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

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

To

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

Subject: Minutes of the 3rd Meeting of Validation Committee for the Application

Period from 1st October, 2018 to 31st December, 2018 for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses)

Regulations, 2010

Sir,

Please find enclosed herewith minutes of the 3rd Meeting of the Validation Committee for the year 2018-19 (Application Period from 1st October, 2018 to 31st December, 2018) for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 held on 12.9.2018 in the NRLDC Conference Room at New Delhi for information and necessary action.

Yours faithfully, Sd/-

Dated: 03/10/2018

(Shilpa Agarwal)
Joint Chief (Engg)

Encl.: As above

Validation Committee Members

SI. No.	Name of the Organizati ons	Name of the nominated persons	Address		
1.	CERC	Shri S.C Shrivastava, Chief (Engg	Central Electricity Regulatory Commission, 3 rd & 4 th Floor, Chanderlok Building, 36-Janpath, New Delhi -110001		
2.		Shri P.K. Awasthi, Joint Chief (Fin.)	Central Electricity Regulatory Commission 3 rd & 4 th Floor, Chanderlok Building, 36-Janpath, New Delhi -110001		
3.	CEA	Chief Engineer, (PSP & PA-II) Division	Central Electricity Authority 3 rd Floor, N-Wing, Sewa Bhawan, R.K. Puram, New Delhi - 110 066		
4.		Director, GM Division	Central Electricity Authority 6 th Floor, N-Wing Sewa Bhawan, R.K. Puram, New Delhi-110066		
5.	CTU/ Powergrid	Shri 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 S.R. Narasimhan Executive Director, NLDC	National Load Despatch Centre B-9, Qutab Institutional Area, KatwariaSarai, New Delhi-110016		
10.		Shri D.K Jain Executive Director	Eastern Regional Load Despatch Center 14, Golf Club Road, Tollygunge, Kolkata-700 033 (W.B.)		
11		Shri T.S Singh Executive Director	North Eastern Regional Load Despatch Centre, Lower Nongrah, Dongtieh, Lapalang, Shillong – 793006		
12.	NRPC	Shri M.A.K.P. Singh Member Secretary	Northern Regional Power Committee 18-A Shaheed Jeet Singh Marg,		

			Katwaria Sarai, New Delhi-11		
13.	WRPC	Shri A. Balan, Member Secretary	Western Regional Power Committee Plot No. F-3, MIDC Area, Marol, Opp : SEEPZ, Andheri (East), Mumbai-400093		
14.	SRPC	Shri S.R. Bhat, Member Secretary	Southern Regional Power Committee 29, Race Course Cross Road, Bangalore-560009, Karnataka		
15.	ERPC	Shri Joydeb Bandyopadhyay , Member Secretary	Eastern Regional Power Committee 14, Golf Club Road, Tollygunge, Kolkata-700 033 (W.B.)		
16.		Shri S.K. Das, Director Engineering	Bihar State Electricity Board 1 st Floor, VidyutBhawan, Bailey Road, Patna-21, Bihar		
17.	NERPC	Shri P.K Mishra Member Secretary	North Eastern Regional Power Committee, NERPC Complex, Dong Parmaw, Lapalang, Shillong-793006 Phone No:0364-2534077 Fax NO::0364-2534040		
18.		Shri Jatin Baishya, Dy. General Manager	State Load Despatch Centre Complex,Kahelipara,Guwahati		
19.	SLDC	Shri P.A.R. Bende, Chief Engineer, SLDC	Chief Engineer Madhya Pradesh Power Transmission Company Ltd., Nayagaon, Rampur, Jabalpur- 482008		
20.	KPTCL	Shri S. Sumanth Director(Transmission), KPTCL	Karnataka Power Transmission Corp. Ltd, KauveryBhavan, K.G. Road, Bangalore – 560009		
21.	UPPTCL	Shri A.K. Singh, Director (Operation), Uttar Pradesh Power Transmission Corporation Ltd.	Uttar Pradesh Power Transmission Corporation Ltd , 7th Floor, Shakti Bhavan, Ashok Marg, Lucknow– 226001		

LIST OF GENERATING COMPANIES

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

Minutes of the 3rd Meeting of Validation Committee for the Application Period from 1st October, 2018 to 31stDecember, 2018 held on 12thSeptember, 2018at NRLDC, New Delhi.

- 1. The Chairman of the Validation Committee, Shri S.C Shrivastava, Chief (Engg.), CERC welcomed the participants present in NRLDC Conference Room and also the other participants of RPCs, RLDCs, STUs and Generating Companies present at Conference Room of WRLDC, SRLDC, ERLDC, NERLDC, SLDCs of Gujarat, Madhya Pradesh, , Chhattisgarh, Punjab, U.P, Haryana, Himachal Pradesh, J&K, Rajasthan, DVC, Jharkhand, Andhra Pradesh, Telangana, Tamil Nadu, Kerala, Karnataka, Bihar, Odisha, West Bengal, Meghalaya, Assam and Maharashtra through video conferencing. List of the participants is enclosed at *Annexure-I*.
- 2. Chief (Engg.), CERC stated that the meeting is convened to discuss the Load Generation data for consideration of load flow studies for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses), Regulations, 2010 for the Third Quarter of 2018-19. The presentation shown during the Validation Committee Meeting dated 12.9.2018 is attached at Annexure- II.
- 3. After deliberation among members, it was decided that the peak generation for new hydro units shall be considered at 70% since most of the hydro units would be able to generate at 70% load for the peak hours during October'18 to December'18. For new thermal units and new gas based units, peak injection would be considered as 70% and 30% of ex-bus capacity respectively.
- 4. Demand Projection for Application Period from 1st October, 2018 to 31st December, 2018 (Q3 of 2018-19).
- **4.1 Northern Region**: Projected demand by IA for Haryana was 7,246 MW. Haryana had submitted its projected demand as 6,788 MW. During the meeting, it was suggested that demand projection of Haryana may be taken as 7,246 MW keeping in view demand given by Haryana in LGBR (Oct- 8140, Nov- 7350, Dec-7340).

The Demand figures as suggested above were agreed.

4.2 Eastern Region:

(i) Projected demand by IA for DVC was 2,841 MW. DVC had submitted its projected demand as 2,260 MW. DVC submitted during the meeting that demand of DVC may be taken as 2,841 MW.

(ii) Representative of Bihar suggested that Demand projection of Bihar may be taken as 4,800 MW instead of 4,507 MW.

The Demand figures as suggested above were agreed.

4.3 Western Region:

- (i) Projected demand by IA for Madhya Pradesh was 11,929 MW. Madhya Pradesh had submitted its projected demand as 11,033 MW prior to meeting. During the meeting, representative of Madhya Pradesh suggested to consider its demand projection as 12,100 MW.
- (ii) Projected demand by IA for Gujarat was 16,064 MW. Prior to the meeting, Gujarat submitted its projected demand as 15,360 MW. During the meeting, representative of Gujarat suggested to consider its demand projection may be taken as 16,342 MW.
- (iii) Projected demand by IA for Maharashtra was 19,839 MW. Prior to the meeting, Maharashtra submitted its projected demand as 20,735 MW. During the meeting, representative of Maharashtra suggested to consider its demand projection as 21,300 MW.

The Demand figures as suggested above were agreed.

4.4 North Eastern Region: Demand projections for NER constituents as submitted by them were agreed.

4.5 Southern Region:

- (i) Projected demand by IA for Andhra Pradesh was 8,741 MW. Prior to the meeting, Andhra Pradesh submitted its projected demand as 9,539 MW. During the meeting, representative of Andhra Pradesh suggested to consider its demand projection as 8,741 MW coinciding with demand given by Andhra Pradesh in LGBR (Oct- 8,400 MW, Nov- 8,500 MW, Dec- 8,900 MW)
- (ii) Representative of SLDC Telangana suggested that demand projection of Telangana may be taken as 9,946 MW as submitted by it prior to Validation Committee Meeting instead of 9,233 MW projected by IA.
- (iii) Representative of SLDC Tamil Nadu suggested that demand projection of Tamil Nadu may be taken as 14,500 MW instead of 14,675 MW.

The Demand figures as suggested above were agreed.

5. Generation Projection for Application Period from 1st October, 2018 to 31st December, 2018 (Q3 of 2018-19).

5.1 Northern Region:

- (i) Representative of NRPC suggested the following changes:
 - (a) Generation from Naptha Jhakri may be taken as 1482 MW instead of 1605 MW.
 - (b) Generation from Kishanganga may be taken as 250 MW instead of 330 MW.
- (ii) Projected generation by IA for Haryana was 3,322 MW. Prior to the meeting, Haryana submitted its generation as 3,071 MW. During the meeting, representative of Haryana suggested to consider its generation projection as 3,421 MW.
- (iii) Projected generation by IA for Uttar Pradesh was 8,837 MW. Prior to the meeting, Uttar Pradesh submitted its generation as 9,500 MW. During the meeting, representative of Uttar Pradesh suggested to consider generation projection as 8,837 MW.
- (iv) Projected generation by IA for Rajasthan was 7,023 MW. Prior to the meeting, Rajasthan submitted its generation as 8,895 MW. During the meeting, it was suggested to consider generation projection for Rajasthan as 7,900 MW, keeping in view its historical ISTS drawal as 3700 MW and the generation projection given by Rajasthan in LGBR is 7,500 MW.
- (v) Projected generation by IA for Jhajjar was 1249 MW. Prior to the meeting, APCPL Jhajjar submitted its generation as 1421 MW. During the meeting, NRPC and NRLDC suggested that one unit of Jhajjar APCPL may be under reserve shutdown during October to December 2018 and hence generation from Jhajjar may be taken as 960 MW. In this regard, representative of Haryana stated that Haryana wants to schedule 540 MW from Jhajjar as per its entitlement and that in the absence of 3rd unit of the APCPL Jhajjar it will not be able to schedule 540 MW. Chief (Engg) CERC queried as to whether Haryana has unit wise PPA to which Haryana insisted to consider the injection as 1,249 MW otherwise which it will not be able to schedule its entitled power. It was agreed to consider 1249 MW for APCPL Jhajjar

The Generation figures as suggested above were agreed.

5.2 Western Region:

- (i) Projected generation by IA for Madhya Pradesh was 4,665 MW. Prior to the meeting, Madhya Pradesh submitted its generation as 5,567 MW. Representative of Madhya Pradesh stated that it is operating high generation from its hydro plants whose reservoirs are full. During the meeting, it was suggested that generation projection of Madhya Pradesh may be considered as 5,567 MW.
- (ii) Projected generation by IA for Gujarat was 10,085 MW. Prior to the meeting, Gujarat submitted its generation as 11,763 MW (considering 3,600 MW generation

from APL Mundra). During the meeting, it was suggested that generation projection of Gujarat may be considered as 11,763 MW instead of 10,085 MW.

- (iii) Member present at WRLDC suggested following changes:
 - (a) Generation from Ratnagiri dabhol and CGPL may be taken as 540 MW and 3,000 MW instead of 488 MW and 3,800 MW respectively.
 - (b) Generation from KAPS and Essar Mahan may be taken as 200 MW and 530 MW instead of 69 MW and 854 MW respectively.
 - (c) Generation from KSK Mahanadi and GMR Chhattisgarh may be taken as 1200 MW and 500 MW instead of 1278 MW and 98 MW respectively.
 - (d)Generation from DGEN and Korba west may be taken as zero instead of 99 MW and 254 MW respectively.
 - (e) Generation from RKM Power may be taken as 350 MW instead of 562 MW.

The Generation figures as suggested above were agreed.

5.3 Eastern Region:

- (i) Projected generation by IA for Odisha was 2,628 MW. Prior to the meeting, Odisha submitted its generation as 3,076 MW. During the meeting, it was suggested that generation projection of Odisha may be taken as 2,628 MW keeping in view the wide variation in generation and demand data as submitted by Odisha and historical ISTS drawl of Odisha.
- (ii) Projected generation by IA for West Bengal was 4,847 MW. Prior to the meeting, West Bengal submitted its generation as 5,796 MW. During the meeting, it was suggested that generation projection of West Bengal may be taken as 4,847 MW keeping in view its historical ISTS drawl and demand projection given by West Bengal.
- (iii) Representative of SLDC, Bihar suggested that generation from Bihar may be taken as 186 MW instead of 350 MW as projected by IA based on last 3 years data.
- (iv) Projected generation by IA for DVC was 4,099 MW. Prior to the meeting, DVC submitted its generation as 4,859 MW. During the meeting, representative of DVC suggested to consider generation projection as 4,099 MW.
- (v) Projected generation by IA for BARH was 1,255 MW. Prior to the meeting, NTPC submitted BARH generation as 1,057 MW. During the meeting, representative of NTPC suggested to consider generation projection as 1,250 MW.
- (vi) Member present at ERLDC suggested following changes
 - (a) Generation from Jharkhand may be taken as 350 MW instead of 428 MW.
 - (b) Generation from JITPL and Kanti Bijli stg-2may be taken as 594 MW and 360 MW instead of 938 MW and 270 MW respectively.

- (c) Generation from Nabinagar BRBCL and Jorthang may be taken as 235 MW and 60 MW instead of 600 MW and 73 MW respectively.
- (d) Generation from Dikchu and Tashiding may be taken as 60 MW instead of 100 and 96 MW respectively

The Generation figures as suggested above were agreed.

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

5.5 Southern Region:

- (i) Projected generation by IA for Andhra Pradesh was 6,220 MW. Prior to the meeting, Andhra Pradesh submitted its generation as 9,725 MW. Representative of SRPC stated that generation from Andhra Pradesh may be taken as 6,900 MW.
- (ii) Representative of TSTRANSCO suggested that generation projection from Telangana may be taken as 5,580 MW (considering new unit of Kothagudem TPS) instead of 4,593 MW as projected by IA based on last 3 years data. He further stated that the Kothagudem TPS seventh unit (800 MW) will be declared COD in September 2018.
- (iii) Representative of SLDC Karnataka suggested that generation from Karnataka may be taken as 7,700 MW (considering 1500 MW Solar generation) instead of 5,959 MWas projected by IA based on last 3 years data, keeping in view that its peak demand coincides with solar generation.

