.CENTRAL ELECTRICITY REGULATORY COMMISSION 3rd & 4th floor, Chanderlok Building, 36-Janpath, New Delhi-110001

No. Engg/Tr.Pricing/Validation/L-1/44/2013/CERC

To

Members of the Validation Committee & Generating Companies (As per list enclosed)

Subject: Minutes of the 2nd Meeting of Validation Committee for the Application Period from 1st July, 2017 to 30th September, 2017 for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010

Sir,

Please find enclosed herewith minutes of the 2nd Meeting of the Validation Committee for the year 2016-17 (Application Period from 1st July, 2017 to 30th September, 2017) for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 held on 31.05.2017 in the NRLDC Conference Room at New Delhi for information and necessary action.

Yours faithfully,

Dated: 05/07/2017

S/d-

(Shilpa Agarwal)
Joint Chief (Engg)

Encl.: As above

Validation Committee Members

| SI. No. | Name of the Organizations | Name of the nominated persons | Address |
|------------|------------------------------|---|--|
| 1. | CERC | Shri S.C Shrivastava, Chief (Engg | Central Electricity Regulatory Commission, 3 rd & 4 th Floor, Chanderlok Building, 36-Janpath, New Delhi -110001 |
| 2. | | Shri P.K. Awasthi, Joint Chief (Fin.) | Central Electricity Regulatory Commission 3 rd & 4 th Floor, Chanderlok Building, 36-Janpath, New Delhi -110001 |
| 3. | CEA | Chief Engineer, (PSP & PA-II) Division | Central Electricity Authority 3 rd Floor, N-Wing Sewa Bhawan, R.K. Puram, New Delhi - 110 066 |
| 4. | | Director, GM Division | Central Electricity Authority 6 th Floor, N-Wing Sewa Bhawan, R.K.Puram, New Delhi-110066 |
| 5. | CTU/ Powergrid | Shri H.K Mallick, GM (Comm) | Power Grid Corporation of India Ltd Plot No. 2, Sector-29, Near IFFCO Chowk, Gurgaon-122001 |
| 6. | | Shri Dilip Rozekar, DGM (SEF)/ alternate member Shri RVMM Rao, Chief. Design Engineer (SEF) | Power Grid Corporation of India Ltd Plot No. 2, Sector-29, Near IFFCO Chowk, Gurgaon-122001 |
| 7. | POSOCO | Shri P. K. Agarwal General Manager | Northern Regional Load Despatch Centre, Jeet Singh Marg, Katwaria Sarai, New Delhi-110016 |
| 8. | | Shri G. Anbunesan AGM, SRLDC | Southern Regional Load Despatch Centre 29, Race Course Cross Road, Bangalore, Karnataka-560009 |
| 9. | | Shri U.K. Verma, General Manager,I/c | National Load Despatch Centre B-9, Qutab Institutional Area,Katwaria Sarai, New Delhi-110016 |
| 10. | | Shri P. Mukhopadhyay General Manager | Eastern Regional Load Despatch Center 14, Golf Club Road, Tollygunge, Kolkata-700 033 (W.B.) |
| 11. | NRPC | Shri M.A.K.P. Singh Member Secretary | Northern Regional Power Committee 18-A Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-11 |
| 12. | WRPC | Shri A. Balan, Member Secretary | Western Regional Power Committee Plot No. F-3, MIDC Area, Marol, Opp: SEEPZ, Andheri (East), Mumbai-400093 |

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|-----|--------|--------------------------|--|
| 13. | SRPC | Shri S.R. Bhat, | Southern Regional Power Committee |
| | | Member Secretary | 29, Race Course Cross Road, |
| | | | Bangalore-560009, Karnataka |
| 14. | ERPC | Shri A.K. | Eastern Regional Power Committee |
| | | Bandyopadhyay, Member | 14, Golf Club Road, Tollygunge, |
| | | Secretary | Kolkata-700 033 (W.B.) |
| 15. | | Shri S.K. Das, | Bihar State Electricity Board |
| | | Director Engineering | 1 st Floor, Vidyut Bhawan, Bailey Road, |
| | | | Patna-21, Bihar |
| 16. | NERPC | Shri P.K Mishra | North Eastern Regional Power |
| | | Member Secretary | Committee, NERPC Complex, Dong |
| | | | Parmaw, Lapalang, Shillong-793006 |
| | | | Phone No:0364-2534077 Fax |
| | | | NO.:0364-2534040 |
| 17. | | Shri Jatin Baishya, | State Load Despatch Centre |
| | | Dy. General Manager | Complex,Kahelipara,Guwahati |
| 18. | SLDC | Shri P.A.R. Bende, | Chief Engineer |
| | | Chief Engineer, SLDC | Madhya Pradesh Power Transmission |
| | | , | Company Ltd., Nayagaon,Rampur, |
| | | | Jabalpur- 482008 |
| | | | ' |
| 19. | KPTCL | Shri S. Sumanth | Karnataka Power Transmission |
| | | Director(Transmission), | Corp.Ltd., |
| | | KPTCL ` | Kauvery Bhavan, K.G. Road, |
| | | | Bangalore – 560009 |
| 20. | UPPTCL | Shri A.K. Singh, | Uttar Pradesh Power Transmission |
| | | Director(Operation), | Corporation Ltd , 7th Floor, |
| | | Uttar Pradesh Power | Shakti Bhavan, Ashok Marg, |
| | | Transmission Corporation | Lucknow - 226001 |
| | | Ltd. | |

LIST OF GENERATING COMPANIES

| SI. No. | Name of the Statutory Bodies | Name of the persons and Designation | Address |
|------------|------------------------------------|---|---|
| 1. | NTPC | Shri A.K Gupta, Director (Commercial) | NTPC Bhawan, Core 7, Scope Complex, Institutional Area, Load Road, New Delhi – 110003 |
| 2. | NHPC | Shri Janardan Choudhary, Executive Director, (O&M) | NHPC office Complex, Sector-33, Faridabad – 121003 (Haryana) |
| 3. | NEEPCO | Shri P.K Singha, Executive Director | Brookland Compound, Lower New Colony, Shillong - 793003 |
| 4. | NLC | Director (Commercial) | No.135, Periyar E.V.R. High Road, Kilpauk, Chennai - 600 010. Tamil Nadu, India |
| 5. | SJVN | Shri Romesh Kapoor, General Manager (C&SO) | SJVN Ltd, Sharma Niwas Below BCS, New Shimla – 171009. |

Minutes of the 2nd Meeting of Validation Committee for the Application Period from 1st July, 2017 to 30th September, 2017 held on 31st May, 2017 at NRLDC, New Delhi.

- 1. The Chairman of the Validation Committee, Shri S.C Shrivastava, Chief (Engg.), CERC welcomed the participants present in NRLDC Conference Room and also the other participants of RPCs, RLDCs, STUs and Generating Companies present at Conference Room of WRLDC, SRLDC, ERLDC, NERLDC, SLDCs of Gujarat, Madhya Pradesh, Chhattisgarh, Rajasthan, Punjab, U.P and Maharashtra through video conferencing. List of the participants is enclosed at *Annexure-I*.
- 2. Chief (Engg.), CERC stated that the meeting is convened to discuss the Load Generation data for consideration of load flow studies for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses), Regulations, 2010 for the Second Quarter of 2017-18.
- 3. Demand Projection for Q2 of Application Period from 1st July, 2017 to 30th September, 2017

3.1 Northern Region:

- (i) Representative of NRLDC suggested that Demand projection of Chandigarh and Haryana may be taken as 363 MW and 9,500 MW instead of 338 MW and 9,294 MW respectively.
- (ii) Representative of Uttar Pradesh suggested that Demand projection of Uttar Pradesh may be taken as 18,000 MW instead of 16,928 MW.
- (iii) Subsequently SLDC Himachal Pradesh has confirmed its Demand 1,298 MW instead of 1,221 MW. IA has suggested that demand projection as suggested by SLDC Himachal Pradesh may be considered. Accordingly Demand projection of Himachal Pradesh shall be taken as 1,298 MW.

The Demand figures as suggested above were agreed.

3.2 Eastern Region: Members present at ERLDC suggested that Demand projection of West Bengal may be taken as 8,000 MW instead of 7,735 MW.

The Demand figures as suggested above were agreed.

3.3 Western Region:

- (i) Members present at WRLDC suggested that Demand projections of Dadra Nagar Haveli may be considered as 770 MW instead of 815 MW.
- (ii) Subsequently SLDC Madhya Pradesh has confirmed its Demand as 7,500 MW instead of 8,000 MW. IA has suggested that demand projection as suggested by SLDC Madhya Pradesh may be considered. Accordingly demand projection of Madhya Pradesh shall be taken as 7,500 MW.

- **3.4 North Eastern Region:** Demand projections for NER constituents are in order.
- 3.5 Southern Region: Demand projections for SR constituents are in order
- 4. Generation Projection for Q2 of Application Period from 1st July, 2017 to 30th September, 2017

4.1 Northern Region:.

- (i) Representative of NTPC suggested that generation from Koldam HEP may be taken as 867 MW instead of 792 MW
- (ii) Members present at NRLDC suggested following changes:
 - (a) Generation from Delhi may be taken as 1,100 MW instead of 712 MW.
 - (b) Generation from Shree Cement may be taken as 285 MW instead of 300 MW.
 - (c) Generation from Lanco Budhil may be taken as 70 MW instead of 98 MW.
- (iii) Subsequently SLDC Himachal Pradesh has confirmed that generation from Himachal Pradesh may be taken as 1,266 MW (including 106 MW generation of Malana-1 HEP) instead of 673 MW. IA has suggested that generation projection as suggested by SLDC Himachal Pradesh may be considered. Accordingly Generation projection of Himachal Pradesh shall be taken as 1,266 MW.
- (iv) Uttar Pradesh SLDC has submitted that generation from Uttar Pradesh may be taken as 10,000 MW instead of 7,890 MW.
- (v) It was decided that based on the past trend and commissioning of new generation, Rajasthan generation may be considered as 7,300 MW instead of 8,516 MW.

The Generation figures as suggested above were agreed.

4.2 Western Region:

- (i) Members present at WRLDC suggested following changes:
 - (a) Generation from RGPPL may be taken as 540 MW instead of 650 MW
 - (b) Generation from CGPL may be taken as 3,300 MW instead of 3,840 MW.
 - (c) Generation from Kawas may be taken as 300 MW instead of 200 MW.
 - (d) Generation from Gandhar may be taken as 300 MW instead of 200 MW.
 - (e) Generation from KAPS may be taken as zero instead of 217 MW
 - (f) Generation from Jindal Power may be taken as 700 MW instead of 678 MW.
 - (g) Generation from KSK Mahanadi may be taken as 1,134 MW instead of 1,526 MW.

