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

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

Dated: 06/12/2018

То

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

Subject: Minutes of the 4<sup>th</sup> Meeting of Validation Committee for the Application Period from 1<sup>st</sup> January, 2019 to 31<sup>st</sup> March, 2019 for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010

Sir,

Please find enclosed herewith minutes of the 4<sup>th</sup> Meeting of the Validation Committee for the year 2018-19 (Application Period from 1<sup>st</sup> January, 2019 to 31<sup>st</sup> March, 2019) for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 held on 26.11.2018 in the NRLDC Conference Room at New Delhi for information and necessary action.

Yours faithfully,

Sd/-

(Shilpa Agarwal) Joint Chief (Engg)

Encl.: As above

#### Validation Committee Members

SI.	Name of the	Name of the nominated	Address		
No.	Organizations	persons	Ocurtual Electricity Desculators		
1.	CERC	Shri S.C Shrivastava, Chief			
		(Engg)			
			Chanderlok Building, 36-Janpath, New Delhi -110001		
2.		Shri P.K. Awasthi,	Central Electricity Regulatory		
		Joint Chief (Fin.)	Commission		
			3 <sup>rd</sup> & 4 <sup>th</sup> Floor, Chanderlok Building,		
-			36-Janpath, New Delhi -110001		
3.	CEA	Chief Engineer, (PSP & PA-	Central Electricity Authority		
		II) Division	3 <sup>rd</sup> Floor, N-Wing, Sewa Bhawan,		
			R.K. Puram, New Delhi - 110 066		
4.		Director, GM Division	Central Electricity Authority 6 <sup>th</sup> Floor, N-Wing		
			Sewa Bhawan, R.K. Puram,		
			New Delhi-110066		
5.	CTU/	Shri J. Mazumder ,GM	Power Grid Corporation of India Ltd		
	Powergrid	(Comm)	Plot No. 2, Sector-29,		
			Near IFFCO Chowk,		
	-		Gurgaon-122001		
6.		Shri Ashok Pal, GM	Power Grid Corporation of India Ltd		
		alternate member Shri	, , ,		
		RVMM Rao, Chief. Design	Near IFFCO Chowk,		
7	<b>D00000</b>	Engineer (SEF)	Gurgaon-122001		
7.	POSOCO	Shri S.S Barpanda,	Northern Regional Load Despatch		
		Executive Director, NRLDC	Centre, Jeet Singh Marg, Katwaria Sarai, New Delhi-110016		
			Ratwalla Salai, New Delli-110010		
8.		Shri A. Gartia	Southern Regional Load Despatch		
		Executive Director, SRLDC	Centre		
			29, Race Course Cross Road,		
			Bangalore, Karnataka-560009		
9.		Shri S.R. Narasimhan	National Load Despatch Centre		
		Executive Director, NLDC	B-9, Qutab Institutional Area,		
			Katwaria Sarai,		
10	4	Shri D.K. Join	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	North Eastern Regional Load		
		Executive Director	Despatch Centre,		
			Lower Nongrah, Dongtieh, Lapalang,		
			Shillong – 793006		
12.	NRPC	Shri M.A.K.P. Singh	Northern Regional Power Committee		
		Member Secretary	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 <sup>st</sup> Floor, Vidyut Bhawan, Bailey Road, Patna-21, Bihar		
17.	NERPC	Shri P.K Mishra Member Secretary	North Eastern Regional Power Committee, NERPC Complex, Dong Parmaw, Lapalang, Shillong-793006 Phone No:0364-2534077 Fax NO.:0364-2534040		
18.		Shri Jatin Baishya, Dy. General Manager	State Load Despatch Centre Complex,Kahelipara,Guwahati		
19.	SLDC	Shri P.A.R. Bende, Chief Engineer, SLDC	Chief Engineer Madhya Pradesh Power Transmission Company Ltd., Nayagaon, Rampur, Jabalpur- 482008		
20.	KPTCL	Shri S. Sumanth Director(Transmission), KPTCL	Karnataka Power Transmission Corp. Ltd, Kauvery Bhavan, K.G. Road, Bangalore – 560009		
21.	UPPTCL	Shri A.K. Singh, Director (Operation), Uttar Pradesh Power Transmission Corporation Ltd.	Uttar Pradesh Power Transmissio 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 N S Parameshwaran, Executive Director, (O&M)	NHPC office Complex, Sector-33, Faridabad – 121003 (Haryana)		
3.	NEEPCO	Ms. Debjani Dey GM (Commercial)	Brookland Compound, Lower New Colony, Shillong– 793003		
4.	NLC	Director (Commercial)	No.135, Periyar E.V.R. High Road, Kilpauk, Chennai - 600 010. Tamil Nadu, India		
5.	SJVN	Shri Romesh Kapoor, General Manager (C&SO)	SJVN Ltd, Sharma Niwas Below BCS, New Shimla – 171009.		

Minutes of the 4<sup>th</sup> Meeting of Validation Committee for the Application Period from 1<sup>st</sup> January, 2019 to 31<sup>st</sup> March, 2019 held on 26<sup>th</sup> November, 2018 at NRLDC, New Delhi.

- The Chairman of the Validation Committee, Shri S.C Shrivastava, Chief (Engg.), CERC welcomed the participants present in NRLDC Conference Room and 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, Tripura and Maharashtra through video conferencing. List of the participants is enclosed at *Annexure-I.*
- 2. Chief (Engg.), CERC stated that the meeting is convened to discuss the Load Generation data for consideration of load flow studies for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses), Regulations, 2010 for the Fourth Quarter of 2018-19. The presentation shown during the Validation Committee Meeting dated 26.11.2018 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 January'19 to March'19. 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 1<sup>st</sup> January, 2019 to 31<sup>st</sup> March, 2019 (Q4 of 2018-19).

#### 4.1 Northern Region:

- (i) Projected demand by IA for Jammu & Kashmir was 2,274 MW. During the meeting, representative of Jammu & Kashmir suggested to consider its demand projection as 2,300 MW.
- (ii) Projected demand by IA for Uttar Pradesh was 16,578 MW. Prior to the Meeting, Uttar Pradesh submitted its demand as 16,800 MW. During the meeting, representative of NRPC suggested to consider its demand projection as 17,166 MW, keeping in view of demand projection given by Uttar Pradesh in LGBR is 17,166 MW.

The Demand figures as suggested above were agreed.

**4.2 Eastern Region**: Projected demand by IA for DVC was 3,033 MW. DVC had submitted its projected demand as 2,979 MW. During the meeting, DVC representative suggested its demand projection as 3,033 MW.

The Demand figures as suggested above were agreed.

#### 4.3 Western Region:

- (i) Projected demand by IA for Madhya Pradesh was 11,737 MW. During the meeting, representative of Madhya Pradesh suggested to consider its demand projection as 12,000 MW.
- (ii) Projected demand by IA for Maharashtra was 23,294 MW. Prior to the meeting, Maharashtra submitted its projected demand as 22,200 MW. During the meeting, WRLDC representative suggested that demand projection of Maharashtra may be taken as 22,500 MW instead of 22,200 MW.
- (iii) Representative of WRLDC suggested the following changes
  - (a) Demand projection from Daman and Diu may be taken as 340 MW instead of 364 MW.
  - (b) Demand projection from Goa may be taken as 520 MW instead of 555 MW respectively.
  - (c) Demand projection of DNH may be taken as 800 MW instead of 777 MW keeping in view of demand projection given by DNH in LGBR as 800 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 9,513 MW. Prior to the meeting, Andhra Pradesh submitted its demand as 9,133 MW. During the meeting, representative of Andhra Pradesh suggested to consider demand projection as 9,513 MW.
- (ii) Projected demand by IA for Karnataka was 11,029 MW. Karnataka was not present in the meeting and has not confirmed its data prior to the meeting. Hence demand shall be taken as projected by IA.
- (iii) Representative of SLDC Telangana suggested that demand projection of Telangana may be taken as 10,600 instead of 11,874 MW projected by IA.
- (iv) SRLDC representative suggested that demand projection of Kerala may be taken as 3,875 MW instead of 3,715 MW.

The Demand figures as suggested above were agreed.

5. Generation Projection for Application Period from 1<sup>st</sup> January, 2019 to 31<sup>st</sup> March, 2019 (Q4 of 2018-19).

