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

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

Dated:28/3/2018

To

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

Subject: Minutes of the 1st Meeting of Validation Committee for the Application Period from 1st April, 2018 to 30th June, 2018 for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations,

2010

Sir,

Please find enclosed herewith minutes of the 1st Meeting of the Validation Committee for the year 2018-19 (Application Period from 1st April, 2018 to 30th June, 2018) for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 held on 26.2.2018 in the NRLDC Conference Room at New Delhi for information and necessary action.

Yours faithfully, **Sd/-**

(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 D.K. Jain GM, NRLDC	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 S.R. Narasimhan GM, NLDC	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 Joydeb 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 1st Meeting of Validation Committee for the Application Period from 1st April, 2018 to 30th June, 2018 held on 26thFebruary, 2018at 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, Punjab, U.P, Delhi, Haryana, DVC, Tamil Nadu, Kerala, Karnataka, Bihar, Odissa, West Bengal, Manipur, Tripura, 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 2018-19. The presentation shown during the Validation Committee Meeting dated 26.2.2018 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 100% since most of the hydro units would be able to generate at 100% load for the peak hours during April'18 to June'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 April, 2018 to 30th June, 2018 (Q1 of 2018-19).

4.1 Northern Region:

- (i) Projected demand by IA for Delhi was 6,500 MW. Subsequently, prior to the meeting, Delhi submitted its projected demand as 6,070 MW. However, during the meeting, representative of Delhi suggested to consider demand projection as 6,500 MW.
- (ii) Projected demand by IA for Punjab was 9,633 MW. Subsequently, prior to the meeting, Punjab submitted its projected demand as 9,082 MW. However, during the meeting, representative of Punjab suggested to consider demand projection as 9,633 MW.
- (iii) Projected demand by IA for Uttar Pradesh was 19,978 MW. Subsequently, prior to the meeting, Uttar Pradesh submitted its projected demand as 20,000 MW. However, during the meeting, representative of Uttar Pradesh suggested to consider demand projection as 19,500 MW.
- (iv) Representative of Rajasthan suggested that Demand projection of Rajasthan may be taken as 9,938 MW instead of 10,787 MW as projected based on last 3 years data.
- (v) Projected demand by IA for Haryana was 8,566MW. Subsequently, prior to the meeting, Haryana submitted its projected demand as 7,513 MW considering normalization. However, during the meeting, representative of Haryana suggested to considerdemand

projection as 8,052 MW.This figure 8,052 MW is before normalization. The Demand figures as suggested above were agreed.

4.2 Eastern Region:

- (i) Member present at ERLDC suggested following changes:
 - (a) Demand projection from West Bengal may be taken as 8,100 MW instead of 7,668 MW as projected by IA based on last 3years data.
 - (b) Projected demand by IA for DVC was 2598 MW.Subsequently, prior to the meeting, DVC submitted its projected demand as 2945 MW. However, during the meeting, it was decided that demand of DVC may be taken as 2,900 MW.
 - (c) Demand projection from Jharkhand may be taken as 1,300 MW instead of 1,328 MW as projected by IA based on 3 years data.
- (ii) Representative of Bihar suggested that Demand projection of Bihar may be taken as 4,900 MW instead of 4,654 MW as projected by IA based last 3 year data.

The Demand figures as suggested above were agreed.

4.3 Western Region: Projected demand by IA for Gujarat was 16,544 MW. Subsequently, prior to the meeting, Gujarat submitted its projected demand as 15,096 MW. However, during the meeting, representative of Gujaratsuggested to consider demand projection as 16,408 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**: It was decided that based on the past trend Andhra Pradesh demand may be considered as 9,100MW instead of 8,484MW as projected by IA based on last 3 years data.

The Demand figures as suggested above were agreed.

5. Generation Projection for Application Period from 1st April, 2018 to 30th June, 2018 (Q1 of 2018-19).

5.1 Northern Region:

- (i) Members present at NRLDC suggested following changes:
 - (a) Projected generation by IA for Himachal Pradesh was 806 MW. Subsequently, prior to the meeting, Himachal Pradesh submitted its generation as 650 MW. However, during the meeting, it was decided that Generation projection of Himachal Pradesh may be taken as 806 MW instead of 650 MW.
 - (b) Generation projection of Rajasthan may be taken as 7,000 MW instead of 6,500 MW as projected by IA based on last 3 years data. It was decided that based on the past trend and commissioning of new generation, Rajasthan generation may be considered as 7,000 MW instead of 6,500 MW to which representative of Rajasthan agreed.

- (c) Generation from Karcham Wangtoo and AD Hydromay be taken as 1,089 MW and 210 MW instead of 1,127 MW and 223 MW respectively.
- (ii) Projected generation by IA for Haryana was 2,408 MW. Subsequently, prior to the meeting, Haryana submitted its generation as 3,600 MW. However, during the meeting, representative of Haryana suggested to consider generation projection as 3,000 MW.
- (iii) Projected generation by IA for Uttar Pradesh was 9,584 MW. Subsequently, prior to the meeting, Uttar Pradesh submitted its generation as 11,500 MW.However, during the meeting, representative of Uttar Pradesh suggested to consider generation projection as 9,950 MW (10,900 MW-950 MW from Rosa Power).
- (iv) Projected generation by IA for Jhajjar was 1281 MW.Subsequently, prior to the meeting, APCPL Jhajjar submitted its generation as 1421 MW.However, during the meeting,NTPC representative suggested that generation from Jhajjar may be taken as 1,281 MW instead of 1,421 MW.