- (h) Generation from Jindal Tamnar may be taken as 570 MW instead of 604 MW.
- (i) Generation from GMR Chhattisgarh may be taken as 460 MW instead of 354 MW.
- (j) Generation from Sholapur STPP may be taken zero instead of 435 MW.
- (ii) Subsequently, SLDC Madhya Pradesh confirmed its generation may be taken as 4,436 MW instead of 5,020 MW. IA has suggested that generation projection as suggested by SLDC Madhya Pradesh may be considered. Accordingly generation from Madhya Pradesh shall be taken as 4,436 MW.
- (iii) Representative of Essar Mahan stated that LILO of 400 kV Korba Vindhyachal line at Essar Mahan has been granted extension for being connected till 30.6.2017 by WRPC. However due to site problems and fund problem they have not been able to complete the dedicated line from 400 kV Mahan TPS to WR Pooling station near Sipat. He also stated that Essar mahan has signed the PPA of 450 MW with Essar steel and has requested CTU to operationalise the LTA. He requested that connectivity period on LILO may be extended.

It was informed that Validation Committee is not the forum to take decision on such issue and that Essar Mahan should approach appropriate forum for relief. Since as on date the date of expiry of connectivity on LILO is 30.6.2017 and that Essar informed that dedicated line is not expected before December 2017, it was decided that generation from Essar Mahan shall not be considered for this quarter(Q2 2017-18). In case POC rates are not determined for Essar Mahan due to non consideration of generation and it gets permission for injection from appropriate forum, the rates as per Sharing Regulations shall be applicable.

The Generation figures as suggested above were agreed.

- **4.3 Eastern Region:** Members present at ERLDC suggested following changes:
 - (a) Generation from West Bengal may be taken as 5,500 MW instead of 4,907 MW.
 - (b) Generation from Chuzachen may be taken as 109 MW instead of 115 MW.
 - (c) Generation from Bhutan may be taken as 1,500MW instead of 1,603MW.
 - (d) Nabinagar BRBCL may be taken as zero instead of 301 MW.

The Generation figures as suggested above were agreed

4.4 North Eastern Region: Generation projections for NER constituents are in order.

4.5 Southern Region:

- (i) Members present at SRLDC suggested following changes:
 - (a) Generation from Andhra Pradesh may be taken as 5,943 MW (excluding 948 MW from Simhadri-I) instead of 6,891 MW.
 - (b) Generation from Kerala may be taken as 1,610 MW instead of 1,533 MW.

- (c) Generation from SEPL may be taken as 250 MW instead of 464 MW.
- (d) Generation from MEPL may be taken as 150 MW instead of 257 MW
- (e) Generation from Lanco Kondapalli may be taken as zero instead of 916 MW.
- (f) Generation from Neyveli (Extn.) TPS may be taken as 420 MW instead of 448 MW.
- (g) Generation from Coastal Energen may be taken as 558 MW instead of 730 MW.
- (h) Generation from IL&FS may be taken as 750 MW instead of 555 MW
- (ii) NTPC representative suggested that generation from Kudgi may be taken as zero instead of 524 MW.
- (iii) Telangana vide email dated 27.06.2017 informed that the internal generation of state may be considered as 5564 MW for PoC computations of 2ndquarter of 2017-18. SRPC vide email dated 5.07.2017 confirmed that generation of Telangana may be taken as 5,500 MW as the same has already been considered by NLDC for ATC computation. Accordingly generation from Telangana shall be taken as 5,500 MW.

The Generation figures as suggested above were agreed

5. HVDC Set Points:

- (i) HVDC set points to be considered in the All India Base case for computation of PoC charges and Losses for July'17 Sep'17 period were projected by Implementing Agency based on operational experience and was put up for validation before the Committee.
- (ii) After discussion, following HVDC set points are finalized.

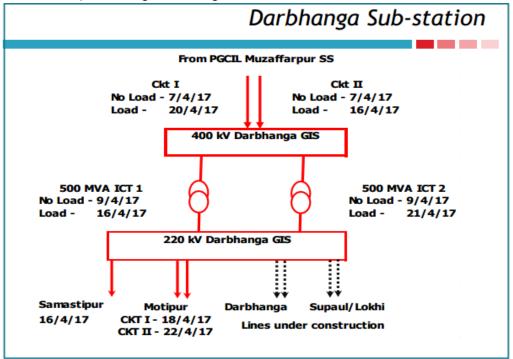
MW Values

| HVDC Name | Set points To be considered in Basecase |
|-----------------------------|---|
| Mundra-Mahindergarh Pole-1 | 1250 |
| Mundra-Mahindergarh Pole-2 | 1250 |
| Talcher-Kolar Pole- 1 | 1000 |
| Talcher-Kolar Pole- 2 | 1000 |
| Rihand-Dadri Pole- 1 | 750 |
| Rihand-Dadri Pole- 2 | 750 |
| Balia-Bhiwadi Pole-1 | 500 |
| Balia-Bhiwadi Pole-2 | 500 |
| Bhadrawati_HVDC | 1000 |
| Vindhyachal_HVDC | 250 |
| Gajuwaka_HVDC | 650 |
| Pusauli HVDC | 400 |
| Chandrapur-Padghe Pole-1 | 750 |
| Chandrapur-Padghe Pole-2 | 750 |
| BNC-Agra Pole-1& Pole-2 | 500(towards NR) |
| Champa- Kurukshetra Pole -1 | 1500 |

6. Other Issues:

(i) Representative of POSOCO raised the issue regarding the escalable component of NRSS-XXIX Transmission Limited and Maheshwaram Transmission Limited. He stated that as per CERC order in petition no 219/ADP/2015 dated 24.11.2015 for Maheshwaram Transmission Limited and Petition no 220/ADP/2014 dated 10.12.2014 for NRSS-XXIX Transmission Limited, the escalable component of approved tariff for FY 2017-18 is 'NIL'. YTC details provided by the transmission licensees were inclusive of

- escalable component. Chief (Engg), CERC stated that the rectification in order is expected shortly and suggested to consider the tariff quoted by transmission licensee for PoC computations. Subsequently rectification order has been issued vide orders dated 12.06.2017
- (ii) Representative of Darbhanga Motihari Transmission Company Limited (DMTCL) stated that downstream network from 400/220 kV substation of Darbhanga to BSPTCL system is ready and The power started flowing w.e.f. 16.04.2017 with the readiness of Darbhanga to Samastipur line and Darbhanga to Motipur line. NLDC has already considered the tariff of DMTCL Darbhanga element in the POC computations for the 1st quarter of 2017. Though all downstream lines has not been completed but the power is flowing through above two lines of BSPTCL and assets of DMTCL are being used. It was requested that YTC may be considered in Q2 of 2017-18. (Agenda enclosed at ANNEXURE- II) The single line diagram of DMTCL is mention below:



It was observed that DMTCL has completed its scope of work under Darbhanga element which does not have any other prerequisite under TSA of DMTCL. However downstream 220 kV lines (4 Nos) under scope of BSPTCL have not been commissioned. CTU representative stated that tariff for 4 nos 220 kV bays for which downstream has not been commissioned should be separated out from quoted tariff and should be billed to bihar bilaterally. The quoted tariff of DMTCL is enblock for Darbhanga element all of which have been completed by DMTCL However complete downstream system of BSPTCL is not ready. Therefore this would be subject to view taken by the commission in its POC order.

(iii) Representative Patran Transmission Company Limited stated that they have successfully loaded ICT-I and ICT-II at Patran 400/220 KV GIS w.e.f. 18/05/2017 upon completion of 220KV Downstream system by PSPCL. PTCL mentioned that NRLDC has issued the certificate for completion of trial operation of following assets on 18.05.2017.

- (a) 400/220 kV, 500 MVA ICT-I at Patran along with associated 400 kV Main Bay (409) & 220 kV Bay (204)
- (b) 400/220 kV, 500 MVA ICT-II at Patran along with associated 400 kV Main Bay (406)& 220 kV Bay (207)

Accordingly, it was decided that up to 18.05.17, CTU will raise the bill to Punjab as per order in 155/MP/2016 and from 19.05.17, the billing, collection and disbursement of transmission charges will be carried out as per the provisions of the Sharing Regulations.

- (iv) Representative of CTU raised the issue regarding removal of BBMB LTA from POC billing for the period Oct 2016 to March 2017(Agenda enclosed at ANNEXURE III). He stated that as per the decisions taken in the Validation Committee meeting held on 21.02.17, LTA and transmission charges for BBMB project were excluded from PoC computations for the 1st quarter of 2017-18 i.e. April'17 to Jun'17.Representative of CTU requested to extend the same decision for the prior period of Q3 & Q4 PoC of 2016-17 (Oct'16 to Mar'17) till a final decision is taken by the Commission in the matter Representative of CERC mentioned that CERC vide order dated 28 .04.2017 notifying POC rates for quarter1 of 2017-18 provided as follows:
 - 10. The assets of BBMB and LTA in respect of BBMB shall not be included under PoC mechanism and a view on inclusion of these assets under PoC shall be taken after determination of final tariff of these assets.

It can be seen that a final view in regard to LTA of BBMB is yet to be arrived at by CERC. POWERGRID may raise the issue at CERC in the appropriate petition. Validation committee is not the appropriate forum for the issue.

(v) New lines to be included for this quarter as proposed by IA.

| Name of the Transmission lines | ISTS Licensee | Discussion |
|---|--|--|
| LILO of both Ckts of Barh- Gorakhpur 400 kV D/C line at Motihari Sub- station | DMTCL | To be Considered |
| 765 kV Nagapattinam – Salem | POWERGRID NM Transmission LTD | Not to be considerd since issue pending at CERC for want of CEA clearances |
| 400 kV D/C Unchahar – Fatehpur | POWERGRID Unchahar Transmission LTD | Not to be Considered (dedicated line) |
| LILO of existing Seoni – Bina of 765 kV S/C Transmission line at Gadarwara Jabalpur Pooling S/S to LILO point of Seoni Bina 765 kV D/C line to Gadarwara | POWERGRID Warora Transmission LTD | Not to be Considered (dedicated line) |
| 400 kV D/C Nizamabad – Yedddumailaram (Shankarpalli) | Maheshwaram | Early commissioning approval is awaited from CEA. CTU suggested |

| Transmission I | ine | Transmission | that the line is an important link and |
|----------------|----------------------|--------------|--|
| 400 kV | Maheshwaram - | LTD | is required for smooth running of |
| Mehboobhnag | ar Transmission line | | system. Considering CTU's |
| | | | recommendation it was decided to |
| | | | include the line for POC calculation, |
| | | | however disbursement of charges |
| | | | will be done only after CEA |
| | | | recommendation is obtained. |
| | | | |

(vi) The PPT shown during the Validation Committee Meeting dated 31.05.2017 is attached at **ANNEXURE-IV**

7. After the deliberations, following was concluded:

- (i) After deliberation among members, it was decided that the peak generation for new hydro units shall be considered at 100% since most of the hydro units will be able to generate at 100% load for the peak hours during July to September. For new thermal units and new gas based stations, peak injection would be considered as 70% and 30% of ex-bus capacity, respectively. In case of non-submission of data by the DICs, for the purpose of Base case preparation:
 - (a) Peak Demand: Forecasted peak demand to be calculated from last 3 years' data taken from CEA website as per provisions of the Regulations.
 - (b) Peak Generation: Forecasted peak generation to be calculated from last 3 years' SEM/SCADA data available with RLDCs as per the provisions of the Regulations.

Preparation of final All India Basecase in PSS/E platform:

It may be mentioned that there would be variation in the validated generation and demand figures in the final all India Base case because of the following steps involved:

- (i) Normalization with All India Forecasted Peak Demand figure.
- (ii) Arriving at Load Generation Balance for convergence of the All India Base case.
- (iii) Adjustment of Slack Bus Generation.

