



DELHI TRANSCO LIMITED

(A Govt. of NCT of Delhi Undertaking)

Office Of DGM(T)OS

1st Floor, 220 KV Sub-Stn Park Street Building,
New Delhi-110001

No. F.DTL/201/2021-22/DGM(OS)/F4/187

Date: 15.02.2022

To,
All Members of Operation Co-ordination Committee

DTL	General Manager (O&M)-I, Chairman OCC General Manager (O&M)-II General Manager (P&M, DM&S) General Manager (Planning) DGM (O&M) - North, East, West, South DGM (M/P) DGM (Planning)	
SLDC	ED (SLDC) DGM (SO)	
TPDDL	HOD (PSC&AM) Sr. Manager (PSC)	
BRPL	AVP (SO)	
BYPL	AVP (SO)	
NDMC	Superintending Engineer, E-I	
IPGCL	AGM (T) Opr. GTPS	
PPCL	AGM (T) Opr.PPS-I AGM (T) Opr. PPS-III	
MES	AEE/M.SLDC Officer	
BBMB	Sr. Executive Engineer, O&M	
DMRC	Add. GM (Elect.) Sr.DGM (Traction)	
GMR(DIAL)	GM (DIAL)	Special Invitee
N. Railways	Sr. DEE (TRD)	Special Invitee

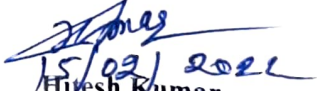
Sub: Agenda for 11th Delhi OCC Meeting (2021-22) to be held on 22.02.2022 at 11:00 A.M. through video conferencing.

The 11th Delhi OCC meeting (2021-22) is scheduled to be held on dt.- 22.02.2022, 11:00 A.M and will be conducted through video conferencing as per attached agenda. **The link and password for joining the meeting is attached in mail.**

Members are hereby requested to make it convenient to attend the meeting via **video conferencing**.

Thanking You.

Sincerely yours,


15/02/2022
Hitesh Kumar
DGM(T)OS, DTL

DELHI TRANSCO LIMITED

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

AGENDA FOR DELHI OCC MEETING NO. 11/2021-22

Date : **22.02.2022**
Time : **11:00 AM**
Venue : **Via Video conferencing**
In O/o-GM(O&M)-I, Delhi Transco Ltd.,
220 KV Sub-Stn Park Street Building,
New Delhi-110001

1. Confirmation of minutes of 10th Delhi OCC meeting (2021-22) held on dated 28.01.2022.

The 10th Delhi OCC meeting (2021-22) was held on 28.01.2022 through video conferencing in accordance with the agenda circulated vide letter dt: 20.01.2022 & 25.01.2022. Minutes of the OCC meeting were issued on 02.02.2022 and was uploaded on DTL website (http://dtl.gov.in/content/344_1_OCC-Meeting2021.aspx).

DTL Agenda:-

2. Proposed planned shutdowns of DTL for the month of March-2022.

DTL proposed planned shutdowns for the month of March-2022 (Annexure-I).

(OCC may deliberate)

3. Installation and commissioning of 11KV Switchgear at 220KV Mehrauli after the fire incident dated 08.01.2022

On date 08.01.2022, a fire incident was occurred due to flash over in 11KV switchgear installed under the control room building causing damaged of control cable panels relays etc. There were six 11KV outgoing feeders along with 02 local supply feeders in the switchgear room at Mehrauli. The named are as follows:-

- | | | |
|---------------------------|---------------------------|------------------|
| 1. 11KV Vasant Kunj Sec-A | 2. 11KV Vasant Kunj Sec-D | 3. 11KV Local-II |
| 4. 11KV Dera Bhati | 5. 11KV Andheria Bagh-I | 6. 11KV Local-I |
| 7. 11KV Andheria Bagh-II | 8. 11KV Fatehpur Beri | |

In this regard, BRPL has been advised to arrange for alternate arrangement for shifting of these feeders to nearby location by installing its 11KV system from its stock so as to meet the load requirement. In this regard, it is submitted that DTL has no spare 11KV switchgear panel available in its stock so revival of this 11KV load is not possible.