#### 5.1 Northern Region:

- (i) Projected generation by IA for Haryana was 2,792 MW. Prior to the meeting, Haryana submitted its generation as 2,889 MW. During the meeting, representative of Haryana suggested to consider its generation projection as 3,014 MW.
- (ii) Projected generation by IA for Jammu & Kashmir was 369 MW. NRPC representative stated that generation given by Jammu & Kashmir in LGBR is 250 MW. During the meeting, representative of Jammu & Kashmir suggested to consider its generation projection as 150 MW.
- (iii) Projected generation by IA for Rajasthan was 7,146 MW. Prior to the meeting, Rajasthan submitted its generation as 9,527 MW. During the meeting, representative of NRPC suggested to consider generation projection for Rajasthan as 8,500 MW, keeping in view generation projection given by Rajasthan in LGBR is 8,500 MW.
- (iv) Projected generation by IA for Naptha Jhakri was 1,602 MW. Representative of SJVN submitted generation projection of Naptha Jhakri as 1,370 MW instead of 1602 MW.
- (v) Representative of NRLDC suggested the following changes:
  - (a)Generation from Unchahar may be taken as 1000 MW instead of 1286 MW as submitted by NTPC due to one unit of 500 MW is under shutdown.
  - (b)Generation from NAPS may be taken as 400 MW instead of 421 MW.
  - (c) Generation from Jhajjar may be taken as 1,387 MW instead of 1,500 MW.
  - (d)Generation from RAAP C may be taken as 400 MW instead of 457 MW.
  - (e)Generation from Karcham Wangtoo may be taken as 1,000 MW instead of 884 MW.

The Generation figures as suggested above were agreed.

#### 5.2 Western Region:

- (i) Projected generation by IA for Madhya Pradesh was 4,870 MW. During the meeting, Representative of Madhya Pradesh suggested that generation projection of Madhya Pradesh may be taken as 6,299 MW, keeping in view of considering new generation unit of Shree Singaji Power Station stage II.
- (ii) Member present at WRLDC suggested following changes:
  - (a)Generation from CGPL may be taken as 3,000 MW instead of 3,837 MW due to outage of one unit.
  - (b)Generation from SSP may be taken as 90 MW instead of 323 MW, keeping in view canal head issue.

- (c)Generation from KAPS may be taken as 200 MW instead of 69 MW, due to addition of one new unit.
- (d)Generation from Essar Mahan may be taken as 550 MW instead of 930 MW.
- (e)Generation from Sasan UMPP may be taken as 3,797 MW instead of 3,856 MW.
- (f) Generation from KSK Mahanadi and Dhariwal may be taken as 1200 MW and 270 MW instead of 1081 MW and 285 MW respectively.
- (g)Generation from Korba west may be taken as zero instead of 289 MW.
- (h)Generation from JP Nigrie may be taken as 1,200 MW (Installed Capacity Auxiliary consumption) instead of 1,240 MW.
- (i) Generation from M.B Power may be taken as 900 MW instead of 1,158 MW
- (j) Generation from RKM power may be taken as 900 MW instead of 518 MW, since its 3 units have been commissioned and it is expecting PPA.
- (k)Generation from ACBIL, Spectrum and MCCPL may be taken as 680 MW instead of 653 MW.
- (I) Generation from GMR Chattisgarh may be taken as 500 MW as submitted by GMR instead of 499 MW.
- (m) Generation from SKS power may be taken as 198 MW (running only one unit due to coal problem) instead of 396 MW.
- (n) Generation from NTPC Gadarwara may be taken as 720 MW as its unit is expected to get commercial in December.

The Generation figures as suggested above were agreed.

#### 5.3 Eastern Region:

- (i) Projected generation by IA for Bihar was 537 MW. Representative of ERLDC suggested that generation from Bihar may be taken as 150 MW (exclusion of Kanti bijlee stage-II generation) instead of 537 MW.
- (ii) Projected generation by IA for Jharkhand was 422 MW. Representative of Jharkhand suggested that generation from Jharkhand may be taken as 350 MW instead of 422 MW.
- (iii) Projected generation by IA for Teesta V was 536 MW. Prior to the meeting, NHPC submitted Teesta V generation as 528 MW. During the meeting, ERLDC representative suggested that generation from Teesta V may be taken as 510 MW.
- (iv) Projected generation by IA for Farakka was 1,936 MW. Prior to the meeting, NTPC submitted Farakka generation as 1,968 MW. During the meeting, ERLDC representative suggested that generation from Farakka may be taken as 1,936 MW.
- (v) Projected generation by IA for BARH was 1,294 MW. Prior to the meeting, NTPC submitted BARH generation as 1,250 MW. During the meeting, ERLDC representative suggested that generation from BARH may be taken as 1,250 MW.

- (vi) Member present at ERLDC suggested following changes
  - (a) Generation from Chujachan may be taken as 87 MW instead of 99 MW.
  - (b) Generation from JITPL may be taken as 550 MW instead of 918 MW..
  - (c) Generation from Kanti Bijli stg-2may be taken as 350 MW.

The Generation figures as suggested above were agreed.

**5.4 North Eastern Region**: It was suggested that generation projection from Mizoram may be taken as 62MW (including Tuirial gen: 54MW) instead of 8MW.

#### 5.5 Southern Region:

- (i) Projected generation by IA for Andhra Pradesh was 6,435 MW. Prior to the meeting, Andhra Pradesh submitted its generation as 6,100 MW. During the meeting, representative of Andhra Pradesh suggested to consider generation projection as 6,435 MW.
- (ii) Projected generation by IA for Karnataka was 6,854 MW. Karnataka was not present in the meeting and has not confirmed its data prior to the meeting. Hence generation shall be taken as projected by IA.
- (iii) SRLDC representative suggested that generation from Kerala may be taken as 1,633 MW instead of 1,362 MW as projected by IA.
- (iv) Member present at SRLDC suggested following changes:
  - (a) Generation from SEPL and MEPL may be taken as zero instead of 184 MW and 174 MW respectively.
  - (b) Generation from Lanco Kondanpalli may be taken as zero (not running since May 2018) instead of 118 MW.
  - (c) Generation from MAPS may be taken as 170 MW instead of 343 MW as one unit of MAPS is under outage and expected revival is after March, 2019.
  - (d) Generation from IL&FS may be taken as 580 MW (only one unit is running) instead of 1,140 MW.

The Generation figures as suggested above were agreed.

#### 6. HVDC Set Points:

- (i) HVDC set points to be considered in the All India Base case for computation of PoC charges and Losses for January 2019 – March 2019 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.

	<u>MW Values</u>
HVDC Name	Set points to be considered in Basecase
Mundra - Mahindergarh Pole-1	500
Mundra - Mahindergarh Pole-2	500
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	600
Champa-Kurukshetra Pole-2	600

#### 7. Other Issues:

- (i) GRIDCO representative raised the following points
  - (a) POC data should be uploaded on website within a week after issue of POC order.
  - (b) LILO of 400 kV Talcher Meramundali and LILO of Meramundali Bolangir at Angul is to be removed in POC base case as they do not exist anymore. Instead of 400kV Talcher – Meramundali D/C line and 400 kV Meramundali – Bolangir S/C line should be considered in the Base case of POC Q4 2018-19. As lapanga bus has already been commissioned with charging of 315 MVA ICT at lapanga, the existing 400 kV Sterlite – Meramundali D/C line should be replaced by 400 kV Sterlite – Lapanga D/C line and 400 kV Lapanga – Meramundali D/C line.

The above issues raised by GRIDCO in Para (a) was agreed and for Para (b) NLDC confirmed that the same shall be done after checking.

(ii) 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 rates. He further observed that despite requesting through Validation committee notice every time, the data of new lines to be considered in that quarter and lines which are to be removed from that quarter are not furnished by CTU in time. This data is supposed to be discussed during Validation committee meeting. CTU is advised to submit the required data as per CERC Sharing regulations and as per timelines decided in Validation committee meeting (Q1 2017-18) dated 21.02.2017 as 60 days prior to start of quarter.

(iii) CTU representative stated that the first element of POWERGRID NM Transmission limited (PNMTL) namely Nagapattinam – Salem was already commissioned and is in service and remaining element 765 kV Salem – Madhugiri transmission line is expected to be commissioned by December, 2018. The YTC of the complete project may be considered in POC. CERC order dated 26.3.2017 in petition no 62/MP/2017 vide which it was decided that the petitioner shall be entitled for tariff for the entire transmission system after the Madhugiri-Salem transmission line is put under commercial operation.

It was decided that the YTC of the above elements shall be considered for POC computation. However disbursement will be made only after actual COD of Madhugiri – Salem transmission line.

- (iv) CTU representative stated that the 765 kV Vindhyachal Jabalpur D/C transmission line of POWERGRID Jabalpur Transmission limited is expected to be commissioned by December 2018 and hence the YTC of the project may be considered in POC.
- (v) CTU representative stated that the 400 kV Cuddapah Madhugiri D/C transmission line of POWERGRID Southern Interconnector Transmission system limited (PSITSL) is expected to be commissioned by January, 2019 and hence the YTC of this element may be considered in POC.

