#### 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: 19/12/2019

То

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

Subject: Minutes of the 4<sup>th</sup> Meeting of Validation Committee for the Application Period from 1<sup>st</sup> January 2020 to 31<sup>st</sup> March, 2020 for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010

Sir,

Please find enclosed herewith minutes of the 4<sup>th</sup> Meeting of the Validation Committee for the **year 2019-20 (Application Period from 1<sup>st</sup> January 2020 to 31<sup>st</sup> March, 2020)** for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) **Regulations, 2010** held on 02.12.2019 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 <sup>rd</sup> & 4 <sup>th</sup> Floor, Chanderlok Building, 36-Janpath, New Delhi -110001
2.		Shri P.K. Awasthi, Chief (Fin.)	Central Electricity Regulatory Commission 3 <sup>rd</sup> & 4 <sup>th</sup> Floor, Chanderlok Building, 36-Janpath, New Delhi -110001
3.	CEA	Chief Engineer, (PSP & PA-II) Division	Central Electricity Authority 3 <sup>rd</sup> Floor, N-Wing, Sewa Bhawan, R.K. Puram, New Delhi - 110 066
4.		Director, GM Division	Central Electricity Authority 6 <sup>th</sup> Floor, N-Wing Sewa Bhawan, R.K. Puram, New Delhi-110066
5.	CTU/ Power grid	Shri J. Mazumder ,GM (Comm)	Power Grid Corporation of India Ltd Plot No. 2, Sector-29, Near IFFCO Chowk, Gurgaon-122001
6.		Shri Ashok Pal, GM 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.		Shri S.S Barpanda, Executive Director, NRLDC	Northern Regional Load Despatch Centre, Jeet Singh Marg, Katwaria Sarai, New Delhi-110016
8.		Shri A. Gartia Executive Director, SRLDC	Southern Regional Load Despatch Centre 29, Race Course Cross Road, Bangalore, Karnataka-560009
9.	500000	Shri V.K.Shrivastava Executive Director, WRLDC	Western Regional Load Despatch Center F3, MIDC Area, Marol, Andheri East, Mumbai- 400093
10.	POSOCO	Shri D.K Jain Executive Director, ERLDC	Eastern Regional Load Despatch Center 14, Golf Club Road, Tollygunge, Kolkata-700 033 (W.B.)
11.		Shri Debasis dey Executive Director, NLDC	National Load Despatch Centre B-9, Qutab Institutional Area, KatwariaSarai, New Delhi-110016
12.		Shri V.Suresh Executive Director, NERLDC	North Eastern Regional Load Despatch Centre, Lower Nongrah, Dongtieh, Lapalang, Shillong – 793006

SI. No	Name of the Organizations	Name of the nominated persons	Address
13.	NRPC	Shri Naresh Bhandari, Member Secretary	Northern Regional Power Committee 18-A Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-11
14.	WRPC	Member Secretary	Western Regional Power Committee Plot No. F-3, MIDC Area, Marol, Opp : SEEPZ, Andheri (East), Mumbai-400093
15.	SRPC	Member Secretary	Southern Regional Power Committee 29, Race Course Cross Road, Bangalore-560009, Karnataka
16.	ERPC	Shri Joydeb Bandyopadhyay , Member Secretary	Eastern Regional Power Committee 14, Golf Club Road, Tollygunge, Kolkata-700 033 (W.B.)
17.		Shri S.K. Das, Director Engineering	Bihar State Electricity Board 1 <sup>st</sup> Floor, VidyutBhawan, Bailey Road, Patna-21, Bihar
18.	NERPC	Member Secretary	North Eastern Regional Power Committee, NERPC Complex, Dong Parmaw, Lapalang, Shillong-793006 Phone No:0364-2534077 Fax NO.:0364-2534040
19.		Shri Jatin Baishya, Dy. General Manager	State Load Despatch Centre Complex,Kahelipara,Guwahati
20.	SLDC	Shri P.A.R. Bende, Member Director, SLDC	Chief Engineer Madhya Pradesh Power Transmission Company Ltd., Nayagaon, Rampur, Jabalpur- 482008
21.	KPTCL	Shri S. Sumanth Director(Transmission), KPTCL	Karnataka Power Transmission Corp. Ltd, KauveryBhavan, K.G. Road, Bangalore – 560009
22.	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

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

### LIST OF GENERATING COMPANIES

Minutes of the 4<sup>th</sup> Meeting of Validation Committee for the Application Period from 1<sup>st</sup> January 2020 to 31<sup>st</sup> March 2020 held on 02<sup>nd</sup> December, 2019 at NRLDC, New Delhi.

- The Chairman of the Validation Committee, Shri S.C Shrivastava, Chief (Engg.), CERC welcomed the participants present in NRLDC Conference Room and participants of RPCs, RLDCs, STUs and Generating Companies present through video conferencing from the Conference Room of WRLDC, SRLDC, ERLDC, NERLDC, SLDCs of Gujarat, Madhya Pradesh, Chhattisgarh, Punjab, U.P, Haryana, Himachal Pradesh, J&K, Rajasthan, Delhi, DVC, Jharkhand, Andhra Pradesh, Telangana, Tamil Nadu, Kerala, Karnataka, Bihar, Odisha, West Bengal, Tripura and Maharashtra.. 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 2019-20. The presentation shown during the is attached at *Annexure-II.*
- **3.** It was deliberated in the meeting that as the base case for computations is build considering all India Peak scenarios as per the Regulation and all India peak demand is met during the evening hours i.e. between 1900 to 2000 hrs when the solar generation is not available at that time. It was decided that henceforth solar generation shall not be considered in the Load Generation balance for PoC computations. It was further decided that Peak generation from wind power plants shall be continued to be considered at 50% of the installed capacity.
- 4. After deliberation among members, it was decided that the peak generation for new hydro units shall be considered at 80%, 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, following shall be considered 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.

# 5. Demand Projection for Application Period from 1<sup>st</sup> January 2020 to 31<sup>st</sup> March, 2020 (Q4 of 2019-20).

#### 5.1 Northern Region:

(i) Projected demand by IA for Himachal Pradesh was 1766 MW. Prior to Meeting Himachal Pradesh had submitted its demand projection as 1428 MW. During the meeting, Himachal Pradesh representative suggested its demand projection as 1768 MW.

The Demand figures as suggested above were agreed upon.

#### 5.2 Eastern Region:

- (i) Projected demand by IA for Bihar was 4781 MW. During the meeting, Bihar representative suggested its demand projection as 4750 MW.
- (ii) Projected demand by IA for DVC was 3206 MW. During the meeting, ERLDC representative suggested its demand projection as 3150 MW.
- (iii) Projected demand by IA for West Bengal was 6681 MW. During the meeting, WBSLDC representative suggested its demand projection as 6822 MW.

The Demand figures as suggested above were agreed.

#### 5.3 Western Region:

- (i) Projected demand for Chhattisgarh by IA was 4260 MW. Prior to meeting, Chhattisgarh had submitted its demand as 4247 MW. During the meeting WRLDC suggested to consider demand projection as 4284 MW.
- (ii) Projected demand for DD by IA was 357 MW. Prior to meeting, DD had submitted its demand as 325 MW. During the meeting WRLDC suggested to consider demand projection for DD as 335 MW.
- (iii) Projected demand for DNH by IA was 839 MW. During the meeting WRLDC suggested to consider demand projection for DNH as 830 MW.
- (iv) Projected demand for Goa by IA was 601 MW. Prior to meeting, Goa had submitted its demand as 610 MW. During the meeting WRLDC suggested to consider demand projection for Goa as 530 MW.

The Demand figures as discussed above agreed. The other demand figures as submitted by DICs as discussed in OCC were agreed.

