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**दिल्ली ट्रांस्को लिमिटेड**  
**DELHI TRANSCO LIMITED**

**Office of DGM (OS & Lines)**  
**Convener (Operation Co-ordination Committee)**  
**Room No. 10, 1st floor, 220KV S/ Stn. Bldg.,**  
**Naraina, Ring Road, New Delhi-110010**

No. F.DTL/831/F.4/2014-15/DGM (OS & Lines)/97

Date: 08.09.2014

To: **Members of Operation Co-ordination committee**

<b>DTL</b>	General Manager (O&M)-I Chairman OCC General Manager (O&M)-II GM (Planning) DGM (O&M)-I, II & III DGM(400kV) DGM (M/P) DGM(Plg.)	Fax no. 011-23366160 Fax No.011-23622707
<b>SLDC</b>	General Manager (SLDC) DGM (SO)	Fax no. 011-23366160 Fax No.011-23632031 Fax no. 011-23221069
<b>TPDDL</b>	HOD (PSC &AM) Sr. Manager (PSC)	Fax no. 011-23221059, 23221012 Fax no. 011-66050602
<b>BRPL</b>	Asstt. Vice President (SO)	Fax no. 011-66050602
<b>BYPL</b>	Dy. General Manager (SO)	Fax no. 011-39996549
<b>NDMC</b>	Superintending Engineer	Fax no. 011-39996549
<b>IPGCL</b>	DGM (I/C) RPH DGM (O) GTPS	Fax no. 011-23235754
<b>PPCL</b>	DGM (O) PPCL	
<b>MES</b>	AEE/M.SLDC Officer	
<b>BTPS</b>	AGM (EEMG)	Fax no. 011-26944348
<b>BBMB</b>	Sr. Executive Engineer, O&M	Fax no. 011-28315542,
<b>NR</b>	Sr. DEE (Northern Railway) Special Invitee	Fax No. 011-23742667
<b>DMRC</b>	DGM (Elect.) – Special Invitee	

विषय: प्रचालन समन्वय उपसमिति बैठक दिनांकित 27.08.2014 (बुधवार) अपराह्न 03:00 बजे का कार्यवृत्त ।

Sub: MOM of OCC Meeting dated 27.08.2014 (Wednesday) at 03:00 PM

प्रचालन समन्वय उपसमिति की बैठक दिनांकित 27.08.2014 (बुधवार) अपराह्न 03:00 बजे, प्रथम मंजिल, सम्मेलन कक्ष, एस एल डी सी भवन, मिंटो रोड, नई दिल्ली में आयोजित की गई। उक्त बैठक के कार्यवृत्त की एक प्रति सूचनार्थ व आवश्यक कार्यवाही हेतु इस पत्र के साथ संलग्न है।

The OCC meeting was held on dt. 27.08.2014 (Wednesday) at 03:00 PM in the Conference Room, 1<sup>st</sup> Floor, SLDC Building, Minto Road, New Delhi. A copy of the minutes of meeting is enclosed herewith for favour of information and necessary action.

(लवलीन सिंह)

(Loveleen Singh)

उपमहाप्रबंधक (प्रचालन सेवाएं एवं लाइन्स)

Dy.General Manager (Operation Services & Lines)

संयोजक, प्रचालन समन्वय उपसमिति

Convener, Operation Coordination Committee

Enclosure: प्रचालन समन्वय उपसमिति बैठक दिनांकित 30.07.2014 का कार्यवृत्त ।

MOM of OCC meeting dt. 27.08.2014

**DELHI TRANSCO LIMITED**  
(Regd. Office: Shakti Sadan, Kotla Road, New Delhi-110002)  
**Office of Dy. Gen. Mgr. (OS & Lines)**  
220KV S/Stn. Bldg. Naraina, New Delhi-110010  
Tele: 25683304

**MINUTES OF THE OCC MEETING DT. 27.08.2014**

GM (O&M)-I, DTL, Chairman-Delhi OCC welcome the members and distinguished guests to the meeting. DGM (OS&L), DTL – Convener Delhi OCC informed that Delhi is still reeling under Summer conditions as there are no rains, the load is still almost 5500MW . OS department gave presentation on the review of grid operation for the month of August, 2014 and planning for grid operation for September, 2014.

SLDC representative gave the presentations on System Constraints observed at the time of peak load of 5925MW on 15<sup>th</sup> July, 2014 (Copy of presentation is enclosed). OCC members appreciated the efforts made by SLDC and suggested to provide the presentation on regular basis on the constraints observed if any during the time of peak load of the month.

The point-wise deliberations made during the meeting are as below:

**1.0 Confirmation of minutes of OCC meeting dt. 30.07.2014**

Last OCC meeting was held on 30.07.14 in accordance with the agenda circulated vide letter dt.28.07.14. Minutes of the aforesaid OCC meeting were issued vide letter dated 07.08.2014.

Members confirmed the same.

**2.1 Setting up of control room by MES.**

In earlier OCC meeting dt. 03.03.14, SLDC informed that they are providing consultancy to MES for setting up of control room at Khyber Line. The estimate had been prepared by SLDC and the tender has been floated by MES.

MES informed that they have signed Consultancy agreement with SLDC. OCC advised MES to expedite the work of setting up of control room.

**(Action by MES)**

**2.2 Shifting of Control Room of NDMC from SLDC building**

NDMC informed that the rectification work of two damaged fiber cables i.e. Minto Road – Connaught Place and Minto Road – Raja Bazaar which are connected to newly constructed control room of NDMC at Nirman Bawan is in progress.

NDMC informed that DTL could use one pair of fiber cable out of fibers owned by PGCIL for which DTL should contact PGCIL directly.

OCC advised DTL to write a letter to PGCIL for the same.

**(Action by NDMC, DTL)**

### **2.3 Establishment of new Control Room for DTL**

During OCC Meeting dt. 30.07.14, GM(O&M)-I informed that KEMA in its report to DTL stated that the transition from a single SLDC to a new SLDC/transmission switching centre would be much simpler if both are located in the same building and even more so, if they are located on the same floor. Accordingly, DTL Centralized control room center should be located in the same SLDC building preferably on the same floor.

DTL informed that the scheme is not yet prepared and is still at planning stage.

