Government of India
Ministry of Power
Central Electricity Authority
SP&PA Division
Sewa Bhawan, R. K. Puram, New Delhi-110066

[ISO: 9001:2008]

No. 100/1/EC (32) 2013-SP&PA/326 -336 Dated: 6th February, 2014

To

1. Smt. Neerja Mathur
Chairperson and Member (Power System)
Central Electricity Authority
Sewa Bhawan, R.K. Puram,
New Delhi – 110 066.

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

3. Director (Transmission)
Ministry of Power,
Shram Shakti Bhawan, Rafi Marg,
New Delhi – 110 001.

4. Shri I. S. Jha
Director (Projects), Power Grid
Saudamini, Plot No. 2, Sector-29,
Gurgaon – 122 001.

5. Shri I.A. Khan
Adviser, Planning Commission, Yojana Bhawan, Parliament Street,
New Delhi – 110 001.

6. Shri V. V. R. K. Rao
Former Chairperson, CEA
B-9/C, DDA Flats, Maya Puri,
New Delhi -110 064.

7. Shri Ravinder
Former Chairperson & Member (Power System), CEA
147, Bhagirathi Apartment,
Sector-9, Rohini, Delhi – 110 085.
(Tel. 9971568444).

Subject: Minutes of the 32nd meeting of the Empowered Committee on Transmission held on 17th January, 2014

Madam/ Sir,

The 32nd meeting of the Empowered Committee on Transmission was held on 17th January, 2014 in CEA under the Chairmanship of Smt. Neerja Mathur, Chairperson and Member (Power System), CEA. The minutes of the meeting are enclosed herewith.

Yours faithfully,

Encl. as above

K K Arya

(K. K. Arya)
Member Secretary
and Chief Engineer (SP&PA)

Copy to:

(i) Joint Secretary (Trans), Ministry of Power, Shram Shakti Bhawan, New Delhi – 110 001.

(ii) COO (CTU), POWERGRID, 'Saudamini', Plot No.2, Sector – 29, Gurgaon – 122 001 (Haryana)

(iii) CEO, RECTPCL, 12-21, Upper Ground Floor, Antriksh Bhawan, 22, KG Marg, New Delhi – 110 001.

(iv) CEO, PFC Consulting Ltd, First Floor, Urjanidhi, 1 Barakhmba Lane, New Delhi -110001 (Fax- 011-23456170)

Minutes of the 32nd meeting of the Empowered Committee on Transmission held on January 17, 2014 at CEA, New Delhi

1.0 List of Participants is enclosed at **Annex – I.**

2.0 Chairperson, CEA as Chairperson of the Empowered Committee (EC) welcomed the members of the newly constituted EC participants to the meeting and requested the Chief Engineer (SP&PA), CEA to take up the agenda.

Chief Engineer (SP&PA), CEA informed that the Empowered Committee on Transmission has been reconstituted by the Ministry of Power vide letter dated 13th December, 2013 with the following composition:

1.	Member (Power System), CEA	-	Chairperson
2.	Member (E&C), CEA	-	Member
3.	Director (Trans), Ministry of Power	-	Member
4.	Director (Projects), PGCIL	-	Member
5.	Advisor (Energy), Planning Commission	-	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

He stated that this is the first meeting of the newly constituted Empowered Committee. He further stated that the minutes of the 31st meeting of the Empowered Committee was circulated vide letter no. 100/1/EC (31)/SP&PA-2013 dated 25th February, 2013 and sought confirmation of the same.

The representative of CTU stated that "Northern Region System Strengthening-XXXII (NRSS-XXXII)" was approved for implementation by POWERGRID in the 31st meeting of Standing Committee on Power System Planning of Northern Region held on January 2, 2013 and 28th meeting of NRPC held on April 26, 2013 with following scope:

(i) 400kV D/C Panchkula – Patiala line (with 10km on multi-circuits towers in forest area near Panchkula for accommodating 220kV D/C line for power supply to Chandigarh)
(ii) 400kV D/C Lucknow – Kanpur (New) line
(iii) LILO of Dadri – Malerkotla line at Kaithal substation
(iv) **LILO of both circuits of RAPP – Kankroli 400kV D/C line at Chittorgarh 400/220kV substation of RRVPNL**

(v) Augmentation of transformation capacity at 400/220kV Ballabhgarh substation by replacing existing 4x315 MVA ICTs with 4x500 MVA ICTs (4x315 MVA ICTs shall be kept as regional spares after refurbishment)

(vi) Augmentation of transformation capacity at 400/220kV Mandola substation by replacing 4x315 MVA ICTs with 4x500 MVA ICTs (Dismantled 315 MVA ICTs shall be maintained as regional spares after refurbishment)

(vii) Provision of 7x105 MVA, 400/220kV ICT at Parbati Pooling Station along with associated bays and two nos. of 220 kV line bays

(viii) Augmentation of transformation capacity by 500MVA ICT (4th) at 400/220kV Sector-72 Gurgaon substation

He stated that the transmission elements mentioned at (i) and (ii) were approved by the 31st Empowered Committee on transmission for implementation under compressed time schedule. However, transmission elements mentioned at (iii) & (iv) above, i.e. LILO of Dadri – Malerkotla 400 kV S/C line at Kaithal and LILO of both circuits of RAPP – Kankroli 400 kV D/C line at Chittorgarh 400/220 kV substation of RRVPNL were inadvertently left out in the discussion. He requested for implementation of these elements mentioned at (iii) & (iv) above under compressed time schedule.

