

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

AGENDA OF OCC MEETING DT. 27.05.2016

Date : 27.05.2016 (Friday)
Time : 10:30 AM
Venue : Office of GM(O&M)-I, Park Street.

1.0 Confirmation of minutes of OCC meeting dt. 04.05.16.

An OCC meeting was held on 04.05.16 in accordance with the agenda circulated vide letter dt.02.05.16. Minutes of the aforesaid OCC meeting were issued vide letter dt. 10.05.16.

Members may like to confirm the same.

2.1 Status of Hot Reserve of transformers at all levels.

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

S. No	Capacity	Present population in nos.	Status of the hot reserve as on 04.05.16
1.	220/66kV Tx	64	DTL informed that tender for supply and ETC of 220/66/33kV 100MVA Tx as hot reserve at 220kV Patparganj Substation got opened.
2.	220/33kV Tx	37	
3.	66/11kV 20MVA Tx.	24	OCC advised DTL to have cold reserve instead of hot reserve to meet any exigency.
4.	33/11kV 16MVA Tx.	16	OCC advised DTL to have cold reserve instead of hot reserve to meet any exigency.

During last meeting dt.04.05.16, OCC advised DTL O&M department to take up with DTL Planning department/ Steering committee for the need of cold reserve transformers at 66kV and 33kV level.

2.2 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 25.05.16
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

Agenda of OCC meeting dt. 27.05.16

				to inform DTL after awarding of the said work.
2	66kV Vasant Kunj – Ridge Valley Ckt.-II	BRPL	13.01.14	BRPL informed that contract is to be awarded for laying new cable and work is not at priority level. Expected by 31.05.16.
3	33kV RIDGE VALLEY - KHEBAR LINE CKT.-I	BRPL	08.02.15	Breaker faulty. To be revamped by including in GIS. Expected by 15.06.16
4.	33kV RIDGE VALLEY - KHEBAR LINE CKT.-II	BRPL	31.01.16	R-phase Single Cable faulty. Road-cutting permission pending.
5.	66kV RIDGE VALLEY - V.KUNJ CKT.-I	BRPL	25.02.16	UNDER SHUT DOWN
6.	66/33kV 50MVA PR.TR.-II AT JNU	BRPL	26.03.16	TAP CHANGER DAMAGED. EXPECTED BY 20.05.16
7.	33kV ROHTAK ROAD - VISHAL CKT.-I	BRPL	01.04.16	CABLE FAULTY. EXPECTED BY 10.05.16
8.	33kV JNU - ANDHERIA BAGH CKT. T-OFF MBS MALL	BRPL	27.04.16	UNDER BREAK DOWN(JUMPER OPEN)
9.	33kV BAY -24 (IP - NEHRU STADIUM)	BRPL	28.04.16	'B'PH. SINGLE CABLE FAULTY. EXPECTED BY 05.05.16
10.	66kV PPK -II - HASTAL CKT.-II	BRPL	17.05.16	'R'PH. SINGLE CABLE FAULTY
11.	33kV OKHLA - EAST OF KAILASH CKT.	BRPL	20.05.16	SINGLE CABLE FAULTY
12.	20MVA PR.TR.-I AT JNU	BRPL	22.05.16	LV SIDE SINGLE CABLE FAULTY
13.	33kV JASOLA - SARAI JULIENA CKT.	BRPL	23.05.16	'B'PH. SINGLE CABLE FAULTY
14.	33kV LODHI ROAD - EXHIBITION GROUND -II	BRPL	23.05.16	'Y'PH. SINGLE CABLE FAULTY
15.	66kV HASTHAL - GGSH CKT.-II	BRPL	23.05.16	'Y' PHASE CABLE FAULTY

