

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

AGENDA OF OCC MEETING DT. 06.10.2015

Date : **06.10.2015 (Tuesday)**
Time : **3:00 PM**
Venue : **Office of ED(Tech) O&M-I, Park Street.**

1.0 Confirmation of minutes of OCC meetings dt. 01.09.15 and dt. 15.09.15

Last OCC meeting was held on 01.09.15 in accordance with the agenda circulated vide letter /mail dt.27.08.15. Minutes of the aforesaid OCC meeting were issued vide letter/mail dt. 18.08.15. Further, an emergency OCC was held on 15.09.15 and minutes for the same circulated vide email dt.17.09.15

Members may like to confirm the same.

2.1 Status of Installation of Capacitors – Study by Planning Deptt., DTL

DTL had entrusted CPRI to study the installation of shunt capacitors in Delhi system on the advice of OCC. Accordingly CPRI carried out the study for reactive power compensation in Delhi. Final report was submitted by CPRI and for its implementation; a copy of report had been emailed to all DISCOMs and GENCOs. SLDC convened a meeting with DISCOMs on dt. 18.02.15 to discuss on the Reactive Power Study report submitted by CPRI.

Planning department, DTL informed that comments from BRPL, TPDDL and BYPL have been received. Comments from NDMC have not yet been received even after repetitive reminders.

NDMC could not attend the meeting. DTL informed that the comments received from DISCOMs have been sent to M/s CPRI and the reply for the same has been received from them (Copy of the reply from CPRI is enclosed).

During the OCC meeting dt. 01.09.15, DTL informed that a meeting is being scheduled with CPRI and Stake holders during September, 2015 to discuss the same.

DTL to update the status.

2.2 Status of Hot Reserve of transformers at all levels.

DTL to update the status of following hot reserves:

S. No	Capacity	Present population in nos.	Status of the hot reserve as on 01.09.15
1.	220/66kV,	18	DTL informed the work has been awarded to M/s

	160MVA Tx		Kanohar. Completion period is 5 months from date of award of work i.e. by the end of September, 2015.
2.	220/66kV, 100MVA Tx	41	DTL informed that indent has been sent for 220/66/33kV 100MVA Tx as hot reserve at 220kV Patparganj Substation.
3.	220/33kV, 100MVA Tx,	36	

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

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

S. No.	Element's Name	DISCOM/ DTL	Date and Time of outage	Remarks/ Status as on 01.10.2015
1	33kV BAY -3 (IP – Kilokri)	BRPL	22.02.11	Clearance from Railways for laying of Underground cables near Bhairon Road is pending.
2	66kV Vasant Kunj – Ridge Valley Ckt.-II	BRPL	13.01.14	BRPL informed that contract is to be awarded for laying new cable.
3	33kV RIDGE VALLEY - KHEBAR LINE CKT.-I	BRPL	08.02.15	Breaker faulty. To be revamped by including in GIS.
4.	33kV JNU-ADCHINI-T-OFF IIT CKT.	BRPL	11.09.15	T-OFF - ADCHINI PORTION) BOTH CABLES
5.	33kV ½ BUS BAR TOWARDS PR.TR.-I SIP	BRPL	15.09.15	L.A. FAULTY
6.	66kV MOHAN CO-OPERATIVE-OKHLA PH.-I CKT.-II	BRPL	24.09.15	Ý'PH. CABLE FAULTY
7.	66kV PPG INDL. AREA - KHICHRIPUR CKT.-II	BYPL	03.05.15	R phase Cable faulty. Expected by 15.09.15
8.	66kV GH-I - GH-II CKT.	BYPL	26.09.15	'R'PH. CABLE FAULTY
9.	33kV BHAGIRATHI - KARAWAL NAGAR CKT.	BYPL	28.09.15	'B'PH. SINGLE CABLE FAULTY
10.	66kV HARSH VIHAR - NAND NAGRI CKT.-II	BYPL	30.09.15	'R'PH. CABLE FAULTY
11.	33kV TRAUMA CENTRE-SAFDARJUNG AIRPORT	NDMC	06.09.15	CABLE FAULTY
12.	33kV ELECTRIC LANE - CONNAUGHT PLACE CKT.	NDMC	26.09.15	'R'PH. CABLE FAULTY
13.	220kV MAHARANI BAGH - ELECTRIC LANE CKT.-II	DTL	17.04.15	Cable again found faulty during testing before energization.
14.	400kV BAMNAULI - JHATIKARA CKT.-I	DTL	27.05.15	Jointing work and testing has been

				completed. energization.	Ckt.	ready	for
--	--	--	--	-----------------------------	------	-------	-----

