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 4th Meeting of Validation Committee for the Application Period from 1st January, 2018 to 31st March, 2018 for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses)

Regulations, 2010

Sir,

Please find enclosed herewith minutes of the **4**th **Meeting of** the Validation Committee for the **year 2016-17 (Application Period from 1**st **January, 2018 to 31**st **March, 2018)** for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) **Regulations, 2010** held on 29.11.2017 in the NRLDC Conference Room at New Delhi for information and necessary action.

Yours faithfully, Sd/-

Dated: 13/12/2017

(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, AGM (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 Executive Director	Northern Regional Load Despatch Centre, Jeet Singh Marg, Katwaria Sarai, New Delhi-110016
8.		Shri G. Anbunesan GM, SRLDC	Southern Regional Load Despatch Centre 29, Race Course Cross Road, Bangalore, Karnataka-560009
9.		Shri U.K Verma, Executive Director	National Load Despatch Centre B-9, Qutab Institutional Area,Katwaria Sarai, New Delhi-110016
10.		Shri P. Mukhopadhyay Executive Director	Eastern Regional Load Despatch Center 14, Golf Club Road, Tollygunge, Kolkata-700 033 (W.B.)
11		Shri T.S Singh Executive Director	North Eastern Regional Load Despatch Centre, Lower Nongrah, Dongtieh, Lapalang, Shillong – 793006
12.	NRPC	Shri M.A.K.P. Singh Member Secretary	Northern Regional Power Committee 18-A Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-11
13.	WRPC	Shri A. Balan,	Western Regional Power Committee

		Member Secretary	Plot No. F-3, MIDC Area, Marol, Opp : SEEPZ, Andheri (East), Mumbai-400093	
14.	SRPC	Shri S.R. Bhat, Member Secretary	Southern Regional Power Committee 29, Race Course Cross Road, Bangalore-560009, Karnataka	
15.	ERPC	Shri A.K. Bandyopadhyay , Member Secretary	Eastern Regional Power Committee 14, Golf Club Road, Tollygunge, Kolkata-700 033 (W.B.)	
16.		Shri S.K. Das, Director Engineering	Bihar State Electricity Board 1 st Floor, Vidyut Bhawan, Bailey Road, Patna-21, Bihar	
17.	NERPC	Shri P.K Mishra Member Secretary	North Eastern Regional Power Committee, NERPC Complex, Dong Parmaw, Lapalang, Shillong-793006 Phone No:0364-2534077 Fax NO::0364-2534040	
18.		Shri Jatin Baishya, Dy. General Manager	State Load Despatch Centre Complex,Kahelipara,Guwahati	
19.	SLDC	Shri P.A.R. Bende, Chief Engineer, SLDC	Chief Engineer Madhya Pradesh Power Transmission Company Ltd., Nayagaon,Rampur, Jabalpur- 482008	
20.	KPTCL	Shri S. Sumanth Director(Transmission), KPTCL	Karnataka Power Transmission Corp. Ltd, Kauvery Bhavan, K.G. Road, Bangalore – 560009	
21.	UPPTCL	Shri A.K. Singh, Director (Operation), Uttar Pradesh Power Transmission Corporation Ltd.	Uttar Pradesh Power Transmission Corporation Ltd , 7th Floor, Shakti Bhavan, Ashok Marg, Lucknow - 226001	

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 4th Meeting of Validation Committee for the Application Period from 1st January, 2018 to 31st March, 2018 held on 29th November, 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, Delhi, Himachal Pradesh, DVC, Jharkhand, Tamil Nadu, Kerala, Karnataka, Bihar, Odissa, West Bengal, Meghalaya, Assam 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 fourth Quarter of 2017-18. The presentation shown during the Validation Committee Meeting dated 29.11.2017 is attached at ANNEXURE- II
- 3. After deliberation among members, it was decided that the peak generation for new hydro units shall be considered at 80% since most of the hydro units would be able to generate at 80% load for the peak hours during January'18 to March'18. For new thermal units and new gas based units, peak injection would be considered as 70% and 30% of ex-bus capacity respectively.
- 4. Demand Projection for Application Period from 1st January, 2018 to 31st March, 2018(Q4 of 2017-18).

4.1 Northern Region:

- (i) Representative of NRLDC and NRPC suggested that Demand projection of Haryana and Uttarakhand may be taken as 7,000 MW and 2,005 MW instead of 6,843 MW and 1850 MW respectively.
- (ii) Representative of Himachal Pradesh suggested that Demand projection of Himachal Pradesh may be considered as 1,500MW instead of 1,153 MW.

The Demand figures as suggested above were agreed.

4.2 Eastern Region:

- (i) Members present at ERLDC suggested that Demand projection of West Bengal and Sikkim may be taken as 7,050 MW and 100 MW instead of 7,069 MW and 104 MW respectively.
- (ii) Representative of Bihar suggested that Demand projection of Bihar may be taken as 4,150 MW instead of 4,082 MW.
- (iii) Representative of Jharkhand suggested that Demand projection of Jharkhand may be taken as 1,240 MW instead of 1,225 MW.

The Demand figures as suggested above were agreed.

4.3 Western Region:

- (i) Members present at WRLDC suggested that Demand projection of Daman and Diu may be taken as 330 MW instead of 314 MW.
- (ii) Representative of Gujarat suggested that Demand projection of Gujarat may be taken as 14,317 MW instead of 13,325 MW. This figure of 14,317 MW is before normalization. Gujarat had earlier given a figure of 13,325 considering normalization.
- (iii) Representative of WRLDC suggested that Demand projection of Essar Hazira may be taken as 700 MW instead of 699 MW

The Demand figures as suggested above were agreed.