In view of above, BRPL may be requested to arrange for the alternate arrangement in this regard.

(OCC may deliberate)

4. Frequent trippings of 33KV BRPL Feeders at 220 KV Okhla Sub-station.

This is to bring in notice of OCC that on dt. 03.02.2022 at 05:15 hrs BRPL feeder 33 KV Nehru place Ckt-I was tripped at 220 KV Okhla on distance protection Zone-I , at distance 2.8 kms from 220 KV Okhla at Fault current 12A, at same time DTL 100 MVA Pr Tx No- 4 along with Incomer also tripped on differential protection and master trip 86 relay. LV Tests & internal inspection was carried out on transformer and found that the transformer winding has been damaged and transformer can't be repaired at site and it will take time to restore.

From 220 KV Okhla Sub Station, 33 KV BRPL feeders likes (Alaknanda Ckt, East of kailash ,Tughlaqabad, Nehru place, Balaji & Okhla phase -2) has frequently tripped due to line/cable fault and resulting to damagineg DTL equipments including Power Transformer at 220 KV Okhla Sub-station.

The 33 KV BRPL feeders (O/H & U/G) from 220 KV Okhla sub-station are very old and need for special attention, in maintenance & replacement of outlived Overhead line/underground cable to avoid the frequent trippings of line. The summer is coming in Delhi so that maintenance of lines (damage conductor/ jumper/ trimming of trees , removing of kite thread, replacement of damage insulators etc.) must be attend by BRPL before the summer season to avoid any unwanted outage/ tripping of 33 KV feeders .

It is also requested to BRPL, that DTL is going to commission 33 KV GIS substation in place of existing 33KV AIS sub-station at 220 KV Sub station Okhla and it will commission in 2-3 months. The BRPL is requested to take necessary arrangements like Cable/Line Termination Cable Trench, Installation of H-Pole etc. with in time and also replace the outlived/damaged overhead line/Cables on priority to avoid frequent tripping and any damage of GIS equipment in future.

(OCC may deliberate)

5. Abnormal gases increase in 20MVA Tx-II at Sarita-Vihar.

20MVA, 66/11KV Power Transformer was commissioned in year 1991 at 220KV Sarita Vihar. Last major work on this transformer executed on 06.04.2017 wherein transformer was completely overhauling by the external agency. DGA conducted on dated 09.08.2016 indicate hydrogen gas level 270PPM. Whereas DGA conducted on dated 06.02.2017 indicate eventually rise of hydrogen gas at 1597PPM. Transformer was kept under observation and discussed in the DTL Transformer expert committee

On dated 16.07.2021 DGA hydrogen gas level identified greater than 7350 PPM and TDCG 7740 PPM. DGA again conducted on 18.09.2021 in report hydrogen identified greater than 5000 and TDCG 11620 .Internal inspections conducted on 21.10.2021 as recommended by Transformer expert committee in their minutes dated 30.09.2021.

During the internal inspection no anomaly was identified, hence transformer put in service on dated 25.10.2021 after extraction of gases through vacuum filtration.

On dated 01.11.2021 DGA report again indicates abnormal level of hydrogen gas i.e. 2131 PPM, in between DGA conducted several times .However on dated 07.02.2022 Transformer kept out of service when hydrogen & TDGC identified in DGA report dated 07.02.2022 greater than 5000 PPM & 42892 PPM respectively.

2x20MVA, 66/11KV Power Transformer installed at Sarita Vihar primarily cater load of Sarita vihar nearby area at 11KV level. Presently following feeders are emanating at 11KV from 220KV Sarita Vihar.

- | | | |
|-------------------|---------------------------|---------------------|
| 1. Sub-station 22 | 2. IOC | 3. Saurabh Vihar 01 |
| 4. Sub-station 21 | 5. Sewage Pumping station | 6. Jaidpur |

7. Saurabh Vihar 02 8. American Express 9. Aali Village

Both 20MVA Power Transformer installed at 220KV Sarita Vihar have been surpassed their useful life of 25 years. Augmentation of these Transformer with 25MVA Power is in consideration by planning .But till new Transformers are not installed, whatever arrangement for load shifting is to be done by BSES , in case one or both transformer kept out of service due to their unsatisfactory operation.

