

मारत सरकार / Government of India विद्युत मंत्रालय / Ministry of Power केंद्रीय विद्युत प्राधिकरण / Central Electricity Authority प्रणाली योजना एवं परियोजना मूल्यांकन विभाग System Planning & Project Appraisal Division सेवा मवन आर के पुरम / Sewa Bhawan, R.K. Puram नई दिल्ली / New Delhi – 110 066 वेबसाइट / Website : <u>www.cea.nic.in</u>



No. 100/1/EC (32) 2013-SP&PA/ 821 - 27

Dated : 31<sup>st</sup> March, 2015

- To
- Shri Major Singh, Member (Power System), Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
- Ms Jyoti Arora, Joint Secretary (Transmission), Ministry of Power, Shram Shakti Bhawan, Ragi Marg, New Delhi-110001.
- Adviser (Energy), NITI Aayog, Yojana Bhawan, Parliament Street, New Delhi-110001.
- Shri Ravinder,
   Former Chairperson & Member(PS),
   CEA,
   147, Bhagirathi Apartment,
   Sector-9, Rohini, Delhi-110085.

- Member (Economic & Commercial), Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
- Shri I.S. Jha, Director (Projects), POWERGRID, Saudamini, Plot No.2, Sector-29, Gurgaon-122001.
- Shri V.V.R.K. Rao, Former Chairperson, CEA, B-9/C, DDA Flats, Maya Puri, New Delhi-110064.

# Subject : 34<sup>th</sup> meeting of the Empowered Committee on Transmission – meeting notice and agenda

Sir.

Carry 7 .

The 34<sup>th</sup> meeting of the Empowered Committee on Transmission is proposed to be held on 13<sup>th</sup> April, 2015 (Monday) at 3.30 PM under the Chairmanship of Shri Major Singh, Chairperson/Member (Power System), CEA in the Conference Room of CEA, 2<sup>nd</sup> Floor, Sewa Bhawan, R.K. Puram, New Delhi.

The detailed agenda for the meeting is enclosed. The agenda has also been uploaded in the CEA website <u>www.cea.nic.in</u> (path to access – Home page – wing specific documents/Power System wing/Meeting of the Empowered Committee on Transmission/Meeting Notice and Agenda). Kindly make it convenient to attend the meeting.

Yours faithfully.

(K.K. Arva)

Member Secretary/Chief Engineer (SP&PA)

Agenda note for the 34th meeting of the Empowered Committee on Transmission

Date and Time: 13th April, 2015 (Monday) at 3:00 PM

Venue: Conference Room of CEA, 2<sup>nd</sup> Floor, Sewa Bhawan, R.K. Puram, New Delhi

## **1.0** Revised procedure for allocation of Inter State Transmission Project(s) under Tariff Based Competitive Bidding (TBCB)

Ministry of Power Vide letter no. 4/14/2014-PG dated 12<sup>th</sup> February, 2015 had issued revised procedure for allocation of Inter State Transmission Project(s) under Tariff Based Competitive Bidding (TBCB). As per the revised procedure, based on the recommendation of the Empowered Committee, Ministry of Power would finalize the Bid Process Coordinators (BPCs) for award of the transmission projects through TBCB route.

For information of the members please.

## 2.0 Re-constitution of the "Empowered Committee" in accordance with guidelines for encouraging competition in development of transmission projects.

Ministry of Power Vide letter no. 15/3/2010-Trans dated 4<sup>th</sup> March, 2015 have reconstituted the Empowered Committee on Transmission with the following composition:

1. Member (Power System), CEA	-	Chairperson
2. Member (E&C), CEA	-	Member
3. Joint Secretary (Trans.), Ministry of Power	-	Member
4. Director (Projects), POWERGRID	-	Member
5. Adviser (Energy), NITI Aayog	-	Member
6. Shri V.V. Ramakrishna Rao,		
Former Chairman, CEA (as an Expert from		
power sector)	-	Member
7. Shri Ravinder, Ex-Member (Power System),		
CEA (as an Expert from power sector)	-	Member
8. Chief Engineer (Trans. Planning/ SP&PA), CEA	-	Member Secretary

