

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

AGENDA OF OCC MEETING DT. 30.08.2016

Date : 30.08.2016 (Tuesday)
Time : 03:00 PM
Venue : Office of GM(O&M)-I, Park Street.

1.0 Confirmation of minutes of OCC meeting dt. 28.07.16.

An OCC meeting was held on 28.07.16 in accordance with the agenda circulated vide letter dt. 25.07.16. Minutes of the aforesaid OCC meeting were issued vide letter dt. 09.08.16.

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 28.07.16 |
|-------|-----------------------|----------------------------|---|
| 1. | 220/66kV Tx 160MVA | 22 | DERC approved 160MVA Transformer at PPK-II as hot reserve. However, load has been taken on same transformer. Considering the loading conditions at PPK-II and light load conditions at Kanjhawla, OCC advised DTL to consider 160MVA Transformer at Kanjhawla as hot reserve for next two years and members agreed for the same. OCC advised DTL planning to inform the same to DERC. |
| 2. | 220/66kV Tx 100MVA | 64 | DTL informed that tender for supply and ETC of 220/66/33kV 100MVA Tx as hot reserve at 220kV Patparganj Substation has been awarded. Tx. is expected to be commissioned before March, 2017 |
| 3. | 220/33kV Tx 100MVA | 37 | |
| 4. | 66/11kV 20MVA Tx. | 24 | DTL Planning department informed that the scheme for 25MVA power transformers is being prepared. OCC advised DTL Planning to consider one 25MVA power transformer each as cold reserve at 66kV and 33kV Levels while preparing scheme. |
| 5. | 33/11kV 16MVA Tx. | 16 | |

2.2 Non- utilization of 66 KV Ridge Valley circuit-II bay at 220kV Park Street Substation by BSES Rajdhani

DTL informed that the outgoing cables of 66 KV Ridge Valley circuit-II at 220kV Park Street Substation were disconnected by BRPL on 20.11.2015. These cables were back-charged by them at their end through 66 KV Ridge Valley circuit-I, thus, live 66 KV cables were left loose in DTL's switchyard. On 12.08.2016, 66 KV Ridge Valley circuit-I got tripped on Earth Fault. The fault was traced in Y-phase cable of 66 KV Ridge Valley circuit-II, which was disconnected from both ends on 13.08.2016 and 66 KV Ridge Valley circuit-I made healthy.

Now, in present condition:

- a. DTL's assets of 66 KV Ridge Valley circuit-II are lying unutilized. This bay can be made available for utilization for evacuation of power to other loads.
- b. There is no redundancy of 66 KV Ridge Valley circuits despite availability of bay.
- c. Availability of 66 KV Ridge Valley circuit-I gets affected due to fault in cables of 66KV Ridge Valley circuit-II, which are not feeding any load.

Accordingly, DTL requested OCC to take decision in regard to the optimum utilization of 66 KV bay assets and reliability of the power supply.

Members may deliberate.

2.3 Issues at 220kV Pappankalan-II substation.

DTL informed that the issues pertaining to BRPL which are to be addressed at PPK-II:

1. The 66kV GGSH-I has duel cable in which 2 phase single cables are faulty since long period and action plan required for making healthiness of duel cable system.
2. The sheath earthing of all outgoing 66kV cables are to be made strengthen and proper.

DTL and BRPL may deliberate.

2.4 No protection on 11kV feeders emanating from 220kV Gazipur substation.

DTL O&M Substation in-charge of Gazipur informed that there is "NO protection/ circuit breaker" is being used on 11 KV out going feeders from Gazipur to BSES at their end.

DTL requested BRPL to look into the issue. BRPL and DTL may deliberate.

2.5 Trippings occurred in Delhi Power System on 15.08.2016

The following trippings occurred in Delhi Power System on 15.08.16:

No. of 220kV feeders of DTL tripped: 6 nos.

Trippings of 66kV/33kV/11kV feeders emanating from DTL substation on 15.08.16 are as below:

| DISCOM | 66kV | 33kV | 11kV |
|---------------|-------------|-------------|-------------|
| BRPL | 5 | 5 | 6 |
| BYPL | 1 | 0 | 1 |
| TPDDL | 2 | 1 | 2 |

Members may deliberate the reasons for trippings on dt.15.08.16.

3.0 SLDC Agenda Points

3.1 Details of tripping/Load shedding during the incident dt. 23.05.16

SLDC informed that there was a major load crash in Delhi area due to thunderstorm and rain on 23.05.2016 at around 15.00hrs. The load of Delhi dropped from 5565MW (at 15.00hrs) to 3886MW (at 16.00hrs) i.e. the load crash was around 25-30MW per minute.