These transmission elements were agreed to be implemented under compressed time schedule by CTU.

Incorporating these changes the minutes of the 31st Empowered Committee on transmission are confirmed.

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

Member Secretary informed that the Ministry of Power on 6th December, 2013 notified the revised timelines for completing the tariff based competitive bidding (TBCB) process. As per the Gazette Notification dated 9th December, 2013, Para 11.1 on Time table for the Bid Process, the bidding process, including the award of the project, has to be completed within 145 days from the 'zero date', which is the date of publication of RfQ. A copy of the Gazette Notification dated 9th December, 2013 is placed at **Annex – II**.

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

Member Secretary informed that 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. was requested to appoint a Consultant to carry out this work and they have appointed a consortium of PwC and Link Legal as Consultant for preparing the SBD document aligning with the notified Case-II bidding documents for generation projects. CEA vide its letter dated 11th November, 2013 has constituted a Committee with members from CEA, POWERGRID, RECTPCL, PFCCL to supervise the revision exercise on SBD for transmission being carried out by the Consultant. It was informed that eight meetings were held and considerable progress has been made in this regard.

It was also informed that the Planning Commission has also brought out a draft Model Transmission Agreement (MTA) for Public Private Partnership (PPP) model with viability gap funding (VGF). It was informed that as the major portion of this MTA without VGF is in line with the notified Case – II document for generation project; accordingly, this document without VGF is being modified. It was also felt that while the exercises for revision of SBD was carrying out, transparency in defining the functional role of 'Authority' in the SBD to undertake various responsibilities in the transmission development process became an issue. However, Members were of the view that the issue of 'Authority' needs to be defined first, and in this regard views of the Ministry of Power could be taken.

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

Member Secretary informed that 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 any of the Bid Processor Coordinators (BPCs 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 that BPC by the concerned BPC to whom the project would be allocated.

COO (CTU) stated that the transmission scheme costs to be submitted to the EC for consideration of the project under TBCB route may be normative costs and should not be referred to in RfQ. He stated that the RfQ document should interalia provide the MVA capacity of the sub-station and the transmission line length.

(b) However, Members were of the view that the scheme costs should be worked out by a Committee for realistic assessment of the cost estimates which may be considered for the scheme, and it was agreed.

(c) It was decided that a committee would be formed with the representatives from CEA, POWERGRID/ CTU and BPCs to work out a matrix for different type of transmission lines which would consider different type of variables for estimating the project cost (for example, type of the terrains, wind zones, etc.). Member Secretary stated that a committee would be constituted shortly with members from PGCIL/CTU, BPCs and CEA. PGCIL/ CTU and BPCs were requested to nominate their members. It was also decided that after completion of the survey, the cost of transmission line shall be worked out by the committee based on the pre-defined cost matrix.

(d) The representatives of PFCCL and RECTPCL stated that the detailed route survey should be conducted only after the approval by the Empowered Committee on Transmission, because many schemes even after approval by the respective Standing Committees on Power System Planning are returned for the detailed justification of the schemes to be put again before the EC. It was opined that for the survey work, at least 2-3 months are needed and further about one week would be required for preparation of cost estimates of the transmission project to be put forth in the bidding process. However, it was decided that cost estimates given to the EC would be tentative in nature and such estimates would be firmed up by the committee itself.

Members were informed that as per new Gazette Notification of the Govt. of India, it is mandated that the Survey report is to be provided to the prospective bidders 45 days prior to the issuance of RfP, which was earlier 90 days.

It was agreed that within 3 weeks of Standing Committee meetings, the Empowered Committee meeting would be convened to expeditiously approve the schemes to be implemented through TBCB.

It was decided that once the BPC is notified for a particular project, the survey should be carried out within the stipulated period and cost estimate should be prepared within 7 days based on the pre-defined cost matrix.

6.0 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 though the present SBDs procedures require to comply the same.

Further, the BPCs are finding difficult to get the TSA signed by the LTTCs despite regular follow up and persuasion, causing delay in the transfer of special purpose vehicle (SPV) to the successful bidder.

It was informed that few LTTCs are not signing the TSA on the pre-text that except for the construction phase, other provisions like O&M, payment of transmission charges, etc. are already covered in the TSA under the CERC sharing regulations. Although, it is provided in the CERC regulations that the PoC regulation will supersede the present payment sharing mechanism given in the present SBD. Thus it has emerged that the present TSA under the TBCB does not appear to be aligned with the prevailing CERC sharing regulations. Members noted it.

