	<p align="center">DELHI TRANSCO LIMITED (A Govt. of NCT of Delhi Undertaking) An ISO 9001:2008 certified company Office of DGM(T) OS, Convener-OCC 1st Floor, 220 kV Sub-Stn Park Street, Opp. Talkatora Stadium, Near R.M.L. Hospital, New Delhi-110001 Web:-www.dtl.gov.in, E-mail :- dgm.os@dtl.gov.in</p>
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No. F.DTL/831/F.4/2017-18/DGM (OS)/71

Date:-03.11.2017

To,
All Members of Operation Co-ordination committee

DTL	General Manager (O&M)-I, Chairman OCC General Manager (O&M)-II General Manager (Planning) DGM (O&M) - North, East, West, South DGM (M/P) DGM (Plg.)	Fax no. 011-23366160 Fax No.011-23622707 Fax no. 011-23366160 Fax No.011-23632031
SLDC	ED (SLDC) DGM (SO)	Fax no. 011-23221069 Fax no. 011-23221059/12,
TPDDL	DGM	Fax no. 011-66050602
BRPL	Vice President (SO) Asstt. Vice President	Fax no. 011-39996549 Fax no. 011-39996549
BYPL	Asstt. Vice President (SO)	Fax no. 011-39996549
NDMC	Executive Engineer (M/F)	Fax no. 011-23235754
IPGCL	AGM (T) COS AGM (T) Opr. GTPS	Fax no. 011-23284797 Fax no. 011-23370884
PPCL	DGM (T) Opr. PPS-I DGM (T) Opr. PPS-III	Fax no. 011-23378947 Fax no. 011-27791175
MES	AEE/M.SLDC Officer	
BTPS	AGM (EEMG)	Fax no. 011-26944348
BBMB	Sr. Executive Engineer, O&M	Fax no. 011-28315542
DMRC	Addl. GM (Elect.) General Manager (Elect.)	Special Invitee Special Invitee
GMR(DIAL)	GM(DIAL)	Special Invitee
N. Railways	Sr. DEE (TRD)	Special Invitee
EDWPCL	Director(EDWPCL)	Special Invitee
Delhi MSWSL	Station Incharge	Special Invitee

Sub :- MOM of Delhi OCC Meeting held on 30.10.2017 at 220kV Park Street Building.

Dear sir/madam,

Delhi OCC meeting for Oct-2017 was held on **30.10.2017 at O/o :- GM(O&M)-I, Delhi Transco Ltd., 220kV Sub-stn Park Street Building, Opp. Talkatora Stadium, Near R.M.L. Hospital, New Delhi-110001.**

The minutes of meeting is enclosed herewith for your kind perusal and further necessary action please. The same has also been uploaded on DTL website, www.dtl.gov.in under the Tab "News and Information – OCC Meeting".

Thanking You.

Enclosure: MOM of Delhi OCC meeting.

Yours Sincerely,
sd/-
(Hitesh Kumar)
DGM(OS),DTL
Convener-OCC

Copy for favour of kind information to:

1. Member Secretary, NRPC, 18-A, SJS Marg, Katwaria Sarai, New Delhi-110016.
2. Secretary, DERC, Viniyamak Bhawan, C-Block, Shivalik, New Delhi-17.
3. Chairperson & Managing Director, DTL.
4. Director (Operations), DTL
5. General Manager (Project)-I, DTL
6. General Manager (Project)-II, DTL

**DGM(OS),DTL
Convener-OCC**

DELHI TRANSCO LIMITED

(Regd. Office: Shakti Sadan, Kotla Road, New Delhi-110002)

MOM OF DELHI OCC MEETING HELD ON 30.10.2017

GM (O&M)-I, DTL, Chairman-OCC welcomed the members of OCC. List of participants are enclosed herewith as Annexure-1. The meeting was started with the presentation on review of grid operation for Sep 2017. It was informed that Delhi peak demand of 5661 MW for Sep-2017 was met on 14.09.2017 at 23:00:29 hrs. Discom wise load as well as generation within Delhi during the peak and load curve for all the Discoms during the Sep month was depicted. Planning of Grid operation for Nov 2017 was also discussed, wherein it was explained that the anticipated peak demand for Nov 2017 would be around 3601 MW.

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

1. Confirmation of minutes of previous Delhi OCC meeting held on dated 28.09.2017.

The previous Delhi OCC meeting was held on 28.09.2017. Minutes of the aforesaid OCC meeting were issued vide letter dt. 13.10.2017 and sent to all the participants/OCC members via e-mail. The minutes were also uploaded on DTL website (www.dtl.gov.in) under the Tab "News and Information – OCC Meeting".

No comments have been received. **Members confirmed the minutes of OCC meeting dt. 28.09.2017 issued vide letter no.-F.DTL/831/F.4/2017-18/DGM(OS)/67, dt. 13.10.2017.**

2. DTL Agenda :

2.1 Tripping of 220 kV Bamnauli-Pappankalan II Ckt.-1 & 2 from Bamnauli end on dt.-20.05.2017 at 23:53 hrs. and 23:57 hrs. respectively.

On dt.-20.05.2017, 220 kV Bamnauli-Pappankalan II Ckt-1& 2 got tripped at 23:53 hrs and 23:57 hrs respectively at Bamnauli end on backup protection and the supply at PPK-II got failed due to radial feed from Bamnauli grid. Later on it was came to notice that the fault was at BRPL 66 kV Hastal grid at the 11 kV end. The fault of 11 kV level should have been cleared at 11 kV or 66 kV level at the BRPL station, but it was not cleared leading to fire. In this particular case at the time of fault at BRPL end the current of 66 kV Hastal feeders was probably less than 800 Amp so the 66 kV feeder was not supposed to trip. Whereas the current of 220 kV feeder as noted from disturbance record of Bamnauli end was 1000 Amp and the feeder has rightly tripped on over current setting resulting supply at PPK-II got failed due to radial feed from Bamnauli grid.

