

Government of India Ministry of Power Central Electricity Authority SP&PA Division

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

No. 100/1/EC (32) 2013-SP&PA/ 48-57

To

- Smt. Neerja Mathur
 Chairperson and Member (Power System)
 Central Electricity Authority
 Sewa Bhawan, R.K. Puram,
 New Delhi 110 066.
- Director (Transmission)
 Ministry of Power,
 Shram Shakti Bhawan, Rafi Marg,
 New Delhi 110 001.
- Shri I.A. Khan Adviser, Planning Commission, Yojana Bhawan, Parliament Street, New Delhi – 110 001.
- 7. Shri Ravinder
 Former Chairperson & Member (Power System), CEA
 147, Bhagirathi Apartment,
 Sector-9, Rohini, Delhi 110 085.
 (Tel. 9971568444).

Dr. Jaipal Singh
 Member (Economic & Commercial),
 Central Electricity Authority
 Sewa Bhawan, R.K. Puram,
 New Delhi – 110 066.

Dated: 10th January, 2014

- 4. Shri I. S. Jha
 Director (Projects), Power Grid
 Saudamini, Plot No. 2, Sector-29,
 Gurgaon 122 001.
- 6. Shri V. V. R. K. Rao Former Chairperson, CEA B-9/C, DDA Flats, Maya Puri, New Delhi -110 064.

Subject: 32nd meeting of the Empowered Committee on Transmission - meeting notice and agenda

Sir

The 32nd meeting of the Empowered Committee on Transmission is proposed to be held on 17th **January, 2014 (Friday) at 3:00 PM** under the chairmanship of Smt. Neerja Mathur, Chairperson and Member (Power System), CEA in the Conference Room of CEA, 2nd Floor, Sewa Bhawan, R.K. Puram, New Delhi.

The detailed Agenda is enclosed at **Annex – I.** The major items covered in the Agenda are as following:

- (1) Amendment in the timelines in the Standard Bid Documents (SBDs) notified by the Ministry of Power on 6th December, 2013.
- (2) Revision of Standard Bid Documents (SBDs) for aligning with the Case II documents for procurement of generation.
- (3) Cost estimates for the project to be implemented through tariff based competitive bidding
- (4) Contract Performance Guarantee provided by the selected Bidder and non signing of the TSA by the LTTCs
- (5) Annulment of bidding process for Transmission System for connectivity for NCC Project (1320 MW) and Baira Suil Sarna 220 kV D/C transmission line
- (6) New transmission schemes to be taken up through tariff based competitive bidding
- (7) Briefing by BPCs on the schemes under bidding process
- (8) Remuneration/ Honorarium for members of Bid Evaluation Committee.

Kindly make it convenient to attend the meeting.

Yours faithfully,

Chief Engineer I/C (SP&PA)

(K. K. Arva)

Copy to:

- i) Shri Y.K. Sehgal, COO (CTU), POWERGRID, 'Saudamini', Plot No.2, Sector 29, Gurgaon 122 001 (Haryana)
- ii) Shri S. K. Gupta, CEO, RECTPCL, Core-4 SCOPE Complex, 7 Lodhi Road, New Delhi 110 003. (Fax-011-24102576)
- iii) Shri N. D Tyagi, CEO, PFC Consulting Ltd, First Floor, Urjanidhi, 1 Barakhmba Lane, New Delhi -110001 (Fax- 011-23456170)

Agenda note for the 32nd meeting of the Empowered Committee on Transmission

Date and Time: 17th January, 2014 (Friday) at 3:00 PM

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

1.0 Amendment in the timelines in the Standard Bid Documents (SBDs)

The Ministry of Power on 6th December, 2013 notified the revised timelines for completing the tariff based competitive bidding process. Vide Gazette Notification dated 9th December, 2013, Para 11.1 on Time table for the Bid Process has been has been amended. Accordingly, the bidding process, including the award of the project, has to be completed within 145 days from the 'zero date', which is the publication of RfQ. The Gazette Notification dated 9th December, 2013 is placed at **Annex – II**.

For information of the members please.

2.0 Revision of Standard Bid Documents (SBDs) for aligning with the Case – II documents for procurement of generation.

The Ministry of Power vide letter dated 10th October, 2013 intimated that the Standard Bid Documents (SBDs) for the Case – II for the generation projects have been notified. As desired by MoP, bidding documents for tariff based competitive bidding (TBCB) for transmission projects have to be aligned with the documents of Case – II for the generation projects. Accordingly, M/s RECTPCL Ltd. has been requested to appoint a Consultant to carry out this work and they have appointed a consortium of PwC and Link Legal as Consultant.

For information of the members please.

3.0 Cost estimates for the transmission projects to be implemented through tariff based competitive bidding (TBCB)

In the meeting held on 6th November, 2013 in CEA relating to the estimated cost of the transmission projects to be implemented through TBCB, the following were decided:

- (a) Survey would be carried out by BPC i.e. PFC and REC after the scheme is finalized in the Standing Committee Meeting on Power System Planning of the respective regions. In case project is not allocated to the BPC who has carried out the survey, the cost of the survey would be reimbursed to the BPC by other BPC to whom the project has been allocated.
- (b) A committee would be formed with the representatives from CEA, POWERGRID and BPCs to work out a matrix for different type of transmission lines which would include factors for different type of variables for estimating the cost (for example, type of the terrains, wind zones, etc.).

CEA would constitute the committee shortly. PGCIL and BPCs may nominate their members.

(c) After completion of the survey, the cost of transmission line shall be worked out by the committee based on the matrix evolved above.

For information of the members please.