NRLDC vide letter no. NRLDC/TS-15A/778-842 dated 24.05.2016 has desired a detailed report indicating list of trippings / manual load shedding which led to load crash on the said date. Delhi SLDC vide its letter dated 01.06.2016 has already requested distribution licensees to provide the following details of load loss

- i) On account of trippings in DISCOMs System
- ii) Load loss due to manual load shedding by DISCOMs.

During OCC meeting dt.28.07.16, DISCOMs informed that they have submitted the requisite data to SLDC. However, SLDC informed that they haven't received any data from DISCOMs regarding the aforesaid incident. OCC advised DISCOMs to send the requisite data again to SLDC within 1 week.

DISCOMs to update the status of submission of data to SLDC.

3.2 Details of Load loss during the incident dt. 18.05.16

On 18.05.2016 at 17.31hrs, 400kV Bawana – Mundka Ckt-II tripped on 'Y-B' Phase to Phase fault. There was delay in fault clearing leading to load throw off of about 1200MW in Delhi system and 3750MW in Northern Region. After the fault, the rise in frequency was 0.4Hz.

NRPC included the same for discussion as an agenda for 124th OCC meeting of NRPC held on 20.06.2016. Since, there was no tripping in the system, DISCOMs may provide the details of load loss due to the above incident which could also be due to the stalling of motors and AC load.

During OCC meeting dt. 28.07.16, the incident has been deliberated and DISCOMs informed that they have not received any incident of sudden load loss in their areas. OCC advised

DISCOMs to submit the requisite data to SLDC within one week for onward submission to NRLDC/NRPC.

DISCOMs to update the status of submission of data to SLDC.

3.3 Power supply failure to DMRC from DTL sub-stations.

DMRC vide letter no. DMRC/O&M/TR/RSJ/T-4(11) dated 12.07.2016 has reported failure of power supply to DMRC from various grid sub-stations of DTL which affected the operation of metro train services badly. Details of disruptions are attached as Annexure-1

During OCC meeting dt. 28.07.16, SLDC informed that the majority of trippings provided by DMRC in annexure-I leading to power supply failure to DMRC are not attributable to DTL. OCC advised DMRC to have a separate meeting with SLDC, DTL and GTPS for deliberating the various issue in power supply to DMRC. OCC further advised DMRC to carry out proper study and provide the brief details in the separate meeting to be scheduled. OCC also advised DMRC to review their system in lieu of increase in no. of trains and coaches.

SLDC and DMRC to update the outcome of the joint meeting.

3.4 Synchronization of 12 MW Gazipur Waste to Energy Plant.

The Waste to Energy Plant of EDWPCL is connected at 66KV level to the 220/66KV Gazipur sub-station of DTL. The 66KV feeder connecting the plant to the sub-station was charged on 19.08.2015. Thereafter, the plant was drawing power from BYPL through DTL substation at Gazipur.

On 21.10.2015, the plant itself synchronized with the grid without informing to the control room of SLDC and started injecting power in to the grid. The plant has now requested to consider the said date as date of synchronization.

Regarding date of synchronization, it is informed that the generator is required to obtain the permission of the SLDC, Delhi (concerned load dispatch Centre in its case) before injecting its infirm power into the grid.

The relevant clause 8.(7) of the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 is reproduced here under for clarity in this regard:

'A generating station, including captive generating plant which has been granted connectivity to the grid shall be allowed to undertake testing including full load testing by injecting its infirm power into the grid before being put into commercial operation, even before availing any type of open access, after obtaining permission of the concerned Regional Load Dispatch Centre, which shall keep grid security in view while granting such permission.'

It is further informed that the telemetry data of the generator end/ SACDA data which is required in SLDC before synchronization is still not being made available by the 12 MW Gazipur Plant.

During OCC meeting dt. 28.07.16, EDWPCL informed that they have synchronized with Gazipur grid on 21.10.15 for turbine testing and de-synchronized after the testing. OCC advised EDWPCL to inform and take permission from Delhi SLDC before actual synchronization of their system with grid. OCC further advised EDWPCL to submit the relay settings at their end to DTL Protection and OS divisions for review. EDWPCL informed that they shall submit the same to DTL. EDWPCL further informed that their communication system is ready and requested DTL to kindly check the same.

EDWPCL to update.

4.0 Joint Checking of Overhead Power Line crossings (TPDDL) with railway representatives.

Railways informed that due to sharp increase in falling of power line crossings on railway traction wire, which resulting into extensive damage to 25kV Traction equipments and disruption of railway traffic. As such railways requested to carry out joint survey of all overhead power line crossings of TPDDL with railway representatives to avoid any failure of these crossings in future.

