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|  | **पंजीकृत कार्यालय :शक्ति सदन, कोटला रोड़, न्यू दिल्ली-110002**  (Regd. Office Shakti Sadan, Kotla Road, New Delhi-110002)  **कार्यालय उपमहाप्रबंधक (एस.ओ.)**  **Office of Dy. General Manager (SO)**  **एस एल डी सी बिल्डिंग, मिंटो रोड़, न्यू दिल्ली-110002**  SLDC Building, Minto Road, New Delhi-110002  Ph: 23221149 FAX No.23221012 | |
| **No. F./DTL/207/13-14/DGM(SO)/171** | | **Dated : 22.01.2014** | |

**Subject : Agenda of the 10th meeting of Grid Coordination Committee**

Dear Sir, / महोदय

The 10th meeting of the Grid Coordination Committee (GCC) is proposed to be held on 29.01.2014 at 11.00hrs. The meeting is to be hosted by NDMC. The venue of the meeting would be intimated in due course.

The agenda of the meeting is enclosed herewith.

You are requested to make it convenient to attend the meeting

Thanking you,

भवदीय / Yours faithfully

Encl : As above

(**वी.वेणुगोपाल)/(V. Venugopal )**

**(उपमहाप्रबंधक (एस.ओ.)/**Dy. G. M. (SO)

Convener (GCC)

To

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| --- | --- |
| 01 | **Sh. A. K. Halder, Chairperson, GCC**  Director (Operations), Delhi Transco Ltd, 1st floor, Shakti Sadan Building, Kotla Road, New Delhi-110002, Office-Phone- 011-23232715, Fax : 23232721 |
| 02 | **Sh. Bhupinder Nath**  **G.M. (Stores)**, Delhi Transco Ltd., RPH Complex, RPH, Delhi |
| 03 | **Sh. Roop Kumar**  **G. M. (Planning)**, Delhi Transco Ltd, Shakti Deep Building, Jhandewalan, Delhi-55 |
| 04 | **Sh. Prem Parkash,**  **G. M. (O&M)-I,** DTL, 220kVParkstreet S/stn Building, Opp. Talkatora Stadium, Near RML Hospital, Park Street, New Delhi-110001, Office Phone - 011-23366462 Fax: 011-23366160 |
| 05 | **Ms Kiran Saini**  **General Manager (Commercial & Regulatory Affairs),** Delhi Transco Ltd,  IP Estate Bldg, New Delhi-110002 |
| 06 | **Sh. Mukesh Kumar Sharma**  **G. M. (Project-I),** Delhi Transco Ltd. Shakti Deep Building, Jhandewalan, Delhi-55 |
| 07 | **Sh. P.K.Gupta**  **General Manager (SLDC),** SLDC Delhi  SLDC Building, 33kV Grid S/Stn Building, Minto Road, New Delhi-110002, Phone Office:011-23221091, Fax:011-23221069 |

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| 08 | **Sh. H. Vyas,**  **G. M. (O&M-II),** Delhi Transco Ltd, Shakti Deep Building, Jhandewalan, Delhi-55 |
| 09 | **Sh. V.K.Gupta,**  **General Manager (Project)-II,** Delhi Transco Ltd.  Shakti Deep Building, Jhandewalan, Delhi-110055 |
| 10 | **Sh. S.K.Mishra,**  **General Manager (Civil)**  Delhi Transco Limited, 220kV Grid S/Stn., Lodhi Road  CGO Complex, New Delhi-110003 |
| 11 | **Sh. Ved Mitra**  **Chief Engineer, DMRC** |
|  | Inderlok Metro Station, Delhi  Ph. 9871165812 |
| 12 | **Sh. P. Mukhopadhyay**  **General Manager (NRLDC),**  18-A, SJSS Marg, New Delhi-110016, Office Phone : 011-26537351, Fax: 011-26852747 |
| 13 | **Sh. Jagdish,**  **Director(Tech), IPGCL / PPCL**  Himadri Building, Rajghat Power House, New Delhi-110002. Office Phone : 011-23273544, Fax: 011-23270590 |
| 14 | **Sh. H.K. Chawla**  **Dy. G.M.(Market Operation), NRLDC**  18-A, SJSS Marg, New Delhi-16, Office Phone : 011-26537351, Fax: 011-26852747 |
| 15 | **Sh. A.K. Sharma**  **Head (O&M), BYPL**  Shakti Kiran Building, Karkardooma, Delhi |
| 16 | **Sh. Mukesh Dadhichi**  **G.M. (SO),** BYPL, Balaji Estate, New Delhi |
| 17 | **Sh. Sunil Kakkar**  **Asstt. VP,** BYPL, Shakti Kiran Building, Karkardooma, Delhi |
| 18 | **Chief Engineer (Transmission System)**, BBMB  SLDC Complex, Sector-28, Industrial Area Phase-I, Chandigarh. |
| 19 | **Sh. Sanjay Banga,**  **HOD(PSC&A), TPDDL**  SCADA Building, Near Netaji Place Subash Place Metro Station, Pitampura, Delhi 34 Phone Office: 011- 27468027, Fax: 011-27468023 |
| 20 | **Sh. Ajay Kumar,**  **VP (PMG), BRPL,**  Building No 20, Nehru Place**,** New Delhi–110019. Off. 39996052 Fax: 011- 3999605 |
| 21 | **Sh. D. Sarkar , General Manager,**  NTPC, BTPS, New Delhi-110044 Office Phone: 011- 26949523, Fax: 011- 26949532 |
| 22 | **Col. Ballaney R.N., CWE,**  CWE (Utilities), MES, Delhi Cantt, New Delhi – 110010. Phone Office: 011- 25692364 Fax: 011- 25687850 |
| 23 | **Sh. N.S.Sagar**  **Chief Engineer (Elect),NDMC**  Room No. 1701, 17th Floor, Palika Kendra, Sansad Marg, New Delhi-110001 |
| 24 | **Sh. Mohinder Singh, Executive Director (Engg.), DERC**  DERC Viniyamak Bhawan, C-Block, Shivalik, New Delhi-17 |

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| 25 | **General Manager (Commercial), Aravali Power Company Pvt Ltd. (APCPL)**  1st Floor, Pawan Hans Towers C-14, Sec-1, Noida-201301 |
| 26 | **Sh. N.N. Sadasivan**  **A.G.M. (Commercial), Aravali Power Company Pvt Ltd. (APCPL)**  1st Floor, Pawan Hans Towers C-14, Sec-1, Noida-201301 |
| 27 | **Sh. Arvind Jhalani, Add. General Manager (Commercial)**, NTPC  NCR Headquarters, R&D Building, A8A, Setor-24, Noida-201301. Fax no. 0120-2410192 |
| 28 | **Sh. Pradeep Mittal**  General Manager, Timarpur – Okhla Waste Management Company Ltd  Jindal ITF Center, 28 Shivaji Marg New Delhi-110015, Ph. 45021983, Fax 45021982 |
| 29 | **Sh. R.K. Bhatnagar,**  **General Manager,** Indira Gandhi Super Thermal Power Station, Jharli, Jhajjar Distt. Haryana Pin-124141, Fax no. 01251-266202, Ph. 01251-266265 |
| 30 | **Sh. Surender Babbar,** General Manager (Finance-), DTL, Shakti Sadan, New Delhi 110002 |
| 31 | **Sh.D.N. Sondhi**, Dy. General Manager (Finance-II), DTL Rajghat Power House New Delhi -02 |
| 32 | **Sh. K.C. Gupta,** Dy. Manager (Finance), SLDC |

Copy for favour of kind information to :-

1. Secretary, DERC, Viniyamak Bhawan, C-Block, Shivalik, New Delhi-17

2. Chairman and Managing Director, DTL

3. Chairperson, NDMC, Palika Kendra, Sansad Marg, New Delhi

4. Director (HR), DTL

5. Director (Finance), DTL

6. CEO, BSES Rajdhani Power Ltd, BSES Bhawan, Nehru Place, New Delhi-110019

7. CEO, BSES Yamuna Power Ltd, Shakti Kiran Building, Karkardooma, New Delhi-92

8. CEO, Tata Power Delhi Distribution Ltd, 33kV Grid S/Stn, Hudson Lane, Kingsway Camp, Delhi-110009

9. Chief Engineer(Utilities),CWE, MES, Kotwali Road, Near Gopi Nath Bazar, Delhi Cantt New Delhi-110010

10Managing Director, Indraprastha Power Generation Company Ltd (Genco) / Pragati Power Corporation Ltd (PPCL), Himadri, Rajghat Power House, New Delhi-02

11CEO, JUIL/TOWMCL, JITF Urban, Infrastructure Ltd. Jindal ITF Centre, 28, Shivaji Marg, new Delhi-110015

12 CEO, Aravali Power Company Pvt. Ltd (APCPL), Pawan Hans Tower, C-14, Sector-1,Noida-201301

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**DELHI TRANSCO LTD.**

(Regd. Office : Shakti Sadan, Kotla Road, New Delhi 110002)

**[Office of Dy. General Manager (SO)]**

SLDC Building, Minto Road, New Delhi – 110 002

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**AGENDA FOR 10th MEETING OF GRID CO-ORDINATION COMMITTEE**

**Time & Date of GCC meeting : 11.00 Hrs. on 29.01.2014**

**1 Confirmation of the minutes of 9th meeting of GCC held on 06.08.2013.**

The minutes of the 9th meeting of GCC held on 06.08.2013 have been circulated vide letter no. F.DTL/207/13-14/DGM(SO)/116 dated 25.09.2013. No comments have been received so far.