- **4.4 North Eastern Region:** Demand projections for NER constituents are in order.
- **4.5 Southern Region:** Representative of Andhra Pradesh suggested that Demand projection of Andhra Pradesh may be taken as 8,300 MW instead of 8,010 MW.
- 5. Generation Projection for Application Period from 1st January, 2018 to 31st March, 2018 (Q4 of 2017-18).

5.1 Northern Region:

- (i) Representative of SLDC Himachal Pradesh suggested that generation projection of Himachal Pradesh may be taken as 320 MW instead of 284 MW.
- (ii) Representative of NRLDC suggested that generation projection of Shree Cement may be taken as 270 MW instead of 303 MW.
- (iii) NTPC representative suggested that generation from Unchahar may be taken as 956 MW instead of 1,286 MW.
- (iv) SJVNL representative suggested that generation Rampur HEP may be taken as 380 MW instead of 427 MW.
- (v) Representative of SLDC Rajasthan suggested that their Chabbra unit of 660 MW is expected by December 2017 and they have considered 1420 MW wind and solar generation. It was decided that based on the past trend and commissioning of new generation, Rajasthan generation may be considered as 7,500 MW instead of 9,328 MW to which representative of Rajasthan agreed.

The Generation figures as suggested above were agreed.

5.2 Western Region:

- (i) As suggested by WRLDC, it was decided that based on the past trend and commissioning of new generation, generation projection of Maharashtra shall be taken as 15,500 MW instead of 17,039 MW.
- (ii) Member present at WRLDC suggested following changes:
 - (a) Generation from RGPPL and SSP may be taken as 540 MW and zero instead of 648 MW and 656 MW respectively.

- (b) Generation from KAPS and Balco may be taken as zero and 300 MW instead of 205 MW and 665 MW respectively.
- (c) Generation from Korba west and GMR Chhattisgarh may be taken as zero instead of 577 MW and 455 MW respectively.
- (d) Generation from RKM Power and Jhabua Power may be taken as 350 MW instead of 653 MW and 127 MW respectively.
- (e) Generation from Lara STPP and SKS Power may be taken as zero instead of 528 MW and 198 MW respectively.
- (f) Generation from DGEN may be taken as zero instead of 196 MW.
- (iii) On the issue of generation projection of Essar Mahan, Chief (Engg) CERC stated that as per available records, WRPC has granted extension by continuation of LILO up to December 2017 only. It was also observed that there is no certainty of commissioning of the Mahan Sipat 400 kV D/C dedicated line by December, 2017. In light of above events it was decided that generation of Essar Mahan shall be taken as zero for the next quarter (Q4 of 2017-18).

The Generation figures as suggested above were agreed.

5.3 Eastern Region:

- (i) Member present at ERLDC suggested following changes
 - (a) Generation from JITPL may be taken as 570 MW instead of 839 MW.
 - (b) Generation from Jorethang HEP may be taken as 70 MW instead of 63 MW.
 - (c) Generation from Adhunik Power and Tashideng HEP may be taken as 250 MW and 60 MW instead of 506 MW and zero respectively.
- (ii) Representative of SLDC, Jharkhand suggested that generation from Jharkhand may be taken as 430 MW instead of 444 MW.
- (iii) Representative of SLDC, Bihar suggested that generation from Bihar may be taken as 250 MW instead of 153 MW.
- (iv) NTPC representative suggested that generation from Barh may be taken as 1,244 MW instead of 1,057 MW.
- (v) It was observed that generation projection for Talcher Stg-1 was on higher side. It was suggested that generation from Talcher Stg-1 may be considered as 942 MW (Installed capacity –Auxiliary consumption) instead of 976 MW.

The Generation figures as suggested above were agreed.

5.4 North Eastern Region: NERLDC representative suggested that generation from Meghalaya may be taken as 170 MW instead of 278 MW in view of new unit been commissioned.

The Generation figures as suggested above were agreed.

5.5 Southern Region:

- (i) Member present at SRLDC suggested following changes:
 - (a) Generation form SEPL may be taken as zero instead of 327 MW.
 - (b) Generation form Lanco Kondanpalli may be taken as zero instead of 118MW.
 - (c) Generation form Meenakshi may be taken as 150 MW instead of 272MW.

- (d) Generation form Kudankulam may be taken as 1,700 MW instead of 1,820 MW.
- (e) Generation form IL&FS may be taken as 750 MW instead of 1,121 MW.
- (f) Generation form Talcher Stg 2 may be taken as 1,885 MW instead of 1,953 MW.
- (vi) Representative of SLDC, Andhra Pradesh suggested that generation from Andhra Pradesh may be taken as 5,836 MW instead of 6,784 MW, keeping in view that injection from Simhadari- I has been considered separately as a regional entity.
- (vii) Representative of SLDC, Tamil Nadu suggested that generation from Tamil Nadu may be taken as 8,004 MW instead of 7,590 MW.
- (viii) NTPC representative suggested that generation from Kudgi STPS (unit- 1 & 2) may be taken as 1,278 MW instead of 524 MW.

The Generation figures as suggested above were agreed.

6. HVDC Set Points:

- (i) HVDC set points to be considered in the All India Base case for computation of PoC charges and Losses for January 2018 March 2018 period were projected by Implementing Agency based on operational experience and was put up for validation before the Committee.
- (ii) It was decided that the set point for Champa kurukshetra Pole-1 & Pole- 2 may be considered as 750 MW each instead of 1250 MW and Mundra- Mahindergarh Pole-1 and Pole -2 may be considered as 1000 MW each instead of 1250 MW.