Annexure-I

<u>List of Participants in the 2nd meeting for 2017-18 of the Validation Committee held on</u> 31st May, 2017 at , New Delhi.

CERC

- 1. Shri S.C.Shrivastava, Chief (Engg.) In Chair
- 2. Ms Shilpa Agarwal, Joint. Chief (Engg.)
- 3. Shri V. Sreenivas, Dy. Chief (Legal)
- 4. Shri Harish Kumar, Engineer

POWERGRID

- 5. Shri H.K Mallick, GM (Comml.)
- 6. Shri Avinash M. Pavgi, GM (Comml)
- 7. Ms Manju Gupta, AGM (Comml.)
- 8. Shri V Sriniwas, DGM (Comml.)
- 9. Shri Rajesh Verma, Chief Manager
- 10. Shri Anil Kumar Meena, Chief Manager

NLDC

- 11. Shri U.K Verma, GM(I/C), NLDC
- 12. Shri S.S. Barpanda, AGM
- 13. Shri G. Chakraborty, DGM
- 14. Shri Gaurav Verma, Senior Engineer
- 15. Shri Sanny Machal, Engineer

CF_A

16. Shri A . Suresh, Dy. Director.

NHPC

17. Shri V.K Srivastava, Manager

WRPC

- 18. Shri A. Balan, M.S. WRPC
- 19. Shri L.K.S Rathore, DD, WRPC

WRLDC

- 20. Shri V.K Shrivastava GM
- 21. Ms Pushpa.S, AGM
- 22. Ms S. Usha, AGM
- 23. Ms Chitrankshi, Manager

ERPC

24. Shri P.K DE, EE

ERLDC

- 25. Shri P. Mukhopadhyai, GM
- 26. Shri G. Mitra, DGM
- 27. Shri Manoj Kumar Thakur, Manager
- 28. Shri S. Banerjee, DGM
- 29. Shri T.R Mahapatra, Manager
- 30. Shri Saurav Sahay, Dy Manager
- 31. Shri R.P Kundu, Sr.Engineer
- 32. Shri S. Ghosh, Engineer

DVC, Kolkata

33. Shri Manuranjan Sahoo, DCE (Comml)

SRPC

34. Shri LEN. J.B, EE

35. Shri Anusha Das J, AEE

SRLDC

36. Shri V Balaji

37. Shri V. Suresh, AGM

38. Shri M Pradeep

39. Shri L. Sharath Chand, Sr. Engineer

NRPC

40. Shri M.A.K.P Singh, MS

41. Shri Upendra Kumar, Director

42. Shri H.K Pandey, SE

43. Shri Bhanwar Singh Meena, EE

NRLDC

44. Shri P.K Agarwal, GM, NRLDC

45. Shri D.K Jain, AGM

46. Shri Rajiv Porwal, DGM

47. Shri H.K Chawla, DGM

48. Shri Riza Naqvi, Sr. Engineer

49. Shri Gaurav Malviya, Engineer

50. Shri Rinku Narang, IT Admin, NRLDC

NTPC

51. Shri Vinod Kumar Jain, DGM

52. Shri Uday Shankar, DGM

NERLDC

53. Shri Amaresh Mallick, DGM

54. Shri Momai Dey, Sr. Engineer

NERPC

55. Shri S.M Aimol

56. Shri Sadiq Imam, AEE

Essel Infra

57. Shri Amit Kumar, GM

58. Shri Rajesh Yadav, Manager

MSETCL

59. Shri Umesh . S. Bhagat, EE, STU

60. Shri Deepak Kolhe, EE(Op)

61. Ms Santosh. G Gawai, DYEE, STU

62. Shri Bulbule Arvind U, SE(LM)

63. Shri Vikas S. Pimpalshende, AE (LM)

MEPTCL

64. Shri B. Wankhar, EE

65. Shri T. Gidon, EE

MPPTCL

66. Shri V.K Rathore, EE

67. Shri Anurag Mishra, EE

ESSAR POWER

68. Shri Sachidanand Bhujole, Vice President

69. Shri Sandeep Sahay, Dy. Head (Comm)

SLDC, ASSAM

70. Shri Dipesh CH. Das, AGM- LD-Com

PATRAN TRANSMISSION COMPANY LTD

71. Shri Dinesh Parakh, GM(Comml)

72. Shri Ramesh Bahri, Consultant

TSTRANSCO

73. Shri N. Bhaskar, CE/SLDC

74. Shri A. Sreenivasa Reddy, SE/SLDC

75. Shri K Madkava Rao, DE/SCADA

76. Shri P.V Madhusudan, DE/PPC

77. Shri G. Ramesh, AE, SLDC

78. Shri A. Madhavi, ADE/SG/TS-SLDC

79. Shri N. Raja Shekar, AE/SG TS- SLDC

TSSPDCL

80. Ms. J. Swapna, AE/Col/TSPCC

81. Shri S. Ravi Kumar, DE

DMTCL Project: Disbursement of Transmission Charges

Dear Sir,

This is in reference to the Eastern Region System Strengthening Scheme VI (ERSS VI) being implemented by Darbhanga-Motihari Transmission Company Ltd. (DMTCL) under BOOM basis awarded through Tariff Based Competitive Bidding (TBCB). The ERSS VI Transmission Scheme consists of following Elements:

A) Darbhanga Element

- 1. Muzaffarpur (PG) Darbhanga 400 kV D/C transmission line with triple snowbird conductor
- 2. 2×500 MVA, 400/220 kV GIS Substation at Darbhanga (400 kV Line Bays 2 Nos., 400 kV ICT bays 2 Nos., 220 kV Line Bays 7 Nos., 220 kV ICT Bays 2 Nos. & 2 Nos. 125 MVAr Bus Reactors)

B) Motihari Element

- 1. LILO of both Ckts of Barh Gorakhpur 400 kV D/C transmission line at Mothihari, GIS Sub-station
- 2. 2 x 200 MVA, 400/132 kV GIS Substation at Mothihari

The Transmission Scheme ERSS VI is to cater to the power demand of North Bihar and Bihar STU (BSPTCL) was required to undertake construction of the following Transmission System in order to off-take power from 400/220 kV Darbhanga Sub-station of DMTCL:

| SI. No. | BSPTCL Transmission Line | |
|---------|---|--|
| 1 | 220 kV D/C Darbhanga (TBCB) – Darbhanga Transmission Line | |
| 2 | 220 kV D/C Darbhanga (TBCB) – Motipur Transmission Line | |
| 3 | 3 220 kV D/C Darbhanga (TBCB) – Supaul/Loki Transmission Line | |
| 4 | 220 kV S/C Darbhanga (TBCB) – Samastipur Transmission Line | |

After the approval of CEA to energize 400 kV D/C Muzaffarpur – Darbhanga Line and 400/220 kV Darbhanga GIS Sub-station, the Deemed Commercial Operation of the Darbhanga Element was declared w.e.f 31st Mar 2017 as none of the above Transmission Line of BSPTCL was ready for charging.

This is to bring to your kind notice that vide letter dated 2nd Jan 2017 (copy enclosed), DMTCL has given the intimation to the LTTCs, CEA, BSPTCL & CTU for interconnection of the Darbhanga Element with the Grid.

Further, vide letters dated 20th Mar 2017 and 2nd Apr 2017 (copy enclosed), BSPTCL was requested to interconnect their 220 kV Transmission Lines with Darbhanga Sub-station for flow of power into BSPTCL System.

Subsequent to the readiness of BSPTCL 220 kV S/C Darbhanga (TBCB) – Samastipur Transmission Line on 16th Apr 2017, the power was start flowing to BSPTCL system w.e.f. 16th Apr 2017. On 18th Apr 2017, 220 kV D/C Darbhanga (TBCB) – Motipur Transmission Line was also charged.

The balance 220 kV Transmission Lines of BSPTCL (Darbhanga (TBCB) – Supaul/Loki Transmission Line and Darbhanga (TBCB) – Darbhanga Transmission Line) are still under construction.

For collection of Transmission Charges of Darbhanga Element of ERSS VI transmission Scheme, vide letter dated 12th Apr 2017, the required documents were submitted to PGCIL. However, PGCIL vide mail dated 19th May 2017 has replied as under:

"As per the above, the tariff of transmission elements shall be part of POC mechanism only after the downstream system is commissioned. In your case, the commissioning status of downstream systems of the 220 kV bays is unclear. Further there is no separate tariff break-up under the first element for these 7 nos. of 220kV bays. In the absence of tariff break-up, we are unable to disburse the payments under POC mechanism for the commissioned assets under the First element. Hence it is requested to provide duly approved tariff break up of first element for commissioned / un-commissioned assets(where power flow yet to take place and billing to be raised on defaulting entity), to enable us to process the disbursement of transmission charges under the POC mechanism."

In view of above, the following is our submission:

- 1) As per Schedule 3 of TSA of the Project, the Darbhanga Element of the Project constitutes 40.74% of the Total Transmission charges and there is no further break up of Tariff among Darbhanga Elements.
- 2) The Darbhanga Element covering 400 kV D/C Muzaffarpur Darbhanga Line and 400/220 kV Darbhanga GIS Sub-station was ready for charging w.e.f 30th Mar 2017.
- 3) The power started flowing in the downstream system of BSPTCL w.e.f 16^{th} Apr 2017 after readiness of BSPTCL 220 kV S/C Darbhanga Samastipur Line.
- 4) NLDC has already considered the tariff of DMTCL Darbhanga Element in the POC computations for the 1st Qtr of 2017 and as Darbhanga Element is commissioned & under commercial operation, the 100% Tariff for same needs to be paid to DMTCL.

It is requested to kindly resolve the above case in the coming meeting of Validation Committee so that timely tariff can be realized.

Regards

Amit Kumar

General Manager – Power Transmission

DMTCL

09953200475

Ref: DMTCL/DEL/2017/16 Date: 20th Mar 2017

To,

Director (Projects)
Bihar State Power Transmission Co. Ltd.
Transmission Vidyut Bhawan, Bailey Road,
4th Floor, Patna,
Bihar – 800021

Sub: Eastern Region System Strengthening Scheme VI being developed by Darbhanga— Motihari Transmission Company Ltd. —Intimation for charging of Darbhanga Element.

Dear Sir,

This is in reference to the Eastern Region System Strengthening Scheme VI (ERSS VI) being developed by Darbhanga–Motihari Transmission Company Ltd. (DMTCL).

This is to intimate you that the following Transmission Elements covered under the ERSS VI Transmission Scheme will be ready for charging on 30th Mar 2017:

- 1) 400 kV D/C Triple Snowbird Muzaffarpur Darbhanga Transmission Line
- 2) 2 X 500 MVA 400/220 kV GIS Sub-station at Darbhanga

As the downstream system at 220 kV level to off take the power from 400/220 kV GIS Sub-station (of DMTCL) is in the scope of BSPTCL, it is requested to interconnect the 220 kV Transmission Lines along with installation of PLCC equipment at DMTCL end latest by 29th Mar 2017 for smooth flow of power.

Thanking You,

Yours faithfully

For Darbhanga-Motihari Transmission Co. Ltd.