(iv) Member present at SRLDC suggested following changes:

- (a) Generation from SEPL and MEPL may be taken as zero instead of 250 MW and 216 MW respectively.
- (b) Generation from Lanco Kondanpalli and MAPS may be taken as zero and 198 MW instead of 237MW and 361 MW respectively.
- (c) Generation from Kudankulam and Coastal Energen may be taken as 900 MW and 558 MW instead of 1300 MW and 754 MW respectively.
- (d) Generation from Vallur, IL&FS and Talcher Stage- II may be taken as 1,400 MW, 650 MW and 1,885 MW instead of 1,152 MW, 935 MW and 1,940 MW respectively.

The Generation figures as suggested above were agreed.

6. HVDC Set Points:

 HVDC set points to be considered in the All India Base case for computation of PoC charges and Losses for October 2018 – December 2018 period were projected by Implementing Agency based on operational experience and was put up for validation before the Committee.

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

MW Values

	<u>IVIVV Values</u>
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 NER)
Alipurduar – Agra Pole -1	0
Alipurduar – Agra Pole -2	0
Champa-Kurukshetra Pole-1	1250
Champa-Kurukshetra Pole-2	1250

7. Other Issues:

- (i) The draft TBCB procedure was discussed during the validation committee. POSOCO representative stated that no new comments have been received till the Validation Committee meeting. Chief (Engg), CERC suggested to include the following point in the draft TBCB procedure:-
 - (a) If the transmission system is commissioned prior to scheduled COD of system and is proposed to be considered under PoC, following documents should be submitted by Transmission Licensee:
 - > RLDC certificate.
 - CEA certificate under Regulation 43 of CEA (Measures Related to Safety
 & Electricity Supply) Regulations, 2010.
 - ➤ CEA certificate for early incentivisation as per order dated 28.1.2016 in petition no 284/ADP/2015.
 - (b) If the transmission system is commissioned after the scheduled COD of system and is proposed to be considered under PoC, following documents should be submitted by Transmission Licensee:

- RLDC certificate.
- ➤ CEA certificate under Regulation 43 of CEA (Measures Related to Safety & Electricity Supply) Regulations, 2010.
- (ii) During the validation committee meeting, representative of CTU raised following issues
 - (a) With reference to minutes of the last Validation Committee issued on 10.7.2018 following was recorded.

"Issue of Odisha Generation Phase-II Transmission Limited (OGPTL): 400 kV D/C OPGC- Jharsuguda Transmission Line was commissioned on 30.8.2017. However, due to non-availability of 400 kV GIS bays to be provided by PGCIL at400 kV Sundargarh-OPGC Circuit -I and II and 2 Nos. of 400 kV Line Bays to be provided by OPGC at OPGC generation switchyard, which were both commissioned on 5.12.2017 and 15.12.2017 respectively, the 400 kV D/C OPGC- Jharsuguda transmission line could be charged on 20.12.2017.

Tariff Payment: From 30.8.2017 -5.12.2017 (To be paid by both PGCIL and OPGC) From 6.12.2017-till date (To be paid by OPGC).

Letters sent by OGPTL to NLDC on 5.4.2018 and CTU on 17.4.2018 for payment of transmission charges.

Representative of CERC clarified that the lines were discussed during Validation Committee meeting held on 29.8.2017 and 29.11.2017. It was asked the reason as to why CTU did not raise the bill, when regulations and CERC order were clear. It was also stated that the issues are similar in nature to one already dealt in Hon'ble Commission's order in petition no. 43/MP/2016, 236/MP/2015 and 201/TT/2015. Accordingly, CTU was advised to raise the bill immediately as per CERC order in Petition No. 43/MP/2016, 236/MP/2015. 155/MP/2016 and 201/TT/2015."

In this regard representative of CTU submitted following during this meeting:-

"CTU informed that the scope of the work of Odisha Generation Phase-II Trans. Ltd (OGPTL) with respect to the installation of the OPGW up to the terminal box besides some of the TL works were not completed and OPGTL declared deemed commercial of the line wef 30.08.2017 instead of actual completion of works in Nov/Dec'17 and the same has also been represented to the Commission in their Tariff Petition filed for bay extensions at Jharsuguda end."

CTU further informed that such deemed commercial operation of the transmission systems of TBCB Licensees as per their TSA needs to be reviewed by the Validation Committee for incorporation into POC billing or bilateral billing.

Chief (Engg), CERC stated that issue raised by CTU is taken note of but no view can be taken in the Validation Committee on the same at present and CTUs suggestion on POC billing shall be considered while finalizing procedure of TBCB under discussion as per Para 7(i) above subject to decision of Commission.

- (b) CTU representative stated that the computations and approval thereof of quarterly POC rates was delayed for the last 3-4 quarters. With the delay, the RTAs were worked out based on previous quarterly POC rates and bills were raised by the CTU accordingly. He requested CERC / NLDC to ensure that the POC rates are computed and approved on time prior to commencement of the POC billing for the quarter, so as to avoid additional billing activity & disputes at the end of CTU. Chief (Engg), CERC requested NLDC to expedite computation of POC rate.
- (c) CTU representative brought forth the issue of sharing of transmission charges of Champa - Kurukshetra line in view of the revised order of the Commission. The commission has directed as under:
 - "102. In our view, the above regulation is applicable in this case and accordingly, the transmission charges of the subject HVDC line shall be borne as under:-
 - a) 10% of the transmission charges allowed shall be considered under Reliability charges which shall be borne by all DICs.
 - b) Where the generators as LTTC has tied up PPA with the beneficiaries, the transmission charges of the subject transmission system shall be apportioned to such beneficiaries for such tied up capacity.
 - c) Where the long term transmission customer has not firmed up the beneficiaries, the transmission charges shall be apportioned to such long term transmission customers in proportion to the capacity not tied up by each of the generators.
 - d) The capacity, if any, left out after considering the capacities under (b) and (c) above, the HVDC charges for such balance capacity shall be borne by the remaining DICs of the target region by scaling up of MTC of the AC system included in the PoC as per Regulation 11(4)(3)(iii) of the 2010 Sharing Regulations. In such an event, direction at (a) above shall not be effected.""
- (d) CTU further stated that on approval of POC rates for the Q1 POC Quarter, the RTAs have been revised by all the regions except Northern Region. Further, CERC vide Order dated 8.5.2018 directed that Jhajjar LTA need not be considered in POC computations for the prospective period. Accordingly, the revision of RTAs for Q1

Quarter in Northern Region, incorporating the new POC rates and excluding the Jhajjar LTA, need to be issued urgently to enable CTU to provide the differential billing in the current Bill#3 which is going to be raised shortly.

(e) CTU representative stated that CERC had reduced the tariffs of some of the State Deemed ISTS Licensees viz. MP, PTCUL, RVPNL for the current tariff block for they have not submitted their revised claims based on the new Tariff Orders. It asked for refund of the excess amount received by them.

Chief (Engg), CERC stated that the above issues (c), (d) and (e) needs to be taken

Chief (Engg), CERC stated that the above issues (c), (d) and (e) needs to be taken up with Commission.

(vi) 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	Remarks
21 numbers OPGW links (2217.94 km) under central Sector	PGCIL		CoD	To be considered in POC
LILO of one ckt of 400 kV D/C Khandwa – Rajgarh transmission line at Khargone TPP	Khargone Transmission Ltd.		March, 2018(Actual COD)	Not to be considered in PoC. Dedicated line shall be considered under provision of CERC Connectivity Regulations as per Regulation no 8(8)*
400 kV Neemrana (PG) – Dhanonda (HVPNL) D/C line	Gurgaon Palwal Transmission Ltd	May, 2019	1st Nov, 2018 (Anticipated COD)	As per CEA minutes issued vide letter dated 20.12.2016 and 28.3.2018(enclosed at Annexure- III and IV) mutually agreed date of early commissioning is Oct, 2018. Hence this line shall be considered in POC. Disbursement will be done after actual COD as per date agreed by CEA
765 kV Sipat – Bilaspur Pooling Station 3rd S/C line	Sipat Transmission limited	Nov, 2018	8th Aug, 2018 (Actual COD)	As per CEA minutes issued vide letter dated 6.7.2017 (enclosed at Annexure- V), mutually agreed date of early commissioning is June, 2018. Hence this line shall be considered in POC. Disbursement will be done after actual COD from the date agreed by CEA.
765 kV Bilaspur Pooling Station – Rajnandgaon D/C line	Sipat Transmission limited	March, 2019	1 st Dec 2018 (Anticipated COD as	As per CEA minutes issued vide letter dated 6.7.2017, mutually agreed date of early commissioning is Nov, 2018. The line shall not be

			submitted by transmissio n licensee)	considered in POC for this quarter since its anticipated date of COD is after 1.11.2018
765 kV S/C Rajgarh (Kotra) – Champa (Pool) line	Chhattisgarh – WR Transmission Limited	Nov, 2018	4th Sep, 2018 (Actual COD)	As per CEA minutes issued vide letter dated 6.7.2017, mutually agreed date of early commissioning is Jun, 2018. Hence this line shall be considered in POC.
765 kV Raipur (Pool) – Rajnandgaon D/C line	Raipur Rajnandgaon – WR Transmission	Nov, 2018	1st Nov, 2018 (Anticipated COD)	As per CEA minutes issued vide letter dated 6.7.2017, mutually agreed date of early commissioning
765 kV Rajnandgaon – New Pooling Station near Warora D/C line	Ltd.	Nov, 2018	1st Nov, 2018 (Anticipated COD)	isNov,2018.Hence this line shall be considered in POC. Disbursement will be done after actual COD as per date agreed by CEA**.
765 kV D/C Jharsuguda (Sundergarh) – Raipur	Odisha Generation Phase –II Transmission Limited (OGPTL)	Aug,2019	1st Oct, 2018 (Anticipated COD)	As per CEA minutes issued vide letter dated 11.1.2017 and 16.11.2016, (enclosed at Annexure- VI) mutually agreed date of early commissioning is Oct, 2018. Hence this line shall be considered in POC. Disbursement will be done after actual COD as per date agreed by CEA.

*Validation Committee has noted the status of this line vide minutes of its meeting held on 26.2.2018

**Vide MOM dated 21.1.2013 of validation committee meeting it was decided that the transmission assets to be declared commercial on or before 1st date of the second month of the quarter are to be included for POC computation. Further, vide MOM dated 23.3.2016 it was agreed that the present practice of considering assets anticipated upto 1st day of 2nd month in PoC computation will be continued.

8. After the deliberations, following was concluded:

- (i) After deliberation among members, it was decided that the peak generation for new hydro units shall be considered at 70% since most of the hydro units will not be able to generate at 100% load for the peak hours during October 2018 to December 2018. For new thermal units and new gas based stations, peak injection would be considered as 70% and 30% of ex-bus capacity, respectively. In case of non-submission of data by the DICs, for the purpose of Base case preparation:
 - (a) Peak Demand: Forecasted peak demand to be calculated from last 3 years' data taken from CEA website as per provisions of the Regulations.
 - (b) Peak Generation: Forecasted peak generation to be calculated from last 3 years' SEM/SCADA data available with RLDCs as per the provisions of the Regulations.

Preparation of final All India 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.

<u>List of Participants in the 3rd meeting for 2018-19 of the Validation Committee held on 12thSeptember, 2018 at , New Delhi.</u>

CERC

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

CEA

- 4. Shri Vikram Singh, Director
- 5. Shri Ravi Shankar Singh, Assistant Director

POWERGRID

- 6. Shri P.S Das. DGM
- 7. Shri V Sriniwas, DGM (Comml.)
- 8. Shri Ajay Upadhyay, Manager (Comml)

NLDC

- 9. Shri S.R Narsiman, Executive Director
- 10. Shri G. Chakraborty, DGM
- 11. Shri Manoj Kumar Agarwal, DGM
- 12. Shri Gaurav Verma, Dy. Manager
- 13. Shri Sanny Machal, Sr. Engineer

WRPC

- 14. Shri A. Balan, M.S, WRPC
- 15. Shri J.K Rathod, SE, WRPC
- 16. Shri D.N Gawali, EE
- 17. Shri L.K.S Rathore, EE

WRLDC

- 18. Ms. S. Usha, DGM,
- 19. Shri N. Roy, DGM
- 20. Ms Chitrankshi, Manager
- 21. Shri Pradeep Sanodiya, Sr. Engineer

ERPC

22. Shri J.G Rao, EE

ERLDC

- 23. Shri D.K Jain, Executive Director
- 24. Shri S.K Sahay, Dy. Manager
- 25. Shri A.K Basak, Sr. Engineer

DVC, Kolkata

26. Shri M. Sahoo, Dy. Chief Engineer

SRPC

27. Shri Anusha Das J, AEE

SRLDC

- 28. Shri Abhimanyu Gartia, Executive Director
- 29. Shri T. Srinivas, DGM
- 30. Shri Madukar G, Manager

NRLDC

- 31. Shri S.S Barpanada, Executive Director
- 32. Shri Riza Naqvi, Sr. Engineer
- 33. Shri Gaurav Malviya, Engineer
- 34. Shri Rinku Narang, Technician, NRLDC

GRIDCO

- 35. Shri Prashoor Kumar Das, GM (Elec)
- 36. Shri S.K Maharana, AGM(Elec)
- 37. Ms Harpriya Behera, AGM (Elec)
- 38. Shri Santosh Kumar Das, Consultant, SLDC Odisha

SLDC KPTCL

39. Shri B.V Malleshappa, EE(E)

KPTCL

40. Shri Mohana kumara.G, AE (E)

TSTRANSCO

- 41. Shri Suresh Babu, SE
- 42. Shri Madhavi, DE

APTRANSCO

- 43. Shri Bhaskar, SE
- 44. Shri Ananth Srinivas, DE

TANTRANSCO

- 45. Shri Murugavelan, AEE(grid)
- 46. Shri Subarayan, EE(grid)

NHPC

47. Shri Vijay Kumar, Manager (E)

NTPC

- 48. Shri P.B Venkatesh, AGM (Comml)
- 49. Shri M.R Hasan, Sr. Manager

NERLDC

- 50. Shri Momai Deh, Sr. Engineer
- 51. Shri Palash Jyoti Borah, Engineer

NERPC

52. Shri S.M Aimol, Dy. Director

D.B Power

53. Shri Sanjay Jadhav, Sr. DGM

MEPTCL

54. Shri T Gidon, EE, SLDC

HVPNL

55. Shri Ravi Sher Singh, XEN56. Shri N.K Makkar, XEN

HPPC

57. Shri Gaurav Gupta, XEN

Techno Electric

58. Shri S.P Hamnarde, GM

Point of Connection Charges and Losses Computation October 2018 - December 2018 (Q3)

Meeting of the Validation Committee

Date: 12th Sep, 2018

Venue: NRLDC Conference Room, New Delhi

Assumptions

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

Contents

PoC Computation for Q3 Case (Oct'18 - Dec'18)

Demand & Generation Projection

New Generation

HVDC Set points

Demand Generation Projection

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

Demand Generation Projection

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

■ New Generation: DOCO by 30th Sep, 2018.

