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: 10/07/2018

To,

Members of the Validation Committee & Generating Companies

(As per list enclosed)

Subject: Minutes of the 2nd Meeting of Validation Committee for the Application Period from 1st July, 2018 to 30th Sept, 2018 for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010

Madam/ Sir,

Please find enclosed herewith minutes of the 2nd Meeting of the Validation Committee for the year 2018-19 (Application Period from 1st July, 2018 to 30th Sept, 2018) for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 held on 20.6.2018 in the NRLDC Conference Room at New Delhi for information and necessary action.

Encl.: As above

Yours faithfully,

Sd/-

(Shilpa Agarwal)

Joint Chief (Engg)

Validation Committee Members

Sl. No.	Name of the Organizations	Name of the nominated persons	Address
1.	CERC	Shri S.C Shrivastava, Chief (Engg	Central Electricity Regulatory Commission, 3rd & 4th Floor, Chanderlok Building, 36-Janpath, New Delhi -110001
2.		Shri P.K. Awasthi, Joint Chief (Fin.)	Central Electricity Regulatory Commission 3rd& 4th Floor, Chanderlok Building, 36-Janpath, New Delhi -110001
3.	CEA	Chief Engineer, (PSP & PA-II) Division	Central Electricity Authority 3rd Floor, N-Wing, Sewa Bhawan, R.K. Puram, New Delhi - 110 066
4.		Director, GM Division	Central Electricity Authority 6th Floor, N-Wing Sewa Bhawan, R.K.Puram, New Delhi-110066
5.	CTU/ Powergrid	Shri H.K Mallick, GM (Comm)	Power Grid Corporation of India Ltd Plot No. 2, Sector-29, Near IFFCO Chowk, Gurgaon-122001
6.		Shri Ashok Pal, GM / alternate member Shri RVMM Rao, Chief. Design Engineer (SEF)	Power Grid Corporation of India Ltd Plot No. 2, Sector-29, Near IFFCO Chowk, Gurgaon-122001
7.	POSOCO	Shri D.K. Jain GM, NRLDC	Northern Regional Load Despatch Centre, Jeet Singh Marg, Katwaria Sarai, New Delhi-110016
8.		Shri G. Anbunesan GM, SRLDC	Southern Regional Load Despatch Centre 29, Race Course Cross Road, Bangalore, Karnataka-560009
9.		Shri S.R. Narasimhan GM, NLDC	National Load Despatch Centre B-9, Qutab Institutional Area,Katwaria Sarai, New Delhi-110016
10.		Shri P. Mukhopadhyay Executive Director	Eastern Regional Load Despatch Center 14, Golf Club Road, Tollygunge, Kolkata-700 033 (W.B.)
11		Shri T.S Singh Executive Director	North Eastern Regional Load Despatch Centre, Lower Nongrah, Dongtieh, Lapalang, Shillong – 793006
12.	NRPC	Shri M.A.K.P. Singh Member Secretary	Northern Regional Power Committee 18-A Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-11
13.	WRPC	Shri A. Balan, 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,	Southern Regional Power Committee

		Member Secretary	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 2nd Floor, Vidyut Bhawan, Bailey Road, Patna-21, Bihar
17.	NERPC	Shri P.K Mishra Member Secretary	North Eastern Regional Power Committee, NERPC Complex, Dong Parmaw, Lapalang, Shillong-793006 Phone No:0364-2534077 Fax NO.:0364-2534040
18.		Shri Jatin Baishya, Dy. General Manager	State Load Despatch Centre Complex,Kahelipara,Guwahati
19.	SLDC	Shri P.A.R. Bende, Chief Engineer, SLDC	Chief Engineer Madhya Pradesh Power Transmission Company Ltd., Nayagaon,Rampur, Jabalpur- 482008
20.	KPTCL	Shri S. Sumanth Director(Transmission), KPTCL	Karnataka Power Transmission Corp. Ltd, Kauvery Bhavan, K.G. Road, Bangalore – 560009
21.	UPPTCL	Shri A.K. Singh, Director (Operation), Uttar Pradesh Power Transmission Corporation Ltd.	Uttar Pradesh Power Transmission Corporation Ltd , 7th Floor, Shakti Bhavan, Ashok Marg, Lucknow - 226001

LIST OF GENERATING COMPANIES

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

Minutes of the 2nd Meeting of Validation Committee for the Application Period from 1st July, 2018 to 30th Sept, 2018 held on 20th June, 2018 at NRLDC, New Delhi.

1. The Chairman of the Validation Committee, Shri S.C Shrivastava, Chief (Engg.), CERC welcomed the participants present in NRLDC Conference Room and also other participants of RPCs, RLDCs, STUs and Generating Companies present at Conference Room of RLDC and SLDCs of State 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 to be considered in load flow studies made for implementation of CERC (Sharing of Inter-State Transmission Charges and Losses), Regulations, 2010 for the Second Quarter of 2018-19. The presentation shown during the Validation Committee Meeting dated 20.6.2018 is attached at **Annexure-II.**

3. After deliberation among members, it was decided that the peak generation for new hydro units shall be considered at 100% since most of the hydro units would be able to generate at 100% load for the peak hours during July'18 to Sept'18. Further, peak generation for new thermal and new gas based units would be considered as 70% and 30% of ex-bus capacity, respectively.

4. The Projected demand and generation figures of States were analysed with respect to projected peak ISTS drawal keeping in view their ISTS drawal in the same quarter of last year and the projected data given by the State in LGBR has also considered

5. Demand Projection for Application Period from 1st July, 2018 to 30th Sept, 2018 held (Q2 of 2018-19).

5.1 Northern Region:

(i) Members present from NRPC stated that the demand figures were discussed in the OCC meeting.

(ii) Representative of Rajasthan suggested that Demand projection of Rajasthan may be taken as 10,500 MW instead of 9,871 MW.

(iii) NRPC representative suggested that Demand projection of Himachal Pradesh may be taken as 1,450 MW instead of 1,369 MW.

The Demand figures as suggested above were agreed

5.2 Eastern Region:

(i) Projected demand by IA for Odisha was 4370 MW. Data submitted by State before meeting was 4205 MW. Members observed Odisha has a high ISTS drawal. Odisha was asked to explain the quantum of maximum generation likely to be achieved by Odisha in the upcoming quarter which was not explained. Keeping in view historical high ISTS drawal of Odisha 4370 MW was agreed to be considered.

(ii) ERLDC representative suggested that the demand projection of West Bengal may be taken as 7,983 MW instead of 7,998 MW.

The Demand figures as suggested above were agreed.

5.3 Western Region:

(i) Five DICs viz. Chattisgarh, Gujarat, Madhya Pradesh, Maharashtra and ESIL Hazira had submitted their demand projections before the meeting. Further, WRLDC representative stated figures for demand projection have been ratified in OCC meeting.

(ii) Projected demand by IA for Dadra Nagar Haveli and Goa WR was 824 and 612 MW respectively. WRLDC representative stated that these are slightly on the higher side and suggested 810 and 500 MW for DNH and Goa WR, respectively. Members agreed.

(iii) Projected demand by IA for Maharashtra was 19573 MW. Maharashtra had submitted its demand as 19,600 MW. After deliberation, as suggested by WRPC and Maharashtra, it was decided that Demand of Maharashtra may be taken as 20,000 MW. Members agreed.

The Demand figures as suggested above were agreed

5.4 North Eastern Region:

(i) All the states in NER have submitted their demand projections to the IA and the same was ratified in OCC

(ii) Demand projections for NER constituents are in order.

5.5 Southern Region:

(i) Three DICs viz. Andhra Pradesh, Telangana and Tamil Nadu have submitted their demand projections before the meeting.

(ii) Projected demand by IA for Andhra Pradesh was 8566 MW. Demand submitted by DIC before meeting was 8400 MW. SRLDC representative stated that demand figure of Andhra Pradesh was on lower side. Representative of state stated that they are exporting power on account of low demand. After verification of ISTS drawl and LGBR, It was decided that Demand projection of Andhra Pradesh may be taken as 9,000MW Members agreed..

(iii) Projected demand by IA for Telangana was 10,785 MW. Demand submitted by DIC before meeting was 9,375 MW. The committee felt the figure is on lower side and asked Telangana representative the reasons for projecting less. The representative stated that the Lift irrigation projects are delayed and consequently the load is lower. When asked about generation, the representative stated that 5600 MW is available and 800MW is expected to be commissioned. JC, CERC said that only those units whose COD is expected will be considered. After deliberations and examination of ISTS drawal and LGBR, the demand projection was taken as 10,070 MW. Telanagana representative resented.

(iv) Projected demand by IA for Kerala and Pondicherry was 3,522 and 387 MW, respectively. After deliberations, as suggested by SRLDC the demand was revised to 3,561 and 350, respectively.

(v) Projected demand by IA for Karnataka was 9,334 MW. Subsequent to the validation committee meeting, SLDC Karnataka confirmed that Demand from Karnataka may be taken as 9,100 MW instead of 9,334 MW as projected by IA based on last 3 years data. IA has suggested that Demand projection as suggested by SLDC Karnataka may be considered. Accordingly demand projection of Karnataka shall be taken as 9,100 MW.

The Demand figures as suggested above were agreed

6. Generation Projection for Application Period from 1st July, 2018 to 30th Sept, 2018 held (Q2 of 2018-19).

6.1 Northern Region:

(i) Projected generation by IA for Uttar Pradesh was 9,270 MW. Prior to the meeting, Uttar Pradesh submitted its generation as 11,500 MW. Director, NRPC stated that

the generation figure of Uttar Pradesh is on a higher side. Further, he stated it will be difficult to achieve this generation due to coal issues. He suggested 11000 MW as a realistic figure. Accordingly, it was decided that generation projection of Uttar Pradesh shall be taken as 11,000 MW.