**(Action by DTL)**

### **2.4 BBMB issues on 220kV Rohtak Road S/S**

In earlier OCC meeting, DTL informed that meeting with BBMB was held in CEA on 21.02.2014 and the options for establishment of 220kV Substation at Rohtak road by connecting it to 400kV Mundka substation as per decision taken in the 10<sup>th</sup> GCC Meeting held on 29.01.2014 explored during the joint visit of 220kV BBMB Rohtak Road S/Stn. by the officers from DTL, TPDDL, BRPL and BBMB on dt. 10.02.14 were discussed. The action shall be initiated as per the minutes of meeting of CEA. The meeting was held in the office of Member (GO&D), CEA on dt 21 Feb.2014.

During the meeting with CEA, the following deliberations were made:

DTL stated that Rohtak Road substation was being fed radially through 220 kV Narela-Rohtak Road D/C line. Re-conductoring of this line would require shutdown of both the circuits, which would lead to loss of supply in Central Delhi area being fed from Rohtak Road substation. Therefore, shutdown of this line was an issue. He further suggested that to avoid loss of supply in Central Delhi, Rohtak Road substation would require to be fed from some alternate source. For this purpose, DTL suggested various options viz. (i) LILO of one circuit of 220 kV Peeragarhi - Wazirpur line at Rohtak Road, (ii) LILO of both the circuits of 220 kV Peeragarhi-Wazirpur circuits at Rohtak road, (iii) Establishment of a 400 kV GIS substation at Rohtak Road and to provide 400 KV in-feed by using the existing corridor & upgradation of existing 220 kV Narela - Rohtak Road transmission line, (iv) Conversion of existing 33 kV AIS to 33 kV GIS at Rohtak Road substation of TPDDL and subsequently establishment of 220 kV GIS substation on the space vacated by means of LILO of 220 kV Peera Garhi - Wazir Pur cables. DTL further stated that erection of a GIS Sub-station would be a long term solution in addition to re-conductoring of the Narela-Rohtak Road line for reliable supply to Rohtak Road substation. In this regard, NRPC opined that re-conductoring of line and construction of GIS Substation work are separate issues and GIS substation work can be taken up in future as system strengthening

work. The proposal for GIS substation work could be put up by DTL to the Standing Committee on Power System planning of CEA.

Further, it was decided that DTL and BBMB would jointly discuss & finalise the course of action to be adopted prior to re-conducting of Narela-Rohtak Road line without loss of supply from the Grid. DTL agreed to take up re-conducting works of Narela-Rohtak Road. The proposal for setting up of GIS substation can be put up by DTL to the Standing Committee on Power System Planning.

Other decisions taken in regard to re-conducting of 220kV Narela-Rohtak Road D/C line are as given below:

1. Independent joint inspection by DTL and BBMB to identify and if needed, test apparently weak towers could be done at the earliest and if required, those could be changed.
2. The work of re-conducting of line will be taken up by DTL as deposit work of BBMB.
3. All the expenses in connection with re-conducting of line including replacement of worn tower members will be borne by BBMB, who will also arrange all kinds of clearances including those from Railways.

As per the decision taken by CEA, an independent joint physical inspection of all the towers of 220kV Narela - Rohtak Road D/C line has been carried out by the team of engineers from DTL and BBMB. The inspecting team has observed that towers of the line are fit for carrying out re-conducting work with new Goat conductor, insulators and fittings.

During the meeting dt. 30.07.14, OCC again advised DTL's planning division to prepare the scheme for the aforesaid re-conducting work and take up with Standing Committee on Power System Planning, CEA for long term planning.

DTL informed that a meeting with CEA along with BBMB took place on 27.08.14 and the following have been decided:

- LILO of single circuit of 220kV Wazirpur – Peeragarhi Circuit at Rohtak Road.
- Conversion of existing goat conductor on 220kV Narela – Rohtak Road with HTLS conductor.

OCC advised DTL to take up the issue in line with MOM of CEA meeting,

**(Action by DTL)**

## **2.5 Status of Installation of Capacitors – Study by Planning Deptt., DTL**

DTL had entrusted the study of installation of shunt capacitors in Delhi system to CPRI on the advice of OCC. CPRI is carrying out the study accordingly for reactive power compensation in Delhi. Final report has been submitted by CPRI copy of report has been emailed to all Discoms and Generators for implementation.

**(Action by DTL, DISCOMs)**

**2.6 Status of Hot Reserve of transformers at all levels.**

DTL updated the status of following hot reserves:

S. No	Capacity	Present population in nos.	Status of the hot reserve as on 29.05.14	Remarks
1	220/66kV, 160MVA Tx	7	160MVA Tx earmarked for 220kV Pappan Kalan-II was proposed be the hot reserve.	DTL informed that 160 MVA transformer at Papankalan –II will remain hot reserve. DTL informed that 4th transformer (160 MVA) at PPK-II shall be expected by the end of March, 2015
2	220/66kV, 100MVA Tx	42	DTL informed that 220/66-33/11kV, 100MVA Tx at 220kV Patparganj S/Stn. proposed as hot reserve is at site i.e. at 220kV S/Stn. Patparganj.	DTL informed that foundation work is in progress.
3	220/33kV, 100MVA Tx,	33		

On the DTL proposal to keep 1 No. 100 MVA 220/33/11kV power transformer as hot reserve at 220kV Patparganj station so as to serve as a standby arrangement in case of emergency, since procurement of new transformer usually takes around 1 year and to meet any exigencies arising out of any power transformer, for use as hot reserve for restoration of power supply, in a meeting held on dated 11.02.2014, DERC asked DTL to explore the option of keeping a transformer in cold reserve, as it may not be easy to transport an oil filled transformer.

In earlier OCC meeting, DTL informed that the transformer can be kept as cold reserve and the entire requisite test for health monitoring of Power transformer should be done periodically. BYPL requested that the practices of PGCIL regarding keeping the transformer as cold reserve may be confirmed and action may be taken accordingly.

In OCC meeting dtd. 29.05.14, DTL informed that they have written a letter to M/s PGCIL and reply for the same is awaited. Further, OCC also advised DTL’s planning to carry out study on the matter.

DTL informed that as per telephonic discussion with DGM(OS) of PGCIL, PGCIL informed that they keep the transformers off-line by filling the oil and carrying the required tests for maintaining the health of the transformer.

OCC advised DTL to take up with PGCIL regarding the same in written.