(Authorized Signatory)

Copy to: Chief Engineer, (PSPM), Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi – 110 066

: Chief Engineer – Transmission, Bihar State Power Transmission Co. Ltd. (Lead LTTC)

: Chief Operating Officer (CTU), PGCIL, "Saudamini", Sec-29, Gurgaon, Haryana - 122001

: All LTTC.



List of LTTCs:

| 1. | Chief Engineer-PTR, West Bengal State Electricity Distribution Company Limited, Vidyut Bhawan, Kolkata -91 | 2. | Dy. General Manager (Commercial), Power Grid Corporation of India Limited, HVDC Pusauli, Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) - 122001 |
|----|--|----|--|
| 3. | Director Commercial, Grid Corporation of Orissa Limited Janpath, Bhubaneswar - 751022 | 4. | Addl. Chief Engineer (EHV, M&E), Power Deptt., Govt. of Sikkim, Gangtok - 737101 |
| 5. | Chief Engineer (Commercial), Damodar Valley Corporation DVC Towers, VIP Road, Kolkata - 700054 | 6. | Chief Engineer, Transmission Jharkhand State Electricity Board Engineering Building, HEC, Dhurwa, Ranchi-834004 |
| 7. | Maithan Power Limited MA-5, Gogna, PO- Maithan DAM Dist. Dhanbad, Jharkhand- 828207 | | |





Ref: DMTCL/DEL/2017/22

Date: 18th Apr 2017

To,

Chief Engineer – Transmission
Bihar State Power Transmission Company Ltd.
Transmission Vidyut Bhawan, 04th Floor,
Bailey Road, Patna,
Bihar (800021)

Chief Operating Officer (CTU Planning), PGCIL, Sec-29, Near IFFCO Chowk, Gurgaon – 122001

Sub: Eastern Region System Strengthening Scheme VI developed by Darbhanga-Motihari Transmission Company Ltd. – Intimation for the power flow through the 220 kV downstream network of BSPTCL.

Dear Sir,

This is in reference to the Eastern Region System Strengthening Scheme VI being implemented by Darbhanga-Motihari Transmission Company Ltd.

Further, this is to inform you that subsequent to successful charging of 400 kV D/C Muzaffarpur – Darbhanga Transmission Line and 2 X 500 MVA 400/220 kV Darbhanga GIS Sub-station, the power is being fed to BSPTCL transmission system through 220 kV S/C Darbhanga – Samastipur Transmission Line w.e.f. 16th Apr 2017, 14:48 Hrs.

Thanking You, Yours faithfully

For Darbhanga-Motihari Transmission Company Ltd.

(Authorized Signatory)



Copy to:

- Executive Director (Commercial), PGCIL, Sec-29, Near IFFCO Chowk, Gurgaon 122001
- Chief Engineer (PSPM), CEA, Sewa Bhawan, R. K. Puram, Sector -1, New Delhi-110066.
- Director (Transmission), Ministry of Power (Govt. of India), Rafi Marg, Sansad Marg Area, New Delhi-110001
- All Long Term Transmission Customers (LTTCs).



List of LTTCs:

| 1. | Chief Engineer- PTR West Bengal State Electricity Distribution | 2. | Dy. General Manager (Commercial), Power Grid Corporation of India Limited, |
|----|--|----|---|
| | Company Limited, | | HVDC Pusauli, Saudamini , Plot No. 02, |
| | Vidyut Bhawan, | | Sector-29, Near IFFCO Chowk, |
| | Kolkata-91 | | Gurgaon (Haryana) - 122 001 |
| 3. | Director Commercial, | 4. | Addl. Chief Engineer (EHV, M&E) |
| | Grid Corporation of Orissa Limited | | Power Deptt., Govt. of Sikkim, |
| | Janpath, Bhubaneswar - 751022 | | Gangtok-737101 |
| 5. | Chief Engineer (Commercial) | 6. | Chief Engineer - Transmission |
| | Damodar Valley Corporation, | | Jharkhand State Electricity Board, |
| | DVC Towers, VIP Road, | | Engineering Building, HEC, |
| | Kolkata- 700054 | | Dhurwa, Ranchi- 834004 |
| 7. | Maithan Power Limited, | | |
| | MA-5, Gogna, | | |
| | PO-Maithan DAM , | | |
| | Distt Dhanbad, Jharkhand-828207 | | |





Darbhanga-Motihari Transmission Company Limited

CIN: U40300DL2012GOI246371 • Tel.: +91 11 47523100 • Website: www.esselinfraprojects.com

Ref: DMTCL/DEL/2017/02-01

Date: 02nd Jan. 2017

To,

Chief Operating Officer (CTU Planning)
Power Grid Corporation of India Ltd.
"Sector – 29, Near IFFCO Chowk,
Gurgaon (Haryana) - 122001.

Chief Engineer – Transmission (Lead LTTC) Bihar State Power Transmission Co. Ltd. Transmission Vidyut Bhawan, 4th Floor, Bailey Road, Patna, Bihar - 800021

Sub: Eastern Region System Strengthening Scheme VI developed by Darbhanga–Motihari Transmission Company Ltd. – **Interconnection of Darbhanga Transmission Element.**

Dear Sir,

This is in reference to the Eastern Region System Strengthening Scheme VI being implemented by Darbhanga Motihari Transmission Company Ltd.

Further, this is to intimate that 400 kV D/C Muzaffarpur (PG) – Darbhanga Transmission Line and 2X500 MVA, 400/220 kV Darbhanga GIS, which are covered in ERSS VI Transmission Scheme shall be ready for charging and interconnection with the Grid system by 15^{th} Feb 2017.

This intimation is for your information and necessary action in this regard please.

Thanking You,

Yours' faithfully

For Darbhanga-Motihari Transmission Company Ltd.

(Authorised Signatory)

Copy to: Chief Engineer (PSPM), CEA, Sewa Bhawan, R. K. Puram, Sector -1, New Delhi-110066.

: General Manager (ERLDC), 14, Golf Club Road, Tollygunge, Kolkata- 700033

: All LTTCs.



Darbhanga-Motihari Transmission Company Limited CIN: U40300DL2012GOI246371 • Tel.: +91 11 47523100 • Website: www.esselinfraprojects.com

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|----|---|----|---|
| 3. | Director Commercial, Grid Corporation of Orissa Limited Janpath, Bhubaneswar - 751022 | 4. | Addl. Chief Engineer (EHV, M&E) Power Deptt., Govt. of Sikkim, Gangtok-737101 |
| 5. | Chief Engineer (Commercial) Damodar Valley Corporation, DVC Towers, VIP Road, Kolkata- 700054 | 6. | Chief Engineer - Transmission Jharkhand State Electricity Board, Engineering Building, HEC, Dhurwa, Ranchi- 834004 |
| 7. | Maithan Power Limited, MA-5, Gogna, PO-Maithan DAM , Distt Dhanbad, Jharkhand-828207 | | |

Darbhanga-Motihari Transmission Company Limited

Site Office: 1st Floor, Vikas Tower, Infront of Durga Mandir (facing Pusa Road) Malighat, BMP – 06, Muzaffarpur, Bihar–842001 Telefax. +91 621 2283023

Ref: MUZ/16-17/375

Date: 2nd Apr 2017

To,

Electrical Superintending Engineer Transmission Circle Muzaffarpur, Bihar State Power Transmission Co. Ltd. Muzaffarpur, Bihar

Sub: Eastern Region System Strengthening Scheme VI being developed by Darbhanga— Motihari Transmission Company Ltd. — Installation of PLCC Equipment by BSPTCL at Darbhanga Sub-station for 220 kV Transmission Lines.

Ref: 1) DMTCL Letter No. DMTCL/DEL/2017/16 dated 20th Mar 2017.

2) BSPTCL Letter No. 810 dated 1st Apr 2017.

Dear Sir,

This is in reference to your letter dated 1st Apr 2017 vide which DMTCL has been requested to provide the clearance for commissioning of PLCC equipment for 220 kV transmission lines of BSPTCL, at DMTCL Darbhanga GIS Sub-station.

In this regard, please refer to our letter dated 20th Mar 2017 (copy enclosed) vide which we have already requested BSPTCL to interconnect the 220 kV Transmission Lines alongwith installation of PLCC equipment at DMTCL Darbhanga end latest by 29th Mar 2017 for smooth flow of power.

It is again requested to interconnect the 220 kV Transmission Lines alongwith installation of PLCC equipment at DMTCL Darbhanga end without any further delay.

Thanking You,

Yours faithfully

For Darbhanga-Motihari Transmission Co. Ltd.

(P K Śwain) AVP - DMTCL

Ref: DMTCL/DEL/2017/22

Date: 18th Apr 2017

To,

Chief Engineer – Transmission
Bihar State Power Transmission Company Ltd.
Transmission Vidyut Bhawan, 04th Floor,
Bailey Road, Patna,
Bihar (800021)

Chief Operating Officer (CTU Planning), PGCIL, Sec-29, Near IFFCO Chowk, Gurgaon – 122001

Sub: Eastern Region System Strengthening Scheme VI developed by Darbhanga-Motihari Transmission Company Ltd. – Intimation for the power flow through the 220 kV downstream network of BSPTCL.

Dear Sir,

This is in reference to the Eastern Region System Strengthening Scheme VI being implemented by Darbhanga-Motihari Transmission Company Ltd.

Further, this is to inform you that subsequent to successful charging of 400 kV D/C Muzaffarpur – Darbhanga Transmission Line and 2 X 500 MVA 400/220 kV Darbhanga GIS Sub-station, the power is being fed to BSPTCL transmission system through 220 kV S/C Darbhanga – Samastipur Transmission Line w.e.f. 16th Apr 2017, 14:48 Hrs.

Thanking You, Yours faithfully

For Darbhanga-Motihari Transmission Company Ltd.

(Authorized Signatory)



Copy to:

- Executive Director (Commercial), PGCIL, Sec-29, Near IFFCO Chowk, Gurgaon 122001
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| | Grid Corporation of Orissa Limited | | Power Deptt., Govt. of Sikkim, |
| | Janpath, Bhubaneswar - 751022 | | Gangtok-737101 |
| 5. | Chief Engineer (Commercial) | 6. | Chief Engineer - Transmission |
| | Damodar Valley Corporation, | | Jharkhand State Electricity Board, |
| | DVC Towers, VIP Road, | | Engineering Building, HEC, |
| | Kolkata- 700054 | | Dhurwa, Ranchi- 834004 |
| 7. | Maithan Power Limited, | | |
| | MA-5, Gogna, | | |
| | PO-Maithan DAM , | | |
| | Distt Dhanbad, Jharkhand-828207 | | |





Darbhanga-Motihari Transmission Company Limited

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Ref: DMTCL/DEL/2017/02-01

Date: 02nd Jan. 2017

To,

Chief Operating Officer (CTU Planning)
Power Grid Corporation of India Ltd.
"Sector – 29, Near IFFCO Chowk,
Gurgaon (Haryana) - 122001.

Chief Engineer – Transmission (Lead LTTC) Bihar State Power Transmission Co. Ltd. Transmission Vidyut Bhawan, 4th Floor, Bailey Road, Patna, Bihar - 800021

Sub: Eastern Region System Strengthening Scheme VI developed by Darbhanga–Motihari Transmission Company Ltd. – **Interconnection of Darbhanga Transmission Element.**

Dear Sir,

This is in reference to the Eastern Region System Strengthening Scheme VI being implemented by Darbhanga Motihari Transmission Company Ltd.