(ii) Projected generation by IA for Delhi was 1248 MW while the DIC submitted 1091 MW. During the course of the meeting, Delhi said their actual generation is higher and submitted figure does not include Badarpur. He stated that its generation including Badarpur will be 1248 MW. After discussions, It was decided that the Generation projection of Delhi shall be taken as 1,200 MW.

(iii) Representative of NHPC suggested following changes:-

(a) Generation from Chamera I, Chamera II and Chamera III may be taken as 541 MW, 305 MW and 234 MW instead of 556 MW, 310 MW and 251 MW respectively.

(b) Generation from Dulhasti and Sewa II may be taken as 395 MW and 128 MW instead of 397 MW and 132 MW respectively.

(iv) Chief(Engg), CERC asked why there is a reduction in hydro generation in Tehri, Koteshwar, Koldam in spite of being a high hydro season. It was informed that all machines are not capable to run at 10% high MCR.

The Generation figures as suggested above were agreed.

6.2 Eastern Region:

Members present at ERLDC suggested following changes

(i) Projected generation by IA for Odisha was 2965 MW. The generation projection submitted by DIC before meeting was 3249 MW. Odisha representative stated the submitted generation projection is as per LGBR figure. However, the members after discussion instead agreed to take 2900MW towards Odisha's injection keeping in view LGBR. Accordingly, it was decided that Generation projection of Odisha shall be taken as 2,900 MW.

(ii) Projected generation by IA for Bihar was 547 MW. ERLDC informed that Kanti-2 is a regional plant now, barauni may not be commissioned in time and hence these may be excluded. Thus, 100 MW injection from Kanti-1 was considered as Bihars demand projection.

(iii) ERLDC representative suggested that Generation from Teesta V, JITPL and Nabinagar may be taken as 522 MW, 450 MW and 450 MW instead of 529 MW, 899 MW and 485 MW respectively.

The Generation figures as suggested above were agreed.

6.3 Western Region:

Members present at WRLDC suggested following changes

(i) Projected generation by IA for Madhya Pradesh was 3261 MW. The generation projection submitted by DIC before meeting was 5140 MW. However, during the meeting, WRLDC representative informed that these figures include wind and solar and need to be excluded in view of their non-availability during the peak demand. After discussions the figures were moderated to 3,600 MW. Accordingly Generation projection of Madhya Pradesh shall be taken as 3,600 MW.

(ii) Projected generation by IA for Maharashtra was 14168 MW. The generation projection submitted by DIC before meeting was 15000 MW. WRLDC representative informed that there was a continuos drawal of 6000MW by the State and is unlikely to generate more as thermal plants are already running high. After discussions it was agreed to consider the projected figure of 14168 MW towards Maharashtra's generation projectionProjected generation by IA for Chhattisgarh was 2240 MW. The generation projection submitted by DIC before meeting was 2777 MW. WRLDC representative informed that the generation is on a higher side and suggested 2100MW. Accordingly Generation projection from Chhattisgarh shall be taken as 2,100 MW.

(iii) WRLDC representative suggested that Generation projection from Ratnagiri Dabhol, CGPL, SSP and Mauda may be taken as 540 MW, 3,000 MW, 200 MW and 1,500 MW instead of 607 MW, 3,656 MW, 940 MW and 1,757 MW respectively.

(iv) WRLDC representative suggested that Generation projections from KAPS and Korba west may be taken as zero instead of 87 MW and 284 MW respectively.

(v) WRLDC representative suggested that Generation projections from Essar Mahan, KSK Mahanadi, Sasan UMPP, Jhabua Power and Tamnar TPP (Jindal Extn.) may be taken as 400 MW, 1,300 MW, 3,100 MW, 540 MW and 750 MW instead of 960, 1,256 MW, 3,772 MW, 309 MW and 1,140 MW respectively.

The Generation figures as suggested above were agreed

6.4 North Eastern Region:.

(i) Projected generation by IA for Assam was 298 MW. Assam representative suggested that generation from Assam may be taken as 281 MW during the meeting. Accordingly Generation from Assam shall be taken as 281 MW.

(ii) Projected generation by IA for Meghalaya was 259 MW. Prior to the meeting, Meghalaya submitted its generation was 323 MW. However, during the Meeting, NRLDC representative suggested that Generation from Meghalaya shall be taken as 307 MW.

(iii) NERLDC representative suggested that generation from Pare, NEEPCO may be taken as 110 MW.

The Generation figures as suggested above were agreed

6.5 Southern Region:

Members present at SRLDC suggested following changes:

(i) Projected generation by IA for Andhra Pradesh was 5937 MW. Subsequently, prior to the meeting Andhra Pradesh submitted its generation was 7475 MW. However, during the meeting, SRLDC representative informed that these figures include wind and solar which need to be excluded in view of their non-availability during the peak. After discussions the figures were moderated to 6600 MW. Accordingly Generation from Andhra Pradesh shall be taken as 6600 MW.

(ii) Projected generation by IA for Karnataka was 6005 MW. Subsequently, prior to the meeting Karnataka submitted its generation projection was 7000MW which includes 3000MW Thermal and 4000MW wind. Further, after validation committee meeting Karnataka submitted its generation as 7100 MW. IA has suggested that generation projection as suggested by SLDC Karnataka may be considered. Accordingly generation from Karnataka shall be taken as 7100 MW.

(iii) Projected generation by IA for Kerala was 1,488 MW.. Reprsentative of SRLDC suggested that Generation projection of Kerala may be taken as 1,571 MW .Accordingly; Generation from Kerala shall be taken as 1,571 MW.

(iv) Generation projection from Ramagundam, Kaiga, Coastal Energen and Kudankulam may be taken as 1950 MW, 700 MW, 700 MW and 850 MW instead of 2431 MW, 771 MW, 754 MW and 1700 MW respectively

(v) Generation from Tuticorin TPP and Kudgi STPS may be taken as 650 MW and 1,500 MW (due to expected CoD of unit on 1st July) instead of 759 MW and 1,024 MW respectively.

(vi) Generation from Lanco Kondapalli, SEPL and MEPL may be taken as zero instead of 422 MW, 320 MW and 227 MW respectively.

The Generation figures as suggested above were agreed

7. HVDC Set Points:

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

(ii) Following HVDC set points are finalized

HVDC Name	Set points to be considered in Base case (in MW)
Mundra-Mahindergarh Pole-1	750
Mundra-Mahindergarh Pole-2	750
Talcher-Kolar Pole- 1	1000
Talcher-Kolar Pole- 2	1000
Rihand-Dadri Pole- 1	750
Rihand-Dadri Pole- 2	750
Balia-Bhiwadi Pole-1	500
Balia-Bhiwadi Pole-2	500
Bhadrawati_HVDC	1000
Vindhyachal_HVDC	250
Gajuwaka_HVDC	650
Pusauli HVDC	400
Chandrapur-Padghe Pole-1	750
Chandrapur-Padghe Pole-2	750
BNC-Agra Pole-1& Pole-2	500(towards NR)
Champa-Kurukshetra Pole-1	1250
Alipurduar- Agra Pole-1	500 (towards NR)
Alipurduar- Agra Pole-2	500 (towards NR)
Champa-Kurukshetra Pole-2	1250

8. Other Issues:

(i) Chief (Engg.), CERC requested RPCs to follow up with states regarding submission of data prior to Validation Committee meeting duly validated in their respective OCC meetings. He further observed that for some of the states, the difference was substantial and requested to all the DICs/ State to submit realistic data to IA.

(ii) CTU representative raised the issue related to billing. Chief (E) said any such issue should be taken up with the Commission. GM, NLDC suggested that the billing problems can be addressed through amendment in BCD procedure. Chief (Engg) stated that CTU may suggest necessary amendments in BCD procedure.

(iii) GRIDCO stated that they were not in receipt of the draft TBCB procedure. They requested that a copy of it to be shared with them. NLDC representative stated that the procedure was circulated to transmission licensees only. Chief (E) advised NLDC/IA to circulate to all DICs and upload it on their website. He further stated that the methodology along with comments would be discussed in next validation committee meeting. A copy of draft TBCB procedure along with comments received from the DICs is enclosed at **Annexure-III**.

(iv) Representative of Haryana referred to clause 45.16 of SOR of the 3rd amendment.

"Mundra-Mohindergarh HVDC was built as dedicated line to transfer 1495 MW power to Haryana. Subsequently, it was made ISTS and M/s Adani has obligation to bear withdrawal charges of Haryana corresponding to 1495MW. Accordingly, 1495/2500 part of YTC of the HVDC line shall be borne by M/s Adani Power Ltd (APL). The remaining 1005 MW capacity can be utilized for transfer of power to any DIC in any region. Hence 1005/2500 part of YTC of the HVDC line shall be included in the PoC calculation by scaling up YTC of AC lines on all India basis. However, this arrangement will not give any right or preference to M/s APL to schedule its power on this line. The scheduling shall be done by RLDC based on system requirement. As M/S Adani Power Limited will pay transmission charges for HVDC to deliver power at Haryana periphery, and with modified approach of allocation of injection charges of Generator wherein generator would pay injection charges only for untied power, APL would not be liable to pay PoC Charges for 1495 MW, so there shall not be any double charging to APL. APL will pay MTC towards 1495 MW for Mundra-Mohidergarh HVDC as specified by Commission in the Order."

He said that Haryana is paying the PoC charges of Mundra-Mohindergarh HVDC even when the liability of withdrawal charges has been shifted from Haryana to Adani. He felt that there is double billing for this line. Jt Chief, CERC stated that issue raised by Haryana needs further deliberation.