The Generation figures as suggested above were agreed.

5.2 Western Region:

- (i) Projected generation by IA for Maharashtra was 15,376 MW.Subsequently, prior to the meeting, Maharashtra submitted its generation as 16,499 MW. However, during the meeting, representative of Maharashtrasuggested that generation projection of Maharashtra may be taken as 15,500 MW instead of 16,499 MW.
- (ii) Member present at WRLDC suggested following changes:
 - (a) Projected generation by IA for Gujarat was 11,196 MW. Subsequently, prior to the meeting, Gujarat submitted its generation as 12,591 MW. However, during the meeting, it was decided that generation from Gujarat may be taken as 11,500 MW instead of 12,591 MW.
 - (b) Projected generation by IA for Madhya Pradesh was 4,021 MW. Subsequently, prior to the meeting, Madhya Pradesh submitted its generation as 5,911 MW. However, during the meeting, it was decided that generation from Madhya Pradesh may be taken as 4,700 MW instead of 5,911 MW.
 - (c) Generation from RGPPL and SSP may be taken as 550 MW and zero instead of 614 MW and 677 MW respectively.
 - (d) Generation from KAPS may be taken as zero instead of 129 MW.
 - (e) Generation from LANCO may be taken as 540 MW instead of 574 MW respectively.
 - (f) Generation from RKM Power and Jhabua Power may be taken as 350 MW and 307 MW instead of 777 MW and 506 MW respectively.
 - (g) Generation from Lara STPP and SKS Power may be taken as zero and 200 MW instead of 528 MW and 198 MW respectively.
 - (h) Generation from Tamnar TPP and Korba west may be taken as 800 MW and zero instead of 1140 MW and 383 MW respectively.
 - (i) Generation from CGPL and TRN Energy may be taken as 3,600 MW and 540 MW instead of 3286 MW and 479 MW respectively.
 - (j) Generation from MB Power and Dhariwal may be taken as 1122 MW and 283 MW instead of 1131 MW and 285 MW respectively.
 - (k) Generation from Korba west and DB Power may be taken as zero and 1100 MW instead of 383 MW and 1166 MW respectively.

- (I) Generation from NSPCL Bhilai may be taken as 460 MW instead of 477 MW.
- (iii) In view of the COD of Unit-III (600 MW) on 28.2.2018, generation from Ksk Mahanadi may be taken as 1,469 MW (1076 MW+393 MW) instead of 1,076 MW.
- (iv) NTPC representative suggested that generation from Mauda may be taken as 1,500 MW instead 1,757 MW.

The Generation figures as suggested above were agreed.

5.3 Eastern Region:

- (i) Member present at ERLDC suggested following changes
 - (a) Generation from Jharkhand may be taken as 435 MW instead of 340 MW as projected by IA based on last 3 years data.
 - (b) Generation from JITPLand Adhunik Power may be taken as 550MW and 450 MW instead of 894 MW and 519 MW respectively.
 - (c) Generation from BRBCL and Bhutan may be taken as 240 MW and 1,200 MW instead of 301 MW and 1,213 MW respectively.
- (ii) Representative of SLDC, Bihar suggested that generation from Bihar may be taken as 305 MW instead of 241 MW as projected by IA based on last 3 years data.

The Generation figures as suggested above were agreed.

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

The Generation figures as suggested above were agreed.

5.5 Southern Region:

- (i) Member present at SRLDC suggested following changes:
 - (a) Generation from SEPL and MEPL may be taken as zero instead of 348 MW and 275 MW respectively.
 - (b) Generation fromLanco Kondanpalli and MAPS may be taken as zero and 350 MW instead of 227MW and 281 MW respectively.
 - (c) Generation fromKudankulam and Coastal Energen may be taken as 1,700MW and650 MW instead of 1,820 MW and 810 MW respectively.
- (ii) Representative of SLDC, Andhra Pradesh suggested that generation from Andhra Pradesh may be taken as 6,000 MW instead of 5,662 MW as projected by IA based on last 3 years data. He further stated that the Rayalaseema fourth unit (600 MW) will be declared COD in first week of March 2018.
- (iii) Projected generation by IA for Tamil Nadu was 8,902MW.Subsequently, prior to the meeting, Tamil Nadu submitted its generation as 10,136 MW.However, during the meeting,representative of SLDC, Tamil Nadu suggested that generation from Tamil Nadu may be taken as 8,902 MW instead of 10,136 MW.
- (iv) Subsequent to the validation committee meeting, SLDC Karnataka confirmed that generation from Karnataka may be taken as 6,910 MW instead of 6,580 MW as projected by IA based on last 3 years data. IA has suggested that generation projection as suggested by SLDC Karnataka may be considered. Accordingly Generation projection of Karnataka shall be taken as 6,910 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 April 2018 June 2018 period were projected by Implementing Agency based on operational experience and was put up for validation before the Committee.
- (ii) In view of the low generation from APL Mundra due to coal shortage, it was decided that the set point for Mundra-Mahindergarh Pole-1 and Pole-2 may be considered as 750MW each instead of 1250 MW and accordingly following HVDC set points are finalized

