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: 12/03/2019

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, 2019 to 30th June, 2019 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 2019-20 (Application Period from 1st April, 2019 to 31st June, 2019)** for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) **Regulations, 2010** held on 21.02.2019 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

Sl. No.	Name of the Organizations	Name of the nominated persons	Address
1.	CERC	Shri S.C Shrivastava, Chief (Engg	Central Electricity Regulatory Commission, 3rd & 4th Floor, Chanderlok Building, 36-Janpath, New Delhi - 110001
2.		Shri P.K. Awasthi, Joint Chief (Fin.)	Central Electricity Regulatory Commission 3rd& 4th Floor, Chanderlok Building, 36-Janpath, New Delhi -110001
3.	CEA	Chief Engineer, (PSP & PA-II) Division	Central Electricity Authority 3rd Floor, N-Wing, Sewa Bhawan, R.K. Puram, New Delhi - 110 066
4.		Director, GM Division	Central Electricity Authority 6th 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.	POSOCO	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.		Shri V.K.Shrivastava Executive Director, WRLDC	Western Regional Load Despatch Center F3, MIDC Area, Marol, Andheri East, Mumbai- 400093
10.		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 Chief General Manager, NLDC	National Load Despatch Centre B-9, Qutab Institutional Area, KatwariaSarai, New Delhi-110016
12.		Shri V.Suresh Chief General Manager, NERLDC	North Eastern Regional Load Despatch Centre, Lower Nongrah, Dongtieh, Lapalang, Shillong – 793006
13.	NRPC	Shri M.A.K.P. Singh Member Secretary	Northern Regional Power Committee 18-A Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-11
14.	WRPC	Shri A. Balan,	Western Regional Power Committee

Sl. No.	Name of the Organizations	Name of the nominated persons	Address
		Member Secretary	Plot No. F-3, MIDC Area, Marol, Opp : SEEPZ, Andheri (East), Mumbai-400093
15.	SRPC	Shri S.R. Bhat, 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 1st Floor, VidyutBhawan, Bailey Road, Patna-21, Bihar
18.	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
19.		Shri Jatin Baishya, Dy. General Manager	State Load Despatch Centre Complex,Kahelipara,Guwahati
20.	SLDC	Shri P.A.R. Bende, Chief Engineer, 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

LIST OF GENERATING COMPANIES

Sl. 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 N S Parameshwaran, Executive Director, (O&M)	NHPC office Complex, Sector-33, Faridabad – 121003 (Haryana)
3.	NEEPCO	Ms. Debjani Dey GM (Commercial)	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, 2019 to 31st June, 2019 held on 21st February, 2019 at NRLDC, New Delhi.

1. The Chairman of the Validation Committee, Shri S.C Shrivastava, Chief (Engg.), CERC welcomed the participants present in NRLDC Conference Room and also the other participants of RPCs, RLDCs, STUs and Generating Companies present at Conference Room of WRLDC, SRLDC, ERLDC, NERLDC, SLDCs of Gujarat, Madhya Pradesh, Chhattisgarh, 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 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 First Quarter of 2019-20. The presentation shown during the Validation Committee Meeting dated 21.02.2019 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 will be able to generate at 100% load for the peak hours during April to June due to high hydro season. 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.

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4. Demand Projection for Application Period from 1st April, 2019 to 30th June, 2019 (Q1 of 2019-20).

4.1 Northern Region:

(i) Projected demand by IA for Rajasthan was 11,640 MW. Prior to the Meeting, Rajasthan submitted its demand as 11,770 MW. During the meeting, it was decided

to consider its demand projection as 11,640 MW keeping in view its historical ISTS drawl.

The Demand figures as suggested above were agreed.

4.2 Eastern Region:

(i) Projected demand by IA for DVC was 2783 MW. DVC had submitted its projected demand as 2960 MW. During the meeting, DVC representative suggested its demand projection as 2890 MW.

(ii) Projected demand by IA for Jharkhand was 1207 MW. During the meeting, Jharkhand representative suggested its demand projection as 1280 MW.

(iii) Projected demand by IA for Odisha was 4785 MW. Odisha had submitted its projected demand as 4540 MW. During the meeting, it was decided to take demand projection as 4785 MW keeping in view historical ISTS drawl.

(iv) Projected demand by IA for Sikkim was 75 MW. During the meeting, ERLDC representative suggested its demand projection as 90 MW.

The Demand figures as suggested above were agreed.

4.3 Western Region:

(i) Projected demand by IA for ESIL was 625 MW. During the meeting, representative of WRLDC suggested to consider its demand projection as 650 MW.

(ii) Projected demand for Maharashtra by IA was 24370 MW. Subsequently, Maharashtra has submitted its demand as 23,300 MW. It was decided to consider 23,300 MW as Maharashtra demand.

The Demand figures as suggested above were agreed. The other demand figures as submitted by DICs and as approved in OCC were agreed.

4.4 Southern Region:

(i) Representative of SLDC Telangana suggested that demand projection of Telangana may be taken as 9957 MW instead of 9227 MW projected by IA.

(ii) Representative of Karnataka suggested that demand projection of Karnataka may be taken as 9800 MW instead of 10190 MW.

