



No. F.DTL/2018-19/Mgr.(OS)-II/28

Date:11.09.2018

To,

**All Members of Operation Co-ordination committee**

<b>DTL</b>	General Manager (O&M)-I, Chairman OCC General Manager (O&M)-II General Manager (PMDM&S) General Manager (Planning) General Manager (C&MM) General Manager (Civil) DGM (O&M) - North, East, West, South DGM (M/P) DGM (Plg.)
<b>SLDC</b>	ED (SLDC) DGM (SO)
<b>TPDDL</b>	HOD (PSC &AM) Sr. Manager (PSC)
<b>BRPL</b>	Vice President (SO)
<b>BYPL</b>	AVP (SO)
<b>NDMC</b>	Superintending Engineer
<b>IPGCL</b>	AGM (T) Opr. GTPS
<b>PPCL</b>	AGM (T) Opr.PPS-I AGM (T) Opr. PPS-III
<b>MES</b>	AEE/M.SLDC Officer
<b>BTPS</b>	AGM (EEMG)
<b>BBMB</b>	Sr. Executive Engineer, O&M
<b>DMRC</b>	Addl. GM (Elect.)

**Sub :- MOM of Delhi OCC Meeting (05/18-19) held on 28.08.2018 at DTL, 220kV Sub-Stn Park Street Building.**

Dear sir/madam,

Enclosed please find herewith the Minutes of Meeting of Delhi OCC meeting (05/18-19) held on **28.08.2018** in the office of **GM(O&M)-I, Delhi Transco Ltd. at 220kV Sub-stn Park Street Building, Opp. Talkatora Stadium, Near R.M.L. Hospital, New Delhi-110001.**

The same is also available on DTL website, www.dtl.gov.in under the Tab “News and Information” – OCC Meeting”.

Thanking You.

Yours Sincerely,  
sd/-  
(Shankar Kumar)  
Mgr.(T) OS-II

**Copy for favour of kind information to:**

- (i)Secretary, DERC, Viniyamak Bhawan, C-Block, Shivalik, New Delhi-17.
- (ii)Chairperson & Managing Director, DTL.
- (iii)Director (Operations), DTL



Mgr.(T) OS-II

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

**MOM OF DELHI OCC MEETING NO. 05/18-19 HELD ON 28.08.2018**

Chairman, OCC welcomed all the members and representatives present in the meeting with a brief power scenario of Delhi for the month of July 2018. List of the officers attended the meeting is enclosed as annexure.

The point-wise deliberations made in the meeting are as under:

**1. Confirmation of minutes of previous Delhi OCC meeting held on dated 25.07.2018.**

The previous Delhi OCC meeting was held on 25.07.2018 in accordance with the agenda circulated vide letter dt: 23.07.2018. Minutes of the aforesaid OCC meeting were issued vide letter dt.03.08.2018. The same was also uploaded on DTL website.

**No comments were received from the participated members except SLDC on the contents of MOM.**

**SLDC have requested for modification in the contents of MOM in r/o Agenda S.No.-3.2 of previous Delhi OCC meeting held on dated 25.07.2018 as under:-**

**Modified MOM in r/o Agenda S.No. 3.2 of Delhi OCC meeting held on 25.07.2018:**

**Real time availability of Delhi Genco gas based plants.**

PPCL representative submitted as under:-

The observations which make the allegations leveled by TPDDL as baseless and uncalled for are:

1. PPCL-Bawana has been declaring its generation capacity on a day-ahead basis as per the provisions of Indian Electricity Grid Code, and refrains from a change in DC on real-time basis unless warranted by any operational factor compelling enough to forbid safe & reliable operation of the machine.
2. PPCL-Bawana has been consistently generating in the range of 250-830 MW over the past few months consistently this Summer in Combined / Open cycle, as and when scheduled by SLDC.
3. TPDDL has presented a distorted and misleading picture by quoting an isolated incident of 22<sup>nd</sup> May 2018, wherein PPCL-Bawana was placed in a forced-majeure situation by the fuel-supplier intimation of which was duly provided to SLDC by appropriate messages. That PPCL-Bawana had kept SLDC informed all throughout could be verified from the records of message history extracted from the web-scheduling portal :

CCGT	22-05-18 17:50	CCGT22052018/07	Revised DC for dated 23/05/2018 w.e.F 00.00 Hrs to 08:00Hrs = 570 MW (160 MW CCNG + 340 MW CCRLNG + 70 MW CCSPOT). 08.00 Hrs to 12:00Hrs = 560 MW (160MW CCNG + 340 MW CCRLNG + 60 MW CCSPOT) 12.00 Hrs to 18:00Hrs = 550 MW (160MW CCNG + 340 MW CCRLNG + 50 MW CCSPOT). 18.00 Hrs to	praveen	Noted	P.K.Sharma	SLDC
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			20:00Hrs = 560MW (160MW CCNG + 340 MW CCRLNG + 60 MW CCSPOT).20.00 Hrs to 24:00Hrs = 570MW (160MW CCNG + 340 MW CCRLNG + 70 MW CCSPOT).				
CCGT	22-05-18 17:34	CCGT22052018/06	Due to High ambient temperatures & low gas pressure from gail terminal our Revised DC for dated 22/05/2018 only from 18.15 Hrs to 24.00Hrs 570 (160 CCNG + 340 CCRLNG + 70 CCSPOT)	praveen	Noted	P.K.Sharma	SLDC
CCGT	22-05-18 15:36	CCGT22052018/05	GT-4 tripped at 15:33 hrs. on internal fault and our revised DC for dt: 22/05/2018 on account of continued reduced gas supply pressure will be wef 16:15 hrs. to 19:00 hrs. = 580 (160 CCNG + 340 CCRLNG + 80 CCSPOT). 19:00 to 24:00 hrs. = 590 (160 CCNG + 340 CCRLNG + 90 CCSPOT)	praveen	Noted	S K Singh	SLDC
CCGT	22-05-18 11:59	CCGT22052018/04	As informed by GAIL Bawana Telephonically, there is gas supply pressure issue from other end and pressure is running comparatively low. In view of that our revised DC for 22/05/2018 wef 12:45 to 24:00 = 680 MW (160MW CCNG + 340 MW CCRLNG + 180 MW OCSPOT).	mohan	Noted	S K Singh	SLDC
CCGT	22-05-18 10:15	CCGT22052018/03	Due to High ambient temperatures, our Revised DC for dated 22/05/2018 only from 12.00 Hrs to 18:00Hrs = 780 MW (160MW CCNG + 340 MW CCRLNG + 70 MW CCSPOT+ 210 MW OCSPOT).	mohan	Noted	Nitin Kumar	SLDC
CCGT	22-05-18 8:30	CCGT22052018/02	AS PER GAIL BAWANA TELEPHONIC MASSAGE , THEY COULD NOT ABLE TO MAINTAIN ADEQUATE GAS PRESURE FROM BACK END. IF REQUIRED WE WILL EITHER REDUCE THE LOAD ON OPEN CYCLE OR SHUT THE MACHINE. THIS IS FOR YOUR KIND INFORMATION	mohan	Noted	VIKRAM CHAURASIA	SLDC
CCGT	22-05-18 7:17	CCGT22052018/01	DC for dated 23/05/2018 w.e.F 00.00 Hrs to 08:00Hrs = 820 MW (160 MW CCNG + 340 MW CCRLNG + 100 MW CCSPOT+ 220MW OCSPOT). 08.00 Hrs to 12:00Hrs = 810 MW (160MW CCNG + 340 MW CCRLNG + 95 MW CCSPOT+ 215 MW OCSPOT). 12.00 Hrs to 18:00Hrs = 800 MW (160MW CCNG + 340 MW CCRLNG + 90 MW CCSPOT+ 210 MW OCSPOT). 18.00 Hrs to 24:00Hrs = 810 MW (160MW CCNG + 340 MW CCRLNG + 95 MW CCSPOT + 215MW OCSPOT	mohan	Noted	vikram	SLDC
SLDC	22-05-18 7:08	SLDC22052018/02	check sg wef 0715hrs		Noted	mohan	CCGT
CCGT	21-05-18 23:50	CCGT21052018/07	As per your message number SLDC21052018/06,dated 2018/05/21,GT#4 has been synchronized at 23:48HRS	Anil Chauhan	Noted	m k nirala	SLDC