Demand Generation Projection

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

 Sum of projected met for all states

Load Generation Projection

New Units	Loading
Thermal Units with DOCO from 1st Jan'18 to 30th Sep'18	70%
Hydro Units with DOCO from 1st Jan'18 to 30th Sep'18	80%
Gas Units with DOCO from 1st Jan'18 to 30th Sep'18	30%

Demand Projection

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

Generation Projection (Including New Generation)

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

HVDC Set points

Maximum Flow based on operational experience.

MW Values

IIII Values
Set points to be considered in Basecase
1000
1000
1000
1000
750
750
500
500
1000
250
650
400
750
750
500 (towards NER)
0
0
2500

Data not Received

- □ Jammu & Kashmir
- Chandigarh
- □ Haryana
- Uttrakhand
- □ Goa

- Jharkhand
- Bihar
- □ Sikkim
- Telangana
- **□** Tamilnadu
- Karnataka
- Pondicherry

Data not Received

AD Hydro Balco Jhabua Power

□ Everest KSK Mahanadi GMR Warora

Sree cement Tehri

Maithon Power Ltd.SGPL

□ Adhunik Power IL&FS

☐ GMR Kamalanga Tuticorin TPP

□ Lanco Amarkantak Semcorp Energy India Ltd.

NSPCL BhilaiSasan UMPP

SEPL+MEPL Coastal Energen

LANCO Kondapalli RGPPL

Korba West

Dhariwal

NLC

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.
- **□** Patran Trans. Co. Ltd.
- **■** Teestavalley Power Transmission Ltd.
- **□** Jindal Power Ltd.
- **■** Essar Power Transmission Company Ltd.
- **Powerlinks Transmission Ltd.**
- **■** Jaypee Powergrid Ltd.
- **□** Torrent Power Grid Ltd.
- **■** Western Transco Power Limited
- Western Transmission Gujarat Limited
- Raichur Sholapur Transmission company Ltd

Sipat Transmission Limited **□** Chhattisgarh -WR Transmission Limited **■** Raipur-Rajnandgaon-Warora Transmission Limited **■** Warora-Kurnool Transmission Limited

YTC Data not received

- North East Transmission Company Ltd.
- Kudgi Trans. Ltd.
- Aravali Power Company Pvt. 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 received from States

- Delhi
- Rajasthan
- Uttrakhand
- Karnataka
- **□** Andhra Pradesh
- Assam
- Madhya Pradesh

List of new assets

	CoD as per TSA	As per CEA website	Anticipated/ Actual CoD		
Khargone Transmission I	.td.				
LILO of one ckt of 400 kV D/C Khandwa-Rajgarh transmission line at Khargone TPP		Feb,2018	Mar,2018		
Gurgaon –Palwal Trans. Ltd.					
400kV Neemrana (PG)- Dhanonda (HVPNL) D/C line	May, 2019	Sep, 2018	1 st Nov, 2018		

	CoD as per TSA	As per CEA website	Anticipated/ Actual CoD			
Sipat Transmission Limited						
765 kV Sipat-Bilaspur Pooling Station 3rd S/C Line	Nov,2018	May,18	Aug,2018			
765 kV Bilaspur Pooling Station -Rajnandgaon D/C Line	Mar,2019	Mar'18	July,2018			
Chhattisgarh -WR Transmission Limited						
765 kV S/C Raigarh (Kotra) – Champa (Pool) line	Nov, 2018	Aug,2018	04 th Sep, 2018			
Raipur Rajnandgaon-WR Transmission Ltd.						
765kV Raipur (Pool) - Rajnandgaon D/C Line	Nov,2018	May,2017	1 st Nov,2018			
765kV Rajnandgaon-New Pooling Station near Warora D/C Line	Nov,2018	Nov,2018	1 st Nov,2018			

Thank You!!

Demand Projection – Northern Region

Entity	Q3 (Oct-Dec'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States						
Chandigarh	207							
Delhi	4,413	4,410						
Haryana	7,246	6,788						
Himachal Pradesh	1,521							
Jammu & Kashmir	2,082							
Punjab	6,856	6,840						
Rajasthan	11,307	11,646						
Uttar Pradesh	16,311	17,800						
Uttarakhand	1,950							
Total	51,893							
Normalization Factor	0.91							

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Demand Projection – Eastern Region

		- Back
Entity	Q3 (Oct-Dec'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States
Bihar	4,507	
DVC	2,841	2,260
Jharkhand	1,275	
Odisha	4,305	4,148
West Bengal	6,765	7,085
Sikkim	89	
Total	19,782	
Normalization Factor	0.91	

Demand Projection – Western Region

Entity	Q3 (Oct-Dec'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States
Chhattisgarh	3,286	3472
Gujarat	16,064	15,360
Madhya Pradesh	11,929	11,033
Maharashtra	19,839	20,735
Daman & Diu	367	
Dadra Nagar Haveli	807	
Goa_WR	542	
ESIL Hazira	689	
Total	53,523	
Normalization Factor	0.91	

Demand Projection – North-Eastern Region

Q3 (Oct-Dec'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States	
142	145	
1,688	1780	
182	214	
327	366	
93	94	
134	135	
307	380	
2,873		
0.91		
	Demand (MW) (Based on Peak Met figures of last 3 years) before normalization 142 1,688 182 327 93 134 307 2,873	

Back

Demand Projection – Southern Region

Entity	Q3 (Oct-Dec'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States			
Andhra Pradesh	8,741	9,539			
Telangana	9,233				
Karnataka	10,510				
Kerala	3,661	3,656			
Tamil Nadu	14,675				
Pondicherry	373				
Goa- SR	80				
Total	47,272				
Normalization Factor	0.91				

Generation Projection – Northern Region 26

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Jan'18 – 30 th June'18 (B)	Generation CoD from 1st Jul'18 to 30 th Sep'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any)	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	Uttar Pradesh	8405	-	432	8837	As per data given by Uttar Pradesh	9500
2	Delhi	822	-	-	822	As per data given by Delhi	766
3	Haryana	3322	-	-	3322	As per data given by Haryana	3071
4	Uttarakhand	817	178	-	995		
5	Punjab	3771	-	-	3771	As per data given by Punjab	4207
6	Rajasthan	6591	-	432	7023	As per data given by Rajasthan	8895
7	Himachal Pradesh	444	-	-	444	As per data given by H.P.	
8	Jammu & Kashmir	560	-	-	560		
9	ВВМВ	2240	-	-	2240	As per data given by BBMB	2125

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

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Jan'18 – 30 th June'18 (B)	Generation CoD from 1st Jul'18 to 30 th Sep'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
10	Dadri Thermal	1678	-	-	1678		1200
11	Rihand	2898	-	-	2898		2807
12	Singrauli	1867	-	-	1867	As per data given by	1863
13	Unchahar	976	-	-	976	NTPC	956
14	Auraiya	240	-	-	240		150
15	Dadri CCPP	551	-	-	551		300
16	NAPS	415	-	-	415		
17	Jhajjar	1249	-	-	1249	Data given by APCPL Jhajjar	1421
18	Dhauliganga	279	-	-	279	As per NHPC	280
19	Tanakpur	74	-	-	74	As per Will C	73
20	Koteshwar	316	-	-	316		
21	Tehri	1064	-	-	1064		
22	Anta	298	-	-	298	As per data given by NTPC	150
23	RAAP B	407	-	-	407	-	
24	RAAP C	427	-	-	427	-	
25	AD Hydro	167	-	-	167	-	
26	Everest	99	-	-	99	-	
27	Karcham Wangtoo	896	-	-	896	-	

Generation Projection – Northern Region(3)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Jan'18 – 30 th June'18 (B)	Generation CoD from 1st Jul'18 to 30 th Sep'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
28	Bairasul	164	-	-	164		0
29	Chamera 1	568	-	-	568	As per NHPC	545
30	Chamera 2	296	-	-	296	·	300
31	Chamera 3	235	-	-	235		231
32	Naptha Jhakri	1607	-	-	1607	As per SJVN	1605
33	Lanco Budhil	62	-	-	62	-	
34	Dulhasti	400	-	-	400		390
35	Salal	533	-	-	533		431
36	Sewa-II	127	-	-	127	As per NHPC	121
37	URI I HPS	355	-	-	355		324
38	URI II HPS	182	-	-	182		187
39	Sree Cement	197	-	-	197	-	
40	Parbati III	402	-	-	402	As per NHPC	390
41	Rampur HEP	453	-	-	453	As per SJVN	442
42	Koldam	878	-	-	878	As per data given by NTPC	792
43	Kishanganga	-	261	-	261	As per NHPC	330
44	Sainj HEP			79	79		

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

S. No.	Entity	Projections based on 3 Years Data (A)	addition during	Generation CoD from 1st Jul'18 to 30 th Sep'18 (C)	TOTAL D=A+B+ C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
45	West Bengal	4847	-	-	4847	As per data given by West Bengal	5796
46	Odisha	2628	-	-	2628	As per data given by GRIDCO	3076
47	Bihar	186	-	<u>164</u>	350	-	
48	Jharkhand	428	-	-	428	-	
49	Sikkim	-	-	-	-	-	
50	Chujachan	109	-	-	109	As per CERC order dated: 22.06.2017	99
51	DVC		-	-			
52	Durgapur Steel		-	-			
53	Koderma TPP	4099	-	-	4099	As per data given by DVC	4859
54	Raghunathpur		-	-			
55	5 Bokaro TPS Expn.	-	-				
56	MPL	955	-	-	955		

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

							Back
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Jan'18 – 30th June'18 (B)	Generation CoD from 1st Jul'18 to 30th Sep'18 (C)	TOTAL	Comments From DICs /States (if any)	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
57	Teesta V	533	-	-	533	As per NHPC	520
58	Kahalgaon	2205	-	-	2205	As per data given by	2178
59	Farakka	1912	-	-	1912	NTPC	1968
61	Talcher	959	-	-	959	Restricted to the generation(Installed Capacity-NAC)	942
62	Rangeet	62	-	-	62	As per NHPC	62
63	Adhunik Power	412	-	-	412	-	
64	Barh	1255	-	-	1255	As per data given by NTPC	1057
65	Kamalanga TPP (GMR)	629	-	-	629	-	
66	JITPL	938	-	-	938	As per email dtd:13.08.18 from JITPL	594
67	Jorthang	73	-	-	73		
68	Bhutan	851	-	-	851	-	
69	Teesta-III	962	-	-	962	As per CERC order dated: 22.06.2017	782
70	Dikchu HEP	100	-	-	100		
71	Nabinagar BRBCL	273	164	164	600		
72	Tashideng	83	-	-	83		
73	Kanti Bijlee Stg-2 (KBUNL)	-	-	-	270		

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

_	, 						
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Jan'18 – 30 th June'18 (B)	Generation CoD from 1st Jul'18 to 30 th Sep'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comment s
		(MW)	(MW)	(MW)	(MW)		(MW)
74	MP	4665	-	-	4665	As per forecasted gen. given by MP	5567
75	Maharashtra	14211	<u>530</u>	98	14839	As per forecasted gen. given by Maharashtra	15014
76	Chhattisgarh	2410	-	-	2410	As per data given by Chhattisgarh	2425
77	Gujarat	10085	-	-	10085	As per data given by Gujarat	11763
78	Goa		-	-		-	
79	D&D		-	-		-	
80	DNH		-	-		-	
81	Vindhyachal	4689	-	-	4689	As per NTPC	4440
82	Ratnagiri Dabhol	488	-	-	488		
83	TAPS (1,2,3,4)	883	-	-	883		
84	JINDAL	635	-	-	635	As per data given by JPL	560
85	LANCO	569	-	-	569		
86	NSPCL Bhilai	484	-	-	484		
87	Korba	2465	-	-	2465	As per NTPC	2431