However, it was decided that till the time the SBDs are revised, the bidding process would continue to use the existing SBDs.

7.0 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)

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

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

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

Chairperson and other members were of the view that for the above claims, BPC should first get the accounts audited for all the expenditure and income and submit all the relevant documents to Member Secretary.

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

It was informed that the cost estimate of the transmission projects given in the Agenda were worked out based on the cost at August, 2013 price level considering normal terrain only. The costs for land, RoW, forest, compensation, etc. were not considered.

As regards the scope for implementation of the bays in existing sub-stations under TBCB route, Shri Ravinder, member of the EC stated that the owners of the sub-stations/ switchyards (viz. State Transmission Utilities, NTPC, etc.) would provide the necessary space for the bays in their respective sub-stations/ switchyards and the execution of the bay extension works would be entrusted to the successful bidder. However, PGCIL/ CTU stated that any bay extension works in the CTU sub-stations would be carried out by PGCIL. This was agreed. Accordingly, the scope of the schemes vis a vis implementing agency have been modified and accordingly, the transmission scheme wise details is given below.

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

It was informed that this 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 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. The scope of the transmission scheme is as under:

Scope:

Sl. No.	Transmission Scheme	Estimated Line Length (km)	Tentative Estimated Cost[1] (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 no. • Line bays: 2 no. • 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 no. **400 kV** • ICT bays: 2 no. • Line bays: 4 no. • ICTs: 2 x 500MVA, 400/220 kV • Space for 400 kV bays: 4 no. **220 kV** • ICT bays: 2 no.		**483**

	• Space for 220 kV line bays: 6 no.		
4.	**Establishment of 765/400/220 kV (765/400 kV, 2x1500 MVA & 400/220 kV, 2x500 MVA) sub-station at Banaskantha** **765 kV** • ICTs: 7x500MVA 765/400 kV (1 spare unit) • Line bays: 4 no. • ICT bays: 2 no. • Space for 765 kV bays: 2 no. • Bus reactor: 3x110 MVAR • Line reactors: 7x110 MVAR (1 unit spare) • Line reactors: 6x110 MVAR switchable (for Chittorgarh line) • Line reactor bay: 2 no. • Bus reactor bay: 1 no. **400 kV** • ICTs: 2 x 500MVA, 400/220 kV • Line bays: 2 no. • ICT bays: 2 no. • Line bays: 2 no. at Sankhari substation of GETCO • Space for line bays: 4 no. **220 kV** • ICT bays: 2 no. • Space for 220 kV line bays: 6 no.		**582**
	Estimated Cost		**2487**

Note:

- GETCO would provide space for 2 no. line bays at their Sankhari sub-station.

[1] realistic cost estimates would be prepared by the committee on cost estimates for the project.

(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 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. The scope of the transmission scheme is as under:

Scope:

Sl. No.	Transmission Scheme	Estimated Line Length (km)	Tentative Estimated Cost[1] (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 no • Line Bays: 4 no • Line reactors: 13 x 80 MVAR/ phase (switchable for Chittorgarh and Suratgarh line and 1unit as spare) • Bus reactor: 4 x80MVAR/ phase (1 unit spare) • Bus reactor bay: 1 no • Space for future line bays: 6 no • Space for future ICT bay: 1 no **400 kV** • ICT bays: 2 no • Line Bays: 2 no • Bus reactor: 1 x 125 MVAR • Bus reactor bay: 1 no • Line Bays: 2 no at Chittorgarh (Existing) S/s of RVPNL • Space for future line bays: 4 no • Space for future ICT bay: 1 no		**448**
	Estimated Cost		**1848**

Note:

- RVPNL would provide space for 2 no line bays at their Chittorgarh (Existing) sub-station.

(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 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. The scope of the transmission scheme is as under:

Scope:

Sl. No.	Transmission Scheme	Estimated Line Length (km)	Tentative Estimated Cost[1] (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 no • Line Bays: 4no • 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 no • Space for future ICT bay: 1 no **400 kV** • ICT bays: 2 no • Line Bays: 2 no • Bus reactor: 1 x 125 MVAR • Bus reactor bay: 1 no • Line Bays: 2 no at Ajmer (Existing) S/s of RVPNL • Space for future line bays: 4 no • Space for future ICT bay: 1 no		**448**
	Estimated Cost		**1356**

Note:

- RVPNL would provide space for 2 no line bays at their Ajmer (Existing) S/s

(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. 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. The scope of the transmission scheme is as under:

Scope:

Sl. No.	Transmission Scheme	Estimated Line Length (km)	Tentative Estimated Cost[1] (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: 2no • Line Bays: 4no • Line reactors: 13x110MVAR/phase (switchable for Ajmer and Moga line, 1 unit spare) • Bus reactor: 7x110MVAR/ phase (1 unit spare) • Bus reactor bay: 2 no • Space for future line bays: 4 no • Space for future transformer bays: 1 no **400 kV** • ICT bays: 2no • Line Bays: 2no • Bus reactor: 1x125MVAR • Bus reactor bay: 1 no • Line Bays: 2 no at Suratgarh (Existing) S/s of RVPNL • Space for future line bays: 4 no • Space for future ICT bays: 1 no		**570**
	Estimated Cost		**2277**

Note:

- RVPNL would provide space for 2 no line bays at their Suratgarh (Existing) S/s

Issue of implementation of RE corridors on compressed time schedule (Transmission schemes mentioned at Item 8, Sl. No. (1) to (4))

Regarding implementation of RE corridors on compressed time schedule through regulated tariff mechanism, Member (Economics and Commercial), CEA stressed the need and justification for implementation of any scheme under compressed time schedule should be submitted with relevant documents, facts and figures to the Empowered Committee on Transmission for taking a considered view in this regard. After assessment, a final call may be taken for a project to be implemented under compressed time schedule, even if the project be implemented with soft loan.

Chairperson, CEA stated that the rationale for the implementation of the scheme under compressed time schedule and not through TBCB route should be placed before the EC.

It was agreed that PGCIL would submit the justification and time line for implementation of the transmission projects under compressed time schedule and accordingly view would be taken by the Empowered Committee for implementation either through PGCIL under compressed timeline or through TBCB.

(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 would 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:

Sl. No.	Transmission Scheme	Estimated Line Length (km)	Tentative Estimated Cost[1] (Rs. Crore)
	Inter State Transmission System for Renewables, Northern Region - IV		
1	Suratgarh -Moga 765 kV D/C transmission line	230	**1050**
	Northern Region System Strengthening Scheme – XXXV		
2	Mohindergarh – Bhiwani 400 kV D/C line with twin moose transmission line Space for 2 no. 400 kV Line Bays at their exiting Mohindergarh sub-station	55	**88**
	Estimated Cost		**1138**

For implementation of Inter State Transmission System for Renewables, Northern Region – IV, it was agreed that PGCIL would submit the justification and time line for implementation of the transmission projects under compressed time schedule and accordingly view would be taken by the Empowered Committee for implementation either through PGCIL under compressed timeline or through TBCB.

Note for NRSS – XXXV (Sl. No. 2):

- CTU would provide 2 no 400 kV Line Bays at exiting Bhiwani (PG)
- M/s Adani would provide space for 2 no 400 kV Line Bays at their exiting Mohindergarh sub-station
- CTU would provide 2 no line bays and 6x80MVAR/phase line reactors (switchable for Suratgarh line) at their exiting Moga 765/400 kV Sub-station

The transmission scheme, NRSS – XXXV was agreed to be implemented through TBCB route. The scheme may be notified by the Government accordingly.

(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 scope of the transmission scheme is as under:

Scope:

Sl. No.	Transmission Scheme	Estimated Line Length (km)	Tentative Estimated Cost[1] (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) • 2 no. of 400 kV line bays at Mundra UMPP generation switchyard	90	256
3.	Mundra UMPP – Bhuj pool 400 kV D/C line (triple snowbird) utilizing line at sl. no. (2)	30	85
	Estimated Cost		**483**

Note:

- CTU would provide 4 no. of 400 kV line bays at their existing Bachau 400 kV substation
- M/s CGPL would provide space for 2 no. of 400 kV line bays at their Mundra UMPP generation switchyard.

It was informed that Mundra UMPP – Bhuj pool 400 kV D/C line was decided to be implemented in two parts. Initially, the line would be constructed up to a point on the Bachau - Versana 400 kV D/C line to form LILO of one ckt. of Bachau- Versana 400 kV D/C at Mundra UMPP. In the Standing Committee, it was decided that this LILO work should be implemented on urgent basis and the LILO section would be extended to Bhuj pool in the matching time frame of on going 765/400 kV Bhuj pooling station. Further, the LILO of both circuits of Mundra UMPP - Limbdi at Bachau also involves construction of LILO section of existing line of PGCIL. It was also informed that presently, SPS has been planned with Mundra UMPP to back down generation in the event of "N-1-1" contingency and decided to be implemented in compressed time schedule. In this regard, PGCIL would submit the justification and time line for implementation of the transmission project under compressed time schedule for 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)	Tentative Estimated Cost[1] (Rs. Crore)
1.	Sipat – Bilaspur Pooling Station 3rd 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 no. • ICTs: 7x500MVA, 765/400 kV (1 spare unit) • ICT bays: 2 no. • Space for 765 bays: 4 no. • Bus reactor: 3 x 110 MVAR • Line reactors: 7 x 110 MVAR (1 unit spare) • Bus reactor bay: 1 no. • 1 no. of line bay at switchyard of Sipat STPP of NTPC **400 kV** • Line bays: 8 no. • ICT bays: 2 no. • Space for 400 kV bays: 4 no.		**538**
	Estimated Cost		**2473**

Note:

- CTU would 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.
- NTPC would provide space for 1 no. of 765 kV line bay at switchyard of Sipat STPP of NTPC. The representative of NTPC agreed to provide the space for the bays.