Further, this is to intimate that 400 kV D/C Muzaffarpur (PG) – Darbhanga Transmission Line and 2X500 MVA, 400/220 kV Darbhanga GIS, which are covered in ERSS VI Transmission Scheme shall be ready for charging and interconnection with the Grid system by 15^{th} Feb 2017.

This intimation is for your information and necessary action in this regard please.

Thanking You,

Yours' faithfully

For Darbhanga-Motihari Transmission Company Ltd.

(Authorised Signatory)

Copy to: Chief Engineer (PSPM), CEA, Sewa Bhawan, R. K. Puram, Sector -1, New Delhi-110066.

: General Manager (ERLDC), 14, Golf Club Road, Tollygunge, Kolkata- 700033

: All LTTCs.



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Darbhanga-Motihari Transmission Company Limited

Site Office: 1st Floor, Vikas Tower, Infront of Durga Mandir (facing Pusa Road) Malighat, BMP – 06, Muzaffarpur, Bihar–842001 Telefax. +91 621 2283023

Ref: MUZ/16-17/375

Date: 2nd Apr 2017

To,

Electrical Superintending Engineer Transmission Circle Muzaffarpur, Bihar State Power Transmission Co. Ltd. Muzaffarpur, Bihar

Sub: Eastern Region System Strengthening Scheme VI being developed by Darbhanga— Motihari Transmission Company Ltd. — Installation of PLCC Equipment by BSPTCL at Darbhanga Sub-station for 220 kV Transmission Lines.

Ref: 1) DMTCL Letter No. DMTCL/DEL/2017/16 dated 20th Mar 2017.

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Dear Sir,

This is in reference to your letter dated 1st Apr 2017 vide which DMTCL has been requested to provide the clearance for commissioning of PLCC equipment for 220 kV transmission lines of BSPTCL, at DMTCL Darbhanga GIS Sub-station.

In this regard, please refer to our letter dated 20th Mar 2017 (copy enclosed) vide which we have already requested BSPTCL to interconnect the 220 kV Transmission Lines alongwith installation of PLCC equipment at DMTCL Darbhanga end latest by 29th Mar 2017 for smooth flow of power.

It is again requested to interconnect the 220 kV Transmission Lines alongwith installation of PLCC equipment at DMTCL Darbhanga end without any further delay.

Thanking You,

Yours faithfully

For Darbhanga-Motihari Transmission Co. Ltd.

(P K Śwain) AVP - DMTCL

Ref: DMTCL/DEL/2017/16 Date: 20th Mar 2017

To,

Director (Projects)
Bihar State Power Transmission Co. Ltd.
Transmission Vidyut Bhawan, Bailey Road,
4th Floor, Patna,
Bihar – 800021

Sub: Eastern Region System Strengthening Scheme VI being developed by Darbhanga— Motihari Transmission Company Ltd. —Intimation for charging of Darbhanga Element.

Dear Sir,

This is in reference to the Eastern Region System Strengthening Scheme VI (ERSS VI) being developed by Darbhanga–Motihari Transmission Company Ltd. (DMTCL).

This is to intimate you that the following Transmission Elements covered under the ERSS VI Transmission Scheme will be ready for charging on 30th Mar 2017:

- 1) 400 kV D/C Triple Snowbird Muzaffarpur Darbhanga Transmission Line
- 2) 2 X 500 MVA 400/220 kV GIS Sub-station at Darbhanga

As the downstream system at 220 kV level to off take the power from 400/220 kV GIS Sub-station (of DMTCL) is in the scope of BSPTCL, it is requested to interconnect the 220 kV Transmission Lines along with installation of PLCC equipment at DMTCL end latest by 29th Mar 2017 for smooth flow of power.

Thanking You,

Yours faithfully

For Darbhanga-Motihari Transmission Co. Ltd.

(Authorized Signatory)

Copy to: Chief Engineer, (PSPM), Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi – 110 066

: Chief Engineer – Transmission, Bihar State Power Transmission Co. Ltd. (Lead LTTC)

: Chief Operating Officer (CTU), PGCIL, "Saudamini", Sec-29, Gurgaon, Haryana - 122001

: All LTTC.



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| 3. | Director Commercial, Grid Corporation of Orissa Limited Janpath, Bhubaneswar - 751022 | 4. | Addl. Chief Engineer (EHV, M&E), Power Deptt., Govt. of Sikkim, Gangtok - 737101 |
| 5. | Chief Engineer (Commercial), Damodar Valley Corporation DVC Towers, VIP Road, Kolkata - 700054 | 6. | Chief Engineer, Transmission Jharkhand State Electricity Board Engineering Building, HEC, Dhurwa, Ranchi-834004 |
| 7. | Maithan Power Limited MA-5, Gogna, PO- Maithan DAM Dist. Dhanbad, Jharkhand- 828207 | | |





CTU Agenda for Validation Committee for Q2 POC (Jul'17 to Sep'17) To be held on 31.05.17

Removal of BBMB LTA from POC billing for the period Oct'16-Mar'17

The transmission tariff of transmission assets of BBMB was included in the POC computations as per the CERC Order w.e.f. Jan'17 and the corresponding LTA of BBMB (approx 2800 MW) was included in the POC computations w.e.f. Q3POC of 2016-17 (Oct'16 to Dec'16) and hence the POC billing raised by the CTU to the beneficiary states of BBMB generation was inclusive of the transmission charges for the proportionate LTA from the BBMB generation.

The inclusion of LTA from BBMB generation in POC computations was contested by Rajasthan with Hon'ble Commission and the matter is under review by the Commission. Meanwhile, in the 1st Validation Committee meeting for Q1 POC 2017-18 (Apr'17-Jun'17) held on 24.03.2017, the above concern raised by Rajasthan was deliberated and it was decided that the LTA from BBMB generation not to be considered for POC computations from the current POC quarter until the matter is decided by Hon'ble Commission and accordingly, the LTA was excluded in the POC computations since Q1POC of 2017-18.

CTU submits that, during Oct'16-Mar'17 period in which the LTA was included in the POC computations and was billed by CTU, some of the beneficiary DICs disputed the billing, however, were making payment under protest. But Punjab disputed & disallowed the billing for the subject LTA and did not make payment for the LTA for the said period despite regular follow up & requests. As such, a huge amount of approx Rs 110 Crore is outstanding from Punjab on this account.

As the above matter of inclusion of LTA of BBMB generation in POC computations is under review by the Hon'ble Commission, the Validation Committee, in its last meeting on 24.03.2017, decided to exclude the LTA of BBMB generation from POC computations from Q1 POC of 2017-18 as mentioned above. In this regard, it is felt prudent to extend the same decision for the prior period of Q3 & Q4 POC of 2016-17 (Oct'16 to Mar'17) also so as to avoid dispute in POC billing & collection of transmission charges till a final decision is taken by the Hon'ble Commission in the matter.

Validation Committee may approve the above.

Point of Connection Charges and Losses Computation July 2017 -September 2017 (Q2)

Meeting of the Validation Committee Date: 31st May, 2017

Venue: NRLDC Conference Room, New Delhi

Assumptions

- As per CERC (Sharing of Inter-State Transmission Charges and Losses)
 Regulations, 2010 and amendments thereof;
- Maximum/Peak generation (based on SEM data) and Maximum/Peak load (based on CEA data) considered.

Contents

□ PoC Computation for Q2 Case (July'17 - Sep'17)

Demand & Generation Projection

New Generation

HVDC Set points

Demand Generation Projection

- Demand and Generation Projection
 - Based on Last 3 years data.
- Generation Projection
 - Average of monthly maximum injection in the last three years.
 - Based on actual metered data available with RLDCs.
 - Increasing Trend: Last Year Average figure considered
 - In other cases : Average of last three years
 - For State's generation, maximum injection data for last 3 yrs and projected generation to be provided by state SLDC.

Demand Generation Projection

■ For State's generation, in case of non-submission of data by the DICs, the maximum injection of the concerned State is taken as the difference between peak met and withdrawal from ISTS based on actual metered data (for the time block corresponding to the block in which peak met occurred).

■ New Generation: DOCO by 30th June 2017.

Demand Generation Projection

- Demand Projection
 - Projection based on last 3 year's average of corresponding month's (July, Aug, Sep) peak demand met figures.
 - Projected all India peak demand met calculated.
 - Based on FORECAST function of MS-Excel
 - Data taken from monthly power supply position published by CEA.
 - Normalization factor: <u>Projected All India Peak Demand Met</u>

 Sum of projected met for all states

Load Generation Projection

| New Units | Loading |
|---|---------|
| Thermal Units with DOCO from 1st Oct'16 to 30th June'17 | 70% |
| Hydro Units with DOCO from 1 st Oct'16 to 30 th June'17 | 100% |
| Gas Units with DOCO from 1st Oct'16 to 30th June'17 | 30% |

Demand Projection

- **□** Northern Region
- □ **Eastern Region**
- **□** Western Region
- □ **North-Eastern Region**
- **□ Southern Region**

Generation Projection (Including New Generation)

- □ **Northern Region**
- □ **Eastern Region**
- **□** Western Region
- □ **North-Eastern Region**
- **□** Southern Region

HVDC Set points

■ Maximum Flow based on operational experience.

MW Values

| <u>IVIV Valu</u> | | | | |
|----------------------------|---|--|--|--|
| HVDC Name | Set points to be considered in Basecase | | | |
| Mundra-Mahindergarh Pole-1 | 1250 | | | |
| Mundra-Mahindergarh Pole-2 | 1250 | | | |
| Talcher-Kolar Pole- 1 | 1000 | | | |
| Talcher-Kolar Pole- 2 | 1000 | | | |
| Rihand-Dadri Pole- 1 | 750 | | | |
| Rihand-Dadri Pole- 2 | 750 | | | |
| Balia-Bhiwadi Pole-1 | 500 | | | |
| Balia-Bhiwadi Pole-2 | 500 | | | |
| Bhadrawati_HVDC | 1000 | | | |
| Vindhyachal_HVDC | 250 | | | |
| Gajuwaka_HVDC | 650 | | | |
| Pusauli HVDC | 400 | | | |
| Chandrapur-Padghe Pole-1 | 750 | | | |
| Chandrapur-Padghe Pole-2 | 750 | | | |
| BNC- Agra Pole-1& Pole-2 | 500 (towards NR) | | | |
| Champa-Kurukshetra Pole-1 | 1500 | | | |

Data not Received

- □ Jammu & Kashmir
- Haryana
- Uttar Pradesh
- □ Goa

- □ West Bengal

- Jharkhand
- □ Sikkim
- Andhra Pradesh
- Pondicherry
- Arunachal Pradesh

Data not Received

- AD Hydro
- Everest
- □ HBPCL
- Sree cement
- □ Maithon Power Ltd.
- Adhunik Power
- GMR Kamalanga
- JITPL
- □ Lanco Amarkantak
- □ NSPCL Bhilai
- □ SEPL+MEPL
- □ LANCO Kondapalli

Balco

TRN Energy

KSK Mahanadi

SGPL

NLC

Vandana Vidyut

Sasan UMPP

Coastal Energen

Vallur

RGPPL

Tehri

YTC Data received from Transmission Licensees

- **□** Reliance Power Transmission Ltd.
- Adani Power Limited
- Aravali Power Company Pvt. Ltd.
- Darbhanga Motihari Transmission Company Ltd.
- **■** Raichur Sholapur Transmission company Ltd.
- Parbati Koldam Trans. Co. Ltd
- Jabalpur Transmission Company Ltd.
- East North Inter-connection Ltd.
- **■** Bhopal Dhule Transmission Company Ltd.
- **■** RAPP Transmission Company Ltd.
- **□** Purulia & Kharagpur Transmission Company Ltd.
- NRSS-XXIX Transmission Ltd.
- **□** NRSS-XXXI B Transmission Ltd.
- NRSS-XXXVI Transmission Ltd.

