top clamp at IP S/stn, 220kV bus coupler at Pragati was closed at 10.16hrs. which hold OK. To avoid over-loading and to control flow on 220kV Maharani Bagh – Pragati Ckt, about 100MW load was reduced at 220kV Patparganj S/Stn.

220kV IP – Patparganj Ckt-I & II made off at Patparganj at 10.16hrs. to run the 220kV Patparganj – Geeta Colony – Wazirabad Cks. through Mandola side and 220kV IP – Pragati – Maharani Bagh through Maharani Bagh side.

At 10.17hrs, 220kV Bus coupler tripped at Pragati on 51CX (O/C), 86 (Master Relay) causing the islanding of the 220kV bus-II from rest of the Grid and tripping of generating units at GT (Unit # 3, 4 & STG-2) others units were not in service, Pragati Unit-II & III (STG) and RPH

units. Island couldn't survive due to vast difference in load and generation as detailed hereunder:-

Sub-Station	Connected Load in MW	Generation position prior to the incident in MW
I.P.	53	--
GT	35	82
RPH	57	109
Pragati	--	210 (Unit-II & III)
Total	**145**	**401**

220kV IP – Patparganj Ckt-II closed at Patparganj at 10.19hrs and bus-II at Pragati charged through 220KV Patparganj – IP – Pragati Ckt-II. The revival of generating units is as under:-

Name of the Station	**Unit no.**	**Time of tripping in Hrs.**	**Restoration time Hrs.**
Pragati	2	10.17	10.34
	3	10.17	11.22
GT	3	10.17	12.45
	4	10.17	11.42
	STG-2	10.17	12.26
RPH	1	10.17	12.20
	2	10.17	12.15

However, shut-down could not be availed due to tripping of generating units at RPH, GT and Pragati. Bus coupler tripping occurred due to lower setting of CTs at Pragati Grid.

B) Tripping at 14.03hrs.

As the shut-down of 220kV IP – Pragati Ckt-II was essential for replacing `B' Phase Ckt breaker top clamp, it was again tried to facilitate shut-down at 14.00hrs. 220kV Bus-coupler closed at Pragati at 14.00hrs. and 220kV IP – Patparganj Ckt-I & II made off at Patparganj to separate Mandola and Maharani Bagh supply. Pragati STG was supposed to be shifted on 220kV bus-I to reduce loading on 220kV IP – Pragati Ckt-I to arrange shut-down of 220kV IP – Pragati Ckt-II. But at 14.03hrs, 220kV bus coupler tripped on 51CX, 86 causing the islanding of 220kV bus-II at Pragati same as mentioned above.

Load generation balance prior to the incident was under:-

Sub-Station	Connected Load in MW	Generation position prior to the incident in MW
I.P.	42	--
GT	32	80
RPH	47	58
Pragati	--	205 (Unit-II & III)
Total	**121**	**343**

Again, 220kV IP – Patparganj Ckt-II closed at Patparganj at 14.04hrs and bus-II at Pragati charged through 220KV Patparganj – IP – Pragati Ckt-II. The revival of generating units are as under :-

Name of the Station	Unit no.	**Time of tripping in Hrs.**	**Restoration time Hrs.**
Pragati	2	14.03	14.22
	3(STG)	14.03	15.07
GT	3	14.03	14.45
	4	14.03	14.12
	STG-2	14.03	15.25
RPH	1	14.03	14.50
	2	14.03	14.58

The shut-down was again arranged looking into the nature of maintenance work required to be done. This time, Pragati STG changed over from Bus-II to Bus-I to reduce the flow of current through 220kV IP – Pragati Ckt-I.

C) **Tripping at 17.35 hrs :**

At 17.35 hrs. 220kV IP – Pragati Ckt-I tripped on 86A at IP. Ckt. did not trip at Pragati. 220/66kV 160MVA Tx-I & II tripped on 86 at Pragati. 220kV IP – Pragati Ckt-II was under emergency shut-down and PTW issued to Sh. Hari Gopal AM (T) (Maintenance) at 15.35hrs.at IP end. 220kV Bus-coupler was kept in open position at Pragati. This tripping led to islanding of 220kV Bus-II from rest of the Grid and collapsed.

Load generation balance prior to the incident was under :-

Sub-Station	Connected Load in MW	Generation position prior to the incident in MW
GT	33	82
Pragati	--	87 (Unit-II)
Total	**33**	**169**

At 17.39, 220kV IP –Pragati-I Ckt charged from IP Grid and 220kV Bus-II charged at Pragati. 160MA Tx-I & II Charged at 17.50hrs. at Pragati Grid.

Load affected during the time of tripping are as under:-

Time (Hrs)		Load in MW	Name of Feeder
From	To		
RPH			
10:18	10:27	5	BAY-13 GB PANT
10:18	10:27	6	BAY-12 IG STADIUM
10:18	10:27	3	BAY-18 TOWN HALL
10:18	10:28	12	BAY-5&6 JAMA MASJID
10:18	10:28	1	BAY-2 LAHORI GATE
10.18	10:34	12	BAY-1 MOTIA KHAN
14:03	14:11	4	BAY-18 TOWN HALL
14:03	14:11	3	BAY-13 GB PANT
14:03	14:24	10	BAY-1 MOTIA KHAN
IP			
10:18	10:27	10	BAY-30 KAMALA MARKET
10:18	10:27	1	BAY-29 IG STADIUM
10:18	10:20	2	BAY-42 CONNAUGHT PLACE
10:18	10:20	2	BAY-28 CONNAUGHT PLACE
10:18	10:20	0	AIIMS – KOLOKRI
10:18	10:20	1	BAY -4 ELECTRIC LANE
10:18	10:20	0	BAY-6 TILAK MARG
10:18	10:20	0	TILAK MARG- EXHB. GROUND –I
10:18	10:27	4	GT-1 VIDYUT BHAWAN NEW
GT Station			
10:18	10:38	2	G-2 VIDYUT BHAWAN NEW
10:18	10:37	8	G-2 SCHOOL LANE

Remedial measures:-

1 Protection system needs to be checked at Pragati Grid.

2 Establishment of computer simulation programs to focus on the operation of electrical power systems on real time basis.