**GCC may confirm the minutes of the 9th meeting of GCC held on 06.08.2013.**

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

**2.1 ENHANCEMENT OF GRID SECURITY AT BTPS**

The issue is in the regular agenda of NRPC OCC meeting. The relevant minutes of the 94th NRPC OCC meeting is appended hereunder:-

In the 88th OCC meeting while discussing “Increasing grid connectivity of BTPS”, representative of BBMB had intimated that in the network around 220KV Samaypur – Ballabgarh, N-1 contingency is not met due to continuous high power flow during summer load peak periods. He had requested that load plan may be rearranged in the area by HVPNL / DTL / POWERGRID after making a proper system study by PGCIL to avoid any system contingency in the area. Further, he had requested that these elements may also be got covered in the system study being carried out by CEA. In this regard, representative of DTL had intimated that a study to evolve composite scheme for supply of power up to 2022 for Delhi was under progress in CEA with the association of DTL and CTU. He added that DTL would conduct an internal study in regard to increasing connectivity of BTPS and then include this aspect in the study being conducted by CEA.

In the 92nd meeting, SE(O), NRPC intimated had that in the recently held TCC/NRPC meetings, POWERGRID had informed that CEA has carried out comprehensive study for supply of power to Delhi up to 2022. He added that this study had suggested creation of 06 new substations in Delhi. Later it was found that due to ROW problem for the line corridors connecting these new substations, it may not be possible to built new substations and as such the plan would be reviewed in a separate meeting between CEA, CTU and DTL. Representative of DTL stated that any planning for increasing grid connectivity of BTPS shall be based on studies by CEA. In this meeting, he intimated as under:-

“At present BTPS is connected with the grid through 220kV Ballabgarh – BTPS – Mehrauli – DIAL – Bamnauli. Further it is already having the link with 220kV BTPS – Alwar Ckt. As such at present BTPS is having 3 connecting links namely

(i) 220kV BTPS – Ballabgarh D/C Line

(ii) 220kV BTPS – Mehrauli – DIAL – Bamnauli D/C Line

(iii) 220kV BTPS – Alwar S/C Line

Due to these existing links BTPS station survived several times in recent past when entire 400kV System of Samaipur / Ballabgarh remained dead causing the loss of 220kV BTPS – Ballabgarh D/C Link.

Further, he intimated that future system is likely to have

(i) 220kV Transmission line from 400kV Maharani Bagh to 220kV Gazipur is under advance stage of completion. As soon as this line comes, the following link shall be arranged.

220kV Maharani Bagh – Gazipur – Noida – BTPS

(ii) Scheme for laying of 220kV Cable from 220kV Masjid Moth S/Stn. to 220kV Okhla is under consideration. The execution of this scheme will have connectivity as under :

220kV Maharani Bagh – Masjid Moth – Okhla – BTPS

(iii) The establishment of 220kV Cable ckt. between 220kV Gazipur to 220kV Patparganj is under execution and after execution it will have link with BTPS as under :

220kV Mandola – Wazirabad – Geeta Colony – Patparganj – Gazipur – Noida -BTPS

(iv) Scheme for execution of 220kV Patparganj to 220kV Preet Vihar (Anand Vihar) (upcoming grid) is under preparation and if finalized the connectivity with 400kV Harsh Vihar will be arranged as under :

220kV Harsh Vihar – Preet Vihar (Anand Vihar) - Patparganj – Gazipur – BTPS

However, he added that the closed loop operation of all the above links would be decided based on the studies being carried out. “

**GCC may note.**

**2.2. PROVSIONS OF SPARE HOT TRANSFORMER CAPACITY.**

In the 9th meeting of GCC held on 06.08.2013, the position on the issue was informed as under :-

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.N | Capacity | Present population in nos. | Status of the hot reserve | Acton plan and responsibility |
| 1 | 440/220kV, 315MVA ICT, | 12 | One Tx at 400kV Mundka would be hot reserve. | The original planning was 2X315MVA Txs at Mundka. The 3rd Tx. available at present which has been brought after repairs. The same is planned as hot reserve at present.  In near future, the load of the S/Stn is likely to be increased with the commissioning of 220kV Wazirpur and 220kV Peera Garhi and LILO of 220kV Najafgarh – Kanjhawala Ckt at Mundka. The provision of 220kV feed to Rohtak Road is also being explored. After the load of the sub-station is attained as envisaged in the scheme would be prepared for provison of 4th transformer as hot reserve and implemented after obtaining the regulatory approval from DERC. |
| 2 | 220/66 kV, 160MVA Tx | 9 | 160MVA Tx earmerked for 220kV Pappan Kalan-II would be the hot reserve. | At Papankalan-II the third transformer which was envisaged as hot reserve has been charged on 19.11.2013 put in use to meet the load demand. New scheme would be prepared for a hot reserve of 220/66kV 160MVA Tx looking into the increasing population. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.N | Capacity | Present population in nos. | Status of the hot reserve | Acton plan and responsibility |
| 3 | 220/66kV, 100MVA Tx | 42 | New Tx. is required to be purchased The scheme for one 220/66/ 33kV 100MVA Tx as hot reserve has been approved and the same would be placed at Patparganj before summer 2014 for hot reserve | Would be in place before summer 2014. |
| 4 | 220/33kV, 100MVA Tx, | 33 |
| 5 | 66/33kV 30MVA Tx, | 3 | After the commissioning of 66kV IFC Grid, the 33kV Narela – Khampur feeder become redundant and then the transformer could be spared for hot reserve purpose. However, the 66kV bay being utilized for 66/33kV Tx at Narela would be used for IFC Grid. As such, the transformer would have to be shifted to some other place for hot reserve.  GCC advised Planning Department of DTL to decide the location. | Planning Department of DTL to identify the location to shift 66/33kV 30MVA Tx from Narela after the commissioning of 66kV IFC Grid which is being established as a deposit work of DDA. Further DDA has not so far deposited the amount. The establishement of the S/stn would take another two years as approval of DERC also requried. The scheme would be submitted after the agreement woth DDA. |
| 6 | 66/11kV 20MVA Tx | 23 | The scheme for a 66/11kV Tx as a hot reserve has been approved and transformer is under procurement. | The transformer would be in place before next summer at Kanjhawala. |
| 33/11kV 20/16MVA Tx | 16 | The hot reserve 33/11kV Tx would be placed at Shalimar Bagh before summer 2014. | Would be in place before summer 2014. |

The Planning Department of DTL may update the status.

**2.3 AUGMENTATION OF TRANSFORMATION CAPACITY OF 66/11KV AND 33/11KV TRANSFORMERS AT DTL SUB-STATIONS.**

Grid Coordination Committee had recommended the proper augmentation of 66/11kV and 33/11kV transformers at 220kV level to maintain the reliability of supply to consumers directly from 220kV S/Stns of DTL. The matter was taken up by Chairperson, GCC with DERC for getting the necessary regulatory approval.

However, DERC was of the view that DTL should not augment these transformers as Distribution Companies are to shift the load from these 11kV system.

**GCC may note.**

**2.4 IMPLEMENTATION OF STATE-OF-THE–ART–LOAD MANAGEMENT SCHEME BY DISCOMS**

CERC vide order dated 28.12.2013 has issued notices to all State Utilities except Delhi for non implementation of The State-Of-The-Art Load Management Scheme. All utilities of Delhi need to maintain the system and ensure that the scheme is operation at all point of time. It is also brought in the notice of amendment of Indian Electricity Grid Code applicable from 17.02.2014. The relevant portions of the amended IEGC is appended hereunder :-

5.4.2 Demand Disconnection

(a) SLDC/SEB/distribution licensee and bulk consumer shall initiate action to restrict the drawal of its control area,from the grid, within the net drawal schedule.

(b) The SLDC/SEB/distribution licensee and bulk consumer shall ensure that requisite load shedding is carried out in its control area so that there is no overdrawl.

d) The SLDC through respective State Electricity Boards/ Distribution Licensees shall also formulate and implement state-of-the-art demand management schemes for automatic demand management like rotational load shedding, demand response (which may include lower tariff for interruptible loads) etc. before 01.01.2011, to reduce overdrawl in order to comply para 5.4.2 (a) and (b) . A Report detailing the scheme and periodic reports on progress of implementation of the schemes shall be sent to the Central Commission by the concerned SLDC.

The amended regulation of 6.4.7 of IEGC is also appended hereunder:-

(2) Regulation 6.4.7 of Principal Regulations shall be substituted with the following:

"7. The SLDC, SEB / distribution licensee shall always restrict the net drawal of the state from the grid within the drawal schedules keeping the deviations from the schedule within the limits specified in the Deviation Settlement Mechanism Regulations. The concerned SEB/distribution licensee/User, SLDC shall ensure that their automatic demand management scheme mentioned in clause 5.4.2 acts to ensure that there is no over-drawal. If the automatic demand management scheme has not yet been commissioned, then action shall be taken as per manual demand management scheme to restrict the net drawal from grid to within schedules and all actions for early commissioning of Automatic Demand Management Scheme (ADMS) shall be initiated

GCC may deliberate.

**2.5 EXECUTION OF CONNECTION AGREEMENT BY PPCL FOR BAWANA CCGT (1371MW).**

In the last GCC meeting held on 06.08.2013, Chairperson, GCC advised the Protection wing of DTL to resolve the issue as quick as possible as the issue was hanging long, though the system is operating since October 2010 without the execution of the mandated Connection Agreement with STU.

PPCL and Protection Wing of DTL may inform the latest status in this regard.

**2.6 OUTSTANDING DUES**

DTL has intimated that the outstanding dues position of various Distribution Companies as on 31.12.2013 is as under:-

|  |  |  |  |
| --- | --- | --- | --- |
| Utility | Paying utilities | | Amount in Rs. Crores |
| BRPL | BYPL |
| DTL | 757.27 | 452.35 | 1209.62 |

Outstanding dues are due to TPDDL and NDMC on account of Pension Trust, Income Tax, Power Purchase Liability and wheeling charges and tabulated as under:-

|  |  |  |  |
| --- | --- | --- | --- |
| Utility | Paying utilities | | Amount in Rs. Crores |
| TPDDL | NDMC |
| DTL | 128.61 | 38.97 | 167.85 |

Other utilities may submit the details of outstanding dues as on date and paying utilities may provide the details of the wiping out of arrears and payment towards the current dues.

