

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

AGENDA FOR OCC MEETING DT. 29.12.2016

Date : 29.12.2016 (Thursday)
Time : 2:30 PM
Venue : SLDC Building
Minto Road, Opp. MCD Civic Centre,
New Delhi-110002

1.0 Confirmation of minutes of OCC meeting dated. 28.11.16.

An OCC meeting was held on 28.11.16 in accordance with the agenda circulated vide letter dt. 22.11.16. Minutes of the aforesaid OCC meeting were issued vide letter dt. 09.12.16.

Members may like to confirm the same.

2.0 DTL O&M Agenda points

2.1 Status of Hot Reserve of transformers at all levels.

DTL to update the status of 100 MVA and 160 MVA hot reserve of power transformers and cold reserves at 66kV and 33kV level:

S. No.	Transformation Capacity	Present population in nos.	Status of the hot reserve as on 28.11.16
1.	220/66kV Tx 160MVA	22	DTL informed that the newly erected 160 MVA transformer at Kanjhawala (previously considered as hot reserve) is being transferred to PPK-I and the 100MVA Tx at PPK-I is being routed to Park street for replacement of the failed 100 MVA transformer. OCC had advised DTL to start the process for purchase of a new 160MVA Power transformer as hot reserve. O&M deptt., DTL may kindly update the status.
2.	220/66kV Tx 100MVA	42	DTL informed that PO for supply and ETC of 220/33kV 100MVA Tx as hot reserve at 220kV Patparganj Substation has been awarded. Tx. is expected to be commissioned before March, 2017. OCC had advised DTL planning deptt. to propose in steering committee meeting for having 2 nos. 220/66-33 KV (Dual ratio Tr.), 100MVA Tx as spare in DTL system. Planning deptt., DTL may kindly update the status.
3.	220/33kV Tx 100MVA	37	

4.	66/11kV 20MVA Tx.	24	DTL Planning department informed that the scheme for 25MVA power transformers has been prepared and the same are for replacement and not for reserve. OCC had advised DTL to get the approval of DERG for cold reserve transformers each at 66kV and 33kV level for further action. Planning deptt., DTL may kindly update the status.
5.	33/11kV 16MVA Tx.	16	

2.2 (a) Alternative supply arrangement for IGI Airport, Delhi

DTL informed that at present, IGI Airport is being provided supply from only one source i.e. 220kV DIAL sub-station. In this regard, DTL requested Airport authority i.e. DIAL to have alternate power supply source in case of failure of supply from DIAL S/Stn. of DTL.

The issue was discussed during the OCC meeting dt.-28.09.2016, wherein DIAL informed that presently there are three terminals at IGI Airport. The power to Terminal –I & II is fed through 8 nos of 33kV outgoing feeders from 66kV Palam S/Stn. which is having two sources of supply from 220kV Mehrauli and from 220kV Vasant Kunj S/stn. However, power source to Terminal – III is only from 220kV DIAL S/Stn. at 66kV Level. Representative of DIAL further stated there is no 66kV Bus arrangement at 66kV DIAL S/Stn.

OCC during the meeting dt.-28.09.2016, pointed out that DIAL should explore the possibility of utilizing idle 66kV feeder from Palam s/stn terminating near 220kV DIAL S/stn. BRPL representative stated that this feeder is lying redundant for the last about three years and PTW on this is still with DIAL and if DIAL is not utilizing this feeder than they may surrender this bay to BRPL.

OCC had advised DIAL to submit the schematic arrangement of power supply to existing terminals of IGI Airport in the next OCC meeting. Representative of DIAL agreed to submit the same alongwith their future plan of utilizing the redundant 66kV Line.

During the OCC meeting dt.-28.10.16, GMR presented the schematic arrangement of power network of IGI Airport, wherein it was informed that there is 11kV link between Terminal –I & II (being feed through Palam Sub-Stn of BRPL) and Terminal –III (being feed through DTL DIAL Sub-Stn at 66kV level). OCC advised that GMR should explore the possibility for having a second source at 66kV level for power supply at Terminal-3 in coordination with BRPL to meet any exigency at Terminal-3 in case of power supply failure at DTL DIAL Sub-Stn. GMR should also deliberate at their end the issue of surrender of 66kV unutilized bay at Palam Sub-Stn to BRPL as raised by BRPL.

During the OCC meeting dt.-28.11.16, It was deliberated that GMR will take up the matter with their management regarding utilizing idle lying 66 KV line or surrender it to BRPL. It was further decided that a meeting will be convened between GMR (DIAL) and BRPL for exploring the possibility for having a second source at 66kV level for power supply at Terminal-3 to meet any exigency.

GMR-DIAL,BRPL to update the status.

2.2 (b) Switching Off 66kV essential bay 1 from DTL 220kV DIAL end without any information to DIAL

GMR vide their e-mail dt.-03.12.2016 have informed that on dated 02-12-2016 at 23:23 hrs., DIAL 66kV Essential Bay 1 was made OFF from 220kV DIAL DTL end without any information to DIAL. The entire Airport operations were hampered as Essential Bay power was interrupted without any information & they were not apprised for making any alternative arrangements to avoid chaos at Airport at Peak operation time during night hours when International traffic movement was on peak.

