

# STATE LOAD DESPATCH CENTRE (DELHI)

राज्य भार प्रेषण केंद्र (दिल्ली)

Office of Dy. General Manager (System Operation)

SLDC Building, Minto Road, New Delhi-110002

Ph: 23221175, FAX No.23221012

No. F./DTL/207/19-20/DGM(SO)/20

Dated :12.06.2019

**Subject :** Minutes of the 21<sup>st</sup> meeting of the Grid Coordination Committee (GCC) held on 22.04.2019 at 10.30hrs at Conference Hall, NRPC Secretariat at 18-A, Qutab Institutional Area, Shaheed Jeet Singh Marg, Katwaria Sarai New Delhi

Dear Sir, / महोदय

The Minutes of the 21<sup>st</sup> meeting of the Grid Coordination Committee (GCC) held on 22.04.2019 at 10.30hrs at Conference Hall, NRPC Secretariat at 18-A, Qutab Institutional Area, Shaheed Jeet Singh Marg, Katwaria Sarai New Delhi are enclosed for ready reference and further necessary action please.

Thanking you,

Yours faithfully

Encl. as above

(S.K. SINHA)

Dy. G.M. (System Operation)

Convener, GCC

To

1. **Chairperson, GCC**  
Director (Operations), Delhi Transco Ltd, 1<sup>st</sup> floor, Shakti Sadan Building, Kotla Road, New Delhi-110002, Office-Phone- 011-23232715, Fax : 23232721
2. **Sh. Harjiwan Vyas, Executive Director (T), SLDC, Delhi**
3. **Sh. Birender Prasad, G. M. (Planning)**
4. **Sh. V. Venugopal, G.M. (O&M)-II, Delhi Transco Ltd.**
5. **Sh. Loveleen Singh, G. M. (Corporate Monitoring & SEM), DTL**
6. **Sh. M. A. Khan, G. M. (Project)-I, Delhi Transco Ltd.**
7. **Sh. K.K. Verma, G. M. (O&M)-I, Delhi Transco Ltd,**
8. **Ms. Kiran Saini, G. M. (Project)-II, Delhi Transco Ltd**
9. **Sh. Mukesh Kumar Sharma, G. M. (P&M, Disaster Management & Safety), DTL**
10. **Sh. Suresh Kumar Sharma, G.M. (C&MM), DTL**
11. **G.M. (Civil), DTL**
12. **Sh. P.K. Malik, General Manager (Finance), DTL**
13. **G.M. (C&RA), DTL**
14. Deputy Secretary, Power Department GNCTD, 8th Level, B-Wing, Delhi Secretariat, I.P. Estate, New Delhi-110002

15. **Sh. Bhupender Nath GM, DMRC, Ph. 9999533627** Inderlok Metro Station, Delhi
16. **Executive Director, NRLDC18-A, SJSS Marg, New Delhi-110016, Office Ph: 011-26537351, Fax:011-26852747**
17. **General Manager (Electrical), DMRC**
18. **Sh. S.M. Verma, Director(Tech), IPGCL / PPCL**  
Himadri Building, RPH, New Delhi-110002. Phone:011-23273544, Fax: 011-23270590
19. Executive Director (Corp), PPCL
20. **Sh. Rajneesh Srivastava, G.M. (Commercial), IPGCL/PPCL, 9999533500**
21. **Sh. A.K. Sharma, Head (O&M), BYPL, Shakti Kiran Building, Karkardooma, Delhi**
22. **Sh. Mukesh Dadhichi, G.M. (SO), BYPL, Shankar Road, New Delhi**
23. **Sh. Sunil Kakkar, Head (PMG), BYPL, Shakti Kiran Building, Karkardooma, Delhi**
24. **Chief Engineer (Transmission System), BBMB**  
SLDC Complex, Sector-28, Industrial Area Phase-I, Chandigarh
25. **Superintending Engineer (O&M) Circle, BBMB, 400kV S/Stn, BBMB Complex, Panipat-132107, Mob. 09416017711, Fax .0180-2662992**
26. **Head (PEC, PM&BD), TPDDL,**  
SCADA Building, Near Netaji Place Subash Place Metro Station, Pitampura, Delhi  
34 Phone Office: 011- 27468027, Fax: 011-27468023
27. **Sh. P. Devanand, HoD, (PSC & Smart Grid), TPDDL**
28. **Sh. Salil Saxena, VP, (System Operation), BRPL**
29. **Sh. Sanjay Srivastava, AVP (PMG), BRPL**
30. **Sh. A.K. Joshi, Chief Engineer (Elect)-II, NDMC**  
Room No. 1706, 17<sup>th</sup> Floor, Palika Kendra, Sansad Marg, New Delhi-110001
31. **Dy.G.M. (Market Operation), NRLDC, 18-A, SJSS Marg, New Delhi-110016**
32. **Sh. Mahender Singh, Secretary, DERC**  
DERC Viniyamak Bhawan, C-Block, Shivalik, New Delhi-17
33. **Sh. U.K. Tyagi, Executive Director (Tariff), DERC**  
DERC Viniyamak Bhawan, C-Block, Shivalik, New Delhi-17
34. **General Manager (Commercial), NTPC, NCR Headquarters, R&D Building, A8A, Setor-24, Noida-201301. Fax no. 0120-2410192**
35. **Sh. S.N. Basu, GM(T), GTPS, Phone No.9818434679, sagmeelbasu@yahoo.co.in**
36. **Sh. Amit Ahuja, GM(T), Bawana, CCGT**
37. **Sh. Satish Raghav, GM, PPCL-I, Ph. 9717698281**
38. **Sh. N.C. Sharma, AGM(T), Operation Bawana CCGT, Ph. 9717694930**
39. **Sh. Neelesh Gupta**  
Whole Time Director, Timarpur – Okhla Waste Management Company Ltd  
Jindal ITF Center, 28 Shivaji Marg New Delhi-110015, Ph. 45021983, Fax 45021982
40. **General Manager, Indira Gandhi Super Thermal Power Station, Jharli, Jhajjar Distt. Haryana Pin-124141, Fax no. 01251-266202, Ph. 01251-266265**  
CWE (U), MES, MES Palam Road, Delhi Cantt, New Delhi-110010
41. **GE (U), MES, Electric Supply, Kotwali Road, Delhi Cantt, Delhi-110010**
42. **Mr. Rohit Bajaj, Vice President Business Development, Indian Energy Exchange**  
Unit no. 3,4,5 & 6, Fourth Floor TDI Centre, Plot No.-7 JASOLA New Delhi-110025  
Ph. 9654125144, [rohit.bajaj@iexindia.com](mailto:rohit.bajaj@iexindia.com), Office No. 43004032.
43. **Dy. G. M. (Fin-I & II), DTL Rajghat Power House New Delhi -110002.**

44. **Dy. G.M. SLDC**
45. DGM/ (Energy Accounting)
46. Manager (HW), SCADA, SLDC
47. Ms. Anjalee Das, (Manager Software), SCADA, SLDC
48. **Sh. Naveen Goel**, Manager (T), System Operation, SLDC.
49. **Ms. Sonali Garg**, Manager (Energy Accounting), Delhi SLDC.
50. **Manager (SO)-Shift**, Delhi SLDC.
51. Dy. Manager (Finance), SLDC.
52. Sh. Appi Reddy, Associate V.P. DMSWL, Sector-5, Pocket N-1, Bawana Industrial Area, Behind Pragati Power Plant, Bawana, New Delhi-110039  
[appireddy.k@ramky.com](mailto:appireddy.k@ramky.com)
53. Project-in-Charge, 12MW East Delhi Waste Processing Company Ltd, Near Veterinary Hospital, Gazipur, Delhi-110096, Ph.22782152.
54. Sh. Sudhir Saxena, Chief Executive Officer, Railway Energy Management Co. Ltd.Ground Floor, Central wing, Plot No-1, Sector-29, Gurgaon-122001

Copy for favour of kind information to :-

1. Secretary (Power), Govt. of NCT of Delhi,
2. Secretary, DERC, Viniyamak Bhawan, C-Block, Shivalik, New Delhi-110017
3. Chairman & Managing Director, DTL
4. Chairperson, NDMC, Palika Kendra, Sansad Marg, New Delhi-110001
5. Member Secretary, NRPC, Katwaria Sarai, New Delhi-110016
6. Director (Operations), NTPC, Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi-110003
7. Managing Director, IPGCL / PPCL, Himadri, Rajghat Power House, New Delhi-02
8. Director (Operations), DMRC, Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi-110001.
9. Director (Electrical), DMRC
10. Director (Finance) DTL
11. CEO, BSES Rajdhani Power Ltd, BSES Bhawan, Nehru Place, New Delhi-110019
12. CEO, BSES Yamuna Power Ltd, Shakti Kiran Building, Karkardooma, New Delhi-92
13. CEO, TPDDL, 33kV Grid S/Stn, Hudson Lane, Kingsway Camp, Delhi-110009
14. Chief Engineer, Delhi Zone,(CEDZ), MES Palam Road, Delhi Cantt, New Delhi-10
15. Addl. Secretary (Power), Govt. of NCT of Delhi, Delhi Secretariat, New Delhi.

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Office of Dy. General Manager (System Operation)  
SLDC Building, Minto Road, New Delhi-110002  
Ph: 23221175, FAX No.23221012

**Summary Record of discussions held in the 21<sup>st</sup> meeting of the Grid Coordination Committee (GCC) held on 22.04.2019 at 10.30hrs at Conference Hall, NRPC Secretariat at 18-A, Qutab Institutional Area, Shaheed Jeet Singh Marg, Katwaria Sarai New Delhi.**

The list of participants is enclosed as **Annexure-1**.

## **WELCOME**

Sh. Prem Prakash, Director (Operations), DTL, Chairperson, GCC welcomed all delegates in the 21<sup>st</sup> Grid Coordination Committee meeting. He hoped that the issues would be sorted out amicably.

He expressed great pleasure that DTL has strengthened its transmission network by augmentation of various transmission lines. With these arrangements, DTL would be able to meet summer peak successfully without any constraints. He hoped that all utilities have made sufficient arrangements to meet consumer's demand.

He further expressed his concerns on the non payment of dues by some of the Distribution licenses due to which generating and transmission companies are facing acute shortage of funds. He advised Distribution Companies to pay dues in time.

Concluding the remarks, he requested all the Stake Holders to actively participate in the proceedings of meeting for fruitful discussions and arrive at a considered decision to ensure secure and economic operation of the power system of Delhi. He advised Dy. G.M. (SO) to take up agenda for discussion.

ED(T), SLDC informed the members about the impending retirement of both Director (Operation) DTL and Director (Technical) IPGCL in end of April 2019. He placed on record their immense contribution in successful handling of transmission and generation sector of Delhi and wished them a healthy future.

The Agenda was subsequently taken up for discussion.

**1 CONFIRMATION OF THE MINUTES OF 20<sup>TH</sup> MEETING OF GCC HELD ON 28.11.2018.**

The minutes of the 20<sup>th</sup> meeting of GCC held on 28.11.2018 had been circulated vide letter No. F./DTL/207/18-19/DGM(SO)/233 dt. 28.02.2019. Comments were received on the MoM from M/s IPGCL and BYPL. BYPL has requested to incorporate specific time limit (of 1 month) for SLDC finance to reconcile and subsequently refund NRLDC charges to the DISCOM's on the issue at S.No. 2.3.4 (page no 19) regarding NRLDC charges refund from Delhi SLDC. Similarly, IPGCL has desired to incorporate the word immediate release of payment to IPGCL by NDMC against S.No. 2.3.3 (iv) regarding energy bills of September' 17 to March' 18. No comments have been received from any other entities so far.

**Convenor GCC informed that the referred issued are still pending and again brought out in this 21<sup>st</sup> GCC Agenda. Accordingly, the MoM of 20<sup>th</sup> GCC was finalised without any changes.**

**2 FOLLOWUP ACTION ON THE DECISIONS TAKEN IN THE PREVIOUS GCC MEETING**

**2.1. PROVISIONS OF HOT RESERVE OF TRANSFORMERS.**

The present status of hot reserve of Power Transformers is as under:-

S.No.	Transformation Capacity	Population in no.	Hot Reserve (No.) Decided	Present status/ Remarks
1.	400/220kV, 500MVA ICT	2	1x500MVA Tr. at Bamnauli	DTL informed that one 400/220kV 500MVA Tx is proposed to be installed as hot reserve by the year 2019-20 and would be placed at Bamnauli. In case of damage of 315MVA in future, the same would be replaced with 500MVA.  <b>DTL Planning Deptt informed that Board approval has been accorded and PR raised for 500 MVA Tx. Chairman GCC informed that in future as a principle 500 MVA Tx. be only procured as hot reserve against 315 MVA Tx. Further, 315 MVA at Mundka to be replaced with 500 MVA.</b>
2.	400/220kV, 315MVA ICT	14		
3.	220/66kV, 160MVA	25	2x160MVA Tr., (1 each at Mundka and Mehrauli)	One 160MVA Tx would be kept as hot reserve and placed at Mundka. While the 2nd 160MVA, 220/66kV Hot reserve transformer is to be placed at 220kV Mehrauli.  Both the transformers are expected to be provided by 2020.  <b>DTL Planning Deptt informed that PR for 160 MVA at Mundka has been raised while the other for Mehrauli is under tendering stage.</b>
4.	220/66kV, 100MVA	41	1x100 MVA Tr. at Pappankalan-I	DTL confirmed that the scheme for 100 MVA Tr. at PPK-I has been approved. The Tx. is expected by 2020.  <b>DTL Planning Deptt informed that PR has been raised and is under approval for Finance .</b>

S.No.	Transformation Capacity	Population in no.	Hot Reserve (No.) Decided	Present status/ Remarks
5	220/33kV, 100MVA	44	2x100MVA Tr., (1 each at Okhla and Patparganj)	DTL informed that the Txs. are expected by 2020 <b>DTL Planning Deptt informed that PR for PPG has been raised and is under approval from Finance and for Okhla, PR received in C&amp;MM Department .</b>
6	66/11kV 20MVA	24	NIL	Steering Committee in its meeting held on 15.03.2017 had decided that in case of exigency, the Discoms may provide these transformer on returnable basis.
7	33/11kV 20MVA	5	NIL	As per the decision taken in the Steering Committee Meeting held on 30.10.17 the transformer augmentation has been planned and detailed under sr. No.2.1(b) below
8	33/11kV 16MVA	11	NIL	<b>GCC noted the above.</b>

### Augmentation plan for 66/11kV and 33/11kV 16MVA / 20 MVA Transformers-

S. No.	Sub Station	Details of existing Tx.	Augmentation Plan	Year	Latest status of Scheme	Remarks
1	Lodhi Road	2 no 33/11kV 20MVA	2 no 33/11kV 25MVA	2018-19	Under tendering.	It is informed that 11kV panel is quite old and under rated compared to 25 MVA Tr. Rating. It was suggested to replace the panel also alongwith the augmentation. GCC advised Planning Department to discuss the matter in steering Committee the issue of replacement of 11kV panel since major expenditure is involved and requires DERC approval. Meanwhile the load shall be limited by the Discoms to the level of 16/20MVA capacity only. <b>DTL Planning Deptt informed that the preparation of specification for switch gear panel is under progress GCC advised DTL to ensure fire protection schemes for each Txs. Further, approval procurement process can be shortened by taking combined approval of all schemes although the procurement may be scheduled in stages as per requirement.</b>
	Lodhi Road	2 no 33/11kV 16MVA	2 no 33/11kV 25MVA	2018-19	Under tendering.	
2	Najaf Garh	2 no 66/11kV 20MVA	2 no 66/11kV 31.5MVA	2019-20		
3	Okhla	2 no 66/11kV 20MVA	2 no 66/11kV 31.5MVA	2019-20		
4	Sarita Vihar	2 no 66/11kV 20MVA	2 no 66/11kV 31.5MVA	2019-20		
5	Pappan kalan-I	2 no 66/11kV 20MVA	2 no 66/11kV 31.5MVA	2020-21		
6	Mehrauli	2 no 66/11kV 20MVA	2 no 66/11kV 31.5MVA	2021-22		

GCC advised that a letter is to be sent to DERC for approval of such schemes before awarding the work by Planning Department.

