

Minutes of the 19th meeting of the Standing committee on transmission system of Northern Region held at Amritsar on 01/10/05.

1. List of the participants is enclosed at Annex - I.
Member (PS) CEA welcomed the participants. Thereafter, the agenda items were taken up for discussion.
2. **Confirmation of the minutes of 19th meeting of the Standing Committee on Transmission system Planning held on 6.06.2005 at Dalhousie, HP.**
 - 2.1 Chief Engineer (SP&PA), CEA stated that the minutes of the 18th meeting of Standing Committee on Power System Planning in Northern Region held on 6.06.2005 at Dalhousie, were circulated vide CEA letter No. 1/9/2005-SP&PA/ 749-764 dated 1.07.2005. No Comments from any constituent states have been received.
 - 2.2 Director(projects), HVPN stated that in the 18th meeting of the standing committee the proposal for 400/220 kV S/S at Gurgoan by 2007-08 time frame and augmentation of transformer at Hissar in 2009-10 time frame were agreed. However, the proposals of augmentation of 3rd transformer Hissar was not covered in the minutes, he requested for inclusion of the same in the strengthening works for 2009-10 time frame in Northern Region
 - 2.3 CE(SP&PA) stated that the proposals for augmentation of transformer at Hissar in 2009-10 time frame was not covered inadvertently. Accordingly para no. 6.8 of the 18th Minutes of the Meeting needs to be amended as under

Summarizing the agreed proposals CE, SP&PA, CEA stated that POWERGRID may formulate the following Northern Regional System Strengthening Schemes

NRSSS-VI: Target 2007-08

- 400/220 kV GIS (2x315 MVA) S/S at Gurgoan by LILO of Samaypur – Bhiwadi 400 kV S/C line

NRSSS-VII: Target 2008-09

- 3rd transformer at Ludhiana
- 4th transformer at Wagoora (POWERGRID) would interact with PDD, J&K to resolve the space issue so as to establish the feasibility of required extension at Wagoora).

NRSSS-VIII: Target 2009-10

- 400/220 KV ,2x315 MVA S/S at Bhinmal by LILO of one circuit of Kankroli – Zerda 400 kV D/C line
- 3rd transformer at Hissar

Thereafter the Minutes of 18th meeting as circulated were taken as confirmed with the above amendments.

3. Item – III Requirement for 220 kV bays by Himachal Pradesh from 200 kV Nalagarh S/S of POWERGRID.

3.1 CE(SP) HPSEB, stated that the demand for power at various load centers of HP was increasing very fast and heavy load was expected by 2007. Since the construction of the proposed 400 kV line from Nalagarh to Kunihar would take some time, for feeding the increasing load as on immediate basis, HPSEB would require one 220/66 kV ICT to be installed at Nalagarh S/S on temporarily basis to feed the load of Nalagarh, Baddi and Barotiwala areas. It was also informed that as and when Nalagarh – Kunihar line would be ready the transformer would be shifted elsewhere.

3.2 CE SP&PA stated that once the 220/66 kV S/S at Nalagarh was established by HPSEB, the shifting of transformer at a later date would require alternate arrangement for the 66 kV loads which would become incident on the proposed Nalagarh S/S. CE HPSEB stated that in that case they would continue with their Nalagarh 220/66 kV S/S. CE(SP&PA) stated that HPSEB could establish their Nalagarh 220/66 kV S/S and construct a 220 kV D/C line between Nalagarh(PG) – Nalagarh(HPSEB) S/S. Alternatively they may expedite construction of 400 kV Nalagarh – Kunihar D/C line and charge initially at 220 kV and connect the proposed 220 kV S/S of HPSEB at Nalagarh by LILO of the Nalagarh(PG) – Kunihar line. The 220 kV bays at Nalagarh(PG) required for this purpose would be provided by POWERGRID at the cost of HPSEB. Whenever Nalagarh(PG) – Kunihar line would be charged at 400 kV, a separate 220 kV D/C line between

Nalagarh(PG) – Nalagarh(HPSEB) could be constructed by HPSEB for which they would utilize the 220 kV bays at Nalagarh(PG) to be provided at HPSEB's cost.