On further investigation & enquiry from 220kV DIAL DTL end they explored that their 66kV Essential Bay 1 feeder was taken OFF by mistake, instead of making 66kV Metro Feeder OFF. This type of mistake is not acceptable to them and that too for feeder which is catering prominent Airport load. Such cases requires to be intimated & confirmed from user in order of validation & avoiding of any slip-ups.

They have urged to take appropriate action at DTL end and confirm them with the interim Corrective action & Systematic recommendations enabling to avoid such incidences in future.

DTL (O&M)-I deptt. and GMR may deliberate

2.3 Shutdown for six months starting w.e.f. 07.12.2016 in r/o 220kV Maharani Bagh – Ghazipur (D/C) Line at 220kV Sub-Station Gazipur end for PWD work.

PWD had requested for Shutdown for nearly six months in r/o 220kV Maharani Bagh – Ghazipur (D/C) Line at 220kV Sub-Station Gazipur end for construction of elevated Road over Barapullah Nallah, starting from Sarai kale khan to Mayur Vihar, New Delhi.

OCC during its meeting dt.-28.11.2016 had approved the shutdown of 220kV Maharani Bagh – Ghazipur (D/C) Line at 220kV Sub-Station Gazipur end for one month starting w.e.f. 07.12.2016 subject to real time loading conditions of the grid and also subject to condition that PWD will restore both the lines within two hours of DTL intimation.

Regarding the further extension of shutdown, DTL(O&M), SLDC & PWD may deliberate.

2.4 Storage of scrap material by BRPL Najafgarh at the common road at 220kV DTL Substation Najafgarh

It was informed by Mgr(O&M), DTL (N-3&5) that BRPL Najafgarh is using the common road from Main Security Gate (at Main Road) to Security Gate at DTL 220kV Najafgarh Substation Security Gate which is creating the hindrance to men and material of DTL and common public at large too. The problem enhances and get gruesome when general public park their vehicles while visiting the BRPL Office encroaching the corridor. It can also not be ruled out that in case of

major chaos, if any fire breaks out at DTL installation at Najafgarh or similar exigency, fire tenders/emergency vehicles may not be able to enter the premise due to space crunch created by storage of damaged & old scraps in the form of LT transformers, electrical poles and also due to parking of vehicles by general public. It was further informed that the matter was also followed up with the then BRPL officers but no action in this regard have been taken so far. An urgent and favourable action is required for vacating the common road by removing the old scraps in the form of LT transformers and Electrical Poles.

During the OCC meeting dt.-28.11.2016, OCC advised BRPL that matter be looked into and resolve the issue raised by DTL in the interest of Grid O&M activities and safety of public.

DTL(O&M) and BRPL may update the status.

2.5 Approval for Deemed Availability of 100MVA 220/66kV Power Transformer-III at 220kV S/stn Pappankalan-I for absence during upgradation of 100MVA Transformer with 160MVA Power Transformer.

On dt. 04/09/2016, 100MVA 220/66kV Power Transformer No-III, EMCO make at 220kV S/stn Pappankalan-I was tripped off on Differential Relay. Dir.(opr),DTL has approved the upgradation of said 100 MVA Transformer with 16 0MVA Power Transformer (Kanohar make) presently installed at 220kV S/Stn Kanjhawala as Hot reserve. The tendering process of upgradation of 100MVA Power Transformer with 160MVA Power Transformer is in pipe line with C&MM deptt. & shall be upgraded as early as possible.

As per the DERC guidelines, absence period of 100MVA Transformer No.-III during the replacement with 160MVA Power Transformer shall be considered as deemed available for calculation of availability in view of its upgradation

DTL O&M-I deptt. and SLDC may deliberate.

3.0 SLDC Agenda Points

3.1 Availability Computation of Elements available at 220/33kV RPH S/Stn.

Following the closure of Rajghat Power House (RPH) generating station the operation of RPH switch yard has been handed over to DTL on 03.06.2016.

Now the maintenance of RPH switchyard lies with DTL. It has to maintain electrical system to maintain the power supply of area fed from RPH switch yard.

As per the Transmission Tariff Regulation of DERC, the Normative Transmission System Availability is 98%.

