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

No.81/4/2003-SP&PA/ 1503-16

Guwahati - 781001

dated: 30.11.05

1	Member (PS)
-	Central Electricity Authority
	Sewa Bhawan, R.K. Puram, New Delhi

Sewa Bhawan, R.K. Puram, New Delhi
The Managing Director
Assam State Electricity Grid Corp..

Bijulee Bhavan, Paltan Bazar, Assam,

- 5 Chief Engineer (P&E)
 Power & Electricity Deptt.
 Govt. of Mizoram, AIZAWL-796001
- 7 Chief Engineer (Elect.)
 Deptt. of Power, Govt. of Tripura
 AGARTALA-799001
- 9 Director (Projects) NEEPCO Ltd., Lower New Colony Meghalaya, Shillong, – 793003
- Director (Projects), NHPC, NHPC Office Complex, Sector –33, Haryana, Faridabad -121003.
- Chief Engineer (P)
 Electricity Department
 Government of Manipur, Keishampat,
 Impal-795001.

- Member (Technical)
 Meghalaya State Electricity Board,
 'Lumjingshai', Short Round Road,
 Meghalaya. Shillong, 793001
- 4 Member Secretary, NEREB, Rosalina, Nongrimbah Road, Laitumkhrah, Shillong-793 003
- 6 Chief Engineer (Power)
 Deptt. of Power, Govt. of Nagaland,
 Kohima, NAGALAND-797001
- 8 Director (Projects), POWERGRID Saudamini, Plot No.2, Sector-29, Haryana, Gurgaon -122001.
- Director (Operation)
 PTC India Ltd., NBCC Towers,
 2nd floor, 15 Bhikaji Cama Place,
 New Delhi-110066.
- 12 Chief Engineer (T&D)
 Department of Power, Govt. of Arunachal
 Pradesh,
 ITANAGAR 791 111
- 14 ED(I/C), Design E&M, NHPC, NHPC Office Complex, Sector –33, Haryana, Faridabad -121003

Sub:

3

Minutes of First Meeting of the Standing Committee Meeting on Power System Planning of North-Eastern Region held at Guwahati on 24.10.05

Sir,

Enclosed please find Minutes of First Meeting of the Standing Committee on Power System Planning of North-Eastern Region (1st meeting of reconstituted committee) held at Guwahati on 24.10.05.

Encl: as above

(Ramesh Kumar)

Yours faithfully,

Director (SP&PA)

Copy to : Sh. S.D. Sharma (US), Ministry of DONER, Vigyan Bhawan Annexe, New Delhi.

1 37 05

CND ocuments and Settings\Sharvan Kumar\Desktop\MoM 1st Reconstituted SCM-NER-24.10.05.doc

Minutes of the Meeting of the Standing Committee on Power System Planning of the North Eastern Region held on 24.10.05 at Guwahati

List of the participants is at Annex.

Member (PS), CEA welcomed the participants of the meeting and thereafter Agenda items were taken up.

1. Reconstituted Standing Committee

The Standing Committee on Power System Planning of the North-eastern Region had been reconstituted with Member (Power System), CEA as Chairperson, Member/Chief Engineer from State Utilities/Electricity Departments, Director from Central PSUs, and Member Secretary, NEREB as Members and Chief Engineer, SP&PA, CEA as Member Secretary.

The above reconstitution had been done with a view to discuss technical issues of transmission planning together with financial issues so as to expedite decisions.

Assam Electricity Grid Corporation Limited had requested to nominate Managing Director, AEGCL as Member of the reconstituted committee. Government of Arunachal Pradesh, Deptt. of Power had requested to nominate their Chief Engineer (T&D), as Member of the reconstituted committee. NHPC also requested to include ED (I/C), Design E&M, NHPC as alternate member.

The above requested changes were accepted and necessary update in mailing list incorporated.

2. Confirmation of the minutes of the Standing Committee Meeting Held at Shillong on 7.5.04

Last meeting of the Standing Committee on Power System Planning of the North-eastern Region was held on 7.5.04 at Shillong. Minutes of the Meeting had been issued vide CEA letter No.81/4/2003-SP&PA/273-82 dated 24.5.04.