(iii) SRLDC representative suggested that demand projection of Tamil Nadu may be taken as 15200 MW instead of 14937 MW.

The Demand figures as suggested above were agreed.

4.5 North Eastern Region: Demand projections for NER constituents as agreed at OCC and submitted by them were agreed.

The Demand figures as suggested above were agreed.

5. Generation Projection for Application Period from 1st April, 2019 to 31st June, 2019 (Q1 of 2019-20).

5.1 Northern Region:

(i) Projected generation by IA for Rajasthan was 7,689 MW. Prior to the meeting, Rajasthan submitted its generation as 9,711 MW. During the meeting, it was decided to consider its generation projection as 7,689 MW keeping in view its historical ISTS drawl.

(ii) Projected generation by IA for AD Hydro was 224 MW. Representative of NRLDC submitted generation projection of AD Hydro as 210 MW instead of 224 MW.

(iii) Projected generation by IA for Karcham Wangtoo was 1134 MW. Representative of NRPC submitted generation projection of Karcham Wangtoo as 1088 MW instead of 1134 MW.

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

5.2 Eastern Region:

(i) Projected generation by IA for Bihar was 365 MW. Subsequently, Bihar has submitted its generation as 190 MW.

(ii) Projected generation by IA for DVC was 4876 MW. Prior to the meeting, DVC submitted generation as 4188 MW. During the meeting, DVC suggested that generation from DVC may be taken as 5000 MW.

(iii) Projected generation by IA for Jharkhand was 316 MW. During the meeting, representative of Jharkhand suggested that generation may be taken as 341 MW.

(iv) Projected generation by IA for Odisha was 3532 MW. Prior to meeting Representative of Odisha submitted generation as 3657 MW. During the meeting, it was decided to consider generation from Odisha as 3532 MW based on its historical ISTS drawl.

(v) Projected generation by IA for West Bengal was 5467 MW. During the meeting, it was decided to consider generation from West Bengal as 5467 MW.

(vi) Member present at ERLDC suggested following changes:

(a) Generation from MPL may be taken as 980 MW instead of 1012 MW.

(b) Generation from JITPL may be taken as 550 MW instead of 832 MW due coal shortage.

(c) Generation from Teesta-III may be taken as 1200 MW instead of 832 MW.

(d) Generation from Nabinagar BRBCL may be taken as 470 MW instead of 434 MW.

The Generation figures as suggested above were agreed.

5.3 Western Region:

(i) Generation for Gujarat has been approved in OCC as 11863 MW. Representative of Gujarat clarified the gap between projected generation by IA and that by Gujarat is due to fact that Sugen and Adani which were down during previous periods are expected to generate in next quarter.

(ii) Projected generation by IA for Madhya Pradesh was 5,441 MW. During the meeting, representative of Madhya Pradesh suggested that generation projection of Madhya Pradesh may be taken as 5,141 MW, keeping in view of addition of Singhaji generation of 660X2 MW.

(iii) Projected Generation for Maharashtra by IA was 15705 MW. Subsequently, Maharashtra has submitted its demand as 16400 MW.

(iv) Projected generation by IA for TAPS was 1050 MW. During the meeting, Representative of WRLDC suggested that generation projection of TAPS may be taken as 1200 MW.

(v) Member present at WRLDC suggested following changes:

(a) Generation from Mauda may be taken as 1500 MW instead of 2050 MW.

(b) Generation from Gandhar may be taken as 360 MW instead of 350 MW.

(c) Generation from Kawas may be taken as 300 MW instead of 250 MW.

(d) Generation from SSP may be taken as 100 MW instead of 390 MW.

(e) Generation from KAPS may be taken as 200 MW instead of 0 MW as one Unit has come which was out of service.

(f) Generation from Essar Mahan may be taken as 450 MW instead of 968 MW.

(g) Generation from DB Power may be taken as 1020 MW as per data provided by DB power.

(h) Generation from Korba West may be taken as 0 MW Instead of 192 MW as it is out of service.

(i) Generation from Jhabua Power may be taken as 566 MW per data provided by Jhabua Power

(j) Generation from Sholapur STPP may be taken as 450 MW Instead of 970 MW as only one unit is running.

(k) Representative of NTPC stated that units of Lara & Gadarwara are expected by 31.03.19. Hence the generation as submitted by DIC was agreed.

The Generation figures as suggested above were agreed.

5.4 Southern Region:

(i) Projected generation by IA for Andhra Pradesh was 5916 MW. Prior to the meeting, Andhra Pradesh submitted its generation as 7100 MW. During the meeting, representative of Andhra Pradesh suggested to consider generation projection as 6500 MW. Representative of A.P. said that it has considered 600 MW of Rayalsema & 620 MW of Solar and the fact that its peak demand is occurring in afternoon when solar generation is there.

(ii) Projected generation by IA for Telangana was 4427 MW. During the meeting, representative of Telangana suggested to consider generation projection as 4582 MW.

(iii) Projected generation by IA for Karnataka was 6272 MW. During the meeting, representative of Karnataka suggested to consider generation projection as 7300 MW considering better water availability this time.

(iv) Projected generation by IA for Tamilnadu was 10123 MW. During the meeting, representative of SRPC suggested to consider generation projection as 10120 MW.