To workout the availability of the RPH switch yard, the details of outages are required to be incorporated in Transmission System Availability computation. The detail of the elements available at the RPH switch yard are as under:

220kV System

S. No.	220kV Lines	Remarks
1	220kV RPH-I.P. Ckt. -I	Already included for computation of Transmission System Availability of DTL.
2	220kV RPH-I.P. Ckt. -II	
3	220/33kV 100 MVA Tr.-1	
4	220/33kV 100 MVA Tr.-2	

33kV System

S. No.	Bay Nos.	Feeder Name
1	Bay No. 1	33kV Motia Khan
2	Bay No. 2	33kV Lahori Gate
3	Bay No. 3	10.5/33kV 85MVA Generator Trf. of Unit-1
4	Bay No. 4	33kV 10MVA Cap Bank-2
5	Bay No. 5	33kV Jama Masjid-1
6	Bay No. 6	33kV Jama Masjid-2
7	Bay No. 7	33/6.6kV 15 MVA station Trf. of Unit-2
8	Bay No. 8	220/33kV 100 MVA Tx I/C
9	Bay No. 9	33kV 50MVA Bus Reactor
10	Bay No. 10	10.5/33kV 85MVA Generator Trf. of Unit-2
11	Bay No. 11	33kv Internal feeder
12	Bay No. 12	33kV IG Stadium
13	Bay No. 13	33kV GB Pant Hosp.
14	Bay No. 14	33/6.6kV 15 MVA station Trf. of Unit-1

15	Bay No. 15	33kV 10MVA Cap Bank-1
16	Bay No. 16	33kV Fountain
17	Bay No. 17	33kV Minto Road
18	Bay No. 18	33kV Town Hall
19	Bay No. 19	33kV Kamla Market
20	Bay No. 20	33kV Kamla Market-2 (DDU Marg)
21	Bay No.21	33kV BUS PT
22	Bay No.22	220/33kV 100MVA Tx I/C

Note : The following elements may not be considered for availability computation.

S. No.	Bay Nos.	Feeder Name	Remarks
1	Bay No. 3	10.5/33kV 85MVA Generator Trf. of Unit-1	Generator transformer is not being used now.
2	Bay No. 7	33/6.6kV 15 MVA station Trf. of Unit-2	Station transformer is not being used now.
3	Bay No. 10	10.5/33kV 85MVA Generator Trf. of Unit-2	Generator transformer is not being used now.
4	Bay No. 11	33kV Internal feeder	
5	Bay No. 14	33/6.6kV 15 MVA station Trf. of Unit-1	Station transformer is not being used now.
6	Bay No.21	33kV BUS PT	
7	Bay No. 4	33kV 10MVA Cap Bank-2	At the time of taking over both the capacitor banks were not working.
8	Bay No. 15	33kV 10MVA Cap Bank-1	

The following details of 33kV O/G feeders may be provided for calculation of availability:-

- (i) Line length (Ckt. Kms.)
- (ii) Type of conductor
- (iii) No. of sub-conductors per phase

OCC may deliberate.

3.2 Reactive Power Management

As decided in the last OCC meeting no. of steps have been taken by SLDC, Delhi and Discoms to control the high voltage conditions and reactive power injection by Delhi system to the grid particularly during off peak time.

1. Opening of feeders at 220kV Level.

The following feeders have been identified and being opened during the period 22.00hrs. to 06.00hrs.

Sr. No.	Name of Stn.	Name of Ckt.	Elements to be opened	Remarks
1	Bamnauli	Dial ckts	Both ckts. at both ends	Load of Dial to be taken on Mehrauli ckt. I & II. (00.00hrs. to 06.00hrs.)
2		Naraina Ckt.	Single ckt. at both ends	Load of Naraina shall be taken on Single ckt.
3		Papankalan –I Ckt.	Single ckt. at both ends	Load of Papankalan –I shall be taken on Single ckt.
4		Papankalan –II Ckt.	Single ckt. at both ends	Load of Papankalan –II shall be taken on Single ckt.
5	Mehrauli	Vasant Kunj ckts.	Single ckt. at both ends	Load of Vasant Kunj shall be taken on Single ckt.
6	Maharani Bagh	Trauma Centre ckts	Both ckts. at both ends	Load of Trauma centre shall be taken on single ckt. of Ridge valley.
7	Trauma Centre	Ridge Valley Ckt.	Single ckt. at both ends	Load of Trauma centre shall be taken on single ckt. of Ridge valley.
8	Bawana	DSIDC Bawana Ckt.	Both ckts. at both ends	Load of DSIDC Bawana shall be taken on single ckt. of Narela.
9	DSIDC Bawana	Narela ckt.	Single ckt. at both ends	Load of DSIDC Bawana shall be taken on single ckt. of Narela.
10	Bawana	Rohini –II	Both ckts. at both ends	TPDDL will shift the load at Rohini-I
11		Rohini –I	Single ckt. at both ends	Load of Rohini-I shall be taken on Single ckt..
12		Shalimarbagh	Single ckt. at both ends	Load of Shalimarbagh shall be taken on Single ckt..
13	Rohini-I	Shalimarbagh	Both ckts. at both ends	Ckt. remain on no load
14	Mundka	Peeragarhi	Both ckts. at both ends	Load will be fed from Wazirpur single ckt.
15	Peeragarhi	Wazirpur	Single ckt. at both ends	Load of Peeragarhi shall be taken on Single ckt
16	Shalimarbagh	Wazirpur	Single ckt. at both ends	Load of Wazirpur shall be taken on Single ckt
17	Bawana	Khanjawala	Both ckts. at both ends	Load of Khanjawala shall be taken on single ckt.