#### 5.4 Southern Region:

- Projected demand for Telangana by IA was 10753 MW. During the meeting Telangana suggested its demand projection as 10980 MW.
- Projected demand for Pondichery by IA was 436 MW. During the meeting SRPC has suggested Pondicherry its demand projection as 500 MW.

The Demand figures as suggested above were agreed upon.

#### 5.5 North Eastern Region:

Demand projections for NER constituents as agreed at OCC and submitted by them were agreed upon.

# 6. Generation Projection for Application Period from 1<sup>st</sup> January, 2020 to 31<sup>st</sup> March, 2020 (Q4 of 2019-20).

#### 6.1 Northern Region:

- (i) Projected generation by IA for J&K was 330 MW. Representative of NRPC suggested the generation projection of J&K as 400 MW.
- (i) Member present at NRLDC suggested following changes:
  - (a)Generation from NAPS may be taken as 330 MW instead of 387 MW.
  - (b)Generation from Dhauliganga may be taken as 240 MW instead of 280 MW.
  - (c) Generation from Koteshwar may be taken as 400 MW instead of 409 MW.
  - (d)Generation from RAAP C may be taken as 440 MW instead of 452 MW.
  - (e)Generation from Naptha Jhakri may be taken as 1485 MW instead of 1594 MW.
  - (f) Generation from Rampur HEP may be taken as 390 MW instead of 445 MW.
  - (g)Bhadhla Solar may be taken as '0' as Solar is not available during all India peak time.

The Generation figures as suggested above were agreed. The other generation figures as discussed in OCC were agreed.

#### 6.2 Eastern Region:

- Projected generation by IA for Bihar was 199 MW. During the meeting, Bihar submitted its generation as 200 MW.
- (ii) Projected generation by IA for Jharkhand was 346 MW. During the meeting, representative of Jharkhand suggested that generation may be taken as 405 MW.
- (iii) Projected generation by IA for Odisha was 3782 MW. Prior to meeting Representative of Odisha submitted generation as 3908 MW. During the meeting, It was decided to consider generation from Odisha as 3000 MW based on its historical ISTS drawl.

- (iv) Member present at ERLDC suggested following changes:
  - (a) Generation from Adhunik Power may be taken as 450 MW instead of 356 MW.
  - (b)Generation from JITPL may be taken as 550 MW instead of 724 MW as one unit is running.
  - (c) Generation from Bhutan may be taken as 578 MW instead of 848 MW
  - (d)Generation from Teesta-III may be taken as 1189 MW instead of 1232 MW.
  - (e)Generation from Darlipalli STPS ST-I may be taken as 0 MW instead of 524 MW as it is not Commissioned yet.

The Generation figures as suggested above were agreed upon.

#### 6.3 Western Region:

- (i) Projected generation by IA for Chhatisgarh was 2200 MW. Prior to meeting, Chhattisgarh has submitted its generation projection as 3457 MW. During the meeting, representative of WRLDC suggested to consider generation projection as 2351 MW.
- (ii) Projected generation by IA for Gujarat was 9986 MW. Prior to meeting Representative of Gujarat submitted generation as 11424 MW. During the meeting, It was decided to consider generation from Gujarat as 11000 MW based on its historical ISTS drawl.
- (iii) Member present at WRLDC suggested following changes:
  - (a)Generation from TAPS (1, 2, 3, 4) may be taken as 1135 MW instead of 1214 MW.
  - (b)Generation from SSP may be taken as 600 MW instead of 240 MW.
  - (c) Generation from KAPS may be taken as 400 MW instead of 207 MW as both units are running.
  - (d)Generation from KSK Mahanadi may be taken as 1610 MW instead of 1029 MW.
  - (e)Generation from RKM Power may be taken as 850 MW instead of 767 MW.
  - (f) Generation from Sholapur STPP may be taken as 600 MW instead of 970 MW.
  - (g)Generation from Rewa Solar may be taken as 0 MW instead of 368 MW.
  - (h)As per the information received from Korba west/ WRLDC before Validation Committee meeting, Generation for Korba West has been considered NIL and same has approved in validation Committee meeting. However, as per IA e-mail dated 03.12.2019 it is informed that, the unit of Korba west would be revived by 15th Dec and could generate 500 MW and as suggested by WRLDC, this might be considered for 2019-20 Q4 PoC computations.

The Generation figures as suggested above were agreed upon.

#### 6.4 Southern Region:

- (i) Projected generation for Andhra Pradesh by IA was 9669 MW. Prior to meeting, Andhra Pradesh has submitted its generation as 9400 MW. During the meeting it was decided to consider generation projection as 7400 MW considering deduction of 1800 MW solar and addition of 200 MW wind.
- (ii) Projected generation for Telangana by IA was 6427 MW. During the meeting it was decided to consider generation projection as 6050 MW considering deduction of solar.
- (iii) Projected generation for Karnataka by IA was 9178 MW. During the meeting it was decided to consider generation projection as 9000 MW based upon historical ISTS drawl.
- (iv) Projected generation for Kerala by IA was 1453 MW. During the meeting Kerala has submitted its generation projection as 1550 MW.
- (v) Member present at SRLDC suggested following changes:
  - (a) Generation from Kaiga may be taken as 590 MW instead of 799 MW.
  - (b) Generation from Neyveli (Ext) TPS may be taken as 380 MW instead of 396 MW.
  - (c) Generation from Neyveli TPS-II may be taken as 1233 MW instead of 1316 MW.
  - (d) Generation from Neyveli TPS-II Exp may be taken as 400 MW instead of 369 MW.
  - (e) Generation from MAPS may be taken as 190 MW instead of 272 MW.
  - (f) Generation from Coastal Energen may be taken as 558 MW instead of 738 MW.
  - (g) Generation from kundankulam may be taken as 900 MW instead of 1191 MW.
  - (h) Generation from Tuticorin TPP may be taken as 942 MW instead of 834 MW.
  - (i) Generation from IL&FS may be taken as 850 MW instead of 1002 MW.
  - (j) Generation from Neyvelli New Thermal Power may be taken as 330 MW instead of 660 MW.
  - (k) Generation from Betam Wind may be taken as 125 MW considering 50% of Installed capacity i.e. 250 MW.

The Generation figures as suggested above were agreed upon.

#### 6.5 North Eastern Region:

(i) Generation projections for NER constituents as agreed at OCC and submitted by them were agreed upon.

Note: The data not specifically indicated above shall be as submitted by DIC or where DIC has not submitted any data, the projected data as forecasted by IA shall be considered as recorded in V.C. presentation.

#### 7. 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 2020 – March 2020 period were projected by Implementing Agency based on operational experience and was put up for validation before the Committee.
- (ii) After discussion, following HVDC set points are finalized.

HVDC Name	Set points (in MW) to be considered in Base case
Mundra-Mahindergarh Pole-1	1000
Mundra-Mahindergarh Pole-2	1000
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)
Alipurduar-Agra Pole-1 & Pole-2	0
Champa-Kurukshetra Pole-1 & Pole-2	2000
Champa-Kurukshetra Pole-3	1000

#### 8. New Assets:

(i) Implementing Agency informed the Validation Committee that the assets of M/s. Gurgaon-Palwal Transmission Limited (GPTL) which were anticipated to be commissioned in last quarter by the end of Oct'19 were considered in 2019-20 Q3 computations. However, some of the assets were not commissioned. It was discussed upon considering the remaining assets of M/s. GPTL which were again anticipated to be commissioned by Dec'19. It was decided to consider the assets of M/S GPTL on submission of written confirmation by GPTL confirming commissioning date of assets.