(v) Member present at SRLDC suggested following changes:

(a) Generation from SEPL may be taken as zero instead of 192 MW.

(b) Generation from Lanco Kondanpalli may be taken as zero (not running since May 2018) instead of 152 MW.

(c) Generation from Kaiga may be taken as 786 MW instead of 820 MW.

(d) Generation from Neyveli (Ext) TPS may be taken as 384 MW instead of 558 MW.

(e) Generation from Neyveli TPS-II may be taken as 1300 MW instead of 730 MW.

(f) Generation from Neyveli TPS-III may be taken as 450 MW instead of 721 MW.

(g) Generation from MAPS may be taken as 195 MW instead of 273 MW.

(h) Generation from Meenakhshi may be taken as 0 MW instead of 218 MW.

(i) Generation from Coastal Energen may be taken as 900 MW instead of 394 MW.

(j) Generation from kundankulam may be taken as 1800 MW instead of 1036 MW.

(k) Generation from Talcher Stage-II may be taken as 1885 MW instead of 1920 MW.

(l) Generation from NNTP of NLC may be taken as 320 MW keeping in view it will be Commissioned by March’19.

The Generation figures as suggested above were agreed.

5.5 North Eastern Region: Generation projections for NER constituents as agreed at OCC and submitted by them were agreed.

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 considere. as recorded in V.C. presentation.

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 2019 – June 2019 period were projected by Implementing Agency based on operational experience and was put up for validation before the Committee.

(ii) Representative of Harayana stated that HVDC set points for Champa Kurukshetra should be taken as 400 MW each pole & for Mundra-Mahindergarh as 750 MW. Representative of NLDC clarified that projected set point for Champa Kurukshetra as 2500 MW and Mundra-Mahindergarh as 750 MW each pole are taken keeping in view peak demand scenario in upcoming scenario.

(iii) After discussion, following HVDC set points are finalized.

HVDC Name	Set points (in MW) to be considered in Base case
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)
Alipurduar-Agra Pole-1 & Pole-2	500
Champa-Kurukshetra Pole-1 & Pole-2	2500

7. Other Issues:

(i) Representative of PowerGrid Corporation Limited showed a list of assets anticipated to be commissioned by March 2019. Representative of PowerGrid informed that provisional tariff for most of the elements are yet to be issued by CERC. It was decided to consider the elements for the Q1 PoC calculations subjected to Availability of Tariff Order by CERC by 15.03.2019.

Name of the Transmission line	Anticipated CoD
Rajarhat-Gokarna system, Durgapur ICT & Malda ICT repl.	Mar'19
400kv d/c Kota-Jaipur	Mar'19
ICT repl. at Kopili,Patna, Indore Bay Extn.	Mar'19
2nd ICT Bongaigaon, Hamirpur ICT (400kV, 315MVA)	Mar'19
Misa ICT & ICT sitarganj	Mar'19
220 kV D/C Kishanganga-Wagoora TL	Mar'19
400kV D/C Dharampuri-Somanhalli TL	Q1 of 2019-20
STATCOM Kishanganj & Nalagarh, Sundargarh BR and Bhinmal Bay extn	Q1 of 2019-20
Thiruvalam GIS Bay Extn. & BR	Q1 of 2019-20
STATCOM Udumalpet & Trichy	Q1 of 2019-20
STATCOM Hyderabad.	Q1 of 2019-20
800kV Champa-Kurukshetra HVDC Pole-III	Q1 of 2019-20
Extn. Pavagada, Madhugiri & Mysore	Q1 of 2019-20
Pune SLR & GIS Bay Extn. & Raipur Extn.	Q1 of 2019-20
ICTs Sundergarh & GIS bay extn.	Q1 of 2019-20
STATCOM Lucknow	Q1 of 2019-20
400kV Singrauli-Allahabad S/C TL	Q1 of 2019-20
SLR & GIS bay Extn. at Kishanganj and ICT Gaya	Q1 of 2019-20
Replacement of 315 MVA 400/220 kV ICT- II with 500 MVA 400/220 kV ICT at Patna sub-station	Feb'19
Replacement of 315 MVA 400/220 kV ICT- II with 500 MVA 400/220 kV ICT at Pusauli sub-station	Apr'19
Provision of Circuit Breakers for making line reactors at Biharshariff Sub-station switchable	Feb'19
400kV D/C Mundra-Bhuj TL, 765kV D/C Bhuj-Banaskantha, 400kV D/C Banaskantha-Sankhari TL, 765kV D/C Banaskantha-Chittorgarh TL	Mar'19