## Augmentation/replacement plan for 220/66kV, 100 MVA Transformers-

Sr. No.	Name of the Sub Station	Qty. (No.)	Year	Latest status of Scheme
1	SaritaVihar (100 MVA to 160 MVA)	1	2018-19	Txs are expected by June 2019. The Txs. Earmarked for Sarita Vihar and Narela have been now shifted for Kanjhawala and Okhla substation due to technical constraints. The Txs. For Sarita Vihar and Narela have been allocated from the 9 Txs ordered to BHEL and expected to be commissioned by end of this year.
2	Narela (100 MVA to 160 MVA)	1	2018-19	
3	Najafgarh (100 MVA to 160 MVA)	2	2018-19	P.O. awarded to BHEL and expected by June 2019.
4	Okhla (100 MVA to 160 MVA)	1	2019-20	PR raised and is under approval after approval of schemes by BoD.
5	Mehrauli (100 MVA to 160 MVA)	1	2019-20	
6	Patparganj (100 MVA to 160 MVA)	2	2019-20	
	Total	8		

**GCC advised that 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.**

## 2.2 IMPLEMENTATION OF AUTOMATIC DEMAND MANAGEMENT SCHEME BY DISCOMS

The implementation of ADMS is being monitored by CERC and in suo moto petition no. 5/2014 in the matter of “non compliance of Regulation 5.4.2(d) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulation 2010” the following has been directed:

*.....however, considering the request of the respondents to grant time to implement ADMS, we grant time till 30.06.2016 to the respondent to implement ADMS failing which they will be liable for action under Section 142 of the Act for non compliance of the Regulation 5.4.2(d) of the Grid Code and order of the Commission. RLDCs are directed to submit the report in this regard by 31.08.2016”.*

The position updated in the utilities in the 20<sup>th</sup> GCC is as under:-

TPDDL : SCADA has already been upgraded. This has the facility of ADMS. The work has been completed and commissioned on 19 March 2018.

BYPL : Already in place.

BRPL : SCADA has already been up-graded. This has the facility of ADMS.

NDMC: The software has been upgraded and under testing.

MES : Exempted due to very small utility and considering strategic important load to be catered.

In the last meeting, GCC advised SLDC to call a meeting with all discoms after implementation of ADMS. No reply received from NDMC regarding implementation of ADMS.

During meeting NDMC informed that testing of ADMS is remaining and work is linked with the IPDS project, for which efforts shall be made to complete at the earliest.

GCC advised NDMC to take up the work on priority and submit status

**NDMC informed that their contractor M/s ABB is expected to give a timeline by September 2019. The matter was discussed and NDMC was advised to ensure schedule as per load requirement and control its Overdrawal manually till ADMS is commissioned. Further, adequate PPAs be signed and allocation obtained from Ministry to ensure no shortage of power in the ensuing summer.**

## 2.3 OUTSTANDING DUES

### DTL

#### 2.3.1 NON PAYMENT OF OUTSTANDING DUES OF DTL BY BRPL, BYPL

BSES utilities are not paying dues to DTL since October, 2010 due to which DTL is facing acute financial crisis. Due to financial crunch, DTL is not able to expand its network as per plans. Even, maintenance activities are also suffering badly. The outstanding dues owed to BSES utilities are increasing month by month. Hon'ble Supreme Court vide its orders dated 26.03.2014, 12.05.2016 has directed BSES Discoms to clear the current dues of DTL i.e. dues w.e.f. 01.01.2014 but BSES utilities are not even complying the directions of Hon'ble Supreme Court. The details of outstanding dues on BSES utilities are as under :-

**i) The details of current dues payable to DTL by BRPL for the period 01.01.2014 to 31.12.2018 are reproduced hereunder:**

(Amount in Rs. Cr.)					
Billing Period	Total Bill amount	Minimum payable amount (as per direction of Hon'ble Supreme Court Orders)	Total minimum payable amount (as per direction of Hon'ble Supreme Court Orders)	Payment received till 30.09.2018	Balance minimum amount of current dues payable as per direction of Hon'ble Supreme Court
01.01.14 to 30.04.16	752.51	677.26	1420.76	592.84	827.92
01.05.16 to 31.12.18	1083.83	743.50			

Therefore, it is evident from the above that minimum amount of Rs. 827.92Cr. is still required to be paid by BRPL to honour the Hon'ble Supreme Court orders.

The total outstanding dues on BRPL as on 31.01.2019 amounting of Rs. 1699.35 Cr after adjustment of subsidy diverted by GNCTD (including current due and LPSC for the billing period 01.10.2010 to 31.12.2018.)

BRPL representative in the last GCC had informed the following :-

BRPL submitted that it is already complying with Hon'ble Supreme Court Order of making payment of 70% of current dues. Further from Nov'17 onwards it has also started paying 100% of current dues to DTL. Further BRPL, has also endeavoured to make the additional payments to DTL, since June 18 onwards, which is over and above the current dues payable.

**BRPL informed that it is paying 100% of current dues to DTL besides making the additional payments to cover the previous outstanding for the period 2014 onwards.**



ii) **The details of current dues payable to DTL by BYPL for the period 01.01.2014 to 31.12.2018 are reproduced hereunder:**

The details of current dues for the period 01.01.2014 to 31.12.2018 are reproduced hereunder:

**(Amount in Rs. Cr.)**

Billing Period	Total Bill amount	Minimum payable amount (as per direction of Hon'ble Supreme Court Orders)	Total minimum payable amount (as per direction of Hon'ble Supreme Court Orders)	Payment received till 31.01.19	Balance minimum amount of current dues payable as per direction of Hon'ble Supreme Court
01.01.14 to 30.04.16	473.67	426.30	827.25	241.21	586.04
01.05.16 to 31.12.18	584.48	400.95			

Therefore, it is evident from the above that minimum amount of Rs. 586.04 Cr. is still required to be paid by BYPL to honour the Hon'ble Supreme Court orders.

The total outstanding dues on BYPL as on 31.01.2019 amounting of Rs.1120.69 Cr after adjustment of subsidy diverted by GNCTD (including current due and LPSC for the billing period 01.10.2010 to 31.12.2018).

In view of the huge outstandings as brought out above, the above beneficiaries i.e. BRPL & BYPL were advised to liquidate the outstanding dues of DTL at the earliest.

**BYPL informed that it is paying 100% of current dues to DTL. GCC noted that both BRPL and BYPL have been getting costs reflective tariffs along with liquidation of regulatory assets from the regulator since the last two years, accordingly, BRPL and BYPL is directed to submit details of payment made by them to the utilities from the liquidation amount of regulatory assets immediately.**

iii) **Non furnishing of LCs by BRPL &BYPL**  
BRPL and BYPL have not furnished LCs to DTL. Letters were issued to both the Distribution Licensees for providing LCs for FY 2019-20 for amount of Rs. 39,55,06,870/- and **Rs. 22,19,75,709/-** respectively w.e.f. 1<sup>st</sup> April, 2019 but no LCs have been provided by both the Discoms so far.

BRPL representative had informed in the last GCC following:-

Cash flow mismatch in past had adversely affected payment obligations, debt servicing capability of the Company and accumulation of outstanding dues to power suppliers. These constraints have restricted our capability to establish desired LC's in favour of power suppliers. Presently BRPL is not in position to establish LC in favour of any of its power supplier.

GCC advised the above beneficiaries i.e. BRPL & BYPL to make all efforts for opening of LC in favour of DTL at the earliest.

**BRPL and BYPL informed that they are finding it difficult to obtain any guarantees required for opening the LC's from any banks.**

### 2.3.2 INTRASTATE UI ACCOUNT

The position of payment of Intrastate UI/ DSM accounts for last three years (as on 31<sup>st</sup> March) is updated as under:-

STATEMENT OF UI AS ON 31.03.2016					
S. No.	Financial Year	Constituents	Payable Amount (Principal)	Receivable Amount (Principal)	Net Payable (+)/ Receivable(-)
1	31.03.2016	IPGCL	1,44,52,343.00	1,16,29,075.00	28,23,268.00
2	31.03.2016	PPCL	25,89,170.00	-	25,89,170.00
3	31.03.2016	BTPS (NTPC)	-	-	-
4	31.03.2016	BYPL	5,68,43,845.00	96,08,57,017.00	-90,40,13,172.00
5	31.03.2016	BRPL	1,12,75,12,497.00	1,79,44,04,903.00	-66,68,92,406.00
6	31.03.2016	TPDDL (NDPL)	31,082.00	-	31,082.00
7	31.03.2016	NDMC	2,98,00,465.00	-	2,98,00,465.00
8	31.03.2016	MES	3,38,84,058.00	10,62,21,181.00	-7,23,37,123.00
		<b>TOTAL</b>	<b>1,26,51,13,460.00</b>	<b>2,87,31,12,176.00</b>	<b>-1,60,79,98,716.00</b>

STATEMENT OF UI AS ON 31.03.2017					
S. No.	Financial Year	Constituents	Payable Amount (Principal)	Receivable Amount (Principal)	Net Payable (+)/ Receivable (-)
1	31.03.2017	IPGCL	1,44,52,343.00	1,16,29,075.00	28,23,268.00
2	31.03.2017	PPCL	25,89,170.00	-	25,89,170.00
3	31.03.2017	BTPS (NTPC)	-	-	-
4	31.03.2017	BYPL	6,18,16,587.00	1,09,42,90,851.00	-1,03,24,74,264.00
5	31.03.2017	BRPL	1,13,70,18,003.00	1,79,44,04,903.00	-65,73,86,900.00
6	31.03.2017	TPDDL (NDPL)	31,082.00	-	31,082.00
7	31.03.2017	NDMC	2,98,00,465.00	-	2,98,00,465.00
8	31.03.2017	MES	4,84,31,731.00	14,63,00,388.00	-9,78,68,657.00
9	31.03.2017	MSW BAWANA	-	-	-
		<b>TOTAL</b>	<b>1,29,41,39,381.00</b>	<b>3,04,66,25,217.00</b>	<b>-1,75,24,85,836.00</b>

STATEMENT OF UI AS ON 31.03.2018					
S. No.	Financial Year	Constituents	Payable Amount (Principal)	Receivable Amount (Principal)	Net Payable(+)/ Receivable(-)
1	31.03.2018	IPGCL	1,50,89,103.00	1,16,29,075.00	34,60,028.00
2	31.03.2018	PPCL	30,58,995.00	-	30,58,995.00
3	31.03.2018	BTPS (NTPC)	-	-	-
4	31.03.2018	BYPL	6,53,79,542.00	1,29,52,53,108.00	-1,22,98,73,566.00
5	31.03.2018	BRPL	1,17,11,55,858.00	1,79,44,04,903.00	-62,32,49,045.00
6	31.03.2018	TPDDL (NDPL)	7,05,562.00	2,12,79,811.00	-2,05,74,249.00
7	31.03.2018	NDMC	5,37,03,019.00	14,63,07,123.00	-9,26,04,104.00
8	31.03.2018	MES	6,32,07,939.00	18,23,31,575.00	-11,91,23,636.00
9	31.03.2018	MSW BAWANA	-	-	-
		<b>TOTAL</b>	<b>1,37,23,00,018.00</b>	<b>3,45,12,05,595.00</b>	<b>-2,07,89,05,577.00</b>

Notes:-

The above figures are showing outstanding principal amount only.

Interest @ 0.04% per day is yet to be figured out on the above outstanding amount payable, after confirmation from various constituents.

The above figures are yet to be reconciled and confirmed from the constituents.

SLDC discharges the payment liabilities to the utilities including that of NRPC (which is the priority payment as per the provisions of DSM Regulations) from the Pool.

It was informed that during the year 2016-17, SLDC has paid Rs.60.76 Crores to NRLDC to avoid legal issues arising out of non payment of dues and the dues of other utilities were also settled.

However, the interest portions with regard to Intrastate Utilities are to be settled. It was explained that upto 2013-14, the accounts have already been settled.

In the previous meetings, GCC advised SLDC to immediately do the needful for recovery of dues from the defaulting utilities. As per the decision taken in the GCC, SLDC has started the proceedings for filing the petition before DERC for recovery of the dues from the defaulting utilities.

GCC had advised SLDC to reconcile the accounts at the earliest.

SLDC Finance Department informed that they have finalised the accounts at their level and are now sending letters to each utility to reconcile the accounts.

**No representative from SLDC Finance was available however, SLDC representative informed that the reconciliation of account has been carried out with IPGCL, TPDDL and NDMC. GCC advised SLDC finance and the rest of the DISCOMS to coordinate and reconcile at the earliest.**

### 2.3.3 Outstanding dues of IPGCL / PPCL.

#### i) Non-payment of Energy Bills by BRPL and BYPL since October, 2010.

Since the re-assignment of the PPA signed with DTL, energy is being supplied and billed by IPGCL and PPCL to all the Distribution Companies as per the Energy Account issued by the State Load Dispatch Centre, Delhi (SLDC) and the payments for the bills raised were being realized within the stipulated period in the past, as per the PPA/ Regulations issued by the DERC.

However, full payments are not being released by BRPL and BYPL from the month of October, 2010. The details of outstanding are as under:

(Amount Rs. in Crores)

Company	BRPL	BYPL	Total
IPGCL	1952.13	1208.11	3160.24
PPCL	3677.64	2729.23	6406.87
Total	5629.77	3937.34	9567.11

Further, in total disregard to Hon'ble Supreme Court of India order dated 12-05-2016; BYPL and BYPL are not paying even 70 % of Current outstanding. The balance current unpaid dues as on date are as under:

(Amount Rs. in Crores)

70% of Current Dues payable by BSES Discoms as per SCI order dt. 12.05.16							
Rs. in cr.							
Utility	BRPL			BYPL			Total
	70% of Billed & due Amount wef 01.01.14	Payment received wef 01.01.14	Net Payable 01.01.14	70% of Billed & due Amount wef 01.01.14	Payment received wef 01.01.14	Net Payable 01.01.14	Total Payable w.e.f 01.01.14
IPGCL	858.87	432.95	425.91	318.22	107.67	210.54	<b>636.46</b>
PPCL	2836.65	1313.24	1523.42	1615.77	436.91	1178.86	<b>2702.28</b>
<b>Total</b>	<b>3695.52</b>	<b>1746.19</b>	<b>1949.33</b>	<b>1933.99</b>	<b>544.58</b>	<b>1389.41</b>	<b>3338.74</b>

Further, the State Commission, in its Tariff order dated 31.08.2017 & 28.03.2018 under chapter 6 Clause 6.1 in case of BRPL & BYPL has also directed as under;  
“A6: Directives

The commission directs the petitioner to make timely payment of bills to all the generating companies and transmission utilities. No late payment surcharge shall be allowed as pass through in the ARR on account of delayed payments.....”

However, from April’17 to March’19 an amount of Rs. 2038.82 Cr. is due for payment for the energy bills raised as per DERC order dated 28.03.2018 & 31.08.2017.