After discussion, following HVDC set points are finalized

MW Values

HVDC Name	Set points to be considered in Basecase
Mundra-Mahindergarh Pole-1	1000
Mundra-Mahindergarh Pole-2	1000
Talcher-Kolar Pole- 1	1000
Talcher-Kolar Pole- 2	1000
Rihand-Dadri Pole- 1	700
Rihand-Dadri Pole- 2	700
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 NER)
Champa-Kurukshetra Pole-1	750
Champa-Kurukshetra Pole-2	750

7. Other Issues:

- (i) Chief (Engg.), CERC requested RPCs to follow up with states regarding submission of data prior to Validation Committee meeting duly validated in their respective OCC meetings.
- (ii) Transmission system of POWERGRID Kala Amb Transmission Ltd: During the validation committee meeting, representative of HPSEBL raised following two issues:
 - (a) 2 No. 220kV bays out of 4 No. bays of 400/220kV Sub Station Hamirpur: HPSEBL is drawing power to the tune of 200 to 300MW in the downstream system of 220/132kV Substation Mattansidh (Hamirpur) and there is non utilization of 4 No. 220kV bays and 400/220kV Sub Station of PGCIL. Whereas owing to non usage of the bays, HPSEBL is being charged for the same. Representative of HPSEB stated that it actually required only 4 bays but PGCIL insisted on having 6 bays stating that it is standardised configuration. HPSEB suggested that bays should be as per the requirement of State and not as per some standard arrangement. It was informed that the matter also stands deliberated in 37th TCC and NRPC meetings who after consensus shall be raising this very issue in CEA's Standing Committee in respect of North Zone for decision.
 - (b) Transmission system associated with Kala Amb:- HPSEB stated that due to non development of downstream system by HPSEBL in Kala Amb owing to constraints such as Forest Clearance, Land Acquisition and ROW related issues, HPSEBL has been levied additional charges which amounts to Rs.4.00 Cr. per month and does not appear to be viable one. He stated that 400KV Kala Amb Substation of PGCIL has been commissioned by LILO of 400kV Jhakri-Abdullahpur line with prime objective to provide system reliability and stability to ISTS system and is providing 40% fixed series compensation to ISTS system and hence attributes to system strengthening irrespective of development of downstream system by the utility concerned. It was also added to the discussions that due to above stated constraints it was not possible to commission the downstream network exactly matching with the commissioning schedule of ISTS system. It was also apprised that the matter was deliberated at length in the 37th TCC and 40th NRPC meetings held on dated 27th & 28th October, 2017 and the consensus in the matter which were supported by all other members as well as PGCIL were also agreed in TCC/NRPC meeting for further submission by Member Secretary, NRPC to CERC for appropriate action for mitigation of such charges and settlement through PoC mechanism.

Representative of POWERGRID Kala Amb Transmission Ltd stated that its system be considered under PoC. The LILO of 400kV D/C Karcham Wangtoo – Abdullapur along with 40% series compensation owned by POWERGRID Kala Amb Transmission Ltd cannot be considered in PoC computation at present due to non-availability of the downstream network. It was also informed that in line with the CERC order dated 4.1.2017 in petition no. 155/MP/2016, the cost of said transmission line may be recovered from the owner of the downstream network till the availability of downstream network.

Chief (Engg), CERC suggested that Himachal Pradesh may raise its issues through a petition.

(iii) Chief (Engg.), CERC noted that in the previous validation committee meeting held on 29.8.2017 following was suggested with regard to inclusion of TBCB lines.

Chief (Engg.), CERC suggested to devise a procedure to be followed in all such cases which can be useful in making decision regarding consideration of such transmission lines(TBCB) in PoC computations. He asked the members of Validation Committee to give their suggestions/comments in this regard which may be sent separately through Letter/email for discussion during next validation Committee meeting

However no suggestions have been received till date. Chief (Engg.) requested NLDC to and suggest a methodology for same. The same may be discussed in next Validation Committee meeting.

- (iv) SRPC representative informed that LTA has been granted from 3 units of NTPC Kudgi and 2nd unit is likely to be declared commercial in the month of December, 2017.
- (v) SRLDC representative raised the issue of certification of the availability of natural ISTS. It was informed that the availability of RPC certified lines is prepared by respective SLDCs and approved by RPCs. PGCIL representative stated that states wish to avail incentives and hence wishes to have availability certification. Members suggested that the availability of natural ISTS may be certified by RLDCs based on the inputs received from SLDCs. It was decided that SRLDC and PGCIL shall raise the issue of availability certification and whether incentive payment shall be applicable for the certified state lines at CERC in one of the natural ISTS petition for necessary regulatory directions.
- (vi) Representative of NRSS XXXVI Transmission Ltd. informed that due to non-readiness of the downstream network, the transmission charges for the following elements are to be paid by Rajasthan Urja Vikas Nigam Ltd.
 - (a) LILO of one Ckt. Of 400kV D/C Sikar(PG)-Neemrana(PG) line at Babai (RRVPNL).
 - (b) 2 Nos. of 400kV bays at 400kV Babai(RRVPNL) substation for LILO of one Ckt. of 400kV D/C Sikar(PG)-Neemrana(PG) line at Babai(RRVPNL).

It was informed that transmission charges for the said elements payable by RUVNL was not included in the Regional Transmission Account of October, 2017. It was requested that same may be included in the Regional Transmission Account of November, 2017. This was agreed to.

Subsequent to the Validation Committee meeting, RRVPNL vide letter dated 4.12.2017 (*Enclosed at Annexure-III*) informed that they will complete the priority bays (ICT-1 & Bus reactor) works by 31.12.17. Hence, the abovementioned assets may be considered under in POC Mechanism. Accordingly the system shall be considered under POC for Q4 (2017-18). However the transmission charges shall be paid from POC pool only post commissioning of downstream assets as indicated.

(vii) During the Validation Committee Meeting, Implementing Agency presented a comparison of projected and actual peak demand met of Q2 2017-18. It was observed that for some of the states, the difference was more than 2%. Chief Engg., CERC suggested that the difference should not be more than 2%. All the states where difference was more than 2% were requested to be more cautions in forecasting and giving projected demand in future. (viii) New lines to be included for this quarter as proposed by IA.