- Jaypee Powergrid Limited
- **■** Kudgi Trans. Ltd.
- Maheshwaram Trans. Ltd.
- **□** Patran Trans. Co. Ltd.
- **□** Torrent Power Grid Ltd.
- **POWERGRID Vizag Trans. Ltd.**
- **□** POWERGRID NM Trans. Ltd.
- **POWERGRID Unchahar Trans. Ltd.**
- **POWERGRID Warora Trans. Ltd.**
- **■** Teestavalley Power Transmission Limited
- North East Transmission Company Ltd.
- **■** Essar Power Transmission Company Ltd.
- **□** Jindal Power Ltd.
- Power Grid Corporation of India Limited
- **□** Powerlinks Transmission Ltd.

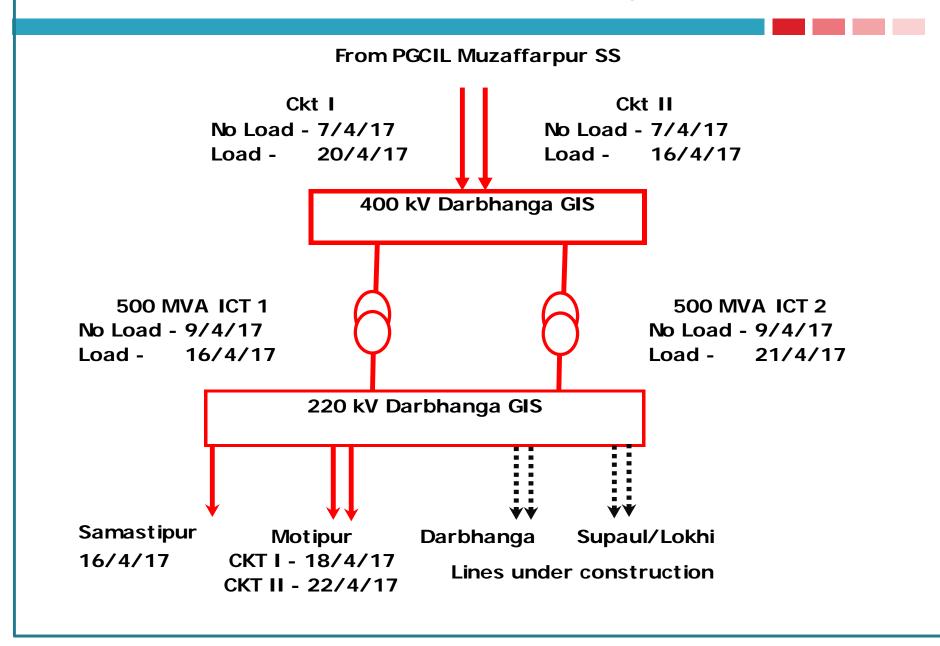
YTC Data received from State

- Delhi
- Karnataka
- Kerala
- Madhya Pradesh
- Assam
- Meghalaya

Points for Discussion

- ➤ Disbursement of Transmission Charges
 - 400 kV D/C Muzaffarpur (PG) Darbhanga transmission line
 - LILO of both Ckts of 400 kV D/C Barh Gorakhpur transmission line at Mothihari
- > Escalable component as per CERC order
 - NRSS-XXIX Transmission Ltd.
 - Maheshwaram Transmission Ltd.
- Patran Transmission Company Ltd.
 - Payment of Charges through PoC Mechanism
- PowerGrid Warora Transmission Ltd.
 - Linked with commissioning of NTPC generation

Darbhanga Sub-station



Thank You!!

Demand Projection – Northern Region

| Entity | Q2 (July-Sep'17) Projected Demand (MW) (Based on Peak Entity Met figures of last 3 years) before normalization | |
|----------------------|--|--------|
| Chandigarh | 338 | |
| Delhi | 5,898 | 6,000 |
| Haryana | 9,294 | |
| Himachal Pradesh | 1,326 | 1,221 |
| Jammu & Kashmir | 2,041 | |
| Punjab | 12,130 | 11,404 |
| Rajasthan | 8,748 | 8,959 |
| Uttar Pradesh | 16,928 | |
| Uttarakhand | 1,999 | 1,999 |
| Total | 58,701 | |
| Normalization Factor | 0.98 | |

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Demand Projection – Eastern Region

| | | | <u> Dack</u> |
|----------------------|--|------------------------------|--------------|
| Entity | Q2 (July-Sep'17) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization | Data Given by DICs/States | |
| Bihar | 4,129 | 4,400 | |
| DVC | 2,491 | 2,838 | |
| Jharkhand | 1,231 | | |
| Odisha | 4,102 | 4,186 | |
| West Bengal | 7,735 | | |
| Sikkim | 105 | | |
| Total 19,794 | | | |
| Normalization Factor | 0.98 | | |

Demand Projection – Western Region

| Entity | Q2 (July-Sep'17) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization | Data Given by DICs/States |
|----------------------|---|------------------------------|
| Chhattisgarh | 3,821 | 3,666 |
| Gujarat | 13,912 | 14,100 |
| Madhya Pradesh | 7,037 | 8,000 |
| Maharashtra | 18,691 | 19,200 |
| Daman & Diu | 337 | |
| Dadra Nagar Haveli | 815 | |
| Goa_WR | 460 | |
| ESIL Hazira | 770 | |
| Total | 45,843 | |
| Normalization Factor | 0.98 | |

Demand Projection – North-Eastern Region

| | R | 2 | ļ |
|--|---|---|---|
| | 브 | a | 1 |

| Q2 (July-Sep'17) Projected Pemand (MW) (Based on Peak Met figures of last 3 years) before normalization 144 1,748 | Data Given by DICs/States 1,530 154 | |
|--|--|--|
| 1,748 155 | · | |
| 155 | · | |
| | 154 | |
| 000 | | |
| 306 | 319 | |
| 86 | 93 | |
| 124 | 129 | |
| 280 | 415 | |
| 2,842 | | |
| 0.98 | | |
| | 280 2,842 | |

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Demand Projection – Southern Region

| | | <u>Back</u> |
|----------------------|--|------------------------------|
| Entity | Q2 (July-Sep'17) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization | Data Given by DICs/States |
| Andhra Pradesh | 8,116 | |
| Telangana | 8,321 | 8,205 |
| Karnataka | 9,368 | |
| Kerala | 3,589 | 3,554 |
| Tamil Nadu | 15,031 | 14,800 |
| Pondicherry | 371 | |
| Goa- SR | 80 | |
| Total | 44,874 | |
| Normalization Factor | 0.98 | |

Generation Projection – Northern Region 24

| S. No | . Entity | Projections based on 3 Years Data (A) | Generation addition during 1st Oct'16 – 31st Mar'17 (B) | Generation CoD from 1st Apr'17 to 30 th June'17 (C) | TOTAL D=A+B+C | Comments From DICs /States (if any) | Figure as per Comments |
|----------|---------------------|--|---|---|------------------|-------------------------------------|------------------------------|
| | | (MW) | (MW) | (MW) | (MW) | | (MW) |
| 1 | UP | 7458 | <u>432</u> | <u>432</u> - 7890 | | | |
| 2 | Delhi | 1241 | - | 1241 | | As per data given by Delhi | 712 |
| 3 | Haryana | 2796 | - | - | 2796 | | |
| 4 | Uttarakhand | 951 | - | 178 | 1129 | As per data given by Uttarakhand | 1288 |
| 5 | Punjab | 5196 | - | - | 5196 | As per data given by Punjab | 5511 |
| 6 | Rajasthan | 6139 | - | 864 | 7003 | As per data given by Rajasthan | 8516 |
| 7 | Himachal Pradesh | 936 | - | - | 936 | As per data given by HP | 673 |
| 8 | Jammu & Kashmir | 973 | - | - | 973 | | |
| 9 | ввмв | 2569 | - | - | 2569 | As per data given by BBMB | 2564 |

Generation Projection – Northern Region ...(2) 25

| S. No. | Entity | Projections based on 3 Years Data (A) | Generation addition during 1st Oct'16 – 31st Mar'17 (B) | Generation CoD from 1st Apr'17 to 30 th June'17 (C) | TOTAL D=A+B+C | Comments From DICs /States (if any | Figure as per Comments |
|-----------|-----------------|--|---|---|------------------|--|---------------------------|
| | | (MW) | (MW) | (MW) | (MW) | | (MW) |
| 10 | Dadri Thermal | 1740 | - | - | 1740 | | 1697 |
| 11 | Rihand | 2828 | - | - | 2828 | | 2807 |
| 12 | Singrauli | 1912 | - | - | 1912 | As per data given | 1863 |
| 13 | Unchahar | 976 | - | - | 976 | by NTPC | 956 |
| 14 | Auraiya | 351 | - | - | 351 | | 150 |
| 15 | Dadri CCPP | 488 | - | - | 488 | | 400 |
| 16 | NAPS | 330 | - | - | 330 | As per NAPS | 400 |
| 17 | Jhajjar | 865 | - | - | 865 | - | |
| 18 | Dhauliganga | 263 | - | - | 263 | As per forecasted Gen. given by NHPC | 280 |
| 19 | Tanakpur | 99 | - | - | 99 | Gen. given by NHFC | 94 |
| 20 | Koteshwar | 393 | - | - | 393 | As per Koteshwar | 400 |
| 21 | Tehri | 1021 | - | - | 1021 | - | |
| 22 | Anta | 318 | - | - | 318 | As per data given by NTPC | 150 |
| 23 | RAAP B | 370 | - | - | 370 | - | |
| 24 | RAAP C | 418 | | - | 418 | - | |
| 25 | AD Hydro | 228 | - | - | 228 | - | |
| 26 | Everest | 105 | - | - | 105 | - | |
| 27 | Karcham Wangtoo | 1185 | - | - | 1185 | - | |