- (ii) The inclusion of assets of M/s. Khargone Transmission Limited (KTL) was also discussed. M/s KTL submitted that the remaining assets would be commissioned by the end of Nov'19. It was discussed and decided to consider the assets of M/s KTL for 2019-20 Q4 computations on submission of written confirmation by KTL confirming date of commissioning of assets.
- (iii) Implementing agency informed that it was decided in 3rd validation committee meeting in 2019-20 to maintain status-quo in case of M/s. Odisha generation Phase-II Transmission Limited (OGPTL) since the matter is sub-judice. It was discussed upon considering same for 2019-20 Q4 computations. It was decided that status-quo will be maintained till the further direction of the Commission in this matter.
- (iv) Implementing agency informed that POWERGRID had submitted the YTC of evacuation transmission system of newly commissioned generation plants for consideration in the 2019-20 Q4 computations. It was informed that the new generation at Lara and Khargone were/ would be partly commissioned. It was discussed and decided to follow the same methodology as in case of Warora and Nabinagar in line with CERC Order dated 06.11.2018 for Kudgi transmission system.
- (v) Implementing agency informed that the asset cost of 13 state utilities whose approved Tariff by the Commission was not available as on 31.03.2019 were excluded in 2019-20 Q3 computations as decided in the 3rd Validation Committee meeting for 2019-20. It was discussed upon continuing same in 2019-20 Q4 computations and decided to continue the exclusion of the 13 state utilities in 2019-20 Q4 calculations as decided in 3rd validation Committee meeting for 2019-20.
- (vi) New lines to be included for this quarter as proposed by IA.

S.No.	Name of the Transmission line	ISTS Licensee	CoD as per TSA	Anticipat ed CoD as submitte d by transmis sion licensee	Remarks
1.	GIS Substation at Kadarpur along with 1 No. of 125 MVAR Bus Reactor	Gurgaon- Palwal	May,2019	Jan,2020	To be considered
2.	400/220 kV, 2 x 500 MVA GIS Substation at Sona Road	Transmis sion	Sep,2019	Jan,2020	in PoC.

#### (a)TBCB Assets:-

S.No.	Name of the Transmission line	ISTS Licensee	CoD as per TSA	Anticipat ed CoD as submitte d by transmis sion licensee	Remarks
3.	400kV Kadarpur- Sohna Road	Limited	Sep,2019	Jan,2020	
4.	LILO of Gurgaon- Manesar 400kV D/c Quad Line at Sohna Road S/s		Sep,2019	Jan,2020	
5.	400kV Prithala-Kadarpur		May,2019	Commissi oned	
6.	765kV Khandwa-Dhule		July,2019		Not
7.	765kV Line Dhule bays for Khandwa-Dhule		July,2019		claimed by Licensee for 2019-20 Q4
8.	Khandwa Substation 2*1500 MVA 765/400 kV		July,2019		To be considered
9.	765kV Khandwa-Indore		July,2019		in PoC as
10.	400kV Khargone TPP switchyard- Khandwa pool	Khargone Transmis sion Limited	July,2019	Jan,2020	per Order dated 21.10.2019 in IA No. 78/2019 in Petition No. 308/MP/20 19 and Order dated 6.11.2018 in Petition no. 261/MP/20 17
11.	LILO of one ckt of 400kV Khandwa-Rajgarh D/c line Khargone TPP		Feb,2018	March,20 18	To be considered in PoC as per Order dated 6.11.2018 in Petition no. 261/MP/20 17.

S.No.	Name of the Transmission line	ISTS Licensee	CoD as per TSA	Anticipat ed CoD as submitte d by transmis sion licensee	Remarks
12.	400kV OPGC-Jharsuguda D/C	Odisha Generatio n Phase- II transmiss ion Ltd			Status- quo to be maintained since matter is sub-judice at CERC

### (b)Assets as submitted by PGCIL

S.No.	Name of the Transmission line	ISTS Licensee	Anticipated CoD / Actual CoD	Date of CERC Order	Remarks
1.	Replacement of 315 MVA 400/220 kV ICT- II with 500 MVA 400/220 kV ICT at Pusauli sub-station		Jan'2020	27-Jun-16	
2.	Comb assets: 1) LILO of both ckts. of Bamnauli-Samaypur 400kV TL at Tuglakabad along with ass. bays; 2) 400/220 kV, 2x500 MVA ICT-I and II at Tuglakabad GIS SS along with ass. bays; 3) 400 kV, 125 MVAR BR at GIS Tughlakabad SS along with ass. Bay		14-Oct-18	31-Oct-19	To be
3.	400/220 kV, 500 MVA ICT-III at 400	Power Grid	28-Nov-18	31-Oct-19	Considered in PoC

S.No.	Name of the Transmission line	ISTS Licensee	Anticipated CoD / Actual CoD	Date of CERC Order	Remarks
	/220 kV GIS at Tuglakabad Sub- stationa long with associated Bays				
4.	400/220 kV, 500 MVA ICT-IV at 400 /220 kV GIS at Tuglakabad Sub- station along with associated Bays		20-Oct-18	31-Oct-19	
5.	±200MVARSTATCOM at 400 kVGwalior sub-station		26-Dec-18	01-Nov-19	
6.	400 kV, 125 MVAR Bus Reactor at Bina		16-Mar-16	01-Nov-19	
7.	400/220 kV, 3 X 105 MVA ICT alongwith associated bays at Hamirpur Sub- station,		31-Mar-19	21-Nov-19	
8.	Circuit 1 of the 765 kV D/C Darlipalli TPS (NTPC)- Jharsuguda (Sundergarh) Pooling Station transmission line alongwith one 765 kV line Bays at Jharsuguda (Sundergarh) Pooling Station		07-Jun-17	21-Nov-17	Not to be considered in PoC. Dedicated line Shall be considered under Regulation 8(8) of CERC Connectivity Regulations.

S.No.	Name of the Transmission line	ISTS Licensee	Anticipated CoD / Actual CoD	Date of CERC Order	Remarks
9.	400 kV D/C Meja- Allahabad transmission line along with associated bays at Allahabad		10-Feb-17	07-Nov-19 203/TT/2016	To be Included in PoC as per CERC Order
10.	400kVD/C(Quad)LaraSTPS-I-ChampaPSalongwithassociatedbaysatChampaPoolingStation		21-Jul-17	20-Jul-18 125/TT/2017	To be Included in PoC as per CERC Order
11.	400kV D/C (Quad) Nabinagar-II – Gaya transmission line with 02 nos. associated bays at Gaya Sub- station	Power Grid	12-May-18	22-Apr-19 106/TT/2018	To be Included in PoC as per CERC Order.
12.	LILO of 400kV S/C Neelmangla- Hoody Transmission Line at new 400/220kV GIS Substation at Yelahanka with 1X63 MVAR 420kV Bus Reactor along		13-Oct-18	08-Nov-19 361/TT/2018	CTU has submitted that as power flow started in two bays (Asset 2A) wef 13.10.2018. To be considered in PoC.

S.No.	Name of the Transmission line with associated	ISTS Licensee	Anticipated CoD / Actual CoD	Date of CERC Order	Remarks
	bays and equipment				
13.	2X500MVA, 400/220kV ICT <sup>s</sup> along with associated bays and 02 No. 220 KV bays at 400/220kV Yelahanka Substation		13-Oct-18	08-Nov-19 361/TT/2018	CTU has submitted that as power flow started in two bays (Asset 2A) wef 13.10.2018. To be considered in PoC
14.	400 KV D/C Lara STPS-1 to Raigarh (Kotra) PS Transmission line Along associated bays at Raigarh (Kotra)		05-May-16	25-May-16 254/TT/2015	To be Included in PoC as per CERC Order.

(vii) It was decided that assets put into use or anticipated to be put under use shall be considered in PoC subject to CERC Regulations & Orders.

#### Preparation of final All India Base case 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.

# List of Participants in the 4<sup>th</sup> meeting for 2019-20 of the Validation Committee held on 02<sup>nd</sup> December, 2019 at New Delhi.