Name of the Transmission line	ISTS Licensee	Remarks
Extension of Kudankulam APP- Tirunelveli 400 kV (Quad) D/C line to Tuticorin Pooling Station 400 kV D/C Aurangabad-Boisar line	PGCIL	To be Considered
400 kV OPGC- Jharsuguda Transmission Line	Odisha Generation Phase-II Trans. Ltd.	Not to be considered in PoC for Q4 (2017-18).
LILO of one ckt of 400 kV D/C Khandwa-Rajgarh transmission line at Khargone TPP	Khargone Transmission Ltd.	Dedicated line shall be considered under provision of CERC Connectivity Regulations as per Regulation no 8(8)
765kV Warora (pooling station)- Parli (new) D/C line		
765kV Parli (new)- Sholapur D/C line 400kV Parli (new)- Parli (PG) D/C line	Powergrid Parli Transmission Ltd.	Not to be considered in POC (Not expected by end of Jan,2018)
400kV Neemrana (PG)- Dhanonda (HVPNL) D/C line	Gurgaon Palwal Transmission Ltd.	
LILO of both ckt of 400kV Uri- Wagoora D/C line at Amargarh. 400kV Samba-Amargarh D/C line	NRSS XXIX Transmission Ltd	To be Considered

8. 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 80% since most of the hydro units will be able to generate at 80% load for the peak hours during January 2018 to March 2018. 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.

<u>List of Participants in the 4th meeting for 2017-18 of the Validation Committee held on</u> 29th November, 2017 at , New Delhi.

CERC

- 1. Shri S.C.Shrivastava, Chief (Engg.) In Chair
- 2. Ms Shilpa Agarwal, Joint. Chief (Engg.)
- 3. Shri P.K.Awasthi, Joint Chief (Fin.)
- 4. Shri A. Suresh, Dy. Chief (Engg)
- 5. Shri Harish Kumar, Engineer

POWERGRID

- 6. Ms Manju Gupta, AGM (Comml.)
- 7. Shri Jasbir Singh, AGM
- 8. Shri V Sriniwas, DGM (Comml.)
- 9. Shri V. Thiagarajan, DGM
- 10. Shri Ramchandra, DGM
- 11. Shri B. Vamsi Rama Mohan, DGM

NLDC

- 12. Shri U.K Verma, Executive Director
- 13. Shri S.R Narsiman, GM
- 14. Shri S.S. Barpanda, GM
- 15. Shri G. Chakraborty, DGM
- 16. Shri Anupam Kumar, Dy. Manager
- 17. Shri Sanny Machal, Sr. Engineer

CEA

- 18. Shri Vikram Singh, Director.
- 19. Shri Ravi Shanker Singh, Asst. Director

WRPC

- 20. Shri A. Balan, M.S, WRPC
- 21. Shri J.K Rathod, SE, WRPC

WRLDC

- 22. Shri V.K Shrivastava ED
- 23. Shri Abhimanu Gartia, GM, POSOCO
- 24. Ms Pushpa.S, AGM
- 25. Ms Chitrankshi, Manager
- 26. Shri Pradeep Sanodiya, Sr. Engineer
- 27. Shri Sriniwas Chitturi, Sr. Engineer
- 28. Shri D.J Kolhe, EE(Op), SLDC Kalwa
- 29. Shri U.S Bhagat, EE (STU)
- 30. Shri S.S Patil, EE, SLDC Kalwa
- 31. Shri Santosh Gawai, DY.EE(STU)
- 32. Shri Selvamani Prabaharam. M, Engineer

ERPC

33. Shri P.K DE, EE

ERLDC

- 34. Shri P. Mukhopadhyai, ED
- 35. Shri S. Banerjee, DGM
- 36. Shri T.R Mohapatra, Manager
- 37. Shri R. Jaiswal, EE
- 38. Shri S. Ghosh, Engineer

DVC, Kolkata

39. Shri M. Sahoo, Dy. Chief Engineer

SRPC

- 40. Shri Rangarajan. R.M, SE
- 41. Shri Asit Singh, SE
- 42. Shri LEN. J.B, EE
- 43. Shri Anusha Das J, AEE

SRLDC

- 44. Shri V Balaji, DGM
- 45. Shri Jane Jose, DGM
- 46. Shri Madukar, Manager

NRPC

- 47. Shri M.A.K.P Singh, MS
- 48. Shri Upendra Kumar, SE

NRLDC

- 49. Shri Rajiv Porwal, DGM
- 50. Shri H.K Chawla, DGM
- 51. Shri Riza Naqvi, Sr. Engineer
- 52. Shri Gaurav Malviya, Engineer
- 53. Shri Rinku Narang, IT Admin, NRLDC

NTPC

- 54. Shri Manoj Kumar Sharma, DGM
- 55. Shri Md. Raghib Hasan, Sr. Manager

NERLDC

- 56. Shri Amaresh Mallick, DGM
- 57. Shri T. Gidon, EE, SLDC
- 58. Shri Alakesh Koth, AEE, SLDC
- 59. Shri Chitra Bahadur Thapa, Engineer
- 60. Shri Palash Jyoti Borah, Engineer

NERPC

- 61. Shri Sadiq Imam, AEE
- 62. Shri Abhijeet Agrawal, AEE

HPSEBL

63. Shri Deepak Uppal, Dy. Chief (Engg)

SJVNL

64. Shri Rajeev Agarwal, Sr. Manager

OPTCL

65. Shri P.K Das, AGM

WBSETCL

66. Shri C.K Halder, ACE

Essel Infra

67. Shri Rajesh Yadav, Manager

68. Shri Neeraj Verma, Manager

Point of Connection Charges and Losses Computation January 2018 - March 2018 (Q4)

Meeting of the Validation Committee Date: 29th Nov, 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 Q4 Case (Jan'18 - Mar'18)

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 31st Dec, 2017.