CCGT	21-05-18 22:43	CCGT21052018/06	As per your message number SLDC21052018/06,dated 2018/05/21 20:06 we will bring one more unit in open cycle w.e.f 0000 hrs. you are requested to please provide the schedule in ramp up mode as below 1130 hrs to 1145 hrs - 30 MW 1145 hrs to 1200 hrs - 70 MW and MTL i.e. 130 MW after that	Anil Chauhan	Noted	sandeep mehta	SLDC
SLDC	21-05-18 20:06	SLDC21052018/06	Sir, Plz bring one unit on MTL(req of TPDDL) from 00 hrs dt 22/05/18		Noted	Anil Chauhan	CCGT
SLDC	21-05-18 18:49	SLDC21052018/04	Sir, Plz synchronize additional one unit of CCGT-Bawana(request of TPDDL) from 00 hrs dt 22/05/18		Noted	Anil Chauhan	CCGT
CCGT	21-05-18 17:32	CCGT21052018/05	The alternate contact nos. for Bawana Control Room are 01127791276 and 01127791179 .	Anil Chauhan	Noted	A K Jolly	SLDC
CCGT	21-05-18 17:27	CCGT21052018/04	Pl remove OCSPOT schedule of 54.999MW from injection schedule for Bawana in slot of 1630 to 1645 Hrs as discussed telephonically with SLDC	Anil Chauhan	Noted	P K sharma	SLDC
SLDC	21-05-18 17:03	SLDC21052018/01	Sir, Plz provide alternate contact number. 64670809 and 64732344 are not working.		Noted	Anil Chauhan	CCGT
CCGT	21-05-18 14:52	CCGT21052018/03	We have revised DC ,Running DC wef 1430 Hrs to 1800 Hrs for dated 21/05/18 vide message no. CCGT21052018/02. Kindly revise the schedule for above period accordingly ,Our max. Running DC is 570 MW till 1800 Hrs.	umesh shah	Noted	A K Jolly	SLDC
CCGT	21-05-18 13:51	CCGT21052018/02	Due to low gas pressure from GAIL terminal & high ambient temperature conditions our revised DC wef 1430 Hrs to 1800 Hrs for dated 21-05-18 is as follow =780 MW ( 160 CCNG+ 340 CCRLNG + 70 CCSPOT + 210 OCSPOT).	umesh shah	Noted	A.K.Jolly	SLDC

4. From the above it is evident that PPCL-Bawana had informed SLDC (21-05-18 13:51) regarding the problem of gas supply-pressure at GAIL end, well before PPCL-Bawana was actually scheduled (21-05-18 18:49) by SLDC at the behest of TPDDL.
5. PPCL-Bawana synchronized its unit (21-05-18 23:50) in accordance with the schedule allotted (from 00 hrs dt 22/05/18) and started generating as per the schedule.  
PPCL-Bawana intimated SLDC (22-05-18 8:30) about the possibility of shutting down the machine in the morning of 22.5.2018 itself.  
*“AS PER GAIL BAWANA TELEPHONIC MESSAGE, THEY COULD NOT ABLE TO MAINTAIN ADEQUATE GAS PREESURE FROM BACK END. IF REQUIRED WE WILL EITHER REDUCE THE LOAD ON OPEN CYCLE OR SHUT THE MACHINE. THIS IS FOR YOUR KIND INFORMATION”*
6. It can be seen that the intimation was given much before the machine tripped due to DAVR trouble, and not started again due to insufficiency of fuel-supply pressure to accommodate running of the additional unit.
7. That PPCL-Bawana deciding to take a hit on their fixed-cost-recovery by curtailing its DC was merely to support the failing pipeline hydraulics of the fuel-supplier GAIL. It needs no emphasis that the situation PPCL-Bawana faced was akin to a grid-disturbance in that the GAIL-pipeline-grid supplies fuel-gas to many generators, and continued gas-drawl by generators in disregard to the decreasing fuel-gas supply pressure would have

had a cascading effect analogous to a continuous power-drawl with decreasing electrical-frequency.

8. That PPCL-Bawana has been generating in accordance with the schedule specified by SLDC can be judged by the following data picked randomly for a week of May (surrounding days of 22.5.2018) and a week of June (when Delhi was recording highest-ever power-demand)

May-18	Date	Peak SG (MW)	Peak Exp (MW)	Source
	17-05-18	722	725	Metered Data SLDC
	18-05-18	595	594	
	19-05-18	534	537	
	20-05-18	450	457	
	21-05-18	570	564	
	22-05-18	680	627	
	23-05-18	570	577	
	24-05-18	680	690	
	25-05-18	500	502	
Jun-18	Date	Peak SG (MW)	Peak Gen (MW)	
	18-06-18	431	455	Metered Data PPCL
	19-06-18	449	473	
	20-06-18	750	778	
	21-06-18	799	830	
	22-06-18	833	859	
	23-06-18	640	630	
	24-06-18	569	595	
	25-06-18	673	700	

9. The above data reflects the technical capability of PPCL-Bawana to meet the peak-demand in accordance with its declared capacity, and confirms that PPCL-Bawana has never ever been unethical in declaring its technical capability.
10. The operation of any power-plant relies on establishing a sustainable dynamic equilibrium between the energy-transfer in various fluid machines, and the slightest of unforeseen deviations can result into a delay in the achievement of this dynamic equilibrium. Needless to say, if such a situation had not been envisaged by the Regulator, there would have been no DSM Regulations in place. So, no isolated incident where there was some delay in bringing the unit on bar, cannot be construed to be gaming on part of the generator.
11. In view of the facts as presented above, SLDC needs to ignore the baseless allegations put forth by TPDDL, and instruct TPDDL to withdraw its vilifying remarks for PPCL-Bawana officially.
12. It is also requested that SLDC should verify the facts, from records, before alleging GENCOS. Generators are committed and put all efforts to ensure uninterrupted power supply to the citizens of Delhi.

TPDDL submitted that such issues should be intimated to the Discoms in the real time like low gas pressure from the GAIL.

SLDC pointed out that intimation regarding low gas pressure was given by the PPCL during real time basis on web based portal which is also available to all the Discoms. Further, it was also informed that there is no such provision for testing the DC of generators as it involves commercial implications. However, if all Discoms agree for giving the full schedule for checking the declared capacity of generators, only then SLDC can verify the DC of generators.

This matter was deliberated again, wherein representatives of TPDDL & PPCL submitted their facts accordingly regarding above issue.

After detailed deliberation on all fronts, OCC observed that the issue be treated as resolved.

As such the minutes of Delhi OCC meeting held on dated 25.07.2018 including the modified MOM of last OCC meeting Agenda S.No.-302 were confirmed.