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

Name of the Transmission line	ISTS Licensee	CoD as per TSA	Anticipated / Actual CoD	Remarks
765 kV Bilaspur Pooling Station -Rajnandgaon D/C Line	Sipat Transmission limited	March, 2019	Feb, 2019	To be considered in PoC
240 MVAR switchable line reactors with bays at Warora (Pool) end in each ckt of 765 kV Warora(Pool)-Rajnandgaon D/C line	Warora-Kurnool Transmission Limited	Nov'18	Deemed CoD On 8th Dec,2018	Not to be considered in PoC keeping in view deemed COD
765 kV Raipur (Pool) - Rajnandgaon D/C Line	Raipur-Rajnandgaon Warora Transmission Limited	Nov'18	March'19	Implementing agency has informed the Committee that these elements are being considered since last two quarters anticipating their commissioning in each forthcoming quarters. However, till date, the elements have not been commissioned. The licensee informed during the meeting that the elements would be commissioned by March'2019. It was decided to consider the elements for the Q1 PoC Calculations
765 kV Rajnandgaon-New Pooling Station near Warora D/C Line		Nov'18	March'19	
400kV D/C Kadapa-	Power Grid Corporation	Feb'19	Feb'19	To be considered in PoC

Name of the Transmission line	ISTS Licensee	CoD as per TSA	Anticipated / Actual CoD	Remarks
Madhugiri (TBCB) TL	of India Limited			
765kV D/C Chilakaluripeta-Cuddapah TL (TBCB)		April'19	April'19	POWERGRID informed the status of commissioning of various elements of POWERGRID Southern Interconnector Transmission system limited (PSITSL) under TBCB as per the following :- (a) 400 kV Cuddapah – Madhugiri D/C transmission line – in Feb2019 (b) 765kV Cuddapah – Chilakaluripeta D/C line, 400kV Chilakaluripeta – Narasaraopeta D/C and corresponding bays at Chilakaluripeta 765/400kV Substation line - in Mar'19 which facilitates power flow through Cuddapah (existing) - Chilakaluripeta-Narasaraopeta (existing) network. (c) 765 kV Vemagiri – Chilakaluripeta D/C line – Expected in April/May 2019 subject to clearance of ROW. As the COD of 400kV Chilakaluripeta-Narasaraopet D/C line is incident upon Chilakaluripeta SS which is expected to be completed in Mar'19 and power flow would also happen as mentioned
400kV D/C Chilakaluripeta-Narasraopeta TL		April'19	April'19	

Name of the Transmission line	ISTS Licensee	CoD as per TSA	Anticipated / Actual CoD	Remarks
				above, POWERGRID requested for inclusion of YTC of 400kV Chilakaluripeta- Narasaraopet D/C line in the POC Computations for Q1Qtr (Apr'19-Jun'19). In view of the above, it is decided to consider the 400kV Chilakaluripeta – Narasaraopeta D/C line in POC for Q1 Qtr.

(iii) 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.

(iv) CGM NLDC requested CTU to include the details of eligible RE generators for waiver of Inter State Transmission System (ISTS) charges and the RE generators not eligible for waiver of ISTS charges in two separate columns along with their LTA quantum while furnishing the LTA/ MToA data. It was agreed that CTU will provide this data to NLDC within a week of issue of minutes for inclusion in assumption file for this quarter.

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.

Annexure-I

List of Participants in the 1st meeting for 2019-20 of the Validation Committee held on 21st February, 2019 at New Delhi.

CERC

1. Shri S.C.Shrivastava, Chief (Engg.) – In Chair
2. Shri P.K Awasthi, Joint Chief (Finance)
3. Ms Shilpa Agarwal, Joint. Chief (Engg.)
4. Ms Sonika Hayaran, Research Officer

POWERGRID

5. Shri V Sriniwas, Sr. GM
6. Shri Vamsi, Sr. GM
7. Rajesh Verma, Sr. DGM
8. Shri. Israt Ali, Chief Manager
9. Ajay Dahiya, Manager

NLDC

10. Shri Debasis De, Chief GM
11. Shri G. Chakraborty, Sr. GM
12. Shri Gaurav Verma, Manager
13. Shri Ravi Shankar, Manager
14. Shri Sanny Machal, Dy. Manager

WRPC

15. Shri D.N Gawali, EE

WRLDC

16. Ms. Pushpa. GM
17. Ms Chitrankshi, Chief Manager
18. Shri Pradeep Sawodiya, Dy Manager

ERPC

19. S.K.Pradhan, AD (Comml.)
20. Mohan Jha, Consultant, ERPC

ERLDC

21. Saurav Kr Sahay, Manager
22. Ashok Kumar Basak, Dy. Manager
23. R.P.Kundu, Dy. Manager

SRPC

24. Shri T Venakteswarlu, SE
25. Shri J B Len, EE
26. Ms. Anusha Das J, AEE
27. Shri Betsy Sebastian, AE

SRLDC

28. Shri A Varghese,GM
29. Shri Madhukar Goodelli, Chief Manager
30. Shri Pradeep Reddy, Manager

Telangana SLDC
31. Suresh babu, SE
32. Madhavi, DE
33. Rajashekar,AE

KPTCL SLDC
34. Malleshappa, EE
35. Mohan G, AE

AP SLDC
36. Murali Krishna,DEE
37. Sujatha,EE

KSEB SLDC
38. KP Pradeep,DCE
39. Beno Paul,EE
40. Getrude,AEE

NRLDC
41. Shri S. S. Barpanda, ED
42. Samar Chandra De, GM
43. Shri Riza Naqvi, Dy. Manager

GRIDCO
44. S.K.Maharana, AGM (Electrical)
45. Harapriya Behera, AGM (Electrical)