3 Intrastate bottleneck needs to be removed in view of closure of RPH Generation Station i.e. LILO 220kV Pragati – Sarita Vihar Ckt. at Maharani Bagh or early commissioning of 220kV Maharani Bagh – Gazipur Ckt to be undertaken. The system strengthening of 220kV Wazirabad-Geeta colony-Patparganj-IP-Pragati–Sarita Vihar-BTPS link needs to taken on priority.

4 Better coordination among O&M Staff at Pragati and IP Grids and SLDC.

19.8 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH NOVEMBER – 2012

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	02.11.12	16.19	400KV BAWANA – BAHADURGARH CKT	02.11.12	16.30	CB-582 AND 682 OF THE CKT. TRIPPED ON 86 GRE, 186A&B AT BAWANA. NO TRIPPING AT BAHADURGARH.
02	02.11.12	19.10	66/11KV 20MVA PR. TR.-III AT DSIDC	03.11.12	18.10	TR. TRIPPED WHILE ENERGIZING.
03	03.11.12	11.03	220KV MANDOLA – GOPALPUR CKT-II	03.11.12	12.08	SUPPLY FAILED FROM MANDOLA DUE TO OPERATION OF SPECIAL PROTECTION SCHEME AT MANDOLA.
04	03.11.12	18.35	220/66KV 100MVA PR. TR.-I AT GAZIPUR	03.11.12	18.50	TR. TRIPPED ON TRIP CKT. FAULTY.
05	04.11.12	02.57	220KV DIAL – MEHRAULI CKT-II	04.11.12	03.15	CKT. TRIPPED ON REC, DR, PFR, RYB MAIN-II, RED MAIN-I TRIP, MAIN-I PROTECTION AT DIAL. NO TRIPPING AT MEHRAULI.
06	05.11.12	01.40	220/66KV 100MVA PR. TR.-I AT VASANT KUNJ	05.11.12	18.02	CKT. TRIPPED ON 30E (SUDDEN PRESSURE RELAY)
07	05.11.12	05.15	220/66KV 100MVA PR. TR.-I AT GAZIPUR	05.11.12	06.38	TR. TRIPPED ON TRIP CKT. FAULTY
08	07.11.12	22.31	400KV BAWANA – DIPALPUR CKT.	07.11.12	22.43	CB-1452 OF THE CKT. TRIPPED ON 86A, 85Y, RX-I, 186AB AT BAWANA. RELAY INDICATION AT DIPALPUR END ARE NOT AVAILABLE.
09	11.11.12	12.47	220KV BTPS – MEHRAULI CKT-I	11.11.12	16.35	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-I AT MEHRAULI AND ON E/F, O/C AT BTPS.
10	19.11.12	14.20	220KV BTPS – NOIDA – GAZIPUR CKT.	19.11.12	15.10	CKT. TRIPPED N 86ABC, 86AN AT BTPS AND ON DIST PROT ZONE-I AT GAZIPUR.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
11	23.11.12	04.31	220KV BTPS – OKHLA CKT-I	23.11.12	05.22	CKT. TRIPPED ON 30A (E/F), 30G, 186 AT BTPS AND ON 96F AT OKHLA
12	23.11.12	04.31	220/33KV 100MVA PR. TR-III & IV AND 220/33KV 20MVA PR. TR. AT OKHLA	23.11.12	05.30	TR-III TRIPPED ON 96C AND TR.-IV TRIPPED ON 96T. 33KV I/C-III & IV DID NOT TRIPPED. 33KV I/C-III & IV TRIPPED MANUALLY. 50MVA PR. TR. TRIPPED ON 95C, 64RHV, 87, 86 ALONG WITH ITS 33KV I/C WHGICH TRIPPED ON 86, 95. 100MVA PR. TR.-III & IV CHARGED AT 05.05HRS AND 05.15HRS RESPECTIVELY. 50MVA PR. TR. TRIED TO CHARGED BUT DID NOT HOLD. TR. FINALLY CHARGED AT 15.40HRS ON 30.11.2012.
13	24.11.12	13.40	220KV BTPS – OKHLA CKT-I	24.11.12	14.23	CKT. TRIPPED ON 96F AT OKHLA.
14	24.11.12	13.40	220/33KV 100MVA PR. TR-III & IV AT OKHLA	24.11.12	14.23	TR.-III TRIPPED ON 96E, 96 AUTO TRIP AND TR. –IV TRIPPED ON 96.
15	24.11.12	16.17	220KV MAHARANI BAGH – PRAGATI CKT.	25.11.12	11.45	CKT. TRIPPED ON DIST PROT ZONE-I, 86 AT PRAGATI. NO TRIPPING AT MAHARANI BAGH.
16	24.11.12	16.17	220KV PRAGATI – SARITA VIHAR CKT.	25.11.12	17.15	CKT. TRIPPED ON DIST PROT `ABC' PHASE, 186A&B AT SARITA VIHAR NO TRIPPING AT PRAGATI
17	26.11.12	15.16	400KV BAMNAULI – MUNDKA CKT-I	26.11.12	15.48	CKT. TRIPPED ON 86, A/R AT MUNDKA.
18	27.11.12	17.15	220KV BAMNAULI – DIAL CKT-II	27.11.12	19.48	CB-252 OF THE CKT. TRIPPED ON POLE DISCREPANCY AT BAMNAULI.
19	29.11.12	16.13	220KV BTPS – NOIDA – GAZIPUR CKT.	29.11.12	16.37	CKT.TRIPPED ON O/C, E/F AT BTPS. NO TRIPPING AT GAZIPUR.
20	29.11.12	20.55	220/33KV 100MVA PR. TR.-III AT GOPALPUR	31.11.12	00.30	TR. TRIPPED ON 30GEF, AUX TR. TROUBLE.
21	29.11.12	07.30	220/66KV 100MVA PR. TR.-I AT WAZIRABAD	29.11.12	18.28	TR. TRIPPED ON REF HV 86.
22	30.11.12	03.03	220/33KV 100MVA PR. TR.-I & II AT MASJID MOTH	30.11.12	03.35	BOTH TR. TRIPPED ON 86, 24, DIFFERENTIAL,O/C, E/F, 50, 51R.
23	30.11.12	03.07	220KV PRAGATI – SARITA VIHAR CKT.	30.11.12	03.15	SUPPLY FAILED FROM PRAGATI. NO TRIPPING AT SARITA VIHAR.
24	30.11.12	03.07	220/66KV 100MVA PR. TR.-II AT SARITA VIHAR	30.11.12	03.59	TR. TRIPPED ON OVER FLUX PROTECTION, 86 ALONG WITH ITS 66KV I/C-II WHICH TRIPPED ON 95C, 86
25	30.11.12	03.08	220KV MAHARANI BAGH – LODHI ROAD CKT-I & II	30.11.12	03.15	SUPPLY FAILED FROM MAHARANI BAGH. NO TRIPING AT LODHI ROAD.
26	30.11.12	03.08	220/33KV 100MVA PR. TR.-I AT LODHI ROAD	30.11.12	03.15	TR. TRIPPED ON OVER FLUX RELAY
27	30.11.12	03.07	220/66KV 100MVA PR. TR.-I AT PARK STREET	30.11.12	03.26	TR. TRIPPED ON OVERFLUX, 99TT, 86