## 2. DTL AGENDA POINTS:

### 2.1 Status of Hot Reserve of transformers at all levels.

The latest status of hot reserve of transformers as updated by DTL Planning deptt. during previous OCC meeting are as under:-

S.No.	Transformation Capacity	Population in no.	Hot Reserve (No.) Decided	Remarks
1.	400/220kV, 500MVA ICT	2	1x500MVA	One 400/220kV 500MVA transformer would be installed as hot reserve by the year 2019-20 and would be placed at Bamnauli. In case of damage of 315MVA transformer, the same would be replaced with 500MVA Tr.
2.	400/220kV, 315MVA ICT	14		<b>Regarding this, Planning deptt., DTL informed that the PR of this scheme is not finalized yet as finalization of estimate for civil works is still pending at Civil deptt. DTL end.</b> Civil deptt., DTL apprised that the civil works estimation for this scheme is under progress and will be finalized within 15 days. OCC advised to put all efforts to procure this hot reserve to avoid power exigency in summer 2019.
3.	220/66kV, 160MVA	22	2x160MVA	The scheme for 160MVA Tr. as hot reserve at Mundka has been prepared & approved after financial vetting. <b>The PR for this Tr. could be sent to DTL C&amp;MM deptt. after approval of this scheme through DTL board</b>

				<p><b>of directors.</b></p> <p>The scheme for another 160MVA transformer as hot reserve at Mehrauli has been prepared and is under financial vetting before sending it for approval from DTL borad of directors.</p> <p><b>OCC advised to put all efforts to procure this hot reserve to avoid power exigency in summer 2019.</b></p>
4.	220/66kV, 100MVA	42	1x100 MVA	<p>Steering Committee has already agreed for providing new 220/66kV, 100MVA hot reserve transformer at 220kV Pappankalan-I by 2019-20.</p> <p><b>DTL Plg. Deptt. confirmed that the scheme for 100 MVA Tr. at PPK-I has been prepared while the PR for this scheme is not finalized yet, as finalization of estimate for civil works is still pending at Civil deptt. DTL end.</b></p> <p><b>Civil deptt., DTL apprised that the civil works estimation for this scheme is under progress and will be finalized within 15 days.</b></p> <p>OCC advised to put all efforts to procure this hot reserve to avoid power exigency in summer 2019.</p>
5	220/33kV, 100MVA	37	2	<p>The scheme for 100MVA transformer as hot reserve at Okhla is under financial vetting before board approval. <b>The PR for this Tr. could be sent to DTL C&amp;MM deptt. after approval of this scheme through DTL board of directors.</b></p> <p>The scheme of 03 nos. 100 MVA Trf at Patparganj (01 no. 220/33kV Trf. as hot reserve and 02 nos. 220/66kV Trf. as augmentation) is already prepared and PR of this scheme is not finalized yet, as finalization of estimate for civil works is still pending at Civil deptt. DTL end.</p> <p><b>Civil deptt., DTL apprised that the civil works estimation for this scheme is under progress and will be finalized within 15 days.</b></p> <p>OCC advised to put all efforts to procure this hot reserve to avoid power exigency in summer 2019.</p>

6	66/11kV 20MVA	24	NIL	<p>Steering Committee in its meeting held on 15.03.2017 has decided that in case of exigency, the Discoms may provide these transformer on returnable basis.</p> <p>As per the decision taken in the Steering Committee Meeting held on 30.10.17 the transformer augmentation has been planned as under:</p>																																								
7	33/11kV 16MVA	16		<table border="1"> <thead> <tr> <th data-bbox="946 430 1000 537">S N</th> <th data-bbox="1000 430 1105 537">Sub Station</th> <th data-bbox="1105 430 1211 537">Details of existing Tx.</th> <th data-bbox="1211 430 1317 537">Augmen tation Plan</th> <th data-bbox="1317 430 1430 537">Year</th> </tr> </thead> <tbody> <tr> <td data-bbox="946 537 1000 653">1</td> <td data-bbox="1000 537 1105 653">Lodhi Road</td> <td data-bbox="1105 537 1211 653">2 no 33/11k V 20MVA</td> <td data-bbox="1211 537 1317 653">2 no 33/11kV 25MVA</td> <td data-bbox="1317 537 1430 653">2018-19</td> </tr> <tr> <td data-bbox="946 653 1000 768"></td> <td data-bbox="1000 653 1105 768">Lodhi Road</td> <td data-bbox="1105 653 1211 768">2 no 33/11k V 16MVA</td> <td data-bbox="1211 653 1317 768">2 no 33/11kV 25MVA</td> <td data-bbox="1317 653 1430 768">2018-19</td> </tr> <tr> <td data-bbox="946 768 1000 884">2</td> <td data-bbox="1000 768 1105 884">Najafga rh</td> <td data-bbox="1105 768 1211 884">2 no 66/11k V 20MVA</td> <td data-bbox="1211 768 1317 884">2 no 66/11kV 31.5MV A</td> <td data-bbox="1317 768 1430 884">2019-20</td> </tr> <tr> <td data-bbox="946 884 1000 999">3</td> <td data-bbox="1000 884 1105 999">Okhla</td> <td data-bbox="1105 884 1211 999">2 no 66/11k V 20MVA</td> <td data-bbox="1211 884 1317 999">2 no 66/11kV 31.5MV A</td> <td data-bbox="1317 884 1430 999">2019-20</td> </tr> <tr> <td data-bbox="946 999 1000 1115">4</td> <td data-bbox="1000 999 1105 1115">Sarita Vihar</td> <td data-bbox="1105 999 1211 1115">2 no 66/11k V 20MVA</td> <td data-bbox="1211 999 1317 1115">2 no 66/11kV 31.5MV A</td> <td data-bbox="1317 999 1430 1115">2019-20</td> </tr> <tr> <td data-bbox="946 1115 1000 1230">5</td> <td data-bbox="1000 1115 1105 1230">Pappan kalan-I</td> <td data-bbox="1105 1115 1211 1230">2 no 66/11k V 20MVA</td> <td data-bbox="1211 1115 1317 1230">2 no 66/11kV 31.5MV A</td> <td data-bbox="1317 1115 1430 1230">2020-21</td> </tr> <tr> <td data-bbox="946 1230 1000 1346">6</td> <td data-bbox="1000 1230 1105 1346">Mehrau li</td> <td data-bbox="1105 1230 1211 1346">2 no 66/11k V 20MVA</td> <td data-bbox="1211 1230 1317 1346">2 no 66/11kV 31.5MV A</td> <td data-bbox="1317 1230 1430 1346">2021-22</td> </tr> </tbody> </table> <p data-bbox="946 1377 1430 1818"> <b>As informed by Plg. Deptt. the scheme of 04 nos. Trf of Lodhi Road is approved and PR against this scheme has been generated. Planning deptt., DTL informed that the preparation of augmentation scheme for Najafgarh, Okhla and Sarita Vihar is under progress &amp; will be finalized within next 01 month.</b>                      OCC advised to put all efforts for energization of Tr. within the specified target date.                 </p>	S N	Sub Station	Details of existing Tx.	Augmen tation Plan	Year	1	Lodhi Road	2 no 33/11k V 20MVA	2 no 33/11kV 25MVA	2018-19		Lodhi Road	2 no 33/11k V 16MVA	2 no 33/11kV 25MVA	2018-19	2	Najafga rh	2 no 66/11k V 20MVA	2 no 66/11kV 31.5MV A	2019-20	3	Okhla	2 no 66/11k V 20MVA	2 no 66/11kV 31.5MV A	2019-20	4	Sarita Vihar	2 no 66/11k V 20MVA	2 no 66/11kV 31.5MV A	2019-20	5	Pappan kalan-I	2 no 66/11k V 20MVA	2 no 66/11kV 31.5MV A	2020-21	6	Mehrau li	2 no 66/11k V 20MVA	2 no 66/11kV 31.5MV A	2021-22
S N	Sub Station	Details of existing Tx.	Augmen tation Plan	Year																																								
1	Lodhi Road	2 no 33/11k V 20MVA	2 no 33/11kV 25MVA	2018-19																																								
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2	Najafga rh	2 no 66/11k V 20MVA	2 no 66/11kV 31.5MV A	2019-20																																								
3	Okhla	2 no 66/11k V 20MVA	2 no 66/11kV 31.5MV A	2019-20																																								
4	Sarita Vihar	2 no 66/11k V 20MVA	2 no 66/11kV 31.5MV A	2019-20																																								
5	Pappan kalan-I	2 no 66/11k V 20MVA	2 no 66/11kV 31.5MV A	2020-21																																								
6	Mehrau li	2 no 66/11k V 20MVA	2 no 66/11kV 31.5MV A	2021-22																																								