After discussion, following HVDC set points are finalized

MW Values

HVDC Name	Set points to be considered in Basecase
Mundra-Mahindergarh Pole-1	750
Mundra-Mahindergarh Pole-2	750
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	1250
Champa-Kurukshetra Pole-2	1250

7. Other Issues:

- (i) POSOCO suggested that generation figures should not be more than of installed capacity minus Auxiliary consumption. It was agreed that POSOCO will accordingly adjust the projected generation figures.
- (ii) 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. He further requested to all the DICs/ State to submit the realistic data to IA.
- (iii) For better time utilization, WRPC representative suggested that region wise time slots may be allocated for discussion in the meeting. Chief (Engg.), CERC stated that each RPCs will be given 30 minutes time slots to present their views in the Validation committee meeting and another 30 minutes will be kept for discussions of common issues in the end. This shall be included in meeting notice.
- (iv) As decided in the 4th Validation Committee meeting for Q4 of 2017-18, Implementing Agency submitted a draft methodology regarding consideration of transmission lines (TBCB) in PoC computations and requested to all the Participants to give their

comments on the same. In this regard, Representative of POWERGRID has raised the following points

- (a) Any Downstream / Upstream systems/owners are not mentioned in the bidding documents. As such the Bidding Documents do not envisage payments from Downstream / Upstream Owners.
- (b) No Implementation Agreement available in any of the TBCB project till date. In the absence of Implementation Agreement, the payment liability should fall on the entity on whose account an element is not put to use
- (c) Transmission Licensee is merely a developer to establish a Transmission Project floated by the Bid Process Coordinator on behalf of Government of India. Transmission Licensee is not an authority to determine as to who should be in Upstream / Downstream and their share in payment of transmission charges.
- (d) In cases wherein the Transmission charges to be paid to the Transmission licensee are relatively very high compared to the scope of work by the downstream / upstream. Then it would be great challenge for the entity to pay the same.
- (e) Tariff of the ISTS system should be included in PoC charges instead of charging the same from a single utility
- (f) Transmission Licensee under TBCB is a Project company and solely dependent on the Transmission charges to meet the debt obligations including operational expenses. Delay / denial of Transmission charges shall suffocate none else but the Transmission Licensee who runs from pillar to post to get its legitimate transmission charges.
- (g) Transmission charges be undertaken as per PoC mechanism in alignment with the provisions of the Bidding documents. In the event of non-readiness of the downstream / upstream system, the same may be separately recovered based on the direction of Validation committee and adjusted in the ensuing bill

It was decided that all stakeholder shall give their comments to IA. IA shall review the draft methodology the methodology would be discussed again in next validation committee meeting.

- (v) During the validation Committee meeting, Implementing Agency presented a comparison of projected and actual ISTS drawal of Q1 2017-18, comparison of projected and actual peak demand met of Q3 2017-18 were also presented by Implementing Agency. It was observed that for some of the states, the difference was substantial. Chief (Engg), CERC requested to all the DICs to provide realistic data.
- (vi) During the validation committee meeting, representative of SRPC raised following issues
 - (a) Representative of SRPC stated that CERC order dated 30.3.2015 in Petition No.291/MP/2015 vide which CERC had directed that transmission lines crossing from Andhra Pradesh to Telangana can be included in the POC, after tariff is determined by the Commission. Till that time, the transmission lines shall not be covered in POC mechanism and Telangana shall not be levied transmission charges towards drawal of its share from Simhadri Stage-1. However, it is

noticed that, LTA quantum of 510.61 MW in respect of Simhadri-I was considered for arriving the slab rates from Quarter-II of 2017-18. Chief (Engg), CERC stated that LTA quantum of 510.61 MW in respect of Simhadri-I for Telangana state shall not be included in POC mechanism since the tariff of transmission lines crossing from Andhra Pradesh to Telangana is under consideration of the commission. After determination of the tariff the same shall be included in POC mechanism.

(b) Representative of SRPC stated that the POC loss of High slab was applied on Talcher Stage-II injection to compensate for losses on HVDC bipole, as per POSOCO document issued in 2011. He further stated that Talcher Stage-II injection has been placed in the highest slab under Southern Region till April, 2015, up to implementation of 3rd Amendment to Sharing of Transmission charges Regulation. After the notification of third amendment to the Sharing Regulations, 2015, consideration of the highest loss slab for Talcher Stage-II injection has been done away with and the slab has been placed under Eastern Region table based on PoC methodology. The basis for consideration high slab of POC loss of Talcher Stage-II, was earlier taken up with POSOCO. In real time, losses for HVDC system are relatively higher and are in the order of about 8 to 10 %, which is captured in weekly losses.

Representative POSOCO stated that the previous philosophy was adopted since SR was not synchronously connected to NEW grid. As SR got synchronously connected the HVDC losses need not be considered separately. Further if required SRPC may take upissue separately with commission.