As no comments on the minutes of the meeting had been received, the minutes of the meeting were confirmed.

3. Misa-Byrnihat 220 kV D/C line alongwith Byrnihat 220/132 kV S/S

- 3.1 CE, SP&PA stated that the following scheme was proposed to be taken-up for execution by a JV of PGCIL and MeSEB.
 - Misa-Byrnihat 220kV D/C line along with line bays at either end.
 - Byrnihat s/s with 1x100 MVA, 220/132kV transformer alongwith bays and 4 nos. 132kV line bays.

He stated that the above mentioned works would provide Central Sector Power supply to fast growing industrial areas around Byrnihat. Matching with this scheme, MeSEB would need to formulate scheme for 132kV system from Byrnihat and take-up for completion in a matching time schedule.

DGM, Powergrid stated that as per the decision taken in the meeting taken by Secretary (power) on 23.8.05 in New Delhi, in which it was decided to execute this line through a Joint Venture Company of Powergrid and MeSEB, it was also decided that a special transmission tariff and it would be kept out of the Unified Common Pool Transmission Tariff(UCPTT).

4. NER System Strengthening Scheme

4.1 CE (SP&PA) stated that based on the discussion/decisions in the earlier meetings of the Standing Committee and further feed-back on the requirement of system strengthening, the following system strengthening schemes had been identified and proposed to be taken up by PGCIL:

Sl.	Works	Remarks
No.		Remarks
2.	Kopili HEP – Khandong HEI 132kV S/C (second line) alongwith bays at either end.	for improved supply of inter-State
-	Khleihriate (PG) – Khleihriate (MeSEB) 132kV S/C (second line) alongwith bays at either end	South-Eastern Meghalaya.
3.	Kopili s/s extension with 1x160 MVA, 220/132kV transformer (3x53.3 MVA single phase units) alongwith bays.	
4.	Dimapur (PG) – Dimapur (Nagaland) 132kV S/C (second line) alongwith bays at either end.	To provide transmission strengthening for supply of
5.	Dimapur (PG) s/s augmentation with additional 1x100 MVA, 220/132kV transformer alongwith bays.	additional inter-state power to Nagaland and Manipur.
5.	Aizwal (PG) – Aizwal (Zemabawk) 132kV stringing of second circuit of the existing S/C on D/C line, alongwith bays at either end.	To strengthen transmission system for supply of inter-state power to Mizoram.

4.2 CE (SP&PA), CEA stated that PGCIL had proposed a FR titled 'Missing Links in NER' which covered the above works and it was proposed to be funded by DONER.

- 4.3 S.E (T&T), MeSEB informed that Khleihriate (PG) Khleihriate (MeSEB) 132kV S/C (second line) mentioned at Sl. No.2 was being executed by MeSEB, therefore it might be deleted from the FR of PGCIL. This was agreed.
- 4.4 C.E, Government of Nagaland intimated that in addition to the above mentioned works, Dimapur (PG) Kohima 220KV S/C line alongwith 220/132 kV S/S at Kohima (Chiephobozou) had been recommended by CEA and they were taking up the matter with DONER for funding the line.
- 4.5 C.E (I/C), SP&PA stated that AEGCL had reported of overloading of existing 315 MVA 400/220KV transformer at Misa 400KV s/s of PGCIL and it was proposed to augment the transformation capacity at Misa Substation. He suggested that this could also be included under the scheme of PGCIL. This was agreed.
- 4.6 Under Secretary, M/o DONER stated that the FR for the all the works mentioned above may be submitted to them for consideration.
- 4.7 CE, SP&PA, CEA stated that the issue of O&M charges for the works proposed to be taken up by PGCIL under the DONER funding was also required to be resolved. He stated that the following options were proposed in this context:
 - a) Recovery of the O&M charges, as transmission tariff, under UCPTT. For this the limit of Rs. 0.35/- for UCPTT charges would need to be suitably increased.
 - b) Capitalisation of O&M charges so that those were covered within the project estimated cost, to be funded by DONER.
 - c) Constituents agreeing to pay the O&M charges through a separate agreement.
- 4.8 DGM, Powergrid stated that as the transmission charges in NER had been pegged at Rs.0.35/- and Powergrid was not able to recover their investment in NER and therefore they were not agreeable to the inclusion of O&M charges in the UCPTT.
- 4.9 CE, SP&PA, CEA stated that as capitalisation of O&M charges would increase the project cost, it would be better if the constituents agreed to pay the O&M charges.
- 4.10 Member (PS), CEA requested the members that the matter be deliberated by the constituents in their organizations and their view point on the matter be conveyed urgently in writing for taking further necessary action.