Generation Projection – Western Region ... (2)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Jan'18 – 30 th June'18 (B)	Generation CoD from 1st Jul'18 to 30 th Sep'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
88	SIPAT	2786	-	-	2786	As per NTPC	2809
89	CGPL	3618	-	-	3618	As per data given by CGPL	3800
90	Mauda	1755	432	-	2187		1757
91	Gandhar	458	-	-	458	As per NTPC	350
92	Kawas	396	-	-	396		250
93	SSP	404	-	-	404	As per data given by SSP	0
95	KAPS	69	-	-	69		
96	Essar Mahan	462	393	-	854		
97	BALCO	513	-	-	513	As per last quarter	300
98	KSK Mahanadi	885	393	-	1278		
99	Sasan UMPP	3859	-	-	3859		
100	JPL Stg-2	1361	-	-	1361	As per data given by JPL	1140

Generation Projection – Western Region (3)

							<u> </u>
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Jan'18 – 30 th June'18 (B)	Generation CoD from 1st Jul'18 to 30 th Sep'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
101	DGEN	99	-	-	99		
102	DB Power	981	-	-	981	As per email dtd:11.09.18 from DB power	900
103	Korba West	254	-	-	254		
104	Dhariwal	284	-	-	284		
105	GMR Chattishgarh Energy Ltd.	98	-	-	98		
106	JP Nigrie	1185	-	-	1185		
107	GMR Warora	538	-	-	538		
108	ACBIL+ Spectrum+MCCPL	671	-	-	671	As per ACBIL	678
109	MB Power (Anuppur)	917	-	-	917	As per MB Power	900
110	RKM Power	330	464	238	562		
111	Jhabua Power	427	-	-	427		
112	TRN Energy	558	-	-	558		
113	Sholapur STPP	566	-	-	566	As you NITES	435
114	Lara STPP	-	-	<u>528</u>	528	- As per NTPC	0
115	SKS Power	-	-	198	198		

Generation Projection – North-Eastern Region

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Jan'18 – 30 th June'18 (B)	Generation CoD from 1st Jul'18 to 30 th Sep'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
116	AGTPP, NEEPCO	93	-	-	93		110
117	Doyang, NEEPCO	63	-	-	63		70
118	Kopili , NEEPCO	198	-	-	198		186
119	Kopili 2, NEEPCO	17	-	-	17	As decided in 147th OCC meeting	23
120	Khandong, NEEPCO	55	-	-	55	0.00008	46
121	Ranganadi, NEEPCO	412	-	-	412		404
122	AGBPP_Kathalguri	234	-	-	234		220
123	Loktak, NHPC	105	-	-	105		105

Generation Projection – North-Eastern Region 35

			Generation				Back
S. No.	Entity	Projections based on 3 Years Data (A)	addition during	Generation CoD from 1st Jul'18 to 30 th Sep'18 (C)	TOTAL D=A+B+ C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
124	Palatana GBPP	554			554		660
125	Bongaigaon_NTPC	319	-	-	319		460
126	Pare NEEPCO	-	-	87	87		110
127	Arunachal Pradesh		-	-	-		-
128	Assam	299			299		272
129	Manipur	-			-	As decided in 147th OCC meeting	-
130	Meghalaya	190			190	-	269
131	Nagaland	15			15		24
132	Tripura	66			66		171
133	Mizoram	6			6		8

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

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Jan'18 – 30 th June'18 (B)	Generation CoD from 1st Jul'18 to 30 th Sep'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
134	Andhra Pradesh	5824	396	-	6220	As per data given by A.P.	9725
135	Telangana	4593	-	-	4593		
136	Karnataka	5959	-	-	5959		
137	Kerala	1408	-	-	1408	As per data given by Kerala	1586
138	Tamil Nadu	8121	-	-	8121		
139	Pondy	0	-	-	0	-	
140	Ramagundam	2472	-	-	2472	As per NTPC	2431
141	Simhadri 2	971	-	-	971	7.6 per 1011 c	948
142	Simhadri 1	969	-	-	969		948
143	SEPL	250	-	-	250		
144	Lanco Kondapalli	237	-	-	237		

Generation Projection – Southern Region...(2)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Jan'18 – 30 th June'18 (B)	Generation CoD from 1st Jul'18 to 30 th Sep'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
145	Kaiga	809	-	-	809		
146	NEYVELI (EXT) TPS	398	-	-	398		
147	NEYVELI TPS-II	1243	-	-	1243		
148	NEYVELI TPS-II EXP	301	-	-	301		
149	MAPS	361	-	-	361		
150	Vallur	1152	-	-	1152		
151	Meenakhshi	216	-	-	216		
152	Coastal Energen	754	-	-	754		
153	Kudankulam	1300	-	-	1300		
154	Tuticorin TPP	900	-	-	900		
155	Sembcorp Energy India Ltd.	1271	-	-	1271		
156	IL&FS	935	-	-	935		
157	Talcher Stage-II	1940	-	-	1940		
158	Sembcorp Gayatri Power Ltd.	1246	-	-	1246		
159	Kudgi STPS	1248	524	-	1771	As per NTPC	1536

Expected Generation addition – Northern Region



			ared Comm to 30 th Ju	nercial from ne'18				•	ed to be decla 8 to 30 th Sep':	
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
	Shravanti Gas	4	75	59						
Uttarakhand	Shravanti Gas	5	75	59	178					
	Shravanti Gas	6	75	59						
Rajasthan						Chhabra	5	660	432	
Kishanganga	Kishanganga	1	110	87						
Kishanganga	Kishanganga	2	110	87						
	Kishanganga	3	110	87						
Saini HED							1	50	40	50
Sainj HEP							2	50	40	50

Expected Generation addition – Western Region



			ared Com 3 to 30 th J	mercial fror une'18	Generation declared/expected to be declared Commercial from 1 st July'18 to 30 th Sep'18					
Entity	Bus Name	Unit No.	Installed Capacity	Gen. considered	Total	Bus Name	Unit No.	Installed Capacity	Gen. considered	Total
			(MW)	(MW)	(MW)			(MW)	(MW)	(MW)
	Nasik TPP	3	270	177						
Maharashtra	Nasik TPP	4	270	177	530	O Sirpur Power	1	150	98	98
	Nasik TPP	5	270	177						
Mauda	Mauda	3	660	432	432					
Essar Mahan	Essar Mahan	2	600	393	393					
KSK Mahanadi	KSK Mahanadi	3	600	393	393					
RKM Power	RKM Power	2	360	232	232					
Lara STPP						Lara STPP	1	800	528	528
SKS Power						SKS Power	1	300	198	198

Expected Generation addition – Eastern Region



			lared Comi 8 to 30 th Ju		m	Generation Commerci		-	to be declar o 30 th Sep'18	
Entity	Entity Bus Name Unit Installed Gen. Total Capacity		Bus Name	Unit No.	Installed Capacity	Gen. considered	Total			
			(MW)	(MW)	(MW)			(MW)	(MW)	(MW)
Bihar						Brauni Extn.	8	250	164	164
Nabinagar BRBCL	Nabinagar BRBCL	2	230	151	151	Nabinagar BRBCL	3	230	151	151

Expected Generation addition – Southern Region



			eclared Cor 118 to 30 th	nmercial fro June'18	m	Generation Commerci		-	ted to be de 18 to 30 th Se	
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)
Andhra Pradesh	Rayalaseema TPP	6	600	396	396					
Kudgi STPS						Kudgi STPS	3	800	524	524

Expected Generation addition –North Eastern Region

		eclared Co 118 to 30 th	mmercial fro June'18	Generation (Commercia				ep'18		
Entity	Bus Name	Unit No.	Installed Capacity	Gen. considered	Total	Bus Name	Unit No.	Installed Capacity	iconsider	Total
			(MW)	(MW)	(MW)			(MW)	(MW)	(MW)
Daro HED						Pare HEP	1	55	44	00
Pare HEP						Pare HEP	1	55	44	88

Comparison of Demand for Q1-18-19 43

	Northern Region	on	
State/Region/System	Actual Peak Demand Met (MW)	Projected Demand (MW)	Change (in %)
Chandigarh	324	372	↓ -13%
Delhi	6192	6500	↓ -5%
Haryana	8702	8052	↑ 8%
Himachal Pradesh	1434	1381	1 4%
Jammu & Kashmir	2245	2238	↑ 0.3%
Punjab	9460	9633	↓ -2%
Rajasthan	11016	9938	11%
Uttar Pradesh	18681	19500	↓ -4%
Uttarakhand	2061	1999	1 3%

Contd...

Eastern Region						
State/Region/System	Actual Peak Demand Met (MW)	Projected Demand (MW)	Change(in %)			
B ihar	4770	4900	↓ -3%			
DVC	2720	2900	↓ -6%			
Jharkhand	1234	1300	↓ -5%			
Orissa	4538	4401	1 3%			
West Bengal	8629	8100	↑ 7%			
Sikkim	85	90	↓ -5%			
Western Region						
Chhattisgarh	3672	4016	√ -9%			
Gujarat	15729	16408	√ -4%			
Madhya Pradesh	8567	8731	√ -2%			
Maharashtra	22721	21500	1 6%			
Daman & Diu	336	364	-8%			
Dadra Nagar Haveli	778	784	↓ -1%			
Goa	528	589	↓ -10%			

Contd..

Southern Region						
State/Region/System	Actual Peak Demand Met (MW)	Projected Demand (MW)	Change (in %)			
Andhra Pradesh	9127	9100	0.3%			
Telangana	8164	9328	√ -12%			
Karnataka	9819	9581				
Kerala	3821	3821	0%			
Tamil Nadu	14845	15200	↓ -2%			
Pondicherry	394	399	↓ -1%			
North Eastern Region						
Arunachal Pradesh	127	115	10%			
Assam	1616	1580	1 2%			
Manipur	177	175	1%			
Meghalaya	334	290	↑ 15%			
Mizoram	90	93	-4%			
Nagaland	125	133	↓ -6%			
Tripura	272	235	↑ 15.9%			

भारत सरकार/Government of India विधुत मंत्रालय/Ministry of Power केन्द्रीय विधुत प्राधिकरण Central Electricity Authority विधुत प्रणाली परियोजना प्रबोधन प्रभाग Power SystemProject Monitoring Division सेवा भवन ,आर.के.पुरम,/Sewa Bhawan, R.K.Puram नई दिल्ली-110 066/New Delhi-110 066 Website: www.cea.nic.in Telefax no:011-26103242 Email:bkarya1664@gmail.com ceapspm@gmail.com



ISO.: 9001-2008

दिनांक: 20/12/2016

फ़ा. सं. केविप्रा /PS/PSPM/07/07/2016/

सेवा में.

(संलग्न सूची के अनुसार)

विषय:

Minutes of the meeting held on 15/12/2016 with Transmission Service Provider (M/s Sterlite Grid Limited) and implementing agencies of interconnecting (upstream/downstream) elements to decide Revised Scheduled Commercial Operation Date (RSCoD) for development of transmission system for "Creation of new 400 kV substations in Gurgaon area and Palwal area as a part of ISTS" to be implemented by M/s Gurgaon Palwal Transmission Limited (A subsidiary of Sterlite Grid Limited) through TBCB route.

महोदय, उपरोक्त विषय पर मुख्य अभियंता (PSPM) केविप्रा द्वारा दिनांक 15/12/2016 की बैठक का कार्यवृत्त संलग्न है

यह पत्र मुख्य अभियंता (PSPM) के अनुमोदन से जारी किया जा रहा है

संलग्नः ऊपरोक्त अनुसार

भवदीय,

(आरके तिवारी) उप निदेशक (PSPM)

जानकारी के लिए कॉपी भेज दिया गया है :

1. Chief Engineer (PSPA-I), CEA

2. Director (Trans.), Ministry of Power, Shram Shakti Bhawan, Rafi Marg New Delhi

3. PPS/PS to Chairperson, CEA/Member (PS), CEA

List of Addressees:

SI. No.	Address	Tele/Fax No./email
1.	Chairman & Managing Director, POWERGRID Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) - 122001	0124-2571700-19 0124-2571760, 0124-2571762(Fax) isjha@powergridindia.com prpati@powergridindia.com
2.	Executive Director(CMG) Powergrid Corporation of India Ltd., SAUDAMINI, Plot No.2, Sector-29, Gurgaon Ph: 0124 2571700-719 Fax: 95124 2571760/2571945/2571932	Ph: 0124 2571700-719 Fax: 95124 2571760/2571945/2571932 poonam@powergridindia.com M: 9910377991 (Poonam Varshney, AGM TBCB)
3.	Chairman & Managing Director PFC Consulting Limited First Floor, "Urjanidhi", 1, Barakhamba Lane, Connaught Place New Delhi – 110001	Tel: 011-23456100 Fax: 011-23456170 sanjaynayak72@gmail.com
4.	Managing Director, Haryana Vidyut Prasaran Nigam Ltd., Shakti Bhawan, Sector-6, Panchkula – 134 109	Ph: 0172-2560579, Fax: 0172- 2565746 Email: md@hvpn.gov.in
5.	Shri Ajmer Singh Gill (Director/Projects), Haryana Vidyut Prasaran Nigam Ltd., Shakti Bhawan, Sector-6, Panchkula – 134 109	Extn.: 2304 Ph: 0172-2560713 directorprojects@hvpn.org.in
6.	COO & Business Head Sterlite Grid Limited, The Mira Corporate Suite, Plot No.1 & 2. C Block , 2 nd Floor, Ishwar Nagar, Mathura road, New Delhi -110065	011- 49962200 (T) 011-49962288 (F) tan.reddy@sterlite.com

Minutes of the meeting held on 15/12/2016 with Transmission Service Provider (M/s Sterlite Grid Limited) and implementing agencies of interconnecting (upstream/downstream) elements to decide Revised Scheduled Commercial Operation Date (RSCoD) for development of transmission system for "Creation of new 400 kV substations in Gurgaon area and Palwal area as a part of ISTS" to be implemented by M/s Gurgaon Palwal Transmission Limited (A subsidiary of Sterlite Grid Limited) through TBCB route.