NTPC
46. Shri P.B. Venkatesh, AGM (Comm)
47. Uday Shankar, DGM

NHPC
48. Shri Vijay Kumar, Senior Manager (E)

NERLDC
49. V. Suresh, Chief GM
50. Shri Amresh Mallick, Sr. GM
51. Samar Chandra de, GM
52. Shri Palash Jyoti Bora, Astt. Manager

NERPC
53. Shri S. M. Aimol, Dy. Director

Warora Kurnwal Transmission Ltd.
54. Neeraj Verma, Manager
55. Mohit Jain, Dy. Manager

Essar Power
56. Ajay Kumar, Sr. Manager

BSPHCL
57. Rajdeep Bhattacharjee, RE

DNHPDCL
58. C.A. Parmar, CE,
59. P.K. Mishra, CFO,
60. R.B. Chambal, AE,

SLDC Shilong
61. T. Liden, EE, SLDC Shilong

Annexure-II

Point of Connection Charges and Losses Computation
April 2019 - June 2019 (Q1)

Meeting of the Validation Committee
Date : 21st Feb, 2019

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'19 - June'19)
  - 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 March, 2019.

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: $\frac{\textit{Projected All India Peak Demand Met}}{\textit{Sum of projected met for all states}}$

Load Generation Projection

New Units	Loading
Thermal Units with DOCO from 1st July'18 to 31st March'19	70%
Hydro Units with DOCO from 1st July'18 to 31st March'19	100%
Gas Units with DOCO from 1st July'18 to 31st March'19	30%

Demand and Generation Projections

- Northern Region
- Eastern Region
- Western Region
- North-Eastern Region
- Southern Region

HVDC Set points

- **Maximum Flow based on operational experience.**

MW Values

HVDC Name	Set points to be considered in Basecase
Mundra-Mahindergarh Pole-1	1000
Mundra-Mahindergarh Pole-2	1000
Talcher-Kolar Pole- 1	1000
Talcher-Kolar Pole- 2	1000
Rihand-Dadri Pole- 1	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	500
Champa-Kurukshetra Pole-1 & Pole-2	2500

Data not Received

- Jammu & Kashmir
- Chandigarh
- Uttrakhand
- Punjab
- Goa
- DNH
- Jharkhand
- Bihar
- West Bengal
- Sikkim
- Kerala
- Telangana
- Karnataka
- Pondicherry

Data not Received

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

KSK Mahanadi

Tehri

SGPL

IL&FS

Tuticorin TPP

Semcorp Energy India Ltd.

Coastal Energen

Korba West

YTC Data received from Transmission Licensees

- Adani Power Limited
- Darbhanga Motihari 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.
- Teestavalley Power Transmission Ltd.
- Jindal Power Ltd.
- Essar Power Transmission Company Ltd.
- Torrent Power Grid Ltd.
- Western Transco Power Limited
- Western Transmission Gujarat Limited
- Sipat Transmission Limited
- Chhattisgarh -WR Transmission Limited
- Raipur-Rajnandgaon-Warora Transmission Limited

Contd….

- Warora-Kurnool Transmission Limited
- Aravali Power Company Pvt. Ltd.
- Jaypee Powergrid Ltd.
- Raichur Sholapur Transmission company Ltd
- Patran Trans. Co. Ltd.
- Power Grid Corporation of India Limited
- PowerGrid Jabalpur Trans. Ltd.
- POWERGRID Warora Trans. Ltd.
- POWERGRID NM Trans. Ltd.
- POWERGRID Vizag Trans. Ltd.
- PowerGrid Parli Trans. Ltd.
- PowerGrid Unchahar Trans. Ltd.
- PowerGrid Kala Amb Trans. Ltd.
- POWERGRID Southern Interconnector Transmission System Limited

YTC Data not received

- North East Transmission Company Ltd.
- Kudgi Trans. Ltd.
- Powerlinks Transmission Ltd.

YTC Data received from States

- Karnataka
- Andhra Pradesh
- Madhya Pradesh
- Assam

List of new assets

	CoD as per TSA	As per CEA website	Anticipated/ Actual CoD
Sipat Transmission Limited			
765 kV Bilaspur Pooling Station -Rajnandgaon D/C Line	Mar,2019		Feb,2019
Warora-Kurnool Transmission Limited			
240 MVAR switchable line reactors with bays at Warora (Pool) end in each ckt of 765 kV Warora(Pool)-Rajnandgaon D/C line			Deemed CoD on 8th Dec,2018
Power Grid Corporation of India Limited			
Replacement of 315 MVA 400/220 kV ICT- II with 500 MVA 400/220 kV ICT at Patna sub-station			Feb'19
Replacement of 315 MVA 400/220 kV ICT- II with 500 MVA 400/220 kV ICT at Pusauli sub-station			Apr'19
Provision of Circuit Breakers for making line reactors at Biharshariff Sub-station switchable			Feb'19