Planning Department of DTL informed that they have already drawn a detailed plan for augmentation/replacement of 220/66kV Tx in Business Plan 2017-22 as under:



Sr. No.	Name of the Sub Station	Qty. (No.)	Year	Latest status of Scheme
1	SaritaVihar (100 MVA to 160 MVA)	1	2018-19	Under tendering stage
2	Narela (100 MVA to 160 MVA)	1	2018-19	Under tendering stage
3	Najafgarh (100 MVA to 160 MVA)	2	2018-19	P.O. awarded
4	Okhla (100 MVA to 160 MVA)	1	2018-19	Under Approval stage
5	Mehrauli (100 MVA to 160 MVA)	1	2019-20	Under Approval stage
6	Patparganj (100 MVA to 160 MVA)	2	2019-20	Under Approval stage
	Total	8		

OCC opined that DTL should adhere the timelines for augmentation/replacement of Tx. as mentioned above.

**OCC advised Civil deptt., DTL to expedite for early completion of civil foundation works for 160MVA Tr. to be installed at 220kV Najafgarh s/s.**

All out efforts be taken to charge the hot reserve transformers within the target date to avoid any power crisis due to breakdown of transformer. Timelines for all associated works for ETC of Tr. such as civil works including Tr. Foundation, equipment replacement, cabling, etc. be also quantified. Monthly progress be apprised/updated in Delhi OCC meeting.

**(Action by Plg. Deptt., DTL)**

## **2.2 Status of Procurement of transformers, O&M minimum inventory/spares/services as well as equipments to be procured against PSDF schemes.**

### **1. Procurement of 09 nos. 220/66kV 160 MVA transformers.**

It has been gathered that the P.O. for 09 nos. 160 MVA Transformers (2 for SGTN, 2 for Budhela, 2 for Gopalpur, 2 for Najafgarh and 1 for Kanjhawala) have been awarded to M/s BHEL.

OCC advised that the above augmentation works at Gopalpur, Najafgarh & Kanjhawala need to be taken on priority basis. Considering the continuous growth in power demand and in view of recent failure of transformers, the transformers are essentially required to be commissioned at various DTL Sub-stns by/ before March-2019 to meet the power demand of next summer season. Order for civil & erection works to be placed for early commissioning of above Transformers to avert any untoward situation/crisis which may arise due to transformer failure.

**C&MM deptt. updated that 03 nos. of BHEL make 160MVA Transformers are expected to reach the site by Jan-Mar 2019. In view of this OCC advised Planning deptt. to expedite in finalizing the drawings provided by M/s BHEL to ascertain the feasibility in existing Tr. foundations.**

**(Action by C&MM deptt. & Planning deptt.)**

### **2. Procurement of minimum inventory/spares.**

**C&MM deptt. informed that the subjected PR has been approved by competent authority. Further, this PR is going to be put up in next meeting of Board of Directors. After its approval from Board the minimum inventory can be procured as per O&M requirements. OCC advised to C&MM deptt. to take necessary actions for further proceedings.**

**(Action by C&MM deptt.)**

### **3. Procurement of materials under PSDF scheme.**

OCC opined that the procurement/execution against PSDF scheme is time bound activity. As such every effort be made to complete the PSDF scheme in time bound manner.

**It has been gathered that the order is already placed for procurement of materials under PSDF scheme. However, the placing of order for erection/ services is still pending which needs to be expedite for utilizing the supplied material.**

**(Action by C&MM deptt.)**

### 2.3 Reactive power compensation at 400kV & 220kV level in DTL network.

DTL Planning deptt. informed that recently the standing committee of CEA on power system planning of Northern region in its 40<sup>th</sup> meeting held on 22.06.2018 (minutes issued on 30.07.2018) agreed for installation of fixed reactors at the following locations across Delhi. The reactors are required to be installed to address the severe overvoltage problem being experienced in Delhi system. The detailed list as agreed in the meeting & provided in the minutes is given here under:

S.No.	Bus Name	Voltage level (kV)	Reactor (MVAR)
1	Mundka	400	125
2	Bamnauli	220	2x25
3	Indraprastha	220	2x25
4	Harsh Vihar	220	2x50
5	Electric Lane	220	1x50
6	Mundka	220	25
7	Peeragarhi	220	1x50
<b>TOTAL</b>			<b>450</b>

**OCC deliberated that due to delay in processing of installation of reactors it is going to be resulted into over/high voltage condition in upcoming winter season. Planning deptt. must expedite to install reactors at some prior locations to be ready to compensate the reactive power in upcoming winter season.**

**OCC advised that all Discoms, DMRC, Gencos & DTL must put all efforts to control the injection of reactive power in their respective control areas to maintain the voltage profile at various levels during upcoming winter season. SLDC to monitor the overvoltage situation.**

**(Action by Plg. Deptt., DTL)**

### 2.4 DTL Summer Action Plan-2019.

A meeting was held in the O/o-Dir(opr.),DTL on 25.07.2018 to finalize the summer action plan for 2019 in consultation with SLDC and DTL Planning & CMG deptt. Following were the deliberations:-

S.No.	Details of the scheme	Time Line	Action Plan	Action by
<b>North Delhi</b>				
1.	Addition of 1x160 MVA Transformer at	15.05.2019	Existing foundation to be modified as per layout drawing of BHEL Tx to be supplied. As	GM(O&M)-I