5.0 Expediting of pending transmission works

- 5.1 CE, SP&PA stated that there was continued delay in taking up or completion of works on the following schemes, which would strengthen inter-state transmission in the NER:
 - (i) Additional 1x100 MVA 220/132kV transformer at Mariani s/s of Assam from where Mokokkchung s/s of Nagaland could be fed using the Mariani-Mokokchung 132kV S/C line.
 - (ii) 132kV D/C Sarusajai-Umiam Stg IV (Assam portion)
 - (iii) 132kV S/C on D/C Agia-Nanglabibra (NEC funded)

- (iv) Restoration of 132kV S/C Mariani-Dimapur
- Restoration of 132kV Loktak-Jiribam one ckt (v)
- Restoration of 132kV Panchgram-Pailapool-Jiribam (vi)
- (vii) 132kV S/C Itanagar-Gohpur
- CE, SP&PA, CEA stated that delay in completion of the above works was proving a 5.2 transmission constraint. He suggested that the feasibility of transfer of the works to PGCIL for execution with DONER funding, could be examined with a view to expedite completion of these schemes.
- 5.3 MD, AEGCL, informed the status of various on going works as mentioned below:

Details 220/132KV 1 X100MVA	Status
Transformer at Mariani	2x50 MVA existing transformer is to be augmented by AEGCL to 2 x100MVA 1, 1000 Fr
Transformer at Mariani	
	transformer would be commissioned by 11/05 and
2kV D/C Some in the	second transformer by 12/05
132kV D/C Sarusajai-Umiam Stg IV (Assam portion)	To be completed by 12/05
132kV S/C on D/C to	
132kV S/C on D/C Agia-Nangalbibra	Funds constraint
132kV S/C Mariani-Dimapur	To be completed by 12/05
132kV Loktak-Jiribam one ckt	To be completed by 12/05
32kV Panchgram-Pailapool	To be completed by 02/06
132kV Pailapool-Jiribam	Funds constraint

- As representative of Government of Arunachal Pradesh was not available, the status of 5.4 Works of 132kV S/C Itanagar-Gohpur could not be ascertained.
- It was decided that in view of the progress intimated by AEGCL there was no 5.5 requirement for consideration of transferring the works to PGCIL. Regarding the works not progressing due to the funds constraint, it was decided that funding through DONER

6. Transmission System for Subansiri HEP (2000 MW)

CE (SP&PA), CEA stated that efforts were being made to strengthen the transmission 6.1 and distribution networks of the NER and that would increase the load demand, however in view of the large hydro potential available in the Region, possibility of full absorption of the power from the HEPs planned in the Region during 11th and early 12 th plan appeared remote and bulk of the power from Subansiri HEP and Kameng HEP was to be consumed in NR/WR. Transmission system needed for this was to be finalised well in advance, so that there was no mismatch of commissioning of Generation Project and its evacuation/transmission network.

A high capacity HVDC link was proposed to be developed from a pooling point at Biswanath - Chariyali to Agra in NR, where from power could further be transmitted to

WR as well, under Subansiri HEP, where power for projects could also be pooled. The following system had been evolved for the purpose:

a) Biswanath Chariyali to be developed as a pooling station in NER

b) Subansiri – Biswanath Chariyali 400kV, 2xD/C Quad lines.