**(Action by DTL)**

**2.7 Long/Recent outage of Elements in Delhi power system as on 26.08.2014 at 08:00 Hrs.**

Members updated the status of Long/Recent outage of Elements in Delhi Power system as below:

S. No.	Element's Name	DISCOM /DTL	Date and Time of outage	Remarks/ Status as on 30.07.2014
1	66kV VASANT KUNJ - RIDGE VALLEY CKT.-II ('Y' PH. CABLE)	BRPL	13.01.14	BRPL informed that one of the cables is expected by the end of August, 2014.
2	33kV BAY -3 (IP - KILOKRI)	BRPL	22.02.11	Clearance from Railways for laying of Underground cables near Bhairon Road is pending..
3	33kV OKHLA(220kV) - ALAKHNANDA CKT.-I	BRPL	17.09.13	GIS bay at Alaknanda Grid is faulty. BRPL informed the issue is still pending with BHEL, Bhopal. Expected by end of October, 2014
4	33kV BAY-5 (IP - LAJPAT NAGAR) ALONG WITH 33KV ½ BUS AT LAJPAT NGR	BRPL	01.03.14	BRPL informed the issue is still pending with BHEL, Bhopal. Expected by end of October, 2014
5	33kV KILOKRI - JAMIA CKT. ('R' & 'B' PH. CABLE)	BRPL	15.03.14	Expected by 15.09.14. Road cutting permission is awaited.
6	33kV NIZAMUDDIN - EXHIBITION GROUND-I CKT (Y PHASE CABLE)	BRPL	23.06.14	Expected by 15.09.14. Road cutting permission is awaited.
7	33kV OKHLA (220kV) - NEHRU PLACE CKT. -IV('Y' PH. SINGLE CABLE)	BRPL	31.05.14	Expected by 15.09.14. Road cutting permission is awaited.
8	33kV VSNL - NEHRU PLACE CKT. (SINGLE CABLE)	BRPL	02.07.14	Expected by 15.09.14. Road cutting permission is awaited.
9	33kV KILOKRI - MEDICAL CKT. (SINGLE CABLE)	BRPL	06.08.14	Energized on 20.08.14
10	33/11kV 16MVA PR.TR.-II AT PUSHP VIHAR(UNDER SHUT DOWN)	BRPL	04.08.14	Expected by 07.09.14
11	66/33kV 50MVA PR.TR.-III AT MALVIYA NAGAR (SHUT DOWN)	BRPL	19.08.14	Expected by 01.09.14
12	33/11kV 20MVA PR.TR.-IV AT VISHAL	BRPL	12.08.14	Expected by 15.09.14
13	66kV MUNDKA(400kV) - NANGLOI WATER WORKS CKT.	BRPL	25.08.14	Expected by 15.09.14
14	66/33kV 50MVA PR. TR.-I AT GONDA	BYPL	15.06.14	Test results are not found desirable. Expected by the

				end of October, 2014
15	33kVBHAGIRATHI - DWARKAPURI CKT. ('Y' & 'B' PH. SINGLE CABLE)	BYPL	06.08.14	Expected by 15.09.14
16	33KV KARKARDOOMA - KANTI NAGAR CKT-I	BYPL	07.08.14	Energized on 26.08.14
17	66kV PPG(220kV)- KHICHRIPUR CKT. ('B' PH. CABLE)	BYPL	17.08.14	Expected by 29.08.14
18	33KV ROHTAK ROAD - PRASAD NAGAR CKT. ('PH. CABLE)	BYPL	17.08.14	Energized on 25.08.14
19	33kV GONDA- U/G SEELAMPUR CKT. (ALL PHASE CKT.)	BYPL	25.08.14	Expected by 15.09.14
20	66kV PPK - REWARI LINE CKT. ( ONE CABLE)	TPDDL		New scheme is in process. After implementation of the new scheme, this line will be dumped.
21	33KV TRAUMA CENTRE - SAFDARJUNG AIR PORT CKT.	NDMC	10.07.14	Feeder shifted to Bay No.10 at Trauma Center S/Stn. DTL to take a view from OEM i.e. Schneider regarding the cause of failure.
22	33KV TRAUMA CENTRE - AIIMS CKT.-III	NDMC	25.07.14	Cable faulty. Expected by 31.08.14
23	33kV BAY -28 (IP - CONNAUGHT PLACE)	NDMC	06.08.14	Manually made OFF from 220kV IP substation of DTL. DTL informed that there is problem of theft of control cables. OCC advised NDMC to plan for another source to Connaught Place.
24	220KV MAHARANI BAGH - MASJID MOTH CKT-I	DTL	14.06.14	Cable faulty. Cable damaged during digging by PGCIL contractor. Expected by the end of September, 2014

OCC advised members to expedite the work.

**(Action by DTL, DISCOMs)**

## 2.8 Shifting of Control Room at 220kV Indra Prastha Substation.

DTL informed that 220kV GIS is proposed at existing 220kV IP Substation and the same is under process for approval with Board of Directors, DTL. Further, the Control Room is to be shifted from first floor of generation main building (being dismantled) to new place in the switchyard.

DTL informed that the estimate for shifting of control room has been prepared and has been put up for approval of the competent authority.

**(Action by DTL)**

## **2.9 Non-tripping of breakers at BRPL end for 11kV feeders emanating from 220kV S/S Najafgarh.**

In earlier OCC meetings, DTL informed that Najafgarh Substation is experiencing frequent trippings at 11kV level due to unhealthy protection system at BRPL end. OCC advised BRPL to check up the healthiness of protection system at their end to avoid damage to DTL system. BRPL informed that on these feeders first switching progress are by passed for protection and they are taking necessary action for retrofit and repair.

OCC advised DTL to take up with DISCOMs for nomination of the members for inspection of first switching substations to check adequate protection its operation thereof.

**(Action by DTL)**

## **2.10 Contingency Plan for 220kV Substation Indra Prastha.**

DTL informed that the operation and maintenance activities of 220 KV S/Stn. Indraprastha has been entrusted to DTL since Jan, 2010 after closure of IP Generating Stn. Main control room of sub-station is situated in main generation building which is about half kilometre away from switchyard. There are many problems being faced which are beyond control of O&M department and DTL is not able to run the sub-station smoothly & reliably. 24 nos. 33KV outgoing feeders emanates from this sub-station feeding the load in the VVIP areas covered under the jurisdiction of BRPL, BYPL & NDMC and possibilities of this sub-station for going in long outages in a part or in whole cannot be ruled out.

During OCC meeting dt. 25.04.14, NDMC informed that they have provision to shift the load from IP stn during contingency conditions at IP Stn. BRPL informed that they shall shift the load from IP Stn subject to load margin at Lodhi Road. BYPL informed that they have provision to shift the load from IP Stn. except for IG Stadium circuit.