Chief(E) stated that this issue is out of purview of validation committee. He suggested to representative of Haryana to bring out the issue/ send suggestions to the PoC review committee.

(v) SRPC representative raised the issue SEPL and MEPL charges. He stated that Generators considered with zero injection by Validation Committee and having LTA to target region are charged as per POC Slab rates of the target region. Its application

has created difference in PoC charges between SEPL and MEPL though both are connected at the same bus. Chief (Eng.), CERC asked SRPC to take up the matter separately with CERC.

(vi) NLDC representative brought forth the issue of sharing of transmission charges of Champa-Kurukshetra line in view of the revised commissions order. The commission has directed as under:

"102. In our view, the above regulation is applicable in this case and accordingly, the transmission charges of the subject HVDC line shall be borne as under:-

a) 10% of the transmission charges allowed shall be considered under Reliability charges which shall be borne by all DICs.

b) Where the generators as LTTC has tied up PPA with the beneficiaries, the transmission charges of the subject transmission system shall be apportioned to such beneficiaries for such tied up capacity.

c) Where the long term transmission customer has not firmed up the beneficiaries, the transmission charges shall be apportioned to such long term transmission customers in proportion to the capacity not tied up by each of the generators.

d) The capacity, if any, left out after considering the capacities under (b) and (c) above, the HVDC charges for such balance capacity shall be borne by the remaining DICs of the target region by scaling up of MTC of the AC system included in the PoC as per Regulation 11(4)(3)(iii) of the 2010 Sharing Regulations. In such an event, direction at (a) above shall not be effected.""

IA stated that the accounts may need to be revised retrospectively. Chief (Engg), CERC stated that issue needs to be taken up with Commission.

(vii) Representative of CTU stated the Billing of Jindal Power Limited (Transmission licensee) was being done based on Provisional tariff Order till December' 2015. Commission issued Final Tariff Order in Dec'15 with a reduced transmission tariff. Accordingly, approximately an amount of Rs. 125 Crore (Principal) is recoverable from JPL since its DOCO, however, JPL is not submitting the Bill#3 with the revised tariff citing that they have challenged the final tariff order in APTEL and the matter is subjudice. As JPL is not responding to revise their billing as per the Final tariff Order, their disbursement is being withheld by CTU (approx. Rs1.5 Cr. per month). CTU informed the Committee that withheld amount of approx. Rs 30 Cr shall be disbursed

to the DICs under next Bill#3 and future withhold amounts shall be disbursed to the DICs once in an year, considering small quantum of withheld amount. Chief (E) stated that matter is not to be decided at the Validation committee.

(viii) For last 3 quarters, comparison of projected and actual ISTS drawal and for Q4 of 2017-18, comparison of projected and actual peak demand met were also presented by Implementing Agency. It was observed that for some of the states, the difference was substantial.

(ix) IA stated that there are natural ISTS lines that have been granted provisional tariff in 9-14 period but have not filed revised petitions for grant of tariff in 14-19 period. He asked whether they should be continued to be considered in PoC. Chief (E) stated that is also not to be decided at the Validation Committee..

(x) Representative of TANGEDCO referred to order dated 1.3.2018 in Petition no 246/MP/2016 whereby M/s CEPL has been relieved from payment of transmission charges for the quantum of 542 MW regarding and asked modalities of such relinquishment on POC. JC (Engg) CERC explained that the relinquished quantum of LTA would be excluded while arriving at approved withdrawal and approved injection of DICs. However, the PoC rates would be calculated as per the extant regulations. Further, it was suggested that TANGEDCO is free to raise the issue at appropriate forum.

(xi) Representative of Sterlite Power raised the issues regarding the recovery of transmission charges for LILO of one ckt of 400 kV D/C Khandwa – Rajgarh line at Khargone TPP under Khargone Transmission Limited and transmission charges for 400 kV D/C OPGC – Jharsuguda Transmission line under Odisha Generation Phase-II Transmission Limited.

(a) Issue of Khargone Transmission Limited (KTL): LILO of one Ckt 400 kV D/C Khandwa-Rajgarh Line at Khargone TPP was commissioned on 01.03.2018. However, due to non-readiness of bays at NTPC Khargone, the said transmission element could not be connected to Khandwa and Rajgarh Sub-Stations of PGCIL.

Tariff Payment: From 1.3.2018 to till date (To be paid by NTPC).

Letters sent by KTL to NLDC on 1.4.2018 and CTU on 17.4.2018 for payment of transmission charges.

(b) Issue of Odisha Generation Phase-II Transmission Limited (OGPTL): 400 kV D/C OPGC-Jharsuguda Transmission Line was commissioned on 30.8.2017. However, due to non-availability of 400 kV GIS bays to be provided by PGCIL at

400 kV Sundargarh-OPGC Circuit -I and II and 2 Nos. of 400 kV Line Bays to be provided by OPGC at OPGC generation switchyard, which were both commissioned on 5.12.2017 and 15.12.2017 respectively, the 400 kV D/C OPGC-Jharsuguda transmission line could be charged on 20.12.2017.

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

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

Representative of CERC clarified that the lines were discussed during Validation Committee meeting held on 29.8.2017 and 29.11.2017. It was asked the reason as to why CTU did not raise the bill, when regulations and CERC order were clear. It was also stated that the issues are similar in nature to one already dealt in Hon'ble Commission's order in petition no. 43/MP/2016, 236/MP/2015 and 201/TT/2015. Accordingly, CTU was advised to raise the bill immediately as per CERC order in Petition No. 43/MP/2016, 236/MP/2015, 55/MP/2016 and 201/TT/2015.

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

Name of the Transmission line	**ISTS Licensee**	**Remarks**
2 Nos. 400 kV line bays at Parli (Powergrid) Switching Station (for Parli new (TBCB)-Parli (Powergrid) 400 kV D/C (quad) line under TBCB)	PGCIL	To be considered in PoC
2 Nos. 765 kV line bays at Solapur (Powergrid) Station (for Parli new (TBCB)-Solapur (Powergrid) 765 Kv D/C line under TBCB route)		To be considered in PoC
400 kV D/C Vindhyachal STPS - IV & V – Vindhyachal Pool (Quad) line	Chhattisgarh -WR	
765 kV S/C Sasan UMPP – Vindhyachal Pooling Station line		

400 kV Gwalior-Morena	Transmission Limited	To be considered in PoC
765 kV S/C Raigarh (Kotra) – Champa (Pool) line		
765 kV S/C Champa (Pool) – Dharamjaygarh line		
765 kV Sipat-Bilaspur Pooling Station , Ckt -3	Sipat Transmission Limited	To be Considered in PoC
400kV Neemrana (PG)- Dhanonda (HVPNL) D/C line	Gurgaon –Palwal Trans. Ltd.	Not to be Considered in PoC
LILO of both ckt of 400kV Uri-Wagoora D/C line at Amargarh	NRSS-XXIX Trans.Ltd.	To be Considered in PoC
400kV Samba-Amargarh D/C line		
400 kV (Quad) D/C Srikaukulam Pooling Station – Garividi	POWERGRID southern Interconnector Transmission System Limited	To be Considered in PoC

9. <u>After the deliberations, following was concluded:</u>

(i) Peak generation for new hydro units shall be considered at 100% since most of the hydro units will be able to generate at 100% load for the peak hours during April 2018 to June 2018. For new thermal units and new gas based stations, peak injection would be considered as 70% and 30% of ex-bus capacity, respectively.

(ii) In case of non-submission of data by the DICs, for the purpose of Base case preparation:

- Peak Demand: Forecasted peak demand to be calculated from last 3 years' data taken from CEA website as per provisions of the Regulations.
- 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.

10. Preparation of final All India Base case in PSS/E platform :

It may be mentioned that there would be variation in the validated generation and demand figures in the final all India Base case because of the following steps involved:

i. Normalization with All India Forecasted Peak Demand figure.

ii. Arriving at Load Generation Balance for convergence of the All India Base case.

iii. Adjustment of Slack Bus Generation.

Annexure-I

List of Participants in the 2nd Meeting of Validation Committee for the Application Period from 1st July, 2018 to 30th Sept, 2018 on 20th June, 2018 at New Delhi.

CERC

1. Shri S.C.Shrivastava, Chief (Engg.) – In Chair
2. Ms Shilpa Agarwal, Joint. Chief (Engg.)
3. Shri P.K.Awasthi, Joint Chief (Fin.)
4. Shri Annepu Suresh, Dy. Chief (Engg)
5. Shri Ramanjaneyulu, Asst. Chief (Engg)
6. Shri Harish Kumar, Associate Engineer

POWERGRID

7. Shri J. Mazumder, GM
8. Shri P.S Das, DGM
9. Shri V Sriniwas, DGM (Comml.)

NLDC

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

CEA

15. Shri Ravi Shankar, Asst. Director (GM Division)

WRPC

16. Shri A. Balan, M.S, WRPC
17. Shri J.K Rathod, SE, WRPC
18. Shri K.B Jagtap, SE, WRPC
19. Shri L.K.S Rathore, EE, WRPC

WRLDC

20. Shri Abhimanyu Gartia, GM
21. Ms Pushpa.S, AGM
22. Ms Usha, DGM
23. Ms Chitrankshi, Manager
24. Shri Pradeep Sanodiya, Sr. Engineer

ERPC

25. Shri P.K DE, EE

NRPC

26. Shri H.K Pandey, SE
27. Shri Sovaran Singh, EE
28. Shri Manish Mauriya, AE

ERLDC

29. Shri S.K Sahay, Dy. Manager

DVC, Kolkata
30. Shri Santosh Kumar Panda

SRPC
31. Shri. J.B LEN, EE
32. Shri Anusha Das J, AEE

SRLDC
33. Shri T. Srinivas, DGM
34.
35. Shri M. Pradeep Reddy, Dy. Manager
36. Shri L. Sharath Chand, Sr. Engineer