**GCC may deliberate.**

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

**In the updated position is as under :**

|  |  |  |
| --- | --- | --- |
| Clause | RECOMMENDATIONS | STATUS AS ON DATE |
| 9.1.1 | Periodical 3RD 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 :-   |  |  |  |  | | --- | --- | --- | --- | | Sl.  No | Description of Issue | Sub-station | Action taken/proposed (As on 31.07.2013) | | 1 | Replacement of Static Distance Relays by Numerical Relays | Bamnauli | Work will be completed by 31.03.2014. | | 2 | Earth fault in DC system to be rectified | Bamnauli | Work will be completed by 31st August 2013 | | 3 | Time Synchronization to be provided or rectified | Bamnauli | No issue | | 4 | DR and Event Logger to be provided or to be kept in order | Bamnauli | The 400 kV EL is in place. EL for 220 kV and DR (inbuilt function with Numerical Relays) will be completed by 30th Nov. 2013. | | 5 | Bus Bar Protection to be provided/made functional | Bamnauli | Bus Bar Protection made functional | | 6 | LBB Protection to be  provided/made functional | Bamnauli | No issue | | 7 | PLCC problems | Bamnauli | PLCC of all 400 kV lines with new Protection Coupler are installed and functional. PLCC Tele protection coupler for 220kV lines will be installed after stringing of OPGW by POWERGRID by July 2014. | | 8 | DG Set | Bamnauli | No issue |   (Basic Protection Audit carried out on 400kV S/Stn Bamnauli before CWG)  It was also advised by NRPC that DTL should go for fresh third party protection audit of entire DTL system. In 90th OCC meeting,  it was informed that TPA of DTL system would be got done from the panel of protection experts being drawn up by NRPC secretariat |

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| Clause | RECOMMENDATIONS | STATUS AS ON DATE |
| 9.1.2 | Philosophy of Zone-3 trippings to be reviewed to avoid indiscriminate and load encroachment and faults  **– Time Frame - immediate** | As per the CEA status report of the recommendations on the issues as on 31.07.2013 the position is as under:  Powergrid, has reviewed the zone-3 settings in coordination with STUs, generators and POSOCO and put them in order in accordance with load ability. The status of implementation of the above by the States was discussed at the meeting of National Power Committee (NPC) held on 15.04.2013 wherein the States were asked to furnish the details. The responses were awaited.  As far Delhi is concerned, the details have been submitted to PGCIL through NRPC as under :-   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | **Sl No** | **Name of substation** | **Voltage level(kV)** | **Name of transmission line** | **Voltage (kV) for MVA calculation** | **Make of relay** | **CT primary** | **Zone-3 setting (X) Secondary Ohms** | | Main-I | 1 | Bamnauli | 400kV | Ballabhrgarh-I | 380kV | Micromho | 2000/1 | 13.9 | | Main-II |  |  |  |  | 380kV | Micromho | 2000/1 | 3.36 | | Main-I | 2 | Bamnauli | 400kV | Ballabhrgarh-II | 380kV | Micromho | 2000/1 | 13.9 | | Main-II |  |  |  |  | 380kV | Micromho | 2000/1 | 3.36 | | Main-I | 3 | Bamnauli | 400kV | Mundka-I | 380kV | Micromho | 2000/1 | 13.4 | | Main-II |  |  |  |  | 380kV | Micromho | 2000/1 | 2 | | Main-I | 4 | Bamnauli | 400kV | Mundka-II | 380kV | Micromho | 2000/1 | 13.4 | | Main-II |  |  |  |  | 380kV | Micromho | 2000/1 | 2 | | Main-I | 5 | Mundka | 400kV | Bamnauli-I | 380kV | P442 | 2000/1 | 10.27 | | Main-II |  |  |  |  | 380kV | D60 | 2000/1 | 10.27 | | Main-I | 6 | Mundka | 400kV | Bamnauli-II | 380kV | P442 | 2000/1 | 10.27 | | Main-II |  |  |  |  | 380kV | D60 | 2000/1 | 10.27 | | Main-I | 7 | Mundka | 400kV | Bawana-I | 380kV | P442 | 2000/1 | 28.4 | | Main-II |  |  |  |  | 380kV | D60 | 2000/1 | 28.4 | | Main-I | 8 | Mundka | 400kV | Bawana-II | 380kV | P442 | 2000/1 | 28.4 | | Main-II |  |  |  |  | 380kV | D60 | 2000/1 | 28.4 | | Main-I | 9 | Mundka | 400kV | Jhajjar-I | 380kV | P442 | 2000/1 | 20.14 | | Main-II |  |  |  |  | 380kV | D60 | 2000/1 | 20.14 | | Main-I | 10 | Mundka | 400kV | Jhajjar-II | 380kV | P442 | 2000/1 | 20.14 | | Main-II |  |  |  |  | 380kV | D60 | 2000/1 | 20.14 | | Main-I | 9 | Bawana | 400kV | Mundka-I | 380kV | Micromho | 2000/1 | 13.4 | | Main-II |  |  |  |  | 380kV | Micromho | 2000/1 | 2 | | Main-I | 10 | Bawana | 400kV | Mundka-II | 380kV | Micromho | 2000/1 | 13.4 | | Main-II |  |  |  |  | 380kV | Micromho | 2000/1 | 2 | | Main-I | 11 | Bawana | 400kV | Mandola-I | 380kV | Micromho | 2000/1 | 11.7 | | Main-II |  |  |  |  | 380kV | Micromho | 2000/1 | 3.12 | | Main-I | 12 | Bawana | 400kV | Mandola-II | 380kV | Micromho | 2000/1 | 11.7 | | Main-II |  |  |  |  | 380kV | Micromho | 2000/1 | 3.12 | |  | 13 | Bawana | 400kV | Abdullapur |  | Settings done by PGCIL | | | |  | 14 | Bawana | 400kV | Bahdurgarh |  | Settings done by PGCIL | | | |  | 15 | Bawana | 400kV | Hisar (Now Mahendergarh) |  | Settings done by PGCIL | | | |  | 16 | Bawana | 400kV | Dipalpur | Settings done by PGCIL | | | |   Note  1) Zone setting for main-I & main-II distance relays to be provided for each line.  2) Voltage kV for MVA calculation may be taken as 380 kV for 400kV lines and 727kV for 765kV line.  REMARKS  1. MAIN-II PROTECTION OD DTL LINES IN THE DELHI RING MAIN LINES IS IN BLOCKING SCHEME  2. ZONE 3 IS SET REVERSE LOOKING FOR MICROMHO RELAYS USED AS MAIN-II.  3. CALCULATED MAX LOADING LIMIT IS AS PER THE FORMULA GIVEN IN THE MINUTES WHERE X IS THE REACTANCE OF LINE  4. THE OTHER END DETAILS IN RESPECT OF JHAJJAR LINE ALSO NEED TO BE CONFIRMED FROM NTPC/PGCIL/APCL  Protection Department of DTL may update the status. |
| 9.1.4 | Complete independent audit of time synchronization of DRs, EL and PMs should be carried out  **- Time frame – within one month** | At all interstate points the time synchronization have been done. Others will follow. DR is available at all 400kV Grids. ELs for all 220kV S/Stns have been planned. DR is not required at 220kV Sub-stations as *Numerical Relays* have this inbuilt feature.  As far as IPGCL and PPCL 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.  **Protection Deptt. of DTL may update the status.** |

|  |  |  |
| --- | --- | --- |
| **Clause** | **RECOMMENDATIONS** | **STATUS AS ON DATE** |
| 9.2.1 | Tightening of Frequency band and be brought very close to 50Hz. | CERC has already issued the amended Grid Code to be implemented from 17.02.2014 in which the allowable frequency band is 49.95Hz to 50.05Hz. The Deviation Settlement Mechanism has also been introduced according to the tightening to the frequency band. |
| 9.2.2 | Review of UI mechanism. Frequency control through UI maybe faced out in a time bound manner and generation reserves and ancillary services may be used for frequency control  **Time frame – 3 months** | As above. |
| 9.3 | All STUs should immediately enable Under Frequency and df/dt under frequency scheme. Central Commission should explore ways and means for implementation of various regulations issued under the Electricity Act 2003. Any violation of these regulations can prove to be costly  **- Time frame - immediate** | In Delhi all 24 UFRs and 13 df/dt relays are functional. Additional relays are also being procured as per the decision of NRPC meetings. Further all UFRs are being replaced with new *Numerical Relay* along with the implementation of *Islanding Scheme of Delhi* expected to the completed soon.  The National Power Committee (NPC) in its 2nd meeting held on 16.07.2013 has decided to adopt four stages automatic load shedding scheme for NEW Grid. The scheme was decided to be implemented within 3 months i.e. by the end of October 2013. The details are as under :-  Scheme for the NEW Grid   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Freq (Hz) | Required Load Relief (MW) (based on max load on feeders) | | | | | | NR | WR | ER | NER | Total | | 49.2 | 2160 | 2060 | 820 | 100 | 5140 | | 49.0 | 2170 | 2070 | 830 | 100 | 5170 | | 48.8 | 2190 | 2080 | 830 | 100 | 5200 | | 48.6 | 2200 | 2100 | 840 | 100 | 5240 | | Total | 8720 | 8310 | 3320 | 400 | 20750 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | S.N | State | Peak met during 2012-13 (MW | Load Shedding target for four stages (MW) – Based on maximum load on the feeders | | | | | 49.2 | 49.0 | 48.8 | 48.6 | | 1 | Chandigarh | 340 | 16 | 16 | 16 | 16 | | 2 | Delhi | 5642 | 258 | 259 | 262 | 263 | | 3 | Haryana | 6725 | 308 | 309 | 312 | 314 | | 4 | HP | 1672 | 77 | 77 | 78 | 78 | | 5 | J&K | 1817 | 83 | 84 | 84 | 85 | | 6 | Punjab | 8751 | 400 | 402 | 406 | 408 | | 7 | Rajasthan | 8515 | 390 | 392 | 395 | 397 | | 8 | UP | 12048 | 551 | 554 | 559 | 561 | | 9 | Uttrakhand | 1674 | 77 | 77 | 78 | 78 | |  | Total | 47184 | 2160 | 2170 | 2190 | 2200 |   O&M Department of DTL has informed the revised settings for Grid Security and Islanding for Delhi have been implemented in |