2.4 Phasing out of 66/33kV, 30MVA Power Transformer at 220kV Narela Substation.

DTL informed that the said transformer is currently being utilized for feeding only 01 No. 33kV Circuit i.e. Khampur of TPDDL since 2010. 2nd feeder namely Haiderpur is under B/D since long time. Due to shortage of space in 66KV yard, the transformer is on single bus selection and the same needs to be switched ‘OFF’ during bus maintenance activities. Further, the transformer is placed adjacent to 20MVAR capacitor bank and thereby always remains in risk of fire during failure of any capacitor unit / cell. Further, the transformer has already lived its useful life period of 25 years successfully as per DERC guidelines and is now under *outlived* condition.

In view of all above, DTL proposed for phasing out of 30MVA, 66/33KV power transformer along with 33KV yard equipments has been initiated in the year 2010. The case has been examined / approved by the Planning Deptt. and put up in OCC accordingly. OCC recommended for consideration of the matter in Steering Committee, in which approval has also been provided for shifting of 33KV load from Narela end by TPDDL.

The subjected transformer has developing acetylene gas during DGA testing, the concentration of which is increasing day by day which indicates some internal high temperature fault. The overhauling / internal inspection of transformer at this stage is not economically feasible (being outlived) and the same may be required to be taken out of service at any time.

During the meeting dt. 08.06.15, OCC advised DTL to carry out internal inspection and dehydration of the transformer and outage for the same shall be provided by TPDDL.

During the OCC meeting dt. 01.09.15, DTL informed that the internal inspection by BHEL i.e. OEM is under the process of order. OCC informed DTL and TPDDL that action taken will be carried out based on the internal inspection report submitted by M/s BHEL.

DTL to update the latest status.

2.5 Back feed & RMU provision for 11 kV feeders by TPDDL at 220 kV Substation Kanjhawala

During OCC meeting dt. 07.07.15, DTL requested TPDDL to make feedback arrangement in line with DERC guidelines at 220kV Kanjhawla S/Stn. to avoid any unwanted situation and safeguard DTL system for any fault at TPDDL end

During meeting dt.07.07.15, OCC advised TPDDL and DTL to have joint inspection visiting TPDDL’s first switching substations to check protection system and back-feeding provision.

DTL informed that a joint inspection with TPDDL has been carried out on dt. 28.07.15. DTL informed the following:

- During the joint inspection, it has been confirmed by TPDDL that no back feed provision has been available for 6 nos. 11kV feeders emanating from 220kV Kanjhawla Substation.
- Protection co-ordination of 11kV system of DTL and TPDDL to be checked.
- As the first switching substation for 11kV ABC Rani Khera is at around 4Kms., the same needs to be shifted near to 220kV Kanjhawla Substation.
- Problem in RMU breaker of 11kV U/G Kanjhawla.
- Reason for frequent tripping of 11kV SOS Bawana feeder.

During OCC meeting dt.01.09.15, DTL and TPDDL informed that a meeting has been took place. TPDDL informed that during check of Protection co-ordination of 11kV System of DTL and TPDDL, it is observed that C.B. timings need to be checked.

DTL and TPDDL to update the latest status.

2.6 Non-Reliable Supply from Dedicated Connection at DTL, 220KV GIS Sub-Station Maharani Bagh under MLHT category.

DTL informed that due to frequent failure of supply from O/H feeder at 220kV S/Stn. Maharani Bagh and to resolve the power Supply problem at this station, it was decided to get uninterrupted power supply through dedicated connection from BSES. Accordingly, payment of Rs. 15089353/- was made by SSC-II Division DTL to BSES Rajdhani Power Ltd. in April 2009 for providing 11 KV double connection under MLHT category at 220KV GIS S/Stn. Maharani Bagh, i.e. one supply from the available O/H 11KV line and other one dedicated supply direct from Kilokari Grid.