			Anticipated/ Actual CoD
Power Grid Corporation of India Limited			
400kV D/C Mundra-Bhuj TL, 765kV D/C Bhuj-Banaskantha, 400kV D/C Banaskantha-Sankhari TL, 765kV D/C Banaskantha-Chittorgarh TL			Mar'19
400kV D/C Kadapa-Madhugiri (TBCB) TL			Feb'19
765kV D/C Chilakaluripeta-Cuddapah TL (TBCB)			Mar'19
400kV D/C Chilakaluripeta-Narasraopeta TL			Mar'19
Rajarhat-Gokarna system, Durgapur ICT & Malda ICT repl.			Mar'19
400kv d/c Kota-Jaipur			Mar'19
ICT repl. at Kopili,Patna, Indore Bay Extn.			Mar'19
2nd ICT Bongaigaon, Hamirpur ICT (400kV, 315MVA)			Mar'19
Misa ICT & ICT sitarganj			Mar'19
220 kV D/C Kishanganga-Wagoora TL			Mar'19
400kV D/C Dharampuri-Somanhalli TL			Q1 of 2019-20
STATCOM Kishanganj & Nalagarh, Sundargarh BR and Bhinmal Bay extn			Q1 of 2019-20
Thiruvalam GIS Bay Extn. & BR			Q1 of 2019-20

			Anticipated/ Actual CoD
Power Grid Corporation of India Limited			
STATCOM Udumalpet & Trichy			Q1 of 2019-20
STATCOM Hyderabad.			Q1 of 2019-20
800kV Champa-Kurukshetra HVDC Pole-III			Q1 of 2019-20
Extn. Pavagada, Madhugiri & Mysore			Q1 of 2019-20
Pune SLR & GIS Bay Extn. & Raipur Extn.			Q1 of 2019-20
ICTs Sundergarh & GIS bay extn.			Q1 of 2019-20
STATCOM Lucknow			Q1 of 2019-20
400kV Singrauli-Allahabad S/C TL			Q1 of 2019-20
SLR & GIS bay Extn. at Kishanganj and ICT Gaya			Q1 of 2019-20
Raipur-Rajnandgaon Warora Transmission Limited			
765 kV Raipur (Pool) - Rajnandgaon D/C Line			March'19
765 kV Rajnandgaon-New Pooling Station near Warora D/C Line			March'19

Thank You !!

Demand and Generation Projection – Northern 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 submitted by DICs
Chandigarh	327		-		327	
Delhi	6,449	6,450	1,723	1,094	4,726	5,356
Haryana	8,911	8,230	2,877	3,100	6,034	5,130
Himachal Pradesh	1,503	1,553	801	813	702	740
Jammu & Kashmir	2,319		972		1,347	
Punjab	10,033		5,182		4,851	
Rajasthan	11,640	11,770	7,689	9,711	3,951	2,059
Uttar Pradesh	20,894	21,000	10,958	11,100	9,936	9,900
Uttarakhand	2,120		1,063		1,057	
Total	64,197					
Normalization Factor	0.90					

Generation Projection – Northern Region

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'18 – 31st Dec'18 (B)	Generation CoD from 1st Jan'19 to 31st Mar'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any)	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	BBMB	2073	-	-	2073	As per data given by BBMB	2065
2	Dadri Thermal	1738	-	-	1738	As per data given by NTPC	1200
3	Rihand	2845	-	-	2845		2807
4	Singrauli	1700	-	-	1700		1863
5	Unchahar	979	-	-	979		1400
6	Auraiya	155	-	-	155		150
7	Dadri CCPP	385	-	-	385		300
8	NAPS	399	-	-	399	As per data given by NPCIL	400
9	Jhajjar	1111	-	-	1111	Data given by APCPL Jhajjar	1422

Generation Projection – Northern Region …(2)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'18 – 31st Dec'18 (B)	Generation CoD from 1st Jan'19 to 31st Mar'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
10	Dhauliganga	290	-	-	290	As per NHPC	280
11	Tanakpur	82	-	-	82		73
12	Koteshwar	363	-	-	363	As per data given by Koteshwar	367
13	Tehri	558	-	-	558		
14	Anta	267	-	-	267	As per data given by NTPC	150
15	RAAP B	385	-	-	385	-	
16	RAAP C	427	-	-	427	-	
17	AD Hydro	224	-	-	224	-	
18	Everest	104	-	-	104	-	
19	Karcham Wangtoo	1134	-	-	1134	-	

Generation Projection – Northern Region(3)

Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'18 – 31st Dec'18 (B)	Generation CoD from 1st Jan'19 to 31st Mar'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
20	Bairasul	185	-	-	185	As per NHPC	120
21	Chamera 1	559	-	-	559		540
22	Chamera 2	310	-	-	310		300
23	Chamera 3	246	-	-	246		231
24	Naptha Jhakri	1626	-	-	1626	As per SJVN	1605
25	Lanco Budhil	70	-	-	70	-	
26	Dulhasti	403	-	-	403	As per NHPC	399
27	Salal	689	-	-	689		690
28	Sewa-II	138	-	-	138		127
29	URI I HPS	566	-	-	566		480
30	URI II HPS	247	-	-	247		240
31	Sree Cement	240	-	-	240	-	
32	Parbati III	452	-	-	452	As per NHPC	520
33	Rampur HEP	451	-	-	451	As per SJVN	442
34	Koldam	878	-	-	878	As per data given by NTPC	792
35	Kishanganga	222	-	-	222	As per NHPC	330
36	Sainj HEP	105	-	-	105		