Generation Projection – Northern Region ...(31

| | | | | <u> </u> | | | |
|------------|---------------|--|---|---|------------------|--|---------------------------|
| S. No. | Entity | Projections based on 3 Years Data (A) | Generation addition during 1st Oct'16 – 31st Mar'17 (B) | Generation CoD from 1st Apr'17 to 30 th June'17 (C) | TOTAL D=A+B+C | Comments From DICs /States (if any | Figure as per Comments |
| | | (MW) | (MW) | (MW) | (MW) | | (MW) |
| 28 | Bairasul | 186 | - | - | 186 | | 180 |
| 29 | Chamera 1 | 559 | - | - | 559 | | 542 |
| 30 | Chamera 2 | 311 | - | - | 311 | As per forecasted data given by NHPC | 307 |
| 31 | Chamera 3 | 249 | - | - | 249 | uuu giron by iiin o | 234 |
| 32 | Naptha Jhakri | 1620 | - | - | 1620 | As per SJVN | 1605 |
| 33 | Lanco Budhil | 98 | - | - | 98 | - | |
| 34 | Dulhasti | 460 | - | - | 460 | | 395 |
| 35 | Salal | 686 | - | - | 686 | As per forecasted | 675 |
| 36 | Sewa-II | 129 | - | - | 129 | data given by NHPC | 128 |
| 37 | URI I HPS | 488 | - | - | 488 | | 480 |
| 38 | URI II HPS | 236 | | - | 236 | | 240 |
| 3 9 | Sree Cement | 300 | - | - | 300 | - | |
| 40 | Parbati III | 531 | - | - | 531 | As per forecasted data given by NHPC | 520 |
| 41 | Rampur HEP | 460 | - | - | 460 | As per SJVN | 420 |
| 42 | Koldam | 867 | - | - | 867 | As per data given by NTPC | 792 |

Generation Projection – Eastern Region...(1) 27

| S. No. | Entity | Projections based on 3 Years Data (A) | addition during | Generation CoD from 1st Apr'17 to 30 th June'17 (C) | TOTAL D=A+B+ C | Comments From DICs /States (if any | Figure as per Comments |
|-----------|---------------------|--|-----------------|---|----------------------|--|------------------------------|
| | | (MW) | (MW) | (MW) | (MW) | | (MW) |
| 43 | West Bengal | 4907 | - | - | 4907 | - | |
| 44 | Odisha | 3767 | - | - | 3767 | Forecasted peak injection as given by GRIDCO | 3286 |
| 45 | Bihar | 394 | - | - | 394 | As per Bihar | 490 |
| 46 | Jharkhand | 317 | - | - | 317 | - | |
| 47 | Sikkim | 0 | - | - | 0 | - | |
| 48 | Chujachan | 115 | - | - | 115 | - | |
| 49 | DVC | | - | - | | | |
| 50 | Durgapur Steel | | - | - | | As you date siven by DVC | |
| 51 | Koderma TPP | 3438 | - | - | 3438 | As per data given by DVC (Average) | 3740 |
| 52 | Raghunathpur | | | | | | |
| 53 | Bokaro TPS Expn. | | | | | | |
| 54 | MPL | 1006 | - | - | 1006 | Last quarter Gen. | 990 |

Generation Projection – Eastern Region...(2)²⁸ Back

| | | | | | | _ | don |
|-----------|------------------------|--|---|---|------------------|--|------------------------------|
| S. No. | Entity | Projections based on 3 Years Data (A) | Generation addition during 1st Oct'16 – 31st Mar'17 (B) | Generation CoD from 1st Apr'17 to 30 th June'17 (C) | TOTAL D=A+B+C | Comments From DICs /States (if any | Figure as per Comments |
| | | (MW) | (MW) | (MW) | (MW) | | (MW) |
| 55 | Teesta | 532 | - | - | 532 | As per forecasted data given by NHPC | 525 |
| 56 | Kahalgaon | 2203 | - | - | 2203 | As per data given by | 2178 |
| 57 | Farakka | 1972 | - | - | 1972 | NTPC | 1968 |
| 58 | Talcher | 974 | - | - | 974 | | |
| 59 | Rangeet | 73 | - | - | 73 | As per forecasted data given by NHPC | 63 |
| 60 | Corporate Power | | - | - | | | |
| 61 | Adhunik Power | 399 | - | - | 399 | - | |
| 62 | Barh | 1147 | | | 1147 | As per data given by NTPC | 1057 |
| 63 | Kamalanga TPP (GMR) | 629 | - | - | 629 | - | |
| 64 | JITPL | 1153 | - | - | 1153 | | |
| 65 | Jorthang | 105 | - | - | 105 | | |
| 66 | Bhutan | 1603 | - | - | 1603 | - | - |
| 67 | Teesta-III | - | - | <u>594</u> | 594 | | |
| 68 | Dikchu HEP | - | - | 95 | 95 | | |
| 69 | Nabinagar BRBCL | - | - | 301 | 301 | | |

Generation Projection – Western Region...(1) 29

| S. No. | Entity | Projections based on 3 Years Data (A) | Generation addition during 1st Oct'16 – 31st Mar'17 (B) | Generation CoD from 1st Apr'17 to 30 th June'17 (C) | TOTAL D=A+B+C | Comments From DICs /States (if any | Figure as per Comments |
|-----------|------------------|--|---|---|------------------|--|------------------------------|
| | | (MW) | (MW) | (MW) | (MW) | | (MW) |
| 70 | MP | 3310 | - | - | 3310 | As per forecasted gen. given by MP | 5020 |
| 71 | Maharashtra | 12521 | 864 | - | 13385 | As per data given by Maharashtra | 14500 |
| 72 | Chhattisgarh | 1839 | - | - | 1839 | As per data given by Chhatishgarh | 2622 |
| 73 | Gujarat | 10375 | - | <u>164</u> | 10539 | As per data given by Gujarat | 11484 |
| 74 | Goa | | - | - | | | |
| 75 | D&D | | - | - | | | |
| 76 | DNH | | - | - | | | |
| 77 | Vindhyachal | 4372 | - | - | 4372 | As per NTPC | 4440 |
| 78 | Ratnagiri Dabhol | 650 | - | - | 650 | | |
| 79 | TAPS (1,2,3,4) | 1228 | - | - | 1228 | As per data given by TAPS | 1228 |
| 80 | JINDAL | 678 | - | - | 678 | | |
| 81 | LANCO | 564 | - | - | 564 | | |
| 82 | NSPCL Bhilai | 470 | - | - | 470 | | |
| 83 | Korba | 2468 | - | - | 2468 | As per NTPC | 2431 |

Generation Projection – Western Region ... (2)

Generation **Projections Generation CoD Comments From** addition during **TOTAL** Figure as per S. based on 3 from 1st Apr'17 1st Oct'16 - 31st **DICs /States Entity** to 30th June'17 **Years Data** D=A+B+C Comments No. Mar'17 (if any (C) (A) (B) (MW) (MW) (MW) (MW) (MW) 2878 2878 2809 84 **SIPAT** As per NTPC 85 **CGPL** 3840 3840 86 Mauda 837 432 1269 1135 As per NTPC 87 Gandhar 420 420 200 88 Kawas 302 302 200 1260 SSP 1260 89 90 **KAPS** 217 217 431 **Essar Mahan** 824 91 393 92 **BALCO** 531 531 1134 93 **KSK Mahanadi** 393 1526 0 0 94 **Vandana Vidyut** 95 3723 3723 Sasan UMPP 96 **Tamnar TPP** 604 604

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Generation Projection – Western Region ... (3)

| | | | | | | | <u>Back</u> |
|-----------|---------------------------------|--|---|---|------------------|------------------------------------|------------------------|
| S. No. | Entity | Projections based on 3 Years Data (A) | Generation addition during 1st Oct'16 – 31st Mar'17 (B) | Generation CoD from 1st Apr'17 to 30 th June'17 (C) | TOTAL D=A+B+C | Comments From DICs /States (if any | Figure as per Comments |
| | | (MW) | (MW) | (MW) | (MW) | | (MW) |
| 97 | DGEN | 339 | - | - | 339 | As per DGEN Power | 0 |
| 98 | DB Power | 1139 | - | - | 1139 | | |
| 99 | Korba West | 567 | - | - | 567 | | |
| 100 | Dhariwal | 264 | - | - | 264 | | |
| 101 | GMR Chattishgarh Energy Ltd. | 354 | - | - | 354 | | |
| 102 | JP Nigrie | 1250 | - | - | 1250 | As per data given by JP Nigrie | 1240 |
| 103 | GMR Warora | 557 | - | - | 557 | | |
| 104 | ACBIL+ Spectrum+MCCPL | 576 | - | - | 576 | | |
| 105 | MB Power (Anuppur) | 568 | - | - | 568 | | |
| 106 | RKM Power | - | <u>232</u> | 232 | 464 | | |
| 107 | Jhabua Power | 0 | - | - | 0 | Last Quarter Generation | 552 |
| 108 | TRN Energy | - | <u>196</u> | 196 | 393 | | |
| 109 | Sholapur STPP | - | | 435 | 435 | As per NTPC | 435 |

Generation Projection – North-Eastern Region

| S. No. | Entity | Projections based on 3 Years Data (A) | Generation addition during 1st Oct'16 – 31st Mar'17 (B) | Generation CoD from 1st Apr'17 to 30 th June'17 (C) | TOTAL D=A+B+ C | Comments From DICs /States (if any | Figure as per Comments |
|-----------|-------------------|--|---|---|----------------------|--|---------------------------|
| | | (MW) | (MW) | (MW) | (MW) | | (MW) |
| 110 | AGTPP, NEEPCO | 132 | - | - | 132 | | 132 |
| 111 | Doyang, NEEPCO | 73 | - | - | 73 | | 74 |
| 112 | Kopili, NEEPCO | 228 | - | - | 228 | | 198 |
| 113 | Khandong, NEEPCO | 48 | - | - | 48 | As decided in 132nd OCC meeting | 66 |
| 114 | Ranganadi, NEEPCO | 421 | - | - | 421 | | 408 |
| 115 | AGBPP_Kathalguri | 209 | - | - | 209 | | 220 |
| 116 | Loktak, NHPC | 107 | - | - | 107 | | 105 |

Generation Projection - North-Eastern Region33

| | | | | | | | <u>Back</u> |
|-----------|-------------------|--|---|---|----------------------|--|---------------------------|
| S. No. | Entity | Projections based on 3 Years Data (A) | Generation addition during 1st Oct'16 – 31st Mar'17 (B) | Generation CoD from 1st Apr'17 to 30 th June'17 (C) | TOTAL D=A+B+ C | Comments From DICs /States (if any | Figure as per Comments |
| | | (MW) | (MW) | (MW) | (MW) | | (MW) |
| 117 | Palatana GBPP | 564 | | | 564 | | 547 |
| 118 | Bongaigaon_NTPC | 239 | | - | 239 | | 230 |
| 119 | Arunachal Pradesh | 0 | | | 0 | | - |
| 120 | Assam | 356 | | | 356 | | 241 |
| 121 | Manipur | 0 | | | 0 | As decided in 132 nd OCC | - |
| 122 | Meghalaya | 248 | | | 248 | meeting | 271 |
| 123 | Nagaland | 30 | | | 30 | | 24 |
| 124 | Tripura | 120 | | | 120 | | 180 |
| 125 | Mizoram | 6 | | | 6 | | 8 |