- 1. The list of participants is attached at Annexure-I.
- Chief Engineer (PSPM), CEA welcomed all the participants and after brief introduction he informed participants that Ministry of Power (MoP) vide OM dated 5/10/2016 constituted a committee having members from CEA, PGCIL, POSOCO, STUs, LLTTCs, Generation Project Developers & Transmission Project Developers to ensure smooth operationalization of the policy for early commissioning of transmission projects awarded through TBCB route. In this regard first committee meeting was held on 26/10/2016. As per the mechanism transmission licensee is required to send the request for early commissioning in advance (i.e. 24 months in advance of the intended early SCOD) to the convener and Member Secretary of the Committee i.e. PSPA-I Division, CEA and also communicate the same to the implementing agencies of the interconnecting (upstream/downstream) elements.
- 3. As indicated in minutes of first meeting dated 26/10/2016 that the transmission schemes being implemented by M/s Sterlite Grid Limited (SGL) had been awarded before the constitution of the committee, therefore, these schemes may be considered for early commission as proposed by M/s SGL. Implementing agencies of (upstream/downstream) elements were also invited so that mutually agreed early commissioning date (RSCOD) could be affirmed through mutual consultation.
- 4. Accordingly, one of five schemes proposed by M/s SGL was discussed in this meeting. The name of this transmission project is "Creation of new 400 kV substations in Gurgaon area and Palwal area as a part of ISTS" to be implemented by M/s Gurgaon Palwal Transmission Limited (A subsidiary of M/s SGL". Following is the scope of construction work under this scheme:
 - (i) Aligarh-Prithala 400 kV D/C HTLS line
 - (ii) Prithala-Kadarpur 400 kV D/C HTLS line
 - (iii) Kadarpur-Sohna road 400 kV D/C HTLS line
 - (iv) LILO of Gurgaon Manesar 400 kV D/C (Q) line at Sohna Road
 - (v) Neemrana(PG) Dhanonda 400 kV D/C HTLS line
 - (vi) 2x500 MVA, 400/220 kV GIS at Kadarpur (Gurgaon)
 - (vii) 2x500 MVA, 400/220 kV GIS at Sohna Road (Gurgaon)
 - (viii) 2x500 MVA, 400/220 kV GIS at Prithala(Palwal)
 - (ix) 2 nos. 400kV line bays at 400kV Dhanonda (HVPNL) S/S

- 5. During detailed deliberations lead LLTTC Haryana Vidyut Prasaran Nigam Limited (HVPNL) informed that they have written M/s Sterlite to submit locations/co-ordinates of above three Substations (Sohna Road, Prithala and Kadarpur) vide two letters dated 27/10/2016 and 23/11/2016 but no reply had been received from M/s SGL. He further stated that due to non-availability of locations of these substations HVPNL could not finalize downstream system from Sohna Road, Prithala and Kadarpur substations.
- 6. M/s SGL informed that land for Sohna Road and Prithala substations has been identified and acquisition of land is under progress which would be completed within two weeks. He further stated that the details of villages etc. of these two S/s would be shared with HVPNL. M/s SGL representative informed that the negotiation for land of Kadarpur S/S is under progress, at the locations as indicated in the RFP. HVPNL representative informed that the location of Kadarpur S/S is not suitable for them as it would not meet the requirement of Load Centre (Zone 1 to 5) as envisaged by HVPNL and also the length of their 220kV transmission line would increase.
- CE (PSPM) suggested M/s SGL to find out the location of Kadarpur S/S which is suitable for HVPNL.
- 8. HVPNL requested M/s SGL that they may have a meeting with Director (Project) HVPNL to discuss the issue of downstream system and its rescheduling as HVPNL had already planned to complete lines by Sep'19. M/s SGL agreed to meet Director (Project) shortly.
- CE(PSPM) sought progress of bays construction by PGCIL at Neemrana (PG) & Aligarh (PG) S/s and it was informed by PGCIL that construction work is going on as per schedule i.e. Oct'18.
- 10. CE(PSPM) advised M/s SGL & HVPNL representatives to discuss the issue of finalization of downstream system for Sohna Road, Prithala and Kadarpur S/s with Director (Project) HVPNL and submit report to CEA for consideration of early commissioning of the scheme.

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Meeting ended with thanks to chair.

Annexure- I

List of Participants

<u>CEA</u>

Shri B K Arya
 Shri R K Tiwari
 Shri I K Mehra
 Shri R K Tiwari
 Dy. Director (PSPM)
 Shri Ravi Kant
 Asstt. Director-II (PSPM)

PGCIL

1. Shri P K Gupta GM(CMG)

Sterilite

Shri TAN Reddy
 Shri Bigyaw Parija
 Shri Aditya Kislay
 Shri Sanjay Zutshi
 Shri Amit Charan
 Shri Amitanshu
 Shri Rohit Gera

HVPNL

Shri Vipin Gupta
 Shri Anil Yadav
 Shri B K Raghava
 Shri Amit Kumar
 Shri Amit Kumar





भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority विद्युत प्रणाली परियोजना प्रबोधन प्रभाग Power System Project Monitoring Division

सं.: केविप्रा/पीएस/पीएसपीएम/7/7/2018

दिनांक: 28.03.2018

सेवा में,

(संलग्न सूची के अनुसार)

विषयः ट्रांसिमशन लाइन टर्मिनल बेय से संबंधित मुद्दों पर चर्चा के लिए मुख्य अभियन्ता पीएसपीएम(द्वारा 19.02.2018 को ली गई बैठक का कार्यवृत्त ।

महोदय,

मुख्य अभियंता (पीएसपीएम), केविप्रा की अध्यक्षता में ट्रांसिमशन लाइन टर्मिनल बेय से संबंधित मुद्दों पर 19.02.2018 को ली गई बैठक का कार्यवृत्त संलग्न है ।

संलग्नक : यथोपरी ।

भवदीय,

(आर.पी. प्रधान) निदेशक

प्रति सूचनार्थः

- 1. संयुक्त सचिव (पारेषण), विद्युत मंत्रालय, श्रम शक्ति भवन, रफ़ी मार्ग, नई दिल्ली
- 2. सदस्य (विद्युत प्रणाली), केविप्रा के प्रधान निजी सचिव

पते की सूची:

SI. No.	Organization	Address	Tele/Fax No./email
1	PGCIL	Sh. I S Jha, Chairman & Managing Director, Powergrid Corporation of India Ltd., SAUDAMINI, Plot No.2, Sector-29, Gurgaon, Haryana-122001.	cmd@powergridindia.com
2	PGCIL	Executive Director(CMG) Powergrid Corporation of India Ltd., SAUDAMINI, Plot No.2, Sector-29, Gurgaon	Ph: 0124 2571700-719 Fax: 95124 2571760/2571945/2571932 prpati@powergridindia.com(9910 377994) ajaiku@hotmail.com (9910999164)
3	AEGCL	Managing Director, Assam Electricity Grid Corporation Ltd., Bijulee Bhawan, Paltan Bazar, Guwahati – 781 001	Fax: 0361 2541090.
4	MPPTCL	Managing Director, Madhya Pradesh Power Transmission Co. Ltd., Block No.3, Shakti Bhawan, Vidyut Nagar,Rampur, JABALPUR – 482 008	Ph: 0761 2661234 FAX: 0761 - 2665593/2664141
5	MPPTCL	Chief Engineer(Power System), Madhya Pradesh Power Transmission Company Limited, Shakti Bhavan, Vidyut Nagar, Rampur, Block-3 JABALPUR - 482 008	Fax No: 0761-2665593/2665593
6	Essel Infra	Amit Kumar Sr. Vice President Essel Infra projects Limited Mohan Cooperative Industrial Estate, Saidabad, New Delhi-110044	M: 9953200475 amit.kumar1@infra.esselgroup.c om
7	Sterilite Grid Ltd.	Sh TAN Reddy, Head - Corporate Affairs & Business Devpt. Sterlite Grid Limited The Mira Corporate Suite, Plot No. 1 & 2, C Block, 2nd Floor, Ishwar Nagar, Mathura Road, New Delhi 110 065	Tele:49962200 Mobile: 9310490976 Fax. 49962288 Email: tan.reddy@sterlite.com
8	Adani Power Ltd.	Shri L.N Mishra, Head – Transmission Business M/s Adani Power Limited, 7th Floor, Sambhav Building, Judges Bunglow Road, Bodakdev, Ahmedabad, Gujarat- 380015	079-25557134 Fax:079-25557177 In.mishra@adani.com 9099900244 sameer.ganju@adani.com 8860550077

Minutes of meeting taken by Chief Engineer (PSPM) on 19.02.2018 to discuss issues pertaining to terminal bays for Transmission Line awarded through TBCB route.

List of participants is enclosed at Annexure-I.

Chief Engineer (PSPM), CEA welcomed all the participants. After brief introduction, CE (PSPM), CEA informed that this meeting has been called to resolve the issues pertaining to transmission line terminal bays.

The agenda wise issued were discussed and deliberations of the same are as under.

A. ADANI TRANSMISSION LTD. (ATL)

1. Sipat Transmission Limited (STL) – Additional System Strengthening for Sipat STPS:

CE(PSPM) sought the progress of Sipat-Bilaspur (PS) 765 kV 3rd S/C line. The representative of STL submitted the progress as under:

• Sipat STPS - Bilaspur 765 kV S/C (Q) line

Length: 24ckm
Locations: 73 nos.
Foundation completed: 71 no.
Tower erected: 71 no.
Stringing completed: 18.6 km
Scheduled COD: 22.11.8
Anticipated COD: Feb'1

CE(PSPM) informed that early commissioning of this line would improve the reliability of evacuation system of Sipat STPS. The representative of STL stated that Sipat-Bilaspur (PS) 765 kV 3rd S/C line will be ready by Feb'18. PGCIL representative stated that associated 765 kV line bays at Bilaspur will be completed by Jun'18 as mutually agreed, however, PGCIL will make all out efforts to complete the bay by Mar'18.

• Bilaspur (PS) - Rajnandgaon 765 kV D/C (hexa) line

CE(PSPM) sought the progress of Bilaspur(PS) -Rajnandgaon 765 kV D/C line. The representative of STL submitted the progress as under:

Length: 324ck
Locations: 428 ns.
Foundation completed: 427 ns.
Tower erected: 427 no.
Stringing completed: 315 cm
Scheduled COD: 22.03.9
Anticipated COD: Feb'18

ATL stated that 765 kV D/C Bilaspur (PS) - Rajnandgaon line will be ready by Feb'18. ATL requested PGCIL for early completion of 2 Nos. bays at Bilaspur PS to charge the Bilaspur-Rajnandgaon line

in order to avoid theft. PGCIL stated that supply of reactors from GE is pending and they have planned the completion in line as per mutually agreed date of early commissioning i.e. by Nov'18.

2. Raipur - Rajnandgaon Warora Transmission Ltd. (RRWTL) - Additional System Strengthening Scheme for Chhattisgarh IPPs - Part B

Raipur (Pool) - Rajnandgaon 765 kV D/C (hexa) line

CE(PSPM) sought the progress of Raipur (Pool) -Rajnandgaon 765 kV D/C line. The representative of STL submitted the progress as under:

Length: 79.56 ckm
Locations: 104 nos
Foundation completed: 104 nos
Tower erected: 104 nos
Stringing completed: 79.56 cKm
Schedule completion: 22.11.2018

Actual completion: May'2017 (works completed)

ATL informed that 765 kV D/C Raipur (Pool) -Rajnandgaon line completed in May'17 and construction work of associated 2 Nos.765 kV Bays at Rajnandgaon SS (Switching) is also completed in Nov'17. ATL stated that electrical inspection of line and Rajnandgaon switching station was also completed on 8th Feb'18. PGCIL stated that the construction work of associated 2 Nos. 765 kV bay at Raipur PS will be ready by Nov'18 as per schedule.

• Rajnandgaon – New Pooling Station near Warora 765 kV D/C line

CE(PSPM) sought the progress of Rajnandgaon – New Pooling Station near Warora 765 kV D/C line. The representative of STL submitted the progress as under:

Length: 532 ckm
Locations: 688 nos
Foundation completed: 550 nos
Tower erected: 516 nos
Stringing completed: 200.6 cKm
Schedule completion: 22.11.2018
Anticipated completion Jun'18

ATL informed that 765 kV D/C Rajnandgaon – New Pooling Station near Warora line will be ready by Jun'18. PGCIL stated that, the associated 2 Nos. 765 kV bays at New Warora Pooling station will be ready by 15th Mar'18. M/s Essel stated that the installation of 2x240 MVAR line reactors at Warora end will be completed by 30th November 2018. ATL requested M/s Essel to expedite installation of reactors at Warora end for charging of this element. CE (PSPM) requested Essel to re-asses the completion time line for installation of reactors at Warora matching with commissioning of transmission line as per TSA.

3. Chhattisgarh WR Transmission Ltd. (CWRTL) – System Strengthening for IPPs in Chhattisgarh & Other Generation Projects in Western Region

CE(PSPM) sought the progress of 400 kV interconnection at Gwalior 765/400 kV s/s. The representative of ATL submitted the progress as under:

• Gwalior-Morena 400 kV D/C (Q) line

Length: 95.6 ckm

Locations: 145 nos
Foundation completed: 145 nos
Tower erected: 145 nos
Stringing completed: 95.6 cKm
Schedule completion 22.05.2018

Anticipated completion Sep'17 (works completed)

ATL informed that 400 kV D/C Gwalior-Morena line was completed in Sept'17 and associated 2 Nos. of 400 kV Bays at Morena (TBCB) will be completed by Feb'18. PGCIL stated that the associated 2 Nos. 400 kV bays at Gwalior (PG) will be ready by Mar'18. ATL stated that 4 no. of 220 kV outlets from Morena (TBCB) of MPPTCL is completed in Jan'18.