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
28	30.11.12	03.07	220/33KV 100MVA PR. TR.-II AT PARK STREET	30.11.12	03.27	TR. TRIPPED ON O/C, 97TT, 86A
29	30.11.12	03.38	220/33KV 100MVA PR. TR.-II AT PARK STREET	30.11.12	04.10	TR. TRIPPED ON OVER FLUX, 99TT, 86A ALONG WITH ITS 33KV I/C-II WHICH TRIPPED ON E/F, 51N, 86
30	30.11.12	13.22	220KV BTPS – NOIDA – GAZIPUR CKT.	30.11.12	13.32	CKT. TRIPPED ON HEAVY DUTY RELAY, FUSE FAILURE AT GAZIPUR.

9.9 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH DECEMBER - 2012

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	01.12.12	05.45	66/11KV 20MVA PR. TR.-I AT PAPPANKALAN-I	01.12.12	16.28	TR. TRIPPED ON BUCHHLOZ.
02	02.12.12	09.05	66/11KV 20MVA PR. TR.-I AT GAZIPUR	02.12.12	12.10	TR. TRIPPED ON OSR, 86, 95
03	08.12.12	00.25	220KV PATPARGANJ – IP CKT-I	08.12.12	03.55	CKT. TRIPPED ON 186 AT IP. NO TRIPPING AT PATPARGANJ
04	11.12.12	14.15	220KV MANDOLA – WAZIRABAD CKT-I & II	11.12.12	14.53	BOTH CKT. TRIPPED ON DIST PROT `R' PHASE ZONE-I AT WAZIRABAD. NO TRIPPING AT MANDOLA. CKT-I CHARGED AT 14.37HRS. AND CKT-II CHARGED AT 14.45HRS.
05	11.12.12	14.15	220KV WAZIRABAD – GEETA COLONY CKT-II	11.12.12	14.40	CKT. TRIPPED ON DIST PROT `RB' PHASE ZONE-I AT WAZIRABAD. NO TRIPPING AT GEETA COLONY.
06	11.12.12	14.15	220/66KV 100MVA PR. TR.-II AT WAZIRABAD	11.12.12	14.47	TR. TRIPPED WITHOUT INDICATION ALONG WITH 66KV I/C-I, II & III. ALL 66KV I/C TRIPPED ON E/F.
07	13.12.12	11.50	220KV MANDOLA – GOPALPUR CKT-II	13.12.12	16.14	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-I AT MANDOLA AND ON DIST PROT `RYB' PHASE ZONE-I AT GOPALPUR.
08	14.12.12	04.28	220KV BAWANA – DSIDC CKT-II	14.12.12	06.10	CKT TRIPPED ON DIST PROT, 86 AT BAWANA. NO TRIPPING AT DSIDC. NO TRIPPING AT BAWANA.
09	14.12.12	04.28	220KV DSIDC – NARELA CKT-II	14.12.12	06.10	CKT. TRIPPED ON DIST PROT `A' PHASE, 86 AT DSIDC. NO TRIPPING AT NARELA.
10	14.12.12	05.53	400KV MUNDKA – JHAJJAR CKT-II	14.12.12	13.00	CB-41352 OF THE CKT. TRIPPED AT MUNDKA ON POLE DISCREPANCY.
11	15.12.12	11.48	220KV WAZIRABAD – GOPALPUR CKT-I	19.12.12	11.48	CKT. TRIPPED ON VT FUSE FAIL AT WAZIRABAD. NO TRIPPING AT GOPALPUR.
12	16.12.12	05.25	220KV SARITA VIHAR – MAHARANI BAGH CKT.	16.12.12	05.54	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-I AT SARITA VIHAR AND ON DIST PROT ZONE-III AT MAHARANI BAGH.
13	16.12.12	05.25	220KV MAHARANI BAGH – PRAGATI CKT.	16.12.12	05.54	`B' PHASE CT BLAST AT PRAGATI END.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
14	16.12.12	05.25	220KV PRAGATI – PARK STREET CKT-I & II	16.12.12	06.09	PARK STREET CKT-I TRIPPED ON 295CA, 96 AND CKT-II TRIPPED ON 96 AT PRAGATI.
15	16.12.12	05.25	220/66KV 160MVA PR. TR.-I & II AT PRAGATI	16.12.12	09.27	BOTH TRANSFORMERS TRIPPED ON OLTC BUCHHLOZ, 86. TR.-I CHARGED AT 09.27HRS. AND TR.-II CHARGED AT 08.06HRS.
16	16.12.12	05.25	220KV SARITA VIHAR – PRAGATI CKT.	16.12.12	05.53	CKT. TRIPPED ON DIST PROT `C' PHASE ZONE-I, 186B AT SARITA VIHAR AND ON 186, 986T AT PRAGATI.
17	16.12.12	15.25	220KV SARITA VIHAR – PRAGATI CKT.	16.12.12	15.33	CKT. TRIPPED ON 186, 96T AT PRAGATI. NO TRIPPING AT SARITA VIHAR.
18	16.12.12	15.25	220KV PRAGATI – PARKSTREET CKT.	16.12.12	15.52	CKT-I TRIPPED ON 295CA, 96 AND CKT-II TRIPPED ON 96 AT PRAGATI END ONLY. NO TRIPPING AT PARK STREET.
19	16.12.12	15.25	220KV PRAGATI – IP CKT-I	16.12.12	15.39	CKT. TRIPPED ON 96F AT PRAGATI. NO TRIPPING AT IP
20	16.12.12	15.25	220/66KV 160MVA PR. TR-I & II AT PRAGATI	16.12.12	15.45	TR-I TRIPPED ON 96ABC AND TR-II TRIPPED ON 96T.
21	16.12.12	17.44	220KV PRAGATI – SARITA VIHAR CKT	16.12.12	17.59	CKT. TRIPPED ON 96T AT PRAGATI. NO TRIPPING AT SARITA VIHAR.
22	16.12.12	17.44	220/66KV 160MVA PR. TR-I & II AT PRAGATI	16.12.12	18.14	TR-I TRIPPED ON 96BC AND TR-II TRIPPED ON 96T.
23	16.12.12	17.44	220KV PRAGATI – PARK STREET CKT-I & II	16.12.12	18.00	BOTH CKT TRIPPED ON 96 AT PRAGATI.
24	17.12.12	15.24	220/66KV 160MVA PR. TR.-I AT PRAGATI	17.12.12	17.27	TR. TRIPPED ON 87, 64HV REF
25	17.12.12	15.24	220KV WAZIRABAD – GEETA COLONY CKT-I	17.12.12	15.30	CKT. TRIPPED N DIST PROT ZONE-I AT WAZIRABAD. NO TRIPPING AT GEETA COLONY
26	18.12.12	11.12	66/11KV 20MVA PR. TR.-II AT PAPPANKALAN-II	18.12.12	13.33	TR. TRIPPED ON O/C `R' PHASE
27	22.12.12	07.00	220KV BTPS – NOIDA – GAZIPUR CKT.	22.12.12	08.08	CKT. TRIPPED ON `B' PHASE E/F AT GAZIPUR AND AUXILIARY RELAY TRIPPING AT GAZIPUR.
28	25.12.12	03.55	220KV BTPS – OKHLA CKT-I	25.12.12	04.34	CKT. TRIPPED ON OVER VOLTAGE GENERAL TRIP AT OKHLA. NO TRIPPING AT BTPS.
29	25.12.12	04.13	220KV PANIPAT – NARELA CKT.-III	25.12.12	04.26	CKT. TRIPPED WITHOUT INDICATION AT NARELA. NO TRIPPING AT PANIPAT
30	26.12.12	17.20	220KV WAZIRABAD – GOPALPUR CKT-I	26.12.12	19.29	CKT. TRIPPED WITHOUT INDICATION AT WAZIRABAD.