16.	66kV PPK -I - BODELLA -I CKT.-II	BRPL	23.05.16	CABLE FAULTY
17.	33kV PATPARGANJ - GEETA COLONY CKT.	BYPL	10.05.16	SINGLE CABLE FAULTY
18.	33kV VIVEK VIHAR(66kV) - G.T. ROAD CKT.-II	BYPL	20.05.16	'PH. SINGLE CABLE FAULTY
19.	66kV WAZIRABAD - GONDA CKT. -I	BYPL	22.05.16	'B'PH. CABLE FAULTY
20.	33kV BHAGIRATHI - KARAWAL NAGAR CKT.-I	BYPL	25.05.16	CABLE FAULTY
21.	33KV PANDAV NAGAR - DMS CKT.	TPDDL	03.04.16	PROBLEM IN RMU. EXPECTED BY 30.10.16
22.	66kV ROHINI -I - RITHALA CKT.-I	TPDDL	23.05.16	UNDER BREAK DOWN
23.	220kV MAHARANI BAGH - ELECTRIC LANE CKT.-II	DTL	17.04.15	Cable got tripped during charging due to existence of another fault. Expected by 31.05.16
24.	400kV BAMNAULI - BALLABHGARH CKT.-II	DTL	17.03.16	11nos. cable joint boxes are being replaced. Expected by 31.05.16
25.	400kV BAMNAULI - JHAKTIKARA CKT.-I&II	DTL	22.05.16	DEAD END TOWER No. 169 ALONGIWITH GANTRY COLLAPSED AT BAMNAULI END

2.3 Protection co-ordination of settings at GTPS w.r.t. to 160MVA Transformers of DTL at Pragati.

On dt. 01.03.16, both 160MVA transformers at Pragati got tripped due to fault on 66kV Bus conductor at GT. If the bus-coupler settings at GT are coordinated with 160MVA transformers, then the 2nd 160MVA transformer couldn't have tripped. Accordingly, DTL requested GT to change the protection co-ordination settings at GTPS w.r.t. 160MVA transformers at Pragati.

DTL and GTPS may deliberate.

2.4 Frequent outage of generating unit no-IV at BTPS

BTPS may deliberate the reasons for frequent outage of Unit No.-IV at BTPS.

2.5 Necessary arrangement required at 220kV Grid for Deployment of New Communication System.

TPDDL informed that they are in the process of revamping communication network by deploying Packet technology (MPLS). For that they need to commission communication equipment at DTL grid end also which are required to communicate with TPDDL Control Centre (CenNet). Communication equipment along with rack (42U) and other accessories like battery bank, FMS will be commissioned at these sites. TPDDL also require 220V AC supply from DTL end (Equipment load is <10A) and start commissioning work from March, 2016. Accordingly, TPDDL requested DTL to provide necessary arrangement (or additional approval if required) for timely completion of project.

During the meeting dt. 31.03.16, OCC advised DISCOMs to co-ordinate with respective substation in-charge of DTL for site surveying and the same shall be completed by 20.04.16. OCC further advised DISCOMs to submit the detail proposal to DTL after site survey.

During the meeting dt.04.05.16, BYPL informed that they have carried out site survey at 4 grids and found ground base towers to be installed at Gazipur, South of Wazirabad and roof top towers to be installed at Patparganj and Kashmere Gate. TPDDL informed that they shall carry out site survey at DTL substations for the said activity from 2nd week of May, 2016. OCC advised BRPL, BYPL and TPDDL to submit the report to DTL based on site survey carried out and DTL to look into the feasibility of providing space to DISCOMs for erection of towers and other equipment.

DISCOMs to update.

2.6 Overloading at 220kV Najafgarh Substation

DTL informed that 220 kV Sub- Station Najafgarh was commissioned in 1977 and at present it has total capacity of 400 MVA at 220 kV level. All 04 No.100 MVA transformers of the station are more than 20 years old and require frequent maintenance. The peak load of the Station remains 350 to 400 mega watt during every summer since 2009.