BRPL should provide the following details before the OCC for deliberation of the above incident-

- A. Single line diagram of the 66 kV Hastal Grid substation.
- B. System configuration at the time of incident
- C. Connectivity of the BRPL Power network.
- D. Incident report by BRPL alongwith DR and SOE.
- E. Tripping analysis report by BRPL
- F. Details of the SCADA Connectivity along with DATA acquisition configuration of 66 kV Hastal to BRPL System Control Room (Balaji) for monitoring of the unmanned substation.
- G. Immediate Remedial measure to avoid such type of incident.

The representative of BRPL informed that the detailed report have been sent to GM(O&M)-I,DTL. It was briefed there was a fault in 11 kV st. through joint which was uncleared at 11 kV level due to failure of DC supply leading to fire in the panel and damage to their transformers.

It was further informed by BRPL that they are exploring for implementation of protection scheme that in case of DC supply failure at their Sub-stn the 66/33 kV incomer feeders will trip immediately. They are also exploring for blowing of hooters automatically in case of DC supply failure. OCC opined that all possible remedial measures be taken by the discoms to avoid the repetition of such incidents in future.

DTL informed that O&M deptt. was unaware about the LILO of 66kV O/G feeders from Pappankalan-II Sub-stn to BRPL 66 kV Hastal grid.

OCC advised that before carrying out the LILO activity, fresh agreement is to be made before charging the ckt. and copy of the same should be submitted to all concerned including the concerned GM(O&M). GM(Commercial), DTL should submit one copy of the agreement to the concerned GM(O&M).

OCC further advised that copy of the agreement for carrying out LILO for this particular case be submitted by BRPL in the office of GM(O&M)-I.

(Action by BRPL)

2.2 Non provision of 33kV cable holding arrangement by NDMC and improper sealing of 33kV cable duct/trench at 220/33 kV Sub-stn HCML and AIIMS Trauma centre.

The subjected matter was discussed during the previous OCC meeting as under:-

(i)220 KV GIS S/Stn. AIIMS Trauma Centre-

There are 18 Nos. 33 KV outgoing feeders at 220 KV GIS S/Stn. AIIMS Trauma Centre out of which 12 Nos. pertains to NDMC, 02 No. pertains to BRPL and 04 Nos. are spare at present. Cable holding arrangement is not provided in any feeders resulting damage of cable end termination box due to stress in the event of fault. Cable end termination box of 33 KV bay No. 19 along with PT was damaged due to same reason. Replacement of multi cable end termination box is very costly amounting to Rs. 27Lacs approx and time consuming being OEM item. It is pertinent to mention here that cable end termination box in which cable is to be inserted pertains to the user entity. Further, cable duct/trench are not properly sealed hence water and mud enters through entry points/pipes in the 33 KV GIS basement in rainy season. Matter was taken up with NDMC since 06.04.2015 but no progress has been made.

(ii)220 KV GIS S/Stn. HCML-

There are 15 Nos. 33 KV outgoing feeders at 220 KV GIS S/Stn.HCML out of which 09 Nos. pertains to NDMC, and 06 Nos. are spare at present. Cable holding arrangement is not provided in any feeders resulting damage/flash of cable end termination box due to stress in the event of fault. Recently on 01.06.2017, there was heavy flash on cable end termination of 33 KV feeder Connaught place (Bay No. 02) during fault and in outage since then. Further, cable duct/trench are not properly sealed hence water and mud enters through entry points/pipes in the 33 KV GIS basement in rainy season. Matter was taken up with NDMC since 06.04.2015 but no progress has been made.

The matter was deliberated in OCC meeting held on 28.06.2017 and a committee comprising of officers from DTL and NDMC was formed to resolve the issues and directed to update the status in next OCC meeting.

Accordingly, committee members met at 220 KV S/Stn. AIIMS Trauma Centre on 06.07.2017 and following decisions were taken. The contents of MOM are as under:-

- 1) NDMC has already agreed in the meeting dated 06.04.2015 (MOM of the same was circulated on 09.04.2015) that they will provide proper cable holding arrangement with alignment to cable end termination in all the feeders.
- 2) NDMC will ensure that all existing pipes are properly sealed from inside of 33KV GIS basement to avoid rain water entry in the basement of 33kV GIS.
- 3) The mud inside the basement shall be removed by DTL after completion of the works by NDMC as specified at Sr. No. 1 and 2.
- 4) NDMC will ensure proper earthing with suitable current rating links of cable sheaths and armors at DTL end in all the 33KV feeders.
- 5) NDMC will ensure proper workmanship during dismantling/insertion of cable and other associated works under intimation and satisfaction to DTL.
- 6) In addition to above, it was also decided that planning department will take care in future upcoming sub-stations with insertion of scope of works for erection of structure for cable holding from cable entry point to 66/33kV cable end terminations.

It has been requested by DTL that NDMC should update the status with its time frame.

The matter was deliberated and it was agreed by NDMC that they have already started the tendering work and all the pending works as per MOM will be completed within four months. DTL to provide the exhaust fan arrangement at the site.

(Action by NDMC)

2.3 Providing cable route drawing for 66 kV Shastri Park I& II, 66 kV Yamuna Vihar I& II and 66 kV Ghonda I& II at 220 kV South of Wazirabad.

DTL have informed that the boundary wall work at 220 kV sub-station South of Wazirabad has been started by civil department.

Following 66 kV BYPL underground cables are passing from 220 KV S/stn SOW:-

- (i) 66 kV Shastri Park I& II, (ii) 66 kV Yamuna Vihar I& II, (iii) 66 kV Ghonda I& II

Before starting digging work cable routes of the aforesaid 66kV feeders are essentially required to avoid the unwanted damage during excavation work. DTL have requested that the authenticated cable route drawings of the above mentioned feeders be provided before the digging activities.