	220kV Kanjhawala		First 160 MVA from transformers package is to be utilize at Kanjhawala.	
2.	a)Addition of 220/66kV 1x100 MVA Transformer at 220kV Shalimarbagh	15.11.2018	Due to the load pattern observed at Mehrauli s/stn during the summer season and outage of 160MVA Power Tx at 220kV Vasant Kunj s/stn , it was decided to shelve the plan of shifting of 100MVA Tx from Mehrauli to Shalimar Bagh. It has now been decided to shift the existing dual ratio 100MVA EMCO Make Power Tx at Shalimar Bagh to newly commissioned 220kV Bay.	GM(O&M)-I Mgr.(O&M) will intimate Civil deptt. for necessary modification in civil foundation as per the drawing.
	b)Addition of 220/33kV 1x 100 MVA at Shalimarbagh	15.06.2019	After repair of 3 <sup>rd</sup> 100MVA 220/33kV Tx of Preet Vihar would be diverted to Shalimar Bagh in place of EMCO make dual ratio Tx.  220/33kV 100 MVA Transformer will be shifted from 220kV Gopalpur S/stn. to Shalimar Bagh. New 220kV & 33kV Transformer bays shall be constructed under QVC of existing contract.	
3.	BRPL would be persuaded to transfer the load of Nangloi Water works from Najafgarh to Mundka	--	The matter was discussed in SCM, it was informed by BRPL that this U/G cable is stable barring a cable fault in the summer months. BRPL was also requested to make possible effort to revive the 66kV Mundka-Nagloi feeder.	Planning and CMG Deptt. to follow up with BRPL.
4.	Addition of 1x160 MVA Transformer at 220kV Goplapur	15.05.2019	66kV GIS is being re-tendered and would not available in next summer. As a stop gap arrangement, 160 MVA Tx would be installed on back to back arrangement at 66kV level for redundancy. TPDDL would be requested to provide 1.0KM 66KV 1000Sq MM cable on loan basis, as discussed in last SM dated 04.07.2018	DTL-Project-I Deptt. to take up with TPDDL

5.	TPDDL to divert load from 220kV Rohini-I to 220kV Rohini-II	31.08.2018	In the SCM dated 04.07.2018, TPDDL has informed that they will cater the load of 66kV DC-1 and RG-4 s/stns from 220kV Rohini-II s/stn in place of 220kV Rohini-I s/stn. This would be reduce the load of Rohini-I by 70MVA.	Planning & CMG Deptt. to follow up TPDDL
<b>West Delhi</b>				
1.	Re-commissioning of faulty 160 MVA BHEL make transformer at Pappankalan-III.	30.10.2019	It has been decided to commission 3 <sup>rd</sup> 160 MVA BHEL make Transformer from Transformer package at Pappankalan-III.	GM(O&M)-I
2.	BRPL would be persuaded to shift the load of their G-2 grid substation from Pappankalan-I to Pappankalan-III by way of 66kV cable connection	31.03.2019	BRPL agreed in the SCM held on 04.07.218	Planning & CMG Deptt. to follow up BRPL
3.	Augmentation of one no. 160 MVA transformer at Najafgarh	30.04.2019	Repaired BHEL make 160 MVA transformer of Pappankalan-III will be utilized at Najafgarh. Civil department has to suitably modify the existing foundation of 100MVA Tx into 160 MVA Power Tx during the shutdown period in the month of Nov to Dec, so that supplied 160MVA Power Tx could be installed at the plinth of the said 100MVA Tx in minimum possible time.	GM(O&M)-I Concerned Civil Division.
<b>South Delhi</b>				
1.	Creation of 2 nos. of 220kV Bays at Okhla for getting infeed from 400/220kV S/stn. Tuglakabad.	31.12.2018	Work awarded and execution under progress.	Project-I Dept.
2.	BRPL is to be persuaded for executing their already conceived	Along with the commissioning of s/stn	Cable laying has been done by BRPL.	Planning & CMG Deptt. to follow up with BRPL

	scheme to lay 66kV feeders to (i) Malviya Nagar (ii) Batra Grid from 220/66kV Tuglakabad substation.			
3.	BRPL is to be persuaded for putting load at 220kV R.K.Puram to relief Mahrauli/Vasant Kunj S/stn.	31.03.2019	In the SCM held on 04.07.2018, BRPL informed that they have already laid 04 no of 33kV cables would be connected soon. For 66kV Level they would connect 66kV Vasant Kunj B-Block feeder to evacuate about 60-70MVA capacity before summer 2019. The faulty 66kV VasantKunj-Ridge Valley cable ckt. Will be LILOed at R.K.Puram	Planning & CMG Deptt. to follow up BRPL
4.	The replacement of damaged 1x160 MVA Tr. At Vasant Kunj	31.03.2019	The 100MVA Transformer being spared after augmentation at 220kV NJF, would be used at Vasant Kunj	GM (O&M)-II
<b>East Delhi</b>				
1.	Addition of 2 no 66kV Bays at Gazipur to feed PPG Industrial Area and Mayur Vihar for reliability.	31.03.2019	Scheme under finance vetting	Planning & C&MM
2.	Addition of 2 no 66kV Bays at SOW to feed Bhagirathi for reliability.	31.03.2019	Scheme under preparation	Planning & C&MM

The next summer plan along with its action plan was discussed among the OCC members. Regarding above, Project deptt. informed that the works of construction of 220kV Bays at Gopalpur & Okhla are already started and running in parallel.

Discoms were also advised to expedite the above works.

(Action by DTL/Discoms)

**2.5 Power evacuation plan for newly commissioned/to be commissioned R.K. Puram, Tughlakabad, Pappankalan-III and Preet Vihar.**

Discoms were requested to submit the schedule for evacuation plan upto March 2019 for newly commissioned/to be commissioned grids, i.e. R.K. Puram, Tughlakabad, Pappankalan-III and Preet Vihar for load optimization on DTL network.

**BYPL informed that 02 nos. new 33kV feeders are going to be charged at 220kV Preet Vihar s/s before summer season and Preet Vihar s/s would be loaded upto 130MW.**

**OCC advised Discoms to put minimum 50% load by march-2019 against capacity of these sub-stations, so that the load relief can be provided on other over loaded Transformers & sub-stations.**

**(Action by Discoms)**

## **2.6 Accuracy testing of CT & PT on 66KV I/C-1, 2, 3 & 4 at 220kV Mehrauli S/Stn.**

In reference to BRPL agenda point No.4 of OCC meeting held on 24/05/2018 regarding accuracy testing of CT & PT on 66KV I/C-1, 2, 3 & 4 at 220KV Sub-Station Mehrauli, The matter was discussed and OCC deliberated that testing of CT & PT be done after August month.

Now BRPL vide E-mail dated 02/08/2018 requested the metering department to plan the shutdown for testing of CT & PT. The matter has been discussed with DGM (SO) and he advised to avail the shutdown in the month of September.

Therefore, metering department proposes the shutdowns on 66KV I/C-1, 2, 3 & 4 at 220 KV Sub-Station Mehrauli as under:-

Sr. No.	Date	Time	Name of Bay	Reason for Shutdown
1	11.09.2018	09:00 Hrs to 13:00Hrs.	100MVA Tx-1 with 66KV Incomer	To carry out accuracy testing of CT & PT
2	12.09.2018	09:00 Hrs to 13:00Hrs.	100MVA Tx-2 with 66KV Incomer	
3	13.09.2018	09:00 Hrs to 13:00Hrs.	100MVA Tx-3 with 66KV Incomer	
4	14.09.2018	09:00 Hrs to 13:00Hrs.	160MVA Tx-4 with 66KV Incomer	

**OCC approved this shutdown to execute the above testing works subject to real time loading conditions, as this work is pending since long time due to unavailability of shutdown during the summer season.**

**(Action by BRPL & DTL)**

## **2.7 Proposed planned shutdowns of O&M, DTL**

DTL O&M deptt. has proposed the planned shutdowns for the month of Sep-2018 as per enclosed Annexure.