Alternatively BSES may allocate relatively new 20MVA Power Transformer on loan basis to DTL, till DTL scheme is not materialized.

In the past also DTL has shown its concern towards shifting of 11KV Load from DTL sub-station but situation remain the same till date.

OCC may deliberate the case in detail and make appropriate arrangement for the upcoming summer to meet the load of BSES 11KV feeders at 220KV Sarita Vihar.

(OCC may deliberate)

SLDC Agenda:-

6. High voltages and reactive power issues in Delhi power system

With onset of winter, High Voltages conditions have been faced in Delhi System. This is happening because of decrease in power demand in Delhi area. High voltage also causes stress on Transmission system equipments. It has been observed that during high voltage conditions Delhi injects reactive power to the grid resulting payment of heavy penalty to NRPC reactive account by Delhi.

In 190th NRPC OCC Meeting held on 21.12.2021, it has been observed that generators are not absorbing reactive power as per their capability curve.

Following steps are in practice and discussed in previous OCC meetings to control the high voltage/ injection of reactive power .

- (i) Switching off the capacitors at all the Substations of Delhi.
- (ii) Transformer taps optimization by DTL and DISCOM.
- (iii) Monitoring of all 400/220KV ICTs and taking actions wherein VAR flows are observed from 220KV to 400KV side. In this respect reactive energy changes could also be monitored.
- (iv) Opening of lightly loaded transmission cables/transmission lines keeping reliability in focus.
- (v) Absorption of reactive power by all generating units as per its capability curve.

In 9th Delhi OCC, December-2021, high voltage & reactive power injection issue was deliberated and following corrective actions were advised:-

- i. Switching off the capacitors at all the Substations of Delhi.
- ii. Transformer tap optimization by DTL and DISCOM.
- iii. Monitoring of all 400/220KV ICTs and taking actions wherein VAR flows are observed from 220KV to 400KV side. In this respect reactive energy changes could also be monitored.
- iv. Opening of lightly loaded transmission cables/transmission lines keeping reliability in focus.

- v. All the generators are advised not to inject MVAr in grid and should absorb MVAr particularly during high voltage condition above 400KV to improve voltage profile of the grid as per their capability curve. The detail of MVAR generated /absorbed by each machine be intimated to SLDC for proper analysis.
- vi. DISCOMs/DMRC were requested to select the list of feeders for switching exercise to control reactive power injection. List of selected feeders to be shared with SLDC.
- vii. For switching of 220KV level double ckt U/G cables, OCC advised switching of U/G cable circuits on alternate basis to ensure the healthiness of both the ckts. DTL/O&M shall inform the SLDC if any U/G cable ckt switched off for more than a week.

In 10th Delhi OCC, January-2022, OCC advised DMRC, DTL & DISCOMs to explore all possibilities to control system voltage profile and reactive power injection in system from their respective ends.

(OCC may deliberate)

BRPL Agenda:-

7. Restoration plan of 66/11KV PTRs & 11KV O/G feeders at 220KV Mehrauli.

BRPL requested to share the restoration plan of 11KV feeders including 66/11KV PTRs at Mehrauli. Seven 66KV feeder are still in via BRPL supply & need to be charge from 220/66KV level. Three 66KV feeders are still in OFF condition.

OCC may review the latest status status of 220KV Mehrauli:-

S No	Feeder Name	Current Status	Load shifted to	Peak Load 2021 (MW)	N-1 situation constraints during Summer 22
1	66KV VKJ C-1&2	OFF	220KV VKJ	5	load transfer is possible provided load margin allowed by DTL
2	66KV M Nagar	OFF	220KV Okhla	24	load transfer is possible provided load margin allowed by DTL
3	PTR- 1&2	OFF	At 11KV level on alternate source	11	Partial load transfer is possible but load constraints may arise in 11KV network during peak hours.
4	66KV C DOT 2	Backfeed	220KV MLI	29	Load transfer is possible provided load margin allowed by DTL on alternate DTL network
5	66KV SAU	Backfeed	220KV MLI	23	
6	66KV Palam	Backfeed	220KV VKJ	24	
7	66KV Brijwasan	Backfeed	220KV VKJ	27	
8	66KV VKJ D1& D2	Backfeed	220KV VKJ	12	
9	66KV Ignou	Backfeed	220KV Okhla	23	

OCC may deliberate the issue.