It was decided that above transmission line at Para (iv) and (v) shall be considered in POC.

(vi) CTU representative stated that YTC of the FSC of POWERGRID Kala Amb Transmission may be included in POC as per CERC order dated 18.9.2018 in Petition no 104/MP/2018.

Representative of POSOCO clarified that the YTC for FSC has already been considered in POC from Q3 2018-19 as per CERC order in petition no 104/MP/2018.

(vii) CTU representative stated that the Bilateral billing of the POWERGRID Warora Transmission limited is being done on NTPC as per the direction of Validation committee. It was informed that NTPC Gadarwara Unit- 1 is expected to be commissioned in Dec'18 and suggested inclusion of proportionate YTC in PoC.

It was observed that the issue of bilateral billing of PWTCL has never been raised in any Validation Committee meeting. CTU should clearly indicate which validation committee it was referring to. Chief (Engg) advised CTU to follow CERC orders and CERC Regulation in all the matters.

(viii) CTU representative further stated that after approval of revised POC rates, the RTAs are also not being revised immediately so that CTU is unable to compute and raise the differential billing in time. As a result, some of the DICs with the reduced billing as per new POC rates are withholding the payments to the extent of reduction in their billing, thus leading to short recovery of tariff at the end of ISTS licensees besides cropping up of new disputes. He requested that in case of delay in POC rates approval, RPC should issue revised RTA within 10 days of approval of new POC rates.

It was agreed that RTA may be revised preferably within a month of issue of revised POC rates.

(ix) ED NLDC requested CTU to include the details of eligible RE generators for waiver of Inter State Transmission System (ISTS) charges and the RE generators not eligible for waiver of ISTS charges in two separate columns along with their LTA quantum while furnishing the LTA/MTOA data. The same may be reflected in the RTA published by respective RPCs.

It was agreed that CTU shall furnish the data as suggested by NLDC

(x) ED NLDC stated that there are eight revisions for re-computation of POC charges for various quarters are pending. He stated that the final result incorporating revisions shall be submitted by mid of the December 2018.

Name of the	ISTS	CoD	Anticipated	Remarks	
Transmission line	Licensee	as per	/ Actual		
		TSA	CoD		
765 kV Bilaspur Pooling Station – Rajnandgaon D/C line	Sipat Transmission limited	March, 2019	1 <sup>st</sup> March, 2019 (Anticipated COD as submitted by transmission licensee)	As per CEA minutes issued vide letter dated 6.7.2017 (enclosed at Annexure – III), mutually agreed date of early commissioning is Nov, 2018. The line shall not be considered in POC for this quarter. since its anticipated date of COD is after 01.02.2019.	
LILO of one circuit of 765 kV Aurangabad – Padghe D/C line at Pune.	Chhatisgarh – WR Transmission Limited	March, 2019	30th Nov, 2018 (Anticipated COD as submitted by transmission licensee)	As per CEA minutes issued vide letter dated 28.3.2018 (enclosed at Annexure – IV), mutually agreed date of early commissioning is July, 2018 Hence this line shall be considered in POC. Disbursement will be done after actual COD as per date agreed by CEA.	
765 kV Khandwa Pool – Dhule D/C 765 kV Khandwa Pool – Indore D/C 2*1500 MVA, 765/400 kV Khandwa Substation and bays	Khargone Transmission Limited	July, 2019	1st Jan, 2019 (Anticipated COD as submitted by transmission licensee)	As per CEA minutes meeting held on dated 12.9.2018 (enclosed at Annexure – V), the date of commissioning as informed by KTL was Nov, 2018. However, generator was not present in that meeting. The line has been planned to be commissioned earlier than scheduled COD of July, 2019. As such line be kept out of POC and KTL is advised to approach CERC in this regard.	

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

#### 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 January 2019 to March 2019. 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.

### List of Participants in the 4<sup>th</sup> meeting for 2018-19 of the Validation Committee held on 26<sup>th</sup> November, 2018 at , New Delhi.

#### CERC

- 1. Shri S.C.Shrivastava, Chief (Engg.) In Chair
- 2. Shri P.K Awasthi, Joint Chief (Finance)
- 3. Ms Shilpa Agarwal, Joint. Chief (Engg.)
- 4. Shri A. Suresh, Dy. Chief (Engg)
- 5. Ms Sonika Hayaran, Research Officer
- 6. Shri Harish Kumar, Associate Engineer

#### POWERGRID

- 7. Shri P.S Das, DGM
- 8. Shri V Sriniwas, DGM (Comml.)
- 9. Shri Bhaskar Wagh, Manager (Comml)
- 10. Shri Ajay Upadhyay, Manager (Comml)

#### NLDC

- 11. Shri S.R Narsiman, Executive Director
- 12. Shri G. Chakraborty, DGM
- 13. Shri Gaurav Verma, Dy. Manager
- 14. Shri Ravi Shankar, Dy. Manager
- 15. Shri Sanny Machal, Sr. Engineer

#### NRPC

16. Shri M.A.K.P Singh, Member Secretary 17. Shri R.P Pradhan, SE

#### WRPC

18. Shri J.K Rathod, SE, WRPC 19. Shri D.N Gawali, EE

#### WRLDC

20. Ms. Pushpa. S, AGM 21. Ms Chitrankshi, Manager

#### ERPC

22. Shri S.K Pradhn, AD (Comml)23. Shri Mohan Jha, Consultant

#### ERLDC

24. Shri S.K Sahay, Dy. Manager 25. Shri Raj Pratum, Sr. Engineer 26. Shri A.K Basak, Sr. Engineer

#### DVC, Kolkata

27. Shri M. Sahoo, Dy. Chief Engineer 28. Shri Debshankar Ghosh, EE (Comml)

#### SRPC

29. Shri J.B LEN, Executive Engineer

#### SRLDC

30. Shri Abraham Vaghere, DGM

31. Shri L. Sharath Chand, Sr. Engineer

32. Shri Abishek . R.S, Engineer

#### NRLDC

33. Shri Rajiv Porwal, DGM34. Shri Suruchi Jain, Manager35. Shri Rinku Narang, Technician, NRLDC

#### GRIDCO

36. Shri S.K Maharana, AGM(Elec) 37. Ms Harpriya Behera, AGM (Elec)

#### APTRANSCO

38. Shri Suresh 39. Ms. Madhavi

#### TNEB

40. Shri Senthil Kumar

#### NHPC

41. Shri Vijay Kumar, Senior Manager (E)

#### NERLDC

42. Shri Amresh Mallick, DGM43. Shri Momai Deh, Sr. Engineer

#### NERPC

44. Shri Farooque Iqbal, EE(P&SS)

Annexure-II

## Point of Connection Charges and Losses Computation January 2019 - March 2019 (Q4)

### Meeting of the Validation Committee Date: 26<sup>th</sup> Nov, 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 Q4 Case (Jan'19 - Mar'19)

Demand & Generation Projection

New Generation

HVDC Set points

## **Demand Generation Projection**

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

## **Demand Generation Projection**

- For State's generation, in case of non-submission of data by the DICs, the maximum injection of the concerned State is taken as the difference between peak met and withdrawal from ISTS based on actual metered data (for the time block corresponding to the block in which peak met occurred).
- □ New Generation: DOCO by 31<sup>st</sup> Dec, 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 1 <sup>st</sup> Apr'18 to 31 <sup>st</sup> Dec'18	70%
Hydro Units with DOCO from 1 <sup>st</sup> Apr'18 to 31 <sup>st</sup> Dec'18	70%
Gas Units with DOCO from 1 <sup>st</sup> Apr'18 to 31 <sup>st</sup> Dec'18	30%

### **Demand and Generation Projections**

- □ <u>Northern Region</u>
- Eastern Region
- Western Region
- North-Eastern Region
- □ Southern Region

## **HVDC Set points**

### Maximum Flow based on operational experience.

**MW 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
- Uttrakhand
- 🗆 Goa
- DNH

- Jharkhand
- Bihar
- West Bengal
- Sikkim
- Kerala
- Telangana
- Tamilnadu
- Karnataka
- Pondicherry

### **Data not Received**

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

**Balco Jhabua Power KSK Mahanadi GMR** Warora Tehri **SGPL** IL&FS **Tuticorin TPP** Semcorp Energy India Ltd. Sasan UMPP **Coastal Energen** 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.**
- **D** 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....

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



- Sipat Transmission Limited
- Chhattisgarh -WR Transmission Limited
- Raipur-Rajnandgaon-Warora Transmission Limited
- Warora-Kurnool Transmission Limited
- **D** Aravali Power Company Pvt. Ltd.