- (c) Consideration LTA getting operationalised in between a POC quarters: -It is observed that LTAs, which are not considered in the POC computation to arrive at rates for the subsequent quarter, are getting operationalised in between the following POC quarter. There is a provision for inclusion of MTOA in RTA, as Additional Medium Term Withdrawal. However, no such provision appears to be there for Additional LTA.
 Chief (Engg) CERC stated that CTU should inform the date of operationalisation of LTA to IA prior to the start of the quarter and before the Validation committee.
- (d) POC slab rates for LTA/MTOA billing: Injections of Generators who are not getting despatched have been considered zero by Validation Committee for the LGB purpose. However, some of the generators have prevailing operationalized LTA. It is observed that POC rates are not issued for such generators. As per the extant provision average of the POC Slab rates are being considered. For example:

In Quarter IV of 2017-18

POC Slab rate for SEPL was not arrived as the generation considered was zero in that Quarter. Average POC Slab rate is Rs.2,04,337. MEPL and SEPL are connected identically to the same ISTS system. The POC rate arrived for MEPL is Rs. 79,142. There is a huge difference in the LTA charges on consideration of average rate, which appears to be inequitable. SRPC requested that POC rates for all Regional entities may be notified.

Chief (Eng.), CERC stated that SRPC may further take up these matters separately with CERC

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

Name of the Transmission line	ISTS Licensee	Remarks
Replacement of existing 2*315 MVA 400/230 kV transformers with 2*500 MVA transformers and utilize the replaced 2*315 MVA transformers as regional spare at Narendra Substation (2nd ICT which was not commissioned)	PGCIL	To be considered (Expected by Mar'18)
400 kV OPGC- Jharsuguda Transmission Line	Odisha Generation Phase-II Trans. Ltd.	Not to be considered in PoC for Q1 (2018-
LILO of one ckt of 400 kV D/C Khandwa- Rajgarh transmission line at Khargone TPP	Khargone Transmission Ltd.	19). 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	Powergrid Parli Transmission Ltd.	Not to be considered in POC(Not expected by end of April,2018)
line 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	Not to be considered in PoC(Not Expected by end ofApril,2018)

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 100% since most of the hydro units will be able to generate at 100% load for the peak hours during April 2018 to June 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 1st meeting for 2018-19 of the Validation Committee held on 26thFebruary, 2018 at , New Delhi.</u>

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. Shri J. Mazumder, GM
- 7. Shri Dilip Rozekar, AGM(CTU-Planning)
- 8. Shri V Sriniwas, DGM (Comml.)

NLDC

- 9. Shri P.K Agarwal, Director (MO), POSOCO
- 10. Shri S.R Narsiman, GM
- 11. Shri S.S. Barpanda, GM
- 12. Shri G. Chakraborty, DGM
- 13. Shri Gaurav Verma, Sr. Engineer
- 14. Shri Sanny Machal, Sr. Engineer

WRPC

- 15. Shri A. Balan, M.S, WRPC
- 16. Shri J.K Rathod, SE, WRPC

WRLDC

- 17. Shri V.K Shrivastava ED
- 18. Ms Pushpa.S, AGM
- 19. Ms Chitrankshi, Manager
- 20. Shri L.K.S Rathore, Asst. Secretary
- 21. Shri Pradeep Sanodiya, Sr. Engineer

ERPC

22. Shri P.K DE, EE

ERLDC

- 23. Shri S. Banerjee, DGM
- 24. Shri S.K Sahay, Dy. Manager

DVC, Kolkata

25. Shri M. Sahoo, Dy. Chief Engineer

SRPC

- 26. Shri LEN. J.B, EE
- 27. Shri Anusha Das J, AEE

SRLDC

- 28. Shri T. Srinivas, DGM
- 29. Shri Madukar, Manager
- 30. Shri L. Sharath Chand, Sr. Engineer
- 31. Shri Pradeep Reddy, Sr. Engineer
- 32. Shri KBV Ram Kumar, Engineer

NRLDC

- 33. Shri Riza Naqvi, Sr. Engineer
- 34. Shri Gaurav Malviya, Engineer
- 35. Shri Rinku Narang, Technician, NRLDC

SLDC, Maharasthra

36. Shri D.J Kolhe, EE(OP)

NHPC

37. Shri Vijay Kumar, Manager (E)

NTPC

38. Shri Uday Shankar, DGM (OS)

NERLDC

- 39. Shri Amaresh Mallick.DGM
- 40. Shri Momai Deh, Sr. Engineer
- 41. Shri Palash Jyoti Borah, Engineer

NERPC

- 42. Shri L.B Mvanthang, Director
- 43. Shri S.M Aimol, Dy. Director

MSETCL

44. Shri U.S Bhagat, EE(STU)

HVPNL

- 45. Shri Sunil, SE
- 46. Shri Ravi Sher Singh, XEN

KPTCL

- 47. Shri Pavitha.K, AEE
- 48. Shri Y.S Sreevidhya, AEE
- 49. Shri Mchanakumara. G, AE

Sterlite Power

- 50. Shri T.A.N Reddy, Vice President
- 51. Shri Rohit Gera, Associate Manager

Point of Connection Charges and Losses Computation April 2018 -June 2018 (Q1)

Meeting of the Validation Committee Date: 26th February, 2018

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 Q1 Case (Apr'18 - June'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 Mar, 2018.