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|  |  | Delhi as per the advise of NRPC. The details are as under:-   |  |  | | --- | --- | | Frequency set at | Load relief in MW | | 49.2Hz | 297 | | 49.0Hz | 353 | | 48.8Hz. | 428 | | 48.6Hz | 1048 | | Total | 2126 | | df/dt |  | | 49.9Hz. with slope 0.1Hz. | 261 | | 49.9Hz with slope 0.2Hz | 282 | | 49.9Hz with slope 0.3Hz | 290 | | Total df/dt | 833 |   With regard to the suggestion of providing under frequency relay’s at Discoms end, it was advised that to ensure proper load relief and to avoid confusion in operation of relays in coordinated ways, the relays be installed in DTL’s Grid S/Stns.  CERC in its order 23.12.2013 has issues notices to the Head of SLDC & MD/CMD of the STU to explain why action should not be initiated under section 142 of Indian Electricity Act 2003 (IEC 2003) for non compliance of Grid Code. The relevant portion of the order on petition no. 221/MP/2012 is reproduced hereunder :  *29. We are constrained to remark that we are thoroughly dissatisfied with the defense mechanism in terms of UFR and df/dt. Hard reality which stares us on the face is that these have not been provided and maintained as per Regulation 5.2 (n) and 5.4.2 (e) of the Grid Code by NR constituents. Accordingly, we hereby direct as follows:*   1. *Issue notices to the heads of SLDCs and MD/CMD of the STU of Punjab, Haryana, Rajasthan, Delhi, Uttar Pradesh, Uttarakhand, Himachal Pradesh, Jammu and Kashmir and head of Electricity Department, UT of Chandigarh and to explain why action should not be initiated under Section 142 of the Electricity Act, 2003 for non-compliance of the Grid Code.*   *(b) Member Secretary, NRPC to submit the latest status of UFRs and df/dt installations in NR within 1 month from the issue of this order.*    *(c) UFRs and df/dt relays also be mapped on the SCADA system of each state so that they can be monitored from SLDC/NRLDC.*  *(d)All STUs and SLDCs to map/network the UFR and df/dt on their SCADA system.*  *(e)NRLDC to submit the compliance report on the progress of installation of additional UFR and df/dt relays and quantum of load relief expected during contingency by 31.3.2014.*    *(f)The staff shall examine the reports of the Member-Secretary, NRPC and NRLDC and shall submit to the Commission within one month of the receipt of the reports of NRPC and NRLDC.*  **Protection Department of DTL may update the status.** |

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| 9.4 | All out efforts should be made to implement the provisions of IEGC with regard to Governor Action - POSOCO to take up the matter with Central Commission  **- Time frame – 3 months** | 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. **Activity in progress.**  As far Delhi Gencos are concerned, PPCL informed that the generating stations in Delhi mainly gas based stations are exempted from FGMO/RGMO. They quoted section 5.2(f)(iii) of IEGC indicating “*all other generating units including the pondage upto 3 hours gas turbine / combined cycle power plants, wind and solar generators, and nuclear power plants are exempted from operation of RGMO / FGMO till the Commission review the situation. However, all the 200MW and above thermal machines, should have the RGMO / FGMO*.”  BTPS representative informed that clause is applicable to the capacity above 200MW units. As far as BTPS is concerned, the units are fitted with mechanical governors as BTPS has old LMZ make Russian turbines with no electro hydro governing system. However to meet the grid code stipulations, 210MW machines would be provided with RGMO facilities in the proposed R&M activities to be started from 2014-15 onwards.  **BTPS may update the status.** |
| 9.5.1 | POSOCO should take up with Central Commission the issue of inconsistency between congestion regulation and detailed procedure framed there under so that congestion due to forced outage UI can be handled effectively.  **Action : Posoco within one month** | CERC vide order dated 22.04.2013 has approved amendment to the detailed procedure for relieving congestion in real time operation under Regulation 4(2) of the Central Electricity Regulatory Commission (Measures to relieve congestion in Real Time Operation) Regulation 2009. The revised procedure is available in NRLDC’s website homepage. |
| 9.6 | Outage planning should be in coordinated manner | NRPC OCC has already decided all Interstate Transmission Element shut-down should be planned and forwarded to RPC by STUs by 5th of every month for the next month. In addition to above annual outage plan should also be drawn out.  DTL is adhering the procedure with regard to shutdown of Transmission lines. |
| 9.7 | 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 | The order for Dynamic Simulation Study and Reactive Power compensation have been placed to CPRI. The study is expected to be completed soon.  Planning Department of DTL may update the status. |

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| 9.8 | The powers of load dispatch centers, regulatory commissions related to non compliance to statutory / regulatory provision including that for non compliance for direction for non payment of UI charges needs review . Appropriate amendments need to be carried out in Electricity Act 2003 after such review.  **Action MoP, GoI Time frame : 6 months.** | Under the consideration of Ministry of Power, GoI. |
| 9.9.1 | Regulatory provisions regarding absorption of Reactive Power by generating units needs to be implemented :  **Posoco Time frame : immediate** | In 79th NRPC’s OCC meeting, NRLDC informed that they have taken up the matter with Regional Generators to absorb reactive power as per the capability during high frequency conditions. They advised SLDCs to do the same. In 84th Operation Coordination Committee meeting of NRPC held on 19.02.2013. It was decided to monitor the reactive power generation on real time basis at RLDC / SLDC level through SCADA. The relevant portion of the MoM is reproduced hereunder :-  **Monitoring of reactive support from generating units.**  Representative of NRLDC stated that critical high voltage is being experienced in the Northern Grid during night off peak hours. Available shunt reactors at the substations are being taken into service, power order on HVDC bi-pole is being reduced, instructions are being given to generators to absorb reactive power to the extent possible and under exceptional conditions under-loaded/redundant EHV transmission lines are being manually opened for voltage regulation. Para 13.6 of the revised Transmission Planning Criteria envisages that during operation, following the instructions of the System Operator, the generating units shall operate at leading power factor as per their respective capability curves. Further as per regulation 5.2 (k) of the Indian Electricity Grid Code, all generating units shall normally have their automatic voltage regulators (AVR) in operation. It is proposed that the reactive power absorption/injection by the generating units may be monitored in the format given under   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | GENERATOR REACTIVE POWER MONITORING TEMPLATE | | | | | | | Name of the Power Station | | |  | | | | Date | | |  | | | | Generating unit | Time | MW at Generator terminals | MVAr Lead/Lag at Generator terminals | Generator transformer Tap Position | Voltage at the HV Bus | | #1 | hh.mm |  |  |  |  | | hh.mm |  |  |  |  | | …. |  |  |  |  | | #2 | hh.mm |  |  |  |  | | hh.mm |  |  |  |  | | …. |  |  |  |  | | #3 | hh.mm |  |  |  |  | | hh.mm |  |  |  |  | | …. |  |  |  |  | | …. |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |

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|  |  | All generating utilities have assured to facilitate the provision of real time gross generation of active and reactive power generation and other parameters as decided in the 84th OCC of NRPC so that the reactive power generation can be monitored by SLDC and NRLDC.  **SCADA Division of SLDC may update the status.** | |
| 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 islands not only help in maintaining essential services but would also help in faster restoration of Grid.  **Action : CEA, RPCs, CTU, STUs, SLDCs and generators Time Frame : six months** | Scheme has been finalized.  PGCIL is the implementing agency. Expected to be in place soon.  **Protection Department of DTL may update the status.** |
| 9.13.1 | System Operation needs to be entrusted to independent system operator. In addition, SLDCs should be reinforced for ring fences for ensuring function autonomy.  **Action : Govt. of India, time frame : one year** | Though Delhi SLDC is operated by DTL it has full autonomy with regard to grid operation. Further it has separate ARR approved by DERC for financial autonomy. Further a committee constituted for creation for SLDC as a separate company has already given its report to State Government. Decision is likely in line with the decision of Govt. of India on Independent System Operator (ISO). |
| 9.13.2 | Training and certification of system operators need to be given focused attention. Sufficient financial incentives need to be given to certified system operators so that system operation gets recognized as specialized activity.  **Action : Govt. of India State Govt. Time frame : 3 months** | Discussed in the 1st meeting of the National Power Committee held on 15.04.2013. Maharashtra has already started an incentive scheme for System Operators in the State. Gujarat has also trained its system operators. States were requested to expedite training of system operators and it was recommended that only certified operators should man the Load Despatch Centers.  As far as Delhi is concerned the officers of SLDC are being sent regularly for training to upgrade the knowledge. So far 19 Engineers have obtained basic certificate and one Engineer got the certification in specialist course in Regulatory affairs.  Incentive schemes are proposed for certified operators which are under the active consideration of the DTL management.  Distribution utilities also proposed to include their Load Despatch Engineers in the certification programs.  GCC advised SLDC to take up the matter with NPTI/PSTI for including the load dispatch engineers of Distribution Licensees in the certification courses. Accordingly, the matter was taken in FOLD meeting wherein the POSOCO to agreed to consider the proposal of including System Operators of Areas Control Centers of Distribution Licensees , if SLDC recommends, in this regard.  **Discoms may intimate the name panel of System Operators whose name can be forwarded to System Operator Training Programs.** |