Demand Generation Projection

- Demand Projection
 - Projection based on last 3 year's average of corresponding month's 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 Apr'17 to 31st Dec'17	70%
Hydro Units with DOCO from 1st Apr'17 to 31st Dec'17	80%
Gas Units with DOCO from 1st Apr'17 to 31st Dec'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

INIVA VE	
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 NER)
Champa-Kurukshetra Pole-1 & Pole-2	2500

Data not Received

- Jammu & Kashmir
- Haryana
- Chandigarh
- □ Goa

- □ West Bengal
- Jharkhand
- Bihar
- □ Sikkim
- Andhra Pradesh
- □ Karnataka
- Pondicherry

Data not Received

AD Hydro

Everest

□ HBPCL

Sree cement

Maithon Power Ltd.

□ Adhunik Power

GMR Kamalanga

□ Lanco Amarkantak

□ NSPCL Bhilai

SEPL+MEPL

□ LANCO Kondapalli

Balco

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
- Darbhanga Motihari Transmission Company Ltd.
- Raichur Sholapur Transmission company 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.
- Maheshwaram Trans. Ltd.
- Parbati Koldam Trans. C
- **13** Gurgaon-Palwal Trans. Ltd.

- **□** Khargone Trans. Ltd.
- Odisha Generation Phase-II Trans. Ltd.
- **□** Patran Trans. Co. Ltd.
- **POWERGRID Unchahar Trans. Ltd.**
- **POWERGRID Warora Trans. Ltd.**
- **□** POWERGRID Kala Amb Trans. Ltd.
- **■** Teestavalley Power Transmission Ltd.
- **□** POWERGRID NM Trans. Ltd.
- **□** Kudgi Trans. Ltd.
- **■** Jaypee Powergrid Ltd.
- **□** Torrent Power Grid Ltd.
- **D** POWERGRID Vizag Trans. Ltd.
- **□** Jindal Power Ltd.
- **□** PowerGrid Parli Trans. Ltd.
- Power Grid Corporation of India Limited

YTC Data not received

- Aravali Power Company Pvt. Ltd.
- North East Transmission Company Ltd.
- Essar Power Transmission Company Ltd.
- Powerlinks Transmission Ltd.

YTC Data received from States

- **□** Kerala
- Madhya Pradesh
- Assam
- Meghalaya
- Delhi

List of new lines

PGCIL	Ant. CoD	
Extension of Kudankulam APP-Tirunelveli 400 kV (Quad) D/C line to Tuticorin Pooling Station		
400 kV D/C Aurangabad-Boisar line	Dec,2017	
Odisha Generation Phase-II Trans. Ltd.		
400 kV OPGC- Jharsuguda Transmission Line	31-07-2017	
Khargone Transmission Ltd.		
LILO of one ckt of 400 kV D/C Khandwa-Rajgarh transmission line at Khargone TPP	01-12-2017	

Contd....

PowerGrid Parli Trans. Ltd.	Ant. CoD
765kV Warora (pooling station)-Parli (new) D/C line	Jan,2018
765kV Parli (new)- Sholapur D/C line	Jan,2018
400kV Parli (new)- Parli (PG) D/C line	Jan,2018
Gurgaon –Palwal Trans. Ltd.	
400kV Neemrana (PG)- Dhanonda (HVPNL) D/C line	01-12-2017
NRSS-XXIX Trans.Ltd.	
LILO of both ckt of 400kV Uri-Wagoora D/C line at Amargarh.	01-12-2017
400kV Samba-Amargarh D/C line	01-12-2017

Thank You!!

Demand Projection – Northern Region

Back

Entity	Q4 (Jan-Mar'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States
Chandigarh	210	
Delhi	4,073	4,000
Haryana	6,843	
Himachal Pradesh	1,541	1,153
Jammu & Kashmir	2,146	
Punjab	6,651	6,500
Rajasthan	10,644	10,424
Uttar Pradesh	16,261	16,500
Uttarakhand	2,005	1,850
Total	50,375	
Normalization Factor	0.91	

21

Demand Projection – Eastern Region

Back

			<u> Dack</u>
Entity	Q4 (Jan-Mar'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization		Given Ss/States
Bihar	4,082		
DVC	2,631	2,	960
Jharkhand	1,225		
Odisha	4,125	4,	002
West Bengal	7,069		
Sikkim	104		
Total	19,235		
Normalization Factor	0.91		

Demand Projection – Western Region

Back

Q4 (Jan-Mar'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States
3,429	3,810
14,464	13,325
11,967	10,114
22,023	21,500
314	
745	
514	
699	700
54,155	
0.91	
	Demand (MW) (Based on Peak Met figures of last 3 years) before normalization 3,429 14,464 11,967 22,023 314 745 514 699 54,155

Demand Projection – North-Eastern Region

Q4 (Jan-Mar'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization 140 1,520	Data Given by DICs/States
1,520	
	1,500
173	173
303	315
101	93
130	123
231	300
2,599	
0.91	
	303 101 130 231 2,599

Demand Projection – Southern Region

		Dack			
Entity	Q4 (Jan-Mar'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States			
Andhra Pradesh	8,010				
Telangana	9,536	10,077			
Karnataka	10,168				
Kerala	3,823	3,822			
Tamil Nadu	14,898	14,700			
Pondicherry	345				
Goa- SR	80				
Total	46,861				
Normalization Factor	0.91				