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 July'17 to 31st Mar'18	70%
Hydro Units with DOCO from 1st July'17 to 31st Mar'18	100%
Gas Units with DOCO from 1st July'17 to 31st Mar'18	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>ivivv values</u>
Set points to be considered in Basecase
1250
1250
1000
1000
750
750
500
500
1000
250
650
400
750
750
500 (towards NR)
2500

Data not Received

- □ Jammu & Kashmir
- Chandigarh
- Rajasthan
- □ Goa

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

Data not Received

□ AD Hydro Balco Jhabua Power

Everest KSK Mahanadi GMR Warora

Sree cement SGPL

□ Maithon Power Ltd. IL&FS

Adhunik Power Tuticorin TPP

GMR Kamalanga
 Thermal Powertech

JITPL Sasan UMPP

□ Lanco Amarkantak Coastal Energen

NSPCL Bhilai RGPPL

SEPL+MEPL Korba West

CGPL Dhariwal

LANCO Kondapalli NLC

YTC Data received from Transmission Licensees

- 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. Company Ltd.
- **□** Gurgaon-Palwal Trans. Ltd.

Contd....

- **□** Khargone Trans. Ltd.
- Odisha Generation Phase-II Trans. Ltd.
- **□** Patran Trans. Co. Ltd.
- **POWERGRID Unchahar Trans. Ltd.**
- **POWERGRID Warora Trans. Ltd.**
- **■** Teestavalley Power Transmission Ltd.
- **POWERGRID NM Trans. Ltd.**
- **□** POWERGRID Vizag Trans. Ltd.
- Jindal Power Ltd.
- PowerGrid Parli Trans. Ltd.
- Aravali Power Company Pvt. Ltd.
- Essar Power Transmission Company Ltd.
- PowerGrid Jabalpur Trans. Ltd.
- **■** Western Transco Power Limited
- Western Transmission Gujarat Limited
- **■** Power Grid Corporation of India Limited

YTC Data not received

- North East Transmission Company Ltd.
- Powerlinks Transmission Ltd.
- Kudgi Trans. Ltd.
- Jaypee Powergrid Ltd.
- **□** Torrent Power Grid Ltd.

YTC Data received from States

- **□** Andhra Pradesh
- Karnataka
- Kerala
- Assam
- Meghalaya
- **□** Himachal Pradesh
- Uttrakhand
- Madhya Pradesh

List of new assests

PGCIL	Ant. CoD
Replacement of existing 2x315 MVA 400/220 kV transformers with 2x500 MVA transformers and utilize the replaced 2x315 MVA transformers as regional spare at Narendra Sub-station (2nd ICT which was not commissioned)	15-03-2018
Odisha Generation Phase-II Trans. Ltd.	
400 kV OPGC- Jharsuguda Transmission Line	Dec,2017
Khargone Transmission Ltd.	
LILO of one ckt of 400 kV D/C Khandwa-Rajgarh transmission line at Khargone TPP	01-01-2018

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	Feb,2018	
NRSS-XXIX Trans.Ltd.		
LILO of both ckt of 400kV Uri-Wagoora D/C line at Amargarh.	Mar,2018	
400kV Samba-Amargarh D/C line	Mar,2018	

Points for discussion

- > Draft procedure for inclusion of TBCB lines in PoC computation
- Railway_UP as separate zone

Thank You!!

Demand Projection – Northern Region

Back

Entity	Q1 (Apr-June'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States	
Chandigarh	372		
Delhi	6,502	6,070	
Haryana	8,566	7,513	
Himachal Pradesh	1,346	1,381	
Jammu & Kashmir	2,238		
Punjab	9,633	9,082	
Rajasthan	10,787		
Uttar Pradesh	19,978	20,000	
Uttarakhand	2,030	1,999	
Total	61,452		
Normalization Factor	0.90		

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Demand Projection – Eastern Region

		Dack
Entity	Q1 (Apr-June'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States
Bihar	4,654	
DVC	2,598	2,945
Jharkhand	1,328	
Odisha	4,248	4,401
West Bengal	7,668	
Sikkim	90	
Total	20,587	
Normalization Factor	0.90	

Demand Projection – Western Region

Entity	Q1 (Apr-June'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States		
Chhattisgarh	3,659	4016		
Gujarat	16,544	15,096		
Madhya Pradesh	8,650	8,731		
Maharashtra	22,340	21,500		
Daman & Diu	364			
Dadra Nagar Haveli	784			
Goa_WR	509			
ESIL Hazira	677	700		
Total	53,528			
Normalization Factor	0.90			

Demand Projection – North-Eastern Region

	В	a	cl

Entity	Q1 (Apr-June'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States
Arunachal Pradesh	146	115
Assam	1,657	1,580
Manipur	158	175
Meghalaya	284	290
Mizoram	83	93
Nagaland	144	133
Tripura	292	380
Total	27,65	
Normalization Factor	0.90	

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Demand Projection – Southern Region

		<u>Back</u>	
Entity	Q1 (Apr-June'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States	
Andhra Pradesh	8,484		
Telangana	8,516	9,328	
Karnataka	9,581		
Kerala	3,936	3,821	
Tamil Nadu	15,959	15,200	
Pondicherry	399		
Goa- SR	80		
Total	46,955		
Normalization Factor	0.90		