Dedicated supply connection from Kilokari Grid via CNG filling station Sarai Kale Khan was completed by BRPL in 2013, but un-interrupted power supply from this dedicated feeder (U/g cable) could not be achieved as supply failed 118 times (78Hrs.) during the period from April 2013 – March 2014, 87 times (505 Hrs.) during the period April 2014- March 2015 and 22 times (14 Hrs.) from April 2015-till date. A lot of jerks & voltage Fluctuations were also been observed and it is not good for smooth functioning of auxiliary system of the substation and very importantly the S/Stn. data which needs to be send to SLDC, Minto Road for real time data monitoring also gets effected.

DTL further informed the selection of HT switchgear of 11KV feeder and back feeding of O/H feeder / underground cable feeder from 11KV HT switchgear at Maharani Bagh S/Stn. are being frequently made by BSES staff as per their requirement.

DTL requested that the intent of 11KV dedicated supply connection may be completed by providing the supply direct from Kilokari Grid to Maharani Bagh Substation without tapping/termination from this dedicated feeder to avoid any disturbances due to frequent failure of LT supply.

During the OCC meeting dt. 13.08.15, BRPL informed that they will provide 11kV Dedicated supply connection at 220kV Maharani Bagh Grid within one month.

During OCC meeting dt. 01.09.15, DTL informed that no action has been initiated till date. OCC advised BRPL to ensure the reliability of supply at 220kV Maharani Bagh Substation by providing 11kV Dedicated supply connection at 220kV Maharani Bagh Grid at the earliest.

BRPL to update the status.

2.7 11 KV tripping at 220 KV S/Stn. Najafgarh

The issue of regular tripping of all the 12 nos. 11 KV feeders emanating from 220 KV S/Stn Najafgarh has been placed in the earlier OCC meetings successively but no action has been taken by BRPL till date. Although, the matter has also been rigorously pursued with BRPL officials through e-mails for a joint inspection with respective protection departments but the same has not been carried out till date.

The chronology in this regard is also placed in the file. It is pertinent to note that on 29.07.2015 Protection Deptt. of BRPL West turned up at 220 KV S/Stn. NJF for protection setting of 11 KV outgoing 7 panel board feeder. However, no action has been taken till date.

The above results in frequent tripping of 11 KV feeders whereby reducing the life the switchgear along with putting constraints on the 3 nos .20 MVA Power Transformers installed at NJF substation.

Accordingly, DTL requested OCC to advise BRPL to have joint inspection with respective Planning departments of BRPL and DTL to ensure healthiness of protection system of first switching substations of 220 KV Sub/stn NJF.

During the meeting dt. 01.09.15, OCC advised DTL and BRPL to have joint inspection of first switching substations.

DTL and BRPL to update.

2.8 Issues regarding 66kV DMRC Mukundpur RSS bay at 220kV Gopalpur Substation.

At 220kV Gopalpur Substation, DMRC constructed a new 66kV bay named 66kV DMRC Mukundpur RSS and the same has been commissioned recently. In this regard, DTL requested for the following clarifications:

- Whether the 66kV Bay will be the asset of DTL or DMRC.
- Whether DTL or DMRC authorized for attending Operation and Maintenance related issues.

DMRC and DTL may deliberate.

2.9 Restoration of Yard area at 220kV Naraina Substation.

At 220kV Naraina Substation, 33kV Bay nos. 21 and 22 have been dedicated to BRPL and accordingly, BRPL laid cable during the period of March 2015 to May 2015 for which complete road from Gate No. 2 of substation to 33kV yard was excavated and ensured the restoration of

the same before charging. The cable laying work by BRPL has been completed, but the restoration of the excavated road has not been completed till date even after repetitive reminders.

Accordingly, DTL requested BRPL to update the status of restoration of the damaged area and remove any debris at the earliest.

BRPL to update.

3 IPGCL/PPCL agenda: Scheduling of power from Pragati power station (PPCL Agenda).

During the year 2015-16 since April, frequent start-stop of the units have been carried out by SLDC as per their instructions at PPS-1.