Generation Projection – Northern Region 25

S. No	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'17 – 30th Sep'17 (B)	Generation CoD from 1st Oct'17 to 31 st Dec'17 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any)	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	Uttar Pradesh	9223	-	-	9223	As per data given by Uttar Pradesh	9800
2	Delhi	753	-	-	753	As per data given by Delhi	675
3	Haryana	3144	-	-	3144		
4	Uttarakhand	758	-	<u>178</u>	936	As per data given by Uttrakhand (Excl. BIPL: 70 MW)	901
5	Punjab	3181	-	-	3181	As per data given by Punjab	3921
6	Rajasthan	6432	432	-	6864	As per data given by Rajasthan	9328
7	Himachal Pradesh	320	-	-	320	As per data given by H.P.	284
8	Jammu & Kashmir	402	-	-	402		
9	ВВМВ	2019	-	-	2019	As per data given by BBMB	1890

Generation Projection – Northern Region ...(2) 26

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'17 – 30th Sep'17 (B)	Generation CoD from 1st Oct'17 to 31 st Dec'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	1485	-	-	1485		1200
11	Rihand	2856	-	-	2856		2807
12	Singrauli	1929	-	-	1929	As per data given	1863
13	Unchahar	1020	327	-	1347	by NTPC	1286
14	Auraiya	248	-	-	248		150
15	Dadri CCPP	440	-	-	440		300
16	NAPS	424	-	-	424	As per NAPS	400
17	Jhajjar	757	-	-	757	-	
18	Dhauliganga	239	-	-	239	As per NHPC	280
19	Tanakpur	48	-	-	48	As per NITC	45
20	Koteshwar	402	-	-	402	As per Koteshwar	381
21	Tehri	906	-	-	906	-	
22	Anta	239	-	-	239	As per data given by NTPC	150
23	RAAP B	405	-	-	405	-	
24	RAAP C	436	-	-	436	-	
25	AD Hydro	123	-	-	123	-	
26	Everest	87	-	-	87	-	
27	Karcham Wangtoo	745	-	-	745	-	

Generation Projection – Northern Region(3)

Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'17 – 30th Sep'17 (B)	Generation CoD from 1st Oct'17 to 31 st Dec'17 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
28	Bairasul	185	-	-	185		180
29	Chamera 1	539	-	-	539	As per NHPC	540
30	Chamera 2	312	-	-	312		300
31	Chamera 3	180	-	-	180		231
32	Naptha Jhakri	1580	-	-	1580	As per SJVN	1370
33	Lanco Budhil	46	-	-	46	-	
34	Dulhasti	427	-	-	427		390
35	Salal	561	-	-	561		450
36	Sewa-II	131	-	-	131	As per NHPC	120
37	URI I HPS	460	-	-	460		408
38	URI II HPS	224		-	224		210
39	Sree Cement	303	-	-	303	-	
40	Parbati III	193	-	-	193	As per NHPC	390
41	Rampur HEP	427	-	-	427	-	
42	Koldam	880	-	-	880	As per data given by NTPC	792

Generation Projection – Eastern Region...(1) 28

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'17 – 30th Sep'17 (B)	Generation CoD from 1st Oct'17 to 31 st Dec'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	5065	-	-	5065	-		
44	Odisha	2884	-	-	2884	Forecasted peak injection as given by GRIDCO	3144	
45	Bihar	153	-	-	153	-		
46	Jharkhand	444	-	-	444	-		
47	Sikkim	0	-	-	0	-		
48	Chujachan	94	-	-	94	As per CERC order dated: 22.06.2017	99	
49	DVC		-	-				
50	Durgapur Steel		-	-		As you date along by DVC		
51	Koderma TPP	3975	-	-	3975	As per data given by DVC (Average)	4087	
52	Raghunathpur							
53	Bokaro TPS Expn.							
54	MPL	1022	-	-	1022	Last quarter Gen.	990	

Generation Projection – Eastern Region...(2)²⁹ Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'17 – 30th Sep'17 (B)	Generation CoD from 1st Oct'17 to 31 st Dec'17 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
55	Teesta V	541	-	-	541	As per NHPC	510
56	Kahalgaon	2196	-	-	2196	As per data given by	2178
57	Farakka	1928	-	-	1928	NTPC	1968
58	Talcher	976	-	-	976		
59	Rangeet	64	-	-	64	As per NHPC	60
61	Adhunik Power	506	-	-	506	-	
62	Barh	1274			1274	As per data given by NTPC	1057
63	Kamalanga TPP (GMR)	678	-	-	678	-	
64	JITPL	839	-	-	839		
65	Jorthang	63	-	-	63		
66	Bhutan	327	-	-	327	-	
67	Teesta-III	-	<u>950</u>	-	950	As per CERC order dated: 22.06.2017	782
68	Dikchu HEP	-	-	76	76		
69	Nabinagar BRBCL	-	151	151	301		

Generation Projection – Western Region...(1) 30

		<u></u>					
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'17 – 30th Sep'17 (B)	Generation CoD from 1st Oct'17 to 31 st Dec'17 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
70	MP	5016	-	-	5016	As per forecasted gen. given by MP	4789
71	Maharashtra	14037	98	<u>707</u>	14842	As per data given by Maharashtra	17039
72	Chhattisgarh	2011	-	-	2011	As per data given by Chhattisgarh	2698
73	Gujarat	9683	164	-	9847	As per data given by Gujarat	9700
74	Goa	0	-	-	0		
75	D&D	0	-	=	0		
76	DNH	0	-	=	0		
77	Vindhyachal	4650	-	-	4650	As per NTPC	4440
78	Ratnagiri Dabhol	648	-	-	648		
79	TAPS (1,2,3,4)	1293	-	-	1293		
80	JINDAL	731	-	<u>-</u>	731	As per data given by JPL	500
81	LANCO	580	-	-	580		
82	NSPCL Bhilai	487	-	-	487		
83	Korba	2490	-	-	2490	As per NTPC	2431