The above transmission scheme was agreed to be implemented through TBCB route. The scheme may be notified by the Government accordingly.

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

This 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 sub-station, 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)	Tentative Estimated Cost[1] (Rs. Crore)
	400 kV interconnections at Gwalior 765/400 kV S/S		
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 no. • ICTs: 2 x 315 MVA, 400/ 220 kV • ICT bays: 2 no. • Bus reactor: 1X125 MVAR • Space for 400 kV bays: 4 no. **220 kV** • Line bays: 4 no. • ICT bays: 2 no. • Space for 220 kV bays: 4 no		**90**
	Additional evacuation line from Vindhyachal-IV & V STPP (3x500 MW)		
3.	Vindhyachal-IV & V STPP – Vindhyachal Pool 400 kV D/C (Quad) 2nd line	15	**67**
	Additional System Strengthening Scheme for Chhattisgarh IPPs		
4.	Sasan UMPP – Vindhyachal Pooling station 765 kV S/C line • 1 no. of 765 kV line bay at Sasan UMPP of M/s SPL, Reliance	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 2nd S/C line	100	**230**
7.	Champa (pool) – Dharamjaigarh 765 kV 2nd S/C line	50	**115**
	Estimated Cost		**823**

Note:

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

- CTU would provide 1 no. of 765 kV line bay at Dharamjaigarh 765/400 kV pooling station of PGCIL.

The above transmission scheme was agreed to be implemented through TBCB route. The scheme may be notified by the Government accordingly.

(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)	Tentative Estimated Cost[1] (Rs. Crore)
1.	Raipur (Pool) – Rajnandgaon 765 kV D/C line	150	**671**
2.	Rajnandgaon – New 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 no. **400 kV** • ICT bays: 2 no. • Line bays: 8 no. • Space for future line bays: 4 no.		**498**
	Estimated Cost		**2191**

Note:

- CTU would provide 2 no. of 765 kV line bays at their Raipur 765/400 kV pooling station.

The above transmission scheme was agreed to be implemented through TBCB route. The scheme may be notified by the Government accordingly.

(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 under Part - A is as under:

Scope:

Sl. No.	Transmission Scheme	Estimated route length (km)	Tentative Estimated Cost[1] (Rs. Crore)
1.	Gadarwara STPS - Jabalpur Pool 765 kV D/C line	120	**537**
2.	Gadarwara STPS-New Pooling Station near Warora 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 New Pooling Station near Warora** **765 kV** • ICTs: 7x500MVA 765/400 kV (1 spare unit) • ICT bays: 2 no. • Line bays: 6 no. • 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 future bays: 4 no. **At Gadarwara STPP switchyard** • 765 kV line bay: 4 no. • Bus reactor: 1X330 MVAR • Switchable line reactor: 2X330 MVAR **400 kV** • ICT bays: 2 no. • Line bays: 4 no. • Space for future bays: 4 no.		**531**
	Estimated Cost		**2525**

Note:

- **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 would provide 2 no. of 765 kV line bay at under construction Jabalpur 765/400 kV pooling station of POWERGRID,

- NTPC would provide to provide space for 4 no. of 765 kV line bay, 1 no. bus reactor bay and 2 no. switchable line reactor at their Gadarwara TPS switchyard for Gadarwara – Warora 765 kV D/C line.
- 6 no. of 765 kV line bays includes 2 no. 765 kV line bays for Rajnandgaon-Warora Pooling s/s 765 kV D/C line.

The representative of NTPC intimated that the main plant of Gadarwara STPP was already awarded in March, 2013 with the commissioning schedule of Unit # 1 in July, 2016. he further added that Gadarwara STPP being a green field project would require grid supply 4-6 months before the commissioning of the unit i.e., by March 2016. It was also informed that PGCIL is presently implementing the LILO of Seoni - Bina line at their Gadarwara STPS switchyard. With time availability of about 26 months from now for commissioning of the generation project, NTPC proposed to consider the implementation of the Gadarwara STPS - Jabalpur Pool 765 kV D/C line only of the scheme under the compressed time schedule. However, the representative of PGCIL/CTU stated that they would not be in position to implement this line under compressed time schedule within 26 months and requested to get it implemented through TBCB route. After deliberations, it was agreed that the Gadarwara STPS - Jabalpur Pool 765 kV D/C line including other transmission elements in this scheme would be implemented through TBCB route matching with the commissioning of Gadarwara STPS. However, it was also decided that the implementing agency for the scheme would ensure that Gadarwara STPS - Jabalpur Pool 765 kV D/C line would be implemented within this period.

The scheme may be notified by the Government accordingly.