CE(PSPM) sought the progress of additional evacuation line from Vindhyachal IV & V STPP. The representative of ATL submitted the progress as under:

Vindhyachal STPS - IV & V - Vindhyachal pool 400 kV D/C (Q) line

Length: 54.62 ckm
Locations: 87 nos
Foundation completed: 87 nos
Tower erected: 87 nos
Stringing completed: 54.62 cKm
Schedule completion 22.01.2019

Anticipated completion: Dec'17 (works completed)

ATL informed that the 400 kV D/C Vindhyachal IV & V STPP – Vindhyachal Pool was completed in Dec'17 and associated 2 Nos. bays at Vindhyachal STPP of NTPC (CWRTL) has also completed in Oct'17. PGCIL stated that the construction work of associated 2 Nos. Bays at Vindhyachal Pool is completed. PGCIL stated that PLCC related work needs to be completed at Vindhyachal pooling station; to which ATL submitted that ATL will complete the work in next two days.

CE(PSPM) sought the progress of additional systeme strengthening scheme for Chhattisgarh IPPs. The representative of ATL submitted the progress as under:

Sasan UMPP – Vindhyachal Pooling Station 765 kV S/C (Q) line

Length: 5.892 ckm
Locations: 22 nos
Foundation completed: 22 nos
Tower erected: 22 nos
Stringing completed: 5.892 cKm
Schedule completion 22.11.2018

Actual completion Nov'17 (works completed)

ATL informed that 765 kV S/C Sasan UMPP – Vindhyachal Pooling Station line was completed in Nov'17 and associated 1 Nos. of 765 kV Bay at Sasan was also completed in Oct'17. PGCIL stated that associated 1 Nos. 765 kV Bay at Vindhyachal Pool will be ready by Mar'18.

Raigarh (Kotra) – Champa (Pool) 765 kV S/C (Q) line

Length: 94 ckm
Locations: 261 nos
Foundation completed: 245 nos
Tower erected: 238 nos
Stringing completed: 62.3 cKm

Schedule completion 22.11.2018
Anticipated completion Mar'18

ATL informed that 765 kV S/C Raigarh (Kotra) –Champa (Pool) line will be ready by Mar'18. PGCIL stated that, the associated one no. 765 kV Bay at Raigarh (Kotra) and one no. 765 kV Bay at Champa (Pool) will be ready by Jun'18.

Champa (Pool) – Dharamjaygarh 765 kV S/C (Q) line

Length: 49 ckm
Locations: 150 nos
Foundation completed: 138 nos
Tower erected: 129 nos
Stringing completed: 30 cKm
Schedule completion 22.11.2018
Anticipated completion Mar'18

ATL informed that 765 kV S/C Champa (Pool) - Dharamjaigarh line will be ready by Mar'18. PGCIL stated that the associated one no. 765 kV Bay at Champa PS and one no. 765 kV Bay at Dharamjaygarh will be ready by Jun'18.

LILO of one ckt of Aurangabad – Padghe 765 kV D/C (hexa) line at Pune

Length: 130 ckm
Locations: 179 nos
Foundation completed: 125 nos
Tower erected: 96 nos
Stringing completed: 19.9 cKm
Schedule completion 22.03.2019
Anticipated completion Jul'18

ATL informed that the LILO of one circuit of Aurangabad – Padghe 765 kV D/C line at Pune will be ready by July'18. PGCIL stated that the associated 2 Nos. 765 kV bays at Pune will be ready by July'18.

B. Sterlite Grid Limited (SGL)

1. NER-II Transmission Limited (NTL)

The representative of NTL requested POWERGRID to complete the construction of bays at Silchar, Misa and Biswanath Chariyalli end by July'19 for commissioning of 400kV D/C Silchar Misa transmission line and 132kV D/C Biswanath Chariyalli – Itanagar line. CE (PSPM) also requested POWERGRID for matching the time frame of bays with the transmission lines. POWERGRID informed that efforts will be made to complete the bays work at Silchar, Misa and Biswanath Chariyalli end by July'19.

2. Odisha Generation Phase-II Transmission Ltd (OGPTL):

The representative of M/s OGPTL (a subsidiary of Sterlite Grid Limited) informed that as per TSA, the SCOD for 765kV D/C Jharsuguda – Raipur Transmission line is Aug'19 and they are planning to prepone the commissioning by June'18. In the meeting held at CEA on 27-12-2016, CE (PSPM) advised POWERGRID and OGPTL for a mutually agreed date and to complete the construction of bays in the first quarter of 2018 so that the line can be utilized properly. GPTL Representative informed that the line will be completed by May'18. POWERGRID representative informed that the

construction of bays will be completed by Oct'18 on best effort basis. CE(PSPM) advised to match the bays schedule as per TSA.

3. Gurgaon Palwal Transmission Limited (GPTL):

The Representative of M/s GPTL (a subsidiary of Sterlite Grid Limited) informed that as per TSA, the SCOD for 400kV D/C Neemrana – Dhanonda Transmission line is May'19. POWERGRID informed in the meeting held at CEA on 15-12-2016 that the construction work of bays at Neemrana end is going on and will be completed by Oct'18. GPTL representative informed that the construction of 400kV D/C Neemrana – Dhanonda line is in advance stage and will be completed by end of Mar'18. CE (PSPM) advised PGCIL to match the completion of bays as per TSA.

Meeting ended with thanks to chair

List of Participants

CEA

1. Sh. B. K. ARYA CHIEF ENGGINEER ----- in chair

2. Sh. R. K TIWARI3. Sh. DHANESH KUMARDY. DIRAD-I

POWERGRID

Sh. RAJESH VERMA
 SMT. PUNAM
 CM (CTU-PLG.)
 CH. MANAGER

STERLITE POWER

Sh. MOHAN BABU PALADUGU
 Sh. TAN REDDY
 Sh. RAGHRAM JALLIPALLI
 Sh. ROHIT GERA

ESSEL

1. Sh. AMIT KUMAR GM

ADANI POWER LTD.

1. Sh. SAMEER GANJU AVP

2. Sh. MANANK BHUTT MANAGER

3. Sh. PRAVEEN TAMAK ASSOCIATE MANGAER





भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority

विद्युत प्रणाली योजना एवं मूल्यांकन-। प्रभाग Power System Planning & Appraisal-I Division

सं / No. 100/1A/PSP&A - I/2017/ 573- 587

दिनांक / Date: 04.07.2017 06.01, 2017

To

As per the list

Commissioning of transmission projects under implementation by M/s ATL through TBCB route

महोदय / महोदया / Madam / Sir,

Please find enclosed the minutes of the meeting held on 16.06.2017 to discuss the early commissioning of transmission projects under implementation by M/s STL, RRWTL & CWRTL (Owned by M/s Adani Transmission Ltd – ATL) through TBCB route.

This is for kind information and necessary action.

भवदीय / Yours faithfully,

(रवीन्द्र गुप्ता / Ravinder Gupta)

(मुख्य अभियन्ता / Chief Engineer)

List of addressees

- Chief Engineer, PSP & A II Division, Central Electricity Authority, New Delhi
- 2) COO (CTU), Saudamini, Plot No. 2, Sector 29, Gurgaon 122001

TSPs:

- 3) CEO, RRWTL, C 105, Anand Niketan, New Delhi 110021
- 4) CEO, STL, C 105, Anand Niketan, New Delhi 110021
- 5) CEO, CWRTL, C 105, Anand Niketan, New Delhi 110021

LTTCs:

- 6) Madhya Pradesh Power Trading Company Ltd., Block No. 11, Ground Floor, Shakti Bhawan, Vidhyut Nagar, Rampur, Jabalpur 482008, Madhya Pradesh
- 7) Chhattisgarh State Power Distribution Company Ltd., P O Sundar Nagar, Dangania, Raipur 492013, Chhattisgarh
- 8) Gujarat Urja Vikas Nigam Ltd. Vidhyut Bhawan, race Course, Vadodara 390007
- 9) Maharashtra State Electricity Distribution Company Ltd., Prakashgad, 4th Floor, Bandra (East) Mumbai 400051
- 10) Goa Power Department, Govt. of Goa, Curti Ponda, Goa 403401
- 11) Electricity Department of Dadra Nagar Haveli, Administration of Dadra Nagar Haveli, 66 kV, Amli Road, Silvassa 396230
- 12) Electricity Department of Daman and Diu, Plot no. 35, OIDC Complex, Near Fire station, Somnath, Daman 396210

Upstream & Downstream implementing agencies

- 13) CMD, Madhya Pradesh Power Transmission Company Ltd., Shakti Bhawan, Rampur, Jabalpur 482008
- 14) Director (Project), PGCIL, Saudamini, Plot No. 2, Sector 29, Gurgaon 122001
- 15) CEO, PWTL, Sampriti Nagar, Nari Ring Road, Uppalwadi, Nagpur 440026

Minutes of the meeting held on 16.06.2017 to discuss the early commissioning of transmission projects under implementation by M/s ATL through TBCB route

A meeting was held on 16.06.2017 at CEA, New Delhi, under the Chairmanship of Member (PS), CEA to discuss the request of M/s STL, M/s RRWTL and M/s CWRTL (owned by M/s Adani Transmission Ltd. – ATL) regarding early commissioning of the transmission schemes, which are already under implementation through tariff based competitive bidding (TBCB) route. The list of participants is enclosed as Annexure – I.

- 1. Member (PS), CEA welcomed the participants to the meeting. After brief introduction, Member (PS), CEA requested Chief Engineer (PSPA-I), CEA to start the proceedings.
- 2. CE, PSPA–I, CEA stated that MoP vide its order no. 15/1/2013-Trans dated 15.07.2015 has issued a policy for incentivizing early commissioning of system strengthening transmission projects awarded through TBCB route or assigned to M/s PGCIL under compressed time schedule. The policy entitles the transmission system provider (TSP) for transmission charges from actual date of COD prior to the original scheduled COD. Subsequently, MoP vide its OM no. 15/1/2013-Trans dated 05.10.2016 had constituted a committee under chairmanship of Member(PS), CEA to ensure smooth operationalization of the policy for incentivizing early commissioning of Transmission schemes.

As per the mechanism suggested in the OM of MoP, the transmission licensee is required to send the request for early commissioning well in advance (i.e. 24 months in advance of the intended early SCOD) to the Convener & Member Secretary of the committee and communicate the same to the implementing agencies of the interconnecting (upstream / downstream) elements. The request received from M/s STL, RRWTL and CWRTL for the early commissioning do not qualify under the MoP policy for the early commissioning, as the request is not received well in advance (i.e. less than 24 months prior to the intended early SCOD). However, the Transmission Service Agreement (TSA) between TSP and LTTCs provides that COD shall not be date prior to the scheduled COD mentioned in the TSA unless mutually agreed by all parties. In view of the provision of the TSA, any early commissioning date of transmission elements prior to the Scheduled COD is possible, only if, all the parties (TSP & LTTCs) mutually agree it.

Therefore, to discuss the early commissioning proposals of M/s STL, RRWTL and CWRTL, this meeting has been convened with LTTCs, TSP, CTU and implementing agencies of upstream & downstream network.

3. PGCIL stated that the upstream & downstream network associated with transmission scheme / element (being implemented through TBCB route) are scheduled to be implemented in the matching timeframe of the transmission scheme / element. Preponing of the upstream / downstream network (say 765 / 400 kV bay) to match with revised schedule, requires additional efforts and incase associated transmission element doesn't come as per the revised schedule, the asset would lie unutilized and CERC would not allow the tariff for the same.

- 4. CEA stated that to avoid such situation the parties should indemnify each other through a suitable implementation agreement and there is provision for mutual indemnification agreements between parties involved, under the mechanism suggested for smooth operationalization of policy for early commissioning of transmission projects.
- 5. CTU stated that there are many cases, where transmission scheme / element has been commissioned as per scheduled COD, however, due to delay in implementation of downstream network the transmission scheme / element remained unutilized and CERC has not allowed inclusion of such elements in PoC pool stating that the transmission charges for such elements are to be recovered from the provider of the downstream network. In case of early commissioning also, it is very difficult to ensure the completion of upstream & downstream network in a matching timeframe. Also, as on date, there is no standard implementation agreement. Further, the parties would become conservative, if they are to sign implementation agreement.
- 6. CEA stated that as far as the present cases are concerned, we are arriving at a mutually agreeable date of revised SCOD. There would not be any financial implication on the parties involved in case of mismatch between transmission element and upstream & downstream network. However, the parties involved would coordinate with each other to ensure that there is no mismatch in commissioning of transmission scheme and upstream & downstream network. In case of anticipated delay in implementation of any element (which jeopardizes the usefulness of the early commissioning of the system), then the parties may arrive at another mutually agreeable early commissioning date.
- 7. Based on the above premises, the proposals received from M/s STL, RRWTL and CWRTL were discussed scheme / element wise and the following was agreed:
 - i) The elementwise details of the three schemes along with their scheduled COD as per TSA, TSP's proposed early commissioning COD and the mutually agreed date for early commissioning is enclosed at Annexure II.
 - ii) There will be no financial implication either on the TSP or on the implementing agencies of the upstream and downstream network, in case of mismatch in achieving the early commissioning date.
 - iii) The TSP and the implementing agency of the upstream and downstream network would make best effort to achieve the mutually agreed date of early commissioning as given in Annexure-II. The parties involved would coordinate with each other to ensure that there is no mismatch. In case of any anticipated mismatch, the respective transmission elements are to be completed by revised mutually agreed date or by SCOD, whichever is earlier.

Meeting ended with the thanks to the chair.