Generation Projection – Northern Region 26

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'17 – 31st Dec'17 (B)	Generation CoD from 1st Jan'18 to 31 st Mar'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any)	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	Uttar Pradesh	9584	-	-	9584	As per data given by Uttar Pradesh	11500
2	Delhi	1025	-	-	1025	As per data given by Delhi	1122
3	Haryana	2408	-	-	2408	As per data given by Haryana	3600
4	Uttarakhand	916	-	<u>178</u>	1094	As per data given by Uttrakhand (Excl. BIPL: 70 MW)	918
5	Punjab	3989	-	-	3989	As per data given by Punjab	5756
6	Rajasthan	6068	-	432	6500		
7	Himachal Pradesh	806	-	-	806	As per data given by H.P.	650
8	Jammu & Kashmir	917	-	-	917		
9	ВВМВ	2177	-	-	2177	As per data given by BBMB	2142

Generation Projection – Northern Region ...(2) 27

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'17 – 31st Dec'17 (B)	Generation CoD from 1st Jan'18 to 31 st Mar'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
10	Dadri Thermal	1754	-	-	1754		1200
11	Rihand	2821	-	-	2821		2807
12	Singrauli	1824	-	-	1824	As per data given by	1863
13	Unchahar	986	327	-	1313	NTPC	956
14	Auraiya	237	-	-	237		150
15	Dadri CCPP	418	-	-	418		300
16	NAPS	400	-	-	400	As per NAPS	400
17	Jhajjar	1281	-	-	1281	Data given by APCPL Jhajjar	1421
18	Dhauliganga	292	-	-	292	As nor NUIDC	280
19	Tanakpur	84	-	-	84	- As per NHPC	94
20	Koteshwar	325	-	-	325	As per Koteshwar	332
21	Tehri	550	-	-	550	As per data given by Tehri	460
22	Anta	316	-	-	316	As per data given by NTPC	150
23	RAAP B	387	-	-	387	-	
24	RAAP C	438	-	-	438	-	
25	AD Hydro	223	-	-	223	-	
26	Everest	105	-	-	105	-	
27	Karcham Wangtoo	1127	-	-	1127	-	

Generation Projection – Northern Region(3)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'17 – 31st Dec'17 (B)	Generation CoD from 1st Jan'18 to 31 st Mar'18 (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	562	-	-	562	As per NHPC	540
30	Chamera 2	314	-	-	314		300
31	Chamera 3	242	-	-	242		231
32	Naptha Jhakri	1628	-	-	1628	As per SJVN	1605
33	Lanco Budhil	70	-	-	70	-	
34	Dulhasti	451	-	-	451		390
35	Salal	688	-	-	688		680
36	Sewa-II	132	-	-	132	As per NHPC	120
37	URI I HPS	559	-	-	559		480
38	URI II HPS	247		-	247		240
39	Sree Cement	257	-	-	257	-	
40	Parbati III	481	-	-	481	As per NHPC	520
41	Rampur HEP	451	-	-	451	As per SJVN	442
42	Koldam	876	-	-	876	As per data given by NTPC	792

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

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'17 – 31st Dec'17 (B)	Generation CoD from 1st Jan'18 to 31 st Mar'18 (C)	TOTAL D=A+B+ C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
43	West Bengal	5234	-	-	5234	-	
44	Odisha	3050	-	-	3050	As per data given by GRIDCO	3177
45	Bihar	241	-	-	241	-	
46	Jharkhand	340	-	-	340	-	
47	Sikkim	-	-	-	-	-	
48	Chujachan	113	-	-	113	As per CERC order dated: 22.06.2017	99
49	DVC		-	-			
50	Durgapur Steel		-	-		As you date siven by DVC	
51	Koderma TPP	4738	-	-	4738	As per data given by DVC (Average)	4527
52	Raghunathpur						
53	Bokaro TPS Expn.						
54	MPL	1013	-	-	1013	Last quarter Gen.	990

Generation Projection – Eastern Region...(2)³⁰ Back

							don
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'17 – 31st Dec'17 (B)	Generation CoD from 1st Jan'18 to 31 st Mar'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any)	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
55	Teesta V	533	-	-	533	As per NHPC	510
56	Kahalgaon	2155	-	-	2155	As per data given by	2178
57	Farakka	1857	-	-	1857	NTPC	1968
58	Talcher	972	-	-	972	Restricted to the generation(Installed Capacity-NAC)	942
59	Rangeet	70	-	-	70	As per NHPC	60
61	Adhunik Power	519	-	-	519	-	
62	Barh	1252			1252	As per data given by NTPC	1057
63	Kamalanga TPP (GMR)	595	-	-	595	-	
64	JITPL	894	-	-	894		
65	Jorthang	102	-	-	102	As per CERC order dated: 22.06.2017	96
66	Bhutan	1213	-	-	1213	-	
67	Teesta-III	959	-	-	959	As per CERC order dated: 22.06.2017	782
68	Dikchu HEP	83	-	-	83		
69	Nabinagar BRBCL	-	<u>151</u>	151	301		
70	Tashideng	-	-	96	96		