During earlier OCC meetings, BRPL informed that meeting of affected area load shall be taken care on real time. Further, in order to meet future contingencies, BRPL informed that establishment of 220/33KV Power Transformers at Maharani Bagh Substation shall be considered in the interest of power sector of Delhi as it will directly connect the load to the Maharani Bagh Grid which is presently under loaded. BRPL requested DTL to provide 8 nos. 33 KV feeders by establishing 220/33KV Power Transformers at Maharani Bagh substation.

NDMC informed that they have feasibility to shift only one feeder of total 3 feeders from 220kV I.P. substation in case of contingencies.

**(Action by DTL)**



## **2.11 Metering issue of 11kV BBMB circuit emanating from 220kV S/Stn. Narela**

During OCC meeting dtd. 29.05.14, DTL informed that 1 no. 11kV BBMB circuit is emanating from 220kV DTL Narela Substation and feeding at 220kV BBMB Narela Substation for auxiliary supply to BBMB Narela Substation since the time of DESU/DVB. In case of failure of their 11kV source, this circuit serves the purpose of emergency supply. This circuit supply has been used by BBMB Narela on rare occasion during exigency at their end. But the energy consumed by BBMB through this feeder is not being accounted for BBMB, but booked to TPDDL at 66kV Bus of 220kV Narela DTL S/Stn.

During the OCC meeting dt. 30.07.14, TPDDL informed that they shall provide desired details by 31.08.14.

The following details regarding energy meter issues raised by TPDDL have been deliberated:

- As discussed in the Metering Committee AMR will be installed on all the DTL billing meters, but till date there is no progress. DTL informed the tendering for AMR is under process.
- Data provided by DTL usually gets delayed and due to this we are not able to submit reports on time to DERC.
- One 11kV feeder BBMB from Narela 220kV is feeding supply to Haryana, but TPDDL is billed on the transformer, so these units should be subtracted from TPDDL billing. OCC advised DTL and TPDDL to have joint visit to check the meter installed at the site i.e. Narela and get the issue resolved.
- CT-PT testing and meter testing of DTL billing points is pending. DTL informed the same is being carried out by them on routine basis.
- Meter installation at Wazirpur-3 grid of TPDDL from Wazirpur 220kV Grid as CT metering core is being used by DTL. DTL informed TPDDL that they can install their meter in series with the metering core keeping in view of the burden limit.

**(Action by DTL, TPDDL)**

## **2.12 Over loading of 20MVA Trfs. at 220kV Najafgarh Substations.**

DTL informed that during this summer season, excessive over loading on all the 3 nos. 20MVA Trsf. has been noted for about whole summer season. For maintaining the loading condition of 20 MVA Trsf., rotational load shedding on 11KV feeders is being resorted to for about whole summer season. Due to this, local public are facing hardships due to non availability of power supply. In the past, due to this menace, DTL installations have been intruded upon by local people and try to sabotage the DTL installations at 220KV S/Stn. Najafgarh.

Further, whenever DTL avails any planned/emergency shutdown on any of the 11KV outgoing feeders emanating from 220KV S/Stn. Najafgarh, BRPL is always unable to back feed the load of any of the 11KV feeders. It is prudent to mention that this is contrary to the transfer schemes rules 2001 vide which it was mandated that DISCOMS shall shift their 11KV loads from existing 220KV S/Stns. of DTL. However, no proper action has been taken by BRPL till date for shifting

of load from DTL Najafgarh S/Stn. Accordingly, BRPL has to erect and commission new 66KV S/Stns. and shift the 11KV load from Najafgarh DTL S/Stn. to their thus erected substations.

BRPL informed that Delhi Jal Board Substation has been commissioned on 25<sup>th</sup> August 2014 and is providing relief on 20MVA transformers at Najafgarh substation.

### **2.13 LILO of existing 66kV NJF-G-5 PPK-1 from 220kV Substation Najafgarh:-**

DTL informed that a PTW Request made by Sh Sandeep Kumar, P&C deptt of BRPL at 07.55 Hrs on 03.07.2014 at 220kV Substation Najafgarh for the 66kV NJF-G-5 PPK-1 Line for LILO-ing the said Line at upcoming 66kV DMRC Metro Depot at Najafgarh. In this regard, DTL requested BRPL through email dated 02.07.2014 for entering into connection agreement with DTL for change of configuration of this line as the same was being LILOed at upcoming 66kV DMRC Metro Depot at Najafgarh in line with DERC regulations/ guidelines. However, BRPL has not carried any connection agreement and charged the said lines on 16:57Hrs on 03.07.2014. Further, DTL informed BRPL has not taken any consent of DTL protection deptt. and even the relay setting have not been revised/ changed as per revised configuration of said line.

Also, the said Line of 66kV G-5 PPK-1 is on no load w.e.f 03.07.2014 and due to this other DTL substations are being overloaded due to non-taking of load on this line.

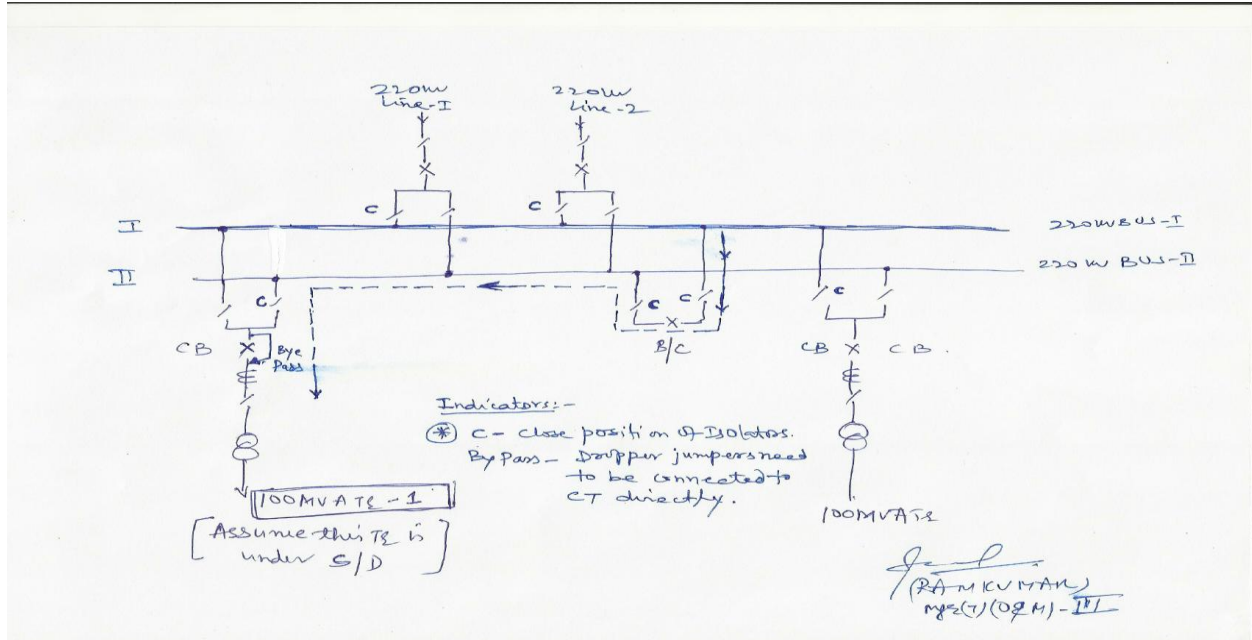
In this regard, DTL requested BRPL to look into the issue.