(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 under Part - B is as under:

Scope:

Sl. No.	Transmission Scheme	Estimated route length (km)	Tentative Estimated Cost[1] (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.	Establishment of 2x1500 MVA 765/400 kV Parli (New) S/S **765 kV** • ICTs: 7x500 MVA, 765/400 kV (1 spare unit) • ICT bays: 2 no. • Line bays: 4 no. • Bus reactor: 3x110 MVAR • Line reactors - 7x110 MVAR (1 unit spare) • Bus reactor bay: 1 no. • Space for 765 kV bays: 4 no. **400 kV** • ICT bays: 2 no. • Line bays: 2 no. • Space for 400 kV bays: 4 no.		**318**
	Estimated Cost		**2360**

Note:

- **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 would provide 2 no. of 765 kV line bay at existing Solapur 765/400 kV substation of POWERGRID,
- CTU would provide 2 no. of 400 kV line bay at existing Parli (PG) 400 kV station of POWERGRID.

The above transmission scheme was agreed to be implemented through TBCB route. The scheme may be notified by the Government accordingly.

(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)	Tentative Estimated Cost[1] (Rs. Crore)
	Connectivity lines for Maheshwaram (Hyderabad) 765/400kV Pooling S/s		
1.	Maheshwaram (PG) – Mahboob Nagar 400 kV D/C line	100	**132**
2.	Nizamabad – Yeddumailaram (Shankarapalli) 400 kV D/C line • 2 no of 400 kV line bays at Mahboob Nagar S/S of APTRANSCO	200	**264**
	Estimated Cost		**396**

Note:

- CTU would provide 2 no of 400 kV bays at Maheshwaram (PG) and Nizamabad 765/400kV S/s of PGCIL
- APTRANSCO would provide space of 2 no. of 400 kV bays at their Mahboob Nagar S/S.

- CTU to provide 2 no of 400 kV bays at Yeddumailaram (Shankarapalli) S/s of PGCIL.

The above transmission scheme was agreed to be implemented through TBCB route. The scheme may be notified by the Government accordingly.

(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

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)	Tentative Estimated Cost[1] (Rs. Crore)
	Transmission System for LTA of 400 MW for 2x500 MW Neyveli Lignite Corporation Ltd. TS-I (Replacement) (NNTPS) in Neyveli		
3.	NNTPS switchyard – Villupuram (Ginjee) 400 kV D/C line • 2 No of line 400 kV bays at NNTPS switchyard	80	**106**
4.	Villupuram (Ginjee) 400/220 kV, 2x500 MVA S/S **400 kV** • ICTs - 400/220 kV: 2 no • ICT bays : 2 no • Line Bays : 2 no • Space for bays : 4 no **220 kV** • ICT bays : 2 no • Line Bays : 6 no • Space for bays : 6 no		**110**
	Estimated Cost		**612**

Note:

- CTU to provide 2 No of 400 kV bays at NNTPS switchyard of NLC

The above transmission scheme was agreed to be implemented through TBCB route. The scheme may be notified by the Government accordingly.

(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. The following is the scope under this scheme:

Scope:

Sl. No.	Transmission Scheme	Estimated route length (km)	Tentative Estimated Cost[1] (Rs. Crore)
1.	Biswanath Chariyalli (NER PP) – Itanagar (Zebra conductor) 132 kV D/C • 2 no. of 132 kV line bays at Itanagar S/s	95	**126**
2.	Silchar– Misa 400kV D/C (Quad) line	200	**864**
3.	Ranganadi - Nirjuli 132 kV D/C line • 2 no. of 132 kV line bays (GIS) at Ranganadi Switchyard	40	**41**
4.	Imphal - New Kohima 400 kV D/C line (to be initially operated at 132 kV) • 2 no. of 132 kV line bays at its New Kohima S/s	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
- DoP, Arunachal Pradesh to provide space for 2 no. of 132 kV line bays at their Itanagar S/s
- 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
- NEEPCO to provide space 2 no. of 132 kV line bays (GIS) at their Ranganadi Switchyard
- DoP, Nagaland to provide space for 2 no. of 132kV line bays at their New Kohima S/s

Shri Ravinder, Member of the Empowered Committee stated that as the works covered under this scheme involve hilly terrains, it is necessary to re-examine the availability of land at various sub-stations/ switchyard and right of way (RoW) before considering the scheme for under TBCB. Member Secretary stated that they would examine the issues involved.