The members of Grid Coordination Committee are requested to deliberate the issue and impress upon BYPL and BRPL to make the payment of dues without any further delay.

BRPL representative informed the following :-

BRPL submitted that it is already complying with Hon’ble Supreme Court Order of making payment of 70% of current dues. Further from Nov’17/Dec ‘17 onwards it has also started paying 100% of current dues to IPGCL/PPCL. Further BRPL, has also endeavoured to make the additional payments to IPGCL/PPCL, since June 18 onwards, which is over and above the current dues payable

In view of the huge outstandings as brought out above, the above beneficiaries i.e. BRPL & BYPL were advised to liquidate the outstanding dues of PPCL/IPGCL at the earliest.

**IPGCL representative informed that both BRPL and BYPL are paying only part payment of the current dues. GCC advised both the DISCOMS to comply with the Supreme Court order and also submit the liquidation plan for outstanding dues at the earliest.**

**ii) Opening of LC by BRPL and BYPL for Bulk Power Supply to IPGCL and PPCL Power Stations.**

Various correspondences have been made by IPGCL and PPCL in respect of opening of LC for securing Bulk Power Supply. However, BRPL and BYPL in spite of number of reminders have not established LC in respect of IPGCL and PPCL since April, 2011.

BRPL representative informed the following :-

Cash flow mismatch in past had adversely affected payment obligations, debt servicing capability of the Company and accumulation of outstanding dues to power suppliers. These constraints have restricted our capability to establish desired LC's in favour of power suppliers. Presently BRPL is not in position to establish LC in favour of any of its power supplier.

GCC advised the above beneficiaries i.e. BRPL & BYPL to make all efforts for opening of LC in favour of PPCL/IPGCL at the earliest.

**BRPL and BYPL informed that they are finding it difficult to obtain any guarantees required for opening the LC's from any banks.**

**iii) Non-payment of dues and LPSC charges by TPDDL.**

TPDDL started default in payment of energy bills since October, 2015. The status of various communication, DERC order and follow up by IPGCL & PPCL since first default till date are as under:

<b>(Amount Rs. in Crores)</b>			
<b>Company</b>	<b>IPGCL</b>	<b>PPCL</b>	<b>Total</b>
<b>TPDDL</b>	44.35	105.07	<b>149.42</b>

GCC advised the TPDDL to reconcile the accounts and clear all dues of PPCL/IPGCL at the earliest.

**TPDDL informed that a petition has been filed and is pending in DERC on the above issue. GCC noted the same.**

**iv) Non-payment of Energy Bills of Sept'17 to March'17 of IPGCL (GTPS) by NDMC.**

IPGCL raised energy bills in respect of energy supplied from 01.09.2017 to 31.03.18 from GTPS power station as per allocation letter dt. 01.09.2017 of Delhi SLDC. The power from GTPS was scheduled by Delhi SLDC to NDMC since 01.09.2017 to 31st March 2018. However, NDMC has not made payment for energy bills for power supply from GTPS from September' 2017 to March'2018. Further with effect from 01.04.2018, the allocations for said amount of Power have been withdrawn from NDMC. An amount Rs 84.23 Cr. is due for payment for energy bills raised from 01.09.2017 to 31.03.2018.

NDMC representative informed that the allocation of GTPS was made by DERC without any requirement from NDMC. Further, NDMC never requisitioned such power for consumption, as such their law deptt has objected to any payment of power allotted from GTPS. SLDC rep contended that the power is scheduled by SLDC as per the allocations made by DERC. Further SLDC also requested NDMC to pay SLDC charges for the same period.

The matter was discussed in length and GCC advised NDMC that in view of the allocations by DERC, and to avoid LPSC, payment be released as per the regulations, however, if still there is any clarity required under the regulations, a meeting can be arranged at SLDC .

**GCC noted that the matter is still pending and advised NDMC to comply with the directions of DERC as per its letter dated 09.02.2018 it was also noted that NDMC has included the pending payment in its ARR also. It has also not contended the matter to DERC or in APTEL. NDMC was informed that in case of continued in-action on the part of NDMC regarding this issue suitable action as per regulations shall be initiated.**

v) **Non-payment of outstanding amount of IPGCL / PPCL by DTL**

Following bills raised on DTL are outstanding:-

- a) A bill of Rs.47.69 Crores on a/c of impact of true up order for the period FY 2007-08 to FY 2011-12 (carrying cost Implementation of Hon'ble ATE Judgment in Appeal No.81 of 2017 Rs.17.35 crores).
- b) Rs. 36.16 crore for late payment of revised Bill of FY 2006-07 IPGCL. As on 28.02.2019 DTL is to release a balance of Rs.16, 97, 49,833/- on account of principal bill dated 18.01.2010 and unpaid surcharge on it Rs.19,18,79,791/- further surcharge as per DERC Regulations will be attracted on balance principal.
- c) Rs. 2.80 crore for late payment of revised Bill of FY 2006-07 PPCL.

DTL rep during the 20<sup>th</sup> GCC had expressed inability to pay since the said amount is not included in Tariff order of DTL. GCC advised IPGCL and DTL to approach DERC for resolving the issue.

**GCC advised DTL to include this amount in current ARR of DTL and DTL representative confirmed that it will include this amount in its revised petition to DERC.**

2.3.4 BYPL and TPDDL had submitted a table agenda regarding refund of NRLDC charges for the period FY 2009-2014 as per Hon'ble CERC directions. Wherein both had informed that earlier the fees and charges of NRLDC were billed and collected by NRLDC from Delhi Discoms through Delhi SLDC (Nodal Agency). The billed amount was being paid by DISCOMS to DTL and the same was being disbursed by DTL to NRLDC (after deducting the TDS).

In compliance to CERC order dated 31.03.2015 and ROP dated 07.07.2015 and CERC final order dated 18.03.2016 for truing up of principal and interest refund amount for the period Apr-09 to Mar-14, NRLDC has refunded the differential amount of Delhi Discoms, to DTL on May-2015 (95%) and July-2016 (balance) Delhi Discoms have not received the refund of differential amount till date.

GCC advised Delhi SLDC to reconcile the complete statement and refund the amount due to the beneficiaries/utility at the earliest.

**No representative from SLDC Finance was available however, SLDC representative informed that initially reconciliation has to be carried out with NRLDC/DTL then only this can be refunded to the beneficiaries. GCC advised SLDC finance to reconcile at the earliest.**

2.4 **STATUS OF IMPLEMENTATION OF RECOMMENDATIONS OF EXPERT COMMITTEE ON GRID DISTURBANCES OCCURRED ON 30.07.2012 AND 31.07.2012 IN THE GRID.**

Clause	Recommendations	Status as on date						
9.1.1	Periodical 3 <sup>RD</sup> Party Protection Audit – Time frame – within one year	The Protection Audit was completed before CWG-2010. The deficiencies pointed out and the latest status on the issue of removal of deficiencies is as under :-						
		<table border="1"> <thead> <tr> <th>S N</th> <th>Description of Issue</th> <th>Sub-Stn</th> <th>Action taken/proposed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>DR and Event Logger to be provided or to be kept in order</td> <td>Bamnauli</td> <td>The EL at 400kV S/Stns is in place. EL for 220kV under procurement and installation expected to be completed by December 2016. DR already available with 400kV system. DR for 220kV system is the inbuilt feature of Numerical Relays which have already been installed.</td> </tr> </tbody> </table>	S N	Description of Issue	Sub-Stn	Action taken/proposed	1	DR and Event Logger to be provided or to be kept in order
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1	DR and Event Logger to be provided or to be kept in order	Bamnauli	The EL at 400kV S/Stns is in place. EL for 220kV under procurement and installation expected to be completed by December 2016. DR already available with 400kV system. DR for 220kV system is the inbuilt feature of Numerical Relays which have already been installed.					
<p>(Basic Protection Audit carried out on 400kV S/Stn Bamnauli before CWG)                      NRPC advised DTL to go for fresh third party protection audit of entire DTL system. In 95<sup>th</sup> OCC meeting held on 21.01.2014 at NRPC, DTL submitted the list of 25 numbers of 220kV Grids S/Stns identified for third party audit. Out of these, TPA of 400kV Mundka, 220kV Shalimar Bagh, 220kV Rohini-I and 220kV Mehrauli S/Stn were completed by 25.05.2014. The main observation was regarding replacement of static relays by Numerical relays.                      DTL's protection Department representative informed that Line Numerical differential</p>								

		<p>relays are installed in DTL 220kV lines. PO for 26 No. bus bar protection schemes awarded. All panels along with control cables received in corresponding sites. Erection work under process. Tender for replacement of old Static relays with numerical relay has been dropped and estimate has been revised and under approval of Competent Authority. DR and EL for the DTL sub Stations is the inbuilt function of the Numerical relays and will be integrated in the SAS while upgradation of conventional sub stations to automation which will be done after commissioning of all BCU's and Numerical relays.</p> <p>NRPC has constituted a committee for conducting regular audit, DTL has given its nomination to NRPC for the audit group. NRPC is going to conduct a training programme for the all the Nominees of various states, after which the audits shall carried out regularly in whole of NR.</p> <p>GCC advised DTL to expedite the replacement work.</p> <p><b><u>Protection deptt informed that line differential relays have been installed on all 220/400 kV lines. Out of 26 nos. bus bar protection panel awarded, 19 nos. have been installed. Further, audit by NRPC shall shortly be commenced.</u></b></p>																			
9.1.4	Complete independent audit of time synchronization of DRs, EL and PMs should be carried out - Time frame – within one month	<p>As far as IPGCL and PPCL systems are concerned, they informed that DR is available at CCGT Bawana and Pragati. EL is not required at generating stations as generators have inbuilt features of EL. PPCL / IPGCL informed the following:</p> <table border="1" data-bbox="566 667 1348 2033"> <thead> <tr> <th rowspan="2">Name of Utility</th> <th colspan="2">Time synchronization</th> <th rowspan="2">PMU</th> </tr> <tr> <th>DR</th> <th>EL</th> </tr> </thead> <tbody> <tr> <td>DTL</td> <td>Implemented</td> <td>Implemented</td> <td rowspan="3">Installed at Bawana and Bamnawali</td> </tr> <tr> <td>RPH</td> <td>Not required on 33kV feeders</td> <td>Two Nos of 33 kV bays i.e. Bay No. 1 and 2 are already having Numerical relays installed. The switchyard maintenance is now being taken care of by DTL.  In the last meeting, DTL representative informed that the work will be completed by December 2018.  DR and EL for these Numerical relay shall be utilized for any disturbances in these feeders.  DTL rep informed that the relays shall be replaced after award and supply of equipments proposed in the PSDF tender.</td> </tr> <tr> <td>PPCL</td> <td>DRs are installed at all the three units of PPS-I. The DRs are time synchronized.</td> <td>In the last meeting, it was informed that the latest numerical relays are installed on GT-1 &amp; 2 and the process of installing Numerical relays on GRPs of STG is being done in phased manner. The same is expected to be completed in 05-06 months. Complete independent audit of time synchronization shall be carried out within one month of installation completion. <b>330MW PPS-I, EL: The same is expected to be completed during next opportunity overhauling of STG. Complete independent audit of time synchronization shall be carried out within one month of installation completion. The relays case was initiated for relays retrofit in recent shutdown, however the case dropped due to abnormally high quoted rates by OEM.</b></td> </tr> <tr> <td>GT</td> <td>The process of installing of DRs on the units of GTPS is being taken up on priority in phased manner. Further, 06 nos units out of nine are having numerical relays installed and the process of installing of latest numerical relays on the rest of the units is under progress in phased manner.  The representative of GT informed that the work will be completed in three months</td> <td>In the last meeting, it was informed that one of the STGs relay retrofiting is planned during next overhauling. Numerical relays have been installed in almost all 66kV feeders / bays and rest are being envisaged. The same is expected to be completed in 5-6 months. Complete independent audit of time synchronization shall be carried out within one month of installation completion. It was also informed that the work will be completed in three months.  IPGCL/PPCL rep informed that the work shall be carried out by March 19  <b>270MW GTPS, One of the STG relay retrofiting is being carried out in the present overhauling of STG in progress. IPGCL representative informed that since the PPAs are expiring on 2021 accordingly, no major CAPEX work is being under taken.</b></td> </tr> </tbody> </table> <p><b>GCC advised all to expedite the replacement / modification work</b></p>	Name of Utility	Time synchronization		PMU	DR	EL	DTL	Implemented	Implemented	Installed at Bawana and Bamnawali	RPH	Not required on 33kV feeders	Two Nos of 33 kV bays i.e. Bay No. 1 and 2 are already having Numerical relays installed. The switchyard maintenance is now being taken care of by DTL.  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9.2.1	Tightening of Frequency band and be brought very close to 50Hz.	<p>CERC has already issued the amended Grid Code to be implemented from 01.01.2019 in which the allowable frequency band is 49.90Hz to 50.05Hz. The Deviation Settlement Mechanism has also been introduced according to the tightening to the frequency band. The main thrust of the amended Grid Code is the utilities should always strict to its scheduled drawal. Further, the following are the main issues:-</p> <ol style="list-style-type: none"> <li>No over drawal by Delhi if frequency is below 49.90Hz.</li> <li>No under drawal by Delhi if the frequency is more than 50.05Hz.</li> <li>Every (06) time blocks the polarity of drawal should change.</li> </ol> <p>In the regular OCC meetings of NRPC, the adherence of the above provisions is monitored. As far as Delhi is concerned, the main violation is occurring in respect of non change of polarity in 06 time blocks.</p> <p>The details of the violations of Delhi for last two years are as under:-</p> <table border="1" data-bbox="564 495 1366 719"> <thead> <tr> <th>Duration</th> <th>Apr-17</th> <th>May-17</th> <th>June-17</th> <th>July-17</th> <th>Aug-17</th> <th>Sep-17</th> </tr> </thead> <tbody> <tr> <td>Violation of drawal limit 150MW if freq <math>\geq</math>49.7Hz and above</td> <td>OD- 89 UD- 304</td> <td>OD-75 UD- 352</td> <td>OD- 193 UD- 315</td> <td>OD- 171 UD- 189</td> <td>OD- 97 UD- 306</td> <td>OD- 86 UD-292</td> </tr> <tr> <td>Violation of non polarity change of drawal</td> <td>125</td> <td>108</td> <td>105</td> <td>90</td> <td>108</td> <td>107</td> </tr> </tbody> </table>	Duration	Apr-17	May-17	June-17	July-17	Aug-17	Sep-17	Violation of drawal limit 150MW if freq $\geq$ 49.7Hz and above	OD- 89 UD- 304	OD-75 UD- 352	OD- 193 UD- 315	OD- 171 UD- 189	OD- 97 UD- 306	OD- 86 UD-292	Violation of non polarity change of drawal	125	108	105	90	108	107																																							
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Violation of drawal limit 150MW if freq $\geq$ 49.7Hz and above	OD-36 UD-122	OD-69 UD-68	OD- 179 UD-61	OD-79 UD-84	OD-22 UD-53	OD-32 UD-81																																																								
Violation of non polarity change of drawal	122	98	122	110	92	112																																																								
Duration	Apr-18	May-18	June-18	July-18	Aug-18	Sep-18																																																								
Violation of drawal limit 150MW if freq $>$ 49.7Hz and above	OD-63 UD- 175	OD-20 UD-90	OD- 1299 UD- 231	OD- 108 UD- 337	OD-86 UD- 126	OD-51 UD-223																																																								
Violation of non polarity change of drawal	122	121	134	116	99	110																																																								
Duration	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19																																																									
Violation of drawal limit 150MW if freq $>$ 49.7Hz and above	OD-31 UD-82	OD- 490 UD- 232	OD-57 UD-17	OD-66 UD- 109	OD-3 UD-6																																																									
Violation of non polarity change of drawal	107	106	87	<b>249</b>	<b>199</b>																																																									
9.4	All out efforts should be made to implement	CERC in its order dated 31.12.2012 reiterated the need for compliance by generators and directed as to why they may not be held responsible for non-implementation of RGMO / FGMO mode of operation. A task force has been constituted by CEA under Member (Thermal), CEA to develop a procedure for testing of primary response of Generating units.																																																												