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| 9.14 | Intrastate transmission system needs to be planned and strengthened in a better way to avoid problems of frequent congestion.  **Action : STU**  **Time Frame : 2 Years** | In the meeting chaired by Director (Operations) on 05.02.2013 the transmission system and distribution system constrains have been identified and remedial measures have been suggested to overcome the constraints on long term and short term basis. It is expected that the major constraints would be resolved within two years.  **The progress is regularly being monitored in the Grid Coordination Meetings**. |
| 9.15.1 | Appropriate amendments should be carried out in Grid connectivity standards to restrain connectivity of a generating station or a transmission element without required communication and telemetry facilities | GCC advised all utilities that efforts should be made to ensure the data flow to the control centers w.r.t. new installations as per the relevant provisions of connectivity conditions of CEA and relevant provisions of IEGC.  **GCC also decided not to issue energization certificate without data connectivity to SLDC / RLDC.** |
| 9.15.2 | The communication network should be strengthened by putting fiber optic communication system. Further, the communication network should be maintained properly to ensure reliability of data at Load Despatch Centers. | PGCIL have informed that requirement of Fibre Optic link for effective communication is being worked out by them with STUs through different RPCs and its implementation is being done in a progressive manner. The work of laying Fibre Optic cables in all the regions is being awarded progressively from December 2012 and is likely to be completed by the year 2014.  DTL has also given the requisition to PGCIL for laying of 286 Kms of OPGW for strengthening of communication system across Delhi under the above contract. |
| 9.15.3 | RTUs and communication equipment should have uninterrupted power supply with proper battery backup so that in case of total power failure, supervisory control and data acquisition channels do not fail. | PGCIL has intimated that at all locations batteries have been replaced except 6 locations in NR to be done by DTL. It was informed that these batteries would be replaced by November 2013.  **O&M Departments of DTL may update the status.** |
| 9.18 | There is need to reinforce system study groups in power sector organizations to analyze the system behavior under different network status / tripping of lines /outage of generators. Where these do no exist, these should be created.  **Action by : CEA, STU, CTU**  **Time frame : one year** | As far as Delhi is concerned it was informed by Planning Deptt. that they are under the process of reviving the system study group consisting members of all stake holders and 1st meeting is expected to be conducted in the 2nd week of September 2013.  **Planning Department of DTL may update the status**. |

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| 9.20 | For smooth operation of Grid system, it is absolutely important that all the power generating and distribution stations are connected on a very reliable telecom network.   1. A proper network may be built up preferably using MPLS (Multi Protocol Label Switching) which is simple, cost effective and reliable. In remote place where connectivity is a problem, the stations can use dedicated fiber cable from the nearest node. 2. Since POWER GRID has its own fiber optic cables, practically covering all major nodes and power stations, a proper communication / IT network may be built using dedicated fibres to avoid any cyber attack on the power system. | CTU have informed that they already have a dedicated independent communication network in place. Further, they are in the process of developing a Grid Security Expert System (GSES) at an estimated cost of about Rs.1300 Crore which involves laying of optical fiber network costing about Rs.1100 Crore for reliable communication and control of under-frequency & df/dt relay based load shedding, etc. System will include substations of 132kV level and above. |

**NEW ISSUES**

**3 OPERATIONAL ISSUES**

**3.1 POWER SUPPLY POSITION**

The power supply position for summer 2014 would be presented by SLDC in the meeting.

Distribution Companies are requested to provide the plans to meet the shortfalls during summer season.

**3.2 SUGGESTIONS TO OVERCOME THE TRANSMISSION CONSTRAINTS.**

The peak demand during summer months is expected 6000MW during June– July 2013. The transmission capacity as per the present information is 6100MW subject to commissioning of 400kV Dadri - Harsh Vihar Double Ckt. Line (100MW) and revival of 220kV AIIMS - Ridge Valley Double Ckt underground cable (300MW). As per the planning criteria for ensuring hassle free meeting of 6000MW demand, the transmission capacity requirement is 9000MW. Due to the less transmission capacity available, occasional congestion cannot be ruled out, though peak demand occurs only for 0.1% age of the time in a month as per the previous years records.

The transmission and distribution constraints were discussed in details in the meeting held on 05.02.13 at SLDC chaired by Dir. (Operations), DTL. The gist of the discussions on the issue of increase of transmission capacity is as under :-

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| **Sr. No.** | **Details of transmission constraints** | **Suggestions drawn out as per discussions held on 05.02.13 and 8th GCC meeting held on 08.03.13** | **Target fixed** | **Status as on 15.01.2014** |
| 1 | Outage of 220/33kV 100MVA Tx-II at Electric Lane – out since 20.09.2012 | Even though the present load is only 50MW. To have redundancy, the Tx. should be energized during the summer season | 31.07.2013 | The transformer is energized on 19.11.2013 at 21.22hrs. on no load and load was taken on 03.12.2013 at 12.38hrs. |
| 2 | Overloading of 220/66kV 100MVA Txs at Mehrauli during peak hours | 160MVA Tx available at site to be energized before summer 2013. | 31.03.2013. | The transformer is energized on 31.10.2013 at 14.40hrs. on no load and subsequently load taken on 07.11.2013 at 13.30hrs. |
| 3 | Overloading of 220/66kV 100MVA Txs at Wazirabad | 160MVA Tx available at site to be energized before summer 2013. | 31.05.2013. | The transformer is as site. In tendering process, for supply, erection, testing and commissioning of 220kV & 66kV Bays the parties quoted abnormally high prices than estimated. The tender has been dropped. For further course of action, the revised estimate is under the consideration of Finance Deptt. |
| 4 | Stability of supply at Gazipur | 160MVA Tx available at Gazipur to be energized as quick as possible | 30.06.13 | The transformer is available at site. In tendering process, for supply, erection, testing and commissioning of 220kV & 66kV Bays the parties quoted abnormally high prices than estimated. The tender has been dropped. For further course of action decision is pending with Director (Opr) / Director (Finance)  Civil foundation works are expected to be completed by Civil Deptt. by December 2013 |
| 5 | Augmentation of 220/33kV 50MVA Tx to 220/33kV 100MVA Tx at Okhla - out since 19.36hrs. on 05.06.2010 | The Tx should be augmented before onset of summer 2013 | 31.05.2013 | The existing 220/33kV 100MVA Tx received for augmentation was diverted to RPH to replace the damaged 100MVA Tx. at RPH. The new Tx of CGL make received on 24.07.2013 at Okhla. However, design of Tx is different from earlier CGL make Tx. The civil foundation modification work completed on 20.11.2013. Transformer erection work is under progress. The transformer is expected to be commissioned by 31.01.2014 |
| 6 | Delay in commissioning of 220kV AIIMs – Ridge Valley D/C Cable. | For ensuring maximum evacuation from Maharani Bagh S/Stn and to give relief to 400/220kV ICTs at Bamnauli, the link should be established to meet the summer load demand. | 31.05.2013 | One of the cables (Ckt-II) commissioned on 15.04.13 at 18.38hrs. The other circuit’s cable is being rerouted due to the upcoming DMRC Station at Bhikaji Cama Place. DTL team has gone to Bawal for inspection of Cable. The cable has been delivered and laying work has been completed. Out of six nos. of joints three joints have been made and remaining three joints are expected to be completed by 19.01.2014. cable is expected to be commission by 31.01.2014. |

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| **Sr. No.** | **Details of transmission constraints** | **Suggestions drawn out as per discussions held on 05.02.13 and 8th GCC meeting held on 08.03.13** | **Target fixed** | **Status as on 15.01.2014** |
| 7 | Revival of 220kV Maha Rani Bagh – Trauma Center (AIIMS) D/C which is out since 31.05.13 due to drilling process by Delhi Jal Board | Order has been placed to M/s. L.S.Cables for 400Mts. 1200 Sq. mm cable piece.. The cable is expected to be delivered by 15.12.2013. The ckts. are expected by 15.01.2014. | | |
| 8 | To ensure maximum evacuation from Mundka 400kV S/Stn. | 220kV Najafgarh – Kanjhawala Ckt. to be LILO at Mundka | Tower cast completion by 30.06.2013 and 15 days shut-down for LILO after that | The length of Loop in section (Najafgarh – Mundka) is 5.5Kms. & for loop out section (Mundka – Khanjawala) is 3.2Kms. Total nos. of towers required to be erected are 35 locations. The route approval was received from DDA in January 2010. For erection of towers, interruptions occurred due to agitation by farmers. At 30 locations tower foundation has been cast. The foundation casting is done under police protection. Towers are erected in 19 locations. Since the clearance for Erection of 5nos. of Towers in the re-routed way was not given by DDA, the plan for the route already approved by DDA was decided to be accepted and work of the foundation of these location is in progress. Tower material and Insulators are also not available at present. 4 Court cases have also been filed by Farmers. As per present condition, work might be completed by end of June 2014. |
| 9 | Stability of supply of West Delhi / North Delhi areas | LILO of 220kV Bawana – Najafgarh Ckt. at Kanjhawala | Route length of the line for Loop in is 3.2Kms for and for Loop Out, the length is 3.3Kms. Towers and foundation casting have been erected at 30 locations. Stringing work has been completed for loop out portion. Due to non availability of stringing material, the work was held up but now it is again started. The repair work of foundation which was damaged in public agitation is now under way. The work is expected to be completed by 31.12.2013. | |

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| **Sr. No.** | **Details of transmission constraints** | **Suggestions drawn out as per discussions held on 05.02.13 and 8th GCC meeting held on 08.03.13** | **Target fixed** | **Status as on 15.01.2014** |
| 10 | The over loading of Mandola ICTs and 220kV Wazirabad – Geeta Colony – Patparganj – IP D/C line. | Commissioning of 220kV Maharani Bagh – Gazipur D/C line | Subject to providing 200MW power to UP. | Route length is 9Kms and number of Tower location is 42. Foundation cast for 36 numbers of towers has been done and at 34 locations, towers have also been erected. NOC for 5 numbers of towers falling in the territory of U.P. has been given by the UP Irrigation Department in principle during the month of Sept. 2013 subject to the condition that lease rent @Rs. 18000/- per year for 15 years to be remitted and in case of requirement the land should be vacated by DTL. On the advise of Okhla Irrigation Deptt. (U.P. Govt.) case for payment of Rs. 2.7Lacs as lease rant has been initiated. On 27.11.2013 formal approval for starting the work has been received from U.P.Irrigation Deptt. Rs. 3.36 Lacs is required to be paid to GDA for taking over tower material lying in their possession. Work has started at one tower location is falling in Yamuna River bed as water has receded. 270Nos. Of polymer insulators are required to be arranged. The work is expected to be completed by 31.03.2014. |
| 11 | The transmission constraints in North Delhi areas | Commissioning of 220kV Wazirpur S/Stn. | 31.05.13 | 220kV Wazirpur Sub-Station is ready and applied for electrical inspector clearance. Sub station is expected to be commissioned by end of Dec. 2013. The Route length of infeed from Shalimarbagh – Wazirpur is 4.18Km. Cable has been laid. However, out of 60joints, 48 joints have been made so far. jointing work is delayed due to extended rains. Only cable end termination box work is pending as on date. As per the present indications, work is expected to be completed by 28.02.2014.  However, the 2nd infeed i.e. 220kV Mundka – Peera Garhi – Wazirpur link is expected to be commissioned by June 2014. The total route length is 8.6Km from Peera Garhi to Wazirpur. Out of 19 sections, work of cable laying has been completed in 10 sections. Out of 120 joints 42 joints has been completed. M/S TBEA is the vendor for execution of this work. |