19.10 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH JANUARY -2013

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
01	02.01.13	08.48	220KV PANIPAT – NARELA CKT-I, II & III	02.01.13	10.30	SUPPLY FAILED FROM PANIPAT. NO TRIPPING AT NARELA.
02	03.01.13	04.30	220KV MANDOLA – WAZIRABAD CKT-IV	03.01.13	05.22	CKT. TRIPPED ON DIST PROT `R' PHASE ZONE-I AT MANDOLA AND ON DIST PROT ZONE-I, RXME18 AT WAZIRABAD.
03	04.01.13	12.10	220/66KV 100MVA PR. TR.-I AT PATPARGANJ	04.01.13	12.58	TR. TRIPPED ON O/C, 51AX, 86
04	04.01.13	09.35	220/33KV 50MVA PR. TR.-I AT OKHLA	04.01.13	13.44	TR. TRIPPED ON 95C, 86, 96-I, 96II ALONG WITH ITS 33KV I/C
05	07.01.13	04.37	33/11KV 16MVA PR. TR-I AT NARAINA	07.01.13	15.06	TR. TRIPPED ON 86, 87 (DIFFERENTIAL).
06	07.01.13	03.50	220/66KV 100MVA PR. TR.-III AT NAJAFGARH	07.01.13	18.02	TR. TRIPPED ON BUCHHOLZ, 86
07	07.01.13	06.55	66/11KV 20MVA PR. TR. AT PATPARGANJ	07.01.13	08.55	TR. TRIPPED ON 86, 30A, BUCHLOZ ALONG WITH ITS 11KV I/C WHICH TRIPPED ON INTER TRIPPING.
08	07.01.13	20.10	220/66KV 100MVA PR. TR.-I AT GAZIPUR	07.01.13	20.50	TR. TRIPPED WITHOUT INDICATION
09	08.01.13	16.09	400KV JHAJJAR – MUNDKA CKT-II	08.01.13	16.42	CKT. TRIPPED ON 86A, DIRECT TRIP, CHANNEL-I AT MUNDKA.
10	13.01.13	11.14	220/33KV 100MVA PR. TR.-IV AT OKHLA	13.01.13	14.22	TR. TRIPPED ON 86, MASTER CTR 86, 30A.
11	17.01.13	11.09	400KV BAWANA – DIPALPR CKT.	17.01.13	11.34	CKT. TRIPPED ON GROUP-A, 86A, CARRIER RELAY RX1, BS585Y, AUXILIARY RELAY 52X6 AT BAWANA.
12	17.01.13	23.11	400KV BAWANA – DIPALPUR CKT.	18.01.13	07.35	CKT. TRIPPED ON OVER VOLTAGE, DIRECT TRIP RECEIVED, AUTO TRIP AT BAWANA.
13	18.01.13	03.45	220/66KV 100MVA PR. TR.-II & III AT DSIDC	18.01.13	04.08	TR-II TRIPPED ON 86. AND TR-III TRIPPED ON O/C, E/F, 86 ALONG WITH 66KV I/C-II & III. 66KV I/C-II TRIPPED ON 96LBB AND 66KV I/C-III TRIPPED ON O/C, E/F, 86, 96. BOTH TR. CHARGED AT 04.08HRS.
14	18.01.13	12.27	220/33KV 100MVA PR. TR.-II AT GEETA COLONY	18.01.13	15.46	TR. TRIPPED ON 86, 30E, DIFFERENTIAL RYB, REF ALONG WITH ITS 33KV I/C-II. SPARKING OBSERVED ON `R' PHASE LA ON 33KV SIDE
15	18.01.13	17.43	220/33KV 100MVA PR. TR.-I AT IP	18.01.13	19.50	TR. TRIPPED ON E/F
16	19.01.13	17.03	220KV GOPALPUR – SUBZI MANDI CKT-I	19.01.13	18.20	CKT. TRIPPED ON DIST PROT `R' PHASE ZONE-I AT GOPALPUR AND ON 95ABC, 86 ABC-I AT SUBZI MANDI
17	19.01.13	17.03	220/33KV 100MVA PR. TR.-I AT SUBZI MANDI	19.01.13	18.10	TR. TRIPPED ON DIFFERENTIAL, E/F, 86
18	19.01.13	19.38	220KV MAHRANI BAGH – LODHI ROAD CKT-I	19.01.13	19.59	CKT. TRIPPED ON FL-I, II, IL-II AT MAHARANI BAGH. NO TRIPPING AT LODHI ROAD.

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
19	22.01.13	12.00	220KV MEHRAULI – VASANT KUNJ CKT-I	22.01.13	12.20	CKT. TRIPPED ON DIST PROT ZONE-A, 186A&B AT MEHRAULI. NO TRIPPING AT VASANT KUNJ.
20	23.01.13	03.06	400KV BAWANA – DIPALPUR CKT	23.01.13	03.19	CKT. TRIPPED ON 86, 85, RX 186 AT BAWANA.
21	25.01.13	15.23	220/33KV 100MVA PR. TR.-I AT IP	25.0.13	17.18	TR. TRIPPED ON SUDDEN PRESSE AND LOCK OUT.
22	28.01.13	16.49	400KV BAWANA – DIPALPUR CKT.	28.01.13	17.10	CKT. TRIPPED ON AUTO TRIP, 86B, 186A, 186A-2 AT BAWANA.
23	31.01.13	09.11	400KV MUNDKA – JHATIKARA CKT-II	31.01.13	09.45	CB-40352 TRIPPED ON DIR. TRIP, CHANNEL-I & II AT MUNDKA.
24	31.01.13	11.24	220/33KV 100MVA PR. TR.-IV AT OKHLA	31.01.13	13.40	TR. TRIPPED ON BUCHLOZ, 30A, CTR, 86 ALONG WITH 33KV I/C-IV WHICH TRIPPED ON 86 LV.