Demand and Generation Projection – Eastern 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 submitted by DICs
Bihar	5,344		365		4,979	
DVC	2,783	2,960	4,876	4,188	-2,093	-1228
Jharkhand	1,207		316		891	
Odisha	4,785	4,540	3,532	3,657	1,253	883
West Bengal	9,004		5,467		3,537	
Sikkim	75				75	
Total	23,197					
Normalization Factor	0.90					

Generation Projection – Eastern Region…(1)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'18 – 31st Dec'18 (B)	Generation CoD from 1st Jan'19 to 31st Mar'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	Chujachan	109	-	-	109	As per CERC order dated: 22.06.2017	99
2	MPL	1012	-	-	1012		
3	Teesta V	532	-	-	532	As per NHPC	522
4	Kahalgaon	2175	-	-	2175	As per data given by NTPC	2161
5	Farakka	1821	-	-	1821		1968
6	Talcher	970	-	-	970	Restricted to the generation(Installed Capacity-NAC)	942
7	Rangeet	69	-	-	69	As per NHPC	64
8	Adhunik Power	505	-	-	505	-	
9	Barh	1320	-	-	1320	As per data given by NTPC	1240

Generation Projection – Eastern Region…(2)

Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'18 – 31st Dec'18 (B)	Generation CoD from 1st Jan'19 to 31st Mar'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any)	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
10	Kamalanga TPP (GMR)	638	-	-	638	-	
11	JITPL	832	-	-	832		
12	Jorthang	94	-	-	94		
13	Bhutan	1096	-	-	1096	-	
14	Teesta-III	1070	-	-	1070	As per CERC order dated: 22.06.2017	782
15	Dikchu HEP	106	-	-	106		96
16	Nabinagar BRBCL	270	164	-	434		
17	Tashideng	103	-	-	103	As per CERC order dated: 22.06.2017	97
18	Kanti Bijlee Stg-2 (KBUNL)		-	-		As per last quarter	350

Demand and Generation Projection – Western 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 submitted by DICs
Chattisgarh	3,780	4,048	1,823	2,329	1,957	1,719
Gujarat	16,587	17,125	9,898	11,863	6,689	5,262
Madhya Pradesh	8,909	9,243	3,959	5,441	4,950	3,802
Maharashtra	24,370	23,140	15,705	16,465	8,665	6,675
Daman & Diu	353	335	-		353	335
Dadra Nagar Haveli	790		-		790	
Goa	559		-		559	
ESIL	625		-		625	
Total	55,973					
Normalization Factor	0.90					

Generation Projection – Western Region…(1)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'18 – 31st Dec'18 (B)	Generation CoD from 1st Jan'19 to 31st Mar'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	Vindhyachal	4654	-	-	4654	As per NTPC	4440
2	Ratnagiri Dabhol	598	-	-	598	As per data given by RGPPL	640
3	TAPS (1,2,3,4)	1050	-	-	1050		
4	JINDAL	761	-	-	761	As per data given by JPL	650
5	LANCO	579	-	-	579		
6	NSPCL Bhilai	478	-	-	478		
7	Korba	2502	-	-	2502	As per NTPC	2431

Generation Projection – Western Region … (2)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'18 – 31st Dec'18 (B)	Generation CoD from 1st Jan'19 to 31st Mar'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
8	SIPAT	2908	-	-	2908	As per NTPC	2809
9	CGPL	3177	-	-	3177		
10	Mauda	2159	-	-	2159	As per NTPC	2050
11	Gandhar	501	-	-	501		350
12	Kawas	534	-	-	534		250
13	SSP	390	-	-	390		
14	KAPS	0	-	-	0		
15	Essar Mahan	575	393	-	968		
16	BALCO	597	-	-	597	As per data given by Balco	400
17	KSK Mahanadi	1171	-	-	1171		
18	Sasan UMPP	3882	-	-	3882	As data given by Sasan	2750
19	JPL Stg-2	945	-	-	945	As per data given by JPL	1140
20	DGEN	0	-	-	0		

Generation Projection – Western Region (3)

Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'18 – 31st Dec'18 (B)	Generation CoD from 1st Jan'19 to 31st Mar'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
21	DB Power	1166	-	-	1166		
22	Korba West	192	-	-	192		
23	Dhariwal	285	-	-	285	As per data given by Dhariwal	273
24	GMR Chattishgarh	620	-	-	620	As per data given by GMR Chattishgarh	1000
25	JP Nigrie	1264	-	-	1264	As per data given by JP Nigrie	1240
26	GMR Warora	524	-	-	524		
27	ACBIL+ Spectrum+MCCPL	666	-	-	666	As per ACBIL	692
28	MB Power (Anuppur)	1161	-	-	1161	As per MB Power	900
29	RKM Power	336	232	-	568	As per RKM Power	600
30	Jhabua Power	498	-	-	498	As per Jhabua Power	566
31	TRN Energy	534	-	-	534	As per data given by TRN Energy	540
32	Sholapur STPP	628	-	432	1060	As per NTPC	970
33	Lara STPP		-	528	528		560
34	SKS Power		198	198	396	As per SKS Power	534
35	Gadarwada			528	528	As per NTPC	560