NRLDC
37. Shri S.S Barpanda, GM

NHPC
38. Shri Vijay Kumar, Manager (E)

NTPC
39. Shri P.B Venkatesh, AGM (Comml)
40. Shri Md. Raghib Hasan, Sr. Manager

NERLDC
41. Shri Amaresh Mallick,DGM
42. Shri Momai Deh, Sr. Engineer
43. Shri Palash Jyoti Borah, Engineer

BSPHCL
44. Ms Sima Kumari

NERPC
45. Shri L.B Mvanthang, SE

SLDC, Assam
46. Shri Bimal Chandra Borah
47. Ms. Barsha Kashyap

SLDC, Tripura
48. Shri Mrinal Paul

SLDC, Meghalaya
49. Shri T Gidon

DHBVN
50. Shri Randeep Singh, SE/HPPC

HVPNL
51. Shri Sunil, SE

52. Shri Ravi Sher Singh, XEN
53. Shri Sunny, AEE

HPPC, Haryana
54. Shri Pawan Bains, XEN

GRIDCO, Odisha
55. Shri S.K Maharana, AGM
56. Ms. Harpriya

TSTRANSCO
57. Shri Suresh Babu, SE
58. Shri P V Madhusudhan, DE
59. Shri A Madhavi. DE
60. Shri N. Rajashekar, AE

KPTCL
61. Shri Malleshappa, EE
62. Shri Mohan, AEE

KSEB
63. Shri N.N Shaji, CE
64. Shri S R Anand, DCE

TANGEDCO
65. Shri Subarayan, EE (Grid)
66. Shri Murugavelan, AEE(Grid)
67. Shri Kathiravan, AEE(CERC-TN)

APTRANSCO
68. Shri Y Anantha Srinivas, EE
69. Shri Kiran, DEE
70. Shri M. Murali Krishna, DEE

D.B Power
71. Shri Sanjay Jadhav, Sr. DGM. Power Sale

Sterlite Power
72. Shri T.A.N Reddy, Vice President
73. Shri Rohit Gera, Deputy Manager
74. Ms Anisha Chopra, Deputy Manager

Point of Connection Charges and Losses Computation
July 2018 -September 2018 (Q2)

Meeting of the Validation Committee
Date : 20th June, 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 Q2 Case (July'18 - Sep'18)
  - Demand & Generation Projection
  - New Generation
  - HVDC Set points

Demand Generation Projection

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

Demand Generation Projection

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

- New Generation: DOCO by 30th June, 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: $\frac{\textit{Projected All India Peak Demand Met}}{\textit{Sum of projected met for all states}}$

Load Generation Projection

New Units	Loading
Thermal Units with DOCO from 1st Oct'17 to 30th June'18	70%
Hydro Units with DOCO from 1st Oct'17 to 30th June'18	100%
Gas Units with DOCO from 1st Oct'17 to 30th June'18	30%

Demand Projection

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

Generation Projection (Including New Generation)

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

HVDC Set points

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

MW Values

HVDC Name	Set points to be considered in Basecase
Mundra-Mahindergarh Pole-1	750
Mundra-Mahindergarh Pole-2	750
Talcher-Kolar Pole- 1	1000
Talcher-Kolar Pole- 2	1000
Rihand-Dadri Pole- 1	750
Rihand-Dadri Pole- 2	750
Balia-Bhiwadi Pole-1	500
Balia-Bhiwadi Pole-2	500
Bhadrawati_HVDC	1000
Vindhyachal_HVDC	250
Gajuwaka_HVDC	650
Pusauli HVDC	400
Chandrapur-Padghe Pole-1	750
Chandrapur-Padghe Pole-2	750
BNC- Agra Pole-1& Pole-2	500 (towards NR)
Champa-Kurukshetra Pole-1 & Pole-2	2500

Data not Received

- Jammu & Kashmir
- Chandigarh
- Goa
- DD
- DNH
- West Bengal
- Jharkhand
- Bihar
- Sikkim
- Andhra Pradesh
- Kerala
- Karnataka
- Pondicherry

Data not Received

- AD Hydro
- Everest
- Sree cement
- Maithon Power Ltd.
- Adhunik Power
- GMR Kamalanga
- JITPL
- Lanco Amarkantak
- NSPCL Bhilai
- SEPL+MEPL
- CGPL
- LANCO Kondapalli
- Balco
- KSK Mahanadi
- SGPL
- IL&FS
- Tuticorin TPP
- Thermal Powertech
- Sasan UMPP
- Coastal Energen
- RGPPL
- Korba West
- Dhariwal
- NLC
- Jhabua Power
- GMR Warora

YTC Data received from Transmission Licensees

- Adani Power Limited
- Darbhanga Motihari Transmission Company Ltd.
- Jabalpur Transmission Company Ltd.
- East North Inter-connection Ltd.
- Bhopal Dhule Transmission Company Ltd.
- RAPP Transmission Company Ltd.
- Purulia & Kharagpur Transmission Company Ltd.
- NRSS-XXIX Transmission Ltd.
- NRSS-XXXI B Transmission Ltd.
- NRSS-XXXVI Transmission Ltd.
- Maheshwaram Trans. Ltd.
- Parbati Koldam Trans. Company Ltd.
- Gurgaon-Palwal Trans. Ltd.

Contd....

- Khargone Trans. Ltd.
- Odisha Generation Phase-II Trans. Ltd.
- Patran Trans. Co. Ltd.
- Teestavalley Power Transmission Ltd.
- Jindal Power Ltd.
- Essar Power Transmission Company Ltd.
- Powerlinks Transmission Ltd.
- Jaypee Powergrid Ltd.
- Torrent Power Grid Ltd.
- Western Transco Power Limited
- Western Transmission Gujarat Limited

Contd….

- Sipat Transmission Limited
- Chhattisgarh -WR Transmission Limited
- Power Grid Corporation of India Limited
- POWERGRID Warora Trans. Ltd.
- POWERGRID NM Trans. Ltd.
- POWERGRID Vizag Trans. Ltd.
- PowerGrid Parli Trans. Ltd.
- PowerGrid Unchahar Trans. Ltd.
- PowerGrid Kala Amb Trans. Ltd.
- POWERGRID Southern Interconnector Transmission System Limited

YTC Data not received

- North East Transmission Company Ltd.
- Kudgi Trans. Ltd.
- Raichur Sholapur Transmission company Ltd.
- Aravali Power Company Pvt. Ltd.
- PowerGrid Jabalpur Trans. Ltd.

YTC Data received from States

- Andhra Pradesh
- Assam
- Madhya Pradesh
- Himachal Pradesh
- Rajasthan

List of new assets

PGCIL	CoD as per TSA	As per CEA website	Ant./Actual CoD
2 Nos. 400 kV line bays at Parli (Powergrid) Switching Station (for Parli new (TBCB)- Parli (Powergrid) 400 kV D/C (quad) line under TBCB)			July,2018
2 Nos. 765 kV line bays at Solapur (Powergrid) Station(for Parli new (TBCB)- Solapur (Powergrid) 765 Kv D/C line under TBCB route)			July,2018
Chhattisgarh -WR Transmission Limited			
400 kV D/C Vindhyachal STPS - IV & V – Vindhyachal Pool (Quad) line	Jan, 2019	Apr, 2018	Mar, 2018
765 kV S/C Sasan UMPP – Vindhyachal Pooling Station line	Nov, 2018	May, 2018	Apr, 2018
400 kV Gwalior-Morena	May, 2018	May, 2018	May, 2018
765 kV S/C Raigarh (Kotra) – Champa (Pool) line	Nov, 2018	June, 2018	July, 2018
765 kV S/C Champa (Pool) – Dharamjaygarh line	Nov, 2018	June, 2018	July, 2018

Contd....

	CoD as per TSA	As per CEA website	Ant./Actual CoD
Sipat Transmission Limited			
765 kV Sipat-Bilaspur Pooling Station , Ckt -3	Nov, 2018	May, 2018	Jun, 2018
Gurgaon –Palwal Trans. Ltd.			
400kV Neemrana (PG)- Dhanonda (HVPNL) D/C line	May, 2019	June, 2018	June, 2018
NRSS-XXIX Trans.Ltd.			
LILO of both ckt of 400kV Uri-Wagoora D/C line at Amargarh.			June, 2018
400kV Samba-Amargarh D/C line	Oct, 2018	June, 2018	June, 2018
POWERGRID Southern Interconnector Transmission System Limited			
Srikaukulam Pooling Station – Garividi 400 kV (Quad) D/C line	Feb, 2019	Jul, 2018	June, 2018

Points for discussion

- Draft procedure for inclusion of TBCB lines in PoC computation
- Transmission assets of Chhattisgarh - WR Transmission Limited

Thank You !!