				of Mundka
18	Pragati	Park street	Single ckt. at both ends	Load of Park Street shall be taken on Single ckt
19	Maharani Bagh	Masjid moth ckts.	Both ckts. at both ends	BRPL will shift the load at alternate source
20		Electric Lane	Both ckts. at both ends	NDMC will shift the load at alternate source
21		Lodhi Road	Single ckt. at both ends	Load of Lodhi Road shall be taken on Single ckt
22	Wazirabad	Gopalpur	Both ckts. at both ends	Ckt. remain on no load
23		Mandola	Single ckt. at both ends	Load of Wazirabad shall be taken on other ckts.
24		Kashmiri Gate	Single ckt. at both ends	Load of Kashmiri Gate shall be taken on Single ckt
25	Gopalpur	Subzi Mandi	Single ckt. at both ends	Load of Subzi Mandi shall be taken on Single ckt
26	Bamnauli	400kV Ballabgarh	Single ckt. at both ends	Load will met through other ckt.
27	Gazipur	Noida-Btps ckt	Single ckt. at both ends	Ckt. remain on no load
28	Vasant Kunj	220kV R.K.Puram ckt. charged at 66kV	To be made off at Vasant Kunj	
29	Kashmiri Gate	DMRC Ckt.	Ckt. which is on no load to be made off	Kashmiri Gate to do the operation in consultation with DMRC.
30	Shalimarbagh	DMRC Ckt.	To be made off	Shalimarbagh to do the operation in consultation with DMRC.

- ## 1. Switching OFF lines to be initiated by 20.00hrs positively.
 2. While charging the lines during normalization, it should be ensured that line be charged from low voltage end .

2. Optimization of Tr. tap positions

It has been observed that during off peak hours since both the 400kV and 220kV Voltages are high, Tr. tap adjustment does not yield appreciable results. However in almost all 220kV S/Stns. Tr. tap position has been kept at Tap No.-3. The details are as under:

Present Tap position of 400/220kV ICTs as on 27.12.2016

Note: TT-Total No. of Taps, NT-Nominal Tap, PT- Present Tap (Tap position as on 27.12.16)										
SI 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	7
12	MUNDKA	DTL	400/220	ICT 03	315	1*315	Y-Y	17	9	7
13	MUNDKA	DTL	400/220	ICT 04	315	1*315	Y-Y	17	9	7
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

Present Tap position of 220/66-33kV Transformers as on 27.12.2016

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		12	5	3
5	220/66kV 100MVA Tx-II	100		12	5	3
6	220/66kV 100MVA Tx-III	100		12	5	3
	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	3
12	220/66kV 100MVA Tx-II	100		1-17	5	3

13	220/33kV 100MVA Tx-I	100		1-17	5	3
14	220/33kV 100MVA Tx-IV	100		1-17	5	3
15	220/33kV 100MVA Tx-III	100		1-17	5	3
	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	3
22	220/66kV 100MVA Tx-II	100		17	5	3
23	220/66kV 100MVA Tx-III	100		17	5	3
24	220/66kV 160MVA Tx-I	160		17	5	3
	220kV Okhla S/S					
25	220/66kV 100MVA Tx-I	100		1-17	5	3
26	220/66kV 100MVA Tx-II	100		1-17	5	3
27	220/33kV 100MVA Tx-III	100		17	5	3
28	220/33kV 100MVA Tx-IV	100		17	5	3
29	220/33kV 100MVA Tx-V	100		17	5	3
	220kV Sarita Vihar S/S					
30	220/66kV 100MVA Tx-I	100		17	5	3
31	220/66kV 100MVA Tx-II	100		17	5	3
32	220/66kV 100MVA Tx-III	100	Under B/D			
	220kV Vasant Kunj S/S					
33	220/66kV 160MVA Tx-I	160		17	5	3
34	220/66kV 100MVA Tx-II	100		17	5	3
35	220/66kV 100MVA Tx-III	100		17	5	3
	220kV Najafgarh S/S					
36	220/66kV 100MVA Tx-I	100		17	5	3
37	220/66kV 100MVA Tx-II	100		17	5	3
38	220/66kV 100MVA Tx-III	100		17	5	3
39	220/66kV 100MVA Tx-IV	100		17	5	3
	220kV Park Street S/S					
40	220/66kV 100MVA Tx-I	100		1-17	5	3
41	220/66kV 100MVA Tx-II	100		1-17	5	3
42	220/33kV 100MVA Tx-I	100		1-17	5	3
43	220/33kV 100MVA Tx-II	100	Under B/D	1-17	5	-
	220kV Kanjhawala S/S					
44	220/66kV 100MVA Tx-I	100		17	5	3
45	220/66kV 100MVA Tx-II	100		17	5	3
46	220/66kV 160MVA Tx-III	160		17	5	3
	220kV Pappankalan-II S/S					
47	220/66kV 100MVA Tx-I	100		17	5	3
48	220/66kV 100MVA Tx-II	100		17	5	3
49	220/66kV 160MVA Tx-III	160		17	5	3
50	220/66kV 160MVA Tx-IV	160		17	5	3
	220kV Pappankalan-I S/S					
51	220/66kV 100MVA Tx-I	100		17	5	3
52	220/66kV 100MVA Tx-II	100		17	5	3