### **YTC Data not received**

- **North East Transmission Company Ltd.**
- Kudgi Trans. Ltd.
- Raichur Sholapur Transmission company Ltd
- **Patran Trans. Co. Ltd.**
- Jaypee Powergrid Ltd.

### **YTC Data received from States**

- Karnataka
- Andhra Pradesh
- Assam
- Madhya Pradesh

### List of new assets

	1		
	CoD as per	As per CEA	Anticipated/
	TSA	website	Actual CoD
Sipat Transmission Limite	d		
765 kV Bilaspur Pooling Station -Rajnandgaon D/C Line	Mar,2019	Mar'18	July,2018
Chhattisgarh -WR Transmission	Limited		
LILO of one circuit of 765 kV Aurangabad – Padghe D/C line at Pune		Dec'18	30 <sup>th</sup> Nov,2018
Khargone Transmission L	.td.		
765kV Khandwa Pool –Dhule D/C		Nov,18	Jan,2019
765kV Khandwa Pool –Indore D/C		Nov'18	Jan,2019
2x1500 MVA, 765/400kV Khandwa Sub Station and bays			Jan,2019

### Re-computation of PoC Rates

	Revision in PoC Rate required with following consideration	Impact of revision				
2015-16_Q4	LTA quantum of 1224 MW instead of 1035 MW for Odisha	Change in PoC rate				
2017-18_Q1	Tariff of Pole - 1 of HVDC Champa - Kurukshetra	Only HVDC & Reliability				
	Tariff of Pole - 1 of HVDC Champa - Kurukshetra					
2017-18_Q2	Tariff of Pole - 2 of HVDC Champa - Kurukshetra	Change in PoC rate, HVDC rate & Reliability rate				
	LTA from NTPC Kudgi to beneficiary states					
2017 10 02	Tariff of Pole - 1 of HVDC Champa - Kurukshetra	Change in HVDC rate &				
2017-18_Q3	Tariff of Pole - 2 of HVDC Champa - Kurukshetra	Reliability rate				
2017 10 04	Tariff of Pole - 1 of HVDC Champa - Kurukshetra	Change in HVDC rate &				
2017-18_Q4	Tariff of Pole - 2 of HVDC Champa - Kurukshetra	Reliability rate				
2010 10 01	Tariff of Pole - 2 of HVDC Champa - Kurukshetra	Change in PoC rate, HVDC				
2018-19_Q1	Allocation to Haryana from IGSTPS	rate & Reliability rate				
2018-19_Q2	Tariff of Pole - 2 of HVDC Champa - Kurukshetra	Change in PoC rate, HVDC				
		rate & Reliability rate				
.8 2018-19_Q3	Tariff of Pole - 2 of HVDC Champa - Kurukshetra	Change in HVDC rate & Reliability rate				

# Thank You !!

## Demand and Generation Projection – Northern Region

Entity	Projected Demand (MW) by IA	Demand as given by DICs	Projected Generation (MW) by IA	Generation data as given by DICs	Projected ISTS drawal (MW) as per IA	ISTS drawal as per data submitt ed by DICs
Chandigarh	239		-			
Delhi	4,191	4,165	651	774	3,540	3,391
Haryana	6,998	7,012	2,792	3,014	4,206	3,998
Himachal Pradesh	1,590		364			
Jammu & Kashmir	2,274		369			
Punjab	6,692	6,690	4,380	4,380	2,312	23,10
Rajasthan	11,590	11590	7,146	9,527	4,444	2,063
Uttar Pradesh	16,578	16,800	9,477	9,800	7,101	7,000
Uttarakhand	2,100		827			
Total	52,252					
Normalization Factor	0.90					

## **Generation Projection – Northern Region <sup>21</sup>**

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'18 – 30 <sup>th</sup> Sep'18 (B)	Generation CoD from 1st Oct'18 to 31 <sup>st</sup> Dec'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any)	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	BBMB	2081	-	-	2081		
2	Dadri Thermal	1476	-	-	1476		1650
3	Rihand	2890	-	-	2890		2807
4	Singrauli	1865	-	-	1865	As per data given by	1863
5	Unchahar	1005	-	-	1005	NTPC	1286
6	Auraiya	176	-	-	176		150
7	Dadri CCPP	418	-	-	418		300
8	NAPS	421	-	-	421	As per data given by NPCII	400
9	Jhajjar	1387	-	-	1387	Data given by APCPL Jhajjar	1500

## **Generation Projection – Northern Region ...(2)** 22

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'18 – 30 <sup>th</sup> Sep'18 (B)	Generation CoD from 1st Oct'18 to 31 <sup>st</sup> Dec'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
10	Dhauliganga	269	-	-	269		280
11	Tanakpur	39	-	-	39	As per NHPC	36
12	Koteshwar	404	-	-	404		
13	Tehri	898	-	-	898		
14	Anta	244	-	-	244	As per data given by NTPC	150
15	RAAP B	377	-	-	377	-	
16	RAAP C	457	-	-	457	-	
17	AD Hydro	131	-	-	131	-	
18	Everest	79	-	-	79	-	
19	Karcham Wangtoo	884	-	-	884	-	

## **Generation Projection – Northern Region(3)**

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'18 – 30 <sup>th</sup> Sep'18 (B)	Generation CoD from 1st Oct'18 to 31 <sup>st</sup> Dec'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
20	Bairasul	170	-	-	170		0
21	Chamera 1	543	-	-	543	As per NHPC	540
22	Chamera 2	308	-	-	308		304
23	Chamera 3	182	-	-	182		231
24	Naptha Jhakri	1602	-	-	1602		
25	Lanco Budhil	70	-	-	70	-	
26	Dulhasti	401	-	-	401		400
27	Salal	480	-	-	480		470
28	Sewa-II	130	-	-	130	As per NHPC	128
29	URI I HPS	432	-	-	432		406
30	URI II HPS	203	-	-	203		203
31	Sree Cement	265	-	-	265	-	
32	Parbati III	189	-	-	189	As per NHPC	260
33	Rampur HEP	442	-	-	442	As per SJVN	442
34	Koldam	850	-	-	850	As per data given by NTPC	792
35	Kishanganga	-	<u>229</u>	-	229	As decided in OCC meeting	229
36	Sainj HEP		69	-	69		

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## **Demand and Generation Projection – Eastern Region**<sup>24</sup>

Entity	Projected Demand (MW) by IA	Demand as given by DICs	Projected Generation (MW) by IA	Generation data as given by DICs	Projected ISTS drawal (MW) as per IA	ISTS drawal as per data submitt ed by DICs					
Bihar	4,785		537								
DVC	3,033	2,979	4,259	4,087	-1,226	-1,108					
Jharkhand	1,201		422								
Odisha	4,220	4,114	3,173	3,107	1,047	1,007					
West Bengal	7,239		5,628								
Sikkim	81		0		81						
Total	20,558										
Normalization Factor		0.90									

# **Generation Projection – Eastern Region...(1)**<sup>25</sup>

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'18 – 30 <sup>th</sup> Sep'18 (B)	Generation CoD from 1st Oct'18 to 31 <sup>st</sup> Dec'18 (C)	TOTAL D=A+B+ C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	Chujachan	87	-	-	87	As per CERC order dated: 22.06.2017	99
2	MPL	1017	-	-	1017		
3	Teesta V	536	-	-	536	As per NHPC	528
4	Kahalgaon	2196	-	-	2196		2178
5	Farakka	1936	-	-	1936	As per data given by NTPC	1968
6	Talcher	967	-	-	967	Restricted to the generation(Installed Capacity- NAC)	942
7	Rangeet	63	-	-	63	As per NHPC	60
8	Adhunik Power	415	-	-	415	-	
9	Barh	1294	-	-	1294	As per data given by NTPC	1250

# **Generation Projection – Eastern Region...(2)**<sup>26</sup>

		0	
	d		N.