During OCC meeting dt.28.07.16, BRPL and TPDDL agreed for joint inspection with railways. However, DISCOMs informed that for attending the shortcomings observed during the joint inspection, railways need to provide free block. Railways representative informed that he will take up with higher authorities regarding the same. OCC advised TPDDL, BRPL and Railways to nominate the representatives for the said joint inspection and provide suitable dates for inspection. OCC further advised DISCOMs and Railways to carry out the inspection as well as attending the same before summer season.

TPDDL, BRPL and Railways to update.

5.0 TPDDL Agenda Points.

5.1 Shutdown of Generation Plant

On dated 17.07.2016, Delhi DISCOMs had given consent for shutdown of one unit of NTPC-Jhajjar. NTPC-Jhajjar has two major beneficiaries - Delhi & Haryana, both with 46% share. So consent of both was required to shut down unit.

However due to paddy season Haryana required its full share from the plant. Haryana was ready to give consent provided they received their full share from the plant. In such a scenario a mechanism at NRLDC level is required which allows NTPC-Jhajjar to shut down one unit and curtailing the schedule of Delhi Only. Of the two remaining units, Haryana will continue to receive its full share, while Delhi will only receive the rest. A real-time change of allocation percentages in such scenarios is required.

During the OCC meeting dt.28.07.16, OCC advised SLDC and DISCOMs to have a separate meeting at SLDC building to deliberate on the aforesaid issue before proposing to NRLDC/NRPC.

SLDC and DISCOMs to update.

5.2 SLA requirement for ICCP failure.

TPDDL informed that SLA between DISCOMs and SLDC is required for failure of Communication Network, ICCP. This causes unnecessary scheduling issues and huge under-drawl and over- draws when the value at SLDC is not correct or hanged.

During OCC meeting dt.28.07.16, SLDC informed that when data is suspect, they never pressurized any DISCOMs for shedding and revision of schedule unless NRLDC advise to do so. DISCOMs requested SLDC to update them daily basis in case of failure in communication network and time for restoration of the communication system. Accordingly, OCC advised SLDC to look into the same and take necessary action.

SLDC to update.

6.0 BYPL Agenda Points

6.1 Permission for installation of communication equipment in DTL premises.

As per OCC meeting dt. 04.05.16, BYPL submitted request for permission to install BYPL equipment like network rack, tower etc for new Link connectivity for FRTUs installed in the DTL grids (Attached).

During the OCC meeting dt.26.08.16, BYPL requested DTL to provide update on the status of request/permission for the same, as the FRTU communication equipment installed presently are outdated and are not working as required for BYPL Operations. OCC advised BYPL to submit the request letter along with necessary details to Director (Operations), DTL for further action.

BYPL to update.

7.0 Shutdowns

7.1 Proposed shutdown at 220kV Lodhi Road substation.

DTL Projects department proposed the following shutdowns at 220kV Lodhi Road substation:

| S. No. | Proposed date and time | Name of the element | Work to be carried out |
|--------|------------------------------------|--|---|
| 1 | 03.09.2016 (10:00AM to 10:15AM) | 220V/180AH Battery Charger & Battery Bank | Disconnecting temporary power cable of Battery Charger & Battery Bank in 33KV GIS Hall and then new cable termination of DCDB panel from Existing 220V/180AH Battery Charger for shifting of Battery Charger & Battery Bank from 33KV GIS Hall to newly constructed 220KV GIS Building (LT switchgear room & Battery Bank Room) can |

| | | | |
|----|---|----------------------------|---|
| | | | be carried out. |
| 2. | 17.09.2016 & 18.09.2016 (06:00AM to 06:00PM) | All 33kV panel/ feeders | Dismantling of existing DCDB in 33KV GIS Hall & to be shifted to newly constructed 220KV GIS Building (LT Room) can be carried out. Shifting of cables in another DCDB in 33kV GIS hall. 15min DC switched off for each 33kV panel/ feeders in 33kV GIS hall. This could be done in phase manner. |
| 3. | 24.09.2016 & 25.09.2016 (06:00AM to 06:00PM) | All 33kV panel/ feeders | Shifting of cables from temporary DCDB panel to permanent DCDB in new 220kV GIS bldg. 15min DC switched off for each 33kV panel/ feeders in 33kV GIS hall. This could be done in phase manner. |

Members may deliberate.