Generation Projection – Western Region ... (2) 31

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'17 – 30th Sep'17 (B)	Generation CoD from 1st Oct'17 to 31 st Dec'17 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
84	SIPAT	2938	-	-	2938	As per NTPC	2809
85	CGPL	3831	-	-	3831	-	
86	Mauda	1425	<u>432</u>		1857		1570
87	Gandhar	312	-	-	312	As per NTPC	350
88	Kawas	311	-	-	311		250
89	SSP	656	-	-	656		
90	KAPS	205	-	-	205		
91	Essar Mahan	520	-	-	520	As per data given by Essar Mahan	550
92	BALCO	665	-	-	665	-	
93	KSK Mahanadi	1121	-	-	1121		
94	Vandana Vidyut	0		-	0		
95	Sasan UMPP	3492	-	-	3492		
96	Tamnar TPP	902	-	-	902	As per data given by JPL	1128

Generation Projection – Western Region ... (3) 32

Back

							Dack
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'17 – 30th Sep'17 (B)	Generation CoD from 1st Oct'17 to 31 st Dec'17 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
97	DGEN	196	-	-	196		
98	DB Power	1185	-	-	1185	As per email from DB Power	880
99	Korba West	577	-	-	577		
100	Dhariwal	282	-	-	282	As per Dhariwal	273
101	GMR Chattishgarh Energy Ltd.	455	-	-	455	Last quarter generation	
102	JP Nigrie	1177	-	-	1177	-	
103	GMR Warora	582	-	-	582		
104	ACBIL+ Spectrum+MCCPL	666	-	-	666	As per ACBIL	683
105	MB Power (Anuppur)	575	-	-	575	As per MB Power	1131
106	RKM Power	189	464		653		
107	Jhabua Power	127	-	-	127		
108	TRN Energy	206	<u>196</u>		403	As per data given by TRN Energy	540
109	Sholapur STPP		435	-	435	As per NTPC	435
110	Lara STPP			528	528		
111	SKS Power			198	198		

Generation Projection – North-Eastern Region

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'17 – 30th Sep'17 (B)	Generation CoD from 1st Oct'17 to 31 st Dec'17 (C)	TOTAL D=A+B+ C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
112	AGTPP, NEEPCO	129	-	-	129	As decided in 138th OCC meeting	132
113	Doyang, NEEPCO	52	-	-	52		63
114	Kopili , NEEPCO	161	-	-	161	As per email received from NEEPCO on 28.11.2017	188
115	Kopili 2, NEEPCO	23			23		21
116	Khandong, NEEPCO	41	-	-	41		43
117	Ranganadi, NEEPCO	402	-	-	402	As decided in 138th OCC meeting	401
118	AGBPP_Kathalguri	234	-	-	234		220
119	Loktak, NHPC	105	-	-	105		105

Generation Projection – North-Eastern Region 34

							<u>Back</u>
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'17 – 30th Sep'17 (B)	Generation CoD from 1st Oct'17 to 31 st Dec'17 (C)	TOTAL D=A+B+ C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
120	Palatana GBPP	674			674		547
121	Bongaigaon_NTPC	239		<u>165</u>	404		460
122	Arunachal Pradesh	0			0		0
123	Assam	306			306		231
124	Manipur	0			0	As decided in 138 th OCC	0
125	Meghalaya	130			130	meeting	278
126	Nagaland	15			15		16
127	Tripura	84			84		73
128	Mizoram	6			6		8

Generation Projection – Southern Region...(1)³⁵

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'17 – 30th Sep'17 (B)	Generation CoD from 1st Oct'17 to 31 st Dec'17 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
129	Andhra Pradesh	6784	-	-	6784		
130	Telangana	4941	-	-	4941	As per data given by Telangana	5245
131	Karnataka	7245	-	-	7245	-	
132	Kerala	1449	-	-	1449	As per Kerala	1511
133	Tamil Nadu	8004	-	-	8004	As per data given by TN	7590
134	Pondy	0	-	-	0	-	
135	Ramagundam	2527	-	-	2527	As per NTPC	2431
136	Simhadri 2	981	-	-	981	7.0 p 0. 1111 0	948
137	Simhadri 1		-	-			948
138	SEPL	327	-	-	327	As per SRLDC	0
139	Lanco Kondapalli	118	-	-	118	As per SRLDC	0

Generation Projection – Southern Region...(2)

Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'17 – 30th Sep'17 (B)	Generation CoD from 1st Oct'17 to 31 st Dec'17 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
140	Kaiga	848	-	-	848		
141	NEYVELI (EXT) TPS	337	-	-	337		
142	NEYVELI TPS-II	1319	-	-	1319		
143	NEYVELI TPS-II EXP	375	-	-	375		
144	MAPS	391	-	-	391		
145	Vallur	1411	-	-	1411		
146	Meenakhshi	272	-	-	272	As per SRLDC	150
147	Coastal Energen	676	-	-	676		
148	Kudankulam	1724	-	-	1724	As per SRLDC	1820
149	Tuticorin TPP	921	-	-	921		
150	Thermal Powertech	1274	-	-	1274		
151	IL&FS	1121	-	-	1121		
152	Talcher Stage-II	1953	-	-	1953		
153	Sembcorp Gayatri Power Ltd.	1051	-	-	1051		
154	Kudgi STPS		524	-	524	As per NTPC	524

Expected Generation addition – Northern Region



		nercial from ep'17	Generation declared/expected to be declared Commercial from 1 st Oct'17 to 31 st Dec'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)
						Shravanti Gas	4	75	59	
Uttarakhand						Shravanti Gas	5	75	59	178
						Shravanti Gas	6	75	59	
Rajasthan	Chhabra	5	660	432						
Unchahar	Unchahar	4	500	327						