S. No.	Entity	Projections based on 3 Years Data (A)	addition during	Generation CoD from 1st Oct'18 to 31 <sup>st</sup> Dec'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any)	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
10	Kamalanga TPP (GMR)	591	-	-	591	-	
11	JITPL	918	-	-	918		
12	Jorthang	62	-	-	62		
13	Bhutan	287	-	-	287	-	
14	Teesta-III	975	-	-	975	As per CERC order dated: 22.06.2017	782
15	Dikchu HEP	70	-	-	70		
16	Nabinagar BRBCL	271	<u>164</u>	-	434		
17	Tashideng	66	-	-	66		
18	Kanti Bijlee Stg-2 (KBUNL)	-	-	-			

## **Demand and Generation Projection – Western Region**<sup>27</sup>

Entity	Projected Demand (MW) by IA	Demand as given by DICs	Projected Generation (MW) by IA	Generation data as given by DICs	Projected ISTS drawal (MW) as per IA	ISTS drawal as per data submitt ed by DICs					
Chattisgarh	3,371	3638	2,471	2375	900	1,263					
Gujarat	15,068	15000	9,100	9380	5,968	5,620					
Madhya Pradesh	11,737	12,000	4,870	6,299	6,867	5,701					
Maharashtra	23,294	22,200	15,000	15,166	8,294	7,034					
Daman & Diu	364		-								
Dadra Nagar Haveli	777		-								
Goa	555		-								
ESIL	697	700	-								
Total	55,863										
Normalization Factor		0.90									

## **Generation Projection – Western Region...(1)** <sup>28</sup>

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'18 – 30 <sup>th</sup> Sep'18 (B)	Generation CoD from 1st Oct'18 to 31 <sup>st</sup> Dec'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comment s
		(MW)	(MW)	(MW)	(MW)		(MW)
1	Vindhyachal	4611	-	-	4611	As per NTPC	4440
2	Ratnagiri Dabhol	591	-	-	591		
3	TAPS (1,2,3,4)	1156	-	-	1156		
4	JINDAL	605	-	-	605	As per data given by JPL	560
5	LANCO	582	-	-	582		
6	NSPCL Bhilai	490	-	-	490		
7	Korba	2491	-	-	2491	As per NTPC	2431

## **Generation Projection – Western Region ... (2)** <sup>29</sup>

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'18 – 30 <sup>th</sup> Sep'18 (B)	Generation CoD from 1st Oct'18 to 31 <sup>st</sup> Dec'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
8	SIPAT	2933	-	-	2933	As per NTPC	2809
9	CGPL	3837	-	-	3837		
10	Mauda	1973	-	-	1973	As per NTPC	1757
11	Gandhar	380	-	-	380		350
12	Kawas	411	-	-	411		250
13	SSP	323	-	-	323		
14	KAPS	69	-	-	69		
15	Essar Mahan	538	<u>393</u>	-	930		
16	BALCO	569	-	-	569	As per last quarter	300
17	KSK Mahanadi	1081	-	-	1081		
18	Sasan UMPP	3856	-	-	3856		
19	JPL Stg-2	967	-	-	967	As per data given by JPL	1140

G	Generation Projection – Western Region (3) 30 Back										
S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'18 – 30 <sup>th</sup> Sep'18 (B)	Generation CoD from 1st Oct'18 to 31 <sup>st</sup> Dec'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments				
		(MW)	(MW)	(MW)	(MW)		(MW)				
20	DGEN	0	-	-	0						
21	DB Power	1173	-	-	1173	As per email dtd:16.11.18 from DB power	1000				
22	Korba West	289	-	-	289						
23	Dhariwal	285	-	-	285						
24	GMR Chattishgarh Energy Ltd.	499	-	-	499						
25	JP Nigrie	1110	-	-	1110	As per data given by JP Nigrie	1240				
26	GMR Warora	564	-	-	564						
27	ACBIL+ Spectrum+MCCPL	653	-	-	653	As per ACBIL	680				
28	MB Power (Anuppur)	1158	-	-	1158	As per MB Power	900				
29	<b>RKM Power</b>	286	232	-	518						
30	Jhabua Power	499	-	-	499						
31	TRN Energy	550	-	-	550	As per data given by TRN Energy	540				
32	Sholapur STPP	622	-	-	622		550				
33	Lara STPP	-	-	<u>528</u>	528	As per NTPC	0				
34	SKS Power	-	198	198	396						

# **Demand and Generation Projection – North Eastern Region**

Entity	Projected Demand (MW) by IA	Demand as given by DICs	Projected Generation (MW) by IA	Generation data as given by DICs	Projected ISTS drawal (MW) as per IA	ISTS drawal as per data submitt ed by DICs			
Arunachal Pradesh	134	134	-		134	134			
Assam	1,561	1,550	349	211	1212	1339			
Manipur	198	210	-		198	210			
Meghalaya	300	370	206	261	94	109			
Mizoram	93	94	11	8	82	86			
Nagaland	127	130	15	12	112	118			
Tripura	272	327	154	173	118	154			
Total	2,686								
Normalization Factor	0.90								

# **Generation Projection – North-Eastern Region**<sup>32</sup>

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'18 – 30 <sup>th</sup> Sep'18 (B)	Generation CoD from 1st Oct'18 to 31 <sup>st</sup> Dec'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	AGTPP, NEEPCO	87	-	-	87		94
2	Doyang, NEEPCO	44	-	-	44		51
3	Kopili , NEEPCO	172	-	-	172		182
4	Kopili 2, NEEPCO	25	-	-	25	As decided in 150th OCC meeting	20
5	Khandong, NEEPCO	35	-	-	35		38
6	Ranganadi, NEEPCO	405	-	-	405		401
7	AGBPP_Kathalguri	231	-	-	231		220
8	Loktak, NHPC	105	-	-	105		105

## **Generation Projection – North-Eastern Region**<sup>33</sup>

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S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'18 – 30 <sup>th</sup> Sep'18 (B)	Generation CoD from 1st Oct'18 to 31 <sup>st</sup> Dec'18 (C)	TOTAL D=A+B+ C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
9	Palatana GBPP	578	-	-	578	As decided in 150th	680
10	Bongaigaon_NTPC	468	-	-	468	OCC meeting	500
11	Pare NEEPCO	-	<u>76</u>	-	76		110
12	Tuirial HEP NEEPCO		42		42		54

# **Demand and Generation Projection – Southern Region**

Entity	Projected Demand (MW) by IA	Demand as given by DICs	Projected Generation (MW) by IA	Generation data as given by DICs	Projected ISTS drawal (MW) as per IA	ISTS drawal as per data submitt ed by DICs
Andhra Pradesh	9,513	9,133	6,435	6,100	3,078	3,033
Telangana	11,874		5,833			
Karnataka	11,029		6,854			
Kerala	3,715		1,362			
Tamil Nadu	14,602		7,813			
Pondicherry	370		-			
Goa_SR	80		-			
Total	51,184					
Normalization Factor			0.90			

# **Generation Projection – Southern Region...(1)**<sup>35</sup>

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'18 – 30 <sup>th</sup> Sep'18 (B)	Generation CoD from 1st Oct'18 to 31 <sup>st</sup> Dec'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	Ramagundam	2461	-	-	2461		2431
2	Simhadri 2	974	-	-	974	As per NTPC	948
3	Simhadri 1	964	-	-	964		948
4	SEPL	184	-	-	184		
5	Lanco Kondapalli	118	-	-	118		
6	Kaiga	839	-	-	839		
7	NEYVELI ( EXT) TPS	337	-	-	337		
8	NEYVELI TPS-II	1316	-	-	1316		
9	NEYVELI TPS-II EXP	300	-	-	300		

## **Generation Projection – Southern Region...(2)**

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Apr'18 – 30 <sup>th</sup> Sep'18 (B)	Generation CoD from 1st Oct'18 to 31 <sup>st</sup> Dec'18 (C)	TOTAL D=A+B+C		Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
10	MAPS	343	-	-	343		
11	Vallur	1249	-	-	1249		
12	Meenakhshi	174	-	-	174		
13	Coastal Energen	582	-	-	582		
14	Kudankulam	1579	-	-	1579		
15	Tuticorin TPP	929	-	-	929		
16	Sembcorp Energy India Ltd.	1278	-	-	1278		
17	IL&FS	1140	-	-	1140		
18	Talcher Stage-II	1946	_	-	1946		
19	Sembcorp Gayatri Power Ltd.	1273	-	-	1273		
20	Kudgi STPS	1456	524	-	1980	As per NTPC	1536

## **Expected Generation addition – Northern Region**

**Back** 

			ared Comm 8 to 30 <sup>th</sup> Se	ercial from	Generation declared/expected to be declared Commercial from 1 <sup>st</sup> Oct'18 to 31 <sup>st</sup> Dec'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)
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						
	Sainj HEP	1	50	35	69					
Sainj HEP	Sainj HEP	2	50	35	09					

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### **Expected Generation addition – Western Region**

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				ared Com 8 to 30 <sup>th</sup> S	mercial fror Sep'18	Generation declared/expected to be declared Commercial from 1 <sup>st</sup> Oct'18 to 31 <sup>st</sup> Dec'18					
	Entity	Bus Name	Gen. considered	Total	Bus Name	Unit No.	Installed Capacity	Gen. considered	Total		
			(MW)	(MW)	(MW)			(MW)	(MW)	(MW)	
	Essar Mahan	Essar 2 600 393									
	RKM Power	RKM Power	2	360	232						
	Lara STPP						Lara STPP	1	800	528	528
	SKS Power	SKS Power	1	300	198	198	SKS Power	2	300	198	198