Annexure - I

<u>List of participants of a meeting regarding advancement in schedules of</u>

<u>TBCB schemes of M/s APL held on 16.06.2017.</u>

			î .	L liciu vii 10.00.2017.	
S.	Name	Designation	Organization	E-mail	Mobile No.
No.	Mr./Mrs.				
1	P. S. Mhaske	Member	CEA		
2	S. K. Roy	Chief	CEA		
	Mahapatra	Engineer			
3	Ravinider	Chief	CEA	ravindergupta_cea@nic.in	9968286184
	Gupta	Engineer			
4	Rishika Saran	Director	CEA		
5	Awdhesh	Director	CEA	awd.cea@gmail.com	9868664087
	Kumar Yadav				
6	Shiva Suman	Dy.	CEA	shivvasuman@nic.in,	011- 26732330
		Director		shivvasumanmedak@gmail.com	011-20732330
7	Vikas Sachan	Asst.	CEA	vikas.cea@gmail.com	7838263649
		Director			
8	Ramchandra	DGM	CTU	ramchand@powergridindia.com	9910378128
9	P. K. Gupta	GM	POWERGRID	pk1gupta@powergridindia.com	9873918911
10	A. Chakraborti	AGM	POWERGRID		9422811708
11	Atul Mathur	ACDE	POWERGRID	mathur.atul@powergridindia.com	9717699633
12	Sandeep Roy	Executive	MPPTCL	ettcmgwd@gmail.com	9452805145
		Engineer			
13	Ravi Bhusan	Resident	MPPTCL	ravi.bhusan@mpptcl.com	9311516609
		Engineer			
14	L. N. Mishra	Sr. V.P	Adani	ln.mishra@adani.com	9099900244
15	Sameer Ganju	GM &	Adani	sameer.ganju@adani.com	88606550077
		Head (NR)			
16	Yogesh	Adviser	Adani	yogesh.agarwal1@adani.com	9810078489
	Aggarwal				

Annexure - II

					1	Annexure - II
S. No.	Elements	Developer	SCOD as per TSA	Indicated Early date of commissioning	Mutually agreed date of Early Commissioning	Remarks
1	Sipa	t Transmission	Ltd. (STL) -	Additional Systen	n Strengthening fo	r Sipat STPS
a	765 kV S/C Sipat - Bilaspur Pooling Station	STL	Nov' 18	Dec'17		Early commissioning of this transmission line
i	1 no. 765 kV line bay at Sipat STPP of NTPC	STL	Nov'18	May'17	June' 18	would improve the reliability of evacuation
ii	1no. of 765 kV line bay at Bilaspur PS	PGCIL	Nov'18*	June'18		system of Sipat STPS.
b	765 kV D/C Bilaspur Pooling Station - Rajnandgaon	STL	Mar' 19	July 18	Nov'18	The system beyond Rajnandgaon (i.e,
i	2 no. of Bays at Bilaspur PS	PGCIL	Mar'19*	Nov'18		Rajnandgaon-Warora- Parli) is under implementation by
ii	2 no. of 765 kV bay at Rajnandgaon SS (Switching)	RRWTL	Nov' 18	Nov'17	Nov'18 (SCOD)	different TSPs (RRWTL, PWTL, and PPTL).
2	Raipur - Rajnand	lgaon Warora T		Ltd. (RRWTL) - A ttisgarh IPPs – Pa		Strengthening Scheme for
a	765 kV D/C Raipur Pool - Rajnandgaon	RRWTL	Nov'18	May'17		
i	2 no. of 765 kV Bays at Raipur PS	PGCIL	Nov'18*	-	Nov'18 (SCOD)	
ii	2 no. of 765 kV bays at Rajnandgaon SS (Switching)	RRWTL	Nov'18	Nov'17	(SCOD)	System Strengthening
b	765 kV D/C Rajnandgaon - New Pooling Station near Warora	RRWTL	Nov'18	June'18	Nov'18 (SCOD)	Scheme for Chhattisgarh IPPs, no requirement of early commissioning. This scheme is interlinked with
i	2 no. of 765 kV bays at Rajnandgaon SS (Switching)	RRWTL	Nov'18	Nov'17	(SCOD)	transmission system being implemented by M/s
ii	2 no. of 765 kV bays at New Warora Pooling Station	Powergrid Warora Transmission Ltd	Nov'17	Nov'17	Nov'17 (SCOD)	PWTL (Nov'17) & PPTL (January 18). The line reactors of the
iii	2X240 MVAR line reactors at Warora end	WKTL	Nov'18	-	Nov'18 (SCOD)	Rajnandgaon- Warora 765 kV D/C line at Warora substation are in the scope
С	Establishment of new 765kV switching station near Rajnandgaon	RRWTL	Nov'18	Nov'17	Nov'18 (SCOD)	of M/s WKPL (Nov'19 with SCOD of reactors as Nov 18).

3	Chhattisgarh WR	Transmission I		RTL) - System S Projects in We		PPs in Chhattisgarh & Other
a	400 kV D/C Gwalior - Morena	CWRTL	May'18	Jan'18		This line is planned to establish an
i	2 no. of 400 kV bays at Gwalior (PG)	PGCIL	May'18*	Jan'18		interconnection between Gwalior (PG) & Morena
ii	2 no. of 400 kV bays at Morena (TBCB)	CWRTL	May'18	Jan'18	Jan'18	(MPPTCL). MPPTCL agreed to implement their
iii	4 no. of 220 kV outlets from Morena (TBCB)	MPPTCL	May'18	Jan'18		220 kV outlets from Morena 400/220 kV SS by January 2018
b	400 kV D/C Vindhyachal IV & V STPP - Vindhyachal Pool	CWRTL	Jan'19	Jan'18		To improve reliability of
i	2 no. of 400 kV Bays at Vindhyachal STPP of NTPC	CWRTL	Jan'19	Jan'18	Jan'18	power evacuation of Vindhyachal stage IV & V.
ii	2 no. of Bays at Vindhyachal Pool	PGCIL	Jan'19*	Jan'18		
с	765 kV S/C Sasan UMPP - Vindhyachal Pooling Station	CWRTL	Nov'18	Dec'17		To improve the reliability
i	1 no. of 765 kV Bay at Sasan UMPP of M/s. SPL, Reliance	CWRTL	Nov'18	Dec'17	Jun'18	To improve the reliability of power evacuation of Sasan UMPP
ii	1 no. of 765 kV Bay at Vindhyachal Pool	PGCIL	Nov'18*	Jun'18		
d	LILO of one circuit of Aurangabad - Padghe 765 kV D/C line at Pune	CWRTL	Mar'19	Jul'18	Jul'18	System strengthening line
i	2 no. of 765 kV bays at Pune	PGCIL	Mar'19*	Jul'18		
e	765 kV S/C Raigarh (Kotra) - Champa (Pool)	CWRTL	Nov'18	Mar'18		To improve reliability in
i	1 no. of 765 kV bay at Raigarh (Kotra)	PGCIL	Nov'18*	Jun'18	Jun'18	Chattishgarh generation complex(Raigarh kotra,
ii	1 no. of 765 kV bay at Champa (Pool)	PGCIL	Nov'18*	June'18		Raigarh Tamna, Champa)
f	765 kV S/C Champa (Pool) - Dharamjaigarh	CWRTL	Nov'18	Apr'18		To improve reliability in
i	1 no. of 765 kV bay at Champa PS	PGCIL	Nov'18*	Jun'18	Jun'18	Chattishgarh generation complex (Raigarh kotra,
ii	1 no. of 765 kV bay at Dharamjaygarh	PGCIL	Nov'18*	Jun'18		Raigarh Tamna, Champa)

^{*}Bays in matching time frame of the associated line.

भारत सरकार/Government of India विधुत मंत्रालय/Ministry of Power केन्द्रीय विधत प्राधिकरण Central Electricity Authority

विध्त प्रणाली परियोजना प्रबोधन प्रभाग Power SystemProject Monitoring Division सेवा भवन ,आर.के.पुरम,/Sewa Bhawan, R.K.Puram नर्ड दिल्ली-110 066/New Delhi-110 066

Website: www.cea.nic.in

Telefax no:011-26103242 Email:bkarya1664@gmail.com ceapspm@gmail.com



ISO .: 9001-2008

Dated: 11.01.2017

No. CEA /PS/PSPM/07/07/2016/ 46-53

(As per attached list)

Subject: Minutes of Meeting taken by Chief Engineer (PSPM), CEA held on 27.12.2016 in CEA with M/s OGPTL(Sterlite Grid) and Powergrid to decide the Revise Schedule Commercial Operation Date (RSCoD) for common transmission system for Phase-II generation Project in Odisha and immediate evacuation system for OPGC project.

Sir/Madam.

Minutes of the meeting taken by Chief Engineer (PSPM), CEA on 27.12.2016 with M/s OGPTL (Sterlite Grid) and Powergrid to decide the revised Schedule Commercial Operation Date (RSCoD) for common transmission system for Phase-II generation project in Odisha and immediate evacuation system for OPGC project is enclosed at annexure for information and necessary action.

This issues with the approval of Chief Engineer (PSPM), CEA.

Encl: as above

Yours sincerely,

Dy. Director (PSPM)

Copy forwarded for information to:

Chief Engineer (PSP&A-I), CEA

2. Director (Trans.), MOP, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001

3. PPS to Member (PS), CEA

ce (PSPM) form

Minutes of Meeting taken by Chief Engineer (PSPM) held on 27.12.2016 in CEA with M/s. OGPTL(Sterlite grid) and Powergrid to decide the revised Schedule Commercial Operation Date (RSCoD) for common transmission system for Phase-II generation Project in Odisha and immediate evacuation system for OPGC project.

The list of participants is enclosed at Annexure-I.

- 2. Chief Engineer (PSPM) CEA welcomed the participants and enquired about progress of transmission lines covered under transmission project being developed by M/s OGPTL (a subsidiary of Sterlite Grid).
- 3. Representative of M/s OGPTL submitted the progress as under:
 - (a) Jharsuguda-Raipur 765 KV D/C line

Length(km):305Locations (nos):763Foundation Completed(nos):300Tower Erected(nos):150Stringing completion(km):16

(b) OPGC TPS - Jharsuguda 400 kV D/C line

Length(km):51Locations (nos):152Foundation Completed(nos):19Tower Erected(nos):0Stringing completion(km):0

- 4. The representative of M/s OGPTL informed that as per TSA, OPGC TPS Jharsuguda 400 kV D/C line and Jharsuguda-Raipur 765 KV D/C line are scheduled to complete in July2017 and Aug,2019 respectively and they are planning to prepone the commissioning of Jharsuguda-Raipur 765 KV D/C line by Oct, 2017. It was observed that both the lines are passing through forest land. The representative of M/s OGPTL informed that OPGC TPS Jharsuguda 400 kV D/C line involves forest area of 30 Hectares (15 KM in patches) in Odisha and Jharsuguda-Raipur 765 KV D/C line involves forest area of 95 Hectare in Chattisgarh and Odisha. M/s OGPTL representative stated that proposal for both lines have already been submitted and approval is expected by March, 2017. He requested POWERGRID to complete the terminal bays at Jharsuguda and Raipur Sub-Station by July 2017 and Oct, 2017 for termination of OPGC TPS Jharsuguda 400 kV D/C line and Jharsuguda-Raipur 765 KV D/C line respectively.
- 5. POWERGRID representative informed that award for construction of 400 kV GIS bays for termination of OPTC TPS Jharsuguda 400 kV D/C line at Jharsuguda substation has been placed to JV of M/s Xian & Techno in Jun2016 and civil work has already been started and it would be ready by July, 2017.

- 6. Regarding terminal bays for Jharsuguda Raipur 765 kV D/C line, POWERGRID representative stated that it is in pre award stage. NIT had been issued and bid opening is scheduled in January 2017 and the award would be placed in March, 2017. She further stated that commissioning schedule of 765 kV bays has been taken as Aug,2019 as indicated in TSA. It was also informed by POWERGRID representative that a meeting was held in POWERGRID in Sept,16 with SGL representatives wherein it was decided to complete the terminal bays for Jharsuguda Raipur 765 kV D/C line by October, 2018 with best effort.
- 7. Chief Engineer (PSP&A-1), CEA informed that Jharsuguda-Raipur 765 kV D/C line was discussed in the meeting of the committee for early commissioning of transmission projects held on 26.10.2016 wherein M/s Sterlite was requested for early commissioning of the line by 24 months. In that meeting M/s Sterlite was advised to discuss with POWERGRID for mutually agreeable date.
- 8. Chief Engineer (PSPM), CEA stated that achieving completion of Jharsuguda-Raiupur 765 D/C line by Oct, 2017 is tough as only casting of 300 foundations, 150 towers erection out of 763 locs and stringing of 16 km out of 305 km had been completed so far, which is about 30-40% and other issues such as forest clearances etc are also yet to be obtained. He advised POWERGRID and OGPTL representative to have a joint meeting to arrive at mutually agreed revised schedule COD for Jharsuguda Raiupur 765 D/C line in first quarter of year 2018 as both project authorities would have sufficient time period of one and half year to complete the 765 kV terminal bays and balance work of transmission line and submit report to CEA for further necessary action.

Annexure-I

List of Participants

Central Electricity Authority

Sh B K Arya
 Sh Ravinder Gupta
 Sh Awdhesh Yadav
 Sh I K Mehra
 Sh Rajesh
 Sh Ravi Kant
 Chief Engineer(PSP&A-I)
 Director(PSP&A-I)
 Dy. Director(PSPM)
 Asstt. Director(PSPM)
 Asstt. Director(PSPM)

Power grid Corporation of India Ltd.