4.0 Non signing of the Transmission Service Agreement (TSA) by the LTTCs & Contract Performance Guarantee (CPGs) to be provided to the LTTCs by the selected Bidder

As per existing provisions of the SBD, the selected Bidder is required to provide the Contract Performance Guarantee in favour of the Long Term Transmission Customers (LTTCs) in proportion to allocated project capacity.

However, pursuant to the framing of regulations by CERC for sharing of transmission charges, identification of LTTCs for specific transmission project does not appear to be relevant.

Further, the Bid Processor Coordinators (BPCs) are finding difficult to get the TSA signed by the Long Term Transmission Customers (LTTCs) despite regular follow up by them as well as by CEA. This would delay the transfer of special purpose vehicle (SPV) by the BPC to the successful bidder.

In view of the above, members may like to deliberate the issues related to non-signing of TSA by the LTTCs and CPGs to be provided to the LTTCs by the selected Bidder.

5.0 Annulment of bidding process for Transmission System for connectivity for NCC Project (1320 MW) and Baira Suil – Sarna 220 kV D/C transmission line

(i) Transmission System for connectivity for NCC Project (1320 MW)

Based on allocation of transmission projects by the Ministry of Power, RECTPCL carried out the Bidding process for selection of developer. After completing of the entire exercise, PGCIL had emerged as lowest bidder. However, their quoted tariff was 97% higher w.r.t tariff worked on based on CERC norms. On account of this, the Bid Evaluation Committee (BEC) rejected all the Bids.

Subsequently, CEA recommended to MoP to implement the transmission scheme through regulated tariff mechanism. MoP vide its letter no. 15/9/2013-Trans dated 10th December, 2013 has allocated the project to PGCIL for development through regulated tariff mechanism.

For carrying out the bidding process for this transmission project, the BPC (RECTPCL) vide e-mail dated 27th December, 2013 stated that they incurred an expenditure of Rs. 2.18 Crore and requested for reimbursement of this expenditure.

Members may deliberate.

(ii) Baira Suil – Sarna 220 kV D/C transmission line

CEA vide letter no. 100/11/REC-8/SP&PA dated 2nd January, 2014 intimated to the BPC (RECTPCL) considering the detailed survey report carried out, the

revised estimated cost of the project worked out to Rs. 250 Crore. The issue of implementation of Baira Suil- Sarna 220 kV D/C line was discussed during the 33rd Standing Committee Meeting of Power System Planning for Northern Region and all the constituents were of the view that considering the very high cost and decided to abandon the implementation of this line.

For carrying out the bidding process for this transmission project, the BPC (RECTPCL) vide e-mail dated 6th January, 2014 stated that they incurred an expenditure of Rs. 2.10 Crore and requested for reimbursement of this expenditure.

Members may like to deliberate.

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

(The estimated costs of the transmission projects have been worked out based on the cost at August, 2013 price level received from PGCIL and considering normal terrain. This does not include land, RoW, forest, etc. compensation.)

(1) Name of the Scheme: Inter State Transmission System for Renewables - Western Region - I

The transmission has been approved in the 32nd Standing Committee on Power System Planning in Northern Region held on 31st August, 2013 and 36th Standing Committee on Power System Planning in Western Region held on 29th August, 2013. The scope of the transmission scheme is as under:

SI. No.	Transmission Scheme	Estimated Line Length (km)	Estimated Cost (Rs. Crore)
1.	Bhuj Pool (New) –Banaskantha (New) 765 kV D/C line	300	1343
2.	Banaskantha - Sankhari 400 kV D/C line	50	79
3.	Establishment of 765/400 kV, 2 x 1500 MVA & 400/220 kV, 2x500 MVA sub-station at Bhuj Pool 765 kV ICTs: 7 x 500MVA, 765/400 kV (1 spare unit) ICT bays: 2 nos. Line bays: 2 nos. Bus reactor: 3 x 110 MVAR Line reactors: 7 x 110 MVAR switchable (1 unit spare) Bus reactor bay: 1 no. Space for 765 kV bays: 8 nos. 400 kV ICT bays: 2 nos. Line bays: 4 no. ICTs: 2 x 500MVA, 400/220 kV Space for 400 kV bays: 4 nos. 220 kV ICT bays: 2 nos. Space for 220 kV line bays: 6 nos.		483
4.	Establishment of 765/400/220 kV (765/400 kV, 2x1500 MVA & 400/220 kV, 2x500 MVA) sub-station at Banaskantha 765 kV		582

Space for 220 kV line bays: 6 nos. Estimated Cost	2487
• ICT bays: 2 nos.	
220 kV	
Space for 400 kV bays: 4 nos.	
• ICT bays: 2 nos.	
• Line bays: 2 nos.	
• ICTs: 2 x 500MVA, 400/220 kV	1
400 kV	
Bus reactor bay: 1 no.	•
• Line reactor bay: 2 no.	}
Chittorgarh line)	
• Line reactors: 6x110 MVAR switchable (for	
• Line reactors: 7x110 MVAR (1 unit spare)	
Space for 763 kV bays, 2 hos. Bus reactor: 3x110 MVAR	
ICT bays: 2 nos.Space for 765 kV bays: 2 nos.	
• Line bays: 4 nos.	Í
• ICTs: 7x500MVA 765/400 kV (1 spare unit)	

CTU to provide 2 no. of 400 kV line bay at Sankhari 400 kV substation of GETCO.

The above scheme has been agreed in the Standing Committee meeting on Power System Planning in WR and NR to be implemented by POWERGRID under compressed time schedule.

Members may deliberate.