Generation Projection – Western Region...(1) 31

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'17 – 31st Dec'17 (B)	Generation CoD from 1st Jan'18 to 31 st Mar'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
70	MP	4021	-	-	4021	As per forecasted gen. given by MP	5911
71	Maharashtra	14748	<u>530</u>	98	15376	As per data given by Maharashtra	16499
72	Chhattisgarh	2388	-	-	2388	As per data given by Chhattisgarh	2797
73	Gujarat	11196	-	-	11196	As per data given by Gujarat	12591
74	Goa	-	-	-	-	-	-
75	D&D	-	-	-	-	-	-
76	DNH	-	-	-	-	-	-
77	Vindhyachal	4697	-	-	4697	As per NTPC	4440
78	Ratnagiri Dabhol	614	-	-	614		
79	TAPS (1,2,3,4)	1002	-	-	1002		
80	JINDAL	800	-	-	800	As per data given by JPL	560
81	LANCO	574	-	-	574		
82	NSPCL Bhilai	477	-	-	477		
83	Korba	2494	-	-	2494	As per NTPC	2431

Generation Projection – Western Region ... (2)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'17 – 31st Dec'17 (B)	Generation CoD from 1st Jan'18 to 31 st Mar'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
84	SIPAT	2876	-	-	2876	As per NTPC	2809
85	CGPL	3286	-	-	3286	-	
86	Mauda	1491	-	432	1923		1757
87	Gandhar	484	-	-	484	As per NTPC	350
88	Kawas	374	-	-	374		250
89	SSP	677	-	-	677		
90	KAPS	129	-	-	129		
91	Essar Mahan	566	-	-	566	As per data given by Essar Mahan	550
92	BALCO	650	-	-	650	As per last quarter	300
93	KSK Mahanadi	1076	-	-	1076		
95	Sasan UMPP	3784	-	-	3784		
96	Tamnar TPP	748	-	-	748	As per data given by JPL	1140

Generation Projection – Western Region ... (3) 33

							Dack
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'17 – 31st Dec'17 (B)	Generation CoD from 1st Jan'18 to 31 st Mar'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
97	DGEN	0	-	-	0		
98	DB Power	1166	-	-	1166		
99	Korba West	383	-	-	383		
100	Dhariwal	285	-	-	285		
101	GMR Chattishgarh Energy Ltd.	270	-	-	270	As per email from GMR Chhattisgarh	500
102	JP Nigrie	1266	-	-	1266	As per JP Nigrie	1240
103	GMR Warora	565	-	-	565		
104	ACBIL+ Spectrum+MCCPL	706	-	-	706	As per ACBIL	692
105	MB Power (Anuppur)	948	-	-	948	As per MB Power	1131
106	RKM Power	313	464	-	777	As per RKM power	400
107	Jhabua Power	506	-	-	506		
108	TRN Energy	281	198	-	479	As per TRN Energy	540
109	Sholapur STPP		435	-	435	As per NTPC	435
110	Lara STPP			<u>528</u>	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 July'17 – 31st Dec'17 (B)	Generation CoD from 1st Jan'18 to 31 st Mar'18 (C)	TOTAL D=A+B+ C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
112	AGTPP, NEEPCO	107	-	-	107		132
113	Doyang, NEEPCO	47	-	-	47		52
114	Kopili , NEEPCO	123	-	-	123		184
115	Kopili 2, NEEPCO	26	-	-	26	As decided in 140th OCC meeting	22
116	Khandong, NEEPCO	44	-	-	44		44
117	Ranganadi, NEEPCO	418	-	-	418		401
118	AGBPP_Kathalguri	227	-	-	227		220
119	Loktak, NHPC	106	-	-	106		105

Generation Projection – North-Eastern Region 35

							Back
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'17 – 31st Dec'17 (B)	Generation CoD from 1st Jan'18 to 31 st Mar'18 (C)	TOTAL D=A+B+ C	As decided in 140th OC meeting As per data given by NTPC	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
120	Palatana GBPP	627			627	As decided in 140th OCC meeting	547
121	Bongaigaon_NTPC	118	<u>165</u>	-	282		460
122	Arunachal Pradesh	-	-	-	-		-
123	Assam	308			308		231
124	Manipur	-			-		
125	Meghalaya	175			175	As decided in 140th OCC	323
126	Nagaland	10			10	meeting	24
127	Tripura	93			93		110
128	Mizoram	3			3		8

Generation Projection – Southern Region...(1)³⁶

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'17 – 31st Dec'17 (B)	Generation CoD from 1st Jan'18 to 31 st Mar'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
129	Andhra Pradesh	5662	-	-	5662		
130	Telangana	3950	-	-	3950	As per data given by Telangana	4518
131	Karnataka	6580	-	-	6580		
132	Kerala	1572	-	-	1572	As per data given by Kerala	1471
133	Tamil Nadu	8902	-	-	8902	As per data given by TN (including wind gen.)	10136
134	Pondy	0	-	-	0	-	
135	Ramagundam	2505	-	-	2505	As per NTPC	2431
136	Simhadri 2	976	-	-	976	7.6 per 1411 e	948
137	Simhadri 1	-	-	-			948
138	SEPL	348	-	-	348		
139	Lanco Kondapalli	227	-	-	227		