## 3.0 Implementing of the schemes after approval by 33<sup>rd</sup> Empowered Committee:

The following schemes were approved in the 33<sup>rd</sup> meeting of EC for implementation under TBCB as well as under regulated tariff mechanism:

Sl. No.	Name of the schemes	Name of the BPCs/ Regulated tariff mechanism
1.	Inter State Transmission System for	Initially under TBCB but changed to
	Renewable in Northern Region	Regulated tariff mechanism vide
		MoP letter dated 03-03-2015.
2.	Creation of 400/220 kV substations in NCT of Delhi during 12 <sup>th</sup> plan period	Regulated tariff mechanism
3.	Establishment of 220/66kV, 2x160MVA GIS S/s at Sector 47, UT Chandigarh along with 220kV D/C line	Regulated tariff mechanism

	from Sector 47 to 400/220kV Panchkula substation of Powergrid as a inter State line	
4.	Northern Region System Strengthening Scheme(NRSS)- <b>Part of XXXIV</b>	Regulated tariff mechanism
5.	Constraints in 400kV bays extensions at 400 kV Vemagiri S/S	Regulated tariff mechanism
6.	Additional inter-Regional AC link for import into Southern Region	PFCCL
7.	HVDC Bipole link between Western region (Raigarh, Chhattisgarh) and Southern region (Pugalur, Tamil Nadu and Madakkathara, in Kerala)	Initially under TBCB but changed to <b>Regulated tariff mechanism</b> vide MoP letter dated 03-03-2015.
8.	Strengthening of transmission system beyond Vemagiri	RECTPCL
9.	Connectivity for Kudankulam 3&4 (2x1000MW) with interstate transmission system	Regulated tariff mechanism
10.	Erection of 220 kV line to Karaikal NLC – Karaikal 220 kV D/C line	Initially under TBCB but changed to <b>Regulated tariff mechanism vide</b> <b>MoP</b> letter dated 03-03-2015.
11.	NER System Strengthening Scheme – II	RECTPCL
12.	Common Transmission System for	
	Phase-II Generation Projects in Odisha	
	<ul> <li>Phase-II Generation Projects in Odisha</li> <li>(i) Jharsuguda (Sundargarh) – Raipur Pool 765 kV D/C line</li> </ul>	PFCCL
	(i) Jharsuguda (Sundargarh) – Raipur	PFCCL Regulated tariff mechanism
13.	<ul> <li>(i) Jharsuguda (Sundargarh) – Raipur Pool 765 kV D/C line</li> <li>(ii) LILO of both circuits of Rourkela -</li> </ul>	
13.	<ul> <li>(i) Jharsuguda (Sundargarh) – Raipur Pool 765 kV D/C line</li> <li>(ii) LILO of both circuits of Rourkela - Raigarh 400 kV D/C line (2<sup>nd</sup> line)</li> <li>Immediate Evacuation System for OPGC (1320 MW) Project in Odisha</li> </ul>	Regulated tariff mechanism         PFCCL (Merged with scheme of
	<ul> <li>(i) Jharsuguda (Sundargarh) – Raipur Pool 765 kV D/C line</li> <li>(ii) LILO of both circuits of Rourkela - Raigarh 400 kV D/C line (2<sup>nd</sup> line)</li> <li>Immediate Evacuation System for OPGC (1320 MW) Project in Odisha (clubbed with 12 (i)</li> <li>Transmission System Strengthening in Indian System for transfer of power</li> </ul>	Regulated tariff mechanism         PFCCL (Merged with scheme of
	<ul> <li>(i) Jharsuguda (Sundargarh) – Raipur Pool 765 kV D/C line</li> <li>(ii) LILO of both circuits of Rourkela - Raigarh 400 kV D/C line (2<sup>nd</sup> line)</li> <li>Immediate Evacuation System for OPGC (1320 MW) Project in Odisha (clubbed with 12 (i)</li> <li>Transmission System Strengthening in Indian System for transfer of power from new HEPs in Bhutan</li> <li>(i) Jigmeling - Alipurduar 400kV D/C line with Quad moose conductor</li> </ul>	Regulated tariff mechanism PFCCL (Merged with scheme of 12(i))

#### 4.0 Briefing by BPCs on the schemes under bidding process

RECTPCL and PFCCL may brief the Empowered Committee about progress of schemes that are under bidding process.