(2) Name of the Scheme: Inter State Transmission System for Renewables, Northern Region - I

The transmission scheme has been approved in the 32nd Standing Committee on Power System Planning in Northern Region held on 31st August, 2013 and 36th Standing Committee on Power System Planning in Western Region held on 29th August, 2013. The scope of the transmission scheme is as under:

SI. No.	Transmission Scheme	Estimated Line Length (km)	Estimated Cost (Rs. Crore)
1	Banaskantha (New) - Chittorgarh (New) 765 kV D/C line	300	1343
2.	Chittorgarh (New) – Chittorgarh (RVPNL) 400 kV D/C (Quad)	20	57
4.	Establishment of 765/400 kV Chittorgarh (New) Substation 765 kV ICTs: 765/400 kV, 7 x 500MVA (1 spare unit) ICT bays: 2 nos Line Bays: 4 nos Line reactors: 13 x 80 MVAR/ phase (switchable for Chittorgarh and Suratgarh line and I unit as spare) Bus reactor: 4 x80MVAR/ phase (1 unit spare) Bus reactor bay: 1 no Space for future line bays: 6 nos Space for future ICT bay: 1 no		448

•	ICT bays: 2 nos	
•	Line Bays: 2 nos	
•	Bus reactor: 1 x 125 MVAR	
•	Bus reactor bay: 1 no	
•	Space for future line bays: 4 nos	
•	Space for future ICT bay: 1 no	
	Estimated Cost	1848

> CTU to provide 2 nos Line Bays at Chittorgarh (Existing) S/s of RVPNL

The above scheme has been agreed in the Standing Committee meeting on Power System Planning in WR and NR to be implemented by POWERGRID under compressed time schedule.

Members may deliberate.

(3) Name of the Scheme: Inter State Transmission System for Renewables, Northern Region - II

The transmission scheme has been approved in the 32nd Standing Committee on Power System Planning in Northern Region held on 31st August, 2013 and 36th Standing Committee on Power System Planning in Western Region held on 29th August, 2013. The scope of the transmission scheme is as under:

Scope:

SI. No.	Transmission Scheme	Estimated Line Length (km)	Estimated Cost (Rs. Crore)
1.	Chittorgarh (New) - Ajmer (New) 765 kV D/C transmission line	190	851
2.	Ajmer (New) – Ajmer (RVPNL) 400 kV D/C (Quad)	20	57
3.	Establishment of 765/400kV Ajmer (New) Substation 765 kV ICTs: 7 x 500MVA, 765/400 kV (1 spare unit) ICT bays: 2 nos Line Bays: 4nos Line reactors: 13 x 80 MVAR/ phase (switchable for Chittorgarh and Suratgarh line, and 1 unit as spare) Bus reactor: 4 x 80 MVAR/ phase (1 unit spare) Bus reactor bay: 1 no Space for future line bays: 6 nos Space for future ICT bay: 1 no		448
	 400 kV ICT bays: 2 nos Line Bays: 2 nos Bus reactor: 1 x 125 MVAR Bus reactor bay: 1 no Space for future line bays: 4 nos Space for future ICT bay: 1 no 		
	Estimated Cost		1356

Note:

CTU to provide 2 nos Line Bays at Ajmer (Existing) S/s of RVPNL

The above scheme has been agreed in the Standing Committee meeting on Power System Planning in WR and NR to be implemented by POWERGRID under compressed time schedule.

Members may deliberate.

(4) Name of the Scheme: Inter State Transmission System for Renewables, Northern Region - III

The transmission corridor is required considering the transmission strengthening beyond Bhuj Pooling sub-station due to Mundra UMPP and Adani Mundra in Kutch (Gujarat) complex as well as likely renewable capacity additions in Rajasthan and Gujarat. The scheme has been approved in the 32nd Standing Committee on Power System Planning in Northern Region held on 31st August, 2013 and 36th Standing Committee on Power System Planning in Western Region held on 29th August, 2013.

Scope:

SI. No.	Transmission Scheme	Estimated Line Length (km)	Estimated Cost (Rs. Crore)
1.	Ajmer (New) – Suratgarh (New) 765 kV D/C transmission line	360	1650
2.	Suratgarh (New) – Suratgarh (Existing) 400 kV D/C (Quad)	20	57
3.	Establishment of 765/400kV Suratgarh (New) Substation 765 kV ICTs: 7x500MVA, 765/400 kV (1 spare unit) ICT bays: 2nos Line Bays: 4nos Line reactors: 13x110MVAR/phase (switchable for Ajmer and Moga line, 1 unit spare) Bus reactor: 7x110MVAR/ phase (1 unit spare) Bus reactor bay: 2 nos Space for future line bays: 4 nos Space for future transformer bays: 1 nos 400 kV ICT bays: 2nos Line Bays: 2nos Bus reactor: 1x125MVAR Bus reactor bay: 1 nos Space for future line bays: 4 nos Space for future line bays: 4 nos		570
	Estimated Cost		2277

Note:

> CTU to provide 2 nos 400 kV Line Bays at Suratgarh (Existing) S/s of RVPNL

The above scheme has been agreed in the Standing Committee meeting on Power System Planning in WR and NR to be implemented by POWERGRID under compressed time schedule.

Members may deliberate.