BRPL informed that the said connection agreement has been done.

### **2.14 Overhauling of Circuit Breakers at 220kV Pappankalan-I Substation.**

Complete overhauling of 06 no. 220kV CBs of 06 No. 220kV Bays including of 100MVA Trs and 220kV Lines at 220kV Substation Pappankalan-1 has been awarded to M/s ABB and the work of overhauling is to be started soon. The usual time for carrying out the overhauling work of each 220kV Circuit Breaker is about 5-6 days.

However, it is very well known that 220kV PPK-1 substation is heavily loaded and as such, it is not possible for availing the shutdown of any 100MVA Tr / 220kV Line for continuous 5-6 days. As such, an alternate arrangement has been made. The same has been drawn in Single Line diagram as given below:



The operation schedule shall be as follows: (Assume O/H of CB of 100MVA is to be carried out)

At first 100MVA Tr shall be under shutdown for 5-6 hours for complete dismantling of all the 3 no. poles of the CB and at the same time dropper jumper from cross bus shall be connected to CT of the 100MVA Tr No-1. Both the 220kV Lines and other Trs shall be taken to 220kV Bus-1. The other Trs and Lines shall be working without any interruptions. Now, after dismantling the poles of the CB, the CB shall be bypassed as shown in the fig. The Protection of the 100 MVA Tr Bay shall be shifted to Bus Coupler Bay CB in the meantime. After, the switching of the Protection from Tr Bay to B/C bay, the 100MVA Tr can also be taken on load. In case of any eventualities, the B/C bay Breaker will get tripped and clear the fault of the 100MVA Tr No.-1.

Later on after the CB is overhauled, again the TR shall be taken under shutdown for erecting the overhauled poles. The bye-pass of CB shall be removed and the Cross Bus jumpers shall be directly connected to main CB and the protection shall be switched to main CB of the Tr.

The above sequence shall be followed for other breakers also.

By following the above, DTL 6 no. 220kV CBs shall be overhauled in bare minimum outage of 5-6 hours of the TR/ Line bay.

OCC approved the S/D of 220kV Bus coupler at PPK-I Substation from 17<sup>th</sup> September, 2014 to 20<sup>th</sup> September, 2014. However, subsequent shutdown of circuit breakers for overhauling shall be availed in October, 2014 and dates for the same shall be finalized in next OCC meeting.

**(Action by DTL)**

## **2.15 Rerouting of OPGW of 66 KV Gopalpur -Jahangirpuri line**

DTL optical fibre Ring has OPGW installed on Gopalpur-Jahanpuri-Narela line on 66kV transmission line owned and maintained by TPDDL. It was informed through email dt. 22-08-14 that laying of underground EHV cable on Jahanpuri –Gopalpur route (from Tower no. 18 to Tower no. 35 which is at JHP grid) has been done and tower line section is to be dismantled, as urgently required by PWD, for construction of road. TPDDL has requested DTL to make immediate arrangement to shift the OPGW ink for allowing dismantling of tower section by TPDDL.

In this regard, Manager (Communication) of DTL along with communication team visited TPDDL office and PWD office on dt. 25-08-14.

Since, neither the exact scope of work nor payment issues was clarified through emails of TPDDL. Hence, on personal efforts DTL gathered the below information from TPDDL office:

- (a) Tower no. 8 to 12 TPDDL has shifted the line to overhead line and OPGW is required to be shifted.
- (b) Tower no. 15 to 18 are required to be dismantled due to DMRC work
- (c) Tower no. 18 to 35 is to be dismantled as urgently required by PWD ,for construction of road

It was also gathered from Executive Engineer PWD Flyover Division F133 that PWD has paid amount to TPDDL for shifting work and no further expenditure can be given by PWD.

So far DTL was not there in the picture and TPDDL has been interacting with PWD for rerouting of the overhead line and now PWD is not ready to talk to DTL for expenditure on shifting of OPGW which is part of the 66kV overhead line section carrying the vital SCADA data required by all Discoms and SLDC for day to day real time scheduling and load dispatch activities, it would be advisable that TPDDL should shift the transmission line and lay the requisite OFC so that the data connectivity is maintained for SLDC and further any further expenditure if so incurred by TPDDL same shall be reimbursed by PWD as being done for similar activities.

DTL informed that in case TPDDL is not shifting the OPGW along with tower line section then PWD could take up the issue at appropriate level in the Delhi Government for any eventuality resulting in the delay of the prestigious work of road diversion.

**(Action by DTL, TPDDL)**

## **3.0 SLDC Agenda Points**

### **3.1 Power map of 66/33kV network of Distribution companies.**

SLDC requested that the power map is required in GPS format and requested DISCOMs to submit the same. During earlier OCC meetings, SLDC informed that they have received the power map from all DISCOMs except NDMC.

On the request of SLDC, NDMC submitted its single line diagram (geographical hard copy). SLDC requested all Discoms to provide hard copy of power network so that the same can be kept in the SLDC control room for reference. All agreed

Discoms requested DTL to post the updated single line diagram of substations and the entire network of DTL in their website for better co-ordination and operation of grid.

SLDC also informed that as per grid code, DISCOMs and STUs need to display their single line diagram on their official website. OCC advised members to ensure compliance of the same.

**(Action by BRPL, BYPL and TPDDL)**

### **3.2 Observation of heavy oscillations during the morning hours of 09.08.14 and 10.08.14 in Northern region (NRLDC point)**

NRLDC informed heavy oscillations observed from 04:00Hrs to 06:00Hrs on dt.09.08.14 and from 02:30Hrs to 04:30Hrs on dt.10.08.14. The frequency of oscillations observed was ~0.75Hz with very less damping to the tune of less than 2%.