38

Expected Generation addition – Western Region



	Generation declared Commercial from 1st Apr '17 to 30th Sep'17					Generation declared/expected to be declared Commercial from 1 st Oct'17 to 31 st Dec'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)	
						Nasik TPP	2	270	177		
Maharashtra	Sirpur	1	150	98	98	Nasik TPP	3	270	177	707	
Widilalasiicia	Power	_	130	30	30	Nasik TPP	4	270	177	707	
						Nasik TPP	5	270	177		
Gujarat	Bhavnagar TPP	2	250	164	164						
Mauda	Mauda	3	660	432	432						
RKM Power	RKM Power	2	360	232	232						
	RKM Power	3	360	232	232						
TRN Energy	TRN Energy	2	300	196	196						
Sholapur STPP	Sholapur STPP	1	660	435	435						
Lara STPP						Lara STPP	1	800	528	528	
SKS Power						SKS Power	1	300	198	198	

Expected Generation addition – Eastern Region



			lared Com		om	Generation declared/expected to be declared Commercial from 1 st Oct'17 to 31 st Dec'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	158						
	Teesta- III	2	200	158						
Teesta- III	Teesta- III	3	200	158	950					
	Teesta- III	4	200	158						
	Teesta- III	5	200	158						
	Teesta- III	6	200	158						
Dikchu HEP						Dikchu HEP	1	48	38	76
DIKCHU HEP	DIRCHU HEP		Dikchu HEP	2	48	38	70			
Nabinagar BRBCL	Nabinagar BRBCL	1	230	151	151	Nabinagar BRBCL	2	230	151	151

Expected Generation addition – Southern Region



	Generation 1st	Generation de Commercial		-						
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)
Kudgi STPS	Kudgi STPS	1	800	524	524					

Expected Generation addition –North Eastern Region

Back

	Generation declared Commercial from 1st Apr '17 to 30th Sep'17					Generation of Commercial		=		
Entity	Bus Name	Unit No.	Installed Capacity	Gen. considered	Total	Bus Name	Unit No.	Installed Capacity	lconsider	Total
			(MW)	(MW)	(MW)			(MW)	(MW)	(MW)
Bongaigaon_NTPC						Bongaigaon_ NTPC	2	250	165	165

Comparison of Demand for Q2-17-18 42

Northern Region								
State/Region/System	Actual Peak Demand Met (MW)	Projected Demand (MW)	Change (in %)					
Chandigarh	327	363	↓ -10%					
Delhi	5970	6000	↓ 0%					
Haryana	9324	9500	↓ -2%					
Himachal Pradesh	1376	1298	1 6%					
Jammu & Kashmir	2138	2041	↑ 5%					
Punjab	10919	11404	↓ -4%					
Rajasthan	9996	8959	12%					
Uttar Pradesh	17672	18000	↓ -2%					
Uttarakhand	1997	1999	↓ 0%					

Contd...

	Eastern Region		
State/Region/System	Actual Peak Demand Met (MW)	Projected Demand (MW)	Change(in %)
Bihar	4233	4400	↓ -4%
DVC	2632	2838	√ -7%
Jharkhand	1251	1231	1 2%
Orissa	4247	4186	1%
West Bengal	7873	8000	↓ -2%
Sikkim	84	105	↓ -20%
	Western Region		
Chhattisgarh	3728	3666	↑ 2%
Gujarat	14037	15957	√ -12%
Madhya Pradesh	7887	7500	5%
Maharashtra	19556	19200	1 2%
Daman & Diu	336	337	↓ 0%
Dadra Nagar Haveli	790	770	↑ 3%
Goa	541	540	1 0%

Contd..

Southern Region								
State/Region/System	Actual Peak Demand Met (MW)	Projected Demand (MW)	Change (in %)					
Andhra Pradesh	7777	8116	-4%					
Telangana	9408	8205	15%					
Karnataka	8785	9368	√ -6%					
Kerala	3490	3554	↓ -2%					
Tamil Nadu	14094	14800	-5%					
Pondicherry	370	371	↓ 0%					
N	orth Eastern Reg	ion						
Arunachal Pradesh	130	144	-10%					
Assam	1682	1530	10%					
Manipur	162	154	1 5%					
Meghalaya	308	319	√ -3%					
Mizoram	83	93	↓ -11%					
Nagaland	138	129	↑ 7%					
Tripura	305	415	-27%					

ANNEXURE-III



RAJASTHAN RAJYA VIDHYUT PRASARAN NIGAM LTD

[Corporate Identity Number (CIN : L40109RJ2000SGC016485]

REGD. OFFICE: VIDYUT BHAWAN, JANPATH, JYOTI NAGAR, JAIPUR – 302005 OFFICE OF THE SUPERINTENDING ENGINEER (DESIGN)

Telephone No. 0141-2740751; Fax No. - 0141-2740794; Email :- se.400kvdesign@rvpn.co.in

NO. RVPN/ SE(DESIGN) /XEN-I / A-II/ TN- 267 /F. /D. 1162

DT: 04-12-2017

M/s NRSS XXXVI Transmission Ltd., A-26/3, Mohan Cooperative Industrial Estate, Mathura Road, New Delhi- 110044.

Sub :- System Strengthening Scheme in Northen Region (NRSS-XXXVI) along with LILO of Sikar- Neemrana 400 KV D/C line at Babai (RRVPNL).

Ref :- 1. Your letter no. 46 dated 23.10.17.

2. Minutes of Meeting held on dated 28.11.17 with M/s A2Z Infra.

Dear Sir,

In reference to aforesaid subject and your letter dt. 23.10.17 under reference it is to intimate that M/s A2Z infra has committed in the meeting held on dated 28.11.17, to complete the priority bays (ICT-I & Bus reactor) /works upto 31.12.17 so as to start commercial operation of substation.

This is for your information.

Your's sincerely,

(Kanika Sharma)

Superintending Engineer (Design)

21/6