(5) Name of the Scheme: Inter State Transmission System for Renewables, Northern Region - IV and Northern Region System Strengthening Scheme - XXXV

These schemes have been approved in the 32nd Standing Committee on Power System Planning in Northern Region held on 31st August, 2013 and 36th Standing Committee on Power System Planning in Western Region held on 29th August, 2013. **Northern Region System Strengthening Scheme – XXXV** is meant to remove transmission constraint during outage of one circuit of Mohindergarh – Bhiwani 400 kV D/C line. The scope of the transmission scheme is as under:

Scope:

SI.	Transmission Scheme	Estimated Line	Estimated Cost
No.		Length (km)	(Rs. Crore)
1	Suratgarh -Moga 765 kV D/C transmission line	230	1050
2	Mohindergarh – Bhiwani 400 kV D/C line with twin moose transmission line	55	88
	Estimated Cost		1138

Note for NRSS – XXXV (Sl. No. 2):

- > CTU to provide 2 nos 400 kV Line Bays at exiting Bhiwani (PG)
- > M/s Adani to provide 2 nos 400 kV Line Bays at their exiting Mohindergarh sub-station
- ➤ CTU to provide 2 nos Line Bays and 6x80MVAR/phase Line reactors (switchable for Suratgarh line) at Moga 765/400 kV Sub-station

(6) Name of the Scheme: System Strengthening associated with Mundra UMPP

The Transmission system strengthening of Mundra UMPP has been agreed by the WR constituents in the 36th meeting of the Standing Committee on Power System Planning in Western Region held on 29th August 2013. The transmission system strengthening was agreed for Mundra UMPP, to comply with 'N-1-1' criteria. The scope of the transmission scheme is as under:

Scope:

Sl. No.	Transmission Scheme	Estimated Line Length (km)	Estimated Cost (Rs. Crore)
1.	LILO of both ckts of Mundra UMPP - Limbdi at Bachau (Triple snowbird)	25	142
2.	LILO of one ckt. of Bachau-Versana (under construction) 400 kV D/C line at Mundra UMPP (Triple snowbird)	90	256
3.	Mundra UMPP – Bhuj pool 400 kV D/C line (triple snowbird) utilizing line at (ii)	30	85
	Estimated Cost		483

Note:

- > CTU to provide 4 no. of 400 kV line bays at Bachau 400kV substation
- M/s CGPL to provide 2 no. of 400 kV line bays at Mundra UMPP generation switchyard.
- (i) Mundra UMPP Bhuj pool 400 kV D/C line is to be implemented in two parts. Initially, the line would be constructed up to the Bachau Versana 400 kV D/C line to form LILO of one ckt. of Bachau- Versana 400 kV D/C at Mundra UMPP. This LILO work has to be taken up immediately. In the time frame of implementation of Bhuj pooling station the LILO section would be extended to Bhuj pool.

(ii) The LILO of both circuits of Mundra UMPP - Limbdi at Bachau also involves construction of LILO section of existing line POWERGRID. Presently, SPS has been planned with Mundra UMPP to back down generation in the event of "N-1-1" contingency, therefore to avoid backing down of available generation the scheme was agreed to be implemented on urgent basis by POWERGRID in compressed time schedule in the Standing Committee.

In view of the above Empowered Committee may deliberate on the issue of implementation of the scheme.

(7) Name of the Scheme: Additional System Strengthening for Sipat STPS

This scheme was agreed in the 36th Standing Committee meeting on Power System Planning of Western Region held on 29th August, 2013. The proposed transmission system will enhance the redundancy of the Sipat Evacuation System. The scope of the transmission scheme is as under:

Scope:

Sl. No.	Transmission Scheme	Estimated route length (km)	Estimated Cost (Rs. Crore)
1.	Sipat – Bilaspur Pooling Station 3 rd 765 kV S/C line	25	57
2.	Bilaspur Pooling Station – Dhanwahi pooling station 765 kV D/C line	300	1343
3.	LILO of both circuits of Jabalpur - Orai 765 kV D/C at Dhanwahi pooling station [2XD/C]	50	448
4.	LILO of all circuits of Vindhyachal – Jabalpur 400 kV 2xD/C line at Dhanwahi pooling station – [4XD/C]	20	127
5.	Establishment of new 2X1500, 765/400 kV Dhanwahi Pooling Station 765 kV Line bays - 6 nos. ICTs: 7x500MVA, 765/400 kV (1 spare unit) ICT bays - 2 nos. Space for 765 bays - 4 nos. Bus reactor: 3 x 110 MVAR Line reactors: 7 x 110 MVAR (1 unit spare) Bus reactor bay - 1 no. 400 kV Line bays - 8 nos. ICT bays - 2 nos. Space for 400 kV bays - 4 nos.		538
	Estimated Cost		2473

Note:

- ➤ CTU to provide 3 no. of 765 kV line bays at exiting Bilaspur 765/400 kV pooling station along with 2X330 MVAR switchable line reactors for Bilaspur Pooling Station Dhanwahi pooling station 765 kV D/C line along with bays.
- > CTU to provide 1 no. of 765 kV line bays at switchyard of Sipat STPP of NTPC.

(8) Name of the Scheme: System strengthening for IPPs in Chhattisgarh and other generation projects in Western Region

The scheme was agreed in the 36th Standing Committee meeting on Power System Planning of Western Region held on 29th August, 2013.