	<p>the provisions of IEGC with regard to Governor Action - POSOCO to take up the matter with Central Commission - <b>Time frame – 3 months</b></p>	<p>CERC has revised the Clause regarding FGMO / RGMO as under:-</p> <p><i>CERC (IEGC) 5th amendment of IEGC dated 12.04.2017 provides that all Coal/lignite based thermal generating units of 200 MW and above, Open Cycle Gas Turbine/Combined Cycle generating stations having gas turbines of capacity more than 50 MW each and all hydro units of 25 MW and above should provide RGMO/FGMO response. Further, it has been provided at Regulation 5.2(h) that ‘RLDCs/SLDCs should not schedule the generating station or unit(s) thereof beyond ex-bus generation corresponding to 100% of the installed capacity of the generating station or unit(s) thereof and that the generating station shall not resort to Valve Wide Open operation of units’ so that primary response is ensured. CERC in its letter dated 05.06.2017 has directed to obtain the status of availability of RGMO/FGMO response from the generators (ISGS as well as intra-state generators) in the region.</i></p> <p>PPCL representative intimated that they are pursuing the matter with their OEM department regarding details of RGMO / FGMO of PPCL-I &amp; PPCL –III and expected by December 2017.</p> <p>PPCL rep informed that placement of PO is under progress and ensured to submit compliance by April’ 19.</p> <p><b>IPGCL / PPCL representative informed that the order has been placed to M/s BHEL and work is expected to be completed by July 19.</b></p>																																										
9.7	<p>In order to avoid frequent outages / opening of lines under over voltages and also providing voltage support under steady state and dynamic conditions, installation of adequate reactive power compensators should be planned. Action : CTU/STUs and CEA – Time frame 6 months</p>	<p>As far as Capacitor requirement of Delhi is concerned, CPRI has already conducted the revised study, it is revealed from study that no additional capacitor is required to be installed in Delhi for 2017-18.</p> <p>NRPC has approved the capacitor requirement study for the year 2019-20 at 11/33kV level from CPRI to obtain the true requirement of capacitor. In this regard all NR utilities were requested to give peak summer data (Load/Voltage) and details as per format approved in NRPC.</p> <p>CPRI had also requested to initially fill the attached data format for any one 220 kV or 132 kV substation and send it back CPRI (manoharsingh@cpri.in) to check its suitability for utilization in carrying out the study. Once CPRI gives a go ahead for the submitted data, the data for the complete state network shall be collected and made available to CPRI.</p> <p>The revised formats had already been circulated to the respective utilities with necessary guidelines for filling the data in desired formats.</p> <p>SLDC Delhi has received the data from all utilities except NDMC which inspite of repeated reminders and discussion in Delhi OCC meetings has not yet submitted, accordingly, Delhi OCC has advised SLDC to send at least the balance data to NRPC/CPRI, since NRPC has intimated that the utilities not submitting the data shall have to carry out study at their own cost.</p> <p><b>Accordingly, the same has been sent to NRPC by SLDC.</b></p> <p>As for as reactor installation is concerned, the 39<sup>th</sup> meeting of Standing Committee of CEA held on 29&amp;30 May 2017, it was suggested that reactors at following locations in Delhi be installed to control high voltage issues.</p> <table border="1" data-bbox="563 1630 1230 2051"> <thead> <tr> <th>Sr. No</th> <th>Name of the Grid</th> <th>Reactors proposed in MVAR</th> <th>Sr. No</th> <th>Name of the Grid</th> <th>Reactors proposed in MVAR</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>220kV</td> <td></td> <td>12</td> <td>Electric Lane</td> <td>2X25</td> </tr> <tr> <td>1</td> <td>Narela</td> <td>25</td> <td>13</td> <td>Mandola</td> <td>25</td> </tr> <tr> <td>2</td> <td>R.K. Puram-I</td> <td>25</td> <td>14</td> <td>AIIMS</td> <td>2X25</td> </tr> <tr> <td>3</td> <td>Patparganj-II</td> <td>2X25</td> <td>15</td> <td>Sarita Vihar</td> <td>25</td> </tr> <tr> <td>4</td> <td>Maharani Bagh (PG)</td> <td>2X25</td> <td>16</td> <td>Bawana</td> <td>25</td> </tr> <tr> <td>5</td> <td>Bamnauli</td> <td>25</td> <td>17</td> <td>Preet Vihar</td> <td>25</td> </tr> </tbody> </table>	Sr. No	Name of the Grid	Reactors proposed in MVAR	Sr. No	Name of the Grid	Reactors proposed in MVAR	A	220kV		12	Electric Lane	2X25	1	Narela	25	13	Mandola	25	2	R.K. Puram-I	25	14	AIIMS	2X25	3	Patparganj-II	2X25	15	Sarita Vihar	25	4	Maharani Bagh (PG)	2X25	16	Bawana	25	5	Bamnauli	25	17	Preet Vihar	25
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A	220kV		12	Electric Lane	2X25																																							
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5	Bamnauli	25	17	Preet Vihar	25																																							

6	Subzi Mandi	2X25	18	Mundka	25
7	Gopalpur	2X25	19	Masjid Moth	25
8	Indraprastha	2X25	B	400kV	
9	Geeta Colony	2X25	1	Maharani Bagh (PG)	125
10	Harsh Vihar	2X25	2	Mundka	125
11	Wazirabad	2X25	3	Mandola (PG)	125

Based on the feasibility study conducted by DTL, the 40<sup>th</sup> Standing Committee Meeting held on 13.07.2018. DTL/PGCIL were advised to install reactors at the following locations.

S. No	Name of the Grid	Voltage level	Reactors proposed in MVAR	Remarks
1	Mundka	400	125	Reactors were approved in the Board which would be further processed for PSDF funding.
2	Mundka	220	25	
3	Harsh Vihar	220	2x50	
4	Peeragarhi	220	1x50	Proposal have been prepared and it would be approved in the board at the earliest
5	Bamnauli	220	2x25	
6	Indrapastha	220	2x25	
7	Electric Lane	220	1x50	
8	Maharani Bagh (PG)	400	125	To be installed by Power Grid.
9	Mandola (PG)	400	125	
	Total		700	

It is expected that the reactors at the above locations would be installed by the year 2020-21.

In the last meeting, GCC advised DTL and PGCIL to expedite the reactors installation as suggested by Standing Committee of CEA.

In the NRPC meetings, it has been informed that the orders shall be placed by Dec 18.

DTL planning rep informed that approvals for all schemes from Sl. 1 to 7 ( to be carried out by DTL) is in approval stage, however for sl. 5 , they informed the constraint of land at Electric lane, where there is only space for one additional transformer ( for n-1 criteria) or one Reactor. In this regard, NDMC representative informed that there is huge voltage problem at Electric lane s/stn and confirmed that present two 100MVA transformers for meeting maximum 100MVA load with n-1 criteria shall be sufficient at Electric lane for the next few years.

In view of NDMC's confirmation GCC advised DTL to expedite the scheme of installation of reactors at all the seven locations ( including Electric lane) as above.

**DTL planning department intimated the present status of schemes for reactor installation. Further, it was informed that the schemes are to be financed through PSDF. So schemes shall be sent to monitoring committee of PSDF before initiation of any tendering process**

9.12	Efforts should be made to design islanding scheme based on frequency sensing relays so that in case of imminent Grid failure, electrical island can be formed. These electrical	<p>As per CPRI Study, it was concluded that due to variation of generation in the Delhi Island envisaged earlier, the chances of survival of single island including the generation of Dadri generating complex, Jhajjar, Bawana, BTPS and Pragati generating stations would be more.</p> <p>DTL representative informed that Revised Islanding scheme as per the NRPC /TCC recommendations is under implementation. The estimate has been prepared and is under vetting stage.</p> <p>In the last meeting, GCC advised DTL to implement the revised islanding scheme at the earliest as it is meant for meeting the exigencies and to maintain power supply of critical installations at the time of Grid failure.</p>
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	<p>islands not only help in maintaining essential services but would also help in faster restoration of Grid.</p> <p><b>Action :</b>  <b>CEA, RPCs, CTU, STUs, SLDCs and generators</b>  <b>Time Frame : six months</b></p>	<p>As per the revised scheme all the small islands shall be merged to a single island. DTL have to make the necessary changes in the relay settings for the creation of single island however the operational changes in the SAS are to be done through OEM. The work of implementation of revised islanding scheme for commissioning of operational changes in the SAS and Commissioning of new Islanding and Load shedding Panels through OEM is under process and is expected to be completed within 6 months.</p> <p>Meanwhile Minor Modification was required in the Islanding scheme due to introduction of 400kV Tuglakabad Sub Station. In the Islanding scheme there was isolation of 400kV Ballabgarh from 400kV Bamnauli. However after introduction of 400kV Tuglakabad isolation of grid connectivity from Bamnauli had to be disabled and isolation of 400kV Ballabgarh had to be shifted to 400kV Tuglakabad .</p> <p>The issue was deliberated in the 153 OCC meeting and thereafter as agreed in the meeting Main-1 and Main-2 Relays of 400kV Ballabgarh Feeders at 400kV Tuglakabad Sub Station are being utilised for isolation at Flat frequency of 47.9 Hz with some operational time delay of 50ms as done in existing scheme.</p> <p>Settings have been implemented on the Main-1 and Main-2 relays at 400kV Tuglakabad Sub Station and the scheme is functional. However the provisional arrangement will be removed after the commissioning of islanding panels by DTL as per the revised configuration.</p> <p>BYPL rep raised the issue of survival and subsequent synchronizing of local islanding at GT/ Pragati.</p> <p>GCC advised DTL to carry out a joint visit with Discoms and IPGCL/ PPCL to analyse the requirements for sustaining local island at GT station and to complete the pending work of Islanding at the earliest.</p> <p><b>DTLs protection department intimated that the order for Islanding is expected to be placed by may 19 and work completed within 4 months thereafter. Regarding local islanding at Pragati station, Chairman GCC advised DTL to arrange a meeting at PPCL in the first week of May 19 to resolve the issue and finalize the BOQ/any other technical requirement.</b></p>
9.13.1	<p>System Operation needs to be entrusted to independent system operator. In addition, SLDCs should be reinforced for ring fences for ensuring function autonomy.</p> <p><b>Action :</b>  <b>Govt. of India, time frame : one year</b></p>	<p>Delhi SLDC is operated under the control of DTL. There is the provision for SLDC to file separate ARR in DERC. The report of the committee constituted for ring fencing of SLDC Delhi was forwarded to GNCTD and followed up subsequently in 2018. Response of GNCTD is awaited. GCC advised SLDC to take up the matter with GNCTD.</p>

### 3 OPERATIONAL ISSUES

#### 3.1 POWER SUPPLY POSITION

The anticipated power supply position of Summer 2019-20 is as under:-

All figures in MW

#### DELHI AS A WHOLE

MONTH	1 <sup>st</sup> Fortnight					2 <sup>nd</sup> fortnight				
	<b>APRIL 2019</b>									
	00-03	03-09	09-12	12-18	18-24	00-03	03-09	09-12	12-18	18-24
DEMAND	3920	3550	4300	4450	4200	5100	4300	4850	5400	5350
AVAILABILITY	5427	5437	5472	5615	5751	5346	5356	5391	5534	5670
SURPLUS (+) / SHORTAGE (-)	1507	1887	1172	1165	1551	246	1056	541	134	320
<b>MAY 2019</b>										
DEMAND	5600	4800	5160	5800	5850	6430	5600	5950	6750	6600
AVAILABILITY	6242	6203	6262	6441	6456	6451	6387	6446	6650	6665
SURPLUS (+) / SHORTAGE (-)	642	1403	1102	641	606	21	787	496	-100	65
<b>JUNE 2019</b>										
DEMAND	6650	5850	6350	7200	7000	6750	5900	6250	7100	6900
AVAILABILITY	6792	6423	6607	7224	7042	7007	6583	6767	7439	7257
SURPLUS (+) / SHORTAGE (-)	142	573	257	24	42	257	683	517	339	357
<b>JULY 2019</b>										
DEMAND	6650	5800	6200	7400	7100	6300	5350	5850	6650	6500
AVAILABILITY	7039	6594	6732	7400	7264	6964	6519	6657	7325	7189
SURPLUS (+) / SHORTAGE (-)	389	794	532	0	164	664	1169	807	675	689
<b>AUG 2019</b>										
DEMAND	5900	5000	5600	6100	6200	6080	5100	5600	6170	6300
AVAILABILITY	6740	6288	6388	7063	6965	6771	6332	6444	7119	7009
SURPLUS (+) / SHORTAGE (-)	840	1288	788	963	765	691	1232	844	949	709
<b>SEP 2019</b>										
DEMAND	5500	4600	5200	5500	5600	5300	4400	5150	5500	5375
AVAILABILITY	6606	6213	6347	6880	6820	6551	6158	6292	6825	6765
SURPLUS (+) / SHORTAGE (-)	1106	1613	1147	1380	1220	1251	1758	1142	1325	1390
<b>BRPL</b>										
MONTH	1 <sup>st</sup> Fortnight					2 <sup>nd</sup> fortnight				
	00-03	03-09	09-12	12-18	18-24	00-03	03-09	09-12	12-18	18-24
APRIL 2019										

DEMAND	1668	1487	1797	1865	1766	2163	1777	1987	2224	2247
AVAILABILITY	2224	2228	2239	2312	2388	2187	2191	2202	2275	2351
SURPLUS (+) / SHORTAGE (-)	556	741	442	447	622	25	414	215	51	104
<b>MAY 2019</b>										
DEMAND	2376	2018	2113	2388	2468	2731	2337	2438	2793	2793
AVAILABILITY	2618	2572	2533	2624	2689	2777	2731	2692	2783	2848
SURPLUS (+) / SHORTAGE (-)	242	553	421	236	221	46	394	255	-11	54
<b>JUNE 2019</b>										
DEMAND	2832	2444	2608	2971	2943	2863	2462	2559	2932	2903
AVAILABILITY	2809	2763	2724	2869	2898	2794	2748	2709	2854	2883
SURPLUS (+) / SHORTAGE (-)	-23	318	116	-102	-45	-69	286	150	-77	-20
<b>JULY 2019</b>										
DEMAND	2822	2410	2535	3057	2982	2664	2214	2383	2736	2719
AVAILABILITY	2860	2789	2725	2870	2924	2860	2789	2725	2870	2924
SURPLUS (+) / SHORTAGE (-)	38	378	190	-187	-58	196	575	342	134	205
<b>AUG 2019</b>										
DEMAND	2493	2060	2286	2501	2578	2572	2104	2277	2519	2631
AVAILABILITY	2659	2588	2524	2669	2723	2690	2632	2580	2725	2767
SURPLUS (+) / SHORTAGE (-)	166	528	238	168	145	119	528	303	206	136
<b>SEP2019</b>										
DEMAND	2337	1895	2126	2258	2356	2244	1806	2104	2257	2235
AVAILABILITY	2584	2537	2499	2590	2655	2534	2487	2449	2540	2605
SURPLUS (+) / SHORTAGE (-)	247	642	373	331	298	290	682	345	282	370