The following data is required by NRLDC for analysis of the event:

- MW/MVAR data, Event Logger and associated plots of generating units.
- Information regarding the hunting observed in the Generating unit.
- Data of DR (Disturbance Recorder), EL (Event Logger) and associated plots of response characteristics of HVDCs, SVC, TCSCs in the region.
- Tripping of any element, excessive line loading observed.
- Any other relevant information.

SLDC informed that the aforesaid data is requested by NRLDC. OCC observed that the data requirement is from GENCOs. OCC advised GENCOs to provide the same to SLDC.

**(Action by GENCOs, DISCOMs and DTL)**

## **4.0 Agenda points of TPDDL.**

### **4.1 Inability to take load on 220kV Rohini-II.**

During the OCC meeting dtd. 25.04.14, TPDDL informed that 220kV Rohini – I, T-off at Rohini-II from 400kV Bawana is not reliable and separate circuit from 400kV BWN is required as early as possible. DTL informed that procurement of tower material is under process and the work of erection of circuit of 220kV Bawana – Rohini-II is expected to be completed by December, 2014. TPDDL also informed that no more load shifting to Rohini-II is possible.

DTL informed that procurement is in process.  
OCC advised DTL to expedite.

(Action by DTL)

#### 4.2 Reliability of Wazirabad Water Works.

TPDDL informed that during last year, about 22 interruptions occurred at Wazirabad Water works due to STS interruption out of which 17 are on account of DTL (i.e due to tripping of either 220kV Gopalpur-Mandola Ckt or tripping of 100MVA at Gopal Pur) and maximum tripping are more than 15mins and in some cases tripping restoration time is even more than 30 mins.

On 08<sup>th</sup> May, 2014, supply was again affected for 50 mins. Water Works is an essential supply of TPDDL. In order to maintain reliable power supply, TPDDL requested DTL to take care of the aforesaid issue and take suitable action to restore supply of WZB through any alternate source as early as possible.

During the OCC meeting 29.05.14, OCC advised DTL to study the cause of excessive trippings and to prepare necessary contingency plans in case of such failures.

During the meeting dt.30.07.14, TPDDL requested to extend the supply of Wazirabad in case of supply failure from Mandola. OCC advised SLDC to extend supply to Gopalpur in bare minimum possible time, in case of failure of Mandola – Gopalpur Circuits.

OCC advised DTL to expedite the work of energization of the 2<sup>nd</sup> circuit of 220kV Wazirabad – Gopalpur on priority.

(Action by DTL)

#### 4.3 Status of 220kV Peeragarhi

As now 33kV Ranibagh CC cable is laid down to 220kV Peeragarhi Grid. But work on 220kV Peeragarghi is not completed yet due to which TPDDL was unable to shift load from existing Ranibagh Grid. Beside of that some 11kV feeders are also laid down but TPDDL can't charge it from new grid as no juice is available in existing SMB- Ranibagh Ckt.

During the OCC meeting dt. 30.07.14, DTL informed that the substation is ready. However, the U/G Cable work is in progress and no supply is available to energize the substation at present. DISCOMs suggested to energize the substation on back-feed from BRPL feed. DTL informed that the Peeragarhi Substation is expected by the end of December, 2014.

DTL informed that at present, SAS configuration work is in progress and for cable, one section is left and jointing work is in progress. Expected by the end of 1<sup>st</sup> week of October, 2014.

(Action by DTL)

**4.4 Real Time actual Drawl Monitoring Issue:**

At SLDC website, in the case of TPDDL actual Drawl, Active Power of 220 KV Kanjhawala taken from Load of 100 MVA PTR-1, 2 in which Load of 66 KV DMRC Circuit from 220 KV Kanjhawala also included. DMRC Circuit from 220 KV Kanjhawala belongs to BRPL only. 10-15 MW load run on this circuit. Due to this TPDDL Actual drawl is at higher side. Print shot for reference is as below:

**Feeder wise load of NDPL at 8/25/2014 8:06:37 PM**

DISCOM	Sub-Station	Feeder / Transformer	Load (MW)
NDPL	BAWANA	TRANSFORMER 1	59.12
NDPL	DSIDC	TRANSFORMERS	78.33
NDPL	GOPALPUR	TRANSFORMERS	179.75
NDPL	KANJHAWLA	TRANSFORMER- 1	66.94
NDPL	KANJHAWLA	TRANSFORMER- 2	62.62
NDPL	KASHMIRI GATE	220 kv DMRC-1	0.00
NDPL	KASHMIRI GATE	220 kv DMRC-2	12.14
NDPL	KASHMIRI GATE	B_CIVILLN_KGAT	0.00
NDPL	Mundka	C_Mundka_Ghevra	25.00
NDPL	Mundka	C_Mundka_Mangolpuri	20.00
NDPL	NARAINA	B_NRINA_INDERPURI	13.96
NDPL	NARAINA	B_NRINA_REWAR1	14.59
NDPL	NARAINA	B_NRINA_REWAR2	16.78
NDPL	NARELA	TRANSFORMERS	189.54
NDPL	ROHINI	TRANSFORMERS	248.85
NDPL	ROHINI-2	TRANSFORMERS	32.61
NDPL	SHALIMAR BAGH	TRANSFORMERS	135.67
NDPL	SUBZI MANDI	TRANSFORMERS	103.80
NDPL	Wazirpur	Transformers	40.66

OCC advised SLDC to do necessary correction and update the website. Further, OCC advised BRPL to check whether metering to DMRC feeder from Kanjhawala Substation is being done by BRPL or TPDDL

**(Action by SLDC, BRPL)**

**5.0 Status of additional allocated bay for Bodela-1 grid (BRPL Agenda Point).**

In earlier OCC, DTL informed BRPL one additional allocated bay for Bodela 1 grid is ready. BRPL informed that Commercial Agreement has been done.

In OCC meeting dt. 30.07.14, BRPL informed that cable laying is in progress and expected by 15<sup>th</sup> August, 2014.

BRPL informed that the work is in progress and they require around 1.5 Kms cable for the same.