The matter was deliberated and it was agreed by BYPL that they will submit the requisite drawing to Mgr.(T)SOW within one week time.

(Action by BYPL)

3. Planned Shutdowns

3.1 Proposed planned shutdowns of O&M, DTL

DTL O&M deptt. has proposed the planned shutdowns for the month of Nov-2017 as per enclosed Annexure.

After deliberation the shutdowns were approved. Duly approved shutdown list is enclosed as annexure.

3.2 Shutdown request of Power Grid for replacement of HTLS conductor of 220 kV SOW-Geeta Colony D/C line and 220 kV SaritaVihar-Pragati line (May 2017 Agenda).

The matter was discussed during Delhi OCC meeting held on dt.-26.05.2017 in which M/s PGCIL had requested for shutdowns of following 220kV lines for HTLS conductor replacement:-

S. No.	Name of transmission line	Ckt.
1.	220 kV Geeta Colony-Wazirabad T/L	Ckt.-1
2.	220 kV Geeta Colony-Wazirabad T/L	Ckt.-2
3.	220 kV SaritaVihar-Pragati	Ckt.-2

It was informed by SLDC that they had inquired from PGCIL about the reason for re-conductoring. PGCIL have informed that during the re-conductoring of 220 kV Pragati – Sarita Vihar Ckt. –II the core of the HTLS conductor got broken due to which delay in re-conductoring occurred. It was also informed that the conductor of the same drum was utilized in 220 kV Geeta Colony – Wazirabad Section. Since the core of the conductor was broken as such the quality of the HTLS used in re-conductoring work has come under question. As such PGCIL has pressed the contractor to change the entire section of the above mentioned ckt's where the conductors of the same drum were used. The shutdowns of above mentioned line is required for change of the existing conductors thus used.

It was deliberated that PGCIL didn't submit the details as agreed in the OCC meeting dt.-26.05.2017.

It was again emphasized by DTL that PGCIL should submit all the relevant details like span, phase, length of conductor, tower no. to tower no., etc. in which the conductor replacement is required alongwith the reason for replacement to GM(O&M)-II, DTL within fifteen days time frame so as to complete the work before winter peak.

GM(O&M)-II, DTL will obtain the required approval from competent authority for the proposed re-conductoring work and thereafter put to OCC for approval of shutdowns. DTL, O&M-II div. to follow up with PGCIL for the same.

(Action by PGCIL/DTL)

3.3 Shutdown request of Power Grid for Loop in Loop out of 220 kV Bamnauli-Naraina Transmission line at 220/66 kV Pappankalan-III Sub-station (Aug 2017 Agenda).

The matter was discussed during Delhi OCC meeting held on dt.-28.08.2017 in which M/s PGCIL had requested the shutdown of 220 kV Bamnauli-Naraina Transmission line for Loop in Loop out at 220/66 kV Pappankalan-III Sub-station.

They had informed that two nos. of new towers required for the LILO of this line are to be placed in the same alignment, for which foundation work has already been completed. However, for the tower erection and stringing work, shutdown of both ckt. is required for around 15 days. M/s Powergrid had requested that the intimation of approved shutdown be given to them in advance (15 days).

The shutdown request of Powergrid was also discussed in the OCC meeting held in the month of June-2017, wherein DTL had enquired PGCIL about readiness of sub-station of Pappankalan-III. PGCIL informed that erection work is in progress and they will inform after confirming from sub-station erection wing.

The matter was deliberated and as per the request of M/s PGCIL, the shutdown was tentatively approved w.e.f. 15 to 30 Nov. 2017. It was also advised that the line differential relays for remote end be also commissioned by PGCIL. PGCIL agreed for the same.

(Action by PGCIL)

3.4 Shutdown request of M/s PWD of 220 kV D/C Maharani Bagh-Ghazipur T/L for the construction of Barapullah Phase-III project (Construction of elevated road over Barapullah Nallah starting from Sarai Kale Khan to Mayur Vihar, New Delhi).

M/s PWD vide their letter dt.-20.09.2017 have requested to provide the shutdown of 220 kV D/C Maharani Bagh-Ghazipur T/L for a period of minimum 6 months or till the completion of re-routing work whichever is earlier to avoid any further delay of flyover work.

It was deliberated that 220 kV D/C Maharani Bagh-Ghazipur T/L is the only reliable source for Ghazipur Sub-stn and as such continuous shutdown for six months will not be feasible for this ckt.

PWD should come with the proposal of Emergency Restoration System (ERS) at their own cost and submit the details in the office of GM(O&M)-II.

GM(O&M)-II will examine the proposal and thereafter put before OCC for approval of shutdown.

(Action by PWD)

3.5 Shutdown request of M/s PPCL of GT 2 w.e.f. 31.10.2017 to 04.11.2017 (5 days) for mandatory Baroscopic inspection at PPS-I.

M/s PPCL vide their letter dt.-13.10.2017 have informed that GT-2 of Pragati Power Station (PPS-I) is running continuously since last overhauling during March-April 2016. The mandatory Baroscopic inspection is already due of the unit. As deliberated in NRPC meeting dt.-06.10.2017, the shutdown is planned w.e.f. 31.10.2017 to 04.11.2017 for 05 days accordingly. M/s PPCL have further informed that during the above shutdown period, the availability of the station will be 150 MW.

After deliberation, the proposed shutdown of GT 2 w.e.f. 31.10.2017 to 04.11.2017 (5 days) were approved.

4. Requirement of 150-200MW power for 7 days from DTL, 220 kV Sub-stn Ghazipur to 220 kV Sahibabad S/Stn of UPPTCL (Sep-2017 Agenda).

Vice Chairman, GDA vide letter no. 03/4/EE-E-(Project)/2017 dt. 03.08.2017 had requested DTL for providing 150-200MW Power for 7 days from 220kV Gazipur S/Stn. due to shutdown of 220kV Muradnagar – Sahibabad Double ckt. for construction of via duct of Metro corridor near Meerut road crossing.