19.11 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH FEBRUARY – 2013

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
1	01.02.13	14:00	WAZIRABAD 66/11KV, 20MVA TX-IV	01.02.13	18:45	TX TRIPPED ON 87, LVREF ALONG WITH 11KV I/C WHICH TRIPPED ON E/F
2	01.02.13	18:35	GAZIPUR 220/66KV 100MVA TX-I	01.02.13	18:50	TX TRIPPED ON TRIP CKT FAULTY
3	02.02.13	22:50	OKHLA 220/33KV 100MVA TX-IV	03.02.13	1:40	TX. TRIPPED ON 30A, 86
4	02.02.13	23:40	PATPARGANJ 33/11KV, 20MVA TX	03.02.13	9:20	TX. TRIPPED ON 30, 86
5	05.02.13	0:36	220KV GOPALPUR-SUBZI MANDI CKT-II	05.02.13	15:48	AT GOPALPUR CKT TRIPPED ON DIST. PROT. ZONE-I. 220KV LA DAMAGED DURING TRIPPING. NO TRIPPING AT SUBZIMANDI
6	05.02.13	3:13	400KV BAWANA-MUNDKA CKT-II	05.02.13	4:25	AT BAWANA CKT TRIPPED ON 186A&B, 30F, 30C. AT MUNDKA CKT TRIPPED ON DIST. PROT, 186A&B
7	05.02.13	3:13	220KV BAWANA - KANJHAWALA CKT	05.02.13	8:00	AT KANJHAWALA CKT TRIPPED ON DIST. PROT. 3-PAHSE TRIP. NO TRIPPING AT BAWANA
8	05.02.13	3:14	ROHINI 220/66KV 100MVA TX-IV	05.02.13	5:45	TX. TRIPPED ON OVER VOLTAGE, 86A, 87
9	05.02.13	3:15	400KV BAWANA-MUNDKA CKT-I	05.02.13	4:32	AT BAWANA CKT TRIPPED ON 186A&B, 30F, 30C. AT BAWANA CKT TRIPPED ON CHANNEL1&2, INTER TRIP
10	05.02.13	3:15	DSIIDC BAWANA 220/66KV 100MVA TX-II	05.02.13	3:40	TX TRIPPED ON O/C, 86
11	05.02.13	3:15	DSIIDC BAWANA 220/66KV 100MVA TX-III	05.02.13	3:40	TX TRIPPED ON O/C, 86
12	05.02.13	3:16	400KV MANDOLA-BAWANA CKT-I	05.02.13	4:52	AT BAWANA CKT TRIPPED ON CB NO. 1552 ON 186A&B, 30F, 295A1 C1 AND CB NO. 1652 ON 130F, 186A&B, 59A, 59C
13	05.02.13	3:16	400KV MANDOLA-BAWANA CKT-II	05.02.13	5:45	AT BAWANA CKT TRIPPED ON CB NO. 1752 ON 186A&B AND CB NO. 1852 ON 186A&B, 130F
14	05.02.13	4:40	220KV BAWANA-SHALIMARBAGH CKT-II	05.02.13	6:06	AT SMB CKT TRIPPED ON CB AIR PRESSURE LOW. NO TRIPPING AT BAWANA
15	05.02.13	4:50	220KV BAMNAULI-PAPPANKALAN-II CKT-I	05.02.13	7:40	AT BAMNAULI CKT TRIPPED ON DIST. PROT. A-PHASE. AT PPK-2 CKT TRIPPED ON DIST. PROT. ZONE-I, A-PHASE,186

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
16	05.02.13	6:52	220KV BAWANA-SHALIMARBAGH CKT-II	05.02.13	14:15	AT SMB CKT TRIPPED ON CB AIR PRESSURE LOW. NO TRIPPING AT BAWANA FOLLOWED BY S/D TO ATTEND CB AT SMB.
17	06.02.13	7:30	220KV SARITA VIHAR - BTPS CKT.-I	06.02.13	11:25	CKT. TRIPPED ON 95 SUPERVISION RELAY
18	06.02.13	23:18	WAZIRABAD 66/11KV, 20MVA TX-III	07.02.13	0:25	TX TRIPPED ON E/F R AND B PH. 11KV I/C TRIPPED ON O/C.
19	07.02.13	18:53	220KV NARELA - MANDOLA CKT-I	07.02.13	20:07	OPERATION OF SPECIAL PROTECTION SCHEME(SPS) AT 400KV MANDOLA.
20	07.02.13	18:53	220KV GOPALPUR-MANDOLACKT-II	07.02.13	20:07	OPERATION OF SPECIAL PROTECTION SCHEME(SPS) AT 400KV MANDOLA.
21	07.02.13	18:53	220KV NARELA - MANDOLA CKT-II	07.02.13	20:07	OPERATION OF SPECIAL PROTECTION SCHEME(SPS) AT 400KV MANDOLA.