53	220/66kV 100MVA Tx-III	100		-	-	-
54	220/66kV 100MVA Tx-IV	100		17	5	3
55	220/66kV 160MVA Tx-V	160		17	5	3
	220kV Mehrauli S/S					
56	220/66kV 100MVA Tx-I	100		17	5	3
57	220/66kV 100MVA Tx-II	100		17	5	3
58	220/66kV 100MVA Tx-III	100		17	5	3
59	220/66kV 160MVA Tx	160		17	5	3
	220kV Gopalpur S/S					
60	220/66kV 100MVA Tx-II	100		1-17	5	3
61	220/33kV 100MVA Tx-I	100		1-17	5	4
62	220/33kV 100MVA Tx-III	100		1-17	5	4
	220kV DSIIDC Bawana S/S					
63	220/66kV 100MVA Tx-II	100		17	5	3
64	220/66kV 100MVA Tx-III	100		17	5	3
65	220/66kV 160MVA Tx	160		17	5	3
	220kV DIAL S/S					
66	220/66kV 160MVA Tx-I	160		17	4	3
67	220/66kV 160MVA Tx-II	160		17	4	3
	220kV Ridge Valley S/S					
68	220/66kV 160MVA Tx-I	160		17	3	3
69	220/66kV 160MVA Tx-II	160		17	3	3
	220kV Rohini-II S/S					
70	220/66kV 160MVA Tx-I	160		17	5	3
71	220/66kV 160MVA Tx-II	160		17	5	3
	HARSH VIHAR 400kV S/S					
72	220/66kV 160MVA Tx-I	160		17	5	3
73	220/66kV 160MVA Tx-III	160		17	5	3
74	220/66kV 160MVA Tx-II	160		17	5	3
	220kV Subzi Mandi S/S					
75	220/33kV 100MVA Tx-I	100		1-17	5	3
76	220/33kV 100MVA Tx-II	100		1-17	5	3
	220kV Kasmere Gate S/S					
77	220/33kV 100MVA Tx-I	100		17	5	3
78	220/33kV 100MVA Tx-II	100		17	5	3
	220kV Lodhi Road S/S					
79	220/33kV 100MVA Tx-I	100		17	5	3
80	220/33kV 100MVA Tx-II	100		17	5	3
	220kV Naraina S/S					
81	220/33kV 100MVA Tx-I	100		17	5	3
82	220/33kV 100MVA Tx-II	100		17	5	3
83	220/33kV 100MVA Tx-III	100		17	5	3
	220kV Geeta Colony S/S					
84	220/33kV 100MVA Tx-I	100		17	5	3
85	220/33kV 100MVA Tx-II	100	Under B/D	17	5	-
	220kV Shalimarbagh S/S					
86	220/33kV 100MVA Tx-I	100		17	5	5
87	220/33kV 100MVA Tx-II	100		17	5	5
88	220/33kV 100MVA Tx-III	100		17	5	5
	220kV I.P. S/S					
89	220/33kV 100MVA Tx-I	100	N/A	1-21	9	5

90	220/33kV 100MVA Tx-II	100	N/A	1-21	9	5
91	220/33kV 100MVA Tx-III	100	N/A	1-17	5	1
	220kV Masjid Moth S/S					
92	220/33kV 100MVA Tx-I	100		1-17	5	5
93	220/33kV 100MVA Tx-II	100		1-17	5	5
	220kV Trauma Center S/S					
94	220/33kV 100MVA Tx-I	100		1-17	5	5
95	220/33kV 100MVA Tx-II	100		1-17	5	5
	220kV Electric Lane S/S					
96	220/33kV 100MVA Tx-I	100		1-17	5	5
97	220/33kV 100MVA Tx-II	100		1-17	5	5
	220kV Wazirpur S/S					
98	220/33kV 100MVA Tx-I	100	Under B/D	1-17	5	-
99	220/33kV 100MVA Tx-II	100		1-17	5	5
	220kV Peeragarhi S/S					
100	220/33kV 100MVA Tx-II	100		1-17	5	5
101	220/33kV 100MVA Tx-III	100		1-17	5	5

In addition to above the following feeders are also switched off from 220kV Grid S/Stns. to reduce reactive power flow from Discom level to 220kV Level.