7.2 Proposed shutdown at 220kV Lodhi Road substation for civil works.

DTL Projects department proposed the following shutdowns at 220kV Lodhi Road substation for carrying various civil works:

| S. No. | Proposed date and time | Name of the element | Work to be carried out | Remarks |
|--------|-------------------------------------|--|---|---|
| 1 | 03.09.16 (06:00AM to 06:00PM) | 100MVA Power Transformer-I along with 33KV Incomer-I | To carry out the shuttering / scaffolding for plaster work of outer side (opposite of 100MVA Power Transformer-I) of newly constructed 220KV GIS Building. | Load can be transfer to 100MVA Power Transformer-II along with 33KV Incomer-II. |
| 2 | 04.09.16 (06:00AM to 06:00PM) | 100MVA Power Transformer-I along with 33KV Incomer-I | For the plaster of outer side (opposite of 100MVA Power Transformer-I) of newly constructed 220KV GIS Building. | Load can be transfer to 100MVA Power Transformer-II along with 33KV Incomer-II. |
| 3 | 10.09.16 (06:00AM to 06:00PM) | 100MVA Power Transformer-I along with 33KV Incomer-I | For the plaster of outer side (opposite of 100MVA Power Transformer-I) of newly constructed 220KV GIS Building. | Load can be transfer to 100MVA Power Transformer-II along with 33KV Incomer-II. |
| 4 | 11.09.16 (06:00AM to 06:00PM) | 100MVA Power Transformer-I along with 33KV Incomer-I | For the plaster of outer side (opposite of 100MVA Power Transformer-I) of newly constructed 220KV GIS Building. | Load can be transfer to 100MVA Power Transformer-II along with 33KV Incomer-II. |
| 5 | 17.09.16 (06:00AM to 06:00PM) | 100MVA Power Transformer-I along with 33KV Incomer-I | For the POP of outer side (opposite of 100MVA Power Transformer-I) of newly constructed 220KV GIS Building. | Load can be transfer to 100MVA Power Transformer-II along with 33KV Incomer-II. |
| 6 | 18.09.16 (06:00AM to 06:00PM) | 100MVA Power Transformer-I along with 33KV Incomer-I | For the paint of outer side (opposite of 100MVA Power Transformer-I) of newly constructed 220KV GIS Building. | Load can be transfer to 100MVA Power Transformer-II along with 33KV Incomer-II. |
| 7 | 24.09.16 (06:00AM to 06:00PM) | 100MVA Power Transformer-II along with 33KV Incomer-II | For the paint of outer side (opposite of 100MVA Power Transformer-II) of newly constructed 220KV GIS Building. | Load can be transfer to 100MVA Power Transformer-I along with 33KV Incomer-I. |

Members may deliberate.

7.3 Proposed shutdowns of DTL

DTL proposed the planned shutdowns for the month of September, 2016 as per enclosed Annexure. Emergency shutdowns like attending hot points etc. need not require OCC deliberation as per the decision in earlier OCC meeting. Such shutdowns may be availed by DTL in consultation with System Operation-SLDC.

Members may deliberate.

8.0 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 26.08.16 |
|--------|--|-------------|-------------------------|--|
| 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. |
| 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. Expected by 31.08.16 |
| 3. | 33kV RIDGE VALLEY - KHEBAR LINE CKT.-II | BRPL | 31.01.16 | GIS is commissioned. SCADA work is in progress. Expected by 31.08.16 |
| 4. | 66kV RIDGE VALLEY-V.KUNJ CKT.-II AT RIDGE VALLEY | BRPL | 13.02.16 | UNDER SHUT DOWN |
| 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 30.08.16 |
| 7. | 33kV BAY -24 (IP - NEHRU STADIUM) | BRPL | 28.04.16 | 'B'PH. SINGLE CABLE FAULTY. EXPECTED BY 10.08.16 |
| 8. | 25MVA PR.TR.-III AT VSNL | BRPL | 26.07.16 | UNDER BREAK DOWN |
| 9. | 66kV PARK STREET - RIDGE VALLEY CKT.-II | BRPL | 12.08.16 | 'Y'PH. CABLE FAULTY |

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|-----|---|-------|----------|--|
| 10. | 33kV ROHTAK ROAD - MADIPUR CKT. | BRPL | 28.05.16 | CABLE FAULTY. EXPECTED BY 15.08.16 |
| 11. | 66kV PPK-II(220kV) - GGSH CKT.-I | BRPL | 06.07.16 | Ý'PH. SINGLE CABLE FAULTY. EXPECTED BY 15.08.16 |
| 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. | 33kV GEETA COLONY - SHAKKARPUR CKT. | BYPL | 22.08.16 | BOTH CABLES FAULTY |
| 15. | 33KV PANDAV NAGAR - DMS CKT. | TPDDL | 03.04.16 | PROBLEM IN RMU. EXPECTED BY 30.10.16 |
| 16. | 66kV ROHINI SEC.-28 - ROHINI -VI CKT.-I | TPDDL | 15.06.16 | Ý'PH. CABLE FAULTY. ROAD CUTTING PERMISSION REQUIRED. EXPECTED BY 20.08.16 |
| 17. | 400kV BAMNAULI - JHAKTIKARA CKT.-I | DTL | 22.05.16 | Tower erection work is yet to be started. In process of tendering. |

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

10.0 Date and time of next OCC meeting.