**BYPL**

MONTH	1 <sup>st</sup> Fortnight					2 <sup>nd</sup> fortnight				
	00-03	03-09	09-12	12-18	18-24	00-03	03-09	09-12	12-18	18-24
<b>APRIL 2019</b>										
DEMAND	965	860	1039	1079	1022	1251	1027	1149	1286	1299
AVAILABILITY	1227	1230	1242	1273	1298	1213	1217	1228	1260	1285
SURPLUS (+) / SHORTAGE (-)	262	371	203	195	277	-37	189	79	-26	-15
<b>MAY 2019</b>										
DEMAND	1374	1167	1222	1381	1427	1579	1351	1410	1615	1615
AVAILABILITY	1447	1450	1462	1501	1510	1522	1500	1512	1576	1585
SURPLUS (+) / SHORTAGE (-)	73	283	240	120	83	-58	149	102	-39	-30
<b>JUNE 2019</b>										
DEMAND	1638	1414	1508	1718	1702	1656	1424	1480	1695	1679
AVAILABILITY	1591	1529	1541	1669	1662	1591	1529	1541	1669	1662
SURPLUS (+) / SHORTAGE (-)	-47	116	32	-50	-40	-65	105	61	-27	-17

JULY 2019										
DEMAND	1632	1394	1466	1768	1724	1541	1280	1378	1582	1572
AVAILABILITY	1587	1529	1541	1665	1658	1562	1504	1516	1640	1633
SURPLUS (+) / SHORTAGE (-)	-45	135	75	-103	-66	21	224	138	57	61
AUG 2019										
DEMAND	1442	1191	1322	1447	1491	1487	1217	1317	1457	1521
AVAILABILITY	1514	1449	1461	1592	1585	1489	1424	1436	1567	1560
SURPLUS (+) / SHORTAGE (-)	72	258	139	145	94	2	207	119	110	39
SEP 2019										
DEMAND	1352	1096	1229	1306	1363	1298	1044	1217	1306	1292
AVAILABILITY	1455	1424	1436	1509	1518	1455	1424	1436	1509	1518
SURPLUS (+) / SHORTAGE (-)	103	328	206	203	155	157	380	219	203	226
<b>TPDDL</b>										
	<b>1<sup>st</sup> Fortnight</b>					<b>2<sup>nd</sup> fortnight</b>				
<b>MONTH</b>	00-03	03-09	09-12	12-18	18-24	00-03	03-09	09-12	12-18	18-24
APRIL 2019										
DEMAND	1165	1039	1255	1303	1234	1511	1241	1388	1554	1570
AVAILABILITY	1705	1709	1720	1759	1794	1703	1706	1718	1757	1792
SURPLUS (+) / SHORTAGE (-)	540	670	465	456	560	192	465	330	203	222
MAY 2019										
DEMAND	1660	1410	1476	1668	1724	1908	1632	1703	1951	1951
AVAILABILITY	1907	1911	1922	1971	1986	1882	1886	1897	1946	1961
SURPLUS (+) / SHORTAGE (-)	247	501	446	303	262	-26	253	194	-5	10
JUNE 2019										
DEMAND	1978	1707	1822	2076	2056	2000	1720	1788	2048	2028
AVAILABILITY	2122	1861	1872	2216	2211	2352	2036	2047	2446	2441
SURPLUS (+) / SHORTAGE (-)	144	153	50	140	156	352	316	259	398	413
JULY 2019										
DEMAND	1971	1684	1771	2135	2083	1861	1546	1664	1911	1899
AVAILABILITY	2322	2006	2017	2416	2411	2272	1956	1967	2366	2361
SURPLUS (+) / SHORTAGE (-)	351	322	246	280	328	411	409	303	454	462
AUG 2019										
DEMAND	1741	1439	1597	1747	1801	1796	1470	1591	1759	1838
AVAILABILITY	2297	1981	1992	2391	2386	2322	2006	2017	2416	2411
SURPLUS (+) / SHORTAGE (-)	556	542	395	643	585	526	536	426	656	573
SEP 2019										
DEMAND	1633	1324	1485	1578	1646	1568	1261	1470	1577	1561

AVAILABILITY	2297	1981	1992	2361	2376	2292	1976	1987	2356	2371
SURPLUS (+) / SHORTAGE (-)	664	657	507	784	730	724	714	518	779	810
<b>NDMC</b>										
	<b>1<sup>st</sup> Fortnight</b>					<b>2<sup>nd</sup> fortnight</b>				
<b>MONTH</b>	00-03	03-09	09-12	12-18	18-24	00-03	03-09	09-12	12-18	18-24
APRIL 2019										
DEMAND	100	140	180	180	150	150	220	290	300	200
AVAILABILITY	242	242	242	242	242	214	214	214	214	214
SURPLUS (+) / SHORTAGE (-)	142	102	62	62	92	64	-6	-76	-86	14
<b>MAY 2019</b>										
DEMAND	160	170	310	325	200	180	250	360	350	210
AVAILABILITY	242	242	317	317	242	242	242	317	317	242
SURPLUS (+) / SHORTAGE (-)	82	72	7	-8	42	62	-8	-43	-33	32
<b>JUNE 2019</b>										
DEMAND	170	250	370	390	260	200	260	380	380	250
AVAILABILITY	242	242	442	442	242	242	242	442	442	242
SURPLUS (+) / SHORTAGE (-)	72	-8	72	52	-18	42	-18	62	62	-8
<b>JULY 2019</b>										
DEMAND	190	270	380	390	270	200	270	380	380	270
AVAILABILITY	242	242	421	421	242	242	242	421	421	242
SURPLUS (+) / SHORTAGE (-)	52	-28	41	31	-28	42	-28	41	41	-28
<b>AUG 2019</b>										
DEMAND	190	270	350	360	290	190	270	370	390	270
AVAILABILITY	242	242	383	383	242	242	242	383	383	242
SURPLUS (+) / SHORTAGE (-)	52	-28	33	23	-48	52	-28	13	-7	-28
<b>SEP 2019</b>										
DEMAND	150	250	320	320	200	160	250	320	320	250
AVAILABILITY	242	242	392	392	242	242	242	392	392	242
SURPLUS (+) / SHORTAGE (-)	92	-8	72	72	42	82	-8	72	72	-8
<b>MES</b>										
	<b>1<sup>st</sup> Fortnight</b>					<b>2<sup>nd</sup> fortnight</b>				
<b>MONTH</b>	00-03	03-09	09-12	12-18	18-24	00-03	03-09	09-12	12-18	18-24
APRIL 2019										
DEMAND	22	25	28	23	28	26	35	36	36	34
AVAILABILITY	28	28	28	28	28	28	28	28	28	28
SURPLUS (+) / SHORTAGE (-)	6	3	0	5	0	2	-7	-8	-8	-6
<b>MAY 2019</b>										
DEMAND	30	35	40	38	30	32	30	40	40	30

AVAILABILITY	28	28	28	28	28	28	28	28	28	28
SURPLUS (+) / SHORTAGE (-)	-2	-7	-12	-10	-2	-4	-2	-12	-12	-2
JUNE 2019										
DEMAND	32	35	42	45	40	32	35	43	45	40
AVAILABILITY	28	28	28	28	28	28	28	28	28	28
SURPLUS (+) / SHORTAGE (-)	-4	-7	-14	-17	-12	-4	-7	-15	-17	-12
JULY 2019										
DEMAND	35	42	48	50	41	35	40	45	40	40
AVAILABILITY	28	28	28	28	28	28	28	28	28	28
SURPLUS (+) / SHORTAGE (-)	-7	-14	-20	-22	-13	-7	-12	-17	-12	-12
AUG 2019										
DEMAND	34	40	45	45	40	35	40	45	45	40
AVAILABILITY	28	28	28	28	28	28	28	28	28	28
SURPLUS (+) / SHORTAGE (-)	-6	-12	-17	-17	-12	-7	-12	-17	-17	-12
SEP 2019										
DEMAND	28	35	40	38	35	30	39	40	40	37
AVAILABILITY	28	28	28	28	28	28	28	28	28	28
SURPLUS (+) / SHORTAGE (-)	0	-7	-12	-10	-7	-2	-11	-12	-12	-9

Note:-

- 1 Availability from Un-allocated quota of Central Sector has been considered as NIL.
- 2 Availability from DVC has been considered as 375 MW only considering its past record.
- 3 Availability from Hydro stations has been considered as 50% during the day time, 75% during evening peak and 30% during the rest of the period in the month of April 2019. During May and September 2019-75%,90% and 50% during day time, evening peak and rest of the time respectively. During the month of June-Aug 2019 during the day time 90%, evening peak 95% and rest of the time 50% from Hydro sources.
- 4 Allocation to Distribution Licensees from various sources has been revised in line with DERC order dated 27.03.2018.

**SLDC representative informed that the summer power supply position is satisfactory. Shortages if any, shall be arranged by DISCOMs through short-term market or the available full module of Bawana on spot gas shall be utilized.**

### 3.2 High Voltage Operation of the Grid during Winter nights.

- i) This issue is regular agenda of Delhi OCC and being continuously discussed in OCC meeting from Oct-17 onwards. OCC has taken various steps to sort out the problem of high voltage conditions and injection of reactive drawal during winter nights. In the OCC meeting, the following steps were deliberated:
  - A. Switching off the capacitors at all the Substations of Delhi, but during winter season proper monitoring of the same is yet to be put in place.
  - B. Transformer taps optimization by DTL and DISCOM. DTL has changed Taps positions of most of the transformers at 220kV S/Stns
  - C. Monitoring of all 400/220kV ICTs and taking actions wherein VAR flows are observed from 220kV to 400kV side. In this respect reactive energy accounts could also be monitored.
  - D. Opening of lightly loaded transmission cables/ transmission lines keeping reliability in focus.
  - E. Absorption of reactive power by generating units.

#### **Opening of feeders at 220kV /66kV/33kV Level by SLDC .**

The following 220kV feeders had been identified and are being opened during the period 20.00hrs. to 08.00 hrs



Sr. No.	Name of Stn.	Name of Ckt.	Elements to be opened
1	Maharani Bagh	Trauma Centre	Single Ckt. at both ends
2	Trauma Centre	Ridge Valley	Single ckt. at both ends
3	Mundka	Peeragarhi	Both Ckts. at both ends
4	Peeragarhi	Wazirpur	Single ckt. at both ends
5	Shalimarbagh	Wazirpur	single ckt. at both ends
6	Pragati	Park street	Single ckt. at both ends
7	Maharani Bagh	Masjid moth	Single Ckt. at both ends
8		Electric Lane	Both Ckt. at both ends
9	Harsh Vihar	Preet Vihar	Both Ckt. at both ends
10	Preet Vihar	Patparganj	Both Ckt. at both ends
11	Patparganj	Gazipur	Single Ckt. at both ends

Following 66kV /33kV BYPL feeders were also opened during night hours 22.00hrs. to 06.00hrs, in this winter season.

Sr. No.	Name of Ckt.	Name of Stn.	Elements to be opened
<b>PARK STREET</b>			
1	33KV Faiz Road Ckt-2		Single Ckt. at both ends
2	33KVShankar Road Ckt-2		Single Ckt. at both ends
<b>PATPARGANJ</b>			
3	66KVPPG. G.H - 1 Ckt -2		Single Ckt. at both ends
4	66 KV Mayur Vihar-1 Ckt-2		Single Ckt. at both ends
5	66KV Khichripur Ckt-1		Single Ckt. at both ends
6	33KV Guru Angad Nagar-1		Single Ckt. at both ends
7	33KV Karkardom Ckt-1		Single Ckt. at both ends
<b>WAZIRABAD</b>			
8	66KV Shastri Park Ckt-1		Single Ckt. at both ends
9	66KV Shastri Park Ckt-3		Single Ckt. at both ends
10	66KV Shastri Park Ckt-4		Single Ckt. at both ends
11	66KV Sonia Vihar Ckt-2		Single Ckt. at both ends
<b>GAZIPUR</b>			
12	66KV Kondli Ckt-2		Single Ckt. at both ends
13	66kV Vivek Vihar Ckt-2		Single Ckt. at both ends
<b>GEETA COLONY</b>			
14	33KV Geeta Colony Ckt-2		Single Ckt. at both ends
15	33KV Kanti Nagar Ckt-2		Single Ckt. at both ends
16	33KV Shakarpur		Single Ckt. at both ends
17	33KVKailash Nagar Ckt-1		Single Ckt. at both ends
<b>PREET VIHAR</b>			
18	Guru Angad Nagar		Single Ckt. at both ends
19	CBD Shahadra		Single Ckt. at both ends

Following 66kV /33kV BRPL feeders were opened during night hours 22.00hrs. to 06.00hrs, in this winter season

S No	Feeder Name	Grid Name	Ckt no.-
1	220 OKHLA	Balaji	2
2	220 OKHLA	NHP	2
3	220 IP BAY 37	KILOKARI	–
4	220 IP BAY	NHRU STM BAY 24	–
5	220 PEERA GARHI	PASCHIM PURI	1
6	220 PPK-2	G-15 PPK	1
7	220 PPK-2	G-4 DWK	1
8	220 PPK-2	G-5 Matiala	1
9	220 PPK-3	G-4 DWK	1
10	220 PPK-3	G-7 DWK	–
11	220 PPK-1	G-6	1

BRPL, BYPL,TPDDL, DMRC and NDMC to take appropriate measures to reduce MVAR injection and submit the details to SLDC.