- 3.3 CE(SP), HPSEB stated that as three nos. of 220 kV bays were laying unutilized at Nalagarh (PG) S/S two nos. of 220 kV bays should be provided to HPSEB under regional pool by diverting the bays allocated to PSEB or Chandigarh which were laying unutilised.
- 3.4 Member (PS), CEA stated that at Nalagarh 400 kV S/S of POWERGRID 2 nos. 400 kV bays were already allotted to HPSEB and out of 4 nos. 220 kV bays, 2 nos. were allotted to PSEB and 2 nos. to UT Chandigarh. Presently only one of the two D/C line to Manimajra (Chandigarh) had been stung and the drawl on the line was to the tune of about 35-40 MW. He further stated that as two nos. 400 kV line bays had already been allotted to HPSEB at Nalagarh, any additional bays requirement by HPSEB at 200 kV could be met only on chargeable basis.
- 3.5 ED(Engg), POWERGRID stated that the two nos. 400 kV line bays already allotted to HPSEB at Nalagarh had been kept unutilized by HPSEB and construction of 400 kV line by HPSEB from Nalagarh would take time. As such, the two 400 kV bays could be utilised for terminating their line from Parbati II HEP. Whenever HPSEB would require their two nos. 400 kV line bays at Nalagarh, the same might be intimated to POWERGRID at least two years in advance so that bays might be kept ready for them.
- 3.6 Dy. CE(Plg.), PSEB informed that PSEB would construct line from Nalagarh to feed their load at Mohali by July of 2006
- 3.7 CE(SP&PA) stated that since 400 kV Patiala S/S would be ready soon and feeding the load of Mohali from Patiala would be easier and cost effective, so if PSEB still decides for construction of lines from Nalagarh, they might do so latest by August 2006, failing which the allocation of their 220 kV bays at Nalagarh would be reviewed.

- 3.8 Since the representative of U.T Chandigarh was not present in the meeting, it was decided to sort out the issue in a separate meeting between HPSEB, PSEB, Chandigarh and POWERGRID.

4. Item – IV Creation of 400/220 kV S/S at New Wanpow in Kashmir.

- 4.1 CE, PDC J&K informed that presently power was being supplied in the valley with lot of restriction, the load demand of Kashmir valley which was of the order of 1000 MW would increase to about 1500 MW during 11th plan period and for
- 4.2 meeting that load a new 400/220 kV S/S would be required in addition to the 4th 400 KV ICT at Wagoora agreed in the 18th standing committee meeting.
- 4.2 CE (SP&PA) stated that during winter peak, the demand of the valley was maximum whereas the generation reduces to minimum. As such, even with four nos. of ICT at Wagoora (1260 MVA) and along with Pampore – Kishenpur 220 kV D/C line and Pampore – Udampur 132 kV D/C (presently S/C) the system would be inadequate to meet the 11th plan load of Kashmir valley. As such, a new 400 kV S/S was required for Kashmir valley. The S/S could be located somewhere around Wanpow as requested by PDC J&K by LILoing the proposed Wagoora – Kishenpur Line.
- 4.3 DGM POWERGRID stated that before firming up the proposal it would be desirable to study alternate locations and feeding/connectivity arrangements.
- 4.4 CE, PDC J&K further stated that for evacuation of power from the Chenab basin projects and also power of other future projects in that basin, a new 400 kV pooling point need to be created, as development of individual evacuation system from each of these projects would create ROW problem in the forest area. He suggested for creation of 400 kV pooling station at Ramban, which could be connected with Kishenpur for further evacuation of power. Further he stated that load of Jammu region was increasing fast as lots of industries were establishing their units in that area. For meeting the load demand of that area, a new 400/220 kV S/S would be required. The S/S could be created somewhere in Samba.