Keeping in view of the over loading problem at Najafgarh Station, it was planned to divert its load to 400 kV Sub- Station Mundka, 220 kV Sub- Station Peeragarhi and 220 kV Sub- Station Pappankalan – II etc. The average load of the Station in this summer remained 300 mega watts, however from last 15 days i.e. since 12th May 2016, it started increasing at about 10 P.M. and reaches to 340 megawatt. In this situation, with the request to system SLDC and BRPL, some load is diverted for smooth running of the Grid during peak time which is at 11 pm (in night).

As it has become a common activity (at every two or 3 days) to divert load of Najafgarh Station at about 10 pm , BRPL is requested for permanent diversion of 50 to 100 megawatt load in this duration so that the station can run smoothly during peak hours .

Accordingly, DTL requested BRPL to provide the details of alternate arrangement of 66 kV Feeders.

Nangloi and Nangloi water works: Possible alternate 400 kV S/Stn Tikrikalan and 220 kV S/Stn Peeragarhi.

G5 –I and G5-2: Possible alternate 220 kV S/Stn PPK-I and PPK-II.

Budhela –I and 2: Possible alternate 220 kV S/Stn PPK-I and PPK-II

Jafferpur –I and Jafferpur –II: Alternate arrangement to be informed

DTL and BRPL may deliberate.

2.7 Utilization of 66kV Bays at 220kV Kanjhawla by TPDDL.

DTL informed that 66kV feeder bays work has been completed at 220kV Kanjhawla substation and TPDDL has already been requested to lay their cables/ connection arrangements besides finalizing necessary documents like signing of connection agreements with DTL etc., but the same has not yet been done by TPDDL.

DTL requested TPDDL to lay cables and commission 66kV Bays at 220kV Kanjhawla substation.

DTL and TPDDL may deliberate.

2.8 Back-feeding arrangement of 33kV and 11kV feeders at various 220kV Substations of DTL.

DTL informed that there are 09 nos. 11KV O/G feeders being maintained at 220 KV Sarita vihar out of which following 11 KV Feeders are not having any back feed arrangement at the end of BRPL.

1. 11 KV Aali Village
2. 11 KV Sourav vihar-I
3. 11 KV Sourav vihar-II
4. 11 KV Jaitpur

DTL further informed that shutdown of 11 KV half bus bar with incomer –I and II was approved by OCC for 08.05.2016 and 14.05.2016 respectively but work could not be completed due to No back feed arrangement of 11 KV Feeders at the end of BRPL. This is very typical position as we are not able to do maintenance work as per OS manual.

DTL requested BRPL to arrange other sources for 11 KV feeders where back feed is not available to avoid any inconvenience during the break-down / Shutdown.

DTL further requested DISCOMs to make back-feeding arrangement on 33kV/11kV feeders at other 220kV substations of DTL also.

BRPL and DTL may deliberate.

2.9 Reliable LT supply at 400kV Substation Bamnauli

DTL informed that LT supply for 400kV Bamnauli aux. consumption is being taken from BRPL at 11kV level through 2 no. 11kV Feeders from IOCL Bijwasan 66kV Substation of BRPL.

It has been noted that both the 11kV Feeders are tripping frequently, hence LT supply availability at Bamnauli has become quite erratic. One no. 11kV Feeder is under breakdown since 22.05.2016 and even after follow with local BRPL officers, the said feeder supply has not been restored.

In view of above, DTL requested BRPL to maintain reliable LT supply at 400kV Substation Bamnauli so as substation aux. load may not be disturbed and be run without any hindrance.

DTL and BRPL may deliberate.

3.0 Expected constraints in meeting Summer 2016 demand in South Delhi (BRPL Agenda)

BRPL informed that in reference to the meeting held on dt. 8th April 16 with Director (T) of DTL for implementation of transmission project for the closure of costly plants in Delhi. During the meeting, the situation of meeting load demand during summer of 2016, in view of DPCC direction for closure of 3X95 units of BTPS was also discussed. We have few observations about the same.