- ii) It is stated that Delhi has to pay heavy amount to NRPC reactive pool account. Penalty amount has increased with the progress of winter despite taking all possible steps to reduce reactive power injection during high voltage period. The details of NRPC reactive account bill from 26 March 2018 to 3<sup>rd</sup> March-2019 are as under:

Weeks No.	Weeks	Payable by Delhi (in Lakhs)	Receivable by Delhi (in Lakhs)
1	26th March to 01st April, 2018	23.38106	
2	02nd to 08th April, 2018	4.00526	
3	09th to 15th April, 2018		0.42442
4	16th to 22nd April, 2018	4.9357	
5	23rd to 29th April, 2018	4.27266	
6	30th April to 06th May, 2018	0.5019	
7	07th to 13th May, 2018	8.1305	
8	14th to 20th May, 2018	2.35494	
9	21 st to 27th May, 2018	0.94808	
10	28th May to 03rd June, 2018		0.7664
11	04th to 10th June, 2018		0.54549
12	11th to 17th June, 2018		0.62646
13	18th to 24th June, 2018		0.1326
14	25th June to 01 st July, 2018		0.95092
15	02nd to 08th July, 2018		1.36213
16	09th to 15th July, 2018		1.22088
17	16th to 22nd July, 2018		0.91089
18	23,rd to 29th July, 2018.		1.19315
19	30th July to 05th August, 2018.		2.10464
20	06th August to 12th August, 2018,		0.69601
21	13th to 19th August, 2018.		0.07342
22	20th to 26th August, 2018.		0.51055
23	27th August to 02nd September,2018	0.47138	
24	03rd to 09th September, 2018.	1.65998	
25	10th to 16th September, 2018.	1.38278	
26	17th to 23th September, 2018.		1.2998
27	24'h to 30th September, 2018		0.02028
28	01 st to 7th October, 2018		0.11568
29	08th to 14th October, 2018.		0.33282
30	15th to 21 st October, 2018.	5.1093	
31	22nd to 28th October, 2018.	10.22182	
32	29th October to 04th November	7.60634	
33	05th November to 11 November	44.88414	
34	12th to 18th November, 2018	28.6405	
35	19th to 25th November, 2018.	27.69186	
36	26th November to 02nd December,2018	12.3564	
37	03rd to 09th December, 2018	19.96652	
38	10th to 16th December, 2018.	22.89784	
39	17th to 23rd December, 2018	11.95656	
40	24th to 30th December, 2018.	28.6545	
41	31 st December 2018 to 06thJanuary, 2019.	27.32492	
42	07th to 13th January, 2019.	21.40208	
43	14th to 20th January, 2019.	27.52274	
44	21 st to 2th January, 2019	34.74212	
45	28th January to 03rd February, 2019.	30.0699	
46	04th to 10th February, 2019	31.0709	
47	11th to 17th February, 2019.	34.82836	
48	18th to 24th February, 2019	36.92654	
49	25th February to 03rd March, 2019	43.63436	
	Total	559.55194	13.28654

In the previous meetings, all Stakeholders assured GCC that all efforts would be taken by them to minimize the injection of reactive power to the Grid especially during high voltage conditions. To control the high voltage issue, GCC had advised the following:-

- i) Generators to absorb reactive power during high voltage regime as per their capability curve.
- ii) DTL to form a Committee to look into high voltage issue including payment of Weekly Reactive Energy Charges bill to NRPC as Discom wise Weekly Reactive Accounts are managed by C&RA Department of DTL and Reactive Energy Charges at Regional level is paid by SLDC
- iii) DTL for early commissioning of Reactors at various locations

In spite of all out efforts by SLDC, injection of reactive power could not be averted and Rs.5.07 Crores have been levied on Delhi due to injection of reactive power to the Grid during high voltage conditions during the period 15.10.18 to 03.03.19. It was explained that as a long term measure to control high Voltage, Standing Committee of CEA in its 39<sup>th</sup> Meeting held 29-30<sup>th</sup> May 2017 has suggested Bus Reactors in Delhi at various locations in Delhi as under:

<b>S. No.</b>	<b>Bus Name</b>	<b>Reactor proposed (in MVAR)</b>
1	400kV Mundka	125
2	220kV Narela	25
3	220kV R.K.Puram	25
4	220kV Patparganj	2 x 25
5	220kV Maharani Bagh	2 x 25
6	220kV Bamnauli	25
7	220kV Subzi Mandi	2 x 25
8	220kV Gopalpur	2 x 25
9	220kV I.P.Stn.	2 x 25
10	220kV Geeta Colony	2 x 25
11	220kV Harsh Vihar	2 x 25
12	220kV Wazirabad	2 x 25
13	220kV Electric Lane	2 x 25
14	220kV Mandola	25
15	220kV AIIMS Trauma Centre	2 x 25
16	220kV Sarita Vihar	25
17	220kV Bawana	25
18	220kV Preet Vihar	25
19	220kV Mundka	25
20	220kV Masjid Moth	25
21	Maharani Bagh (PGCIL)	125
22	Mandola (PGCIL)	125

Based on the feasibility study conducted by DTL, the 40<sup>th</sup> Standing Committee Meeting held on 13.07.2018, DTL/PGCIL were advised to install reactors at the following locations.

<b>S.No</b>	<b>Name of the Grid</b>	<b>Voltage level</b>	<b>Reactors proposed in MVAR</b>	<b>Remarks</b>
1	Mundka	400kV	125	To be installed by DTL.
2	Bamnauli	220kV	2X25	
3	Indraprastha	220kV	2X25	
4	Harsh Vihar	220kV	2X50	
5	Electric Lane	220kV	1X50	
6	Mundka	220kV	25	
7	Peera Garhi	220kV	1X50	
8	Maharani Bagh (PG)	400kV	125	To be installed by Power Grid.
9	Mandola(PG)	400kV	125	
	<b>Total</b>	<b>700</b>		

Planning Department of DTL informed that the scheme for reactors is being devised and the status is as under :-

S.N.	Bus Name	Voltage Level (kV)	Reactor (MVAR)	Current status
1.	Mundka	400	125	Reactors were approved in the Board which would be further processed for PSDF funding.
2.	Mundka	220	25	
3.	Harsh Vihar	220	2x50	
4.	Peeragarhi	220	1x50	
5.	Bamnauli	220	2x25	Proposal have been prepared and it would be approved in the board at the earliest
6.	Indrapastha	220	2x25	
7.	Electric Lane	220	1x50	
8.	Maharani Bagh (PG)	400	125	To be installed by Powergrid
9.	Mandola (PG)	400	125	

Further, it was informed that DMRC which is also one of the prominent sources of injection of reactive power has also planned reactive power compensation in their system and would likely to be available by 2019-20. It is also expected that the reactors at the above locations would be installed by the year 2020-21.

In the last meeting, GCC advised DTL and PGCIL to expedite the reactors installation as suggested by Standing Committee of CEA. DMRC was also advised to implement the reactive power management scheme devised by them as early possible.

**No representative of DMRC was available however, DTL representative gave the status of reactor installation.**

**GCC advised all utilities to control the reactive power generation at their respective buses itself for overall effect on system. Further, DTL to expedite the work of installation of reactors as above.**

### 3.3 NON USAGE OF BAYS ALOTTED TO VARIOUS UTILITIES FROM DTL SUB-STATIONS.

In the last meeting, the position of unutilized bays at various newly commissioned DTL sub-stations was updated by the utilities as under:

S N.	Name of 400/220k V S/Stns.	Details of non utilization of bays				
		Voltage level	Name of bay	Name of the utility to whom the bay is allocated	Original allocation date	Present status
1	220kV Trauma Centre	33kV	Kidwai Nagar East	NDMC	19.11.09	NDMC informed that these Ckts are ready for charging. However, work is held up for clearness from O&M Department. GCC advised NDMC to make to install the cable holding arrangement for all feeders while O&M was instructed to clear all the Malba inside the cable cellar area in coordination with NDMC.  90% work has been completed. And rest is expected to be completed by June 2019.
			Safdarjung Hospital		19.11.09	
			Race Course		17.06.11	
			Jor Bagh		19.11.09	

S N.	Name of 400/220kV S/Stns.	Details of non utilization of bays				
		Voltage level	Name of bay	Name of the utility to whom the bay is allocated	Original allocation date	Present status
2	220kV Electric Lane	33kV	1. Vidyut Bhawan 2. Hanuman Road 3. Janpath Lane. 4. Church Road 5. Delhi High Court 6 IGNCA <b>Total = 6 Bays</b>	NDMC	19.11.09	<b>Out of 4 Km. 3Km cable laid . Expected to be completed by May,2019.</b>  <b>Cable termination pending at Hanuman Road S/Stn. Expected to be completed by April,2019.</b>  <b>Expected to be completed by Sep, 2019.</b> <b>Expected to be completed by March, 2020.</b> <b>Expected to be completed by March, 2020.</b> <b>Expected to be completed by March, 2020.</b>
3	400kV Mundka	66kV	1. Bay 604 2. Bay 606 3. Bay 610 4. Bay 613 5. Bay 614 6. Bay 617 <b>Total = 6 Bays</b>	BRPL/TPD DL	31.05.2012	<b>Due to land issues, the Two bays for TPDDL Kirari would now be utilized by 2020-21.</b> <b>Four bays for BRPL i.e. Bakkarwala(2 Nos.) &amp; Nilothi(2 Nos.) would be utilized by 20-21.</b> <b>For Bakkarwala – Deposit case of DDA. BRPL is taking up the case with DDA for deposit.</b>

**GCC advised all utilities to utilize the bays allocated to them for optimum utilisation of the assets.**

### **3.4 LONG OUTAGE OF ELEMENTS OF DELHI POWER SYSTEM**

The status of long outage of elements is as under:-

S. N	Name of the Element	outage		Utility	Remarks
		Date	Time		
1	<b>VASANT KUNJ - 220/66kV 160MVA PR.TR.-III</b>	26.04.2018	01:48	DTL	TRANSFORMER BURNT DUE TO FIRE. TO BE REPLACED. Expected to be replaced by Oct 19.
2	<b>NARELA - 66kV CAPACITOR BANK</b>	11.08.2018	18:18	DTL	66kV CAPACITOR BANK CELLS BLASTED AT 220kV NARELA. TO BE REPLACED. EXPECTED BY JAN 2019.
3	<b>KASHMERI GATE - 33kV BUS COUPLER</b>			DTL	TRIPPING COIL PROBLEM. Material is to be procured from OEM at Switzerland. However load can be taken on the breaker in case of emergency.
4	<b>RPH STN. - 220/33kV 100MVA PR.TR.-I</b>	03.09.2018	21:56	DTL	TRIPPED ON BUCHLOZ RELAY. Replacement of transformer is EXPECTED BY July 2019.
5	<b>OKHLA - 220/66kV 100MVA PR.TR.-I</b>	27.09.2018	10:15	DTL	'Y' PH. WINDING DAMAGED. TO BE REPLACED. EXPECTED BY Oct 2019.
6	<b>400KV TUGLAKABAD - BAMNAULI CKT-I</b>	12.10.2018	09:35	DTL	CKT-I energised on ERS in April 19. CKT.-II ENERGIED ON ERS ON 15.10.2018
7	<b>PATPARGANJ - 220/33kV 100MVA PR.TR.-I</b>	10.01.2019		DTL	TR. DAMAGED. TO BE REPLACED.

8	220/33kV 100MVA TR.-II AT RPH STN.	21.02.2019		DTL	DISMANTLING OF TR. IS IN PROGRESS AND BEING REPLACED WITH TR.-II AT GAZIPUR and expected to be commissioned by 1 <sup>st</sup> Week of May 19.
9	33kV BAY -3 (IP - KILOKRI)	22.02.2011	13:10	BRPL	CKT back charge.
10	66kV V.KUNJ INSTL.AREA-RIDGE VALLEY CKT.-I	26.03.2017	10:45	BRPL	UNDER SHUT DOWN. This circuit is proposed to be relaid after necessary approvals.
11	33kV ALAKNANDA - OKHLA CKT.-I	19.04.2018	15:05	BRPL	BREAKER PROBLEM expected by May-2019
12	33kV RIDGE VALLEY - KHEBAR LANE CKT.-II	13.01.2016	00:47	BRPL	CKT energised.
13	33kV BUS COUPLER AT TUGLAKABAD	05.12.2018		BRPL	'R' PH. CLAMP BLAST. BREAKER BY PASSED.
14	33kV BUS COUPLER AT SARAI JULIENA	02.01.2019		BRPL	LIMB BLAST (BREAKER FAULTY)
15	50MVA PR.TR.-III AT JNU	18.03.2019		BRPL	Energised
16	220kV PARK STREET - 66kV RIDGE VALLEY CKT.	18.03.2019		BRPL	'Y' PH. SINGLE CABLE FAULTY
17	220kV R.K. PURAM - 33kV BHICAJICAMA PLACE CKT.	19.03.2019		BRPL	UNDER SHUTDOWN
18	11kV I/C-IV AT D.C. SAKET	20.03.2019		BRPL	CKT energised.
19	33kV D.C. SAKET - MALVIYA NAGAR U/G CKT	20.03.2019		BRPL	CKT energised.
20	33kV OKHLA PH.-II- JAMIA -T-OFF SARAI JULIENA CKT.	14.08.2018	16:45	BRPL	T of remove and CKT energised.
21	33kV AMBIENANCE MALL-ANDHERIA BAGH T-OFF 'B' BLOCK VASANT KUNJ CKT.	24.10.2018	12:50	BRPL	T of remove and CKT is now LILO'd at Vasant Kunj B Blockd.
22	20MVA PR.TR.-I AT VASANT KUNJ 'B' BLOCK	16.11.2018	12:10	BRPL	Energised.
23	400kV MUNDKA -66kV NANGLOI CKT.	13.02.2019		BRPL	'Y'PH. CABLE FAULTY
24	66kV MANGOLPURI-I - T-OFF NANGLOI CKT.	09.03.2018		TPDDL	CKT energised.
25	33kV SHAHZADA BAGH - T-OFF RAMA ROAD CKT.	13.04.2018		TPDDL	CKT energised.
26	66kV ROHINI-28 - ROHINI -6 CKT.-II	03.12.2018		TPDDL	CKT energised.
27	33kV GULABI BAGH - SHAHZADA BAGH CKT.	19.03.2019		TPDDL	CKT energised.
28	20MVA PR.TR.-III AT KARAWAL NAGAR	17.12.2018		BYPL	Tx. Energised.
29	16MVA PR.TR.-III AT CBD SHAHDRA	28.02.2019		BYPL	Tx. Energised.
30	25MVA PR.TR.-IV AT KARAWAL NAGAR	07.03.2019		BYPL	Tx. Energised.
31	220kV WAZIRABAD - 66kV GONDA CKT.-I	10.03.2019		BYPL	CABLE FAULTY
32	220kV GAZIPUR - 66kV PPG INDL AREA CKT.	19.03.2019		BYPL	B-Ph CABLE FAULTY
33	33kV FAIZ ROAD - ANAND PARVAT CKT.	17.03.2019		BYPL	CKT energised.
34	33kV GONDA - U/G G.T. ROAD CKT.	19.03.2019		BYPL	CKT energised.
35	33kV GONDA - SEELAMPUR CKT.-I	20.03.2019		BYPL	CKT energised.

**GCC noted the position and advised all utilities to keep their elements in healthy position so that any eventualities can be managed properly in summer months.**

## 4.0 NEW AGENDA

### 4.1 Agenda by DTL ( as per previous meeting)

#### A) Provision of the unit protection i.e. numerical line current differential protection on 220 kV, 66kV & 33 kV lines

- A-1 As a unit protection the differential protection principle is considered superior with respect to selectivity, sensitivity, and speed of operation as compared with distance schemes. The faulty feeder/line is isolated in sub cycle time range keeping the rest of the system healthy. Absence of unit protection results in delayed fault clearance and cascaded tripping which not only lead to supply outage to a large area of consumers but also affect the life of upstream high value substation equipment.
- A-2 Delhi Grid Coordination committee in its 6<sup>th</sup> GCC meeting, minutes dated 11.06.2012 approved the protection code and the protection requirement for the various voltage level feeders are as under: -  
**400-220 KV LINES**  
*"Main-1 & 2 will be numerical communicable IEC 61850 compliance distance protection scheme with built in Fault Locator, Disturbance Recorder and Event Loggers of scheme as per national policy or Main-2 numerical line current differential with IEC 61850 compliant".*  
**66KV/33KV Lines**  
*"Main Protection: - IEC61850 compliant Numerical Distance Protection/line current differential protection with built in fault locator, disturbance recorder and event logger for all overhead lines of length more than 1 KM. For all underground cables and over head lines up to 1 km. length main protection shall be essentially Numerical line current differential protection. Back up Protection: - Directional Over Current and Earth Fault protection".*
- A-3 It can be noted from the above that Numerical line current differential protection is required for all underground cables, composite lines and also O/H lines of less than 1 Km and existing Discoms feeders also. Therefore, Discoms/Users has to install the Numerical Line Current Differential relay at both ends for the lines existing as well as new line which are less than or equal to 1 km and Composite line (overhead+ cable) irrespective of length with connectivity.
- A-4 The above issues were discussed at length in various Protection Subcommittee committees with Discoms. The details of the MOMs of the Protection subcommittee are as under: -
- A-5 In 7<sup>th</sup> Protection subcommittee *the committee deliberated in details. The members were apprised about the necessity of the **Numerical line Current Differential relay** at both ends having feature of distance protection in case of communication failure for the feeders/ lines which are less than or equal to 1 km and Composite line (overhead+ cable) irrespective of length with connectivity".*
- A-6 In 8<sup>th</sup> Protection subcommittee *"The issue was again discussed at length and it was agreed by all the members that line differential relay is necessary for following: -*  
*1. All 220 kV lines (including Overhead, underground and composite).*  
*2. All 66kV and 33 kV underground cable.*  
*3. All 66 kV and 33 kV Composite feeders(overhead cum underground)*  
*4. All 66 kV and 33 kV Overhead Lines less than 1 km.*
- A-7 *TPDDL apprised the members that laying of dedicated fiber is not be necessary for line current differential protection schemes. The committee agreed that laying of fiber optic cable may not be the constraint for implementation of line current*