#### CERC

- 1. Shri S.C.Shrivastava, Chief (Engg.) In Chair
- 2. Ms Shilpa Agarwal, Joint. Chief (Engg.)
- 3. Shri Abhishek Rohilla Dy Chief (Engg.)
- 4. Ms Sonika Hayaran, Research Officer

#### POWERGRID

- 5. Shri Ajay Upadhyay, CM (Comm.)
- 6. Shri V.Sreenivas, Sr. GM

#### NLDC

- 7. Shri Debasis De, ED
- 8. Shri G. Chakraborty, Sr. GM
- 9. Shri Ravi Shankar Chinnam, Manager
- 10. Shri Laxman Singh, ET(MO),

#### NRLDC

- 11. Shri S. S. Ba Shri rpanda, ED
- 12. Shri Alok Kumar, Dy. General Manager
- 13. Shri H.K. Chawla, Sr. GM
- 14. Shri Riza Naqvi, Manager

#### WRPC

15. Shri D.N. Gawari, EE (Opn.) 16. Shri P. Peddy Reddy

#### WRLDC

17. Ms. S. Usha, GM18. Ms Chitrankshi G, Chief Manager19. Shri Pradeep Sanodia, DGM

#### NRPC

20. Shri Naresh Bhandari, Member Secretary 21. Shri RP. Pradhan, SE(Comml)

#### ERPC

22. Shri S. M. Jha, Consultant, ERPC

#### ERLDC

23. Shri Saurav Kr Sahay, Manager

#### SRPC

24. Ms. Anusha Das J, AEE

25. Shri M.V. Subba Reddy, AEE 26. Shri Asit Singh

#### Telangana SLDC

27. Shri Suresh Babu, SE 28. Shri Rajashekar,AE

#### Tamilnadu SLDC

29. Shri Murugavelan 30. Shri K. Kamraj

#### **KPTCL SLDC**

31. Shri B.V. Malleshappa, EE(E)32. Shri D. Chethan EE(PSS-S)

#### Odisha, SLDC

33. Shri P.K. Das, SR. GM(Elec.) 34. Shri P.K. Satapathy, GM(Elec.)

#### West Bengal, SLDC 35. Shri. Dibrendu Bhattacharya, DGM(Comm.)

**AP Transco** 36. Shri A K V Bhaskar

#### **KSEB SLDC**

37. Shri Anil Job, EE (Comml.)38. Ms. Anu S. Ramesh, AE39. Shri Subramani

#### GRIDCO

40. Shri S.K.Maharana, AGM (Electrical) 41. Shri. H. Bahra, AGM (Elel.)

#### NTPC

42. Shri P.B. Venkatesh, AGM (Comm) 43. Shri Vikram Singh, Sr.Manager

#### NERLDC

44. Shri Farooque Iqbal, EE(Comml)45. Shri Sachin Kr. Singh, Astt. Manager46. Shri S.C. De, GM(SO-II)47. Shri Palash Jyoti Borah, DM(SO-II)

#### **HVPN**

48. Shri Mohit Agarwal, SDO49. Shri Ayush, SDO50. Dr. R.P.Sharma, XEN51. Shri Deepak, AE

HVPNL 52. Shri Sunny, AEE

**Sterlite** 53. Shri Agam Kumar, Manager

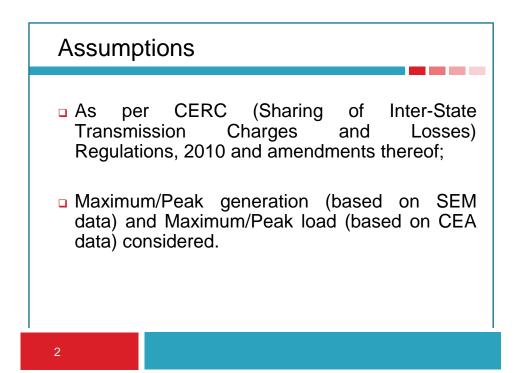
**BSPTCL** 54. Shri Gagan Kumar, Manager

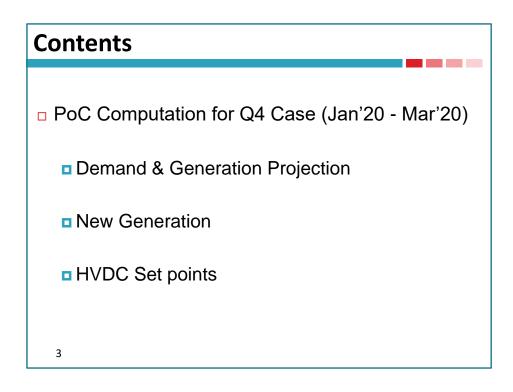
JUSNL 55. Shri Tushar Ranjan, Manager

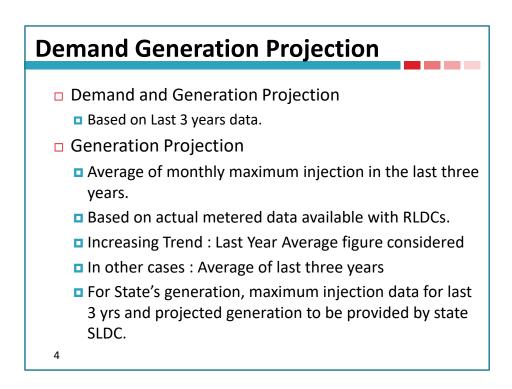
**KPTCL** 56. Shri B V. Malleshappa, 57. Shri Chetan D 58. Ms. Swathi S. AE(Elec.) 59. Ms. Meetha C, AE(Elec.) 60. Shri Krishanapp V, SEE