(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 scheme

Scope:

Sl. No.	Transmission Scheme	Estimated route length (km)	Tentative Estimated Cost[1] (Rs. Crore)
1.	Dinchang-Rangia / Rowta Pooling Point 400 kV D/C (Quad)	120	**518**
2.	LILO of both ckts of Balipara-Bongaigaon 400 kV D/C (TM) line at Rangia / Rowta [2xD/C]	10	**48**
3.	Establishment of 7x105 MVA 400/220 kV Pooling station (GIS) at Dinchang **400 kV** • ICTs: 7x105 MVA, 400/220 kV (1 spare unit) • ICT Bays: 2 no. • Line bays: 2 no. • Bus Reactors: 2X80 MVAR • Bus Reactor bays: 2 no. • Space for future line bays: 4 no. **220 kV** • ICT Bays: 2 no. • Space for future line bays: 16 no.	-	**127**
4.	Establishment of 2x315 MVA, 400/220 kV Pooling station at Rangia / Rowta in Upper Assam **400 kV** • ICTs: 2x315 MVA, 400/220 kV • ICT Bays – 2 no. • Line bays – 6 no. • Bus Reactor: 125 MVAR– 2 no. • Bus Reactor bays – 2 no. • Line Reactor: 50 MVAR at Rangia / Rowta end - 2 no. • Space for Line bays – 6 no. **220 kV** • ICT Bays – 2 no. • Line bays – 4 no. • Space for Line bays – 2 no.	-	**180**
	Estimated Cost		**873**

Note:

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

Shri Ravinder, Member of the Empowered Committee stated that the constructions of various transmission elements under the scheme are planned in conjunction with evacuation of power from various HEPs coming up in Arunachal Pradesh. Depending on the progress of the HEPs and the timeline for such projects, the transmission scheme would be required to be implemented. He advised CEA to make site visit to the HEPs to gather the latest progress made by the generation developer and to make realistic assessment of the timeframe for the transmission project.

9.0 Briefing by BPCs on the schemes under bidding process

The status of the projects under bidding, as furnished by RECTPCL and PFCCL is enclosed at **Annex –III** and **Annex – IV**, respectively.

10.0 Remuneration/ Honorarium for members of Bid Evaluation Committee

Regarding the proposal for providing an honorarium to the members of Bid Evaluation Committee attending the BEC meetings in Delhi, it was decided that the committee members would be paid Rs. Three Thousand only as honorarium along with reimbursement of to and fro journey, boarding and lodging expenditure, as per their entitlement in the respective organisations.

11.0 Any other item

Shri VVRK Rao, Member of the Empowered Committee informed that he would not be able to attend the meeting of EC due to prior commitment. Vide e-mail dated 16th January, 2014, on Agenda Item 5(i) [Transmission System for connectivity for NCC Project (1320 MW)] desired whether entrusting the Project to Powergrid on Regulated Tariff mechanism would lead to a lower Tariff reasonably close to the estimated tariff? It is stated that the matter of higher discovered tariff discovered in the bidding process was discussed in Ministry of Power and was decided to award the transmission scheme on regulated tariff mechanism.

On Agenda Item 5 (ii) [Baira Suil – Sarna 220 kV D/C transmission line], he desired that the reasons for increase in the estimated cost to Rs. 250 Crore need an analysis. It is stated that the matter of implementation of the Baira Suil – Sarna 220 kV D/C transmission line was deliberated in the 33rd standing Committee meeting of Power System Planning of Northern Region held on 23rd December, 2013 where in it was decided to explore an alternative to this line.

On Agenda Item 8 (1to 5) [ISTS schemes for RE], Shri VVRK Rao enquired whether presently AC system is to be preferred over HVDC where evacuation involves large scale RE generation? The other point regarding strengthening of under lying state system may please be kept in view for appropriate suitable action. It is informed that while AC transmission system has been planned in the green energy corridor, but the option of HVDC could be considered also as an alternative. In this context it was felt that HVDC system becomes economical only when large quantum of power is to be transmitted over a long distance and that to with considerable reactive power support at the terminal stations of HVDC. Further, to supply power to the beneficiaries anchoring of HVDC bi-pole system becomes complex and may not be economically viable.

Selection and planning of HVDC system would require adequate short circuit levels at the terminating stations which may not be available where AC pooling stations are considered. In view of the above, it has been felt prudent to make AC system for evacuation of power from RE generation sources.

The meeting ended with vote of thanks to the Chair.

Annex – I

List of participants in the 32nd meeting of the Empowered Committee on Transmission chaired by Chairperson and Member (Power System), CEA on 17th January, 2014

1. Smt. Neerja Mathur, Chairperson and Member (PS), CEA – Chairperson
2. Dr. Jaipal Singh, Member (E&C) , CEA – Member
3. I.A. Khan, Adviser (Energy), Planning Commission – Member
4. Shri Ravinder, Ex. Chairperson and Member (PS), CEA – Member
5. Shri K.K. Arya, Chief Engineer (SP&PA), CEA – Member Secretary

6. Dr. R. Saha, Director (SP&PA), CEA
7. Shri Chandra Prakash, Dy. Director (SP&PA), CEA
8. Smt. Anita Gahlot, Dy. Director (SP&PA), CEA
9. Shri Santhosh Kumar, Dy. Director (SP&PA), CEA