(Action by BRPL)

## 6.0 Proposed Shutdowns

### 6.1 Proposed shutdown at 220kV Lodhi Road Substation

OCC tentatively approved the following shutdowns proposed by DTL at 220kV Lodhi Road Substation for shifting of 33kV Load to newly installed 33kV GIS Switchgear from 2<sup>nd</sup> October, 2014. However, the date of shutdowns of shall be finalized in September OCC meeting.:

S. No.	Proposed Date & time of S/D	Name of the feeder / equipment	Work to be carried out	Approved Date & time of S/D
1	15.09.14 to 17.09.14	100MVA Tx-I along with respective 33kV feeders	Shifting of 33kV Load to newly installed 33kV GIS Switchgear	Tentatively from 2 <sup>nd</sup> October, 2014
2	18.09.14 to 20.09.14	100MVA Tx-II along with respective 33kV feeders		

(Action by DTL)

### 6.2 Proposed shutdown at Maharani Bagh Substation.

OCC approved the following shutdowns proposed by DTL at Maharani Bagh Substation for ETC of relays of Siemens make by M/s Siemens Engineer:

S. No.	Proposed Date & time of S/D	Name of the feeder / equipment	Work to be carried out	Approved Date & time of S/D
1	28.08.14 (10:00Hrs to 13:00 Hrs)	Electric Lane Ckt.-I	Installation, testing and commissioning of Main-II Siemens Protection Scheme	28.08.14 (10:00Hrs to 13:00 Hrs)
2	28.08.14 (13:30Hrs to 19:00 Hrs)	Electric Lane Ckt.-II		28.08.14 (13:30Hrs to 19:00 Hrs)
3	29.08.14 (10:00Hrs to 13:00 Hrs)	Trauma Center Ckt-I		Deferred to October, 2014
4	29.08.14 (13:30Hrs to 19:00 Hrs)	Trauma Center Ckt-II		Deferred to October, 2014
5	30.08.14 (10:00Hrs to 13:00 Hrs)	Masjid Moth Ckt.-I		30.08.14 (10:00Hrs to 13:00 Hrs)
6	30.08.14 (13:30Hrs to 19:00 Hrs)	Masjid Moth Ckt.-II		Subject to revival of Masjid moth Ckt-I

(Action by DTL)

### 6.3 Proposed shutdown at 220kV Patparganj Substation.

OCC *deferred* the following shutdowns proposed by DTL at 220kV Patparganj Substation to October, 2014:

S. No.	Proposed Date & time of S/D	Name of the feeder / equipment	Work to be carried out
1	02.09.14 (10:00Hrs) to 03.09.14(17:00Hrs)	33 KV KARKARDOOMA CKT-I With 33 KV BUS-I	For replacement of BUS-I isolator and general cleaning and Maintenance of the Bay
2	04.09.14 (10:00Hrs) to 05.09.14(17:00Hrs)	33 KV KARKARDOOMA CKT-II	-do-
3	06.09.14 (10:00Hrs) to 07.09.14(17:00Hrs)	33 KV CBD SHAHDARA	-do-



4	08.09.14 (10:00Hrs) to 09.09.14(17:00Hrs)	33 KV GURU ANGAD NAGAR CKT-	-do-
5	10.09.14 (10:00Hrs) to 11.09.14(17:00Hrs)	33 KV GURU ANGAD NAGAR CKT-II	-do-
6	12.09.14 (10:00Hrs) to 13.09.14(17:00Hrs)	33 KV PREET VIHAR	-do-
7	14.09.14 (10:00Hrs) to 15.09.14(17:00Hrs)	33 KV SHAKAR PUR	-do-

#### 6.4 Proposed shutdown at 220kV Okhla Substation.

OCC approved the following shutdowns proposed by DTL at 220kV Okhla Substation subject to attending of Transformer Incoming CT at 220kV Masjid Moth Substation:

S. No.	Proposed Date & time of S/D	Name of the feeder / equipment	Work to be carried out	Remarks	Approved Date & time of S/D
1	30.08.2014 from 08:00 Hrs to 15:00 Hrs	100 MVA, 220/33 KV Transformer No. IV	Replacement of Las on R,Y & B Phase	The load to be Taken on Transformer No. III & V, The excess load if any to be managed by BRPL	30.08.2014 from 08:00 Hrs to 15:00 Hrs
2	31.08.2014 from 08:00 Hrs to 15:00 Hrs	100 MVA, 220/33 KV Transformer No.-V	Replacement of Las on R,Y & B Phase	The load to be Taken on Transformer No. III & IV, The excess load if any to be managed by BRPL	31.08.2014 from 08:00 Hrs to 15:00 Hrs
3	31.08.2014 from 08:00 Hrs to 15:00 Hrs	11 KV Bus Bar-II along with 11 KV Incomer- 11 and outgoing feeders of Alaknanda via TA, A-8 Kalkaji extn, A-12 Kalkaji Extn, Tara Apptt, Govindpuri puri Gali No.5	General Maintenance of Bus bar-II and associated feeder panels	The load to be managed by BRPL	Deferred

(Action by DTL)

#### 6.5 Proposed shutdown at 220kV Najafgarh Substation.

OCC approved the following shutdowns proposed by DTL at 220kV Najafgarh Substation:

S. No.	Proposed Date & time of S/D	Name of the feeder / equipment	Work to be carried out	Remarks	Approved Date & time of S/D
1	02.09.14 (06:00 to 17:30hrs)	20MVA Tr. No3 along with 66KV bus-bar No.-2	For replacement of Bus-1 & line isolators with new Isolator& For replacement of Bus-2 isolator of jaffer pur Ckt.-2	Load will be shifted to 20MVA Tr. No.1 & 66KV Bus –Bar No-1,& switch off the 66KV O/G feeder Nangloi & Jaffer Pur-2	Deferred
2	03.09.14 (06:00 to 17:30hrs)	20MVA Tr No-1 along with 66KV bus -1	For replacement of Bus-1 Isolators with new Isolator & For replacement	Load will be shifted to 20MVA Tr. No.2 & 66KV Bus –Bar No-2	03.09.14 (06:00 to 17:30hrs)

			of Bus-1 Isolators with new Isolator of 66KV Cap. bank-2		
3	04.09.14 (06:00 to 17:00hrs)	66KV Jaffer Pur 1& 2 along with 66KV bus –bar No-1	For replacement of Bus-1 isolators with new Isolator	66KV Jaffer Pur 1 &2	Deferred

(Action by DTL)

### 7.0 Additional Agenda points with the permission of the Chair.

#### 7.1 Calibration of meters at BTPS.

BTPS requested that the calibration of meters installed at BTPS on 220kV outgoing feeders may be checked.

DTL informed that they are doing the work in routine for all the meters. OCC advised DTL to look into it.