The system strengthening will provide 400 kV anchoring at Gwalior substation, improve the reliability of evacuation of power from Vindhyachal - IV & V STPP (3x500 MW), Sasan UMPP (6x660 MW) and IPPs in Chhattisgarh. The scope of the transmission scheme is as under:

Scope:

Sl. No.	Transmission Scheme	Estimated route length (km)	Estimated Cost (Rs. Crore)
1.0.	400 kV interconnections at Gwalior 765/400 kV S/S	iengen (Kin)	(XISI CX OX O)
1.	Gwalior 765/400 kV – Morena 400 kV D/C line	50	79
2.	Establishment of 2X315 MVA, 400/ 220 kV substation at Morena 400 kV Line bays - 2 nos. ICT - 2 x 315 MVA, 400/ 220 kV ICT bays - 2 nos. Bus reactor: 1X125 MVAR Space for 400 kV bays - 4 nos. 220 kV Line bays - 4 nos. ICT bays - 2 nos. Space for 220 kV bays - 4 nos		90
	Additional evacuation line from Vindhyachal-IV & V ST	PP (3x500 MW)	<u>'</u>
3.	Vindhyachal-IV & V STPP – Vindhyachal Pool 400 kV D/C (Quad) 2nd line	15	67
	Additional System Strengthening Scheme for Chhattisga	rh IPPs	
4.	Sasan UMPP – Vindhyachal Pooling station 765 kV S/C line	8	18
5.	LILO of one circuit of Aurangabad – Padghe 765 kV D/C line at Pune	50	224
6.	Raigarh (Kotra) - Champa (Pool) 765 kV 2 nd S/C line	100	230
7.	Champa (pool) – Dharamjaigarh 765 kV 2 nd S/C line	50	115
	Estimated Cost		823

Note:

- ➤ 2 no. of 400 kV line bays existing at Gwalior 765/400 kV sub-station to be utilized for terminating Gwalior Morena 400 kV D/C line.
- ➤ CTU to provide 2 no. of 400 kV line bays at the Vindhyachal 765/400 kV pooling station under construction by PGCIL.
- > CTU to provide 2 no. of 400 kV line bays at the switchyard of Vindhyachal -V TPS of NTPC.
- > CTU to provide 1 no. of 765 kV line bay at Vindhyachal 765/400 kV pooling sub-station under construction by PGCIL.
- > CTU to provide 1 no. of 765 kV line bay at Sasan UMPP of M/s SPL, Reliance.
- > CTU to provide 2 no. of 765 kV line bays at Pune 765/400 kV substation of PGCIL.
- > CTU to provide 2 no. of 765 kV line bay at Champa 765/400 kV pooling station of PGCIL.
- CTU to provide 1 no. of 765 kV line bay at Raigarh (Kotra) 765/400 kV pooling station of PGCIL.
- > CTU to provide 1 no. of 765 kV line bay at Dharamjaigarh 765/400 kV pooling station of PGCIL.

(9) Name of the Scheme: Additional System Strengthening Scheme for Chhattisgarh IPPs

This scheme was agreed in the 36th Standing Committee meeting on Power System Planning of Western Region held on 29th August, 2013. This scheme would improve the

reliability of evacuation of power from the generation projects in Chhattisgarh complex. The scope of the transmission scheme is as under:

Scope:

Sl. No.	Transmission Scheme	Estimated route length (km)	Estimated Cost (Rs. Crore)
1.	Raipur (Pool) – Rajnandgaon 765 kV D/C line	150	671
2.	Rajnandgaon – Pooling station near Warora 765 kV D/C line	200	895
3.	LILO of all (4) circuits of Raipur/Bhilai – Bhadrawati 400 kV lines at Rajnandgaon	20	127
4.	Establishment of new substation near Rajnandgaon 765/400 kV, 2x1500 MVA substation 765 kV ICTs - 7x500MVA 765/400 kV (1 spare unit) ICT bays - 2 no. Line bays - 4 no. Bus reactor - 3x110 MVAR Bus reactor bay - 1 no. Line reactors - 7x110 MVAR (1 unit spare) (switchable for Warora line) Space for 765 kV bays - 4 nos. 400 kV ICT bays - 2 no. Line bays - 8 no. Space for 400 kV bays - 4 nos.		498
	Estimated Cost		2191

Note:

CTU to provide 2 no. of 765 kV line bays at Raipur 765/400 kV pooling station of PGCIL.

The scheme is to be implemented in the matching time frame of transmission scheme for Gadarwara STPP.

(10) Name of the Scheme: Transmission system associated with Gadarwara STPS (2x800 MW) of NTPC (Part - A)

This scheme was agreed in the 36th Standing Committee meeting on Power System Planning of Western Region held on 29th August, 2013. The scheme is for the evacuation of Gadarwara STPS. The scope of the transmission scheme is as under:

Sl. No.	Transmission Scheme	Estimated route length (km)	Estimated Cost (Rs. Crore)
1.	Gadarwara STPS - Jabalpur Pool 765 kV D/C line	120	537
2.	Gadarwara STPS-Warora (Pooling Station) 765 kV D/C line	300	1343
3.	LILO of both circuits of Wardha-Parli (PG) 400 kV D/C line at Warora (Pooling Station) (Quad) line [2xD/C]	20	114

4.	Establishment of 2x1500 MVA 765/400 kV Warora	531
	(Pooling Station)	
	765 kV	
	• ICTs: 7x500MVA 765/400 kV (1 spare unit)	
	• ICT bays – 2 no.	
	• Line bays – 6 no.	į.
	Bus reactor – 3x110 MVAR	
	Bus reactor bay – 1 no.	
	• Line reactors - 7x110 MVAR (1 unit spare) (for Gadarwara line)	
	• Line reactors switchable - 6x110 MVAR (for Parli line)	
	• Space for 765 kV bays – 4 no.	
	400 kV	
	• ICT bays – 2 no.	
	• Line bays – 4 no.	
	• Space for 400 kV bays – 4 no.	
	Estimated Cost	2525

- > Transmission system associated with Gadarwara STPS (2x800 MW) both Part A and Part B transmission systems are to be implemented in the same time frame.
- CTU to provide 2 no. of 765 kV line bay at under construction Jabalpur 765/400 kV pooling station of POWERGRID,
- NTPC to provide to provide 4 no. of 765 kV line bay, 1X330 MVAR bus reactor and 2X330 MVAR switchable line reactor at their Gadarwara TPS switchyard for Gadarwara Warora 765 kV D/C line.
- ➤ 6 nos. of 765 kV line bays includes 2 no. 765 kV line bays for Rajnandgaon-Warora Pooling s/s 765 kV D/C line.