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| **Sr. No.** | **Details of transmission constraints** | **Suggestions drawn out as per discussions held on 05.02.13 and 8th GCC meeting held on 08.03.13** | **Target fixed** | **Status as on 15.01.2014** |
| 12 | The transmission constraints in West and North Delhi areas | Commissioning of 220kV Peera Garhi S/tn. | Though it was expected to be commissioned by 30.06.13, due to delay in getting RBI approval for opening Project Account for Rupees payment to the successful Chinese Bidder, the project is expected to be commissioned only by 31.12.13 | The sub station would be ready by March 2014.  As far as 220kV link i.e. 220kV Mundka – Peera Garhi ckt. is concerned high density ethylene pipe (HDD) has been laid. Total Route length is 13Km out of 24 sections cable laying work has been completed in 18 sections. Work is under progress at 3 sections. Cable is not available for 3 sections. About 67% cable laying work has been done. However, the cable joint works are still pending. 10 Km cables are also required to be delivered by M/s TBEA (LC is required to be opened). The project is expected to be completed by 30.06.2014. |
| 13 | Over loading at Mandola and transmission line between Mandola and IP, the commissioning of the S/Stn to be expedited before summer 2013 | Commissioning of 400kV Harsh Vihar S/Stn. | Due to delay in commissioning of 400kV Dadri – Harsh Vihar D/C line by PGCIL, the target could not be fixed. | The total length of the circuit is 56Kms. There are 161 no. of Towers locations and at 149 locations, foundation have been cast. At 141 locations, towers have been erected. Stringing work has been started on 29th July 2013 and about 15kilometre stringing work has been completed. At remaining locations foundation casting and tower erection work is under progress .  Work is expected to be completed by 15.02.2014. |

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| **Sl. No** | **Name of S/stn** | **Name of the Element** | Date | **Reason** | **Target** | Present status |
| 1 | 220kV Ridge Valley | 220/66kV 160MVA Pr. Tr. –II | 21.05.13 at 08.15hrs. | Poor IR Test result |  | Transformer energized on 13.12.2013 at 19.59hrs. |

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| **Sr. No.** | **Details of transmission constraints** | **Suggestions drawn out** | **Target fixed** | **Present status and Target fixed** |
| 1 | Over-loading of 220kV Rohini-I S/Stn | Commissioning of 220kV Bawana – Rohini-II Double Ckt line (O/H) | Before summer 2014. | Route length is 6.1Kms. Out of 38 locations, at 29 locations foundations have been cast. 19 towers have also been erected out of 38. Tower material are under procurement. Polymer insulators are also required to be arranged. OPGW would be made available by PGCIL in ULDC Phase-II Scheme. Expected to be commissioned by June 2014. |
| 2 | Overloading of 220kV Ckts. from Mandola to BTPS namely 220kV Mandola – Wazirabad (4 Ckts), 220kV Wazirabad – Geeta Colony (Two Ckts), 220kV Geeta Colony – Patparganj (2 Ckts), 220kV Patparganj – IP (2Ckts), 220kV IP – Pragati Ckt (2 Ckts), 220kV Pragati – Sarita Vihar (2 Ckts.) after removal of present LILO, 220kV Sarita Vihar Ckt (2 Ckts) | Capacity enhancement of transmission lines should be carried out in phased manner  **In 1st phase**  220kV Wazirabad – Geeta colony D/C line, 220kV Geeta colony – Patparganj D/C line  **Second Phase**  220kV Mandola–Wazirabad Ckt-I, II, III & IV  220kV Pragati – Sarita Vihar Ckt-I & II  220kV Sarita Vihar – BTPS Ckt-I & II  **Third phase**  Enhancement of the capacity of switchgears at Wazirabad, Geeta Colony, Patparganj, IP and Sarita Vihar S/Stns. | Planning Deptt to prepare the scheme so that the augmentation can be done before summer 2014  To be augmented by summer 2015  Subsequently | The budgetary offer for augmentation of 220kV Wazirabad – Geeta Colony Double Ckt. and 220kV Bamnauli – Papankalan –I Double Ckt. has been requested from the venders.  Even though efforts are underway to increase the capacity of these lines before summer 2014. It is likely to happen only before Summer 2015 due to procedural delays. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Details of transmission constraints** | **Suggestions drawn out** | **Target fixed** | **Present status and Target fixed** |
| 3 | Overloading of Transformers at Pappankalan-I and 220kV Line between Bamnauli and Pappankalan-I | Two transformers to be augmented to 160MVA Txs along with 66kV bus bars at Pappankalan-I. Lines capacity of 220kV Bamnauli - Pappankalan-I should also be augmented to handle the enhanced transformation capacity. | Planning Department to prepare the scheme so that that the system to be in place before summer 2014 | The proposal of augmentation of transformers’ has been put up to the DTL Board for approval.  But the Board has return the proposal with query that how both the transformer (220/66kV 100MVA Tx.) would be utilized. The Planning Deptt. would resubmit the proposal of utilization of these transformers. Since at least six months are required for vender for supply of 160MVA Transformers and the long shutdown of existing transformers for augmentation purpose only during Oct.- March period. The augmentation is possible only before summer 2015. |
| 4 | Over-loading of 400/220kV 315MVA transformers at Mandola sub station of PGCIL | 31st Standing Committee Meeting of Power System Planning held on 02.01.2013 at CEA, has approved the augmentation of all four 315MVA Txs to 500MVA capacity. | To be implemented by PGCIL. It is understood that two Txs would be augmented before summer 2014 and others before summer 2015. | Since at present no 500MVA Trs. are on order, the augmentation is planned from Summer 2015 |
| 5 | Over-loading of 400/220kV 315MVA ICTs at Ballabhgarh | 31st Standing Committee meeting of Power System Planning held on 02.01.2013 at CEA has approved the augmentation of all four 315MVA Txs to 500MVA | To be implemented by PGCIL. It is understood that all Txs would be augmented before summer 2015. | Since at present no 500MVA Trs. are on order, the augmentation is planned from Summer 2015 |
| 6 | Alternate source to RPH | The establishment of link between 220kV Kashmiri Gate to RPH to be established so that reliable link between 220kV Harsh Vihar – Wazirabad – Kashmiri Gate – RPH could be established for ensuring reliability of power supply of Central and East Delhi areas. | Scheme for GIS has already been prepared and is under finance scrutiny. At Kashmiri Gate, three Nos. of new bays to be erected by M/s. ABB. Engineers has already visited the site. Expected to be commissioned before Summer 2015. | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | | **Details of transmission constraints** | **Suggestions drawn out** | **Target fixed** | **Present status and Target fixed** |
| 7 | Overloading of 66/11kV at Najafgarh, Pappankalan-I, and Wazirabad and 33/11kV Txs at Shalimar Bagh 220kV Sub-Stations | | Due to problem of getting space near 220kV S/Stns. Distribution Licensees requested DTL to enhance the capacities of the 66/11kV and 33/11kV transformers at critically loaded sub-stations namely Najafgarh, Pappankalan-I, Shalimar Bagh and Wazirabad before summer 2014. | Planning Department has already taken up the matter with DERC during July 2013 which has been followed up by Director (Operations) in October 2013. Still, approval is awaited from DERC. | |
| 8 | In adequate transmission capacity at Masjid Moth | | Planning Deptt. to prepare scheme so that additional 220/33kV Tx is in place at Masjid Moth before summer 2014. | The plan has already been prepared and Board approval obtained. The procurement action is being considered by C&MM Deptt. After order at least six months are required for commissioning of transformer. All out efforts are taken to commission the transformer by summer 2014. The 3rd transformer would be in place by summer 2014. | |
| 9 | Enhancement of transformation capacity from existing 2X100MVA (220/33kV) Txs. At Lodhi Road | | At present both the transformers are running at full capacity and occasional load shedding also taking place due to over loading. | Due to space constraint the 3rd Tx is possible only after the conversion of existing conventional Grid S/Stn to GIS which is expected to be in place by Summer 2014 (August 2014 end). | |

**3.3** **CAPACITOR INSTALLATION PLAN**

The present capacitor position in Delhi is as under :-

|  |  |  |  |
| --- | --- | --- | --- |
| **Utility** | **Installed capacity in MVAR (HT)** | **Installed in capacity in MVAR (LT)** | **Total** |
| BYPL | 863.8 | 102 | 965.8 |
| TPDDL | 657.4 | 119 | 776.4 |
| NDMC | 209.8 | 24 | 233.8 |
| DTL | 753.5 | 0 | 753.5 |
| BRPL | 1178.78 | 242 | 1420.78 |
| RPH | 20 | 0 | 20 |
| MES | 20.1 | 0 | 20.1 |
| Total | 3703.38 | 487 | 4190.38 |
| Requirement as per NRPC Study | 4594 as on 31.03.2013 |  |  |

The utilities have informed that they have planned the installation of additional capacitors are as under :-