### **Expected Generation addition – Eastern Region**

-

			lared Comi 18 to 30 <sup>th</sup> S		om	Generation declared/expected to be declared Commercial from 1 <sup>st</sup> Oct'18 to 31 <sup>st</sup> Dec'18				
Entity	Bus Name Unit Installed Gen. No. Capacity considered Total				Bus Name	Unit No.	Installed Capacity	Gen. considered	Total	
	(MW) (MW)							(MW)	(MW)	(MW)
Bihar							8	250	164	164
Nabinagar BRBCL	Nabinagar BRBCL 2 230 151 151									

39

### **Expected Generation addition – Southern Region**

			eclared Co r'18 to 30 <sup>th</sup>	mmercial fro 'Sep'18	Generation Commerc			cted to be de 18 to 31 <sup>st</sup> De		
Entity	Bus Name	Bus Name Unit Installed Gen. No. Capacity Considered Total B					Unit No.	Installed Capacity	Gen. considered	Total
			(MW)	(MW)	(MW)			(MW)	(MW)	(MW)
Telangana						Kothaguder TPS-VII	n 12	800	528	528
Kudgi STPS	Kudgi STPS	3	800	524	524				•	

### Expected Generation addition –North Eastern Region <sup>41</sup>

_		

		eclared Co '18 to 30 <sup>ti</sup>	mmercial fro <sup>h</sup> Sep'18	Generation o Commerci						
Entity	Bus Name	Bus Name Unit Installed Gen. No. Capacity considered Total		Bus Name	Unit No.	Installed Capacity	ICONSIDER	Total		
		(MW) (MW) (MW						(MW)	(MW)	(MW)
	Pare HEP	1	55	44			•	•		
Pare HEP	Pare HEP	1	55	44	88					
Turial HEP	Turial HEP	1	60	42	42					

Annexure- III





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 To As per the list

विषय / Subject: 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

#### 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, ्र्रेसेन्ट्र र्ड्राप्ना (रवीन्द्र गुप्ता / Ravinder Gupta) (मुख्य अभियन्ता / Chief Engineer)

दिनांक / Date: 04.07.2017

सेवा भवन, आर. के. पुरम-I, नई दिल्ली-110066 टेलीफैक्स: 011-26732305. ईमेल: pspandpa1.cea@gmail.com वेबसाइट: <u>www.cea.nic.in</u> Sewa Bhawan, R.K Puram-I, New Delhi-110066 Telefax: 011-26732305 Email: pspandpa1.cea@gmail.com, Website: <u>www.cea.nic.in</u> 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:

- Madhya Pradesh Power Trading Company Ltd., Block No. 11, Ground Floor, Shakti Bhawan, Vidhyut Nagar, Rampur, Jabalpur – 482008, Madhya Pradesh
- Chhattisgarh State Power Distribution Company Ltd., P O Sundar Nagar, Dangania, Raipur – 492013, Chhattisgarh
- B) Gujarat Urja Vikas Nigam Ltd. Vidhyut Bhawan, race Course, Vadodara 390007
- Maharashtra State Electricity Distribution Company Ltd., Prakashgad, 4<sup>th</sup> 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

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

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

		<b>TBCB</b> sche	<u>mes of M/s Al</u>	<u>PL held on 16.06.2017.</u>	
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				

## List of participants of a meeting regarding advancement in schedules of TBCB schemes of M/s APL held on 16.06.2017

						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 System	strengthening for	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	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	Rainur - Rainandgaan Warora Transmission Ltd (RRWTL) - Additional System Strengthening Scheme for					
а	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	(3000)	System Strengthening Scheme for Chhattisgarh IPPs, no requirement of early commissioning. This scheme is interlinked with
b	765 kV D/C Rajnandgaon - New Pooling Station near Warora	RRWTL	Nov'18	June'18	Nov'18 (SCOD)	
i	2 no. of 765 kV bays at Rajnandgaon SS (Switching)	RRWTL	Nov'18	Nov'17	(3000)	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 Rajnandgaon- Warora 765 kV D/C line at Warora substation are in the scope of M/s WKPL (Nov'19 with SCOD of reactors as Nov 18).
iii	2X240 MVAR line reactors at Warora end	WKTL	Nov'18	-	Nov'18 ( SCOD)	
с	Establishment of new 765kV switching station near Rajnandgaon	RRWTL	Nov'18	Nov'17	Nov'18 (SCOD)	

3	Chhattisgarh WR	Transmission I		RTL) - System S Projects in Wes		PPs in Chhattisgarh & Other
а	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 (MPPTCL). MPPTCL agreed to implement their 220 kV outlets from Morena 400/220 kV SS by January 2018
ii	2 no. of 400 kV bays at Morena (TBCB)	CWRTL	May'18	Jan'18	Jan'18	
iii	4 no. of 220 kV outlets from Morena (TBCB)	MPPTCL	May'18	Jan'18		
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 of power evacuation of Sasan UMPP
i	1 no. of 765 kV Bay at Sasan UMPP of M/s. SPL, Reliance	CWRTL	Nov'18	Dec'17	Jun'18	
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 Chattishgarh generation complex( Raigarh kotra,
i	1 no. of 765 kV bay at Raigarh (Kotra)	PGCIL	Nov'18*	Jun'18	Jun 18	
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 complex(	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 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 ट्रांसमिशन 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 ट्रांसमिशन 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

### <u>पते की सूची:</u>

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) <u>ajaiku@hotmail.com</u> (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

#### <u>Minutes of meeting taken by Chief Engineer (PSPM) on 19.02.2018 to discuss issues</u> 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 3<sup>rd</sup> 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 3<sup>rd</sup> 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 30<sup>th</sup> 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:

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. <u>Sterlite Grid Limited (SGL)</u>

#### 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 TIWARI	DY. DIR
3. Sh. DHANESH KUMAR	AD-I
POWERGRID	
1. Sh. RAJESH VERMA	CM (CTU-PLG.)
2. SMT. PUNAM	CH. MANAGER
STERLITE POWER	
1. Sh. MOHAN BABU PALADUGU	DM
2. Sh. TAN REDDY	V.P.
3. Sh. RAGHRAM JALLIPALLI	A.V.P
4. Sh. ROHIT GERA	AM
ESSEL	
1. Sh. AMIT KUMAR	GM
	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 परियोजना प्रबोधन प्रभाग Power System Project Monitoring Division

सेवा में,

#### (संलग्न सूची के अनुसार)

विषय: टीबीसीबी के अंतर्गत ट्रांसमिशन परियोजनाओं की प्रगति की समीक्षा करने के लिए मुख्य अभियंता (विदयुत प्रणाली परियोजना प्रबोधन प्रभाग) के.वि.प्रा. दवारा 12.09.18 को ली गई बैठक का कायर्यवृत्त ।

**Subject:** Minutes of meeting taken by CE (PSPM), CEA on 12.09.18 to review the progress of Transmission projects awarded through TBCB route- reg.

महोदय / Sir,

A Meeting was taken by Chief Engineer (PSPM) on 12.09.2018 in CEA to review the progress of transmission projects awarded through TBCB route, which are expected to be completed during 2018-19. The Minutes of above meeting are attached at Annexure-I.

संलग्नक: यथोपरी।

Signature Not Verified Digitally signed by SANJAY JAIN Date: 2018.10.11 16:27:53 IST

(संजय जैन / Sanjay Jain) निदेशक / Director

#### <u>प्रति सूचनार्थ:</u>

- 1. संयुक्त सचिव (ट्रांस), विद्युत मंत्रालय, श्रम शक्ति भवन, रफ़ी मार्ग, नई दिल्ली-110001
- 2. पी.पी. एस., सदस्य (वि.प्रा.), के.वि.प्रा.

#### Annexure-I Minutes of meeting taken by Chief Engineer (PSPM), CEA on 12.09.2018 to review the progress of Transmission projects awarded through TBCB route.

List of participants is enclosed at Annexure-II. No representative from Odisha Power Generation Corporation (OPGC) attended the meeting.

At the outset, Chief Engineer (PSPM) welcomed all the participants. After a brief introduction he reviewed the progress of transmission projects which are scheduled to complete during balance period FY 2018-19. The brief of discussion is as under:

#### 1. Rajnandgaon – Warora 765 kV D/C Transmission Line by M/s Raipur Rajnandgaon Warora Transmission Ltd(RRWTL)

M/s RRWTL submitted progress of transmission line as under:

Total Foundation (nos.): 688	Line length (Ckm): 532
Foundation completed (nos.):550	Stringing completed (Ckm): 200.6
Tower erection completed (nos.):516	Anticipated completion: Nov, 2018.