(OCC may deliberate)

8. Restoration plan of 33/11KV PTRs at 220KV Lodhi Road.

BRPL requested to share the restoration plan of 33/11KV PTRs at 220KV Lodhi Road. Two PTRs are currently in OFF state since 29.11.2021.

(OCC may deliberate)

9. Voltage issues on 11KV Bus bars at 220KV DTL Sub-stations.

Whenever DTL take shutdown of 33/11KV or 66/11KV I/C's, PTR's and 11KV Bus bar, PT measurand was unavailable due to PT selection issues and active power measurand becomes zero due to this.

This issue is happening very frequently at many DTL 220KV stations causing disturbance in power scheduling data and real time load forecast.

(OCC may deliberate)

10. High 11KV bus-bar voltage at 220KV Sub-stations.

In last two OCC meeting, chairman OCC advised DTL to reduce tap position of 66/11KV or 33/11KV PTR's at 220KV stations, but we are still receiving very high voltage at 11KV.

Tap reduction at following stations are required to control very high 11KV voltage.

- | | | |
|----------------|---------------------|----------------------|
| 1. 220KV PPK-1 | 2. 220KV Lodhi Road | 3. 220KV Saritavihar |
| 4. 220KV VKJ | 5. 220KV Okhla | 6. 220KV NJF |

(OCC may deliberate)

NDMC Agenda:-

11. Energization of 33KV Vidyut Bhawan & 33KV Shahjahan Road from 220KV Lodhi Road.

It is for your kind information that 33KV supply from 220KV DTL Lodhi Road to 33KV ESS Shahjahan Road & 33KV ESS Vidyut Bhawan is not available since 29/11/2021 due to flash over occurred in the HT Panel Room as informed by DTL System Control and somehow the fire could bust in panel room due to some loose connection in Cable End Termination of other DISCOMs not pertains to NDMC. With the result of fire, the dedicated Panel for NDMC the both Cable Ends of feeders had entangled into broken fire in the HT Panel Room during that night.

During inspection it has been found that only 05 Nos. feeders are outgoing in HT Panel and the supply is given to BRPL only and No such provision kept for NDMC Feeders whereas the NDMC feeders are prestigious as well as VVIP. During meeting with manager Lodhi Road DTL communicated that the proposal of replacement of panels is under consideration and will take considerable time for approval and in process of tendering for replacement of all burnt panels.

The matter had also been discussed in 10th OCC Meeting held on dated 28.01.2022 where it was requested to Chairman OCC for early energization of 02 Nos. feeders as mention above.

It was advised that NDMC to initiate to get repair of cable ends of both the feeders and there after OCC will decide for termination of cable in the presently available panels.

Since there is no such fault of NDMC in the broken fire took place in the HT Panel Room during that night but both the feeders has badly damaged and brutally burnt in above incident. Since fire broken out in HT Panel Room, it will cost a considerable expenditure in replacement of both Cable End Termination of NDMC feeders.

OCC may kindly informed the name of organisation who is going to bear the expenditure involved in replacement of new cable end termination of required make size and specification. However, NDMC is taking action at their end.

You are therefore requested to kindly look into the matter and take action at your end for getting both the 33KV supply energized from 220KV DTL Lodi Road to avoid any unwarranted situation in case of failure of other single source of GT Supply. Kindly make provision for early energization of above mentioned VVIP area feeder on top priority.

(OCC may deliberate)

12. Planned Shutdowns of feeders feeding NDMC area should be kept on Saturday, Sunday or Gazetted holiday.

NDMC requested all concerned department to plan the shutdowns of feeders feeding NDMC area should be on Saurday/Sunday/or any holiday.