1. The operating heat rate during the July & Aug '2015 is 2030 Kcal/kwh and 2055 kcal/kwh respectively against the normative of 2000Kcal/Kwh. There is considerable loss Rs. 4.12 Cr during July & Aug'2015 by generating 150 MU and 100 MU on such conditions. Thus taking direct commercial hit for meager savings by DISCOMs.
2. There are incidents during which total station was shut down by stopping all the units by SLDC as per recommendation of DISCOMS. However, variable cost of generation of Rs. 2.80/unit is on half module operation. The operational difficulties lies with starting of steam turbine in cold start up and there is considerable loss during startup of unit in Open cycle as well as heat rate.
3. Pragati Power Station is having sufficient tie up of domestic gas allocation through GAIL for base load operation of the plant, however due to less supply of domestic gas from ONGC, a long term contract of 0.2mmcmd of RLNG was signed with GAIL having 90% take or pay obligation.
4. The domestic gas allocation having variable cost of Rs. 2.80 /unit is more than sufficient to operate half module at base load for 365 days. However the scheduling of full module at base load or at 265 MW may be done for PPS-1 to avoid the MGO charges by consuming MGO quantity of RLNG. The up to date statement of RLNG consumption shall be communicated to SLDC for win-win situation for all entities.

Accordingly, based on the above facts PPCL informed that

1. Pragati power station is having gas turbines operating in combined cycle mode with waste heat recovery steam turbines to be operated continuously for which they are designed for. It is requested not to stop steam turbine operating in combined cycle mode in half module at least.
2. The scheduling of power shall be done on the cost of generation on the day basis considering the availability of gas rather one month old COG merit order.
3. Half module of 1GT and STG to be scheduled for 365 days having sufficient domestic gas @variable cost of Rs. 2.80/unit at present without any extra transmission charges, taking the efficient machine in service as per plant request presently its GT#1.

4. To avoid MGO of RLNG of PPS-1 scheduling may done for running both the units to consume MGO quantity of RLNG depending upon the grid conditions.

During the meeting dt. 01.09.15, OCC deliberated the issue and advised PPCL to submit 24 hrs. generation DC in advance in prescribed format required by SLDC along with the variable cost on day ahead basis which would be used for billing purposes. The scheduling shall be done strictly on merit order basis by SLDC based on requirement sent by DISCOMs . It was also deliberated and accepted that in case of PPCL (Pragati) if one unit and 1/2 STG are run then minimum technical limit will be at 132MW.

PPCL to update.

5.Uninterrupted supply to IGI stadium complex (BYPL agenda) :

3rd India African forum summit is going to be held at IGI stadium complex from 26th to 29 Oct 2015. Prime ministers of 54 countries are invited for the summit making it very important and prestigious event for New Delhi.

The power supply to IGI stadium complex is through 33 KV IGI stadium grid of BYPL, which in turn receives power from 220 KV RPH (Bay no.-12) and IP Stn (Bay no. 29 & 33).

Multiple partial grid collapses happened during last 15 days (on Mandola-IP section) have affected the supply of IGI stadium, thus underlining an area of utmost concern.

Accordingly, BYPL requested to deliberate the remedial/alternate arrangements for ensuring uninterrupted supply at event venue.

The issue has been deliberated and members are of opinion that at I.P., there shall be a dedicated 220kV bus to 33kV I.G. Stadium Ckts and one 220kV bus to be fed from BTPS end and the second bus to be fed from Mandola end with Bus coupler in OFF position. Further, 220kV I.P.-RPH Double circuit shall remain on the same 220kV Bus at I.P.

During emergency OCC meeting dt. 15.09.15, OCC advised DTL and SLDC to explore all the possibilities for having two different sources of supply for feeding 33kV IGI stadium Substation for improving the reliability of power supply.

OCC further advised DTL and BYPL to ensure the following before the event:

- Letter to Delhi Police by DTL for security at 220kV I.P. Substation.
- 33kV IGI substation to be manned.
- All maintenance activities of 33kV Bay No.29&33 at IP substation and Bay No. 12 at RPH to be completed for ensuring healthiness of the bays.
- Grass cutting at I.P. substation to be carried out.

BYPL, DTL and SLDC to update.

6. Proposed Shutdowns

Shutdowns proposed by various divisions of DTL have been consolidated and enclosed as Annexure-I.

Members may deliberate.

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