10. Shri Y.K. Sehgal, COO (CTU), PGCIL
11. Shri Dilip Rozekar, DGM (CTU), PGCIL
12. Shri Mukesh Khanna, DGM (CTU) , PGCIL

13. Shri S.K. Gupta, CEO, RECTPCL
14. Shri V.K. Singh, Additional CEO, RECTPCL

15. Shri Rajesh Kumar Shahi, Vice President, PFCCL
16. Shri Sanjay Rai, Vice President, PFCCL
17. Shri Sanjay Nayak, Manager, PFCCL

18. Shri A.K. Gupta, Executive Director (Engg.), NTPC
19. Shri S.S. Mishra, AGM, NTPC

Annexure-II

रजिस्ट्री सं० डी० एल०-33004/99 REGD NO D L-33004/99

भारत का राजपत्र
The Gazette of India

असाधारण
EXTRAORDINARY
भाग I—खण्ड 1
PART I—Section 1
प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 288] नई दिल्ली, सोमवार, दिसम्बर 9, 2013/अग्रहायण 18, 1935
No. 288] 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 सं. 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
	शून्य तिथि
आरएफक्यू का प्रकाशन	
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 मूल्य बोली प्रस्तुत करना	120 दिन
बोलीकर्ता की संक्षिप्त सूची तैयार करना और एलओआई जारी करना	135 दिन
करारों पर हस्ताक्षर	145 दिन

3. संविदा अवार्ड और निष्कर्ष पैरा 12.2 – दूसरे 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:

1. 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 date
Submission of Response to RFQ	30 days
Short listing based on responses and issuance of RFP	60 days
Bid clarification, conference, Final clarification and revision of RFP	85 days
Technical and price bid submission	120 days
Short listing of bidder and issue of LOI	135 days
Signing of Agreements	145 days

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 दिसंबर, 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 सं. 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 एतद्द्वारा निम्नांकित संशोधन किए जाते हैं :

1. पारेषण हेतु लाइसेंस 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।

घनश्याम प्रसाद, निदेशक

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

Printed by the Manager, Government of India Press, Ring Road, Mayapuri, New Delhi-110064
and Published by the Controller of Publications, Delhi-110054.

Annex – III

Status of projects under bidding process by RECTPCL

The representative of BPC, RECTPCL stated that the following seven (7) transmission projects were allocated to them for carrying out the bidding process for award of the project:

1. System Strengthening in southern region for import of power from eastern region
2. Transmission system required for evacuation of power from Kudgi TPS
3. Transmission System for connectivity for NCC Project
4. Baira Siul - Sarna 220 kV D/C Line
5. NRSS XXIX,
6. XXXI (Part A)
7. XXXI (Part B)

He stated that the bidding process for selection of developer for "System Strengthening in southern region for import of power from eastern region" and "Transmission system required for evacuation of power from Kudgi TPS" has been concluded successfully and the project have been awarded to M/s PGCIL and M/s L&T IDPL, respectively. The bidding process for Transmission System for connectivity for NCC Project has been annulled due to high prices whereas, the bidding process for 220 kV D/C Baira Siul - Sarna Line is also required to be cancelled as the same has not been agreed to by the Standing Committee on Power System Planning of Northern region due to very high per kilometer cost of line.

The bidding process in respect of transmission projects, namely NRSS XXIX, XXXI (Part A) and XXXI (Part B) is expected to be concluded by March 2014.

Annex - IV

Status of projects under bidding process by PFCCL

The representative of BPC, PFCCL stated that the following seven (7) transmission projects were allocated to them for carrying out the bidding process for award of the project:

1. Transmission System for Patran 400 kV S/S
2. Eastern Region System Strengthening Scheme – VI
3. Eastern Region System Strengthening Scheme – VII
4. Part ATS of RAPP U-7&8 in Rajasthan
5. Transmission System Associated with DGEN TPS (1200 MW) of Torrent Power Ltd.
6. Northern Region System Strengthening Scheme – XXXIII
7. ATS for Tanda Expansion TPS (2X660 MW)

He stated that bidding process for the transmission projects mentioned at Sl. No. 1 to 4 has been completed and the SPV for these schemes except that mentioned at Sl. No. 4 has been transferred to the Successful Bidder(s). He also stated that for the transmission project mentioned at Sl. No. 4, out of 25 nos. of LTTCs, 3 LTTCs namely, Punjab State Power Corporation Ltd, AD Hydro Power Ltd and North Central Railway are yet to sign the TSA. The Successful Bidder, Sterlite Grid Limited, has informed that they will sign the Share Purchase Agreement only after signing of the TSA by all the LTTCs. Further, the transmission scheme mentioned at Sl. No. 5, RfQ Stage has been completed and RfP has been issued to the qualified bidders w.e.f. 28.11.2013 with last date of submission of RfP Bid as 13.03.2014.

The representative of further PFCCL stated that on the advice of CEA, the bid processes for the transmission scheme mentioned at Sl. No. 6 and 7 have been kept in abeyance.