(OCC may deliberate)

PGCIL Agenda:-

13. Regarding hot line crossing work over DTL lines by newly constructed line of PGCIL: Constrution of LILO of both Ckt of Bawana-Mandola 400 KV D/C line at Maharani Bagh.

PGCIL is entrusted with the work of construction of 4 nos. sub-stations and associated transmission lines by Ministry of Power, GOI, under Inter-state transmission system for strengthening of power situation in NCR. Accordingly, a loop in loop out line of 400kV D/C Mandola-Bawana line is being constructed from start point near village-pachra in UP to Maharani Bagh substation opposite Sarai Kale Khan ISBT Delhi.

The construction of LILO of Bawana-Mandola transmission line is in progress. The foundation and tower erection work across 1). 220KV D/C Mandola-Gopalpur line 2). 220KV D/C Madola-Narela line and 3). 400KV D/C Mandola-Bawana line have been completed. PGCIL is planning to do stringing work over above mentioned transmission line of DTL from 15.02.2022 by hotline method.

(OCC may deliberate)

14. Long/recent Outage/breakdown of elements in Delhi power system.

Members may update the latest status of following Long/Recent Outage/Breakdowns of elements in the Delhi Power system as under:

S. no.	Element's Name	Utility	Date of outage	Status of outage as on 14.02.2022
1.	220KV PEERAGARHI - 33KV A-4 PASCHIM VIHAR CKT.	BRPL	10.07.21	'Y' PH. SINGLE CABLE CONNECTOR FAULTY.
2.	220KV OKHLA - 33KV EAST OF KAILASH CKT.	BRPL	25.08.21	'R' PH. SINGLE CABLE FAULTY.
4.	220KV IP -BAY 09 EXHIBITION CKT-II	BRPL	20.01.22	R' PH. SINGLE CABLE FAULTY.
5.	220KV TRAUMA CENTER- 33KV AIIMS CKT	BRPL	29.01.22	UNDER BREAKDOWN.
6.	220KV PPK-II- 66KV HASTAL CKT-I	BRPL	09.02.22	'B' PH. SINGLE CABLE FAULTY.
7.	220KV GEETA COLONY- 33KV SHAKARPUR CKT	BYPL	10.02.22	'R' PH. SINGLE CABLE FAULTY.
8.	220KV PARK STREET - 66KV DMRC CKT.-I&-II	DMRC	19.10.21	SHUT DOWN FOR GRID SHIFTING WORK AT DMRC END.
9.	400KV BAWANA, 315MVA ICT-II	DTL	30.03.21	315MVA ICT-II CAUGHT FIRE AND DAMAGED.
10.	AT PEERAGARHI: - 220/33KV 100MVA TRF.-I	DTL	10.07.21	TRIPPED ON DIFFERENTIAL. TX FAULTY.
11.	220KV LODHI ROAD - 33 KV VIDYUT BHAWAN, JLN STADIUM FEEDERS	DTL	29.11.21	AFFECTED DUE TO BOTH 33KV BUSES DEAD BECAUSE OF FIRE IN 33KV GIS
12.	AT MUNDKA: 315MVA ICT – IV	DTL	13.11.21	TRIPPED ON BUCHLOZ RELAY. 'R' PH. WINDING DAMAGED.
13.	AT MEHRAULI: 20MVA PR.TR.-II	DTL	01.01.22	SHUT DOWN FOR OVERHAULING OF TRANSFORMER.
14.	220KV MASJID MOTH- MAHARANI BAGH CKT-I	DTL	28.01.22	CB PROBLEM AT MAHARANI BAGH END.
15.	220KV TRAUMA CENTER- 33KV BHIKAJI KAMA PLACE	DTL	03.02.22	'R' PHASE PT DAMAGED.
16.	220KV OKHLA- 100 MVA-IV	DTL	03.02.22	TRIPPED ON DIFFERENTIAL.
17.	220KV SARITA VIHAR- 20MVA TX-II	DTL	07.02.22	MADE OFF DUE TO HIGH CONTENT OF HYDROGEN GAS.