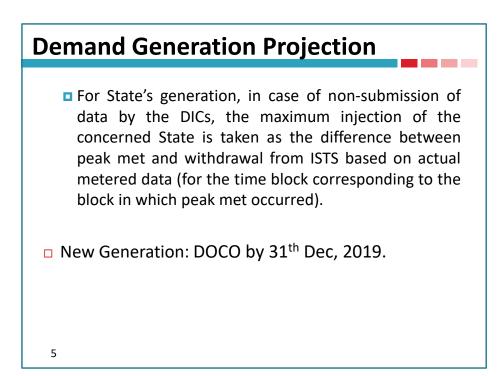
Annexure-II

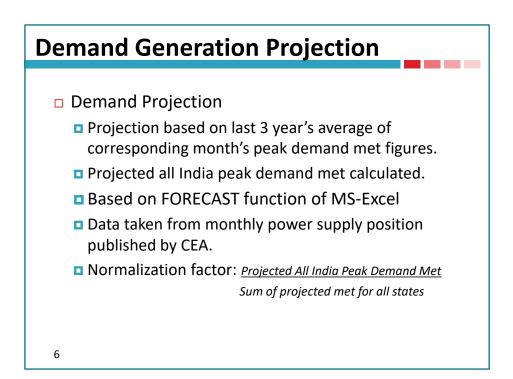




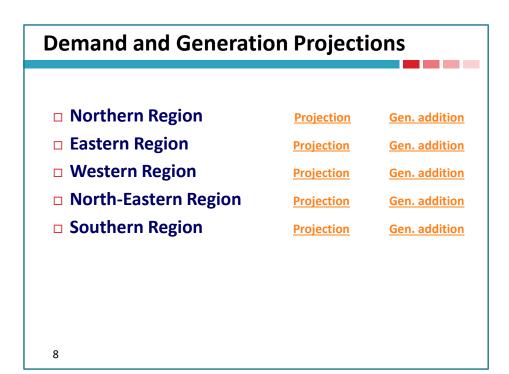






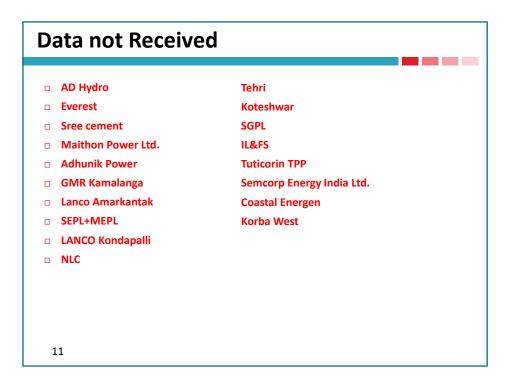


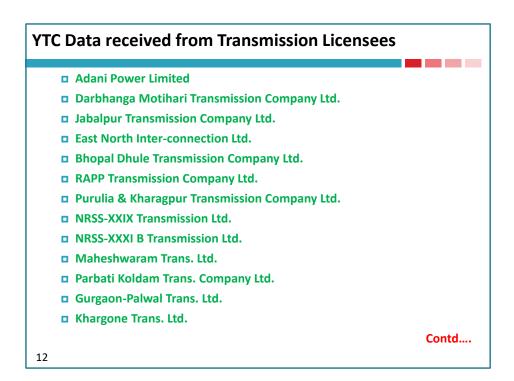
ad Generation Project	tion
New Units	Loading
Thermal Units with DOCO from 1 <sup>st</sup> Apr'19 to 31 <sup>th</sup> Dec'19	70%
Hydro Units with DOCO from 1 <sup>st</sup> Apr'19 to 31 <sup>th</sup> Dec'19	80%
Gas Units with DOCO from 1 <sup>st</sup> Apr'19 to 31 <sup>th</sup> Dec'19	30%
	New UnitsThermal Units with DOCO from 1st Apr'19 to 31th Dec'19Hydro Units with DOCO from 1st Apr'19 to 31th Dec'19Gas Units with DOCO from



HVDC Name	MW Value 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	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)
Alipurduar-Agra Pole-1 & Pole-2	0
Champa-Kurukshetra Pole-1 & Pole-2	2000
Champa-Kurukshetra Pole-3	1000

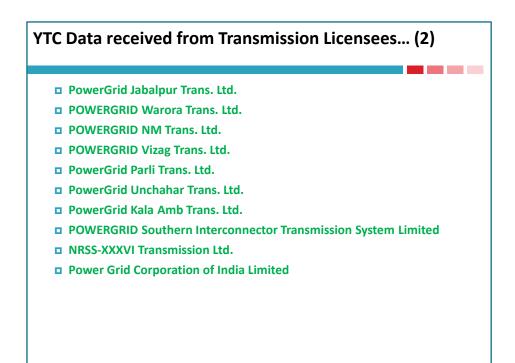
Data not Received	
Jharkhand	🗆 Jammu & Kashmir
🗆 Bihar	Chandigarh
West Bengal	Uttrakhand
Sikkim	Dadra Nagar Haveli
Telangana	Tripura
Karnataka	Meghalaya
Kerala	
Pondicherry	
10	

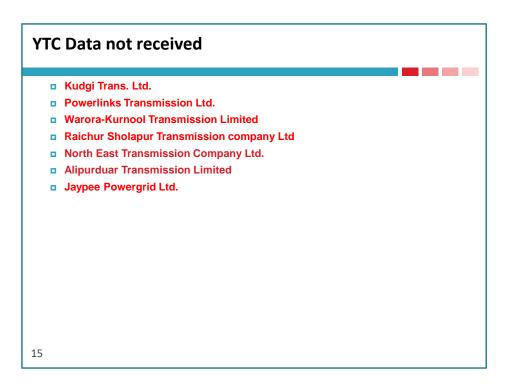


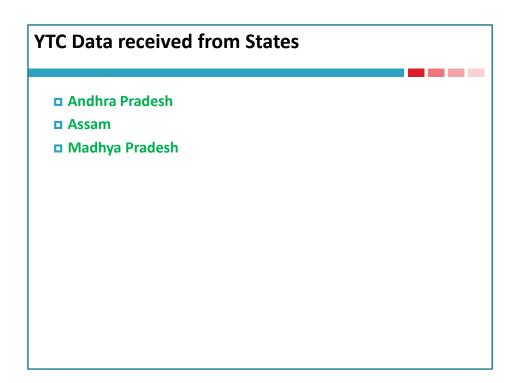


## YTC Data received from Transmission Licensees... (2)

- **D** Odisha Generation Phase-II Trans. Ltd.
- **D** Teestavalley Power Transmission Ltd.
- Jindal Power Ltd.
- **Essar Power Transmission Company Ltd.**
- Western Transco Power Limited
- Western Transmission Gujarat Limited
- Sipat Transmission Limited
- **Chhattisgarh WR Transmission Limited**
- Raipur-Rajnandgaon-Warora Transmission Limited
- Aravali Power Company Pvt. Ltd.
- Patran Trans. Co. Ltd.
- **D** Torrent Power Grid Ltd.







Name of the Transmission Asset	CoD as per TSA	As per CEA website	Anticipated Actual CoD
Gurgaon- Palwal Transmission	Limited		
GIS Substation at Kadarpur along with 1 No. of 125 MVAR Bus Reactor	May,201	9	Nov 2019
400/220 kV, 2 x 500 MVA GIS Substation at Sona Road	Sep,2019	9	Dec 2019
400kV Kadarpur- Sohna Road	Sep,2019	9	Nov 2019
LILO of Gurgaon- Manesar 400kV D/c Quad Line at Sohna Road S	/s Sep,2019	9	Dec 2019
400kV Prithala-Kadarpur	May,201	9	Nov 2019

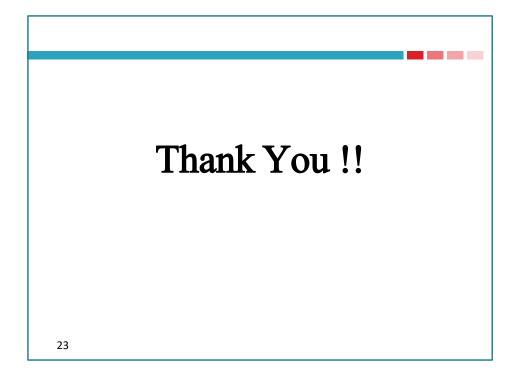
List of new assets (2)							
Name of the Transmission Asset	CoD as per TSA	As per CEA website	Anticipated/ Actual CoD				
Khargone Transmission Limited							
765kV Khandwa-Dhule	July,2019		Not claimed by Licensee				
765kV Line Dhule bays for Khandwa-Dhule	July,2019		for 2019-20 Q4 as well				
Khandwa Substation 2*1500 MVA 765/400 kV	July,2019		Nov 2019				
765kV Khandwa-Indore	July,2019		Nov 2019				
400kV Khargone TPP switchyard- Khandwa pool	July,2019		Nov 2019				
LILO of one ckt of 400kV Khandwa-Rajgarh D/c line Khargone TPI	P Feb,2018		March 2018				
18							

	List of new assets (3)								
	Name of the Transmission Asset								
	Odisha Generation Phase-II transmission Ltd								
≻	Both the lines 400kV OPGC-Jharsuguda D/c and 765kV Raipur-Jharsuguda commissioned.								
$\triangleright$	OPGC Stage-II U#3 was commissioned on 03 <sup>rd</sup> July 2019								
>	OPGC Stage –II U#4 was commissioned on 21 <sup>st</sup> Aug 2019								
۶	OPGC relinquished its LTA and wanted U#4 to be considered under state's jurisdiction								
۶	Petition filed with CERC								
≻	As per the minutes of validation Committee meeting held for 2019-20 Q3, it was decided that								
	status- quo will be maintained since matter is sub-judice.								
۶	Cost of 765kV Raipur-Jharsuguda D/c being considered in PoC								
۶	Cost of 400kV OPGC-Jharsuguda D/c being considered for bilateral billing								
>	Whether to consider 400kV OPGC-Jharsuguda D/c in PoC for 2019-20_Q4 computations								