(Action by DTL)

#### 7.2 Requirement of approval and maintenance staff and protection staff of DTL for signal testing of 11kV feeders.

BRPL informed that relay testing (Auto trip signal and ON/OFF position) of breakers of 11kV feeders which are feeding to BRPL area from DTL substations will be started from September, 2014 and signals will be checked at Balaji Control Room. BRPL informed for this, O&M staff and protection staff of DTL is required and requested to approve it and provide name and contact number of concerned DTL engineers. Further, BRPL informed that if any defects identified will be jointly rectified by DTL and BRPL staff.

DTL provided the list of concerned engineers and are as below:

S. No.	Grid Name	Schedule date	Protection staff of DTL	Maintenance Staff of DTL
1	Sarita Vihar	01.09.14	Hitesh Kumar, Manager(T)-Prot.	AM(T) of the respective substations
2	Okhla	03.09.14	Paritosh Joshi, Manager(T)-Prot.	
3	Lodhi Road	05.09.14	Paritosh Joshi, Manager(T)-Prot.	
4	Vasant Kunj	09.09.14	Paritosh Joshi, Manager(T)-Prot.	
5	Mehrauli	11.09.14	Paritosh Joshi, Manager(T)-Prot.	
6	Pappankalan-I	15.09.14	B.L. Gujar, Manager(T)-Prot.	
7	Najafgarh	17.09.14	B.L. Gujar, Manager(T)-Prot.	

(Action by DTL, BRPL)

#### 7.3 Proposed shutdown by Metering department

OCC approved the following shutdowns proposed by DTL – Metering department for accuracy testing of CT, PT and metering system complying with the metering regulations subject to loading conditions.

S. No.	Proposed Date & time of S/D	Name of the feeder / equipment	Remarks/ Areas affected	Approved Date & time of S/D
1.	01.09.2014 (07:00am to 01:00pm)	66kV I/C-I, Rohini-I	Feeding to TPDDL	01.09.2014 (07:00am to 01:00pm)

2	02.09.2014 (07:00am to 01:00pm)	66kV I/C-II, Rohini-I	Feeding to TPDDL	02.09.2014 (07:00am to 01:00pm)
3	03.09.2014 (07:00am to 01:00pm)	66kV I/C-III, Rohini-I	Feeding to TPDDL	03.09.2014 (07:00am to 01:00pm)
4	04.09.2014 (07:00am to 01:00pm)	66kV I/C-IV, Rohini-I	Feeding to TPDDL	04.09.2014 (07:00am to 01:00pm)
5	05.09.2014 (07:00am to 01:00pm)	66kV I/C-I, Shalimar Bagh	Feeding to TPDDL	05.09.2014 (07:00am to 01:00pm)
	06.09.2014 (07:00am to 01:00pm)	66kV I/C-III, Shalimar Bagh	Feeding to TPDDL	06.09.2014 (07:00am to 01:00pm)
6	08.09.2014 (07:00am to 01:00pm)	11kV Local Tx., Shalimar Bagh	Feeding to DTL	08.09.2014 (07:00am to 01:00pm)
7	09.09.2014 (07:00am to 01:00pm)	66kV I/C-I, DSIIDC Bawana	Feeding to TPDDL	09.09.2014 (07:00am to 01:00pm)
8	10.09.2014 (07:00am to 01:00pm)	66kV I/C-II, DSIIDC Bawana	Feeding to TPDDL	10.09.2014 (07:00am to 01:00pm)
9	11.09.2014 (07:00am to 01:00pm)	11kV Local Tx., DSIIDC Bawana	Feeding to DTL	11.09.2014 (07:00am to 01:00pm)
10	12.09.2014 (07:00am to 01:00pm)	66kV I/C-I, Bawana	Feeding to TPDDL	12.09.2014 (07:00am to 01:00pm)
11	15.09.2014 (07:00am to 01:00pm)	66kV I/C-I, Kanjhawala	Feeding to TPDDL	15.09.2014 (07:00am to 01:00pm)
12	16.09.2014 (07:00am to 01:00pm)	66kV I/C-II, Kanjhawala	Feeding to TPDDL	16.09.2014 (07:00am to 01:00pm)
13	17.09.2014 (07:00am to 01:00pm)	66kV DMRC, Kanjhawala	Feeding to BRPL	17.09.2014 (07:00am to 01:00pm)
14	18.09.2014 (07:00am to 01:00pm)	11kV Local Tx., Kanjhawala	Feeding to DTL	18.09.2014 (07:00am to 01:00pm)
15	19.09.2014 (07:00am to 01:00pm)	66kV I/C-I, Narela	Feeding to TPDDL	19.09.2014 (07:00am to 01:00pm)
16	20.09.2014 (07:00am to 01:00pm)	66kV I/C-II, Narela	Feeding to TPDDL	20.09.2014 (07:00am to 01:00pm)
17	22.09.2014 (07:00am to 01:00pm)	33kV I/C-III, Narela	Feeding to TPDDL	22.09.2014 (07:00am to 01:00pm)
18	23.09.2014 (07:00am to 01:00pm)	11kV Local Tx., Narela	Feeding to DTL	23.09.2014 (07:00am to 01:00pm)
19	24.09.2014 (07:00am to 01:00pm)	66kV I/C-I, SOW	Feeding to BYPL	24.09.2014 (07:00am to 01:00pm)
20	25.09.2014 (07:00am to 01:00pm)	66kV I/C-II, SOW	Feeding to BYPL	25.09.2014 (07:00am to 01:00pm)
21	26.09.2014 (07:00am to 01:00pm)	66kV I/C-III, SOW	Feeding to BYPL	26.09.2014 (07:00am to 01:00pm)
22	27.09.2014 (07:00am to 01:00pm)	11kV Local Tx.-1, SOW	Feeding to DTL	27.09.2014 (07:00am to 01:00pm)
23	29.09.2014 (07:00am to 01:00pm)	11kV Local Tx.-2, SOW	Feeding to DTL	29.09.2014 (07:00am to 01:00pm)
24	30.09.2014 (07:00am to 01:00pm)	66kV I/C-I, Ridge Valley	Feeding to BRPL	30.09.2014 (07:00am to 01:00pm)
25	01.10.2014 (07:00am to 01:00pm)	66kV I/C-II, Ridge Valley	Feeding to BRPL	01.10.2014 (07:00am to 01:00pm)
26	04.10.2014 (07:00am to 01:00pm)	66kV I/C-I, DIAL	Feeding to BRPL	04.10.2014 (07:00am to 01:00pm)
27	07.10.2014 (07:00am to 01:00pm)	66kV I/C-II, DIAL	Feeding to BRPL	07.10.2014 (07:00am to 01:00pm)

(Action by DTL)

**8.0 Meeting ended with vote of thanks to the Chair.**