## 5.0 New transmission schemes to be taken up through Tariff Based Competitive Bidding

#### (1) Name of the Scheme: System strengthening scheme in Northern Region (NRSS-XXXVI)

The transmission scheme has been approved in the 35<sup>th</sup> Standing Committee on Power System Planning in Northern Region held on 3/11/2014. The scope of the transmission scheme is as under:

SL. No.	Transmission Scheme	Capacity in MVA/ ckt. km	Estimated Cost (Rs. Crore)
1	Koteshwar Pooling Station - Rishikesh 400kV D/C (Quad) line	235	294
2	2 Nos. of bays at 400 kV Koteshwar Pooling Station		12.5
3	2 Nos. of bays at 400 kV Rishikesh S/S		12.5
	Total	L	319

Note:

- PTCUL to provide space for 2 Nos. of bays at their 400 kV Rishikesh S/S
- POWERGRID to provide space for 2 Nos. of bays at their 400 kV Koteshwar pooling station
- POWERGRID to provide one no. of 220 kV bay at their 400/220kV Roorkee Substation

#### Members may like to deliberate.

# (2) LILO of 220kV Dhauliganga - Pithoragarh (PG) for construction of Proposed 220kV GIS S/s at Jauljibi, Pithoragarh & Proposed 2x100 MVA, 220/132kV GIS s/s at Almora in Kumaon region

The transmission scheme has been approved in the 35<sup>th</sup> Standing Committee on Power System Planning in Northern Region held on 3/11/2014. The scope of the transmission scheme is as under:

SI. No.	Transmission Scheme	Capacity in MVA/ ckt. km.	Estimated Cost (Rs. Crore)
	Phase II		
	Creation of 400/220kV, 2X315MVA		
1	GIS Substation in Jauljivi area under		94
	ISTS by LILO of both ckt. of 400 kV		

	Dhauliganga-Bareilly (PGCIL) line		
	(presently charged at 220 kV) at 400kV		
	Jauljivi (ISTS). The 400 kV Jauljivi S/S		
	to have the following provisions:		
	<ul> <li>400 kV side <ul> <li>(a) 2 nos. of 400 kV line bays for 400kV</li> <li>D/C to Bareilly</li> <li>(b) 2 nos. of 400 kV ICT bays</li> <li>(c) Space provision for 2 future bays</li> </ul> </li> <li>220 kV side <ul> <li>(a) 8 nos. of 220 kV line bays</li> <li>(Pithorgarh-2, Almora-2, Baram (Jauljivi)-2, Dhauliganga-2)</li> <li>(b) 2 nos. of ICT bays</li> <li>(c) 1 No. of 220kV Bus reactor bay (25 MVAr Reactor already available at Dhauliganga shall be shifted to Baram(Jauljivi) S/s)</li> </ul> </li> </ul>		
2	Charging of Baram(Jauljivi)–Bareilly D/C line at 400kV level	_	-
3	220 kV Jauljibi (PTCUL) under Phase I would be connected to Baram(Jauljivi) (ISTS)400/220kV substation through 220 kV D/C line (line and the S/S under PTCUL scope)	10	3
4	The existing LILO of Dhauliganga- Pithoragarh (PGCIL) line at 220KV Jauiljibi S/s would be disconnected and connected to Baram(Jauljivi)400/220kV ISTS substation under ISTS	10	3
5	Diversion of Dhauliganga-Bareilly 400kV D/c line(operated at 220kV) at Bareilly end from CB Ganj to Bareilly(PGCIL)-To be finalised"	-	-
	Total		100

#### Members may like to deliberate.

# (3) Creation of new 400kV Substations in Gurgaon area and Palwal area as a part of ISTS

The transmission scheme has been approved in the 35<sup>th</sup> Standing Committee on Power System Planning in Northern Region held on 3/11/2014. The scope of the transmission scheme is as under:

SI. No.	Transmission Scheme	Capacity in MVA/ ckt. km.	Estimated Cost (Rs. Crore)
1	Creation of 400 kV level at Aligarh substation by adding 2x1500 MVA 765/400 kV ICT	3000	102
2	Aligarh – Prithala, 400 kV D/C Quad line	232	290
3	Prithala – Kadarpur 400 kV D/C Quad line	112	140
4	Kadarpur – Sona Road 400 kV D/C Quad line	17	21
5	LILO of Gurgoan – Manesar D/C line at Sona Road S/S	10	12.5
6	Neemrana – Dhonanda(HVPNL) 400 kV D/C Quad line	166	208
7	Creation of 400/220kV, 2X500 MVA substations at Kadarpur in Gurgaon area		320
8	Creation of 400/220kV, 2X500MVA substations at Sona Road in Gurgaon area		332
9	Creation of 400/220kV, 2X500MVA substations at Prithala in Palwal area		320
10	To cater to the future load growth of the area, space provision for capacity augmentation by 2X500MVA transformation at all these substations may be kept.	-	_
	Total		1746

#### Members may like to deliberate.

### (4) LILO of Sikar-Neemrana 400kV D/C line at Babai (RRVPNL)

The transmission scheme has been approved in the  $35^{\text{th}}$  Standing Committee on Power System Planning in Northern Region held on 3/11/2014. The scope of the transmission scheme is as under:

SI. No.	Transmission Scheme	Capacity in MVA/ ckt. km.	Estimated Cost (Rs. Crore)
1	LILO of one ckt. of Sikar- Neemrana line at Babai	2	1.8
2	Babai – Bhiwani D/C line	252	227
	Total		227

Members may like to deliberate.

#### (5) 132kV Banka- Deoghar D/C lines (about 40 Kms)

The transmission scheme has been approved in the  $1^{st}$  -2014 meeting of the Standing Committee on Power System Planning of Eastern Region held on 2/5/2014. The scope of the transmission scheme is as under:

Sl. No.	Transmission Scheme	Capacity in MVA/ ckt. km.	Estimated Cost (Rs. Crore)
1	132 kV Banka - Deoghar D/C line	120	27

Members may like to deliberate.

- 6.0 Constitution of the Bid Evaluation Committees (BEC's) for the new transmission schemes
- (1) Bid Evaluation Committee (BEC) for "Additional inter-Regional AC link for import into Southern Region" - PFCCL

Sl.	Name	Designation
No.		_
1.	Head, SBI Capital Markets, 6th floor, World Trade Tower, Barakhamba Lane, Connaught Place, New Delhi- 110001 Phone No. 011-23418770 Fax: 011 -23418773	Chairman
2.	Mohd. Anwaruddin Director (Project, Grid & Finance), Telangana TRANSCO Hyderabad	Member
3.	Shri S Sumanth Director (Transmission ), Karnataka Power Transmission Company Ltd., Bengaluru, Karnataka	Member
4.	Shri Pankaj Batra, Chief Engineer (F&CA) Central Electricity Authority Room No. 626, 6th floor, Sewa Bhawan, R.K.Puram, New Delhi-110066 Phone No. 011-26732688, 26732668, Mobile: 9350981062	Member (CEA)
5.	Shri Goutam Roy Director (SP&PA) Central Electricity Authority Sewa Bhawan, R.K.Puram, New Delhi-110066	Member (CEA)

	Phone No. 011-26711015, Mobile: 8376817933	
6.	Chairman of SPV constituted by PFCCL &	Convener -
	RECPTCCL	Member