- c) Biswanath Chariyali Agra, HVDC Bipole, +/- 600kV, 4000 MW.
- 6.2 CE (SP&PA), CEA stated that the above proposed transmission system had been discussed in the NR and WR and they had shown general acceptability to the proposal subject to allocation of firm power for the hydro projects in NER.

 He further stated that transmission charges for the system were of the order of Rs.100crore/month and opined that unless firm allocation for a major chunk of power from the project was made to the beneficiaries of the power, transmission system could not be built.

Accordingly, only for large sized hydro projects capacities which could not be absorbed in NER and for which allocation of power to outside NER region was required, the following allocation of power was suggested in the agenda note:

Allocation of power:

Free power to home/distressed states: 12%
Power allocated to states within NER: 8%
Power allocated to states of NR and WR: 75%
Unallocated: 5%

- 6.3 DGM, PGCIL, stated that the transmission system planned contained a long HVDC link and in view of the considerable time taken in development of such a long link, it was very essential that decision for transmission link was taken at the earliest.
- 6.4 ED, NHPC, informed that NHPC had signed MOU with states of ER. CE, SP&PA stated that the issue would also be discussed in ER.
- 6.5 MD, AEGCL, stated that as requested by GOA, 600MW from Subansiri HEP be allocated to Assam. He further requested that from pooling point at Bishwanath-Chariyali, 400/220KV transformer and 220KV outlets be provided for use by AGECL. Member (PS), CEA stated that 400/220 kV transformer at Bishwanath Chariyali pooling station could be considered and STU could develop their network from that point.
- Member (PS), CEA urged the members that it was very essential they realistically assessed the power requirement of the Region and keeping the total picture of hydro development in the Region in mind decide their requirement of shares from Subansiri and Kameng HEPs so that transmission network for evacuation of power could be developed.

7. Transmission System for Kameng HEP (600 MW)

7.1 CE (I/C), SP&PA, CEA informed that Kameng HEP was scheduled for commissioning during 2009-10 and therefore transmission system for evacuation of power from this

HEP needed to be finalized quickly and added that PGCIL had tentatively identified a transmission system for evacuation of power from Kameng HEP and requested PGCIL to make a presentation on the same.

- 7.2 DGM, PGCIL made a presentation in which the following transmission elements were identified:
 - Kameng Bishwanath Chariyali pooling station 400kV D/C line
 - LILO of Ranganadi-Balipara 400kV D/C at Bishwanath Chariyali pooling station.
 - Bishwanath Chariyali Bongaigaon Siliguri 400kV D/C line.
- 7.3 Executive Director (O&M), Neepco stated that in view of the stated requirement of power from Kameng HEP by the NER States, transmission system from Bishwanath Chariyali to Bonigaigaon-Siliguri might not be required and the existing 400KV Balipara-Bongaigaon-Siliguri line might be able to handle the requirement of export of surplus, if any, to outside NER.
- 7.4 DGM, PGCIL stated that power flow to the extent of 550 MW had already taken place on the existing 400KV Balipara-Bongaigaon-Siliguri line. He stated that if NER States were not in a position to absorb power from Kameng HEP the same was required to be exported outside the Region and under outage of one of the existing 400 kV Balipara-Bongaigaon line the generation at Kameng HEP would be required to back down, if additional transmission system was not envisaged. In view of this and in view of the ROW constraint in NER, 400 KV Bishwanath Chariyali Bongaigaon Siliguri 400kV D/C line was considered essential, so that power of Kameng HEP was not bottled.
- 7.5 CE (I/C) SP&PA, CEA stated that in order to firm up the transmission system proposed by PGCIL, power allocation of Kameng HEP was required to be firmed up.

8. Review of Progress of Transmission Works

- 8.1 CE (I/C), CP&PA requested the State Utilities/Electricity Departments to intimate in writing the progress of their transmission works.
- 8.2 NEEPCO informed that Tuirial Kolasib 132 kV S/C associated with Tuirial HEP would be completed by November 05 and charged at 33KV.
- 8.3 PGCIL informed that 132 kV Balipara Kameng via Bhalukpong S/C line would be completed by December 05.
- **9.** Meeting ended with vote of thanks to the chair.