Demand Projection – Northern Region

Back

Entity	Q2 (July-Sep'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States
Chandigarh	342	
Delhi	6,183	6,200
Haryana	9,585	9,300
Himachal Pradesh	1,393	1,369
Jammu & Kashmir	2,201	
Punjab	11,131	11,094
Rajasthan	9,755	9,871
Uttar Pradesh	19,752	19,800
Uttarakhand	2,023	1,916
Total	62,364	
Normalization Factor	0.91	

Demand Projection – Eastern Region

Back

Entity	Q2 (July-Sep'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States
Bihar	4,650	
DVC	2,675	3,069
Jharkhand	1,284	
Odisha	4,370	4,205
West Bengal	7,998	
Sikkim	89	
Total	21,064	
Normalization Factor	0.91	

Demand Projection – Western Region

Back

Entity	Q2 (July-Sep'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States
Chhattisgarh	3,796	3,900
Gujarat	13,549	14,500
Madhya Pradesh	7,776	8,133
Maharashtra	19,573	19,600
Daman & Diu	359	
Dadra Nagar Haveli	824	
Goa_WR	612	
ESIL Hazira	686	700
Total	47,174	
Normalization Factor	0.91	

Demand Projection – North-Eastern Region

Back

Entity	Q2 (July-Sep'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States
Arunachal Pradesh	142	140
Assam	1,887	1,680
Manipur	168	176
Meghalaya	305	320
Mizoram	82	94
Nagaland	137	140
Tripura	338	385
Total	3,059	
Normalization Factor	0.91	

Demand Projection – Southern Region

Back

Entity	Q2 (July-Sep'18) Projected Demand (MW) (Based on Peak Met figures of last 3 years) before normalization	Data Given by DICs/States
Andhra Pradesh	8,566	8,400
Telangana	10,785	9,375
Karnataka	9,334	
Kerala	3,522	
Tamil Nadu	14,618	14,500
Pondicherry	387	
Goa- SR	80	
Total	47,291	
Normalization Factor	0.91	

Generation Projection – Northern Region

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Oct'17 – 31st Mar'18 (B)	Generation CoD from 1st Apr'18 to 30th June'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any)	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
1	Uttar Pradesh	8838	-	432	9270	As per data given by Uttar Pradesh	11500
2	Delhi	1248	-	-	1248	As per data given by Delhi	1091
3	Haryana	3715	-	-	3715	As per data given by Haryana	4114
4	Uttarakhand	1027	178	-	1205	As per data given by Uttrakhand	1091
5	Punjab	5336	-	-	5336	As per data given by Punjab	5670
6	Rajasthan	6006	-	432	6438	As per data given by Rajasthan	7468
7	Himachal Pradesh	1096	-	-	1096	As per data given by H.P.	1114
8	Jammu & Kashmir	1107	-	-	1107		
9	BBMB	2566	-	-	2566	As per data given by BBMB	2559

Generation Projection – Northern Region …(2)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Oct'17 – 31st Mar'18 (B)	Generation CoD from 1st Apr'18 to 30th June'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
10	Dadri Thermal	1713	-	-	1713	As per data given by NTPC	1200
11	Rihand	2862	-	-	2862		2807
12	Singrauli	1869	-	-	1869		1863
13	Unchahar	985	-	-	985		956
14	Auraiya	268	-	-	268		150
15	Dadri CCPP	458	-	-	458		300
16	NAPS	368	-	-	368	As per NAPS	400
17	Jhajjar	1239	-	-	1239	Data given by APCPL Jhajjar	1421
18	Dhauliganga	291	-	-	291	As per NHPC	280
19	Tanakpur	101	-	-	101		94
20	Koteshwar	403	-	-	403	As per Koteshwar	389
21	Tehri	1024	-	-	1024	As per data given by Tehri	905
22	Anta	286	-	-	286	As per data given by NTPC	150
23	RAAP B	384	-	-	384	-	
24	RAAP C	489	-	-	489	-	
25	AD Hydro	246	-	-	246	-	
26	Everest	105	-	-	105	-	
27	Karcham Wangtoo	1171	-	-	1171	-	

Generation Projection – Northern Region(3)

Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Oct'17 – 31st Mar'18 (B)	Generation CoD from 1st Apr'18 to 30th June'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
28	Bairasul	185	-	-	185	As per NHPC	180
29	Chamera 1	556	-	-	556		540
30	Chamera 2	310	-	-	310		300
31	Chamera 3	251	-	-	251		231
32	Naptha Jhakri	1625	-	-	1625	As per SJVN	1605
33	Lanco Budhil	75	-	-	75	-	
34	Dulhasti	397	-	-	397	As per NHPC	390
35	Salal	697	-	-	697		690
36	Sewa-II	132	-	-	132		120
37	URI I HPS	503	-	-	503		480
38	URI II HPS	244		-	244		240
39	Sree Cement	251	-	-	251	-	
40	Parbati III	531	-	-	531	As per NHPC	520
41	Rampur HEP	458	-	-	458	As per SJVN	442
42	Koldam	882	-	-	882	As per data given by NTPC	792
43	Kishanganga	-	-	327	327	As per NHPC	330

Generation Projection – Eastern Region…(1)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Oct'17 – 31st Mar'18 (B)	Generation CoD from 1st Apr'18 to 30th June'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
44	West Bengal	4948	-	-	4948	-	
45	Odisha	2965	-	-	2965	As per data given by GRIDCO	3249
46	Bihar	383	-	164	547	-	
47	Jharkhand	277	-	-	277	-	
48	Sikkim		-	-	-	-	
49	Chujachan	111	-	-	111	As per CERC order dated: 22.06.2017	99
50	DVC	3687	-	-	3687	As per data given by DVC (Average)	4811
51	Durgapur Steel		-	-			
52	Koderma TPP		-	-			
53	Raghunathpur		-	-			
54	Bokaro TPS Expn.		-	-			
55	MPL	1013	-	-	1013	Last quarter Gen.	990

Generation Projection – Eastern Region…(2)

Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Oct'17 – 31st Mar'18 (B)	Generation CoD from 1st Apr'18 to 30th June'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any)	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
56	Teesta V	529	-	-	529	As per NHPC	510
57	Kahalgaon	2166	-	-	2166	As per data given by NTPC	2178
58	Farakka	1941	-	-	1941		1968
59	Talcher	964	-	-	964	Restricted to the generation(Installed Capacity-NAC)	942
61	Rangeet	66	-	-	66	As per NHPC	60
62	Adhunik Power	504	-	-	504	-	
63	Barh	1249			1249	As per data given by NTPC	1057
64	Kamalanga TPP (GMR)	629	-	-	629	-	
65	JITPL	899	-	-	899		
66	Jorthang	106	-	-	106	As per CERC order dated: 22.06.2017	96
67	Bhutan	1546	-	-	1546	-	
68	Teesta-III	1216	-	-	1216	As per CERC order dated: 22.06.2017	782
69	Dikchu HEP	104	-	-	104		
70	Nabinagar BRBCL	158	164	164	485		
71	Tashideng	-	-	96	96		

Generation Projection – Western Region…(1)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Oct'17 – 31st Mar'18 (B)	Generation CoD from 1st Apr'18 to 30th June'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
71	MP	3216	-	-	3216	As per forecasted gen. given by MP	5140
72	Maharashtra	13540	530	98	14168	As per forecasted gen. given by Maharashtra	15000
73	Chhattisgarh	2240	-	-	2240	As per data given by Chhattisgarh	2777
74	Gujarat	10810	-	-	10810	As per data given by Gujarat	9750
75	Goa	-	-	-	-	-	-
76	D&D	-	-	-	-	-	-
77	DNH	-	-	-	-	-	-
78	Vindhyachal	4595	-	-	4595	As per NTPC	4440
79	Ratnagiri Dabhol	607	-	-	607		
80	TAPS (1,2,3,4)	960	-	-	960		
81	JINDAL	724	-	-	724	As per data given by JPL	560
82	LANCO	563	-	-	563		
83	NSPCL Bhilai	483	-	-	483		
84	Korba	2512	-	-	2512	As per NTPC	2431

Generation Projection – Western Region … (2)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Oct'17 – 31st Mar'18 (B)	Generation CoD from 1st Apr'18 to 30th June'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
85	SIPAT	2984	-	-	2984	As per NTPC	2809
86	CGPL	3656	-	-	3656	-	
87	Mauda	1355	432	-	1787	As per NTPC	1757
88	Gandhar	433	-	-	433		350
89	Kawas	315	-	-	315		250
90	SSP	940	-	-	940		
91	KAPS	87	-	-	87		
92	Essar Mahan	567	-	393	960		
93	BALCO	508	-	-	508	As per last quarter	300
95	KSK Mahanadi	864	393	-	1256		
96	Sasan UMPP	3772	-	-	3772		
97	Tamnar TPP	773	-	-	773	As per data given by JPL	1140

Generation Projection – Western Region (3)

Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Oct'17 – 31st Mar'18 (B)	Generation CoD from 1st Apr'18 to 30th June'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
98	DGEN	0	-	-	0		
99	DB Power	1121	-	-	1121	As per email dated 31.05.2018 from DB Power	980
100	Korba West	284	-	-	284		
101	Dhariwal	285	-	-	285		
102	GMR Chattishgarh Energy Ltd.	269	-	-	269	As per email dated 18.06.2018 from GMR	500
103	JP Nigrie	1253	-	-	1253	As per email dated 31.05.2018 from JP Nigrie	1241
104	GMR Warora	553	-	-	553		
105	ACBIL+ Spectrum+MCCPL	703	-	-	703	As per ACBIL	680
106	MB Power (Anuppur)	1124	-	-	1124	As per MB Power	1131
107	RKM Power	298	464	238	999	As per email dated 31.05.2018 from RKM Power	350
108	Jhabua Power	309	-	-	309		
109	TRN Energy	387	-	-	387	As per TRN Energy	540
110	Sholapur STPP	581	-	-	581	As per NTPC	435
111	Lara STPP	-	-	528	528		0
112	SKS Power	-	-	198	198		

Generation Projection – North-Eastern Region

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Oct'17 – 31st Mar'18 (B)	Generation CoD from 1st Apr'18 to 30th June'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
113	AGTPP, NEEPCO	100	-	-	100	As decided in 144th OCC meeting	78
114	Doyang, NEEPCO	74	-	-	74		72
115	Kopili , NEEPCO	196	-	-	196		187
116	Kopili 2, NEEPCO	30	-	-	30		23
117	Khandong, NEEPCO	53	-	-	53		46
118	Ranganadi, NEEPCO	419	-	-	419		404
119	AGBPP_Kathalguri	201	-	-	201		210
120	Loktak, NHPC	106	-	-	106		105