## (2) Bid Evaluation Committee (BEC) for "Strengthening of transmission system beyond Vemagiri" - RECTPCL

Sl.	Name	Designation
No.		
1.	Head, SBI Capital Markets, 6th floor, World Trade Tower, Barakhamba Lane, Connaught Place, New Delhi- 110001 Phone No. 011-23418770 Fax: 011 -23418773	Chairman
2.	Mohd. Anwaruddin Director (Project, Grid & Finance), Telangana TRANSCO Hyderabad	Member
3.	Shri S Sumanth Director (Transmission ), Karnataka Power Transmission Company Ltd., Bengaluru, Karnataka	Member
4.	Shri Pankaj Batra, Chief Engineer (F&CA) Central Electricity Authority Room No. 626, 6th floor, Sewa Bhawan, R.K.Puram, New Delhi-110066 Phone No. 011-26732688, 26732668, Mobile: 9350981062	Member
5.	Shri Goutam Roy Director (SP&PA) Central Electricity Authority Sewa Bhawan, R.K.Puram, New Delhi-110066 Phone No. 011-26711015, Mobile: 8376817933	Member
6.	Chairman of SPV constituted by <b>PFCCL &amp;</b> <b>RECPTCCL</b>	Convener - Member

SI.	Name	Designation
No.		
1.	Head, SBI Capital Markets,	Chairman
	6th floor, World Trade Tower,	
	Barakhamba Lane, Connaught Place,	
	New Delhi- 110001	
	Phone No. 011-23418770	
	Fax: 011 -23418773	
2.	Name of the member sought from NERPC	Member
3.	Name of the member sought from NERPC	Member
4.	Shri Pankaj Batra,	Member
	Chief Engineer (F&CA)	
	Central Electricity Authority	
	Room No. 626, 6th floor, Sewa Bhawan,	
	R.K.Puram, New Delhi-110066	
	Phone No. 011-26732688, 26732668,	
	Mobile: 9350981062	
5.	Shri Goutam Roy	Member
	Director (SP&PA)	
	Central Electricity Authority	
	Sewa Bhawan, R.K.Puram,	
	New Delhi-110066	
	Phone No. 011-26711015, Mobile: 8376817933	
6.	Chairman of SPV constituted by <b>PFCCL &amp;</b>	Convener -
	RECPTCCL	Member

# (3) Bid Evaluation Committee (BEC) for "NER System Strengthening Scheme – II" - RECTPCL

#### (4) Bid Evaluation Committee (BEC) for "Common Transmission System for Phase-II Generation Projects in Odisha" - PFCCL

SI. No.	Name	Designation
1.	Head, SBI Capital Markets, 6th floor, World Trade Tower, Barakhamba Lane, Connaught Place, New Delhi- 110001 Phone No. 011-23418770 Fax: 011 -23418773	Chairman
2.	Name of the member sought from ERPC	Member
3.	Name of the member sought from ERPC	Member
4.	Shri Pankaj Batra, Chief Engineer (F&CA) Central Electricity Authority Room No. 626, 6th floor, Sewa Bhawan, R.K.Puram, New Delhi-110066	Member

	Phone No. 011-26732688, 26732668, Mobile: 9350981062	
5.	Shri Goutam Roy Director (SP&PA) Central Electricity Authority Sewa Bhawan, R.K.Puram, New Delhi-110066 Phone No. 011-26711015, Mobile: 8376817933	Member
6.	Chairman of SPV constituted by PFCCL & RECPTCCL	Convener - Member

(5) Bid Evaluation Committee (BEC) for "Transmission System Strengthening in Indian System for transfer of power from new HEPs in Bhutan" - RECTPCL

Sl. No.	Name	Designation
1.	Head, SBI Capital Markets, 6th floor, World Trade Tower, Barakhamba Lane, Connaught Place, New Delhi- 110001 Phone No. 011-23418770 Fax: 011 -23418773	Chairman
2.	Name of the member sought from ERPC	Member
3.	Name of the member sought from ERPC	Member
4.	Shri Pankaj Batra, Chief Engineer (F&CA) Central Electricity Authority Room No. 626, 6th floor, Sewa Bhawan, R.K.Puram, New Delhi-110066 Phone No. 011-26732688, 26732668, Mobile: 9350981062	Member
5.	Shri Goutam Roy Director (SP&PA) Central Electricity Authority Sewa Bhawan, R.K.Puram, New Delhi-110066 Phone No. 011-26711015, Mobile: 8376817933	Member
6.	Chairman of SPV constituted by PFCCL & RECPTCCL	Convener - Member

## 7.0 Any other item.

Any other item with the permission of Chair.

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