	List of new assets (PowerGrid) (4)						
SI. No	Name of Transmission line	Act. CoD	CERC Order date				
1	Replacement of 315 MVA 400/220 kV ICT- II with 500 MVA 400/220 kV ICT at Pusauli sub-station	Jan'2020	22-Aug-16				
2	Circuit 1 of the 765 kV D/C Darlipalli TPS (NTPC)-Jharsuguda (Sundergarh) Pooling Station transmission line alongwith one 765 kV line Bays at Jharsuguda (Sundergarh) Pooling Station	07-Jun-2017	21-Nov-17				
3	400 kV D/C Meja-Allahabad transmission line along with associated bays at Allahabad	10-Feb-2017	7-Nov-19				
4	400 kV D/C (Quad) Lara STPS-I – Champa PS Line along with associated bays at Champa Pooling Station	21-Jul-2017	20-Jul-18				
5	400kV D/C (Quad) Nabinagar-II – Gaya transmission line with 02 nos. associated bays at Gaya Sub-station	12-May-2018	22-Apr-19				

	List of new assets (PowerGrid)	) (5)	
SI. No	Name of Transmission line	Act. CoD	CERC Order date
6	Comb assets: 1) LILO of both ckts. of Bamnauli-Samaypur 400kV TL at Tuglakabad along with ass. bays; 2) 400/220 kV, 2x500 MVA ICT-I and II at Tuglakabad GIS SS along with ass. bays; 3) 400 kV, 125 MVAR BR at GIS Tughlakabad SS along with ass. Bay	14-Oct-2018	31-Oct-19
7	400/220 kV, 500 MVA ICT-III at 400 /220 kV GIS at Tuglakabad Sub-stationa long with associated Bays	28-Nov-2018	31-Oct-19
8	400/220 kV, 500 MVA ICT-IV at 400 /220 kV GIS at Tuglakabad Sub-station along with associated Bays	20-Oct-2018	31-Oct-19
9	±200 MVAR STATCOM at 400 kV Gwalior sub-station	26-Dec-2018	1-Nov-19
10 1	400 kV, 125 MVAR Bus Reactor at Bina	16-Mar-2016	1-Nov-19

SI. No	Name of Transmission line	Act. CoD	CERC Order date
11	LILO of 400kV S/C Neelmangla-Hoody Transmission Line at new 400/220kV GIS Substation at Yelahanka with 1X63 MVAR 420kV Bus Reactor along with associated bays and equipment	13-Oct-2018	8-Nov-19
12	2X500MVA, 400/220kV ICT <sup>*</sup> s along with associated bays and 02 No. 220 KV bays at 400/220kV Yelahanka Substation	13-Oct-2018	8-Nov-19
13	400/220 kV, 3 X 105 MVA ICT alongwith associated bays at Hamirpur Sub-station,	31-Mar-2019	21-Nov-19
14	400 KV D/C Lara STPS-1 to Raigarh (Kotra) PS Transmission line Along associated bays at Raigarh (Kotra)	05-May-2016	25-May-16



				on – Nor		
Entity	Projected Demand (MW) by IA	Demand as given by DICs	Projected Generation (MW) by IA	Generation data as given by DICs	Projected ISTS drawal (MW) as per IA	ISTS drawal as per data submitt ed by DICs
Chandigarh	236				236	
Delhi	4,366	4375	682	774	3684	3601
Haryana	7,008	7000	2762	3125	4245	3875
Himachal Pradesh	1,766	1428	384	340	1382	1088
Jammu & Kashmir	2,590		330		2260	
Punjab	6,172	6,139	3939	4837	2233	1302
Rajasthan	13,609	13,100	9964	9,791	3645	3309
Uttar Pradesh	15,586	15567	9553	9233	6033	6333
Uttarakhand	2,229		735		1494	
Total	53562		28781			
Normalization Factor			0.9	)1		

G	<b>Generation Projection – Northern Region</b> <sup>25</sup>							
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'19 – 30th Sept'19 (B)	Generation CoD from 1st Oct'19 to 31 <sup>th</sup> Dec'19 (C )	TOTAL D=A+B+C	Comments From DICs /States (if any)	Figure as per Comments	
		(MW)	(MW)	(MW)	(MW)		(MW)	
1	BBMB	2165	-	-	2165	As per data given by BBMB		
2	Dadri Thermal	1410	-	-	1410		1200	
3	Rihand	2893	-	-	2893		2795	
4	Singrauli	1858	-	-	1858	As per data given	1858	
5	Unchahar	1182	-	-	1182	by NTPC	1421	
6	Auraiya	134	-	-	134		150	
7	Dadri CCPP	458	-	-	458		300	
8	NAPS	387	-	-	387			
9	Jhajjar	1447	-	-	1447	Data given by APCPL Jhajjar	1414	

G	Generatio	on Proj	ection -	- Northe	ern Re	gion(	<b>2)</b> 26
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'19 – 30th Sept'19 (B)	Generation CoD from 1st Oct'19 to 31 <sup>th</sup> Dec'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
10	Dhauliganga	263	-	-	263		280
11	Tanakpur	63	-	-	63	As per NHPC	45
12	Koteshwar	409	-	-	409		
13	Tehri	932	-	-	932		
14	Anta	248	-	-	248	As per data given by NTPC	150
15	RAAP B	370	-	-	370	-	
16	RAAP C	452	-	-	452	-	
17	AD Hydro	125	-	-	125	-	
18	Everest	86	-	-	86	-	
19	Karcham Wangtoo	958	-	-	958	-	

_					_	. (0)	27
Ge	eneratior	n Proje	ction – ľ	Northei	rn Re	gion(3)	<u>Back</u>
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'19 – 30th Sept'19 (B)	Generation CoD from 1st Oct'19 to 31 <sup>th</sup> Dec'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as pe Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
20	Bairasul	109	-	-	109		120
21	Chamera 1	557	-	-	557	As per NHPC	540
22	Chamera 2	306	-	-	306		100
23	Chamera 3	184	-	-	184		231
24	Naptha Jhakri	1594	-	-	1594	As per SJVN	
25	Lanco Budhil	56	-	-	56	-	
26	Dulhasti	389	-	-	389		320
27	Salal	533	-	-	533		512
28	Sewa-II	131	-	-	131	As per NHPC	130
29	URI I HPS	443	-	-	443		413
30	URI II HPS	217	-	-	217		213
31	Sree Cement	265	-	-	265	-	
32	Parbati III	145	-	-	145	As per NHPC	260
33	Rampur HEP	445	-	-	445	As per SJVN	
34	Koldam	864	-	-	864	As per data given by NTPC	792
35	Kishanganga	248	-	-	248	As per NHPC	220
36	Sainj HEP	74	-	-	74		
37	Tanda Stg-2			<u>432</u>	432		
38	Bhadhla Solar	-	-	-		As per last quarter	250

Demand	and Gen	eration	Projectio	on – East	ern Reg	ion <sup>28</sup>
Entity	Projected Demand (MW) by IA	Demand as given by DICs	Projected Generation (MW) by IA	Generation data as given by DICs	Projected ISTS drawal (MW) as per IA	ISTS drawal as per data submitt ed by DICs
Bihar	4,781		199		4582	
DVC	3,206		5315		-2110	
Jharkhand	1,305		346		959	
Odisha	4,595	4307	3782	3908	813	399
West Bengal	6,681		4973		1708	
Sikkim	110				110	
Total	20678					
Normalization Factor			0.9	91	_	