Accordingly the issue was deliberated in OCC Meeting held on 28.08.2017 and consensus was made to provide upto 150MW Power to UPPTCL during 09.09.2017 to 15.09.2017.

DMRC vide letter dt. 12.09.2017 has informed SLDC that the required power during the above period could not be materialized due to dislocating of EHV Tower connecting Delhi and UP System due to natural disaster occurred at Gazipur land filling site on 01.09.2017. As such, DMRC did not request Delhi SLDC to provide upto 150MW Power to UPPTCL during 09.09.2017 to 15.09.2017. DMRC further stated that the transmission line connecting Delhi and UP System is unsafe for operation. They have now planned to erect a new tower in place of damaged tower and the work is likely to be completed by 29.09.2017.

Now, DMRC has again requested SLDC for providing 150-200MW Power to UPPTCL for 7 days from 220kV Gazipur S/Stn. w.e.f. 03.10.2017 to 10.10.2017, so that the UPPTCL may allow the shutdown of their 220kV line from Muradnagar to Sahibabad to DMRC for raising of height of this line infringing the DMRC corridor from Dilshad Garden to New Bus Adda at Ghaziabad.

Delhi SLDC informed that FIFA Under-17 world India 2017 Tournament is being organized in Delhi during 06.10.2017 to 28.10.2017 and reliable and uninterrupted power supply has to be maintained in Delhi.

The matter was deliberated in the OCC meeting held on 28.09.2017, wherein the allocation of proposed power from DTL 220 kV Sub-stn Ghazipur to 220 kV Sahibabad S/Stn of UPPTCL was deferred till Nov-2017 in view of hosting of FIFA U-17 world cup during the month of Oct-2017.

The matter was deliberated and consensus was made to provide 150 MW Power to UPPTCL from Ghazipur Sub-stn via 220 kV Ghazipur-Sahibabad ckt. during 05.11.2017 to 12.11.2017. This is subject to revival of Pragati GT#2 which is under planned shutdown w.e.f. 31.10.2017 to 04.11.2017 for Mtc. work.

It was further informed by DMRC that CEO, Noida has written letter to Hon'ble CMD DTL for requirement of 150-200 MW power from DTL Ghazipur Sub-stn for 7 days at 220 kV Noida Sec-62 Sub-stn for shifting of 220 kV Greater Noida-Noida Sec. 62 ckt. which is creating hindrance to the construction of via-duct of metro corridor from Sec-62, Noida to Electronic city.

The matter was deliberated and consensus was made to provide 150 MW Power for 7 days from Ghazipur Sub-stn to 220 kV Noida Sec-62 Sub-stn via 220 kV Ghazipur-Noida Sec.-62 ckt. after the completion of power requirement at 220 kV Sahibabad Sub-stn of UPPTCL as mentioned above.

In case of any exigency in Delhi power system, SLDC Delhi will restrict the power drawl to UPTTCL.

5. SLDC Agenda

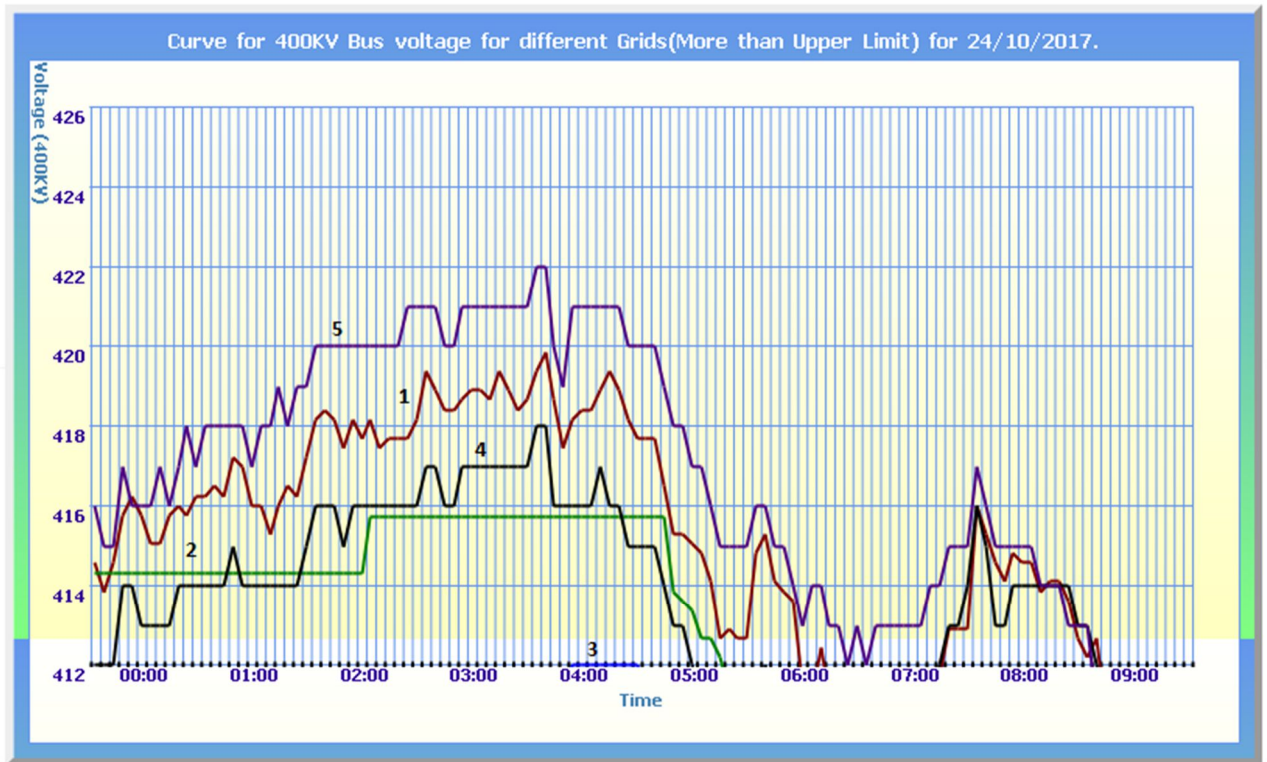
5.1 Winter Preparedness and Observance of High Voltage in the Grid:

As part of winter preparedness, for controlling high voltages in the grid, following were decided in Oct-2016 OCC meetings as well as during special meeting:

- A. Switching off the capacitors at all the Substations of Delhi, but during winter season proper monitoring of the same is yet to be put in place.
- B. Transformer taps optimization by DTL and DISCOM. (list of Tx. taps details of DTL as on 24.10.17 is enclosed in Annexure-I).
- C. Monitoring of all 400/220 kV ICTs and taking actions wherein Var flows are observed from 220 kV to 400 kV side. In this respect reactive energy accounts could also be monitored.



Figure-1: Reactive power injection by Delhi control area to NR grid causing Penalty



- 1 Red Color: Mandaula 400 KV
- 2 Green Color: Bawana 400 KV
- 3 Blue Color: Bamnauli 400 KV
- 4 Black Color: Mundka 400KV
- 5 Indigo Color: Maharani Bagh 400KV

Figure:2: Voltage curves at different Exchange points at 400kV level.

D. Opening of lightly loaded transmission cables/transmission lines keeping reliability in focus.

E. Absorption of reactive power by generating units.

Annexure-1

Present Tap position of ICTs as on 24.10.2017

Note: TT-Total No. of Taps, NT-Nominal Tap, PT- Present Tap (Tap position as on 24.10.2017)

Sl No.	Station Name	Owner	Voltage Ratio (kV)	Equipment	Rating (MVA)	ICT details (MVA)	Configuration	TT	NT	PT
1	BAMNAULI	DTL	400/220	ICT 01	315	1*315	Y-Y	17	9	9B
2	BAMNAULI	DTL	400/220	ICT 02	315	1*315	Y-Y	17	9	9B
3	BAMNAULI	DTL	400/220	ICT 03	500	1*500	Y-Y	17	9	9B
4	BAMNAULI	DTL	400/220	ICT 04	500	1*500	Y-Y	17	9	9B
5	BAWANA	DTL	400/220	ICT 01	315	1*315	Y-Y	17	9	9B
6	BAWANA	DTL	400/220	ICT 02	315	1*315	Y-Y	17	9	9B
7	BAWANA	DTL	400/220	ICT 03	315	1*315	Y-Y	17	9	9B
8	BAWANA(CCGT)	DTL	400/220	ICT 04	315	1*315	Y-Y	17	9	9B
9	BAWANA(CCGT)	DTL	400/220	ICT 05	315	1*315	Y-Y	17	9	9B
10	BAWANA(CCGT)	DTL	400/220	ICT 06	315	1*315	Y-Y	17	9	9B
11	MUNDKA	DTL	400/220	ICT 02	315	1*315	Y-Y	17	9	9
12	MUNDKA	DTL	400/220	ICT 03	315	1*315	Y-Y	17	9	9
13	MUNDKA	DTL	400/220	ICT 04	315	1*315	Y-Y	17	9	9
14	HARSH VIHAR	DTL	400/220	ICT 01	315	1*315	Y-Y	17	9	9
15	HARSH VIHAR	DTL	400/220	ICT 02	315	1*315	Y-Y	17	9	9
16	HARSH VIHAR	DTL	400/220	ICT 03	315	1*315	Y-Y	17	9	9

220kV Tr. tap position

Present Tap position of 220/66kV & 220/33kV Trs. as on 24.10.2017

S. No.	Name of the Element	MVA rating of ICT	Status of OLTC	Total tap	Normal tap	Present tap position
	400kV Bawana S/S					
1	220/66kV 100MVA Tx	100		17	5	5
	400kV Mundka S/S					
2	220/66kV 160MVA Tx-II	160		17	5	5
3	220/66kV 160MVA Tx-III	160		17	5	5
	220kV Narela S/S					
4	220/66kV 100MVA Tx-I	100		17	5	5
5	220/66kV 100MVA Tx-II	100		17	5	5
6	220/66kV 100MVA Tx-III	100		17	5	5
	220kV Rohini S/S					
7	220/66kV 100MVA Tx-I	100		17	5	5
8	220/66kV 100MVA Tx-II	100		17	5	5
9	220/66kV 100MVA Tx-III	100		17	5	5
10	220/66kV 100MVA Tx-IV	100		17	5	5
	220kV Patparganj S/S					
11	220/66kV 100MVA Tx-I	100		1-17	5	6
12	220/66kV 100MVA Tx-II	100		1-17	5	6
13	220/33kV 100MVA Tx-I	100		1-17	5	5
14	220/33kV 100MVA Tx-IV	100		1-17	5	5
15	220/33kV 100MVA Tx-III	100		1-17	5	5
	220kV Pragati S/S					
16	220/66kV 160MVA Tx-I	160				
17	220/66kV 160MVA Tx-II	160				
	220kV Gazipur S/S					
18	220/66kV 100MVA Tx-I	100		17	5	3
19	220/66kV 100MVA Tx-II	100		17	5	3
20	220/66kV 160MVA Tx	160		17	5	3
	220kV Wazirabad S/S					
21	220/66kV 100MVA Tx-I	100		17	5	5
22	220/66kV 100MVA Tx-II	100		17	5	5
23	220/66kV 100MVA Tx-III	100		17	5	5
24	220/66kV 160MVA Tx-I	160		17	5	5
	220kV Okhla S/S					
25	220/66kV 100MVA Tx-I	100		1-17	5	5
26	220/66kV 100MVA Tx-II	100		1-17	5	5
27	220/33kV 100MVA Tx-III	100		17	5	5
28	220/33kV 100MVA Tx-IV	100		17	5	5
29	220/33kV 100MVA Tx-V	100		17	5	5
	220kV Sarita Vihar S/S					
30	220/66kV 100MVA Tx-I	100		17	5	5
31	220/66kV 100MVA Tx-II	100		17	5	5
32	220/66kV 100MVA Tx-III	100		17	5	5
	220kV Vasant Kunj S/S					
33	220/66kV 160MVA Tx-I	160		17	5	5
34	220/66kV 100MVA Tx-II	100		17	5	5
35	220/66kV 100MVA Tx-III	100		17	5	5
	220kV Najafgarh S/S					
36	220/66kV 100MVA Tx-I	100		17	5	5
37	220/66kV 100MVA Tx-II	100		17	5	5
38	220/66kV 100MVA Tx-III	100		17	5	5
39	220/66kV 100MVA Tx-IV	100		17	5	5