**After deliberation, the shutdowns were approved subject to real time loading conditions. Approved shutdown list is enclosed as Annexure.**

## **3. SLDC Agenda**

### **3.1 Status Report:**

Status of following work were updated as under:-

Sr. No.	Name of Element	Action plan	Time line
1	400/220kV Tuglakabad S/Stn.	Evacuation plan of four feeders at 66kV Level namely	66kV Batra- by Sep-18 & others

		66kV Batra Ckt., 66kV Malviya Nagar ckt, 66kV Okhla ckt & 66kV MCIE Ckt. by BRPL	by May-19
2	220kV Rohini –II	Transfer of load from Rohini –I to Rohini-II by TPDDL	Sep-2018
3	220kV Electric Lane	Transfer of load from Park Street/I.P. to Electric Lane by NDMC	
4	220kV Khanjawala	New transformer 220/66kV 160VMA by Planning Deptt. of DTL.	May-2019
5	220kV Shalimar Bagh	New transformer 220/66kV 100VMA by Planning Deptt. of DTL.	Subjected to repaired tx of Preet Vihar
6	220kV Papankalan-III	Augmentation of new 66kV Cable of G-2 to transfer load of Papankalan-I to Papankalan –III by BRPL	Nov-18
7	220kV Vasant Kunj	Revival of 66kV Vasant Kunj – Ridge Valley Ckt. by BRPL	This ckt is to be diverted to another new s/s
8	220kV Mandola – Gopalpur Ckt.	Reconductoring of existing ckt. by HTLS by DTL.	02 years approx.
9	220kV Mandola – Wazirabad Ckt.	Reconductoring of existing ckt. by HTLS by DTL.	02 years approx.
10	220kV Bawana – Rohini-I Ckt.	Reconductoring of existing ckt. by HTLS by DTL.	1.5 years approx
11	66kV Mundka – Nangloi Ckt.	Revival of existing faulty ckt by BRPL in coordination with TPDDL.	
12	220kV Pappankalan-III	Revival of 220/66kV Transformer.	Dec-2018

**OCC advised that the timeline be strictly adhered to.**

#### **4.TPDDL Agenda**

##### **4.1 Problem in fetching of tripping information at 220kV level grids through newly installed ADMS (SCADA) System.**

Tata Power DDL always strives to give correct information of supply fail and other tripping information to their customer timely. But they are unable to do same in their newly installed ADMS (SCADA) system if tripping occurs at 220kV Grid.

To overcome this situation, Tata Power DDL needs Circuit Breaker status of all 220kV DTL grids through ICCP.

M/s TPDDL have requested to look into the matter and provide a solution for better synergy between DTL and Tata Power DDL regarding this as it will be beneficial to all the consumers of Delhi.

**The SLDC representative expressed apprehension on usage of SLDC’s SCADA data for commercial use by TPDDL, which may create complexities and may involve SLDC in dispute between DISCOM and consumer.**

**Further, it was informed that presently there is low % availability of 66 and 33kV Digital data at SLDC, since all the RTU’s have become old and due for replacement with new ones, for which MOU is already signed with PGCIL.**

**After detailed deliberations, OCC advised TPDDL to take up the issue with SLDC at a later date after replacement of RTU's.**

#### **4.2 Delay in information sharing regarding tripping incidents of 11kV feeders at 220kV Naraina S/s.**

Tata Power DDL is frequently facing the problem of delay in information of 11kV feeder tripping at 220kV Naraina grid. If timely informed, then Tata Power DDL can back feed all consumers within 15 min of time, but in most of cases consumer faces Power Outage as long as 2 hours.

The list of delay in information from 1st April to 15 Aug-18 is attached as annexure.

**OCC advised to both DTL & TPDDL for sharing of tripping information in time bound manner to avoid any delay in restoration of power supply in minimum possible time.**

**(Action by TPDDL & DTL)**

### **5. BRPL Agenda**

#### **5.1 Revival of 66kV Mundka- Mangolpuri-1-Toff Nangloi ckt (TPDDL feeder)**

66kV Mundka-Mangolpuri-1-Toff-Nangloi feeder is under cable fault since 09.03.2018 (B-phase cable faulty). This Ckt comes under TPDDL jurisdiction and revival of the same need to be discussed.

**BRPL raised concern over 66kV Mundka- Mangolpuri-1-Toff Nangloi ckt which is under breakdown since long time.**

**OCC advised to TPDDL to rectify the issues & revive this ckt. to maintain uninterrupted power supply in this area.**

**(Action by TPDDL )**

#### **5.2 Delay in issuance of PTW & isolation of switches at TPDDL grids named as Rewari Line and Rohtak Road.**

In case of tripping of 33KV feeders from TPDDL grids like Rewari line and Rohtak road, Isolation of switches and issuance of PTW procedure is taking too much time. BSES grids depending on above said TPDDL incoming source getting affected and consumer is facing severe outage periods.

Apart from above this problem also persists in 11kV feeders emanating from Rewari Line (TPDDL grid) where the average time of attending 11kV feeder is approx. 02Hrs on average. Due to above this division is facing issues with consumers. TPDDL is requested to find solution to reduce outage duration by providing PTW in time.

**OCC advised TPDDL to resolve the issue faced by BSES.**

**(Action by TPDDL)**

### **6. Long/Recent Outage/Breakdown of Elements in Delhi power system.**

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



S.N	Element's Name	Discom/ DTL	Date and Time of outage	Latest Status of outage
1.	33kV BAY -3 (IP – KILOKARI)	BRPL	22.02.2011	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.	66kV V.KUNJ INSTL.AREA-RIDGE VALLEY CKT.-I	BRPL	26.03.2017	UNDER SHUT DOWN. Expected by 08.10.2018.
3.	33kV ALAKHNANDA - OKHLA CKT.-I	BRPL	19.04.2018	BREAKER PROBLEM. Expected by 04.10.2018.
4.	33kV RIDGE VALLEY - KHEBAR LANE CKT.-II	BRPL	13.01.2016	'R' PH. SINGLE CABLE FAULTY. Expected by 15.10.2018.
5.	33kV LODHI ROAD - EXHIBITION GROUND-II CKT.	BRPL	02.08.2018	'R' PH. SINGLE CABLE FAULTY. Expected by 22.10.2018.
6.	220kV OKHLA - 33kV MASJID MOTH CKT.	BRPL	14.08.2018	UNDER SHUTDOWN. Expected by 30.09.2018.
7.	33kV SIRI FORT - HUDCO CKT.	BRPL	14.08.2018	'B' PH. SINGLE CABLE FAULTY. Energized on 03.09.2018.
8.	33kV OKHLA PH.-II-JAMIA -T-OFF SARAI JULIENA CKT.	BRPL	14.08.2018	T-POINT SIDE JUMPER OPENED. Expected by 14.10.2018.
9.	33kV RIDGE VALLEY - PARK STREET CKT.-II	BRPL	16.08.2018	'B' PH. CABLE FAULTY. Energized on 23.08.2018.
10.	33kV SIRI FORT - MEDICAL CKT.	BRPL	21.08.2018	'Y' PH. SINGLE CABLE FAULTY. Expected by 30.09.2018.
11.	33kV RIDGE VALLEY - PARK STREET CKT.-I	BRPL	22.08.2018	UNDER SHUTDOWN. Energized on 23.08.2018.
12.	66kV MUNDKA - NANGLOI CKT.	BRPL	08.05.2017	'B' & 'Y' PH. CABLE FAULTY. Expected by 05.10.2018.
13.	(220kV NARAINA) – 33kV DMS CKT.	BYPL	22.08.2018	'Y' PH. SINGLE CABLE FAULTY. Energized on 25.08.2018.
14.	66KV MUNDKA- MANGOLPURI-I - T-OFF NANGLOI CKT.	TPDDL	09.03.2018	CABLE FAULTY. Expected by 05.10.2018.
15.	33kV SHAHZADA BAGH - T-OFF RAMA ROAD CKT.	TPDDL	13.04.2018	CABLE FAULTY. Expected by 30.09.2018.
16.	33kV BAY -16 (IP - NIRMAN BHAWAN)	NDMC	14.08.2018	'R' PH. CABLE FAULTY. Energized on 02.09.2018.
17.	220/66kV 160MVA PR.TR.-III AT 220kV VASANT KUNJ	DTL	26.04.2018	TRANSFORMER BURNT DUE TO FIRE. TO BE REPLACED.
18.	33kV BUS COUPLER AT KASHMERE GATE	DTL		TRIPPING COIL PROBLEM.
19.	220kV MAHARANI BAGH - ELECTRIC LANE CKT.-I	DTL	22.05.2018	CABLE DAMAGED DUE TO METRO WORK AT SARAI KALEN KHAN. Expected by 10.09.2018.
20.	220kV DIAL - MEHRAULI CKT.-I UPTO TOWER NO.86	DTL	26.07.2018	CABLE FAULTY. (220kV BAMNAULI-MEHRAULI-T-OFF DIAL CHARGED ON 27.07.2018). Cable portion is charged on 03.09.2018.