G	enerat	ion Pr	ojectio	on – Ea	aster	n Region	<b>(1)</b> <sup>29</sup>
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'19 – 30th Sept'19 (B)	Generation CoD from 1st Oct'19 to 31 <sup>th</sup> Dec'19 (C )	TOTAL D=A+B+ C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	Chujachan	95	-	-	95		
2	MPL	1002	-	-	1002	As per last quarter	990
3	Teesta V	536	-	-	536	As per NHPC	528
4	Kahalgaon	2238	-	-	2238		2171
5	Farakka	1972	-	-	1972	As per data given by NTPC	1960
6	Talcher	959	-	-	959	Restricted to the generation(Installed Capacity- NAC)	942
7	Rangeet	63	-	-	63	As per NHPC	60
8	Adhunik Power	356	-	-	356	-	
9	Barh	1274	-	-	1274	As per data given by NTPC	1238

G	Generation Projection – Eastern Region(2) <sup>30</sup>										
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'19 – 30th Sept'19 (B)	Generation CoD from 1st Oct'19 to 31 <sup>th</sup> Dec'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any)	Back Figure as per Comments				
		(MW)	(MW)	(MW)	(MW)		(MW)				
10	Kamalanga TPP (GMR)	603	-	-	603						
11	JITPL	724	-	-	724						
12	Jorthang	67	-	-	67						
13	Bhutan	278	-	570	848						
14	Teesta-III	1232	-	-	1232						
15	Dikchu HEP	92	-	-	92						
16	Nabinagar BRBCL	646		164	810						
17	Tashideng	99	-	-	99						
18	Kanti Bijlee Stg-2 (KBUNL)		-	-		As per last quarter	300				
19	Nabinagar STPS			432	432						
20	Darlipalli STPP ST-I			524	524						

Demand	and Gene	eration I	Projectio	n – Wes	tern Reg	gion <sup>31</sup>
Entity	Projected Demand (MW) by IA	Demand as given by DICs	Projected Generation (MW) by IA	Generati on data as given by DICs	Projected ISTS drawal (MW) as per IA	ISTS drawal as per data submitte d by DICs
Chattisgarh	4,260	4,247	2200	3457	2060	789
Gujarat	16,319	15675	9986	11424	6333	4251
Madhya Pradesh	14,197	13,900	6705	6705	7693	7195
Maharashtra	21,271	21,800	15481	14651	5790	7149
Daman & Diu	357	325			357	325
Dadra Nagar Haveli	839				839	
Goa	601	610			601	610
ESIL	711	700			711	700
Total	58555					
Normalization Factor			<b>0.9</b> 1	İ		

Ge	neratio	n Proje	ection	– Weste	rn Re	gion(1	.) 32
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'19 – 30th Sept'19 (B)	Generation CoD from 1st Oct'19 to 31 <sup>th</sup> Dec'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comment s
		(MW)	(MW)	(MW)	(MW)		(MW)
1	Vindhyachal	4611	-	-	4611	As per NTPC	4415
2	Ratnagiri Dabhol	627	-	-	627	As per data given by RGPPL	660
3	TAPS (1,2,3,4)	1214	-	-	1214		
4	JINDAL	471	-	-	471	As per data given by JPL	440
5	LANCO	578	-	-	578		
6	NSPCL Bhilai	457	-	-	457	As per data given by NSPCL	457
7	Korba	2481	-	-	2481	As per NTPC	2421
8	SIPAT	2858	-	-	2858	As per NTPC	2794
9	CGPL	3855	-	-	3855	As per data given by CGPL	3800
10	Mauda	2217	-	-	2217	As per NTPC	2050
11	Gandhar	438	-	-	438	As per NTPC	350

G	eneratio	n Proje	ction –	Weste	rn Re	gion (2	<b>2)</b> <sup>33</sup>
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'19 – 30th Sept'19 (B)	Generation CoD from 1st Oct'19 to 31 <sup>th</sup> Dec'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
12	Kawas	503	-	-	503	As per NTPC	250
13	SSP	240	-	-	240		
14	KAPS	207	-	-	207		
15	Essar Mahan	698	-	-	698	As per data given by Essar Mahan	1123
16	BALCO	510	-	-	510	As per data given by BALCO	400
17	KSK Mahanadi	1029	-	-	1029	As per data given by KSK Mahanadi	
18	Sasan UMPP	3859	-	-	3859	As per data given by Sasan	3778
19	JPL Stg-2	1144	-	-	1144	As per data given by JPL	1100
20	DGEN	69	-	-	69		
21	DB Power	1161			1161	As per DB Power	950
22	Korba West	0			0	As per Korba West	0
23	Dhariwal	280			280	As per data given by Dhariwal	273
24	GMR Chattishgarh	520			520	As per data given by GMR Chhattisgarh	1000
25	JP Nigrie	1154			1154	As per data given by JP Nigrie	1241
26	GMR Warora	576			576	As per data given by GMR Warora	523

G	eneration	Projec	tion – \	Nester	n Regi	ion (3)	34
		-					<u>Back</u>
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'19 – 30th Sept'19 (B)	Generation CoD from 1st Oct'19 to 31 <sup>th</sup> Dec'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
27	ACBIL+ Spectrum+MCCPL	626			626	As per data given by ACBIL	664
28	MB Power	946			946	As per MB Power	900
29	RKM Power	690			690	As per RKM Power	767
30	Jhabua Power	365			365	As per Jhabua Power	565
31	TRN Energy	352			352	As per data given by TRN Energy	549
32	Sholapur STPP	902			902		970
33	Lara STPP			528	528	As per NTPC	560
34	SKS Power	396			396	As per data given by SKS power	534
35	Gadarwada		528		528	As per NTPC	560
36	Khargone STPS			432	432		
37	Naranpar_Ostro						125
38	Rewa_Solar (Acme+Arinsun+Badw ar_Mahinder)						368

Generation Projection – Western Region (4)										
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'19 – 30th Sept'19 (B)	Generation CoD from 1st Oct'19 to 31 <sup>th</sup> Dec'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments			
		(MW)	(MW)	(MW)	(MW)		(MW)			
39	Vadwa_Green Infra(wind)						90			
40	Roha Green Infra (Wind)						91			
41	Ratadiya AGEMPL						25			
42	Dayapar Inox wind						75			
43	Bhuvad_Renew wind						60			
	•									

Demand	l and Gene	eration	Projectio	n — Nortl	n Eastern	36 Region
Entity	Projected Demand (MW) by IA	Demand as given by DICs	Projected Generation (MW) by IA	Generation data as given by DICs	Projected ISTS drawal (MW) as per IA	ISTS drawal as per data submitt ed by DICs
Arunachal Pradesh	135	156	-	6.4	135	149.6
Assam	1,501	1550	334	252	1167	1298
Manipur	225	235	-		225	235
Meghalaya	381	384	147	243	234	141
Mizoram	113	99	66 (Including generation from Tuirial HEP)	68	47	31
Nagaland	129	140	14	12	115	128
Tripura	391 (including Bangladesh Drawal)	378 (Including Bangladesh Drawal)	126	178	265	200
Total	2875					
Normalization Factor			0.91			

G	eneration	Proje	ction –	North-	East	ern Regi	on <sup>37</sup>
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'19 – 30th Sept'19 (B)	Generation CoD from 1st Oct'19 to 31 <sup>th</sup> Dec'19 (C )	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	AGTPP, NEEPCO	105	-	-	105	_	135
2	Doyang, NEEPCO	49	-	-	49		62
3	Kopili , NEEPCO	181	-	-	181		0
4	Kopili 2, NEEPCO	22	-	-	22	As decided in 162nd OCC meeting	25
5	Khandong, NEEPCO	36	-	-	36	· · · · · · · · · · · · · · · · ·	44
6	Ranganadi, NEEPCO	344	-	-	344		401
7	AGBPP_Kathalguri	232	-	-	232		230
8	Loktak, NHPC	105	-	-	105		105