*differential protection for existing feeders also, hence decided to implement line current differential protection for all the upcoming lines of DISCOMs including lines emanating from DTL substations and also implement the schemes for existing lines at the earliest in a time bound manner. All DISCOMs/utilities were requested to submit action plan and time frame for the same”.*

- A-8 A meeting was held on dt.16.05.2018 at 11:00 AM chaired by Director(Oprns.), DTL in the Conference Hall, Shakti Sadan, DTL, Kotla Road, New Delhi to discuss the issue of providing unit protection on DISCOM feeders through line current differential relays and redundancy criteria of DISCOM network as per Grid code. During the meeting TPDDL informed that they have implemented Numerical line current differential protection scheme on significant number of lines both their Intra substation feeders and feeders emanating from DTL Grids. DERC has approved the scheme for 83 feeders and TPDDL has implemented the scheme on 32 feeders emanating from DTL Grids and already have on 80 feeders between their own Sub-stations. It was also informed that for rest of the feeders, TPDDL was preparing a scheme and will approach DERC for approval. Regarding connectivity issue, TPDDL explained that TPDDL is adopting IP MP LS (Internet Protocol Multi layered switching) which does not require dedicated fiber for every feeder.
- A-9 It was decided that DISCOMs and DMRC will implement the Numerical line current differential schemes for the following type of feeders in a TIME BOUND MANNER and an action plan shall be submitted within a month.
- A. All 66kV and 33 kV underground cable.
  - B. All 66 kV and 33 kV Composite feeders
  - C. All 66 kV and 33 kV Overhead Lines less than 1 km.
- A-10 Despite the matter has been rigorously persuaded in the various protection sub committees and Discoms has also given the undertakings for the installation of the line current differential protection. It has been observed that the Discoms has not implemented line current differential protection for the upcoming lines of Discoms lines emanating from DTL substations and also on existing lines.
- A-11 Committee may deliberate the time line for the installation of the requisite Numerical line differential relay for the 66/33 kV DISCOM's feeders attached at Annexure –A.
- BRPL and BYPL rep informed that they are not having MPLS scheme of communication, as such are unable to provide the relay on already laid out cables. However, for all new cables they have laid out dedicated OFC and line differential relays.
- GCC advised the protection deptt. DTL to identify the feeders where such relays are not provided by the Discoms, and reduce the TMS to protect the EHV equipment from repeated lower level faults.

**GCC advised Protection Department DTL to ensure proper relay coordination with the DISCOMS and take up the mater regularly in OCC/PSC meetings.**

**B) Change in the nomenclature of feeders due augmentation works**

- B-1 In case if there is any change in the line configuration after the LILO of feeders at Discoms end than Discoms shall provide the details of length and parameters of the overhead conductor/cable in the connection agreement as follows.
1. Line length, Nature of the feeder (U/G, O/H or Composite), Positive and Zero sequence parameters (U/G, O/H or Composite) for feeder form DTL substation to Discoms substation.



2. Line length, Nature of the feeder (U/G, O/H or Composite), Positive and Zero sequence parameters (U/G, O/H or Composite) for feeder from New Discoms substation to existing Discoms substation.

GCC advised C&RA deptt DTL to confirm the provision of above in connection agreement. Further all DISCOMS to arrange for correction of any discrepancy in feeder nomenclature at S/stn / Discom level in coordination with DTL's planning deptt.

**Both TPDDL and BYPL confirmed that they don't have any mismatch of nomenclature in any feeder. Accordingly, GCC advised BRPL to ensure correction of feeder nomenclature at both ends.**

**C) Reliability criteria for DISCOMs network for important feeders.**

- C-1 A meeting was held on 16.5.18 at 11:00AM chaired by Director (Oprn.), DTL in Conference Hall, Shakti Sadan. The issue of providing reliable power supply to essential services was discussed and during discussions it emerged that there are substations/feeders which are fed from single source and as per grid code do not have dual source connectivity to ensure continuity of supply in case, the supply from one source gets affected. It was also observed that in some cases the second source is also from the same substation.
- C-2 SLDC informed that the supply to essential feeders including VVIP feeders has to be maintained to ensure operational success of islanding of Delhi system during NR Grid exigency. Further, the reliable supply to essential services like Hospitals, DJB water and sewage disposal plants, Railways, underground metro, IGI Airport and VVIP areas is of utmost importance and these installations should have alternate feed from different source.
- C-3 Director (Oprn.) DTL emphasized that all the efforts be made to maintain reliable supply to VVIP and essential feeders and in no case the supply be got affected. It should also be ensured that there are always two or more supplies from different sources available to emergency loads and substations feeding to them. It was agreed that reliability of important services can be ensured only if they have alternate feed from different source.

GCC advised SLDC to identify the feeders without having provision of dual supply and inform to Steering committee to take appropriate action on same.

**The updated status of feeders without having provisions of dual supply is as per Annexure-B. The same has been informed to steering committee for further needful.**

**GCC noted the above.**

**4.2 AGENDA BY SLDC**

**4.2.1 REPORT ON REAL TIME VERIFICATION OF DC OF CCGT BAWANA ON 23.10.2018 / AVAILABILITY ISSUES**

CCGT Bawana is a state generating station having capacity of 1370MW consisting of 4x216MW GTs and 2x254MW STGs.

As per Clause 32.2 of state Grid code. "The SLDC shall periodically review the actual deviation from the dispatch and net drawal schedules being issued, to check

whether any of the constituents are indulging in unfair gaming or collusion. In case any such practice is detected, the matter shall be investigated and reported to the Commission.”

Real time verification of DC of CCGT Bawana was carried out on 23.10.2018 after a number of incidents of Trippings.

GCC may please note.

Subsequently, during the winter months of December, January and February, also a large number of trippings of units of CCGT were observed, alongwith frequent reduction in the Declared capability. This happened mainly during early morning hours. Accordingly a meeting was called at SLDC with DISCOMS / CCGT for enquiring the reason of such trippings and to ensure availability of CCGT Bawana in summer months. The MOM of same is attached as Annexure-C.

CCGT Bawana informed that their machines are sensitive to weather conditions and during extreme foggy/polluted conditions, are unable to perform to capacity, for which they have taken up with their OEM for early resolution. As per request of Discoms, full availability testing was carried out from 18.03.19 to 20.03.19. During this period even though CCGT could reach upto 1160 MW (its DC at that time) for few hours but soon after due to its various reasons, it revised the DC frequently giving an average DC of approx. 700MW.

Discoms have represented on this issue and have requested to reduce it's DC accordingly for the winter months.

**The issue was discussed in detail wherein CCGT representative confirmed that suitable filters have been replaced on their machines and assured GCC that the frequent trippings during last winter seasons shall not be repeated in the next winter season.**

**GCC noted the same.**

#### **4.2.2. STATUS OF IMPLEMENTATION OF RECOMMENDATIONS OF ENQUIRY COMMITTEE ON GRID DISTURBANCES ON 30 AND 31.07.2012.**

This is in reference to the agenda item no. 14 of 150 NRPC OCC meeting. The Status of Implementation of Recommendations of Enquiry Committee on Grid disturbances on 30 and 31.07.2012 is not updated by DTL and Delhi Genco's to NRPC.

In 147<sup>th</sup> NRPC OCC meeting, all utilities were requested to update the information as per the letter enclosed at Annexure 18 with the Agenda of the 146th OCC meeting. The indicative formats are attached as Annexure –III.

SLDC Delhi is regularly raising this agenda in Delhi OCC Meeting and letter also written to the concerned utilities to provide the details. However, same is still awaited

GCC advised the concerned utilities to submit the data within one week to SLDC

**The available data is enclosed as an Annexure-D and same has been informed to NRPC.**

**GCC noted.**

### 4.2.3 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. The same was also apprised to OCC as under:-

S.No.	Details of the scheme	Time Line	Action Plan	Status
<b>North Delhi</b>				
1.	Addition of 1x160 MVA Transformer at 220kV Kanjhawala	15.06.2019	Existing foundation to be modified as per layout drawing of Kanohar Tx to be supplied. As First 160 MVA from transformers package is to be utilize at Kanjhawala.	Foundation work in progress. 160 MVA Tx. Expected to be received by May 2019.
2.	a)Addition of 220/66kV 1x100 MVA Transformer at 220kV Shalimar bagh  b)Addition of 220/33kV 1x 100 MVA at Shalimar bagh	15.05.2019  15.06.2019	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 which is connected there at 33kV level to newly commissioned 220kV Bay and will be charged at 66kV level at Shalimar bagh itself. After repair of 3 <sup>rd</sup> 100MVA 220/33kV Tx of Preet Vihar, it would be diverted to Shalimar Bagh in place of above mentioned EMCO make dual ratio Tx.,which is presently charged there at 33kV level and planned to be charged at 66kV level at Shalimar bagh itself.  220/66-33kV, 100 MVA Transformer will be shifted from 220kV Gopalpur S/stn. to Shalimar Bagh, as the same is being replaced with 220/66kV 160MVA Tr. New 220kV & 33kV Transformer bays shall be constructed under QVC of existing contract.	Tx. shifted to the new bay. 66 kV bus modification work in progress.  One Tx from Preet Vihar will be transferred to Shalimar Bagh.
3.	BRPL would be persuaded to transfer the load of Nangloi from Najafgarh to	--	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 submitted that they are facing hardship to revive the cable.

S.No.	Details of the scheme	Time Line	Action Plan	Status
	Mundka		BRPL was also requested to make possible effort to revive the 66kV Mundka-Nagloi feeder.	OCC deliberated that this ckt is under breakdown since long time and BRPL to expedite to replace/ revive the cable to reduce the burden of already overloaded Najafgarh S/s before coming summer-2019. BRPL updated that the Mangolpuri T - Off section would be revived soon.
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	Foundation work for the bay equipment is in progress. Expected by May, 19.
<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 the 160MVA BHEL make transformer after its repairing.	Tx. received at site after repairs expected by end of May,19..
2.	BRPL would be persuaded to shift the load of their G-2 grid substation from Pappanklan-I to Pappankalan-III by way of 66kV cable connection	31.03.2019	BRPL agreed in the SCM held on 04.07.218	BRPL informed that the work is under progress and expected to be completed by 15.05.2019
<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.	The bays have been energised and commissioned in April 19.
2.	BRPL is to be persuaded for	Along with the	Cable laying has been done by BRPL.	BRPL updated that 66kV

S.No.	Details of the scheme	Time Line	Action Plan	Status
	executing their already conceived scheme to lay 66kV feeders to (i) Malviya Nagar (ii) Batra Grid from 220/66kV Tuglakabad substation.	commissioning of s/stn		Malviya Nagar ckt & Batra Ckt are already energized. DTL informed that the above charged ckts are under loaded & load needs to be increased to provide load relief at 220kV Okhla s/s where 01 no. 220/66kV 100MVA Tx is under breakdown condition. Further, BRPL submitted that the lines of 66kV Mohan Cooperative enclave & Okhla phase-1 ckt are planned for LILO near Tughlaqabad before next summer to optimize load at Okhla s/s.
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 and it would be connected soon.	BRPL shall explore to charge by May 2019.
			For 66kV Level they would connect 66kV Vasant Kunj B-Block feeder to evacuate about 60-70MVA capacity before summer 2019.	In view of outage of 160MVA Tr. at V. Kunj, BRPL should explore the possibility to connect the cable between RK Puram and Vasant Kunj B-Blk by May 2019.
			The faulty 66kV VasantKunj-Ridge Valley cable ckt. will be LILoed at R.K.Puram.	The ckt. will be utilized for next Stn at west of JNU. BRPL expressed their inability to

S.No.	Details of the scheme	Time Line	Action Plan	Status
				revive the cable.
East Delhi				
1.	The replacement of damaged 1x100 MVA Tx.-1 at Raj Ghat	-----	Replacement with new Tx.	Order placed expected to be commissioned by July 19.
2.	The replacement of damaged 1x100 MVA Tx.-2 at Raj Ghat	-----	Replacement	Replacement with 100 MVA Tx no-1 of Ghazipur Sub-Station expected by May, 19.

### **GCC may deliberate**

#### **4.2.4 Transmission Capacity Allocation calculation:**

At present Transmission Capacity Allocation is calculated based on the allocation from Delhi Gencos, ISGS (including LT, MT) and purchase of power through short term open access. This is as per DERC order.

After introduction of Intra state open Access (Consumers above 1 MW) (since 2014),

It is difficult to include the purchase through STOA, because of non applicability of Transmission Charges on renewable power purchase of open access consumers.

Therefore, it is proposed that purchase through short term open access should be excluded from the Transmission Capacity allocation calculation after the approval of Hon'ble Commission.

**Above matter has also been discussed in Delhi CSC. BRPL and BYPL have given their confirmation. View of the other discoms is also required in this regard.**

**TPDDL informed that**

**“As per our discussion it is understood that going forward, Delhi SLDC is not going to consider STOA transaction (pertaining to Open Access Consumers and short term banking/bilateral purchase/IEX purchase done by Delhi Discoms) while calculating long term transmission charges entitlement ( %) of Delhi DISCOMS as being done currently.**

**Billing of transmission charges shall be purely based on Long Term Power Purchase contracts of the Discoms ( LTOA quantum from Delhi Genco's, ISGS stations and Long term Bilateral contracts).**

**With the above understanding, we are providing our consent towards the change in current methodology of billing/sharing of ISTS & DTL Transmission charges among Delhi Discoms”.**

**In view of above confirmation of DISCOMs, SLDC will issue the capacity allocation of Delhi DISCOMs on the proposed methodology, for recovery of STU charges. However, separate capacity allocation shall be made, for recovery of SLDC charges, considering the long term renewable power purchase by beneficiaries. The above shall be effective from April 19 onwards.**

**GCC noted.**

#### **4.2.5 Updating the Scheduling procedure and State Grid Code:**

With reference to DERC letter no. F.No.3(551)/Traiff-Engg./DERC/2018-19/6195/ 2707 dt. 18/10/2018 wherein DERC directed to modify the Delhi Grid Code. Accordingly the Scheduling Procedure also needs to be modified.

In this regard it is suggested all the stakeholders to inform any modification/suggestions in previous State Grid Code / scheduling procedure available on website to SLDC Delhi. A draft of State Grid Code / scheduling procedure modified as per the latest regulations of CERC will be circulated shortly.

**SLDC has circulated the draft amendments in state grid code and the modified scheduling procedure to all entities, comments on the same are awaited.**

**GCC noted the same and requested all to contribute to the modifications as above.**

#### **4.2.6 Applicability of DSM on waste to energy plants:**

DERC in its order dt. 21.01.2019, has provided relaxation of the Deviation Settlement Mechanism for intra state scheduling purposes to the generation projects based on Waste to Energy sources from date of commissioning of the Project. The relevant part is reproduced as under-

*“(ii) Any commercial/financial implication in case of deviation from the scheduled power under Deviation Settlement Mechanism from the date of the commissioning of the project and the actual generation shall be treated as scheduled generation; Provided that the above exemptions shall be applicable for the useful life of the existing and future projects commissioned or Power Purchase Agreement signed on or before 31st March, 2022”*

Further, a meeting was held dt. 29.01.2019 at SLDC for discussing the implementation of the above DERC order. Wherein, it was deliberated that as per directions of DERC, WTE plants would be exempted from DSM further the actual generation would be treated as scheduled generation. Accordingly, the schedule of beneficiaries of the respective WTE plants (Discoms/Open Access Consumers) would be revised as per actual.