M/s RRWTL representative informed that several ROW issues are being faced in Maharashtra. The transmission line is passing through forest land and Stage-I forest clearance has been received in Mar, 2018 but working permission and Stage-II forest clearance is pending. RRWTL representative was advised to submit details of forest clearance to CEA to take up the issue with forest authorities.

Regarding progress of terminal bays at Rajnandgaon and Warora s/s, RRWTL representative informed that they are constructing Rajnandgaon S/s and its construction including terminal bays for Rajnandgaon – warora line has been completed. PGCIL representative informed that bays at Warora substation has been completed. CE (PSPM) enquired about the progress of switchable line reactor (240 MVAR) at Warora S/s required for Rajnandgaon – warora line. ESSEL representative informed that civil work has been completed and reactors have been erected and erection of other equipment is under progress. Essel representative stated that line reactor work would be completed by Nov, 2018.

#### 2. LILO of one circuit of Aurangabad- Padge 765 kV D/C line at Pune by M/S Chhattisgarh WR Transmission Ltd (CWRTL)

M/s CWRTL submitted progress of transmission line as under:

Total Foundation (nos.): 179	Line length (Ckm): 130
Foundation completed (nos.):150	Stringing completed (Ckm): 72
Tower erection completed (nos.):134	Anticipated completion: Dec. 2018.

M/s CRWTL representative informed that severe ROW issues are being faced at Pune end. However, this line is expected to be completed by Dec, 2018. Regarding progress of

terminal bays at Pune substation, PGCIL representative stated that line bays construction works at Pune s/s is in advance stage and confirmed that it would be ready by Dec, 2018.

## 3. Alipurduar(PG)-Siliguri (PG) 400 kV D/C line by M/s Alipurduar Transmission Ltd. (ATL)

M/s ATL submitted progress of transmission line as under:

Total Foundation (nos.): 321	Line length (Ckm): 232
Foundation completed (nos.):288	Stringing completed (Ckm): 30.61
Tower erection completed (nos.):221	Anticipated completion: Mar, 2019.

M/s ATL representative informed that the line is passing through villages in new jalpaiguri and alipurduar district of West Bengal and they are facing stiff resistance in some villages. He further stated that matter is being resolved with the help of local MLA and district authorities. The ATL representative informed that police protection would be needed at few locations to complete line by Mar, 2019 and requested CEA to take up matter with district authorities in New Jalpaiguri and Alipurduar.

#### 4. Kishanganj (PG)-Darbhanga (DMTCL) 400 kV D/C line, 2 nos. 400 kV line bays and 80 MVA switchable line reactors at Darbhanga S/S of DMTCL by M/s Alipurduar Transmission Ltd. (ATL)

M/s ATL submitted progress of transmission line as under:

Total Foundation (nos.): 547	Line length (Ckm): 209
Foundation completed (nos.):541	Stringing completed (Ckm): 160.85
Tower erection completed (nos.):523	Anticipated completion: Mar, 2019.

M/s ATL representative informed that construction of line is progressing as per execution plan and they would complete line by its schedule date of completion i.e Mar, 2019.

M/s ATL submitted progress of line bays and line reactor at Darbhanga s/s as under:

Land Acquired: 100 %	Civil work completed: 80 %
Equipment supplied: 98 %	Equipment erected : 70 %
Scheduled COD : Mar, 2019	Anticipated COD : Dec, 2018.

M/s ATL representative informed that construction of line bays and line reactor bays is in advance stage and expected to complete by Dec, 2018. However, he requested intervention of CEA in resolution of following issues:

i. Issue of providing auxiliary supply to M/s ATL from existing LTAC panel of M/s DMTCL was discussed in CEA on 28.05.18 and it was agreed by DMTCL to extend the AC supply from their spare feeder (having two separate source of AC supply). The matter was pursued by ATL but no response has been received from DMTCL. In

absence of response from DMTCL, they have completed the formality for one source of LT AC auxiliary supply from NBPDL. However, requirement of second source of AC supply is still to be resolved.

ii. For integration of Bays with Bus bars at Darbhanga substation, shutdown of one week for each bus (Bus –I and Bus –II) would be required along with shut down of both buses simultaneously for 2 days for complete integration. They have made a request in this regard to ERLDC, but permission for shutdown of both the buses simultaneously have not been approved.

CE (PSPM) stated that separate meeting would be called with DMTCL and PGCIL to discuss the issue of LT supply. Regarding shut down of Bus-I &II, he advised ATL representative to submit details of shut down program accordingly ERPC/ERLDC would be requested for shut down of Darbhanga s/s.

#### 5. Salem - Madhugiri 765 kV S/C line by Powergrid Nagapattinam Transmission Limited (PNTL)

wis i full representative submitted progress of transmission fine as under.	
Total Tower Foundation (nos.): 575	Total length (Ckm): 438
Foundation completed (nos.): 573	Stringing completed (Ckm): 400
Tower erection completed (nos.): 573	Anticipated completion: Oct, 2018

M/s PNTL representative submitted progress of transmission line as under:

M/s PNTL representative informed that the progress of line has been severely affected due to acute Right of Way issues and mass agitation of villagers in Ramnagar and Tumkur district. The work was standstill for several months. The construction work could be started with intervention of district authority of Ramnagar and Tumkur district but still there are protest state-wise. PNTL representative informed that they are putting all efforts to complete line by Oct'18.

## 6. Vindhyachal pooling station - Jabalpur pooling station 765 kV D/C line by Powergrid Jabalpur Transmission Ltd(PJTL)

Total Foundation (nos.): 1010	Line length (Ckm): 749
Foundation completed (nos.): 996	Stringing completed (Ckm): 586
Tower erection completed (nos.): 965	Anticipated completion: Nov, 2018

M/s PJTL representative submitted progress of transmission line as under:

M/s PJTL representative informed that severe Right of Way issues are being faced in the villages of Maihar tehsil and Ramnagar tehsil of District Satna (MP). She further stated that RoW issues are being resolved with the help of Distt Authorities and informed that line would be completed by Nov'18.

#### 7. Jharsuguda – Raipur 765 kV D/C line by Odisha Generation Phase-II Transmission Ltd(OGPTL)

M/s OGPTL representative submitted progress of transmission line as under:

II	
Total Foundation (nos.): 782	Line length (Ckm): 608
Foundation completed (nos.): 782	Stringing completed (Ckm): 518
Tower erection completed (nos.): 774	Anticipated completion: Oct, 2018

M/s OGPTL representative informed that all the foundations have been casted and erection of 8 towers and 45 km of stringing is balance. He further stated that the line is in advance stage of completion and it would be ready by Oct'18. M/s OGPTL informed that in the meeting held at CEA on 19-02-2018 they have proposed to prepone the commissioning of 765kV D/C Jharsuguda – Raipur Transmission line. PGCIL representative stated that the construction of bays will be completed by Oct'18 with best effort. CE (PSPM) advised PGCIL to match the bays schedule as per the commissioning of transmission line.

# 8. Transmission lines and substation covered under "Creation of new 400 kV GIS substations in Gurgaon area and Palwal as a part of ISTS" by M/s Gurgaon Palwal Transmission Limited (GPTL)

M/s GPTL representative submitted progress of transmission works covered under the transmission project is as under:

#### i. Aligarh-Prithala 400 kV D/C line(HTLS)

Total Foundation (nos.): 107	Line length (Ckm): 98.56
Foundation completed (nos.): 92	Stringing completed (Ckm): 8
Tower erection completed (nos.): 66	Anticipated completion: Mar, 2019

#### ii. Prithala - Kadarpur 400 kV D/C line(HTLS)

Total Foundation (nos.): 64	Line length (Ckm): 54.9	
Foundation completed (nos.): 41	Stringing completed (Ckm): 0	
Tower erection completed (nos.): 22	Anticipated completion: Mar, 2019	

#### iii. Kadarpur - Sohna road 400 kV D/C line(HTLS)

Total Foundation (nos.): 30	Line length (Ckm): 22.14	
Foundation completed (nos.): 6	Stringing completed (Ckm): 0	
Tower erection completed (nos.): 0	Anticipated completion: Mar, 2019	

#### iv. LILO of Gurgaon – Manesar 400 kV D/C line(Q) at Sohna Road

Total Foundation (nos.): 2	Total length (Ckm): 0.78	
Foundation completed (nos.): 0	Stringing completed (Ckm): 0	
Tower erection completed (nos.): 0	Anticipated completion: Mar, 2019	