Generation Projection – Southern Region...(1)³⁴

| S. No. | Entity | Projections based on 3 Years Data (A) | Generation addition during 1st Oct'16 – 31st Mar'17 (B) | Generation CoD from 1st Apr'17 to 30 th June'17 (C) | TOTAL D=A+B+C | Comments From DICs /States (if any | Figure as per Comments |
|-----------|---------------------|--|---|---|------------------|--------------------------------------|---------------------------|
| | | (MW) | (MW) | (MW) | (MW) | | (MW) |
| 126 | Andhra Pradesh | 6551 | - | <u>340</u> | 6891 | | |
| 127 | Telangana | 2805 | 785 | - | 3591 | As per data given by Telangana | 6515 |
| 128 | Karnataka | 6475 | - | - | 6475 | - | |
| 129 | Kerala | 1610 | - | - | 1610 | As per Kerala | 1533 |
| 130 | Tamil Nadu | 9808 | - | - | 9808 | As per data given by TN | 10267 |
| 131 | Pondy | 0 | - | - | 0 | - | |
| 132 | Ramagundam | 2470 | - | - | 2470 | As per NTPC | 2431 |
| 133 | Simhadri | 915 | - | - | 915 | | 948 |
| 134 | SEPL | 464 | - | - | 464 | - | |
| 135 | Lanco Kondapalli | 916 | - | - | 916 | | |

Generation Projection – Southern Region...(2)

| S. No. | Entity | Projections based on 3 Years Data (A) | Generation addition during 1st Oct'16 – 31st Mar'17 (B) | Generation CoD from 1st Apr'17 to 30 th June'17 (C) | TOTAL D=A+B+C | Comments From DICs /States (if any | Figure as per Comments |
|-----------|--------------------------------|--|---|---|------------------|------------------------------------|---------------------------|
| | | (MW) | (MW) | (MW) | (MW) | | (MW) |
| 136 | Kaiga | 737 | - | - | 737 | | |
| 137 | NEYVELI (EXT) TPS | 448 | - | - | 448 | | |
| 138 | NEYVELI TPS-II | 1200 | - | - | 1200 | | |
| 139 | NEYVELI TPS-II EXP | 398 | - | - | 398 | | |
| 140 | MAPS | 339 | - | - | 339 | | |
| 141 | Vallur | 1388 | - | - | 1388 | | |
| 142 | Meenakhshi | 257 | - | - | 257 | | |
| 143 | Coastal Energen | 730 | - | - | 730 | | |
| 144 | Kudankulam | 978 | 935 | - | 1913 | | |
| 145 | Tuticorin TPP | 926 | - | - | 926 | | |
| 146 | Thermal Powertech | 1252 | - | - | 1252 | | |
| 147 | IL&FS | 555 | - | - | 555 | | |
| 148 | Talcher Stage-II | 1875 | - | - | 1875 | | |
| 149 | Sembcorp Gayatri Power Ltd. | - | <u>864</u> | - | 864 | | |
| 150 | Kudgi STPS | - | | 524 | 524 | As per NTPC | 524 |

Expected Generation addition – Northern Region



| | | | ared Comm 5 to 31st M | nercial from lar'17 | | Generation declared/expected to be declared Commercial from 1st Apr'17 to 30th June'17 | | | | | |
|-------------|----------|-------------|--------------------------|------------------------|-------|--|-------------|-----------------------|------|------|--|
| Entity | Bus Name | Unit No. | Installed Capacity | Gen. considered | Total | Bus Name | Unit No. | Installed Capacity | | | |
| | | | (MW) | (MW) | (MW) | | | (MW) | (MW) | (MW) | |
| UP | Bara | 3 | 660 | 432 | 432 | | | | | | |
| | | | | | | Shravanti Gas | 4 | 75 | 59 | | |
| Uttarakhand | | | | | | Shravanti Gas | 5 | 75 | 59 | 178 | |
| | | | | | | Shravanti Gas | 6 | 75 | 59 | | |
| Rajasthan | | | | | | Chhabra | 5 | 660 | 432 | 864 | |
| Najastiidii | | | | | | Suratgarh | 7 | 660 | 432 | 004 | |

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Expected Generation addition – Western Region

| | | | lared Com .6 to 31st I | mercial fror Mar'17 | n | Generation declared/expected to be declared Commercial from 1st Apr'17 to 30th June'17 | | | | | | |
|-----------------|-----------------------|----------|---------------------------|------------------------|-------|--|-------------|-----------------------|--------------------|-------|--|--|
| Entity | Bus Name | Unit No. | Installed Capacity | Gen. considered | Total | Bus Name | Unit No. | Installed Capacity | Gen. considered | Total | | |
| | | | (MW) | (MW) | (MW) | | | (MW) | (MW) | (MW) | | |
| Maharashtra | Koradi TPS | 9 | 660 | 432 | 864 | | | | | | | |
| Ivialialasiitia | Koradi TPS 10 660 432 | | 004 | | | | | | | | | |
| Gujarat | | | | | | Bhavnagar TPP | 2 | 250 | 164 | 164 | | |
| Mauda | Mauda | 3 | 660 | 432 | 432 | | | | | | | |
| Essar Mahan | | | | | | Essar Mahan | 2 | 600 | 393 | 393 | | |
| KSK Mahanadi | | | | | | KSK Mahanadi | 3 | 600 | 393 | 393 | | |
| RKM Power | RKM Power | 2 | 360 | 232 | 232 | RKM Power | 3 | 360 | 232 | 232 | | |
| TRN Energy | TRN Energy | 1 | 300 | 196 | 196 | TRN Energy | 2 | 300 | 196 | 196 | | |
| Sholapur STPP | | | | | | Sholapur STPP | 1 | 660 | 435 | 435 | | |

Expected Generation addition – Eastern Region



| | Gener | | lared Com | | om | Generation declared/expected to be declared Commercial from 1st Apr'17 to 30th June'17 | | | | | |
|-------------------|----------|----------|-----------------------|--------------------|-------|--|----------|-----------------------|--------------------|-------|--|
| Entity | Bus Name | Unit No. | Installed Capacity | Gen. considered | Total | Bus Name | Unit No. | Installed Capacity | Gen. considered | Total | |
| | | | (MW) | (MW) | (MW) | | | (MW) | (MW) | (MW) | |
| | | | | | | Teesta- III | 1 | 200 | 198 | | |
| Teesta- III | | | | | | Teesta- III | 2 | 200 | 198 | 594 | |
| | | | | | | Teesta- III | 3 | 200 | 198 | | |
| Dikchu HEP | | | | | | Dikchu HEP | 1 | 48 | 48 | 96 | |
| DIRCHA HEF | | | | | | Dikchu HEP | 2 | 48 | 48 | 30 | |
| Nabinagar BRBCL | | | | | | Nabinagar BRBCL | 1 | 230 | 151 | 151 | |
| INADIIIAKAI DNDCL | | | | | | Nabinagar BRBCL | 2 | 230 | 151 | 151 | |

Expected Generation addition – Southern Region



| | | | lared Com | mercial from Mar'17 | Generation declared/expected to be declared Commercial from 1st Apr'17 to 30th June'17 | | | | | |
|----------------|-----------------------------------|-------------|-----------|------------------------|--|------------|-------------|-----------------------|--------------------|-------|
| Entity | Bus Name | Unit No. | | Gen. considered | Total | Bus Name | Unit No. | Installed Capacity | Gen. considered | Total |
| | | | (MW) | (MW) | (MW) | | | (MW) | (MW) | (MW) |
| Andhra Pradesh | | | | | | Hinduja | 2 | 520 | 340 | 340 |
| Tolongono | Singereni Thermal | 1 | 600 | 393 | 785 | | | | | |
| Telangana - | Singereni Thermal | 2 | 600 | 393 | 765 | | | | | |
| Kudankulam | Kudankulam | 2 | 1000 | 935 | 935 | | | | | |
| Sembcorp | Sembcorp Gayatri Power Ltd. | 1 | 600 | 432 | 864 | | | | | |
| Gayatri Power | Sembcorp Gayatri Power Ltd. | 1 | 600 | 432 | 804 | | | | | |
| Kudgi STPS | | | | | | Kudgi STPS | 1 | 800 | 524 | 524 |

Expected Generation addition –North Eastern Region

40

| | Gener | | declared Co ct '16 to 31s | mmercial fro t Mar'17 | Generation declared/expected to be declared Commercial from 1st Apr'17 to 3th June'17 | | | | | |
|--------|----------|-------------|------------------------------|--------------------------|---|----------|----------|-----------------------|------------------------|-------|
| Entity | Bus Name | Unit No. | Installed Capacity | Gen. considered | Total | Bus Name | Unit No. | Installed Capacity | Gen. consider ed | Total |
| | | | (MW) | (MW) | (MW) | | | (MW) | (MW) | (MW) |
| | | | | | | | | | | |

Comparison of Demand for Q4-16-17

41

| Northern Region | | | | |
|---------------------|-----------------------------------|-----------------------------|---------------|--|
| State/Region/System | Actual Peak Demand Met (MW) | Projected Demand (MW) | Change (in %) | |
| Chandigarh | 215 | 261 | ↓ -18% | |
| Delhi | 4063 | 3950 | 1 3% | |
| Haryana | 6680 | 7313 | ↓ -9% | |
| Himachal Pradesh | 1490 | 1484 | ↓ 0% | |
| Jammu & Kashmir | 2090 | 2135 | ↓ -2% | |
| Punjab | 6377 | 6100 | ↑ 5% | |
| Rajasthan | 10180 | 10275 | ↓ -1% | |
| Uttar Pradesh | 14862 | 14500 | 1 2% | |
| Uttarakhand | 1951 | 2000 | ↓ -2% | |

Contd...

| | Eastern Region | | |
|---------------------|-----------------------------|-----------------------------|--------------|
| State/Region/System | Actual Peak Demand Met (MW) | Projected Demand (MW) | Change(in %) |
| Bihar | 3598 | 3600 | 1 0% |
| DVC | 2563 | 2645 | √ -3% |
| Jharkhand | 1145 | 1170 | ↓ -2% |
| Orissa | 3911 | 4058 | ↓ -4% |
| West Bengal | 6985 | 7397 | √ -6% |
| Sikkim | 91 | 118 | ↓ -23% |
| | Western Region | | |
| Chhattisgarh | 3380 | 3767 | ↓ -10% |
| Gujarat | 13739 | 13960 | -2% |
| Madhya Pradesh | 10696 | 10078 | 6% |
| Maharashtra | 21237 | 19200 | 11% |
| Daman & Diu | 309 | 305 | 1% |
| Dadra Nagar Haveli | 722 | 765 | √ -6% |
| Goa | 492 | 425 | 16% |

| Southern Region | | | | | |
|---------------------|-----------------------------|-----------------------------|---------------|--|--|
| State/Region/System | Actual Peak Demand Met (MW) | Projected Demand (MW) | Change (in %) | | |
| Andhra Pradesh | 7510 | 7792 | ↓ -4% | | |
| Telangana | 8841 | 7500 | ↑ 18% | | |
| Karnataka | 9968 | 9483 | ↑ 5% | | |
| Kerala | 3694 | 3598 | 1 3% | | |
| Tamil Nadu | 13844 | 14800 | √ -6% | | |
| Pondicherry | 339 | 332 | 1 2% | | |
| N | orth Eastern Reg | ion | | | |
| Arunachal Pradesh | 131 | 121 | ↑ 8% | | |
| Assam | 1417 | 1365 | 1 4% | | |
| Manipur | 161 | 160 | 1% | | |
| Meghalaya | 310 | 337 | √ -8% | | |
| Mizoram | 95 | 93 | 1 2% | | |
| Nagaland | 130 | 130 | √ 0% | | |
| Tripura | 225 | 250 | ↓ -10% | | |