BYPL

Sr. No.	Name of Stn.	Name of Ckt.
1.	220kV Park Street	33kV Faiz Road Ckt-I
		33kV Motia Khan Ckt-II
2	220kV Subzi Mandi	33kV BG Road Ckt-II
3	220kV IP	33kV Bay-17 –Delhi Gate
		33kV Bay-18 –DDU
4	220kV RPH	33kV Bay-13 – GB Pant
		33kV Bay-12 – IG Stadium
		33kV Bay-5 – Jama Masjid
		33kV Bay-6 – Jama Masjid
		33kV Bay-2 – Lahori Gate
		33kV Bay-17 – Minto Road
		33kV Bay-18 – Town Hall
5	220kV Patparganj	66kV GH-I Ckt-II
		66kV Vivek Vihar Ckt-II
		66kV Khichripur Ckt

		66kV Akshardham Ckt.
		33kV Karkardooma Ckt-II
		33kV Geeta Colony Ckt.
		33kV Scope Tower Ckt.
		33kV Guru Angad Nagar Ckt-II
6	220kV Gazipur	66kV Kondli Ckt-I
7	220kV Wazirabad	66kV Shastri Park Ckt-I
		66kV Yamuna Vihar Ckt-I
8	220kV Geeta Colony	33kV Kailash Nagar Ckt-II
		33kV Kanti Nagar Ckt-II
		33kV Shakarpur Ckt.
10	400kV Harsh Vihar	66kV Nand Nagari Ckt-II

BRPL

Sr. No.	Name of Stn.	Name of Ckt.
1	220kV Sarita Vihar	66kV Mathura Road Ckt-I
2	220kV Vasant Kunj	66kV Vasant Kunj `C' Block Ckt-I & II
3	220kV Okhla	66kV Okhla Phase-I Ckt-I
		33kV Okhla Phase-II Ckt-I
		33kV Balaji Ckt-I
		33kV Nehru Place Ckt-II
		33kV Alaknanda Ckt-I
4	220kV DIAL	66kV DIAL (Aerocity) Ckt-I
5	220kV Peera Garhi	33kV Udyog Nagar Ckt
		33kV Paschim Puri Ckt-II
6	220kV Pappankalan-I	66kV Bindapur Ckt-I
		66kV GH-II Ckt-I
7	220kV Pappankalan-II	66kV GGS Ckt-I
		66kV G-15 Ckt-I
		66kV G-6 Ckt-I

8	220kV IP	33kV Bay-7 (Exh Ground-I)
		33kV Bay-37 – Kilokari
9	220kV Najafgarh	66kV Jafarpur Ckt-I
		66kV Nangloi Ckt.
10	220kV Mehrauli	66kV Malviya Nagar (Two Ckts)

With all the coordinated efforts the maximum reactive power injection under high voltage condition has been reduced from 500MVAR to 350MVAR on 21.12.2016. The details of MVAR injection from various drawal points of Delhi system are as under:

Sr. No.	Name of Station	Ckt. / Tr.	MVAR	Remarks
1	Bamnauli 400kV	Papankalan-I	4	BRPL advised to reduce MVAR injection at Papankalan –II, Vasant Kunj & Ridge Valley.
		Papankalan –II	-16	
		Najafgarh	0	
		DIAL	-3	
		Naraina	-6	
		Mehrauli	-4	
		Vasant Kunj	-7	
		Ridge Valley	-7	
2	Bawana 400kV	DSIDC Bawana	-21	TPDDL advised to reduce MVAR injection at DSIDC Bawana & Khanjawala.
		Rohini –I	3	
		Rohini –II	-4	
		Shalimarbagh	14	
		Khanjawala	-7	
		220/66kV 100MVA Tr.	-3	
3	Maharani Bagh 400kV	Masjid Moth	0	
		Trauma Centre	4	
		Electric Lane	3	
		Lodhi Road	1	
4	Harsh Vihar 400kV	220/66kV 160MVA Tr.	-15	BYPL advised to reduce MVAR injection at Harsh Vihar
5	Mundka 400kV	Peeragarhi	0	TPDDL advised to reduce MVAR injection at Khanjawala & TPDDL & BRPL at 220/66kV Tr. at Mundka.
		Najafgarh	6	
		Khanjawala	-7	
		220/66kV 100MVA Tr.	-12	
6	Mandola 400kV	Wazirabad	-16	BYPL & BRPL advised to reduce MVAR injection at Wazirabad, I.P.Stn. Patparganj
		Gopalpur	-3	
		Narela	1	
		I.P.Stn.	-8	
		Patparganj	-13	
		Geeta Colony	-3	
		Kashmiri Gate	2	
		Gazipur	5	
7	BTPS	Okhla	-9	BYPL & BRPL advised to reduce MVAR injection at Okhla, Sarita Vihar & Park Street
		Sarita Vihar	-22	
		Park Street	-14	

Observation :

1. Reactive power injection at Discom level should be made zero so that there should not be any injection from 66/33kV Level to 220kV for example the line loading of 220kV Bamnauli – Papankalan–II Ckts was (MW = 36, MVAR = -16).
2. Reactive power generation of :
G.T. Stn. (MW = 70, MVAR = -2)
Pragati –I (MW = 151, MVAR = -10)
Bawana CCGT (MW = 253, MVAR = -7)

Generators should not generate MVARs during high Voltage conditions .
3. All utilities should ensure that no reactive power be generated locally during high voltage time.
4. All utilities should ensure that optimum tap position be maintained at their respective substations to control high voltage.