4.5 AGM POWERGRID informed that at Wagoora S/S of POWERGRID, 4th 400/220 kV, 315 MVA ICT was agreed in the last standing meeting, however for instillation of the same addition space had to be made available adjoining the existing S/S, for which the help from PDD was solicited. Further, for extension of capacity at Kishenpur S/S of POWERGRID would be difficult, however the same would also required to be examined and if required the state electricity board would be required to facilitate in acquisition of land. He also seconded the proposal for creation of 400 kV pooling station at Ramban for pooling power from Chanab basin projects.

4.6 CE (SP&PA) stated that the concern of J&K for pooling station to be created at Ramban was well taken, the same would be studied and could be discussed in the next meeting. The proposal for creation of S/S at Jammu might be taken up later.

The Members of the Committee agreed for the same.

5. Item – V Creation of 400/220 kV S/S at East of Loni Road in Delhi.

Since no representative from Delhi Transco was present so it was decided to defer the proposal for the next meeting

6. Item – VI Transmission system for Lata Tapovan (108 MW) and Tapovan Vishnugad (520 MW) HEPs of NTPC.

6.1 CE (SP&PA) stated that the proposal for evacuation of power from Lata Tapovan (108 MW) and Tapovan Vishnugad (520 MW) HEPs of NTPC was put up for discussion in the 18th SCM of NR held on 6/06/05 and the following transmission system from these projects had been proposed.

Lata Tapovan (108 MW)

- Establishment of 400/132 kV GIS pooling station at Kuwari Pass
- LILO of one circuit of Vishnupryag – Muzaffarnagar line at Kuwari Pass

- Lata Tapovan – Kuwari Pass 132 kV D/C line

Tapovan Vishnugad (520 MW)

- Tapovan Vishnugad – Kuwari Pass 400 kV D/C
- Kuwari Pass – Roorkee 400 kV D/C

The above proposals were required to be firmed up depending upon the commissioning schedule of these projects confirmed by NTPC.

- 6.2 GM(OE-elect/C&I), NTPC stated that the capacity of Lata Tapovan machines had been increased from 108 MW to 162 MW and both Tapovan Vishnugad and Lata Tapovan were expected in 2011-12 time frame.
- 6.3 CE (PP&M), RVPNL stated that as per information, NTPC had proposed to set up these project as merchant plant, and the generation tariff and transmission charges for such merchant plant schemes were not clear. Member (PS), CEA stated that in view of the fact that the proposed project is likely to be a merchant plant nature of the generation projects, the matter could be considered only when NTPC obtains the required clarifications on the tariff related matter for such merchant plants in respect of generation as well as transmission from CERC.

The Members of the Committee agreed for the same.

7. Item – VII Evacuation system from Hydro projects in Uttaranchal.

- 7.1 Member (PS), CEA stated that the as regards to the proposal of Uttaranchal to build the proposed integrated transmission system from the generation projects upto pooling points with in the state, they would need to, as per Electricity Act 2003 obtain license from CERC to construct such lines which were interstate in nature. They also need to firm up the beneficiaries of power from these projects.

- 7.2 ED(Engg), POWERGRID stated that Uttananchal also needs to sign indemnity with the executor of the generation before going ahead for the construction of the proposed evacuation system.

The MD, PTUCL took a note of the above suggestions.

8. Item – VIII Enhancement of Transmission Capacity in East – West Corridor of Northern Region

- 8.1 DGM(Engg.) POWERGRID gave a presentation of the proposal for enhancement of the existing transmission capacity in the East – West corridor of Northern region and suggested for following strengthening requirements

- Anpara – Unnao 765 kV S/C line (charged at 400 kV) – 30% comp.
- Unnao – Bareilly 400 kV D/C - 45% comp.
- Gorakhpur – Lucknow 400 kV D/C - 30% comp.
- Bareilly – Mandaula 400 kV D/C - 30% comp.

He informed that the cost to be incurred for the above proposal would be around Rs. 120 crores. The above proposal would optimize the load-ability of the existing corridor beside reducing the transmission losses.

The members in general agreed the proposals.