S. No.	Name of the Element	MVA rating of ICT	Status of OLTC	Total tap	Normal tap	Present tap position
	220kV Park Street S/S					
40	220/66kV 100MVA Tx-I	100		1-17	5	2
41	220/66kV 100MVA Tx-II	100		1-17	5	2
42	220/33kV 100MVA Tx-I	100		1-17	5	4
43	220/33kV 100MVA Tx-II	100		1-17	5	4
	220kV Kanjhawala S/S					
44	220/66kV 100MVA Tx-I	100		17	5	5
45	220/66kV 100MVA Tx-II	100		17	5	5
	220kV Pappankalan-II S/S					
46	220/66kV 100MVA Tx-I	100		17	5	5
47	220/66kV 100MVA Tx-II	100		17	5	5
48	220/66kV 160MVA Tx-III	160		17	5	5
49	220/66kV 160MVA Tx-IV	160		17	5	5
	220kV Pappankalan-I S/S					
50	220/66kV 100MVA Tx-II	100		17	5	5
51	220/66kV 160MVA Tx-III	160		17	5	5
52	220/66kV 100MVA Tx-IV	100		17	5	5
53	220/66kV 160MVA Tx-V	160		17	5	5
	220kV Mehrauli S/S					
54	220/66kV 100MVA Tx-I	100		17	5	5
55	220/66kV 100MVA Tx-II	100		17	5	5
56	220/66kV 100MVA Tx-III	100		17	5	5
57	220/66kV 160MVA Tx	160		17	5	5
	220kV Gopalpur S/S					
58	220/66kV 100MVA Tx-II	100		1-17	5	3
59	220/33kV 100MVA Tx-I	100		1-17	5	7
60	220/33kV 100MVA Tx-III	100		1-17	5	7
	220kV DSII DC Bawana S/S					
61	220/66kV 100MVA Tx-II	100		17	5	5
62	220/66kV 100MVA Tx-III	100		17	5	5
63	220/66kV 160MVA Tx	160		17	5	5
	220kV DIAL S/S					
64	220/66kV 160MVA Tx-I	160		17	4	3
65	220/66kV 160MVA Tx-II	160		17	4	3
	220kV Ridge Valley S/S					
66	220/66kV 160MVA Tx-I	160		17	3	3
67	220/66kV 160MVA Tx-II	160		17	3	3
	220kV Rohini-II S/S					
68	220/66kV 160MVA Tx-I	160		17	5	3
69	220/66kV 160MVA Tx-II	160		17	5	3
	HARSH VIHAR 400kV S/S					
70	220/66kV 160MVA Tx-I	160		17	5	5
71	220/66kV 160MVA Tx-III	160		17	5	5
72	220/66kV 160MVA Tx-II	160		17	5	5
	220kV Subzi Mandi S/S					
73	220/33kV 100MVA Tx-I	100		1-17	5	5
74	220/33kV 100MVA Tx-II	100		1-17	5	5
	220kV Kasmere Gate S/S					
75	220/33kV 100MVA Tx-I	100		17	5	3
76	220/33kV 100MVA Tx-II	100		17	5	3
	220kV Lodhi Road S/S					
77	220/33kV 100MVA Tx-I	100		17	5	3
78	220/33kV 100MVA Tx-III	100		17	5	3

S. No.	Name of the Element	MVA rating of ICT	Status of OLTC	Total tap	Normal tap	Present tap position
	220kV Naraina S/S					
79	220/33kV 100MVA Tx-I	100		17	5	Damaged
80	220/33kV 100MVA Tx-II	100		17	5	5
81	220/33kV 100MVA Tx-III	100		17	5	5
	220kV Geeta Colony S/S					
82	220/33kV 100MVA Tx-I	100		17	5	5
83	220/33kV 100MVA Tx-II	100		17	5	5
	220kV Shalimarbagh S/S					
84	220/33kV 100MVA Tx-I	100		17	5	5
85	220/66kV 100MVA Tx-II	100		17	5	5
86	220/33kV 100MVA Tx-III	100		17	5	5
	220kV I.P. S/S					
87	220/33kV 100MVA Tx-I	100	N/A	1-21	9	9
88	220/33kV 100MVA Tx-II	100	N/A	1-21	9	9
89	220/33kV 100MVA Tx-III	100	N/A	1-17	5	5
	220kV Masjid Moth S/S					
90	220/33kV 100MVA Tx-I	100		1-17	5	2
91	220/33kV 100MVA Tx-II	100		1-17	5	2
92	220/33kV 100MVA Tx-II	100		1-17	5	2
	220kV Trauma Center S/S					
93	220/33kV 100MVA Tx-I	100		1-17	5	5
94	220/33kV 100MVA Tx-II	100		1-17	5	5
	220kV Electric Lane S/S					
95	220/33kV 100MVA Tx-I	100		1-17	5	5
96	220/33kV 100MVA Tx-II	100		1-17	5	5
	220kV Wazirpur S/S					
97	220/33kV 100MVA Tx-I	100		1-17	5	5
98	220/33kV 100MVA Tx-II	100		1-17	5	5
	220kV Peeragarhi S/S					
99	220/33kV 100MVA Tx-II	100		1-17	5	5
100	220/33kV 100MVA Tx-III	100		1-17	5	5

220kV Tr. tap position

It was deliberated that all possible measures be taken by DTL as well as all the Discoms to control the problem of over voltage during the winter season. Following steps needs be taken immediately to control the over voltage situation:-

(i) All the Generators were advised to control the MVAR injection in the grids.