**Table-16**

|  |  |  |  |
| --- | --- | --- | --- |
| Utility | Planning for installation of additional capacity in MVAR | Installed so far | Remarks |
| 2013-14 |
| TPDDL | 72.2 | 10.08 | 10.08MVAR installed at RG-28 S/Stn but not yet energized. |
| BRPL | 167.4 | 10.8 | Additional 256.4MVAr capacity is planned to be added at LT level in 2013-14. Further 10.8MVAR added at GGSH S/stn on 13.02.2013 |
| BYPL | 108 | 5.4 | Approval for 32.4MVAr has already been accorded by DERC. 5.4MVAR added at Jama Masjid S/stn on 12.06.12 |
| NDMC | 126 | 30.24 | 5.04MVAr capacitor is also planned for Ali Ganj, Jorbagh for which building is yet to be constructed. Further 30.24MVAR capacity added at Keventry Diary, Sanjay Camp and Raisina Rd S/stn. 10.08MVAR each during May 2013. |
| MES | -- | -- | The installed capacity 21.1MVAR is sufficient to meet the load of MES. However for voltage regulation they have planned additional capacity at LT level for 2013-14. |
| Total | **473.6** | **56.52** |  |

Discoms requested Planning Department of DTL to complete the study of capacitor requirement without which DERC will not allow for capitalization of any additional capacitors

**Planning Deptt. of DTL may update status.**

**3.3 NON USAGE OF BAYS ALLOTTD TO VARIOUS UTILITIES FROM DTL SUB-STATIONS.**

The details of plans to utilize the unutilized bays of recently commissioned sub-stations given by the utilities are as under:-

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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** |
| 1 | 220kV Trauma Center | 33kV | 1. Sanjay Camp,  2 Jor Bagh  3.IIT  4. Bhicaji cama  **Total = 4 Bays** | NDMC  NDMC  BRPL  BRPL | 19.11.09  17.06.11 | 1. As per the information provided by NDMC, the nomenclature has been changed to Race Course. Work is held up due to monsoon. However, expected by Dec. 13.  2. ½ cable laid, expected by sept.13. However, Sub-station would be ready by Dec. 2013. Work is held up due to monsoon.  3. 40% Cabling work completed. Matter is subjudice due to ROW issue.  4. 90% Cabling work completed. Matter is subjudice due to ROW issue. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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  **Total = 5 Bays** | NDMC | 19.11.09 | 1.50% cable laid. Work is held up due to permission of digging.  2. The work for laying of cable has been awarded. The cable laying activities would be started after monsoon. Expected by December 2013.  3. Land allocation for Janpath Sub-station is still awaited. However, it has been proposed by NDMC to use this Bay for new proposed 33kV Sub-station at Parliament Annexure for which land has been allocated.  4. Bay allocated to DMRC by NDMC for their upcoming project in Phase-3  5. The land allocation fro the S/stn at Delhi High Court premises has not been obtained so far. However, NDMC is planning to terminate the cable at some other S/stn which is under planning stage. |
| 3 | 220kV DSIDC  Bawana | 66kV | 1 Bawana-I  2 Bawana-I  3 Bawana-7  4 Bawana-7  **Total = 4 Bays** | TPDDL | 19.11.09 | For 1&2 the cable work is under progress. Expected by Sept.13  For 3&4 it is a deposit work of DSIIDC. The scheme has been approved by DERC and expected by Feb. 2014. Further, DSIDC has yet to deposit the amount for which demand note has already been raised. One of the Bays allotted for Bawana-7 S/stn is now allotted to the upcoming MSW plant. This bay would be established by the time commissioning of Bawana-7 S/stn. |
| 4 | 220kV Rohini-II | 66kV | 1 RG-30-I  2 RG-30-II  **Total = 2 Bays** | TPDDL | 31.05.12 | Scheme has been submitted to DERC for approval. Both the circuits would be energized after the establishment of Rohini-30 Grid S/Stn. |
| 5 | 400kV Mundka | 66kV | 1. 66kV Mundka ckt-I  2. 66kV Mundka ckt-II  3.66kV Bakarwala ckt-I  4.66kV Bakarwala ckt-II  5. 66kV Pashim Vihar | BRPL | 19.11.09 | 1 &2. Work for construction of 66kV Mundka S/Stn. Has been awarded in June 2013 and S/Stn. Is expected by March 2014. The total length of Cable is 400 mtrs.  3&4. The scheme for the establishment of the Bakkarwala S/Stn. was approved by DERC in 2007. However, the scheme was not implemented due to inadequate load requirement. Now, DERC has again been approched for approval as price has been increased significantly.  5. The cable length is more than 18 Kms. To avoid the sheath voltage inducement problem has been encounter on 66kV Nangloi, Nangloi Water Works and Mangolpuri Feeders, it was decided to take out the Paschim Vihar feeder from the upcoming 220kV Bodella S/Stn. The planning steering Committee for re-allocation of Paschim Vihar Bay allotted to BRPL from Mundka to upcoming Dichau Kalan S/Stn. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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** |
|  |  |  | **TPDDL**  1.66kV Mangol Puri-II  2.66kV Kirari Sultan Puri Ckt.-I  3.66kV Kirari Sultan Puri Ckt.-II | TPDDL | 19.11.09 | 1.For Mangolpuri Ckt-II, though the scheme has been prepared but has not been submitted to DERC due to pending resolution of T-Off to Nangloi on Mangolpuri ckt.  For 2&3 the Sub-stn is envisaged in 2015-16 and by the time the Ckt would be readied. The matter has been taken up with Delhi Govt for allocation of land for establishment of 66kV Grid S/Stn. |

**Utilities may update the status.**

**3.4 ISSUE REFERRED FROM STEERING COMMITTEE OF PLANNING.**

**3.4.1 Establishment of 66kV Dhaula Kuan DMRC S/STN.**

DMRC has taken up the matter with BRPL for feeding the Dhaula Kuan S/Stn by LILO of one cable between 66kV Park Street and Ridge Valley S/Stns. This was approved in the last meeting of GCC held on 06.08.2013.

BRPL vide their letter dated 28.11.2013 has not agreed to the proposal. BRPL has in fact suggested the LILO of the both the circuits between Park Street and Ridge Valley Ckts at Dhaula Kuan.

The Steering Committee meeting held on 12.12.2013 has also decided to implement the decision taken in the GCC meeting held on 06.08.2013.

The Steering Committee further suggested DMRC that the provision of bus coupler be made at 66kV Dhaula Kuan S/Stn. So that power flow can take place between Park Street and Ridge Valley in contingency on which DMRC no agreed as it cannot become the part of utility for power transfer between them and DMRC as DMRC is very important public transport system and providing the power for Metro operation is the highest priority. During such transfer of power, operation control centers of DMRC which is responsible for running trains will come into the picture which may lead to unsafe train operations. Since, there was no consensus in the Steering Committee meeting, the matter has been referred to GCC for resolution.

GCC may deliberate.

**3.5 AUGMENTATION OF 66kV CIRCUITS EMENATING FROM GT STATION.**

The issue was discussed in Delhi Operation Coordination Committee held on 30.07.2013.

BYPL raised the issue of load constraints faced on 66 KV O/G feeders from GTPS. Due to long outage of 220KV BTPS - Gazipur line, it is required to take maximum load on 66 KV GTPS - Akshardham feeder (to be further distributed to MVR-1&2 areas). This arrangement can reduce the loading on 220 KV Patparganj Transformers thereby load-shedding in East Delhi area. However, due to under-sized conductor used at O/G bays at GTPS, loading above 300-350 Amps is not allowed, while the capacity of the Akshardham feeder is about 550 Amps. (630 sq.mm.cable).

GTPS informed that a complete shutdown of 66 KV half-bus is required to augment the conductor of O/G bays. During shutdown, both the stations auxiliary transformers will remain affected as these are installed on the same half-bus vicinity. This will require complete shutdown of the station as there will be no-supply to the station auxiliaries and it may take around 72 Hrs. to restart the station after the shut-down.

In order to avoid complete shut-down of the station, it was suggested to explore the possibility to arrange auxiliary supply through 11kV sources by BYPL so that the shut-down of the complete station can be obviated. BYPL agreed to provide 11kV supply for auxiliary needs on temporary basis.

SLDC suggested to do the augmentation work after second week of October 2013 during Saturday and Sunday.

GCC advised IPGCL to plan the work during Saturday and Sunday after second week of October 2013 provided auxiliary needs are arranged through 11kV BYPL sources.

**BYPL and GT may update the status.**

**3.6 WORK OF REPLACEMENT OF PORECELAIN INSULATORS WITH POLYMER AND REPLACEMENT OF CONDUCTORS OF 220KV NARELA–ROHTAK ROAD TRANSMISSION LINES OWNED BY BBMB.**

In the last GCC meeting, Planning Department of DTL was advised to draw out schemes immediately so that the stability of power supply of the areas fed from Rohtak Road S/Stn is ensured even by establishing a 220kV GIS S/Stn at the existing space of 33kV Rohtak Road S/Stn of TPDDL. The 220kV feed from nearby 400kV S/Stn preferabley from Mundka may also be ensured. TPDDL had even agreed the suggestion of providing space for establishing for GIS.

**Planning Department of DTL and TPDDL may update the status.**

**4 COMMERCIAL ISSUES.**

**4.1 INTRASTATE UI ACCOUNT**

The latest position of Intrastate UI account is as under:-

|  |  |  |
| --- | --- | --- |
| **UTILITY** | **AMOUNT IN RUPEES CRORES**  **RECEIVABLE BY UTILITIES** | **PAYABLE BY UTILITY  (position as on 17.01.2014)** |
| TPDDL | 20.5394871 | 0.0000000 |
| BRPL | 0.0000000 | 92.7907086 |
| BYPL | 30.2977568 | 0.0000000 |
| NDMC | 27.9081480 | 0.0000000 |
| MES | 0.0000000 | 0.0000000 |
| IPGCL | 0.5165137 | 0.0000000 |
| PPCL | 2.1742410 | 0.0000000 |
| BTPS | 1.2561128 | 0.0000000 |
| **TOTAL** | **82.6922594** | **92.7907086** |

The interest payment of UI amount has also been settled as under:-

**DETAILS OF PAYMENT RECEIVED FROM NRLDC AGAINST INTEREST ON UI CHARGES**

|  |  |  |
| --- | --- | --- |
| **DATE** | **AMOUNT**  **(Rs. In Crore)** | **Period corresponding to** |
| 25.04.2012 | 3.59 | 3rd quarter of 2011-12 |
| 16.05.2012 | 7.52 | 4th quarter of 2011-12 |
| 28.01.2013 | 40.23 | 1st, 2nd and 3rd quarter of 2012-13. |
| 02.07.2013 | 11.24 | 1st, 2nd and 3rd quarter of 2012-13. |
| **TOTAL** | **62.58** |  |

**INTEREST CALCULATION UI PAYMENTS (in Rs. Crores)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Utility** | **2011-12** | **2012-13** | **Total** |
| **NDMC** | 1.1020835 | 4.8823321 | 5.9844156 |
| **PPCL** | 1.1955113 | 1.7382714 | 2.9337828 |
| **IPGCL** | 0.0441188 | 0.1391949 | 0.1833137 |
| **TPDDL** | 1.2738977 | 17.5872983 | 18.8611960 |
| **BYPL** | 1.4042043 | 19.7683589 | 21.1725632 |
| **BTPS** | 0.0717167 | 0.9332447 | 1.0049614 |
| **MES** | 0.2187122 | 1.2425519 | 1.4612641 |
| **Total** | **5.3102445** | **46.2912522** | **51.6014968** |

It is mentioned that though the substantial amount of the outstanding dues of the receivable utilities have been cleared / adjusted, the entire outstanding could be cleared only if the paying utility i.e. BRPL clears the outstanding dues amounting to Rs.92.7907086 Crs. The State Electricity Regulatory Commission has already been informed of the position details of which are already enclosed as annexure filed along with the SLDC submission dt. 26.09.13 in Petition No. 143/MP/2013.