NTPC has intimated that the main plant of Gadarwara STPP has already been awarded in March 2013 with U-1 scheduled for commissioning by July 2016. Gadarwara STPP being a green field project would require grid support 4-6 months before unit commissioning i.e., by March 2016. With limited time of about 27 months available for implementing the scheme, NTPC has requested to consider the implementation of ATS of Gadawara STPP under compressed time schedule.

(11) Name of the Scheme: Transmission system associated with Gadarwara STPS (2x800 MW) of NTPC (Part - B)

This scheme was agreed in the 36th Standing Committee meeting on Power System Planning of Western Region held on 29th August, 2013. The scheme is for the evacuation of Gadarwara STP. The scope of the transmission scheme is as under:

Sl. No.	Transmission Scheme	Estimated route length (km)	Estimated Cost (Rs. Crore)
1.	Warora (Pooling Station)- Parli (New) 765 kV D/C line	300	1343
2.	Parli (New)-Solapur 765 kV D/C line	150	671
3.	Parli (New) - Parli (PG) 400 kV D/C (Quad) line	10	28

4. Est	ablishment of 2x1500 MVA 765/400 kV Parli (New) S/S	318
765	5 kV	
•	ICTs: 7x500 MVA, 765/400 kV (1 spare unit)	
•	ICT bays: 2 nos.	
•	Line bays: 4 nos.	
•	Bus reactor: 3x110 MVAR	
•	Line reactors - 7x110 MVAR (1 unit spare)	
•	Bus reactor bay: 1 no.	ļ
•	Space for 765 kV bays: 4 nos.	
400	0 kV	
•	ICT bays: 2 nos.	
•	Line bays: 2 nos.	
•	Space for 400 kV bays: 4 nos.	
	Estimated Cost	2360

- Transmission system associated with Gadarwara STPS (2x800 MW) both Part A and Part B transmission systems are to be implemented in the same time frame.
- CTU to provide 2 no. of 765 kV line bay at existing Solapur 765/400 kV substation of POWERGRID.
- > CTU to provide 2 no. of 400 kV line bay at existing Parli (PG) 400 kV station of POWERGRID.

NTPC has intimated that the main plant of Gadarwara STPP has already been awarded in March 2013 with U-1 scheduled for commissioning by July 2016. Gadarwara STPP being a green field project would require grid support 4-6 months before unit commissioning i.e., by March 2016. With limited time of about 27 months available for implementing the scheme, NTPC has requested to consider the implementation of ATS of Gadawara STPP under compressed time schedule.

(12) Name of the Scheme: Connectivity lines for Maheshwaram (Hyderabad) 765/400kV Pooling S/s.

The schemes were approved in the 36th meeting of the Standing Committee on Power System Planning of Southern Region held on 4th September, 2013. The scope of the transmission scheme is as under:

Scope:

Sl. No.	Transmission Scheme	Estimated route length (km)	Estimated Cost (Rs. Crore)
	Connectivity lines for Maheshwaram (Hyderabad) 765/40	00kV Pooling S/s	
1.	Maheshwaram (PG) – Mahboob Nagar 400 kV D/C line	100	132
2.	Nizamabad – Yeddumailaram (Shankarapalli) 400 kV D/C line	200	264

Note:

- CTU to provide 2 nos of 400 kV bays at Maheshwaram (PG) and Nizamabad 765/400kV S/s of PGCIL
- CTU to provide 2 nos of 400 kV bays at Mahboob Nagar S/S of APTRANSCO
- CTU to provide 2 nos of 400 kV bays at Yeddumailaram (Shankarapalli) S/s of PGCIL.

(13) Name of the Scheme: Transmission System for LTA of 400 MW for 2x500 MW Neyveli Lignite Corporation Ltd. TS-I (Replacement) (NNTPS) in Neyveli

Scope:

Sl. No.	Transmission Scheme	Estimated route length (km)	Estimated Cost (Rs. Crore)
1,0,	Transmission System for LTA of 400 MW for 2x500 MW I (Replacement) (NNTPS) in Neyveli	·	
3.	NNTPS switchyard – Villupuram (Ginjee) 400 kV D/C line	80	106
4.	Villupuram (Ginjee) 400/220 kV, 2x500 MVA S/S 400 kV ICTs - 400/220 kV: 2 nos ICT bays : 2 nos Line Bays : 2 nos Space for bays : 4 nos 220 kV ICT bays : 2 nos Line Bays : 6 nos Space for bays : 6 nos Space for bays : 6 nos		110
	Estimated Cost		612

Note:

> CTU to provide 2 Nos of 400 kV bays at NNTPS switchyard of NLC

(14) Name of the Scheme: NER System Strengthening Scheme - II

This scheme was earlier a part of comprehensive scheme for strengthening of transmission and distribution system in NER and Sikkim. Later on the intra state works for six states of NER(excl.Arunachal Pradesh and Sikkim) are being taken up through World Bank funding and that for Arunachal Pradesh and Sikkim through Government of India funding (NLCPR Central). The inter state works has been approved by constituents of NER in joint standing committee meeting of ER and NER held on 03.01.2014 at Guwahati. Following is the scope under this scheme:

Scope:

SI.	Transmission Scheme	Estimated route	Estimated Cost
No.		length (km)	(Rs. Crore)
1.	Biswanath Chariyalli (NER PP) – Itanagar (Zebra conductor) 132 kV D/C	95	126
2.	Silchar- Misa 400kV D/C (Quad) line	200	864
3.	Ranganadi - Nirjuli 132 kV D/C line	40	41
4.	Imphal - New Kohima 400 kV D/C line (to be initially operated at 132 kV)	150	360
	Estimated Cost		1391

Note:

- CTU to provide 2 no. of 132kV line bays each at Bishwanath Chariyali (PGCIL), Nirjuli (PGCIL) and Imphal (PGCIL) S/Ss
- CTU to provide 2 no. of 132kV line bays at Itanagar S/s (of DoP, Arunachal Pradesh)
- CTU to provide 2 no. of 400kV line bays each at Silchar (PGCIL) and Misa (PGCIL)
- CTU to provide 80 MVAR bus reactor at Misa (PG) along with GIS bay

- CTU to provide Switchable line reactors, 1x80 MVAR at Misa ends of the each circuit of the Silchar–Misa 400kV D/C line
- > CTU to provide 2 no. of 132 kV line bays (GIS) at Ranganadi Switchyard (of NEEPCO)
- CTU to provide 2 no. of 132kV line bays at its New Kohima S/s (of DoP, Nagaland)

(15) Scheme: Transmission system for phase-I generation projects in Arunachal Pradesh

This scheme was approved in the 3rd Standing Committee Meeting of Power System Planning in North Eastern Region held on 21st December, 2011 at NRPC, New Delhi as evacuation system from 4 no. of hydro projects in Arunachal Pradesh in Kameng basin. Subsequently, the scheme was reviewed in a meeting among CEA, CTU and the project developers held on 30.10.2013. Based on the progress of generation projects, it was decided in the meeting that the scheme would be taken up for evacuation of power from 2 no. of generation projects viz. Dirang Energy Pvt. Ltd. (Patel Hydro Power Pvt. Ltd.) (189 MW) and Sew Nafra Power Corporation Ltd. (120MW). The same system would also be utilized subsequently for evacuation of power from other 2 generation projects viz. Adishankar Khuitam Power Pvt. Ltd. (66 MW) and KSK Dibbin Hydro Power Pvt. Ltd. (120 MW), as and when they materialize. Following is the scope under this schem

SI. No.	Transmission Scheme	Estimated route	Estimated Cost
1.	Dinchang-Rangia / Rowta Pooling Point 400 kV D/C	length (km)	(Rs. Crore) 518
1.	(Quad)	120	310
2.	LILO of both ckts of Balipara-Bongaigaon 400 kV D/C	10	48
2.	(TM) line at Rangia / Rowta [2xD/C]	10	10
3.	Establishment of 7x105 MVA 400/220 kV Pooling station	-	127
	(GIS) at Dinchang		
	400 kV		
	• ICTs - 7x105 MVA, 400/220 kV (1 spare unit)		
	• ICT Bays – 2 nos.		
	• Line bays – 2 nos.		
]	Bus Reactor - 80 MVAR - 2 nos.		
	Bus Reactor bays – 2 nos.		
	• Space for 400 kV bays – 4 nos.		
	220 kV		
	• ICT Bays – 2 nos.		
	• Space for bays – 16 nos.		
4.	Establishment of 2x315 MVA, 400/220 kV Pooling station	_	180
	at Rangia / Rowta in Upper Assam		
	400 kV		
}	• ICTs: 2x315 MVA, 400/220 kV		
	• ICT Bays – 2 nos.		
	• Line bays – 6 nos.		
	Bus Reactor: 125 MVAR- 2 nos.		
ļ	 ■ Bus Reactor bays – 2 nos. 		
	• Line Reactor: 50 MVAR at Rangia / Rowta end - 2		
	nos.		
	• Space for Line bays – 6 nos.		
	220 kV		
	• ICT Bays – 2 nos.		
	• Line bays – 4 nos.		
	• Space for Line bays – 2 nos.		

	
Estimated Cost	873

M/s Sew Nafra Power Corporation Ltd. and Patel Hydro Power Pvt. Ltd. to provide 2 no. 220 kV bays each at Dinchang pooling station)

7.0 Briefing by BPCs on the schemes under bidding process

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

8.0 Remuneration/ Honorarium for members of Bid Evaluation Committee.

Chief Engineer (SO & Comml.), Haryana Vidyut Prasaran Nigam Ltd. vide Memo No. Ch. 8/HVPNL/Comml./103 dated 11th September, 2013 has intimated that he has to carry out work in addition to his normal duties as a member of the Bid Evaluation Committee for the transmission projects under TBCB. Accordingly, he has requested for remuneration/honorarium for the same.

Members may like to deliberate.

9.0 Any other item.

Any other item with the permission of Chair.