22	07.02.13	18:53	220KV GOPALPUR-SUBZI MANDI CKT-I	07.02.13	20:07	OPERATION OF SPECIAL PROTECTION SCHEME(SPS) AT 400KV MANDOLA.
23	07.02.13	18:53	220KV GOPALPUR-SUBZI MANDI CKT-II	07.02.13	20:07	OPERATION OF SPECIAL PROTECTION SCHEME(SPS) AT 400KV MANDOLA.
24	07.02.13	18:53	220KV GOPALPUR-MANDOLACKT-I	07.02.13	20:07	OPERATION OF SPECIAL PROTECTION SCHEME(SPS) AT 400KV MANDOLA.
25	13.02.13	12:29	BAMNAULI 400/220KV 315MVA ICT-III	13.02.13	13:38	ICT TRIPPED ON L V WINDING HIGH TEMP.,186 A & B
26	13.02.13	19:24	INDRAPRASTHA POWER 220/33KV 100MVA TX-I	13.02.13	20:05	33 KV I/C NO-1 TRIPPED ON 86.
27	14.02.13	6:58	GOPALPUR 33/11KV, 16MVA TX-I	14.02.13	7:00	11KV I/C-I TRIPPED ON O/C ALONG WITH 11KV RAINY WELL FEEDER.
28	15.02.13	17:50	INDRAPRASTHA POWER 220/33KV 100MVA TX-II	15.02.13	18:37	TX. TRIPPED ON E/F.CAT FOUND DEAD ON 33KV BUS.
29	16.02.13	1:58	PAPPANKALAN-I 220/66KV 100MVA TX-I	16.02.13	3:26	66KV I/C-I TRIPPED ON E/F
30	16.02.13	1:58	PAPPANKALAN-I 220/66KV 100MVA TX-II	16.02.13	3:26	66KV I/C-II TRIPPED ON E/F
31	16.02.13	1:58	220KV BAMNAULI-PAPPANKALAN-I CKT-I	16.02.13	3:28	AT PPK-I CKT. TRIPPED ON E/F,AUTO RE-CLOSE LOCKOUT.AT BAMNAULI CKT. TRIPPED ON D/P,C-PH,AUTO RE-CLOSE,186 A&B
32	16.02.13	3:17	PARKSTREET 66/33KV, 30MVA TX-I	16.02.13	13:52	TX. TRIPPED ON 80AB,86
33	16.02.13	6:40	220KV NARELA - MANDOLA CKT-I	16.02.13	7:05	SPS OPERATED AT 400KV MANDOLA DUE TO TRIPPING OF BOTH POLE OF RIHAND-DADRI CKT.
34	16.02.13	6:40	220KV GOPALPUR-MANDOLACKT-I	16.02.13	10:02	SPS OPERATED AT 400KV MANDOLA DUE TO TRIPPING OF BOTH POLE OF RIHAND-DADRI CKT.
35	16.02.13	6:40	220KV NARELA - MANDOLA CKT-II	16.02.13	7:05	SPS OPERATED AT 400KV MANDOLA DUE TO TRIPPING OF BOTH POLE OF RIHAND-DADRI CKT.
36	16.02.13	6:40	220KV GOPALPUR-MANDOLACKT-II	16.02.13	7:05	SPS OPERATED AT 400KV MANDOLA DUE TO TRIPPING OF BOTH POLE OF RIHAND-DADRI CKT.
37	16.02.13	7:18	PARKSTREET 220/66KV 100MVA TX-I	16.02.13	8:27	66KV I/C-I OF 100 MVA TR-I TRIPPED ON O/C,51 A&C
38	16.02.13	7:26	PARKSTREET 220/66KV 100MVA TX-II	16.02.13	7:28	TX. TRIPPED ON BUCHLOZ ALARM AND TX. TROUBLE ALARM.
39	16.02.13	8:48	NAJAFGARH 220/66KV 100MVA TX-II	16.02.13	10:24	66KV I/C-II TRIPPED ON E/F ALONG WITH 66KV BODELA-II CKT-1 & 2
40	21.02.13	18:47	220KV GEETA COLONY-PATPARGANJ CKT-I	21.02.13	18:55	AT GEETA COLONY CKT TRIPPED ON DIST. PROT. 3-PHASE TRIP, ZONE-2. NO TRIPPING AT PATPARGANJ
41	22.02.13	0:45	NAJAFGARH 66/11KV, 20MVA TX-I	22.02.13	1:15	11KV I/C NO-1 TRIPPED ON O/C,E/F
42	22.02.13	17:24	WAZIRABAD 66KV GHONDA CKT-I	22.02.13	19:35	CKT. TRIPPED ON D/P,ZONE-2,DIST-11.3 KM,Y-PH EARTH STRIP MELTED.
43	25.02.13	8:38	SARITA VIHAR 220/66KV 100MVA TX-II	25.02.13	12:58	66 KV I/C NO-2 TRIPPED ON 95C,E/F,86