However, the TOWMCL and EDWPCL WTE plants had already approved transactions for February 2019 for sale of power under open access and these transactions cannot be reversed. Also retrospective implementation of order won't be possible. In this regard, it was decided that the said order would implemented from 01.03.2019. Further, various issues and difficulties pointed out have been forwarded to DERC for their further needful.

**The said copy of MoM is enclosed herewith as Annexure-E.**

**GCC noted.**

#### **4.2.7 Revised allocation of EDWPCL**

DERC in its order dt. 14.12.2018, has revised the allocation of 51% share (remaining power after 49% to BYPL) as under,

*“The terms of PPA have been examined and it is observed that with effect from 01.01.2019, the seller (EDWPCL) intends to sell remaining 51% share of power under open access route to third party consumers other than Delhi DISCOMs and so going forward the seller would not sell 51% of its remaining power to Delhi DISCOMs, which justifies the short term of the PPA i.e. upto 31.12.2018 to regularize past procurement by BRPL.”*

In view of the above order, the allocation of Power from EDWPCL would be 49% to BYPL and for remaining 51% M/s EDWPCL would be free to sell its power through the route of open access.

**GCC noted.**

### **5.0 AGENDA BY TPDDL (as per previous GCC)**

#### **5.1 Deviation limit revision**

In line with 3rd Amendment to CERC DSM regulations, the matter was discussed in 18th Commercial Sub-Committee Meeting held on 27.05.2016, wherein Delhi SLDC has granted the relaxation to intra-state entity whose loads are less than 400 MW, thereby allowing NDMC & MES a limit of 48 MW for over drawl/under drawal with effect from 30th May 2016.

The matter of providing a separate treatment to NDMC & MES by allowing them a flat limit of 48 MW for deviation from schedule was discussed in the meetings held at Delhi SLDC on 12th Jan 2017 and 27th Jan 2017, in presence of other intra-state

entities of Delhi. Other entities of Delhi were of the opinion that allowing the flexibility to any entity is under purview of Hon'ble DERC and hence approval from DERC must be secured in this regard.

In view of the above, we request Delhi SLDC that as separate treatment has been provided to NDMC & MES in line with 3rd Amendment to DSM regulations by way of allowing a flat deviation limit of 48 MW, the earlier approved deviation margin of 17 and 3 MW granted to NDMC & MES respectively vide DERC order dated 3rd August 2010, should be discontinued.

GCC advised SLDC to hold a separate meeting with all concerned, at SLDC, to formulate certain guidelines on the issue.

In this regard a meeting was held with various stakeholders in which various recommendations and proposals to apply the amended DSM regulations was finalized and forwarded to DERC for consideration. The MoM is enclosed as an Annexure-A.

**GCC noted.**

## **6. Additional Agenda by BYPL:-**

- a. Refund of NRLDC charges for period FY 2009-2014, as per Hon'ble CERC direction.
  - Hon'ble CERC vide notification dated 18.09.2009 issued the CERC (Fees and Charges of Regional Load Despatch Centre and other related matters), Regulation 2009 for determination of fee and charges for RLDCs for the control period 2009-14.
  - Accordingly, fees and charges of NRLDCs were billed and collected by NRLDC from Delhi Discoms through Delhi SLDC (Nodal Agency). The billed amount was being paid by Discoms to DTL and the same was being disbursed by DTL to NRLDC (after deducting the TDS).
  - In compliance to CERC order dated 31.03.2015 and ROP dated 07.07.2015 and CERC final order dated 18.03.2016 for truing up of principal and interest refund amount for the period Apr-09 to Mar-14, NRLDC has refunded the differential amount of Delhi Discoms, to DTL on May-2015 (95%) and July-2016 (balance).



- Delhi Discoms including BYPL have not received the refund of differential amount till date.
- The matter was discussed in 14th GCC meeting dated 26.04.2016, wherein Delhi SLDC informed that the refund has been received from NRLDC which shall be refunded to Delhi Discoms including BYPL very soon. Based on the advice of GCC, a meeting was held on 28.04.2017 in Delhi SLDC regarding this issue. It was informed that 100% refund has not been received from NRLDC and some amount pertaining to Double TDS and LPSC due to less payment has not been released by NRLDC.
- The paras pertaining to the decision of this meeting are reproduced below :-

Quote

19. With regard to refund of True Up expenses of 2009-14 and 2014-19 (for the period upto December 2016), the TDS in respect of Discoms would be reimbursed to the USERS as per their dues. It was also brought out that the TDS credit given by Discoms has been used by DTL in discharging the total tax liabilities of DTL as DTL is operating SLDC. SLDC shall refund the amount due to true up of NRLDC Charges along with TDS credit availed by DTL to the Delhi Discoms/Beneficiaries at the earliest. However, with regard to the surcharge deduction the same would be possible after the amount is reimbursed by RLDC.

21. Director (Operations), DTL advised Finance Section of SLDC to immediately reconcile the TDS for the period October 2010 till date with regard to Discoms for NRLDC Charges with DTL.

Unquote

- As per above, the refundable amount from Delhi SLDC is worked out as under:-

Details of POSOCO refund to be given to Delhi Discoms by DTL computed upto 31.03.2019					
S.N.	Billed as per CERC approval	CERC approved Trued up Charges	Difference	Interest upto 31.03.2016	Total
	A	B	C=A-B	D	E
Apr-09 to Sept-10	75884923	74073549	1811374	1083458	2894832
Oct-10 to Mar-14	160384523	131605615	28778908	5431003	34209911
Total	236269446	205679164	30590282	6514461	37104743

Interest Calculation	Refundable Amount (as on 31.03.16)	Days	ROI (%)*	Interest	Total refund
FY 16-17	37104743	365	12.80	4749407	41854150
FY 17-18	41854150	365	12.60	5273623	47127773
FY 18-19	47127773	365	12.20	5749588	52877361
BYPL Share				25.40%	13430850

Note:- ROI calculated as per the CERC regulation ie: SBI PLR rates as on 1st April of respective year plus 3.50 points

- In the 20th GCC meeting held on 28.11.18, Delhi SLDC was directed to refund the amount at earliest, but refund has still not been received till date.

**GCC noted that this issue has already been clarified in the above MoM at serial No. 2.3.4**

- b. CERC on 22.11.2018, notified an amendment to DSM (4th Amendment) Regulations, 2018 implemented w.e.f. 1st January, 2019.
- Amendment of Regulation 7 (Limits on Deviation volume and consequences of crossing limits) of the Principal Regulation
  - 4.19 Clause (10) of Regulation 7 of the Principal Regulations shall be read as under:
  - “In the event of sustained deviation from schedule in one direction (positive or negative) by any regional entity (buyer or seller), such regional entity shall have to change sign of their deviation from schedule, at least once, after every 6 time blocks. To illustrate, if a regional entity has positive deviation from schedule from 07.30 hrs to 09.00hrs, sign of its deviation from schedule shall be changed in the 7th time block i.e. 09.00hrs to 09.15hrs from positive to negative or vice versa as the case may be.
  - Provided that violation of the requirement under this clause shall attract an additional charge of 20% on the daily base DSM payable / receivable as the case may be.”
  - 4.20 A new clause shall be added after clause (11) of Regulation 7 of the Principal Regulations, as under: - “(11a) The additional charge for violation of sign change stipulation shall be leviable for each such violation during a day. To illustrate, the change of sign should take place at least once after every six time blocks. Accordingly, the entity, starting from time block t1, should change the sign after time block t6. In case, sign change does not take place immediately after time block t6, but takes place from time block t7 upto time block t12, additional charge shall be levied equivalent to one violation. In case, sign change does not take place immediately after time block t12, but takes place from time block t13 upto time block t18, additional charge shall be levied equivalent to two violations. Provided that in case of run of river projects without pondage, payment of additional charge for failure to adhere to sign change requirement shall apply from such date as may be notified by the Commission. Such generators shall, however, be required to follow the sign change requirement and report to POSOCO the reasons for non-adherence to the requirement”

### **Interpretation**

- Utilities shall not sustain to deviate from its schedule for more than 6 continuous time blocks in one direction. They must change the sign of its deviation from schedule on every 7th time block. Each such violation, shall levy an additional charge of 20% on the daily DSM payable / receivable. The number of violations may go upto 15 violations in a day and amount to the penalty of 300% of daily base DSM payable / receivable.

### **BYPL Comments**

- The above CERC Regulation has already come in effect from 01.01.2019 and DERC might adopt the same at Intra-state level.
- The penalty imposed on discoms for non-adherence to sign reversal after every 6th time-block of UD/OD might result to huge financial losses as the penalties imposed are not a pass through by the State Regulator.
- The additional burden on utilities for non compliance of sign reversal regulations is as under:

Week 41-51	Deviation Amount (Rs. In Lakh)	No of Sustain Deviation Incident	Intra State Sustain Deviation (Rs. In Lakh)	Prorata Amount Sustain Deviation (Rs. In Lakh)
NR	-639	562	2546	0
TPDDL	-43	337	603	304
BRPL	-1209	704	2828	1185
BYPL	373	331	499	210
NDMC	180	578	664	224
MES	318	1017	918	353
Nrail	154	792	364	151
GT	-19	552	59	19
PRAGATI	6	275	26	8
BAWANA	115	484	263	92
Total of Entity	-124	5070	6224	2546

- The financial impact on adoption of the above provisions by DERC might result to an additional burden on BYPL. It is therefore requested that SLDC may approach DERC for non-adoption of the provisions of penalty for non-adherence to sign reversal regulations for Delhi discoms at Intra-state level.

**GCC noted that this issue has already been clarified in the above MoM at serial No. 2.4(9.2.1)**

## **7. Additional Agenda by IPGCL**

The GTPS plant was commissioned in 1986 as peaking power station and converted to base load station in 1995 with installation of Waste Heat Recovery Units. The Power Purchase Agreement of Gas Turbine Power Station is expiring in March, 2021. Gas Turbine Power Station has strategic importance and inherent features to ensure reliable operation of State Grid since it is embedded Power with Black start facility for grid safety & stability. The station is also one of the important elements of islanding scheme of Delhi state approved by Central Electricity Authority / NRPC. Its operation is required not only on commercial lines but also from the perspective of planning, grid safety and security. During consequential National Grid failure on 30th and 31st July 2012 these machines came on bar on black start, in Islanding mode and helped to restore the emergency services like hospitals etc and helped in evacuation of Metro Passengers Stranded in the tunnels at various locations of the Metro network. There are various other occasions when in case of total grid failure plant was run on islanding mode to supply radial feeding.

At Present around 0.4 -0.5 MMSCMD cheaper domestic gas has been allocated by Ministry of Petroleum and natural gas, Govt. of India with swapping facility to higher efficiency plant i.e. PPS-I & PPS-III, resulting in overall reduced power purchase cost of Delhi DISCOMs. In case it is decided to decommission the plant after March 2021, the allocated cheaper domestic gas to the tune of 160.6 MMSCM per annum will be de-allocated and result in loss of opportunity to utilize the gas and bring down overall cost of power purchase. As per present gas fuel charges, it is estimated that the additional financial burden for total power purchase will be to the tune of Rs. 350 Cr. per annum if the same is generated through RLNG at existing power stations of PPS-I and PPS-III, and around Rs 201.17 Cr after offsetting annual fixed cost of around Rs 148.83 Cr (for FY 2019-20). Thus there is net economical gain in terms of overall power purchase cost reduction of the beneficiaries apart from the fulfillment of technical requirements of Delhi Grid.

It is pertinent to mention that during the winter load conditions, grid is suffering from the problem of the over voltage and under voltage during summer affecting the electrical equipments of transmission and distribution system. The condenser mode of gas turbine can be used to regulate the grid voltage in both under/over voltage conditions. In the absence of the fixed reactors, the reactive compensation through the GTPS being flexible is most suited to the energy profile of Delhi. There are grid locations like Electric Lane where the fixed reactors are not feasible due to location constraints. In view of these constraints, the reactive compensation from the GTPS will suitably provide the relief in the interconnected network. The plant can be made ready for synchronous Condenser Mode Operation through installation of SSS clutch in all six gas turbines.

In this regard, a meeting was called on 07.03.2019 under the Chairmanship of Hon'ble Secretary power GNCTD to discuss and decide the need of operation of GTPS beyond March 2021 (The copy of MOM is enclosed). The meeting was attended by all stake holders of Delhi as well as CEA and DERC. The meeting concluded with common agreement on the following:

- a. Load flow study by SLDC for evaluation of active and reactive power requirement from the station,
- b. Detailed submission by IPGCL supported by offer from service provider on Turnkey basis for R&M for restoration of capacity and reliability of the plant with a view to utilize/retain full domestic gas and to provide SSS clutch in required number of machines for further 10 years.

IPGCL has already initiated action on 'b' above. SLDC requested to take necessary action regarding load flow study for evaluation of active and reactive power requirement from the station.

The agenda is being put up for apprising the GCC about the decision taken in the aforesaid meeting and further action by the stakeholders.

**SLDC representative informed that the reactive power study shall be required to be carried out by CEA as was done earlier. Accordingly, Planning Department and IPGCL may kindly coordinate with CEA on this issue.**

**“BRPL vide their letter dated 26.04.2019 have informed that it is pertinent to mention that BRPL has filed a petition 23/2015 in DERC for dissolution of uneconomical PPAs including IPGCL. Hence the matter is sub judice”.**

**“BYPL vide their letter dated 24.04.2019 have informed that the tenure of said PPA is going to expire on March 2021. The said PPA has neither been extended**

and nor do we intend to extend the same. BYPL is operating under regulated environment, however the DISCOM cannot schedule power on expiry of PPA without the explicit provision/permission of the Hon'ble DERC. In the event if scheduling of power continues after expiry of PPA then the same will be solely at your risks and costs.

**“Quote”**

As per DERC T&C of tariff regulation 2017 state that “The utility shall file a Petition before the Commission for approval of the proposal with a Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date financial package, phasing of expenditure, schedule of completion, reference price level estimated completion cost including foreign exchange component, if any, and any other information considered to be relevant by the utility for meeting the expenditure on renovation and modernization (R&M) for the purpose of extension of life beyond the originally recognized useful life. The Commission may grant approval for additional capital cost on account of renovation and modernization after due consideration of reasonableness of the cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, and such other factors as may be considered relevant by the Commission.”

**“Unquote”**

In case GT is intending to extend its useful life then it is requested to provide a cost of R&M, cost benefit analysis and take fresh consent from all the beneficiaries. Further, it is also requested to take all necessary approval from Hon'ble DERC before going into any kind of R&M leading to extension of useful life of the plant.

#### **8. HOSTING OF NEXT MEETING OF GCC**

Next meeting of GCC is scheduled to be held during September 2019. As per the roster, MES has to host the next meeting. GCC advised accordingly.

LTD

## STATE LOAD DESPATCH CENTRE

List of Participants Attended the 21<sup>st</sup> GCC MEETING HELD ON 22.04.2019 at 10.30hrs at Conference Hall, NRPC Secretariat at 18-A, Qutab Institutional Area, Shaheed Jeet Singh Marg, Katwaria Sarai New Delhi.

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