Demand and Generation Projection – North Eastern 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 submitted by DICs
Arunachal Pradesh	127	127	-		127	
Assam	1,725	1770	265	254	1,460	1,516
Manipur	190	186	-		190	186
Meghalaya	344	317	240	261	104	56
Mizoram	91	99	62	64 (including 56 MW from Tuirial HEP)	29	35
Nagaland	137	130	7	12	130	118
Tripura	281	341	154	166	127	175
Total	**2,894**					
Normalization Factor	0.90					

Generation Projection – North-Eastern Region

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'18 – 31st Dec'18 (B)	Generation CoD from 1st Jan'19 to 31st Mar'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	90	-	-	90	As decided in 153rd OCC meeting	101
2	Doyang, NEEPCO	51	-	-	51		56
3	Kopili , NEEPCO	187	-	-	187		184
4	Kopili 2, NEEPCO	25	-	-	25		22
5	Khandong, NEEPCO	45	-	-	45		48
6	Ranganadi, NEEPCO	412	-	-	412		401
7	AGBPP_Kathalguri	228	-	-	228		231
8	Loktak, NHPC	106	-	-	106		105

Generation Projection – North-Eastern Region

Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'18 – 31st Dec'18 (B)	Generation CoD from 1st Jan'19 to 31st Mar'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
9	Palatana GBPP	646	-	-	646	As decided in 153rd OCC meeting	680
10	Bongaigaon_NTPC	543	-	-	543		560
11	Pare NEEPCO	-	109	-	109		110

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 submitted by DICs
Andhra Pradesh	9,980	10,100	5,916	7,100	4,064	3,000
Telangana	9,227		4,427		4,800	
Karnataka	10,190		6,272		3,918	
Kerala	3,812		1,441		2,371	
Tamil Nadu	14,937	15,200	10,123	10,120	4,814	5,080
Pondicherry	410		-		410	
Goa_SR	80		-		80	
Total	48,635					
Normalization Factor	0.90					

Generation Projection – Southern Region…(1)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'18 – 31st Dec'18 (B)	Generation CoD from 1st Jan'19 to 31st Mar'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	Ramagundam	2494	-	-	2494	As per NTPC	2431
2	Simhadri 2	969	-	-	969		948
3	Simhadri 1	964	-	-	964		948
4	SEPL	192	-	-	192		
5	Lanco Kondapalli	152	-	-	152		
6	Kaiga	820	-	-	820		
7	NEYVELI (EXT) TPS	558	-	-	558		
8	NEYVELI TPS-II	730	-	-	730		
9	NEYVELI TPS-II EXP	721	-	-	721		

Generation Projection – Southern Region…(2)

Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st July'18 – 31st Dec'18 (B)	Generation CoD from 1st Jan'19 to 31st Mar'19 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
10	MAPS	273	-	-	273		
11	Vallur	1236	-	-	1236		
12	Meenakhshi	218	-	-	218		
13	Coastal Energen	394	-	-	394		
14	Kudankulam	1036	-	-	1036		
15	Tuticorin TPP	854	-	-	854		
16	Sembcorp Energy India Ltd.	1274	-	-	1274		
17	IL&FS	933	-	-	933		
18	Talcher Stage-II	1920	-	-	1920		
19	Sembcorp Gayatri Power Ltd.	1269	-	-	1269		
20	Kudgi STPS	1511	528	-	2039	As per NTPC	2050

Expected Generation addition – Northern Region

Back

	Generation declared Commercial from 1st July'18 to 31st Dec'18					Generation declared/expected to be declared Commercial from 1st Jan'19 to 31st Mar'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
Rajasthan						Chhabra	6	660	432	432

Expected Generation addition – Western Region

Back

	Generation declared Commercial from 1st July'18 to 31st Dec'18					Generation declared/expected to be declared Commercial from 1st Jan'19 to 31st Mar'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)
Essar Mahan	Essar Mahan	2	600	393	393					
RKM Power	RKM Power	2	360	232	232					
Lara STPP						Lara STPP	1	800	528	528
SKS Power	SKS Power	1	300	198	198	SKS Power	2	300	198	198
Gadarwada						Gadarwada	1	800	528	528

Expected Generation addition – Eastern Region

Back

	Generation declared Commercial from 1st July'18 to 31st Dec'18					Generation declared/expected to be declared Commercial from 1st Jan'19 to 31st Mar'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)
Odisha						OPGC Stage-II	4	660	432	432
Bihar						Brauni Extn.	8	250	164	164
Nabinagar BRBCL	Nabinagar BRBCL	2	230	151	151					

Expected Generation addition – Southern Region

Back

	Generation declared Commercial from 1st July'18 to 31st Dec'18					Generation declared/expected to be declared Commercial from 1st Jan'19 to 31st Mar'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)
Telangana						Kothagudem TPS-VII	12	800	528	528
Kudgi STPS	Kudgi STPS	3	800	528	528					

Expected Generation addition –North Eastern Region

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	Generation declared Commercial from 1st July'18 to 31st Dec'18					Generation declared/expected to be declared Commercial from 1st Jan'19 to 31st Mar'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)
Pare HEP	Pare HEP	1	55	54	109					
	Pare HEP	1	55	54						