19.12 DETAILS OF 400/220KV BREAKDOWN/TRIPPINGS OCCURRED IN DTL SYSTEM DURING THE MONTH MARCH -2013

SLNO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
1	01.03.13	3:25	SUBZI MANDI 220/33KV 100MVA TX-II	01.03.13	5:32	TR TRIPPED ON O/C,E/F AND 33KV I/C-II TRIPPED ON 86
2	02.03.13	1:21	PARKSTREET 220/33KV 100MVA TX-I	02.03.13	6:38	33KV I/C -1 TRIPPED ON E/F
3	03.03.13	16:51	220KV BAMNAULI-NAJAFGARH CKT-II	04.03.13	18:49	AT BAMNAULI CKT. TRIPPED ON D/P,A-PH,186 A&B.SPARKING OBSERVED ON R-PH JUMPER OF LA. AT NAJAFGARH CKT. TRIPPED ON D/P Z-1 186
4	03.03.13	18:44	BAMNAULI 400/220KV 315MVA ICT-II	18.03.13	15:11	ICT TRIPPED ON 67B-I O/C,GR-II,A-I,86-B-I,30AH,95A-I/95C,TRIP SUPERVISION RELAY,95B-I/95C,186A&B.Y-PH LA OF ICT DAMAGED.
5	04.03.13	15:50	220KV BAWANA - NAJAFGARH CKT	04.03.13	16:00	CKT. TRIPPED ON 186 AT 22OKV NAJAFGARH.
6	05.03.13	5:14	SARITA VIHAR 66/11KV, 20MVA TX-II	05.03.13	12:42	11KV I/C TRIPPED ON O/C
7	05.03.13	11:30	NAJAFGARH 66KV 20MVAR CAP. BANK-III	05.03.13	13:40	TRIPPED ON 86, 64RA
8	06.03.13	22:17	OKHLA 220/33KV 100MVA TX-IV	06.03.13	22:30	33 KV I/C-IV TRIPPED ON O/C, R-PH.
9	06.03.13	22:17	OKHLA 220/33KV 100MVA TX-III	06.03.13	22:30	33 KV I/C-III TRIPPED ON O/C, R-PH.
10	06.03.13	22:17	OKHLA 33KV EAST OF KAILASH CKT	07.03.13	15:45	CKT TRIPPED ON E/F R & B PH JUMPER OF BUS ISOLATOR SNAPPED. DURING S/D PERIOD 33KV I/C NO III & IV REMAINED OFF DUE TO NON-AVAILABILITY OF BUS SELECTION.50MVA TX. NO-1 IS ALSO OUT SINCE 07.01.13 SO ALL 33KV FEEDERS REMAIN OFF DURING S/D PERIOD.
11	08.03.13	14:23	PARKSTREET 220/33KV 100MVA TX-II	08.03.13	14:54	66KV I/C-2 TRIPPED ON E/F. MONKEY ELECTROCUTED ON 66KV BUS-2
12	09.03.13	15:09	220KV GOPALPUR-MANDOLACKT-I	09.03.13	19:18	AT GOPALPUR CKT TRIPPED ON D/P. AT MANDOLA CKT TRIPPED ON D/P, R-PH TO N, DIST.-17.97 KM.
13	09.03.13	17:20	220 KV GOPALPUR-WAZIRABAD CKT	09.03.13	18:05	CKT. TRIPPED WITHOUT INDICATION AT WAZIRABAD
14	09.03.13	18:27	220KV BAMNAULI-PAPPANKALAN-I CKT-I	09.03.13	18:32	AT PPK-1 CKT TRIPPED ON D/P,186. NO TRIPPING AT BAMNAULI.
15	09.03.13	18:27	220KV BAMNAULI-PAPPANKALAN-II CKT-II	13.03.13	13:01	AT BAMNAULI CKT TRIPPED ON D/P,B-PH,186 A & B.Y-PH LA OF CKT DAMAGED.NO TRIPPING AT PAPPANKALAN-2.R-PH CT ALSO REPLACED.
16	10.03.13	0:13	220 KV GOPALPUR-WAZIRABAD CKT	10.03.13	15:33	CKT. TRIPPED WITHUT INDICATION AT WAZIRABAD.
17	10.03.13	9:32	220KV GOPALPUR-MANDOLACKT-II	10.03.13	10:00	SPS OPERATED AT MANDOLA.