#### v. Neemrana(pg) – Dhanonda 400 kV D/C line(HTLS)

Total Foundation (nos.): 110	): 110 Total length (Ckm): 93.26	
Foundation completed (nos.): 109	Stringing completed (Ckm): 76	
Tower erection completed (nos.): 106	n completed (nos.): 106 Anticipated completion: Oct, 2018	

#### vi. 2x500 MVA, 400/220 kV GIS at Kadarpur

Land Acquired: 100 %	Civil work completed: 9 %	
Equipment supplied: 45 %	Equipment erected : 0 %	
Scheduled COD : May, 2019	Anticipated COD : Mar, 2019	

#### vii. 2x500 MVA, 400/220 KV GIS at Sohna Road

Land Acquired: 100 %	Civil work completed: 17 %	
Equipment supplied: 23 %	Equipment erected : 0 %	
Scheduled COD : Sep, 2019	Anticipated COD : Mar, 2019	

#### viii. 2x500 MVA, 400/220 kV GIS at Prithala(Palwal)

Land Acquired: 100 %	Civil work completed: 50 %	
Equipment supplied: 62 %	Equipment erected : 0 %	
Scheduled COD : May, 2019	: May, 2019 Anticipated COD : Mar, 2019	

M/s HVPNL raised concerns regarding difficulty in construction of downstream 220kV Lines near GPTL 400kV Sohna Road Sub-Station end. GPTL replied that the route of 400kV D/C Kadarpur - Sohna Transmission Line is in accordance with notified Section 164 route.

M/s GPTL apprised the chair that land acquisition in Gurgaon and Palwal area is very difficult but still all 3 Substation Sites are at good and approachable area. The details of land location had already shared with M/s HVPNL.

GPTL also agreed to provide any engineering support to M/s HVPNL for termination of 220kV downstream lines at Sohna Road Sub-station. In view of that HVPNL agreed to share the routes and line/tower details of 220kV lines terminating at Sohna Road S/s.

M/s HVPNL and M/s GPTL has requested CEA to form a Joint committee having members from CEA, HVPNL and GPTL to find out the amicable solution of 220kV downstream lines terminating at Sohna Road S/s.

GPTL stated that 400kV D/C Neemrana - Dhanonda Transmission line will be ready for charging by Oct'18 and requested PGCIL to match Neemrana Bay to the transmission line schedule i.e Oct'18. PGCIL representative informed that construction of bays at Neemrana end is going on and will be completed by Oct'18.

Representative of M/s KTL (a subsidiary of sterlite grid) also raised issue of transmission project-connectivity system for Khargone TPP(2x660 MW) and informed that they had received a letter dated 26-10-2017 from PGCIL stating that the construction of bays at Indore s/s would be completed by May'18 for which the KTL had replied that 765kV D/C Khandwa Pool – Indore Transmission line would be ready by June'18. KTL representative informed in the meeting that 765kV D/C Khandwa Pool – Indore Transmission line is in advance stage of construction and it would be ready by Nov'18 and requested PGCIL to complete line bay at Indore s/s by Nov'18. PGCIL agreed for completion of line bays at

Indore s/s by Nov'18 with best effort. KTL also informed that they would complete 765kV D/C Khandwa pool – Dhule transmission line by Nov'18.

After discussions following deliberations are made:

- 1. CEA to hold a meeting to resolve the issue of second source of Auxiliary supply to ATL for bays at Darbhanga Substation and also write to ERLDC/ERPC to consider shut down of both buses at Darbhanga S/S for integration of buses and bays.
- 2. PGCIL shall make best effort to complete terminal bays at Jharsuguda, Raipur, Aligarh, Nemrana and Indore s/s matching with the completion schedule of associated line.
- 3. CEA to form a technical committee comprising officers of CEA, HPVNL, GPTL and any other agency, if required, to finalise the route of downstream line of HPVNL (inside and outside substation), emerging from Kadarpur (Gurgaon), Sohna Road (Gurgaon) and Prithla(Palwal) substations of M/s GPTL.

Meeting ended with thanks to the chair.

#### Annexure-II

Minutes of meeting taken by Chief Engineer (PSPM), CEA on 12.09.2018 to review the progress of Transmission projects awarded through TBCB route.

#### **List of Participants**

#### CEA 1. SHRI B. K. ARYA CHIEF ENGGINEER (PSPM)...IN CHAIR 2. SHRI SANJAY JAIN DIRECTOR (PSPM) **DEPUTY DIRECTOR (PSPM)** 3. SHRI AJITESH KUMAR **ASSISTANT DIRECTOR (PSPM)** 4. SHRI DHANESH KUMAR **ASSISTANT DIRECTOR (PSPM)** 5. SHRI YADAV MANOJ KUMAR **ASSISTANT DIRECTOR (PSPM)** 6. SHRI AVINASH PATHAK 7. SHRI RAVI KANT **ASSISTANT DIRECTOR (PSPM) POWERGRID** ADDL. GENERAL MANGER 1. SMT. POONAM VARSHNAY HVPNL 1. SHRI ANIL YADAV SE 2. SHRI VIPIN GUPTA SE 3. SHRI GULSHAN NAGPAL SE 4. SHRI RANDEEP CHAUHAN **Executive Engineer** ADANI TRANSMISSION LIMITED 1. SHRI SAMEER GANJU AVP **2.** SHRI PRAVEEN TAMAK MANAGER **KPTL** 1. SHRI AJAY TRIPATHI GENERAL MANAGER 2. SHRI ATUL DUGGAL MANAGER **ESSEL INFRAPROJECTS LIMITED (WKTL)** 1. SHRI NEERAJ VERMA MANAGER STERLITE POWER TRANSMISSION LIMITED 1. SHRI TAN REDDY VP 2. SHRI ROHIT GERA **DEPUTY MANAGER GPTL (Subsidiary of SPTL)** 1. SHRI KAMLESH GARG **PROJECT HEAD** 2. SHRI B.K. SINGH PROJECT DIRECTOR 3. SHRI SANDIP MAITY AGM OGPTL (Subsidiary of SPTL) 1. SHRI JAGVEER SINGH **DEPUTY MANAGER** 2. SHRI RAGHAV MISHRA ASSOCIATE MANAGER

#### Annexure-III

#### List of Addressees

S. No	Name of Utility	Address	Ph./FAX/ Email ID
1.	PGCIL	Chairman & Managing Director, Powergrid Corporation of India Ltd., SAUDAMINI, Plot No.2, Sector-29, Gurgaon, Haryana-122001	Email: <u>cmd@powergridindia.com</u> <u>poonam@powergridindia.com</u> Ph: 09910377991
2.	ATL	Senior Vice President Adani Transmission Limited, 7th Floor, Sambhav Building, Judges Bunglow Road, Bodakdev, Ahmedabad, Gujarat-380015	Email: <u>In.mishra@adani.com</u> , <u>KINJAL.SEJPAL@adani.com</u> Ph: 09099900244
3.	GPTL	Vice President (Corporate Affairs & B.D.) Sterlite Power Transmission Limited F-1 Mira Corporate Suits, Ishwar Nagar, New Delhi 110065	Email: <u>tan.reddy@sterlite.com</u> Ph: 09310490976
4.	KPTL	Senior Vice President (PPP Division and Long Term Assets) Kalpataru Power Transmission Limited, B-5, Tower-3, 3rd Floor, Okaya Business Centre, Sector-62, Noida, (U.P.) 201306, India.	Email id: - saurabh.gupta@kalpatarupower.c om ajay.tripathi@kalpatarupower.com Ph: 9811826807
5.	OPGC {For issues with "Common Transmission system for phase-II generation projects in Orissa and immediate evacuation system for OPGC project (Orissa)" }	Managing Director Odisha Power Generation Corporation Limited, Zone-A, 7th Floor,Fortune Towers, Chandrasekharpur, Bhubaneswar - 751023 Odisha, India	EPBAX: - 91-674-2303765 / 2303766 FAX : 91-674-2303755 / 2303756 Email: indranil.dutta@aes.com
6.	HVPNL (For status of downstream network for the scheme "Creation of new 400 kV GIS substations in Gurgaon area and Palwal as a part of ISTS")	Managing Director, Haryana Vidyut Prasaran Nigam Ltd., Shakti Bhawan, Sector-6, Panchkula – 134109	Email: <u>md@hvpn.gov.in</u> Ph.: 0172-2560579
7.	WKTL (ESSEL) (For 240 MVAR switchable Line Reactors with Bays at Warora (Pool) end in each circuit of Warora (Pool) – Rajnandgaon 765 kV D/C line with NGR (700 Ohm).	Sr. V.P. Essel Infra Projects Limited, 6th Floor, Plot No. 19, Film City, Sec- 16 A, Gautam Buddha Nagar, Noida, U.P201301	Email: amit.kumar1@infra.esselgroup.co m Ph: 09953200475