1. Ms. Sangeeta Saxena Dy General Manager(CMG)

OGPTL/Sterlite Grid

Sh T A N Reddy
 Sh. Bigyan Parija
 Sh. Jeetendra Bisht
 Sh. J. RaghuRam
 Smt. Bindu Madhavi
 Sh. Rohit Gera
 Vice president
 AVP Projects
 Head, Customer Development Strategy
 GM-Projects
 Asst. Manager
 Engineer



भारत सरकार / Government of India विद्युत मंत्रालय / Ministry of Power केन्द्रीय विद्युत प्राधिकरण / Central Electricity Authority विद्युत प्रणाली योजना एवं मूल्यांकन- 1 प्रभाग



Power System Planning & Appraisal -I Division सेवा भवन, आर.के.पुरम, नई दिल्ली - 110066

Sewa Bhawan, R. K. Puram, New Delhi-110066

सं / No. 100/1 A/Early Comm/PSP&PA-I/ (39-64) दिनांक / Date: 16th November, 2016

То

As per list enclosed

विषय / Subject: Minutes of the Meeting of the Committee to ensure smooth operationalization of the Policy for early commissioning of Transmission Projects

Madam/Sir,

Please find enclosed the minutes of the meeting held on 26th October, 2016 in CEA regarding smooth operationalization of the Policy for early commissioning of Transmission Projects.

Yours faithfully,

(के के आर्य/K.K.Arya)

संयोजक व सदस्य सचिव/Convener & Member Secretary

Copy for information to:

- 1. Joint Secretary (Trans), Ministry of Power, Shram Shakti Bhawan, New Delhi
- 2. Secretary, CERC, 3 rd & 4 th Floor, Chanderlok Building, 36, Janpath, New Delhi- 110001
- 3. PPS to Chairperson, CEA

Mailing list

1. COO, CTU, PGCIL, Saudamini, Plot	2. CEO, POSOCO, B-9, Qutub
No. 2, Sector – 29, Gurgaon - 122001	Institutional Area, Katwaria Sarai.
	New Delhi - 110016.
3. Chief Engineer, PSPA-II,	4. Chief Engineer, PSPM Divn.,
Central Electricity Authority,	Central Electricity Authority,
New Delhi	New Delhi
5. Shri T.A.N Reddy,	6. Director (Projects),
Head-B.D. & Corporate Affairs,	NTPC, NTPC Bhawan, Core 7, Scope
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Minutes of the Meeting of the Committee to ensure smooth operationalization of the Policy for early commissioning of Transmission Projects held on 26.10.2016

List of participants is enclosed at Annexure- A.

Chairperson & Member(PS), CEA welcomed all participants to the meeting. He stated that MoP vide its OM No. 15/1/2013-Trans dated 5th October, 2016 has constituted a committee to ensure smooth operationalization of the Policy for early commissioning of Transmission Project issued on 15.07.2015. This is the first meeting of the committee that has been convened to discuss the issues related to the operationalization of policy and to discuss the proposal received from M/s Sterlite for early commissioning of transmission projects.

CE(PSP&A-I), CEA stated that earlier Powergrid vide their letter dated 12-08- 2016 has requested CEA to decide the course of action pertaining to advancement of schedules of transmission projects being implemented through TBCB route. Subsequently, Sterlite Power Grid Ventures Ltd vide letter dated 19-09-2016 has furnished the revised (early) commissioning schedule of transmission projects being implemented by them and have requested to arrange a meeting with PGCIL for advancing the construction of the associated sub-station bays in matching timeframe (early commissioning schedule) of their transmission line. MoP vide OM dated 5-10-2016 has constituted the committee for operationalization of the policy. As per the mechanism suggested in the MoP OM, the Transmission licensee is required to send the request for early commissioning in advance (i.e. 24 months in advance of the intended early SCOD) to the Convener & Member Secretary of the committee and communicate the same to the implementing agencies of the interconnecting (upstream/ downstream) elements. In the MoP order nothing is specified about the time duration (after project award) after which the TSP needs to put the request for early commissioning of the project. Therefore, the committee needs to deliberate on this aspect along with steps to be followed for considering the requests received for early commissioning of projects from TSPs.

CE (PSP&A-II),CEA stated that as per the TSA (Transmission Service Agreement) date of Commercial Operation(COD) cannot be a date prior to the Scheduled COD mentioned in the TSA, unless mutually agreed to by all the parties. And for this purpose only the LLTTC (Lead Long Term Transmission Customer) has been made a member of the committee, to put forward the views of the LTTCs regarding agreement/disagreement for the early commissioning, but no LLTTC has been invited to the meeting. He further stated that the transmission charges are applicable for 35 years from the scheduled COD of the projects. The transmission project may contain two or more transmission elements and in case some transmission elements are taken up for early commissioning then that element will start getting transmission tariff from a date earlier than the SCOD. This would result in payment of transmission tariff for more than 35 years for some transmission elements, whereas the MoP policy for early commissioning clearly states that the number of years of applicability of tariff would remain unchanged i.e, 25/35 years. This aspect also needs to be clarified. Similarly, the

transmission license is issued for period of 25 years and early commissioning of transmission element (s)/scheme would require the necessary changes in the Transmission License.

The issues were deliberated in detail and the following was agreed:

- 1. All the transmission schemes (five nos.) for which request has been made by M/s Sterlite Grid for early commissioning do not qualify for consideration as the request has not been well in advance (i.e., 24 months in advance of the intended early SCOD). But, as these schemes were under implementation before the constitution of the committee, PSPM Division, CEA may hold the meetings with the TSP and the implementing agencies of the interconnecting (upstream/ downstream) elements so that a mutually agreed early commissioning date (before SCOD) could be arrived at through mutual consultation.
- 2. Regarding the early commissioning dates, the representatives of POWERGRID, NTPC and HVPNL expressed their views as given below:
 - a) Powergrid stated that they could derive a mutually agreeable date for implementation of associated bays at Powergrid S/s and accordingly advance the commissioning schedule.
 - b) Regarding Khargone TPP Switchyard Khandwa pool 400 kV D/C (Quad) line, NTPC stated that they are not anticipating any preponing of the generation commissioning schedule, therefore they would require this line only with the SCOD of July, 19 as indicated in the TSA.
 - c) Regarding the downstream network of Sohna Road, Kadarpur and Prithala, HVPNL stated that they would revert back on the issue.
 - d) Regarding the downstream network of TSTRANSCO, M/s Sterlite stated that they would take up the matter with TSTRANSCO.

The summary of the transmission schemes of M/s Sterlite Grid is attached at Annexure-B.

- 3. Transmission Licensee needs to submit their request for revised early Scheduled Commercial Operation Date (SCoD) after submission of their execution plan to PSPM Division, CEA and well in advance (i.e. 24 months in advance of the intended early SCOD) to Convener and Member Secretary of the committee and communicate the same to the implementing agencies of the interconnecting (upstream/downstream) elements.
- 4. PSPM Division, CEA may convene a meeting with TSP and the implementing agencies of the interconnecting (upstream/ downstream) elements so as to decide the mutually agreed date of commissioning for the elements.
- 5. The committee may take a decision on early commissioning, based on usefulness of the early commissioning for transmission system.
- Mutual indemnification agreements would be signed between the Transmission Licensee/ STU /POWERGRID/ existing Transmission Licensee/ Generation developer, as the case may be, whose transmission elements/assets are involved. Accordingly, the committee

- would finalise the Revised SCOD (RSCOD) and the TSA would stand modified mutatis mutandis.
- 7. PSPM Division, CEA to review the progress of the transmission elements involved in the early commissioning and assess their commissioning in matching RSCOD. The deviations may be brought to the notice of the committee.
- 8. In case of non- availability of interconnecting elements as per the agreed RSCOD, Committee may explore the alternative arrangement for utilization of Transmission element. The effected parties may seek recourse as per the Indemnification Agreements.
- Regarding the applicability of tariff for 35 years, clarifications may be sought from MoP regarding transmission schemes having more than one element with different commissioning schedules.

Meeting ended with the thanks to the chair.

Annexure-A

List of participants of the Meeting on the subject: Early Commissioning of Transmission Projects held on 26.10.2016

SI.	Name	Designation
No.	Shri/Smt	•
1.	S.D. Dubey	- Member(PS)/Chairman, CEA - in chair
2.	K.K.Arya	- Chief Engineer (PSP&A-I), CEA
3.	Pradeep Jindal	- Chief Engineer (PSP&A-II), CEA
4.	B.K. Arya	- Chief Engineer (PSPM),CEA
5.	Awdhesh Kumar Yadav	- Director (PSP&PA-I), CEA
6.	Manjari Chaturvedi	- Dy. Director, CEA
7.	Shivani Sharma	- Dy. Director, CEA
8.	Shiva Suman	- Dy. Director, CEA
9.	Kanchan Chauhan	- Assistant Director, CEA
10.	Priyam Srivastava	- Assistant Director, CEA
11.	Vikas Sachan	- Assistant Director, CEA
12.	Nitin Deswal	- Assistant Director,CEA
13.	T.ANReddy	- VP, Sterlite
14.	Bigyan Parija	- AVP, Sterlite
15.	J. Raghu Ram	- GM, Sterlite
16.	Amit Chauan	- DGM, Sterlite
17.	K.R. Suri	- Advisor, Sterlite
18.	M.D. Roy	- Addl.GM, NTPC
19.	V.K. Jain	- Dy.GM, NTPC
20.	S.S. Barpand	- AGM, NLDC, POSOCO
21.	Vipin Gupta	- SE NCR PIg.,HVPNL
22.	Ashok Pal	- GM, Power Grid
23.	Sangeeta Saxena	- Dy.GM Power Grid

	.	1			•••		
Remarks wrt early commissioning	•	\$ C C	confirm the downstream network	es en escentrar	TSTRANSCO to	confirm the downstream network	Sterlite to discuss with Powergrid for mutually agreeable date for 2 No. of 765kV Bay at Raipur S/S of POWERGRID
Request for Early Forminissioning (19.9.2016) cc from RSCoD	Commissioned		13 months		8	5 months	10 months ag 7.7
Advancement	12 months	11 months	11 months	11 months	16 months	16 months	24 months
RSCoD	23/06/2016	30/10/2017	30/10/2017	30/10/2017	T-65	0 0 2 2	ال بر بر
ScoD	04/06/2017	04/10/2018	04/10/2018	04/10/2018	20/06/2018	20/06/2018	08/08/2019
Elements	Jalandhar - Samba 400 kV D/C	Samba – Amargarh 400 kV D/c routed through Akhnoor/Rajouri	LILO of both circuits of Uri – Wagoora 400 kV D/C line at Amargarh	400/220 kV GIS substation at Amargarh with 7x105 MVA	Maheswararn (PG) - Mehboob Nagar 400 kV D/C line & 2 No. of 400KV line bays at Mehboob Nagar S/S of TSTRANSCO	Nizamabad – Yeddumailaram (Shankarpalli) 400kV D/C line & 2 No. of 400KV line bays at Yeddumailaram (Shankarpalli) S/S of TSTRANSCO	Jharsuguda (Sundargarh) – Raipur Pool 765kV D/C line
SPV Name		NRSS XXIX Transmission	Limited	THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PR	Maheshwaram	Transmission Limited (MTL)	Odisha Generation Phase II Transmission Limited (OGPTL)
S.No.		, Aus			AMARAAA	¢4	ന

o de la companya de l	commissioning	1			\$ \$170 OF A \$100 OF A \$100	HVPNL to revert	back for the downstream	these substations and	Dhanonda S/s	ender i i i i i i i i i i i i i i i i i i i	1.	NTPC not	agreed for early commissioning	Sterlite to discuss with
Request for	Commissioning (19.9.2016) from RSCoD							13 months				19 months		19 months
	Advancement by	ı	17 months	17 months	21 months	21 months	17 months	17 months	21 months	17 months	17 months	15 months	à	15 months
,	RSCoD	July'17						Nov'17				April'18	Feb'18	April'18
	Scot	Jul-17	14/05/2019	14/05/2019	14/09/2019	14/09/2019	14/05/2019	14/05/2019	14/09/2019	14/05/2019	14/05/2019	2 0	Feb'18	Jul-19
	Elements	OPGC – Jharsuguda (Sundargarh) 400kV D/C line	Aligarh-Prithala 400kV D/C HTLS line	Prithala-Kadarpur 400kV D/C HTLS line	Kadarpur-Sohna Road 400kV D/C HTLS line	LILO of Gurgaon-Manesar D/C line at Sohna Road S/s	Neemrana (PG)-Dhonanda (HVPNL) 400kV D/C HTLS line	400/220kV, 2X500 MVA GIS substation at Kadarpur in Gurgaon area	400/220 kV, 2X500 MVA GIS substation at Sohna Road in Gurgaon area	400/220 kV, 2X500 MVA GIS substation at PrithalainPalwal area	2 Nos. of 400kV line bays at 400kV Dhonanda (HVPNL) substation	Khargone TPP Switchyard – Khandwa pool 400 kV D/C (Quad) line.	LILO of one ckt of Khandwa – Rajgarh 400 kV D/C line at Khargone TPP	Khandwa Pool – Indore 765 kV D/C line
	SPV Name			and the state of t			Gurgaon - Palwal	Transmission Limited (GPTL)				5	rnargone Transmission Limited (KTL)	
	S. N.							4		NINGSLAMP			w	

		ALALALA MARIAN MARAMANA		1			The state of the s
Š. Š.	SPV Name	Elements	Scol	RSCoD	Advancement by	Request for Early Commissioning (19.9.2016) from RSCoD	Remarks wrt early commissioning
		Khandwa Pool – Dhule 765 kV D/C line	Jul-19	April 18	15 months	19 months	Powergrid for mutually agreeable date for bays at Indore
		765/400 kV, 2x1500 MVA pooling station at Khandwa	Jul-19	April'18	15 months	19 months	
		2 nos. of 765 kV line bays and 7 X 80 MVAR Switchable line reactors (1 unit as spare) along with 800 Ω NGR and its auxiliaries for Khandwa Pool – Dhule 765 kV D/C at Dhule 765 kV D/C M/s BDTCL	6- 1-	A 	15 months	19 months	