21.	30MVA PR.TR. AT 220kV NARELA	DTL	11.08.2018	TRANSFORMER TO BE DE-CAPITALIZED.
22.	66kV CAPACITOR BANK AT 220kV NARELA	DTL	11.08.2018	66kV CAPACITOR BANK CELLS BLASTED AT 220kV NARELA. TO BE REPLACED.
23.	STG-2 at PPCL Bawana	PPCL Bawana	01.10.2017	Problem in Generator Transformer. Expected by 11.09.2018

## SLDC ADDITIONAL AGENDA

### 1. Planned shutdown request of PGCIL for 220kV bus-I & bus-II at Maharani bagh Sub-stn on continuous basis for seven days

In 150<sup>th</sup> NRPC outage coordination meeting PGCIL has requested the shutdown of 220kV bus-I & bus-II at Maharani bagh stn on continuous basis for seven days to rectify SF6 gas leakage in B- Phase B3 compartment of bay 203. Shutdown details are as under:

Sr. NO.	ELEMENT NAME	DURATION	REASON
1.	220KV BUS-I MAHARANIBAGH	24.09.18(08.30) to 30.09.18(18.30)	SF6 Gas leakage rectification work in B-Ph B-3 compartment of Bay 203. B-3 Compartment is connected with Both Bus-Bar. So to work on B-3 compartments, it's required both Bus-Bar Shutdown. Gas leakage rectification work shall be done by M/s ABB(OEM). LOA has been issued to OEM. During shut period, power flow shall be fully interrupted from 220kV side .
2.	220KV BUS-II MAHARANIBAGH	24.09.18(08.30) to 30.09.18(18.30)	SF6 Gas leakage rectification work in B-Ph B-3 compartment of Bay 203. B-3 Compartment is connected with Both Bus-Bar. So to work on B-3 compartments, it's required both Bus-Bar Shutdown. Gas leakage rectification work shall be done by M/s ABB(OEM). LOA has been issued to OEM. During shut period, power flow shall be fully interrupted from 220kV side.

SLDC DELHI has not given consent for the proposed shutdown for the month of September 18. SLDC also requested PGCIL to clarify the exact work and to find a temporary arrangement to feed the important load during shutdown of both the 220kV buses at Maharani Bagh.

**This shutdown proposal of both 220kV Buses at Maharani Bagh by PGCIL has been deferred as this shutdown is going to total black out 03 nos. radial feed substations (i.e. Lodhi Road, Electric Lane & Masjid Moth).**

OCC advised that PGCIL must come with a better solution so that at least 01 no. 220kV Bus can be kept alive to feed above radial feed sub-stations. Further, OCC requested to DTL GIS expert committee, DGM (SO) & DGM O&M (South) to explore the better option, so that complete shutdown of both 220kV Buses at Maharani bagh be avoided. The matter be discussed in next OCC meeting. PGCIL should come prepare accordingly.

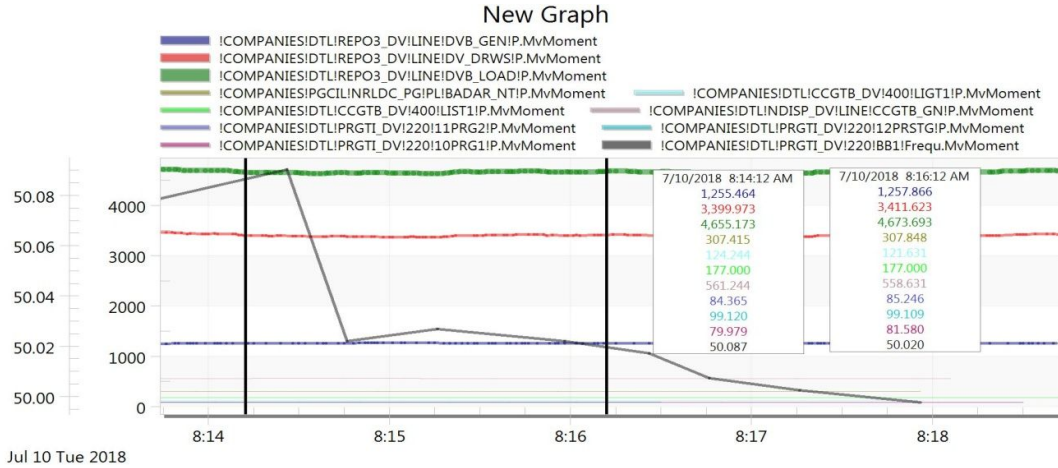
(Action by PGCIL)

## 2.Frequency response characteristics of Delhi System on 10<sup>th</sup> july 2018.

Frequency Response Characteristics		Analysis	Time	Frequency (Delhi-SCADA)
<p><i>On 10th July 2018, at 08:15 hrs 400 KV Rangpo – Binaguri I tripped on R-B phase fault &amp; SPS –I operated resulting into tripping of one unit each at Dikchu, Chuzachen, Jorethang , Tashiding and bus Coupler at Teesta III. At the same time 400 KV Teesta 3- Rangpo line also tripped due to SPS-2 operation and then all units at Teesta III &amp; Dikchu tripped due to loss of evacuation path. Total generation loss was 1025 MW.</i></p>		Starting from	10-Jul-2018 08:14:12 hrs	50.087
		To	10-Jul-2018 08:16:12 hrs	50.020