Generation Projection – North-Eastern Region

Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Oct'17 – 31st Mar'18 (B)	Generation CoD from 1st Apr'18 to 30th June'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
121	Palatana GBPP	587			587	As decided in 144th OCC meeting	439
122	Bongaigaon_NTPC	201	165	-	366		460
123	Arunachal Pradesh	-	-	-	-		-
124	Assam	298			298		
125	Manipur	-			-		-
126	Meghalaya	259			259		323
127	Nagaland	27			27		24
128	Tripura	100			100		156
129	Mizoram	7			7		8

Generation Projection – Southern Region…(1)

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Oct'17 – 31st Mar'18 (B)	Generation CoD from 1st Apr'18 to 30th June'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
130	Andhra Pradesh	5541	396	-	5937	As per data given by A.P.	7475
131	Telangana	4608	-	-	4608	As per data given by Telangana	5620
132	Karnataka	6005	-	-	6005		
133	Kerala	1488	-	-	1488		
134	Tamil Nadu	9154	-	-	9154	As per data given by TN (including wind gen.)	9908
135	Pondy	-	-	-	-	-	
136	Ramagundam	2482	-	-	2482	As per NTPC	2431
137	Simhadri 2	964	-	-	964		948
138	Simhadri 1	787	-	-	787		948
139	SEPL	320	-	-	320		
140	Lanco Kondapalli	422	-	-	422		

Generation Projection – Southern Region…(2)

Back

S. No.	Entity	Projections based on 3 Years Data (A)	Generation addition during 1st Oct'17 – 31st Mar'18 (B)	Generation CoD from 1st Apr'18 to 30th June'18 (C)	TOTAL D=A+B+C	Comments From DICs /States (if any	Figure as per Comments
		(MW)	(MW)	(MW)	(MW)		(MW)
141	Kaiga	771	-	-	771		
142	NEYVELI (EXT) TPS	447	-	-	447		
143	NEYVELI TPS-II	1199	-	-	1199		
144	NEYVELI TPS-II EXP	333	-	-	333		
145	MAPS	365	-	-	365		
146	Vallur	1120	-	-	1120		
147	Meenakhshi	227	-	-	227		
148	Coastal Energen	754	-	-	754		
149	Kudankulam	1071	-	-	1071	As per last quarter (including unit-2)	1700
150	Tuticorin TPP	759	-	-	759		
151	Thermal Powertech	1289	-	-	1289		
152	IL&FS	769	-	-	769		
153	Talcher Stage-II	1868	-	-	1868		
154	Sembcorp Gayatri Power Ltd.	1237	-	-	1237		
155	Kudgi STPS	769	524	-	1293	As per NTPC	1024

Expected Generation addition – Northern Region

Back

	Generation declared Commercial from 1st Oct'17 to 31st Mar'18					Generation declared/expected to be declared Commercial from 1st Apr'18 to 30th June'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
Uttarakhand	Shravanti Gas	4	75	59	178					
	Shravanti Gas	5	75	59						
	Shravanti Gas	6	75	59						
Rajasthan						Chhabra	5	660	432	
Kishanganga						Kishanganga	1	110	109	
						Kishanganga	2	110	109	
						Kishanganga	3	110	109	

Expected Generation addition – Western Region

Back

	Generation declared Commercial from 1st Oct'17 to 31st Mar'18					Generation declared/expected to be declared Commercial from 1st Apr'18 to 30th June'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)
Maharashtra	Nasik TPP	3	270	177	530	Sirpur Power	1	150	98	98
	Nasik TPP	4	270	177						
	Nasik TPP	5	270	177						
Mauda	Mauda	3	660	432	432					
Essar Mahan						Essar Mahan	2	600	393	393
KSK Mahanadi	KSK Mahanadi	3	600	393	393					
RKM Power	RKM Power	2	360	232	464	RKM Power	4	360	232	232
	RKM Power	3	360	232						
Lara STPP						Lara STPP	1	800	528	528
SKS Power						SKS Power	1	300	198	198

Expected Generation addition – Eastern Region

Back

	Generation declared Commercial from 1st Oct'17 to 31st Mar'18					Generation declared/expected to be declared Commercial from 1st Apr'18 to 30th June'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)
Bihar						Brauni Extn.	8	250	164	164
Nabinagar BRBCL	Nabinagar BRBCL	2	230	151	151	Nabinagar BRBCL	3	230	151	151
Tashideng						Tashideng	1	49	48	96
						Tashideng	2	49	48	

Expected Generation addition – Southern Region

Back

	Generation declared Commercial from 1st Oct'17 to 31st Mar'18					Generation declared/expected to be declared Commercial from 1st Apr'18 to 30th June'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)
Andhra Pradesh	Rayalaseema TPP	6	600	396	396					
Kudgi STPS	Kudgi STPS	2	800	524	524					

Expected Generation addition –North Eastern Region

Back

	Generation declared Commercial from 1st Oct'17 to 31st Mar'18					Generation declared/expected to be declared Commercial from 1st Apr'18 to 30th June'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)
Bongaigaon _NTPC	Bongaigaon_ NTPC	2	250	165	165					

Comparison of Demand for Q4-17-18

Northern Region			
State/Region/System	Actual Peak Demand Met (MW)	Projected Demand (MW)	Change (in %)
Chandigarh	221	210	↑ 5%
Delhi	3958	4000	↓ -1%
Haryana	6958	7000	↓ -1%
Himachal Pradesh	1548	1500	↑ 3%
Jammu & Kashmir	2227	2146	↑ 4%
Punjab	6410	6500	↓ -1%
Rajasthan	11245	10424	↑ 8%
Uttar Pradesh	15076	16500	↓ -9%
Uttarakhand	2056	2005	↑ 3%

Contd...

State/Region/System	Actual Peak Demand Met (MW)	Projected Demand (MW)	Change(in %)
Eastern Region			
Bihar	4343	4150	↑ 5%
DVC	2804	2960	↓ -5%
Jharkhand	1178	1240	↓ -5%
Orissa	4122	4002	↑ 3%
West Bengal	7159	7050	↑ 2%
Sikkim	93	100	↓ -7%
Western Region			
Chhattisgarh	3439	3810	↓ -10%
Gujarat	14343	14317	↑ 0%
Madhya Pradesh	11104	10114	↑ 10%
Maharashtra	21513	21500	↑ 0%
Daman & Diu	347	330	↑ 5%
Dadra Nagar Haveli	766	745	↑ 3%
Goa	510	514	↓ -1%

Contd..

State/Region/System	Actual Peak Demand Met (MW)	Projected Demand (MW)	Change (in %)
Southern Region			
Andhra Pradesh	8814	8300	↑ 6%
Telangana	9931	10077	↓ -1%
Karnataka	10454	10168	↑ 3%
Kerala	3706	3822	↓ -3%
Tamil Nadu	14414	14700	↓ -2%
Pondicherry	357	345	↑ 3%
North Eastern Region			
Arunachal Pradesh	129	130	↓ -1%
Assam	1479	1500	↓ -1%
Manipur	188	173	↑ 9%
Meghalaya	316	315	↑ 0%
Mizoram	94	93	↑ 1%
Nagaland	122	123	↓ -1%
Tripura	264	300	↓ -12%

Annexure- III

Methodology -Consideration of new transmission lines in PoC Computations

Regulatory Provisions

Para 17 of Hon'ble Commission's order dated 04.01.2017 in petition no. 155/MP/2016 provides as under:

"The petitioner is directed to provide YTC details of its assets to NLDC and CTU. NLDC shall provide the same to RPC for inclusion in RTAs. The assets shall be billed along with bill 1 under the provisions of the Central Electricity Regulatory Commission (Sharing of inter-State Transmission charges and losses), Regulations, 2010 as amended from time to time. ISTS licensees shall forward the details of YTC to be recovered as per formats provided under the Sharing Regulations to NLDC. ISTS licensees shall forward the details of entity along with YTC details from whom it needs to be recovered as per applicable order of the Commission to NLDC (only in cases of bilateral billing due to non-availability of upstream/downstream system). Based on the input received from respective licensees and the Commission`s order, NLDC shall provide details of billing pertaining to non-availability of upstream/downstream system to respective RPCs for incorporation in RTAs for all cases of bilateral billing. On this basis, CTU shall issue the bills. The process given in this para shall be applicable to all future cases of similar nature and all concerned shall duly comply with the same."

First proviso to regulation 8 (5) of CERC (Sharing of Inter-State Transmission Charges & Losses) Regulations, 2010 provides as under;

"Provided that in case the commissioning of a generating station or unit thereof isdelayed, the generator shall be liable to pay Withdrawal Charges corresponding to its Long term Access from the date the Long Term Access granted by CTU becomes effective. The Withdrawal Charges shall be at the average withdrawal rate of the target region"

Regulation 6.3 A (5) of Indian Electricity Grid Code Regulations, 2010 provides as under:

"Trial run and Trial operation in relation to a transmission system or an element thereof shall mean successful charging of the transmission system or an element thereof for 24 hours at continuous flow of power, and communication signal from the sending end to the receiving end and with requisite metering system, telemetry and protection system in service enclosing certificate to that effect from concerned Regional Load Despatch Centre."

Third proviso to clause (8) of Regulation 8 of Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters Regulations, 2009 provides as under;

"Provided also that the transmission charges for such dedicated transmission line shall be payable by the generator even if the generation project gets delayed or is abandoned."