(ii) All the 220 kV rating transformers in DTL be operated on tap position no.-3.

(iii) All the 400 kV rating ICTs in DTL be operated on tap position no.-5.

(iv) The tap position of 20MVA/16MVA transformers be also changed if required on the directions of SLDC.

(v) All the Discoms were also advised to operate their transformers on optimum tap position to encounter the over voltage problem.

(vi) All the capacitor banks installed in DTL as well as all the Discoms be switched off immediately.

(vii) The underground cables to be switched off at both ends as per the directions of SLDC.

(viii) SLDC to closely monitor the grid voltage and can give directions accordingly to control the over voltage problems.

(Action by SLDC/DTL/Gencos/Discoms)

5.2 Electricity generation target for the year 2018-19.

Delhi SLDC received a communication from NRPC regarding Electricity Generation target for 2018-19. This data is sought by Central Electricity Authority (CEA).

Delhi SLDC has written a letter to all generating stations i.e. BTPS, Pragati, CCGT Bawana & G.T. on 13.09.2017. So far none of the generating stations have submitted the details to Delhi SLDC.

The issue was also discussed in last OCC Meeting held on 28.09.2017, wherein the generating stations informed that the data will be sent within a week time. However, SLDC have informed that none of the Gencos have given the information. It is once again requested to provide the requisite information.

It was informed by SLDC that the requisite data have been submitted by all the Gencos.

5.3 Agenda point no.15 from 138 th NRPC OCC Meeting:

(a) RGMO/FGMO compliance by generators in the region (Agenda based on letter by CERC)

CERC (IEGC) 5th amendment of IEGC dated 12.04.2017 provides that all Coal/lignite based thermal generating units of 200 MW and above, Open Cycle Gas Turbine/Combined Cycle generating stations having gas turbines of capacity more than 50 MW each and all hydro units of 25 MW and above should provide RGMO/FGMO response. Further, it has been provided at Regulation 5.2(h) that ‘RLDCs/SLDCs should not schedule the generating station or unit(s) thereof beyond ex-bus generation corresponding to 100% of the installed capacity of the generating station or unit(s) thereof and that the generating station shall not resort to Valve Wide Open operation of units” so that primary response is ensured. CERC in its letter dated 05.06.2017 has directed to obtain the status of availability of RGMO/FGMO response from the generators (ISGS as well as intra-state generators) in the region.

The latest status of RGMO/FGMO available with NRPC is attached in ANNEXURE – F. All the Utilities are requested to check and update this status.

Annexure-F :

S.No.	Power Station	Unit size	No of units	Installed Capacity	Status of RGMO/FGMO					Reason for seeking exemption/ extension	Status not available	Remarks
					Units required to operate under RGMO/ FGMO as per IEGC	Units operating under RGMO	Units operating under FGMO with manual control to achieve RGMO	Units operating with inoperative governor /locked governor	Units exempted from RGMO/ FGMO by CERC			
CENTRAL SECTOR												
NTPC (Thermal)												
1	Badarpur TPS	3x95 + 2x210	5	705	2	0	0	2	0	2	Mechanical governors	
Delhi												
4	Indra Prastha Gas station	6x30+3x34	9	282.00	0	0	0	0	0			
5	Pragati Gas Turbines	2x104+1x122	3	330	3	0	0	0	0			
6	Bawana	4x216+2x253	6	1370	6	0	0	0	0			
7	Rajghat TPS	2x67.5	2	135	0	0	0	0	0			
8	Rithala GPS	3x36	3	108	0							

PPCL representative intimated that they are pursuing the matter with their OEM department regarding details of RGMO / FGMO of PPCL-I & PPCL –III. PPCL may share the information before next OCC meeting.

Whereas BTPS has submitted the details.

(b) SCADA mapping of RGMO/FGMO signal by the respective utilities of Northern Region .

The matter was discussed and decided in 138th NRPC- OCC Meetings for SCADA Mapping of RGMO/FGMO signals in respective control area.

Genco's may provide the analog/digital signal regarding operational status of RGMO/FGMO to SLDC before next OCC meeting so that the mapping can be done in Delhi SCADA system .

6. Long/Recent outage of Elements in Delhi power system.

Members updated the status of following Long/Recent outage of elements in Delhi Power system as under:

S.N	Element's Name	Discom/ DTL	Date and Time of outage	Updated Status as on 30.10.2017
1.	33kV BAY -3 (IP – KILOKARI)	BRPL	22.02.2011	Clearance from Railways for laying of Underground cables near Bhairon Road is pending. OCC advised BRPL to inform DTL after awarding of the said work. During the OCC meeting dt.-28.11.2016, It was deliberated that the above work shall be started after joint inspection with Railways.
2.	33kV RIDGE VALLEY - KHEBAR LINE CKT.-II	BRPL	31.01.2016	R-PHASE SINGLE CABLE FAULTY. Permission awaited from NH. Expected by 25.12.2017.
3.	66kV VASANT KUNJ INSTL.AREA-RIDGE VALLEY CKT.-I	BRPL	26.03.2017	UNDER SHUTDOWN.
4.	33kV LODHI ROAD - EXHIBITION GROUND -II	BRPL	04.06.2017	SINGLE CABLE FAULTY.
5.	33kV JASOLA - JAMIA CKT.	BRPL	26.09.2017	BOTH CABLES FAULTY. Energized on 27.10.17,18.10.17.
6.	66kV VASANT KUNJ `C BLK - JNU CKT-II	BRPL	12.10.2017	R PHASE CABLE FAULTY. Expected by 30.10.17.
7.	33kV BAY -13 (IP - NIZAMUDDIN)	BRPL	21.10.2017	Y PHASE SINGLE CABLE FAULTY Expected by 01.11.17.
8.	33kV BAY -24 (IP - NEHRU STADIUM)	BRPL	21.10.2017	R PHASE SINGLE CABLE FAULTY Energized on 29.10.17
9.	66kV SAGARPUR - REWARI LINE CKT.	BRPL	30.07.2016	'B'PH. CABLE FAULTY. RE-ROUTING BEING DONE. Expected by Dec 17.
10.	66kV MUNDKA - NANGLOI CKT.	BRPL	08.05.2017	'B' & 'Y'PH. CABLE FAULTY Digging permission awaited
11.	33kV PANKHA ROAD - D.C. JANAKPURI CKT.-II	BRPL	29.09.2017	'R'PH. SINGLE CABLE FAULTY Energized on 25.10.17
12.	33kV NARAINA(220kV)-MAYA PURI CKT.-II	BRPL	29.09.2017	SINGLE CABLE FAULTY PWD permission awaited.
13.	33kV PASCHIM VIHAR - MUKHERJEE PARK CKT-III	BRPL	08.10.2017	UNDER SHUT DOWN
14.	66kV HASTHAL - GGSH CKT-I	BRPL	20.10.2017	'Y' CABLE FAULTY Expected by 30.10.17.
15.	66kV PPK -II - HASTAL CKT.-II	BRPL	20.10.2017	'Y'PH. SINGLE CABLE FAULTY Expected by 6.11.17.
16.	66kV HASTHAL - GGSH CKT-II	BRPL	20.10.2017	'R'PH. SINGLE CABLE FAULTY Expected by 30.10.17.
17.	66kV PPG - AKSHARDHAM CKT	BYPL	06.08.2017	CABLE FAULTY. Expected by last week of Dec 17
18.	66kV KHICHRIPUR - PPG INDL. AREA CKT.-I	BYPL	05.09.2017	R, Y & B-PHASE CABLE FAULTY. Expected by 10 Nov 17
19.	66kV KHICHRIPUR - PPG INDL. AREA CKT.-II	BYPL	05.09.2017	R, Y & B-PHASE CABLE FAULTY. Expected by 10 Nov 17

S.N	Element's Name	Discom/ DTL	Date and Time of outage	Updated Status as on 30.10.2017
20.	33KV PANDAV NAGAR - DMS CKT.	TPDDL		RMU FAULTY. Expected by 30 Nov 17
21.	33kV INDERPURI - PANDAV NAGAR CKT.	TPDDL		CABLE energized.
22.	33kV BAY -28 (IP - CONNAUGHT PLACE) CKT	NDMC	20.08.2017	CABLE FAULTY. PWD permission awaited. Expected by 10 Nov 17.
23.	33kV HC MATHUR LANE - ELECTRIC LANE CKT.	NDMC	06.10.2017	'R' PH. CABLE FAULTY Expected by 1 st week of Nov 17.
24.	33kV TRAUMA CENTRE - MEDICAL CKT-II	NDMC	07.10.2017	'B' PH. CABLE FAULTY Energized on 28.10.17.
25.	400kV BAMNAULI - JHAKTIKARA CKT.-II	DTL	21.10.2017	Shutdown for Restoration of ERS. Tower erected and work completed and both ckts. energized on 25.10.2017.
26.	400kV BAWANA - MUNDKA CKT.- I&II	DTL	14.05.2017	Legs of tower no.-116 twisted due to fire beneath the line. Ckt.- I & II energized upto tower no. 115 from Bawana end. Jumper opened at tower no. 115.Order placed and completion of work expected by 31.12.2017.
27.	220/33kV 100MVA PR.TR.-I AT 220kV NARAINA	DTL	26.07.2017	Transformer damaged due to fire. Another Transformer to be supplied by PGCIL against MOU-II by 31.12.2017.

Additional Agenda of M/s TPDDL

1. High voltage received from 220 kV DSIDC BAWANA.

M/s TPDDL have informed that there is voltage regulation of 0.8 kV per tap of OLTC position at DTL side. Hence, the tap position needs to be changed from tap-5 to tap-3. The details of 66 kV voltage during 20.10.2017 to 25.10.2017 is as under:-

Date	DTL Point	TPDDL point	Average Voltage	Minimum Voltage	Maximum Voltage
20-10-17	DSIDC 220KV	Bawana-1 Phase-2	70.00	69.02	71.09
21-10-17			70.16	69.01	71.27
22-10-17			69.19	67.48	70.61
23-10-17			68.56	66.51	70.21
24-10-17			68.25	66.09	70.19
25-10-17			68.90	66.09	69.94

The matter was already discussed and advised as per Agenda point no.-5.1.

2.Termination at 220 kV Subji Mandi grid.

M/s TPDDL have informed that they have observed that there was unbalanced loading at 220kV Subzi mandi to 33kV Shahzada bagh ckt no. 2, and upon load testing it was seen that R Phase lead of Cable end box of cable no. 2 at 220kV Subzi mandi Grid(GIS grid)end found damaged (Photos attached). Hence cable no. 2 of the same circuit put down from both the ends and circuit is charged on cable no. 1.

Now it is not clear who will make the termination of cable in GIS panel because it is special type termination and is not available in TPDDL.



The matter was discussed and it was deliberated that the cable end termination be done by TPDDL at their own level.

(Action by TPDDL)

The meeting ended with vote of thanks to the Chair.

NOTE:-The MOM of OCC meeting can also be seen on DTL website (www.dtl.gov.in) under the Tab “News and Information – OCC Meeting”.