18	10.03.13	9:32	220KV NARELA - MANDOLA CKT-II	10.03.13	10:08	SPS OPERATED AT MANDOLA.
19	10.03.13	9:32	220KV GOPALPUR-SUBZI MANDI CKT-II	10.03.13	10:01	SPS OPERATED AT MANDOLA.
20	10.03.13	9:32	220KV NARELA - MANDOLA CKT-I	10.03.13	10:08	SPS OPERATED AT MANDOLA.
21	10.03.13	9:32	220KV GOPALPUR-SUBZI MANDI CKT-I	10.03.13	10:01	SPS OPERATED AT MANDOLA.
22	10.03.13	9:32	220KV GOPALPUR-MANDOLACKT-I	10.03.13	9:53	SPS OPERATED AT MANDOLA.
23	10.03.13	10:45	KANJHAWALA 220/66KV 100MVA TX-II	10.03.13	10:59	66 KV I/C-II TRIPPED ON E/F.
24	10.03.13	18:28	220KV MAHARANIBAGH-MASJID MOTH CKT-II	10.03.13	19:06	AT MAHARANIBAGH CKT TRIPPED ON MAIN-2 PROTECTION. TC-1,Y-PH FAULTY.
25	10.03.13	18:32	MASJID MOTH 220/33KV 100MVA TX-I	10.03.13	18:51	33KV I/C -I TRIPPED ON O/C AND MASTER RELAY INDICATION.
26	19.03.13	10:36	GAZIPUR 220/66KV 100MVA TX-II	19.03.13	12:15	TX TRIPPED ON HIGH SPEED RELAY & AUX. TRIP ALONG WITH 220KV BTPS-NOIDA-GAZIPUR CKT.

27	20.03.13	12:25	220KV MEHRAULI - BTPS CKT. - I	20.03.13	18:15	AT MEHRAULI CKT TRIPPED ON D/P,Z-1,DIST-11.24KM AT BTPS CKT TRIPPED ON B-PH,E/F. FIRE REPOTRED NEAR GOVT DISPANCERY SANGAM VIHAR.
28	20.03.13	12:44	220KV MEHRAULI - BTPS CKT. - II	20.03.13	18:15	AT MEHRAULI CKT TRIPPED ON D/P,Z-1,DIST.-11.19KM,186 AT BTPS CKT TRIPPED ON E/F,R-PH,DIST.-6.9KM
29	20.03.13	13:31	220KV GOPALPUR-MANDOLACKT-I	20.03.13	13:35	AT MDL CKT TRIPPED ON D/P,R-PH,Z-1 AND AT GOPALPUR CKT TRIPPED ON D/P,Z-1,DIST-0.4KM,O/C,E/F,R&Y-PH
30	21.03.13	22:29	220KV WAZIRABAD - MANDOLA CKT-I	21.03.13	23:18	AT WZB CKT TRIPPED ON D/P,Z-1,DIST-0.8KM AT MDL CKT TRIPPED ON D/P,R-PH,DIST-12.38KM
31	25.03.13	0:45	220KV BAMNAULI-NARAINA CKT-I	25.03.13	1:05	AT BAMNAULI CKT TRIPPED ON D/P,A-PH,186A&B NO TRIPPING AT NARAYANA.
32	25.03.13	3:32	220KV DIAL-MEHRAULI CKT-II	25.03.13	10:36	AT DIAL CKT TRIPPED ON O/C,R,Y&B-PH. AT MEHRAULI CKT TRIPPED ON 186.
33	26.03.13	23:03	220KV BAMNAULI-PAPPANKALAN-I CKT-I	26.03.13	23:47	AT BAMNAULI CKT TRIPPED ON 186,D/P. NO TRIPPING AT PPK-1.
34	29.03.13	9:58	SARITA VIHAR 66/11KV, 20MVA TX-I	29.03.13	13:00	TX TRIPPED ON 30D,OLTC BUCHHOLZ ALARM,86
35	31.03.13	16:56	220KV BAMNAULI-PAPPANKALAN-I CKT-I	31.03.13	17:14	AT BAMNAULI CKT TRIPPED ON D/P,B-PH,186A,B. NO TRIPPING AT PPK-1.
36	31.03.13	16:56	PAPPANKALAN-I 220/66KV 100MVA TX-I	31.03.13	19:58	TX TRIPPED ON DIFFERENTIAL,86D,33REF.