Extract from the Appellate tribunal's order dated 18.01.2018 in appeal no. 198 of 2015 provides as under:

"It may be concluded that some parts of the transmission system viz. bays and line reactors cannot be considered as commissioned and claimed to be put in commercial operation without

commissioning of the associated transmission line(s). The completeness / intended use of the transmission system should be viewed in its entirety."

Para 44 from the CERC order dated 25.05.2016 in petition no. 254/TT/2016 regarding determination of transmission tariff for 2019 for 400 kV D/C Lara STPS-1 to Raigarh (Kotra) PS Transmission Line provides as under;

"The transmission charges for the instant assets shall be borne by NTPC till the commissioning of thegenerating station. Once thegenerating station is commissioned, the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of the 2014 Tariff Regulations"

Consideration of new lines for PoC computations

PoC charges and losses are computed well in advance, on quarterly basisby considering the forecasted demand and generation of various entities and upcoming elements of the transmission system. The transmission lines likely to be declared under commercial operation by the last date of first month of next application period are to be considered for PoC computations. Considering the future scenario, it is important to decide

i) Whether the said transmission line will actually be available for service in the next application period. Transmission licenseewould make commitment of declaring COD of its assets before the due date so that the transmission charges can be included in PoC pool.

ii) that the transmission charges of the transmission licensee who has built the transmission line shall be recovered through PoC pool from all the utilities as per sharing mechanism

Data required from the ISTS Licensees:

1. YTC details in Format 1
2. Copy of Transmission Service Agreement (TSA)
3. Scheduled date of commissioning as per TSA
4. Expected or actual date of commercial operation
5. Pre-requisite for commissioning of elements
6. Associated downstream/upstream network
7. CERC order for tariff adoption
8. CERC order for grant of transmission license
9. Detailed calculation of month wise transmission tariff including escalation factor in MS-Excel (calculation of escalable components are to be shown separately)

Conditions for consideration of lines in PoC computations:

1. **In case of associated downstream network with the ISTS line:** If actual power flow through the lineand through ICT to downstream network is likely to commence in at least one bay, the said transmission line may be included in PoC computations. In case the transmission line is being built by a transmission licensee and bays associated with project are being developed by any other entity, declaration regarding status of commissioning of their respective elements may be made separately.

2. **In case of transmission line associated with generating station:**There might be cases where line is expected to be commissioned but LTA is not likely to commence. In such situations, line shall be included in PoC computations after the DOCO of generating station or from the date of commencement of LTA, as the case may be.
3. **In case of early commissioning of transmission elements:**There might be cases where more than one element is associated with a project. In case of early commissioning of one element, if CEA confirms that the particular element is important for grid and may be allowed an early commissioning, the transmission charges pertaining to that element shall be included for PoC computations. Clause 4 (v) of Regulation 6.3.A Indian Electricity Grid Code Regulations, 2010 provides as under;

   "An element shall be declared to have achieved COD only after all the elements which are pre-required to achieve COD as per the Transmission Services Agreement are commissioned. In case any element is required to be commissioned prior to the commissioning of pre-required element, the same can be done if CEA confirms that such commissioning is in the interest of the power system."

In cases where the downstream system or the generating station associated with transmission lineis not ready but the transmission line has been commissioned, transmission charges for said transmission line shall be recovered from the owner of downstream network or generating station, as the case may be, as per provisions of relevant CERC orders/regulations.

Comments from Shri B. Vamsi :-

Inputs as desired to the methodology which would be helpful in making decision regarding consideration of transmission lines (TBCB) in PoC computations

Sl.No	Reference	Remarks
1	**Transmission Service Agreement (TSA)** (Part of Bidding Documents) **"Commercial Operation Date" or "COD"** shall mean the date as per Article 6.2; **"Monthly Transmission Charges"** for any Element of the Project, after COD of the Element till COD of the Project, and for the Project after COD of the Project, **6.2 Commercial Operation:** 6.2.1 An Element of the Project shall be declared to have achieved COD - seventy two (72) hours following the connection of the Element with the Interconnection Facilities Or - seven (7) days after the date on which it is declared by the TSP to be ready for charging but is not able to be charged for reasons not attributable to the TSP ..... 6.2.2 Once any Element of the Project has been declared to have achieved deemed COD as per Article 6.2.1 above, such Element of the Project shall be deemed to have Availability equal to the Target Availability till	The Bidding Conditions provided to the Bidders clearly state that in the event of Transmission element is unable to be charges for reasons not attributable to the TSP then after 7 days from the date of readiness for charging, the Transmission element shall be considered declared COD. 1) After CoD of the Element(Actual or Deemed), Transmission Charges are payable to the TSP. 2) Transmission charges payment is also not linked to the LTA (neither its effectiveness not its reqlinquishment). 3) Payment of Transmission charges is not linked to POWER FLOW.

	the actual charging of the Element and to this extent, shall be eligible for payment of the Monthly Transmission Charges applicable for such Element.	
2.	Transmission charges that are quoted and adopted under Section 63 are in RUPEES / ANNUM and not in RUPEES / MW and are as such independent of power flow. Transmission charges that are determined under Section 62 are in RUPEES / ANNUM and not in RUPEES / MW and are as such independent of power flow.	4) Payment of Transmission charges is no linked to POWER FLOW.
3.	While the bidding is being done on the basis of existing Standard Bidding Documents (SBDs), and the list of LTTC is being provided as per the format of the existing SBDs. It is clarified that the transmission charges will be shared and recovered as per the applicable CERC regulation. The transmission charges will be shared and recovered for payment as per the applicable CERC regulation which is at present the Point of Connection mechanism of sharing. As per the present CERC regulation the charges will be recovered by the Central Transmission Utility from the DICs and disbursed to the TSPs as per the Revenue Share Agreement.	5) Bidding conditions clearly state that the Transmission Charges shall be recovered from the DICs through the PoC mechanism. As such Validation Committee is requested to honour the provisions of the bidding documents.
4	Downstream / Upstream	6) The bidding documents do not mention of any Downstream / Upstream systems/owners. As such the Bidding Documents do not envisage payments from Downstream / Upstream Owners.
5.	**CERC Order No. 43/MP/2016 dated 21.9.2016**	

	A related issue arises as to how recovery of transmission charges of transmission licensee shall be made when the transmission system under TBCB is ready as on its scheduled COD as per the provisions of the TSA but cannot be made operational or put to use due to non-availability/ delay in upstream/ downstream system. In our view, ISTS licensee executing the project under TBCB should enter into Implementation Agreement with CTU, STU, inter-State transmission licensee, or the concerned LTTC, as the case may be, who are responsible for executing the upstream/ downstream transmission system and clearly provide the liability for payment of transmission charges in case of the transmission line or upstream/downstream transmission assets. In the absence of Implementation Agreement, the payment liability should fall on the entity on whose account an element is not put to use. For example, if the transmission line is ready but terminal bays belonging to other licensees are not ready, the owners of upstream and downstream terminal bays shall be liable to pay the charges to the owner of transmission line in the ratio of 50:50 till the bays are commissioned. In case one end bays are commissioned, the owner of other end bays shall be liable to pay the entire transmission charges of the transmission line till its bays are commissioned. The above principle shall be followed by CTU in all cases of similar nature in future." 7) Implementation Agreement ▪ not available in any of the TBCB project till date ▪ Format of Implementation Agreement not available ▪ No Implementation agreement has been signed till date It is stated that in the absence of Implementation Agreement, the payment liability should fall on the entity on whose account an element is not put to use. It is submitted that to enforce any such liability on the Upstream / Downstream there is no Agreement. This puts the Transmission Licensee at a risk in receipt of the transmission charges quoted during the bidding and adopted by the Commission. Absence of any Agreement with the Upstream / Downstream entities to be liable for payment of transmission charges is litigation prone and eventually impacts none else but the Transmission Licensee. Under TBCB, the Transmission Licensee is a Project Company solely dependent on the revenues from the Project. Needless to mention

		any delay / denial of charges severely impacts the financial position of the Company and increase the risk perception in Transmission business. Eg. a) POWERGRID KALA AMB Transmission System. Project declared DoCO in July 2017. Till date Transmission charges are not paid to the Project Company. b) POWERGRID UNCHAHAR Transmission System. Project declared DoCO in October 2016. Transmission charges for the initial months not paid to the Project Company.
6	**CERC order no. 155/MP/2016 dated 04.01.2017**: "The petitioner is directed to provide YTC details of its assets to NLDC and CTU. NLDC shall provide the same to RPC for inclusion in RTAs. The assets shall be billed along with bill 1 under the provisions of the Central Electricity Regulatory Commission (Sharing of inter-State Transmission charges and losses), Regulations, 2010 as amended from time to time. ISTS licensees shall forward the details of YTC to be recovered as per formats provided under the Sharing Regulations to NLDC. ISTS licensees shall forward the details of entity along with YTC details from whom it needs to be recovered as per applicable	Details of Upstream / Downstream are not furnished as part of bidding documents to the Transmission Licensee. 8) Transmission Licensee is merely a developer to establish a Transmission Project floated by the Bid Process Coordinator on behalf of Government of India.

	order of the Commission to NLDC (only in cases of bilateral billing due to non-availability of upstream/downstream system). Based on the input received from respective licensees and the Commission`s order, NLDC shall provide details of billing pertaining to non-availability of upstream/downstream system to respective RPCs for incorporation in RTAs for all cases of bilateral billing. On this basis, CTU shall issue the bills. The process given in this para shall be applicable to all future cases of similar nature and all concerned shall duly comply with the same."	Transmission Licensee is not an authority to determine as to who should be in Upstream / Downstream and their share in payment of transmission charges. Neither the Transmission Licensee is an authority to determine nor he has the knowhow and such bestowing such responsibility may also lead to additional complexities. As such the requirement of ISTS licensees to forward the details of entity along with YTC details from whom it needs to be recovered due to non-availability of upstream/downstream system needs to be reviewed. As per IEGC, in case of TBCB Projects, the matching of commissioning of the transmission line / substation and generating station shall be monitored by Central Electricity Authority.
7	Complexity in assigning entities who use the System	9) Apportionment of Transmission charges based on their usage of a Transmission Systems in a mesh network is a complex activity and prone to challenge. Ex: Kala Amb Transmission System comprises of a Substation which is connected to the ISTS through LILO of KarchamWangtoo –