Sr No	Particulars	Dimension	DELHI	Particulars	Dimensions	CCGT-BAWANA	PRAGATI
1	Actual Net Interchange before the Event	MW	3399.973	Actual Net Interchange before the Event	MW	561.244	263.464
2	Actual Net Interchange after the Event	MW	3411.623	Actual Net Interchange after the Event	MW	558.631	265.955
3	Change in Net Interchange (2 - 1)	MW	11.65	Change in Net Interchange (2-1)	MW	-2.613	2.491
4	Generation Loss (+) / Load Throw off (-) during the Event	MW	0	Generation Loss (+) / Load Throw off (-) during the Event	MW	0	0
5	Control Area Response (3-4)	MW	11.65	Control Area Response (4-3)	MW	2.613	-2.491
6	Frequency before the Event	HZ	50.087	Frequency before the Event	HZ	50.087	50.087
7	Frequency after the Event	HZ	50.020	Frequency after the Event	HZ	50.020	50.020
8	Change in Frequency (7-6)	HZ	-0.067	Change in Frequency (7-6)	HZ	-0.067	-0.067
9	Frequency Response Characteristic (5 / 8)	MW/HZ	-173.8806	Frequency Response Characteristic (5 / 8)	MW/HZ	-39.00	37.18
10	Net System Demand met before the Event	MW	4655.173	Net System Demand met before the Event	MW	0	0
11	Internal Generation before the Event (10 - 1)	MW	1255.2	Internal Generation before the Event (10 - 1)	MW	561.244	263.464
12	Ideal load response assuming 4% per Hz (0.04*Row 10)	MW/Hz	186.20692	Ideal load response assuming 4% per Hz (0.04*Row 10)	MW/Hz	0	0
13	Ideal generator response assuming 5% droop.....40% per Hz (40% of Row 11)	MW/Hz	502.08	Ideal generator response assuming 5% droop.....40% per Hz (40% of	MW/Hz	224.4976	105.3856

				Row 11)			
14	Composite ideal response (12 + 13)	Mw/Hz	688.28692	Composite ideal response (12+13)	MW/Hz	224.4976	105.3856
15	Percentage of ideal response(FRC*100/s.no.14)	%	-25.26281	Percentage ideal response	%	-17.37212	35.27911



NRLDC has reported an incident on 10 July 2018 in which there is fall of frequency upto 0.067Hz and frequency response characteristics is calculated by NRLDC. Delhi SLDC also verified the incident and calculated the FRC . The FRC calculation done by Delhi SLDC has been mailed to PPCL 1 & PPCL 3.

PPCL 1 & PPCL 3 are requested to calculate the FRC and verify the response of machines for the incident occurred on 10 July 18.

**3. System study for capacitor requirement in NR for year 2019-20.**

The matter is a regular agenda in NRPC OCC to do system study for capacitor requirement in Northern Region. NRPC has approved the capacitor requirement study at 11/33kV level from CPRI to obtain the true requirement of capacitor for FY 2018-19. In this regard all NR utilities were requested to give peak summer data (Load/Voltage) and details as per format approved in NRPC. The format for data is attached as Annexure-II. As such, all utilities are requested to provide data in required format.

The matter was discussed in last OCC meeting and Discoms were advised to submit data requisite format. Till date no information has received.

**It was deliberated that the study of capacitor requirement in Delhi Power network is very crucial for preparation to counteract the low voltage problem during high load demand in next summer season. OCC advised to Discoms for providing the requisite data to SLDC as per format in Annexure-II.**

**The status shall be updated in every OCC meeting.**

**(Action by All Discoms & DMRC)**

**4.Requirement of data for the GIS based energy map being developed by Energy Division of NITI Aayog.**

This is in reference to the agenda item no. 19 of 149 NRPC OCC meeting. Energy Division of Niti Aayog is preparing a GIS based energy map, therefore, Member Secretary, NRPC has requested all Discoms / Power Department to furnish the information regarding the Name, Voltage level, Capacity Longitude and Latitude of 33kV & 66kV S/Stns and Lines. The format for data is attached as Annexure –III.

The matter was discussed in last OCC meeting and Discoms were advised to submit data requisite format. Till date no information has received.

**OCC deliberated that this agenda has been discussed in OCC meeting for multiple times, but till now the requested data has not provided by Discoms & DMRC.**

**OCC requested to all concerned to furnish the requisite data required for GIS based energy mapping.**

**(Action by Discoms & DMRC)**

**5.Multiple tripping of 220kV Pragati-Sarita vihar line.**

The trippings occurred on 220kV Pragati-Sarita vihar line during 01.05.2018 to 10.08.2018 are as under:-

Sl No	Sub-Station/Line	Outage Date	Outage Time	Revival Date	Revival Time	Reason/Remarks
1	220kV PRAGATI - SARITA VIHAR CKT	3.5.18	07:15	3.5.18	08:03	At Sarita Vihar : 186A&B. At Pragati : Ckt. did not trip.
2	220kV PRAGATI - SARITA VIHAR CKT	9.6.18	17:28	9.6.18	21:47	At SVR: Z-1, 1.026 km, Y ph. At PGT: Y ph; E/F, 13.17 km.
3	220kV PRAGATI - SARITA VIHAR CKT	22.6.18	13:37	22.6.18	15:15	AT PRAGATI : DIST PROT, ZONE-I, II, III, DIST 6.93KM. AT SARITA VIHAR : DIST PROT, ZONE-I, DIST 6.642KM.
4	220kV PRAGATI - SARITA VIHAR CKT	2.7.18	20:21	2.7.18	22:24	AT SARITA VIHAR : DIST PROT, ZONE-III , III, DIST 9.615KM. AT PRAGATI : DIST PROT, ZONE-I, DIST 2.896KM.
5	220kV PRAGATI - SARITA VIHAR CKT	12.7.18	17:15	12.7.18	20:15	At Pragati: Dist prot, Zone-I, Dist-2.216Kms, C-Ph, 186, O/C, E/F. At Sarita Vihar: : Dist prot, Zone-II, Dist-10.52Kms, ABC Phase, 186,
6	220kV PRAGATI - SARITA VIHAR CKT	21.7.18	10:12	21.7.18	16:40	AT PRAGATI : DIST PROT, ZONE-I, DIST 1.592KM. AT SARITA VIHAR DIST PROT, ZONE-II, DIST 10.19KM.
7	220kV PRAGATI - SARITA VIHAR CKT	27.7.18	17:48	27.7.18	19:30	AT SARITA VIHAR : DIST PROT, ZONE-I, 86ABC, DIST 5.223KM. AT PRAGATI : DIST PROT, ZONE-I, DIST 7.317KM.
8	220kV PRAGATI - SARITA VIHAR CKT	4.8.18	19:17	4.8.18	19:52	AT SARITA VIHAR : DIST PROT, ZONE-I, DIST 2.951 AT PRAGATI : DIST PROT, ZONE-I, DIST 9.474KM.

220kV Pragati- Sarita Vihar ckt is an important line connecting generating stns at Pragati stn. to Maharani Bagh via Sarita Vihar. There were multiple trippings observed in last three months.

**The analysis of above tripping is attached as Annexure-PGT-SRV tripping.**

**OCC advised that all precautionary measures including tree trimming be done to avoid the transient fault.**

**(Action by DTL)**

**6.Installation of 10 MW Battery Energy Storage (BESS) at 66/11KV Grid RG-24 in Rohini by M/s TPDDL:**

In the last OCC meeting, TPDDL explained the 10 MW Battery Energy Storage (BESS) at 66/11KV Grid RG-24 in Rohini .

SLDC opined that a detailed presentation be given by TPDDL to explain the benefits of the scheme like AT&C loss reduction, T&D equipment life extension, privilege services to the preferential consumers, back power to the plants etc along with the guidelines of DERC.

**TPDDL explained the brief structure & working of this Energy storage system (BESS) through power point presentation. This explanation also included the possibilities/ alternatives of back power to plants, privilege services to the preferential consumers in case of emergency situations.**

**OCC took notable interest in this new energy storage system and requested SLDC to ascertain the guidelines of DERC in view of installation of this system as well as connectivity of the same with Delhi power grid.**

**The meeting ended with vote of thanks to the chair**

**NOTE:-The MOM of OCC meeting can also be seen on DTL website ([www.dtl.gov.in](http://www.dtl.gov.in)) under the Tab “News and Information – OCC Meeting”.**

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