- On the page 5 of referred meeting MOM, load drawl from BTPS, on dt 19.06.15 was 900 MW when the peak demand of Delhi was 5846 MW. It is important to note that the referred load figure is “without any drawl by Alwar feeder from BTPS bus”. It clearly indicates that the entire loading from BTPS was catering to Delhi demand only.
- Presently, considering the DPCC direction, only 2X210 units and 2X150 MW power is available on the BTPS bus. Thus the total power available on BTPS bus will be around 678 MW (BTPS PLF assuming 90%).
- We firmly believe the BTPS capacity should be reviewed along with generation data of Pragati and GT, which was not accounted while reviewing the demand on 19/6/15. Normally Pragati run at 280MW and GT on 80 MW during the peak load hrs. If we consider these two figures then we are left with additional capacity of 70 MW on Pragati bus, which can be increased.
- Thus for load demand of 900MW on BTPS bus, we have 678MW from BTPS generation and Ballabgarh and additional 70 MW from Pragati. Thus there will be:
 - Shortfall of approx 150 MW if peak is around 5850 MW.
 - Shortfall will be more if demand increases further.
 - If there is a any drawl on Alwar line, it will further increase the shortfall by same amount.

As assured by director DTL, the work for making one ckt LILO of sarita vihar- pragati at Maharani Bagh and work of laying 220 KV ckt from haresh vihar to PatperGanj will be completed by the end of June 2016.

Following points are emerging from the above discussion.

1. If the peak load will be before end of June then there will load shedding of around 150 MW in south Delhi area.
2. If Harsh Vihar work gets completed and peak load occurs after June 16, then this work will not give any relief to Pragati bus towards BTPS as this supply will be restricted to Pragati bus towards IP side and give relief to Mandolla – Geeta colony Ckt only.
3. The work for making LILO of Sarita Vihar- Pragati at Maharani Bagh will have marginal impact to share the load of Sarita vihar and Pragati as confirmed from load flow study done on 27th April 2016, at SLDC, Minto Road on the direction of 14th GCC of dt 26/6/16. Again there will be shortage of around 100-200MW of power at BTPS bus and thus shedding is eminent in South Delhi area.
4. It was also seen in the load flow study that BTPS – Ballabhgarh 220 KV circuit will be over loaded to extent of 170 MW whereas its safe loading capacity is only 100MW when load of Delhi reaches 6000MW
5. If work of Harsh Vihar doesn't get completed, all 4 Circuits of Mondolla to Wazirabad will also be over loaded and there will be shedding in the East Delhi too when peak load of Delhi reaches 6000MW
6. If any Generation or circuit is out at BTPS bus then the loading on the BTPS- Ballabhgarh link will be around 210 MW as confirm in the load study on PSS module with SLDC and that is beyond its capacity and there after cascading will take place and entire generation of Delhi and incoming circuit's may trip. This can lead to break down of entire grid network of south Delhi and same impact in East Delhi also if any circuit between Mondolla to wazirabad tripped off.
7. In the load flow study, generation on BTPS increased by around 100 MW to see the impact on both the over loaded circuit of south and east Delhi, after this increase of generation at BTPS, BTPS to Ballabhgarh and Mondolla to Wazirabad Circuit come within limit but on the maximum load at 6000 MW.

After analyzing the complete scenario and load flow study by considering peak load of Delhi 6000MW, It seems shedding in South Delhi cannot be avoided even after completing the LILO arrangement at Maharani Bagh. Similarly, East Delhi may observe some shedding if the work of Hareesh Vihar to Patperganj does not complete on time.

One of the possibility to minimize Shedding and to avoid collapsing of network, in south east Delhi area if generation can be increased at BTPS bus by around 100 to 150 MW to meet the peak loading of 6000MW.

Members may deliberate.

4.0 Proposed Shutdowns

DTL proposed the planned shutdowns for the month of June, 2016 as per enclosed Annexure.

Members may deliberate.

5.0 Any additional agenda points with the permission of the Chair.

6.0 Date and time of next OCC meeting.