4.0 OS Agenda

4.1 Changing of Transformer Tap position in Off-line mode

It has been learnt that the tap position of transformers in DTL are being changed in off-line mode. Changing the tap position of transformer in off-line mode may lead to interruption of power supply and it can't be denied that the consumer load may also be affected even for a shorter duration of time. Besides there are chances of failure of OLTC if the tap changing operations in online mode are done after prolonged period of time. Hence the operation of OLTC should be continued.

DTL O&M-I/II deptt. may deliberate.

5.0 EDWPCL Agenda

5.1 Relay coordination with DTL Ghazipur Sub-Stn.

EDWPCL vide their e-mail dt.-17.11.2016 have informed that they have submitted hard copy of relay settings at their end to DTL for checking of relay coordination.

DTL has checked and finalized the relay settings and the same has been communicated to EDWPCL.

EDWPCL may update.

6.0 Northern Railways Agenda

6.1 Joint Checking of Overhead Power Line crossings with railway representatives.

Northern Railways vide their letter dt.-17.11.2016 have informed that Joint checking of several overhead crossings are still pending between The detail of crossings are as under:-

Details of Overhead Crossing pending for Joint Checking

S.No.	Section	Railway Location	Overhead Crossing between	System Voltage	Concerned Supply Authority
1	-do-	1532/15-17	I.P. - Sarita Vihar	220 KV	DTL
2	-do-	-do-	I.P. - Sarita Vihar	220 KV	DTL
3	-do-	5/21G- 5/23G	Patparganj- Vivek Vihar	66 KV	BSES
4	-do-	7/33G-8/1G	Patparganj- Vivek Vihar	66 KV	BSES
5	Shahdra-Sahibabad	9/3-9/5	Vivek Vihar-Dilshad Garden	66 KV	BSES
6	Azadpur-Adarsh Nagar	8/7-8/9	Azadpur- Tri Nagar	33 KV	TPDDL
7	Adarsh Nagar-Badli	11/15-11/17	Jahangir Puri-Pritampura	66 KV	TPDDL

Also joint checking of one no. 33 KV overhead crossing between Hazrat Nizamuddin- Okhla of DTL is pending. Railways have requested that necessary directives be issued for early joint checking.

Further, Northern Railways vide letter dt.-28.10.2016 have provided the list of following Railways representatives/officers for joint inspection of overhead power line crossing:-

S.No.	Section details	Concerned Railway representatives & Contact Nos.	Concerned Railway Officers & Contact Nos.
1.	Badli-New Delhi Tilak Bridge-Sahibabad Delhi-Sahibabad	Sh. Gyan Prakash, Sr. Sec. Engineer/OHE/N.Delhi Mob.No.-9717632846	Sh.C.K. Keshav ADEE/TRD/New Delhi Mob.No.-9717631312
2.	Hazrat Nizamuddin- Okhla	Sh.Pradeep Chaudhari Sr. Sec. Engineer/OHE/Tughlakabad Mob.No.-9717632847	Sh.Shyam Lal ADEE/TRD/Faridabad Mob.No.-9717632607
3.	Badli-Narela	Sh.Sanjay Uppadhyay Sr. Sec. Engineer/OHE/Narela Mob.No.-9717648532	Sh.C.K. Keshav ADEE/TRD/New Delhi Mob.No.-9717631312
4.	Shakurbasti-Bahadurgarh	Sh.Pramod Kumar Sr. Sec. Engineer/OHE/Bahadurgarh Mob.No.-08295944285	Sh.N.S. Parihar

5.	Hazrat Nizamuddin-Patel Nagar-Shakurbasti	Sh.Munna Lal Sr. Sec. Engineer/OHE/Patel Nagar Mob.No.-9717632845	ADEE/TRD/Patel Nagar Mob.No.-9717631320
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As already been discussed in the last OCC meeting dt.-28.11.2016, DTL/Discoms to carry out the joint site inspection on top priority in order to ensure safety of Railways corridor.

DTL/Discoms/Northern Railways may deliberate.

6.2 Removal of abandoned crossing: -

Northern Railways vide their letter dt.-17.11.2016 have informed that one no. 33 KV crossing, pertaining to TPDDL, between Daya Basti- Shakur Basti is abandoned since long. This crossing should be removed at the earliest to avoid any failure of this crossing and further damage to Railway traction system.

Northern Railways/TPDDL may deliberate.

7.0 Regarding ownership of equipments installed at 220kV S/Stn BBMB Delhi (BBMB agenda point)

BBMB vide their letter dt.-19.10.2016 (Refer Annex.-4) has informed that BBMB Punjabi Bagh have not any documentary proof regarding 'Ownership' of equipments installed by DTL erstwhile DESU at 220kV Sub-Stn BBMB, Delhi, which is essentially required to maintain the equipments in the wake of uninterrupted power supply from BBMB Delhi Sub-Stn. Hence, **BBMB has desired to provide the list of Ownership of equipments installed at 220kV Sub-Stn Punjabi Bagh BBMB Delhi along with the supporting documents.**

Presently, it is brought to your kind notice that one no. 66/33kV 30MVA T/F was commissioned in 1982.The name plate data of the transformer reflects that it is the DESU property.This transformer has achieved its useful life of 34 years.Due to ageing effect of T/F, the Frantic Compounds content is 2750, which is on higher side as compared to permissible limit.It indicates the severe deterioration of solid insulation in the T/F. The Tan Delta value of HV Red bushing, checked by Protection team BBMB Panipat is 2.144% which is also on higher side. The Tan Delta value of winding of T/F is also on higher side and **our Protection Division has recommended to replace the Transformer with new Transformer.**

In view of above facts, BBMB has requested to take appropriate action to replace the said Power T/F at the earliest to avoid any interruption in the Power supply in case of any outage due to breakdown of this T/F.