G	Generation Projection – North-Eastern Region <sup>38</sup>										
S. No.	Entity 1st Apr/19 – 30th D=A+B+ DICs /States										
		(MW)	(MW)	(MW)	(MW)		(MW)				
9	Palatana GBPP	653			653	As decided in 162nd OCC	680				
10	Bongaigaon_NTPC	463	165		628	meeting	615				
11	Pare NEEPCO	96			96		110				

Demand	Demand and Generation Projection – Southern Region											
Entity	Projected Demand (MW) by IA	Demand as given by DICs	Projected Generation (MW) by IA	Generation data as given by DICs	Projected ISTS drawal (MW) as per IA	ISTS drawal as per data submitt ed by DICs						
Andhra Pradesh	9,669	9400	6151	9035	3518	365						
Telangana	10,753		6427		4327							
Karnataka	13,137		9178		3959							
Kerala	4,000		1453		2546							
Tamil Nadu	15,319	15000	7501	7805	7818	7195						
Pondicherry	436				436							
Goa_SR	80				80							
Total	53394											
Normalization Factor			0.91									

G	<b>Generation Projection – Southern Region(1)</b> <sup>40</sup>										
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'19 – 30th Sept'19 (B)	Generation CoD from 1st Oct'19 to 31 <sup>th</sup> Dec'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments				
		(MW)	(MW)	(MW)	(MW)		(MW)				
1	Ramagundam	2445	-	-	2445		2421				
2	Simhadri 2	971	-	-	971	As per NTPC	943				
3	Simhadri 1	961	-	-	961		943				
4	SEPL	0	-	-	0						
5	Lanco Kondapalli	0	-	-	0						
6	Kaiga	799	-	-	799						
7	NEYVELI ( EXT) TPS	396	-	-	396						
8	NEYVELI TPS-II	1316	-	-	1316						
9	NEYVELI TPS-II EXP	369	-	-	369						

Gei	neration P	roiectio	n – Soi	uthern	Regi	on(2)	41
		iojectio				(=)	Back
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'19 – 30th Sept'19 (B)	Generation CoD from 1st Oct'19 to 31 <sup>th</sup> Dec'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
10	MAPS	272			272		
11	Vallur	1303			1303		
12	Meenakhshi	0			0		
13	Coastal Energen	738			738		
14	Kudankulam	1191			1191		
15	Tuticorin TPP	834			834		
16	Sembcorp Energy India Ltd.	1219			1219		
17	IL&FS	1002			1002		
18	Talcher Stage-II	1935			1935	As per last quarter	1875
19	Sembcorp Gayatri Power Ltd.	1271			1271		
20	Kudgi STPS	2291			2291	As per NTPC	2050
21	Neyveli New Thermal Power		330	330	660		
22	Green Infra_SR						125
23	Mytrah					As per last quarter	125
24	Orange						100

			red Comm – 30th Se	ercial from ept'19		Generation declared/expected to be declared Commercial from 1st Oct'19 to 31 <sup>th</sup> Dec'19						
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		
Uttar Pradesh	Meja	1	660	432	432							
	Chhabra SCTPP	6	660	432								
Rajasthan	Suratgarh SCTPP	7	660	432	864 -							
Tanda Stg-2						Tanda Stg-2	1	660	432	432		

Expecte	d Gene	rati	on ac	ditior	1 – V	Vestei	n R	egion	4	3				
									Ba	<u>ck</u>				
			clared Com 19 – 30th	nmercial from Sept'19	m	Generation declared/expected to be declared Commercial from 1st Oct'19 to 31 <sup>th</sup> Dec'19								
Entity	Bus Name	Unit No.	Installed Capacity	Gen. considered	Total	Bus Name	Unit No.	Installed Capacity	Gen. considered	Tota				
			(MW)	(MW)	(MW)			(MW)	(MW)	(MW				
Gujarat	Wanakbori TPS Extn.	8	800	524	524									
RKM Power	RKM Power	2	360	232	232									
Sholapur STPP	Sholapur STPP	2	660	432	432									
Lara STPP	Lara STPP	1	800	528	528									
SKS Power	SKS Power	1	300	198	396									
SIGTOWER	SKS Power	2	300	198	590									
Gadarwada	Gadarwada	1	800	528	528									
Khargone STPS						Khargone STPS	1	660	432	432				

Expecte	ed Generation addition – Eastern Region									44 <u>Back</u>			
			lared Com 9 – 30th										
Entity	Bus Name	e Unit Installed Gen. No. Capacity considered		Total	Bus Name	Unit No.	Installed Capacity	Gen. considered	Total				
			(MW)	(MW)	(MW)			(MW)	(MW)	(MW			
Odisha	OPGC Stage-II	4	660	432	432								
						Mangdechu HEP	1	180	143				
Mangdechu HEP						Mangdechu HEP	2	180	143	570			
NEF						Mangdechu HEP	3	180	143	370			
						Mangdechu HEP	4	180	143				
Nabinagar BRBCL	Nabinagar BRBCL					Nabinagar BRBCL	4	250	164	164			
Nabinagar STPS						Nabinagar STPS	1	660	432	432			
Darlipalli STPP ST-I						Darlipalli STPP ST-I	1	800	524	524			

	lon	addi	tion – S	Sout	hern R	egi	on	45 <u>Bac</u>	
Name	Unit No.	Installed Capacity	Gen. considered	Total	Bus Name	Unit No.	Installed Capacity	Gen. considered	Tota
		(MW)	(MW)	(MW)			(MW)	(MW)	(MV
eli New ermal ower	1	500	330	330	Neyveli New Thermal Power	2	500	330	330
•	1 Name eli New ermal	Ist Apr   Name Unit No.   Init No.   Init Init   Init Init   Init Init   Init Init   Init Init	Unit Installed   Name Unit Installed   Question (MW)   eli New 1 500	Ist Apr'19 – 30th Sept'19   Name Unit No. Installed Capacity Gen. considered   Image: September 2 and	Ist Apr'19 – 30th Sept'19   Name Unit No. Installed Capacity Gen. considered Total   Image: New Image: The Source of Sourc	Ist Apr'19 – 30th Sept'19 Commercial   Name Unit Installed Gen. capacity Total Bus Name   Image: September of the september	Ist Apr'19 – 30th Sept'19 Commercial from   Name Unit No. Installed Capacity Gen. considered Total Bus Name Unit No.   Image:	Ist Apr'19 – 30th Sept'19 Commercial from 1st Oct'   Name Unit Installed Gen. considered Total Bus Name Unit Installed capacity   Vame (MW) (MW) (MW) (MW) (MW) (MW)   In New rmal 1 500 330 330 Neyveli New Thermal 2 500	Ist Apr'19 – 30th Sept'19 Commercial from 1st Oct'19 to 31 <sup>th</sup> D   Name Unit No. Installed Capacity Gen. considered Total Bus Name Unit No. Installed Capacity Gen. considered   1 (MW) (MW) (MW) V V (MW) (MW)   1 500 330 330 Neyveli New Thermal 2 500 330

Entity			clared Co 19 – 30th	mmercial fro Sept'19	m	Generation declared/expected to be declar Commercial from 1st Oct'19 to 31 <sup>th</sup> Dec'1					
	Bus Name	Unit No.	Installed Capacity	Gen. considered	Total	Bus Name	Unit No.	Installed Capacity	Gen. consider ed	Tota	
			(MW)	(MW)	(MW)			(MW)	(MW)	(MM	
Arunachal Pradesh	Dikshi HEP	1	8	6.4	6.4						
Bongaigaon_NTPC	Bongaigaon_ NTPC	3	250	165	165						