Generation Projection – Southern Region...(2)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'17 – 31st Dec'17 (B)	Generation CoD from 1st Jan'18 to 31 st Mar'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
140	Kaiga	830	-	-	830		
141	NEYVELI (EXT) TPS	558	-	-	558		
142	NEYVELI TPS-II	732	-	-	732		
143	NEYVELI TPS-II EXP	820	-	-	820		
144	MAPS	281	-	-	281		
145	Vallur	1387	-	-	1387	As per NTPC	1400
146	Meenakhshi	275	-	-	275		
147	Coastal Energen	810	-	-	810		
148	Kudankulam	1220	-	-	1220	As per last quarter (including unit-2)	1700
149	Tuticorin TPP	749	-	-	749		
150	Thermal Powertech	1270	-	-	1270		
151	IL&FS	934	-	-	934		
152	Talcher Stage-II	1925	-	-	1925	Restricted to the generation (Installed Capacity- NAC)	1885
153	Sembcorp Gayatri Power Ltd.	1267	-	-	1267		
154	Kudgi STPS		<u>1047</u>	-	1047	As per NTPC	1024

Expected Generation addition – Northern Region



			ared Comm 7 to 31st D	nercial from ec'17	Generation declared/expected to be declare Commercial from 1 st Jan'18 to 31 st Mar'18					
Entity	Bus Name Unit Installed Gen. No. Capacity 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						

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Expected Generation addition – Western Region

	Genera			mercial fron	n			•	ed to be decl	
		1st July'1	.7 to 31st I	Dec'17		Commer	cial fro	m 1 ^{sτ} Jan'18	to 31 st Mar	18
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	3	270	177		Sirpur Power	1	150	98	
Maharashtra	Nasik TPP	4	270	177	530					98
	Nasik TPP	5	270	177						
Mauda						Mauda 3 660			432	432
RKM Power	RKM Power	2	360	232	464					
	RKM Power	3	360	232	-					
TRN Energy	TRN Energy	2	300	198	198					
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 Comi 17 to 31st [om	Generation declared/expected to be declared Commercial from 1 st Jan'18 to 31 st Mar'18				
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)
Nabinagar BRBCL	Nabinagar BRBCL	1	230	151	151	Nabinagar BRBCL	2	230	151	151
			Tashideng	1	49	48	0.0			
Tashideng						Tashideng	2	49	48	96

Expected Generation addition – Southern Region



		lared Com 17 to 31st	mercial from Dec'17	Generation d Commercia		_	ted to be de 18 to 31 st Ma			
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	1047					
Kuugi 3173	Kudgi STPS	2	800	524	1047					

Expected Generation addition –North Eastern Region

		eclared Co '17 to 31s	mmercial fro t Dec'17	Generation declared/expected to be declared Commercial from 1 st Jan'18 to 31 st Mar'18						
Entity	Bus Name	Unit No.	Installed Capacity	Gen. considered	Total	Bus Name	Unit No.	Installed Capacity	consider	Total
			(MW)	(MW)	(MW)			(MW)	(MW)	(MW)
Bongaigaon _NTPC	Bongaigaon_ NTPC	2	250	165	165					

Comparison of Demand for Q3-17-18 43

	Northern Region	on	
State/Region/System	Actual Peak Demand Met (MW)	Projected Demand (MW)	Change (in %)
Chandigarh	207	227	↓ -9%
Delhi	4232	4120	3%
Haryana	7165	7259	↓ -1%
Himachal Pradesh	1492	1400	7%
Jammu & Kashmir	2086	2031	3%
Punjab	6700	6992	↓ -4%
Rajasthan	10954	9608	14%
Uttar Pradesh	15213	18000	√ - 15 %
Uttarakhand	1944	1830	6%

Contd...

Eastern Region										
State/Region/System	Actual Peak Demand Met (MW)	Projected Demand (MW)	Change(in %)							
Bihar	4112	4214	↓ -2%							
DVC	2738	2725	^ 0%							
Jharkhand	1181	1244	↓ -5%							
Orissa	4170	4141	1%							
West Bengal	6914	6970	√ - 1%							
Sikkim	93	95	↓ -2%							
	Western Region									
Chhattisgarh	3356	3530	↓ -5%							
Gujarat	15319	14947	2%							
Madhya Pradesh	11517	11400	1%							
Maharashtra	19739	20600	↓ -4%							
Daman & Diu	349	320	9%							
Dadra Nagar Haveli	779	770	1%							
Goa	500	480	4%							

Contd..

Southern Region			
State/Region/System	Actual Peak Demand Met (MW)	Projected Demand (MW)	Change (in %)
Andhra Pradesh	8093	7833	↑ 3%
Telangana	8231	8800	-6%
Karnataka	9395	9955	↓ -6%
Kerala	3589	3660	↓ -2%
Tamil Nadu	13785	13900	√ - 1%
Pondicherry	355	350	1%
North Eastern Region			
Arunachal Pradesh	137	135	1%
Assam	1559	1550	1%
Manipur	178	168	6%
Meghalaya	336	290	16%
Mizoram	90	93	√ -3%
Nagaland	131	130	1%
Tripura	375	358	1 5%