**GCC may deliberate.**

**5 Formation of Renewable Regulatory Fund (RRF)**

CERC vide order dated 09.07.2013 has approved the detailed procedure for the implementation of mechanism of Renewable Regulatory Fund under Regulation 6.1 (d) of Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations 2010.

Renewable Regulatory Fund has been implemented w.e.f. 15.07.2013. CERC has also amended the Grid Code w.e.f. 17.02.2014 in the operation of RRF. The extract is appended hereunder:-

(14) Para 5 of Annexure-1 to the Grid Code (Complimentary

Commercial Mechanism) shall be substituted as under:

“5. The wind generators shall be responsible for forecasting their generation upto an accuracy of 70%. Therefore, if the actual generation is beyond +/- 30% of the schedule, wind generator would have to bear the UI charges. For actual generation within +/- 30% of the schedule, no deviation would be payable/receivable by Generator, The host state, shall bear the deviation charges for this variation, i.e within +/- 30%. However, the deviation charges borne by the host State due to the wind generation, shall be shared among all the States of the country in the ratio of their peak demands in the previous month based on the data published by CEA, in the form of a regulatory charge known as the Renewable Regulatory Charge operated through the Renewable Regulatory Fund (RRF). This provision shall be applicable with effect from such date as may be notified by the Commission.

As per the detailed procedure published by NLDC, the payment has to be released within 10 days of the issue of the accounts by the respective RPC. In order to avoid the penalty, **GCC may discuss and decide strategy of payment.**

**6 Revision of UI Accounts from 28.05.2013 (9th week) to 01.12.2013 (35th week) by NRLDC.**

The transmission losses of Delhi for 2013-14 from week-9 has shown a phenomenal increase as detailed hereunder:-

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week No.** | **2012-13** | **2013-14** | **Week No.** | **2012-13** | **2013-14** |
| 1 | 1.08 | 1.22 | 27 | 0.88 | 1.59 |
| 2 | 1.18 | 1.34 | 28 | 1.11 | 1.68 |
| 3 | 1.26 | 1.07 | 29 | 1.09 | 1.64 |
| 4 | 1.29 | 1.26 | 30 | 1.08 | 1.48 |
| 5 | 1.31 | 1.16 | 31 | 1.16 | 1.70 |
| 6 | 1.45 | 1.13 | 32 | 1.34 | 1.67 |
| 7 | 1.39 | 1.01 | 33 | 1.48 | Accounts for the week-33 and onwards are not prepared. |
| 8 | 1.26 | 1.09 | 34 | 1.25 |
| 9 | 1.15 | 1.42 | 35 | 1.30 |
| 10 | 1.14 | 1.34 | 36 | 1.55 |
| 11 | 1.13 | 1.37 | 37 | 1.69 |
| 12 | 1.23 | 1.48 | 38 | 1.03 |
| 13 | 1.33 | 1.55 | 39 | 0.99 |
| 14 | 1.37 | 1.60 | 40 | 1.15 |
| 15 | 1.22 | 1.76 | 41 | 1.09 |
| 16 | 1.13 | 1.52 | 42 | 1.08 |
| 17 | 1.25 | 1.48 | 43 | 1.25 |
| 18 | 1.16 | 1.38 | 44 | 0.99 |
| 19 | 1.17 | 1.41 | 45 | 0.99 |
| 20 | 1.11 | 1.37 | 46 | 1.08 |
| 21 | 1.16 | 1.26 | 47 | 1.02 |
| 22 | 1.10 | 1.22 | 48 | 1.00 |
| 23 | 1.10 | 1.44 | 49 | 1.14 |
| 24 | 1.00 | 1.39 | 50 | 0.98 |
| 25 | 1.18 | 1.33 | 51 | 1.01 |
| 26 | 1.11 | 1.31 | 52 | 1.20 |
|  |  |  | 53 | 1.19 |

On analysis, it was found that at 220kV BBMB, Narela S/Stn. the ICT-II has been upgraded from 50MVA to 100MVA on 28.05.13 and accordingly the CT’s on 220KV side are upgraded from 150/1 A to 300/1 A and on 132KV side are upgraded from 250/1A to 500/1A but the same CT ratio has been not updated in NRLDC/NRPC master data and issued UI accounts considering old ratio in said period (i.e 28.05.13 to 01.12.13 )and upgraded only on 02.12.13 as such DTL losses increased during the above period i.e. 28.05.13 (9th week) to 01.12.13 (35th week) and losses comes in the range of 1.3% to 1.70 % against its average trend

of 1.2% due to metering error occurred at BBMB Narela resulting into higher input energy booked to Delhi. The same is also informed to NRLDC on nos. of occasions but so far no revision has been done by NRLDC in the UI accounts for the period 28.05.2013 to 01.12.2013.

**GCC may deliberate.**

**7 IMPLEMENTATION OF OPEN ACCESS IN DELHI**

DERC vide its order dt. 24.12.2013 has decided the charges for Open Access in Delhi.

The guidelines have also been issued alongwith the orders. The collection and disbursement of the component of open access have also been decided as under :

13 iv. Applicable Charges for an Open Access Consumer

Where a consumer opting for Open Access purchases electricity from a source other than the DISCOM of his area, he shall be liable to pay:-

a) Energy charges to the seller of electricity as per the contract entered into by him;

b) Wheeling charges to the DISCOM in whose area he is located, at the rate fixed in the Tariff Order;

c) Cross subsidy surcharge fixed in this order to the DISCOMs in whose area, the consumer is located, if applicable;

d) Additional surcharge as applicable;

e) Standby charges as applicable;

f) Transmission charges to DTL at the rate fixed as per 5(ii) of this order;

g) Scheduling and system operating charges to SLDC at the rate Rs. 2000/- per day or the rate fixed by the Commission from time-to-time;

h) UI charges to the DISCOMs in whose area, the consumer is located at the prevalent rate;

i) Reactive energy charges to the DISCOMs in whose area, the consumer is located at the rate @ 10 Ps/kVARh or the rate fixed by the Commission from time-to-time;

j) Miscellaneous charges in respect of metering and other requirements as necessary under Intra-State ABT mechanism, to be provided by DTL. These charges are to be paid to DTL as per actual cost incurred by DTL;

k) Any other charges not mentioned above, but covered by this Order and the detailed procedures drawn by STU for operationlization of Open Access in Delhi;

v. All the charges relating to Open Access Transactions shall be collected by the Distribution Licensee in whose area the Open Access consumer is located and as per the detailed procedures drawn by STU for operationlization of Open Access in Delhi. Those charges which relate to other agency involved in such open access transactions and collected by a particular DISCOM shall be paid within 3 working days to respective agencies failing which late payment surcharge @ 1.25% per month shall be payable.

Apart from above all Distribution Companies are required to nominate the Nodal Officer for successful operation of Open Access. Further timelines are also require to be adhere to as per the guidelines as under :

**ACTIVITY CHART SHOWING TIME LINES FOR SHORT TERM OPEN ACCESS PROCESS**

**ACTIVITY**

|  |  |  |
| --- | --- | --- |
| **A)** | **Approval of Short Term Open Access** | **TIME LINE** |
| i) | Submission of Application By Consumer to SLDC | 0 |
| ii) | Verification of field data and Consent by Distribution Licensee | **within 12 working days** |
| iii) | **Decision by SLDC for conditional approval** | **within 3 working days** |
|  | **Total** | **15 working days** |
| **B)** | **INSTALLATION OF METERING EQUIPMENTS.** | |
| i) | Procurement of Metering Equipment By the authorized agency | within 30 days |
| ii) | Testing by Authorized agency | within 10 days |
| iii) | Installation at site by consumer/Dist Licensees | within 10 days |
| iv) | Testing by Distribution Licensees /STU & issue of Point wise compliance report | within 10 days |
| **C** | **Issue of NOC/Standing clearance/Concurrence by SLDC** | |
| i) | Submission of application | 0 working day |
| ii) | First NOC/Standing clearance/Concurrence | within 7 working days |
| iii) | Subsequent Monthly NOC/SC/Concurrence | within 3 working days |
| **D** | **Down loading of Meter data & preparation of Energy account by SLDC:** | |
| i) | Meter reading & down loading of data by Dist: Licensees (on due date) (Monthly in case of Purchaser & weekly in case of Seller) | 0 Hr. |
| ii) | Submission of downloaded data to SLDC by Distribution Licensees / STU | within two days |
| iii) | Preparation of Energy Account by SLDC for Distribution Licensees | within 7 days |
| iv) | Forwarding of UI Energy Account by Dist licensees | within a month |

**GCC may deliberate.**

**8 HOSTING OF NEXT MEETING OF GCC**

GCC may decide.