असाधारण

EXTRAORDINARY

भाग I-खण्ड 1

PART I—Section 1 पाधिकार से प्रकाशित

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NEW DELHI, MONDAY, DECEMBER 9, 2013/AGRAHAYANA 18, 1935

विद्युत मंत्रालय

संकल्प

नई दिल्ली, 9 दिसंबर, 2013

सं. 15/1/2010-पारेषण.--पारेषण सेवा के लिए प्रशुल्क आधारित प्रतिस्पर्धात्मक बोली दिशा-निर्देश।

पारेषण सेवा के लिए प्रशुल्क आधारित प्रतिस्पर्धात्मक बोली दिशा-निर्देशों के लिए दिशा-निर्देश संकल्प मं. 11/5/2005-पीजी (i), दिनांक 13 अप्रैल, 2006 द्वारा अधिसूचित किए गए थे और विद्युत अधिनियम, 2003 के प्रावधानों के अंतर्गत समय-समय पर संशोधित किए गए थे।

उपर्युक्त दिशा-निर्देशों में एतद् द्वारा निम्नांकित संशोधन किए जाते हैं :

- 1. बोली प्रक्रिया पैरा 9.5 आठवें वाक्य में **"दो माह"** शब्द को बदलकर **"एक माह"** कर दिया गया है ।
- 2. बोली प्रक्रिया के लिए समय-सारणी : पैरा 11.1 निम्नलिखित से प्रतिस्थापित किया गया है : बोली प्रक्रिया के लिए सुझायी गई समय-सारणी नीचे दर्शाई गई है । बीपीसी यहाँ मौजूदा परिस्थितियों के आधार पर दर्शाई गई समय-सीमा को आगे बढ़ा सकती है और ऐसे परिवर्तन इन दिशा-निर्देशों में विपथन नहीं माने जाएंगे ।

कार्यक्रम	शून्य तिथि से बीता समय
आरएफक्यू का प्रकाशन	शून्य तिथि
आरएफक्यू के समक्ष प्रतिउत्तर प्रस्तुत करना	30 दिन
प्रतिउत्तर के आधार पर संक्षिप्त सूची तैयार करना और आरएफपी जारी किया जाना	60 दिन
बोली स्पष्टीकरण, सम्मेलन, अंतिम स्पष्टीकरण और आरएफपी का संशोधन	85 दिन
तकनीकी और मूर्ल्य बोली प्रस्तुत करना	120 दिन
बोलीकर्ता की संक्षिप्त सूची तैयार करना और एलओआई जारी करना	135 दिन
करारों पर हस्ताक्षर	145 दिन

5153 GI/2013 (1)

3. संविदा अवार्ड और निष्कर्ष पैरा 12.2 - दसरे वाक्य में "एक माह" को बदलकर "दस दिन" कर दिया गया है।

घनश्याम प्रसाद, निदेशक

MINISTRY OF POWER RESOLUTION

New Delhi, the 9th December, 2013

No. 15/1/2010-Trans,—Tariff based Competitive-bidding Guidelines for Transmission Service

The Guidelines for Tariff based Competitive-bidding Guidelines for Transmission Service had been notified vide Resolution No. 11/5/2005-PG (i), dated 13th April. 2006 and as amended from time to time under the provisions of the Electricity Act, 2003.

The following amendments are hereby made in the above Guidelines:

- BIDDING PROCESS para 9.5 The words 'two months' in eighth sentence have been replaced by 'one month'.
- 2. TIME TABLE FOR THE BID PROCESS: Para 11.1 has been substituted by the following:

A suggested time-table for the bid process is indicated below. The BPC may give extended time-frame indicated herein based on the prevailing circumstances and such alterations shall not be construed to be deviation from these guidelines.

Event	Elapsed time from zero date
Publication of RFQ	Zero dite
Submission of Response to RFQ	30 days
Short listing based on responses and issuance of RFP	60 days
Bid etarification conference. Final clarification and revision of RFP	85 days
Cechnical and price bid submission	
Short listing of bidder and issue of LOI	PN tos
Signing of Agreements	14 2 (m.e.

3. CONTRACT AWARD AND CONCLUSION para 12.2 - The words 'one month' in second sentence have been replaced by 'ten days'.

GHANSHAYAM PRASAD, Director

संकल्प

नई दिल्ली. 9 दिसंदर, 2013

सं. 15/1/2010-पारेषण.--पारेषण परियोजनाओं के विकास में प्रतिस्पर्धा को प्रोत्साहित करने के लिए दिशा-निर्देश !

पारेषण परियोजनाओं के विकास के लिए प्रतिस्पर्धा को प्रोत्साहित करने के लिए दिशा-निर्देश संकल्प मं. 11/5/2005-पीजी (ii), दिनांक 13 अप्रैल, 2006 द्वारा अधिसूचित किये गए थे और विद्युत अधिनियम, 2003 के प्रावधानों के अंतर्गत समय-समय पर संशोधित किए गए थे।

उपर्युक्त दिशा-निर्देशों में एतद्द्रारा निम्नांकित संशोधन किए जाने हैं :

पारेषण हेतु लाइमेंस पैरा 20 - तीसरे वाक्य में शब्दों "30 दिन" को बदलकर "10 दिन" कर दिया गया है ।
 चौथे वाक्य में शब्दों "तीस दिन" को बदलकर "दस दिन" कर दिया गया है ।

धनश्याम प्रसाद, निवेशक

RESOLUTION

New Delhi, the 9th December, 2013

No. 15/1/2010-Trans.—Guidelines For Encouraging Competition in Development of Transmission Projects

The Guidelines for Encouraging Competition in Development of Transmission Projects had been notified *vide* Resolution No.11/5/2005-PG (ii), dated 13th April, 2006 and as amended from time to time under the provisions of the Electricity Act, 2003.

The following amendments are hereby made in the above Guidelines:

1. LICENSE FOR TRANSMISSION Para 20 - The words '30 days' in third sentence have been replaced by '10 days'. The words 'thirty days' in fourth sentence have been replaced by 'ten days'.

GHANSHYAM PRASAD, Director