During the OCC meeting dt.-28.11.2016, TPDDL informed that they are searching their records available with them and shall revert back by 15.12.2016.

TPDDL may update the status.

8.0 Shutdowns

8.1 Proposed shutdowns of O&M, DTL

DTL, O&M deptt. has proposed the planned shutdowns for the month of December, 2016 as per enclosed Annexure.

Members may deliberate.

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

Members to update the status of following Long/Recent outage of Elements in Delhi Power system:

S. No.	Element's Name	DISCOM /DTL	Date and Time of outage	Remarks/Status as on 26.12.16
1.	33kV BAY -3 (IP – Kilokri)	BRPL	22.02.11	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.-I	BRPL	08.02.15	Breaker faulty. To be revamped by including in GIS. GIS is commissioned. SCADA work is in progress.
3.	33kV RIDGE VALLEY - KHEBAR LINE CKT.-II	BRPL	31.01.16	R-Ph single cable faulty
4.	66kV RIDGE VALLEY-V.KUNJ CKT.-II AT RIDGE VALLEY	BRPL	13.02.16	UNDER SHUT DOWN
5.	20MVA PR.TR.-III AT VSNL	BRPL	20.07.16	UNDER BREAK DOWN.
6.	33kV IIT-JNU Ckt.	BRPL	27.11.16	B-Ph single cable faulty
7.	66kV Jasola-Mathura Road ckt.-II	BRPL	24.12.16	Single cable faulty

8.	11kV Half Busbar towards Pr. Tr.-2 at NDSE	BRPL	21.11.16	UNDER SHUT DOWN
9.	66kV Bus coupler at G-15 Dwarka	BRPL	22.11.16	CT Blast
10.	33kV ROHTAK ROAD - MADIPUR CKT.	BRPL	28.05.16	CABLE FAULTY.
11.	66kV Mundka(400kV)-Nangloi ckt.	BRPL	11.05.16	Ckt. Put off. Now cable OK.
12.	66kV SAGARPUR - REWARI LINE CKT.	BRPL	30.07.16	'B' PH. CABLE FAULTY.
13.	30MVA PR.TR. AT NANGLOI	BRPL	18.08.16	UNDER SHUT DOWN.
14.	20MVA Pr. Tr.-I at Sagarpur	BRPL	2.12.16	UNDER SHUT DOWN
15.	66kV PPK-II-G-5 Matiala Ckt.-1	BRPL	7.12.16	Y-Ph cable faulty
16.	66kV Hastal-GGSH Ckt.-II	BRPL	17.12.16	Y-Ph cable faulty
17.	16MVA Pr.Tr.-II at Mukherji park	BRPL	20.12.16	UNDER SHUT DOWN
18.	66KV PPG-Vivek vihar ckt.-1	BYPL	24.12.16	B-PH SINGLE CABLE FAULTY
19.	33KV PANDAV NAGAR - DMS CKT.	TPDDL	03.04.16	PROBLEM IN RMU.
20.	66kV PPK(220kV)-Rewari line ckt.	TPDDL		B-PH CABLE FAULTY
21.	33kV Shastri park-Pusa ckt.-1	TPDDL		R-PH CABLE FAULTY
22.	315MVA ICT-1 at 400kV Bawana	DTL	11.12.16	Tr. Damaged due to fire.

23.	100MVA Tr.-2 at Geeta colony	DTL	01.12.16	DGA result of Tr. Oil is not within the permissible limit.
24.	400kV BAMNAULI - JHAKTIKARA CKT.-I	DTL	22.05.16	Tower erection work is yet to be started. In process of tendering.
25.	220/66kV 100MVA PR.TR.-III AT 220kV PPK-I	DTL	04.09.16	HV SIDE 'Y' PH. WINDING DAMAGED.
26.	220/33kV 100MVA PR.TR.-II AT 220kV PARK STREET	DTL	11.09.16	The transformer have been put Off due to rise in oil temperature and it will be replaced by the transformer at 220kV Pappankalan-I.
27.	220/33kV 100MVA PR.TR.-I AT 220kV WAZIRPUR	DTL	19.10.16	Tr. Tripped on Differential and Buchholz. Internal inspection has been carried out and the transformer will be charged after the recommendations of OEM.
28.	100 MVA Tr.-III at Sarita Vihar	DTL	14.12.16	Under shutdown to attend abnormal gas formation.

Thank You