		Abdullapur 400 kV D/C (Quad Moose) line. The Substation incidentally also has 40% Series Compensation on 400 kV KarchamWangtoo – Kala Amb quad D/C line at Kala Amb ends thus enhancing the power flow of the ISTS line benefiting the ISTS and also the State. 10) In cases wherein the Transmission charges to be paid to the Transmission licensee are relatively very high compared to the scope of work by the downstream / upstream. Then it would be great challenge for the entity to pay the same. Eg.; Kala Amb Transmission System. About Rs.60 Cr/Annum
8	**37th Meeting TCC & 40th Meeting of Northern Regional Power Committee (NRPC)**	11) Tariff of the ISTS system should be included in PoC charges instead of charging the samefrom a single utility.
9.	**Seriousness of delay / denial of Transmission charges**	12) Transmission Licensee under TBCB is a Project company and solely dependent on the Transmission charges to meet the debt obligations including operational expenses. Delay / denial of Transmission charges shall suffocate none else but the Transmission Licensee who runs from pillar to post to get its legitimate transmission charges

10.	**Way forward**	13) Transmission charges be undertaken as per PoC mechanism in alignment with the provisions of the Bidding documents. In the event of non-readiness of the downstream / upstream system, the same may be separately recovered based on the direction of Validation committee and adjusted in the ensuing bill.

Comments on the submission of PoC Team.

Data required from the ISTS Licensees:

Sl.No	Description	Remarks
1	YTC details in Format 1	Standard details which are generally furnished
2	Copy of Transmission Service Agreement (TSA)	Standard details which are generally furnished initially
3	Scheduled date of commissioning as per TSA	Standard details which are generally furnished
4	Expected or actual date of commercial operation	Standard details which are generally furnished
5	Pre-requisite for commissioning of elements	Standard details which are generally furnished and also available in the TSA
6	Associated downstream/upstream network	Not in the purview of ISTS licensee. Neither he is an Authority nor is he Competent to furnish such data
7	CERC order for tariff adoption	Standard details which are generally furnished
8	CERC order for grant of transmission license	Standard details which are generally furnished
9	Detailed calculation of month wise transmission tariff including escalation factor in MS-Excel (calculation of	Standard details which are generally furnished

	escalable components are to be shown separately)	

Conditions for consideration of lines in PoC computations:

Sl.No	Reference	Remarks
1	**In case of associated downstream network with the ISTS line:** If actual power flow through the line and through ICT to downstream network is likely to commence in at least one bay, the said transmission line may be included in PoC computations. In case the transmission line is being built by a transmission licensee and bays associated with project are being developed by any other entity, declaration regarding status of commissioning of their respective elements may be made separately.	As per Transmission Service Agreement (TSA) provided as part of bidding documents, irrespective of power flow, transmission charges are to be paid under PoC. It is submitted that Transmission charges be recovered under PoC and disbursed to the Transmission Licensee and as regards making liable the Upstream / Downstream the Validation Committee may appropriately identify and bill the Upstream / Downstream and adjust the same in the YTC billing in the ensuing bill.(Please refer submission above) Declaration regarding status of commissioning of elements of the ISTS Licensee under TBCB is Standard information which is provided, and shall be in accordance with the Transmission Service Agreement (TSA). However, DECLARATION CANNOT be providedon behalf of any other entity and their Status.(Please refer submission above)

2	**In case of transmission line associated with generating station:** There might be cases where line is expected to be commissioned but LTA is not likely to commence. In such situations, line shall be included in PoC computations after the DOCO of generating station or from the date of commencement of LTA, as the case may be.	In case of Dedicated Transmission Lines , the treatment is provided in Third provisio of 8(5) CERC (Sharing of Inter-State Transmission Charges & Losses) Regulations, 2010 provides as under The referred treatment apparently refers to Associated Transmission System for Generation. Payment of Transmission charges under TBCB are not dependent on commencement / relinquishment of LTA (Please refer submission above).
3	**In case of early commissioning of transmission elements:** There might be cases where more than one element is associated with a project. In case of early commissioning of one element, if CEA confirms that the particular element is important for grid and may be allowed an early commissioning, the transmission charges pertaining to that element shall be included for PoC computations. Clause 4 (v) of Regulation 6.3.A Indian Electricity Grid Code Regulations, 2010 provides as under; "*An element shall be declared to have achieved COD only after all the elements which are pre-required to achieve COD as per the Transmission Services Agreement are commissioned. In case any element is required to be commissioned prior to the commissioning of pre-required element, the same can be done if CEA confirms that such commissioning is in the interest of the power system*."	As per Transmission Service Agreement (TSA) provided as part of bidding documents, any shift in the SCOD shall be only after agreement with the LTTCs. The referred provision is with regard to pre-required element readiness and not to early commissioning.

4	In cases where the downstream system or the generating station associated with transmission line is not ready but the transmission line has been commissioned, transmission charges for said transmission line shall be recovered from the owner of downstream network or generating station, as the case may be, as per provisions of relevant CERC orders/regulations.	Recovery of Transmission Charges under TBCB is as per Transmission Service Agreement (TSA) provided as part of bidding documents . The TSA also provides that the Transmission charges shall be recoverable through PoC. The TSA with the above provisions is also adopted by CERC. There is no mention of Upstream / Downstream in the TSA and the BPC despite repeated requests failed to provide any detail of the same. Till date there is no Implementation Agreement which is signed to fix the liability on any entity. In the absence of any Agreement merely stating that the downstream / upstream shall be liable to pay shall only lead to litigations , denial / delayed recovery of the Transmission charges by the Transmission Licensee who is solely dependent on the revenue from the Transmission charges. It is humbly submitted that the recovery of Transmission charges be undertaken as per PoC mechanism in alignment with the provisions of the Bidding documents. In the event of non-readiness of the downstream / upstream system, the same may be separately recovered based on the direction of Validation committee and adjusted in the ensuing bill. (Please refer submission above)

Dear Sir

This is with reference to mail trail below. Please find below our observations / comments on the draft methodology being discussed for your kind perusal.

Sr. No.	Concern Areas	Details / Rational
1.	**Limitation of Liability**	Liabilities of the TSP should be governed as per TSA clauses 6.3, 6.4, 14.5 or any other relevant clause specified in TSA and should not go beyond the contractual agreement under any unforeseen event.
2.	**Project Financing**	It may be appreciated that bankers would be apprehensive to finance the project with unlimited liabilities & in case they agree the cost of debt would be very high which would adversely impact all the stakeholders including end consumers. In all probability, in an event wherein, the liabilities of the projects are not capped in the agreement, it may not be possible for the company to secure the financial closure of the project.
3.	**Consequential Damages**	It is worthwhile to highlight that the every project should be governed as per its contract terms and conditions. It would be appreciated that if one of the projects gets delayed the other related project should not be expected to bear the brunt. Any damages may be explicitly stated & capped in a TSA & maximum liabilities should be known upfront to the developer.
4.	**Institutionalized Process**	If the project is declared to have achieved deemed COD then charges pertaining to such project should be paid through PoC mechanism because it is the institutionalized process through which charges/tariff of transmission projects (ISTS) are being settled by CTU. Therefore, in case of delay of the associated systems, the project under consideration should not bear the loss & tariff may be paid through the POC mechanism.

Regards, Rahul

Rahula Kr Kashyapa
Adani Transmission Limited
email: rahula.kashyapa@adani.com
Cell: +91-9099900206

Sir,

No TBCB project should be considered in PoC on the basis of anticipated Commissioning date, irrespective of any reasons..
Such projects should be considered only on achieving actual commissioning and on declaration of successful start of commercial operation of the assets as per the conditions laid down in TSA.

Regards,
N K Jain
Director
JP POWERGRID LTD , Noida
(JV of JPVL and Powergrid)
Mobile:- 09910378087
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Representative of POWERGRID has raisedthe following points:-

(a) Any Downstream / Upstream systems/owners are not mentioned in thebidding documents. As such the Bidding Documents do not envisagepayments from Downstream / Upstream Owners.

(b) No Implementation Agreement available in any of the TBCB project till date.In the absence of Implementation Agreement, the payment liability should fallon the entity on whose account an element is not put to use.

(c) Transmission Licensee is merely a developer to establish a TransmissionProject floated by the Bid Process Coordinator on behalf of Government ofIndia. Transmission Licensee is not an authority to determine as to whoshould be in Upstream / Downstream and their share in payment oftransmission charges.

(d) In cases wherein the Transmission charges to be paid to the Transmissionlicensee are relatively very high compared to the scope of work by thedownstream / upstream. Then it would be great challenge for the entity to paythe same.

(e) Tariff of the ISTS system should be included in PoC charges instead ofcharging the same from a single utility.

(f) Transmission Licensee under TBCB is a Project company and solelydependent on the Transmission charges to meet the debt obligationsincluding operational expenses. Delay / denial of Transmission charges shallsuffocate none else but the Transmission Licensee who runs from pillar topost to get its legitimate transmission charges.

(g) Transmission charges be undertaken as per PoC mechanism in alignmentwith the provisions of the Bidding documents. In the event of non-readiness ofthe downstream / upstream system, the same may be separately recoveredbased on the direction of Validation committee and adjusted in the ensuingbill.