

Agenda for discussions in the 26th meeting of the STU Coordination Committee to be held under the chairmanship of Pr. Secretary (MPP & Power)

1. Evacuation arrangement for Beaskund HEP (9 MW) & other SHPs in Palchan valley:-
Progress review of evacuation arrangement for Small HEPs in Palchan area:-
 - i) HPPTCL shall apprise the Committee on evacuation arrangements finalized for evacuation of power from various Small HEPs in Palchan valley.
 - ii) Progress review of 33/220 kV sub station in the yard of Allain Dhuangan HEP. Time Line-30.4.2013 -Action by HPPTCL & Developer of Beaskund HEP.
 - iii) Action taken on the remedial measures suggested during 24th meeting of the Committee for controlling abnormally high/low voltage conditions at 33 kV Naggar sub station viz. by proving shunt reactors at the selected locations and/or using OLTCs. -Action by HPSEBL.

2. Construction of 4 Nos. Transmission Projects to be built by HPPTCL with Financial assistance by ADB (Tranche-I): -
Progress review of 4 Nos. Transmission Projects being built by HPPTCL with financial assistance by ADB:
 - i) 66/220 kV, 31.5 MVA Pooling station at Bhoktoo +LILO of 220 kV Kashang- Bhaba Line- COD-31st October, 2013.-
 - ii) 220/400 kV, 315 MVA P.S near Pragati Nagar+ LILO of both circuits of 400 kV Jhakri- Abdullapur D/C Line.- COD-30th November, 2014. :-
 - Award of work- Time Line-30.4.2013.

- Revised Time Line for Forest Clearance of 400 kV Line to reach MOEF, Gol- 28.2.2013.
- iii) 220 kV D/C High Capacity Line from Hatkoti to 220/400 kV P.S near Pragati Nagar.-COD- 30th November, 2014. :-
- Time Line for Forest Clearance of 220 kV Line to reach MOEF, Gol- 28.2.2013.
- iv) 66/220 kV, 2x80/100 MVA+220/400 kV, 2x315 MVA P.S at Wangtoo+ LILO of both circuits of 220 kV and 400 kV Lines COD- 220 kV portion – 31st March, 2015 and 400 kV portion-30th September, 2015:- .
- Award of work- Time Line-31.3.2013.
- Time Line for Forest Clearance of land to reach MOEF, Gol- 28.2.2013.

3. Construction of 33/220 kV Phojal sub station in Naggar Valley in Distt. Kullu

Progress review of following transmission projects:-

- a) Construction of 33/220 kV GIS sub station at Phojal-
Time Line-31.12.2013.
- b) LILO of one circuit of 220 kV Prini- Nalagarh D/C line of M/S ADHPL. Time line-30.11.2013.
- c) Time Line for Forest Case for 220 kV Line to reach MOEF, Gol- 28.2.2013.

4. Valley wise transmission Plan for Palampur Zone, Satluj Basin (up to Wangtoo) and Ravi basin (Chamba & Gharola Zones)

Committee shall be apprised on the following:

- i) Short term arrangements for evacuation of Small Hydel power in Palampur Zone

HPSEBL shall give activity wise progress for completion of following works:

- a) 33 kV Baner- Darang- Kangra line.-Time Line-
May, 2014
 - b) 33 kV Baijnath- Bassi line.-Time Line- May,
2014.
- ii) Evacuation arrangements for Small HEPs in Satluj Basin (up to Wangtoo)
- a) HPSEBL shall give activity wise progress for augmentation of 66/220 kV, 31.5 MVA transformers at Kotla (Jeori). Time line-30.6.2013.
 - b) HPSEBL shall give activity wise progress for commissioning of 66/22 kV sub station at Ani (Nagan). Time line-31.12.2013.
 - c) HPSEBL shall apprise the Committee on the firmed up evacuation arrangements for projects coming upstream of Ghanvi-II by using 66 kV line from Kut (24 MW) HEP to Kotla sub station instead of earlier planned strengthening of 66 kV Ghanvi-I- Kotla lines.
- iii) Evacuation arrangements for Small HEPs in Ravi Basin (Chamba & Gharola Zones)
- a. Progress review of 33/220 kV GIS sub station at Lahal with 220 kV Lahal- Budhil Line under implementation by HPPTCL and is included in Tranche-II of ADB Loan- Time Line-2015-16.
 - b. HPSEBL shall give activity wise progress for construction of 33 kV D/C lines between Holi & Gharola and Gharola and Bharmour. Time Line-2014-15.



c. Progress review of 33/220 kV GIS sub station under construction by HPPTCL at Karian with 220 kV S/C line on D/C towers between Karian and 400/220 kV Chamera P.S of PGCIL. Time line- 31.5.2013.

5. Construction of 220 kV Kashang- Bhaba D/C Line:

Progress review of restoration of 220 kV Kashang-Bhaba line (presently charged at 22 kV) which was damaged due to collapse of one of its towers.-Time Line-31.5.2013.

6. Progress review of Transmission Projects planned to be built with ADB Loan –Tranche-II

HPPTCL shall give status/progress of various transmission projects covered in Tranche-II of ADB Loan.

7. Interim arrangements for Evacuation of power of Surah (1.5 MW) and Swad (5 MW) HEPs in Distt. Mandi.

Energy Directorate shall apprise the Committee on the status of resolution of pending issue i.e. prior approval of UNFCCC for joint evacuation of Patikari (16 MW) and Swad (5 MW) HEPs.

8. Evacuation of Power of Small HEPs in Sahoo Area in Ravi basin:

In the 25th meeting of the Committee held on 16.1.2013, it was decided that HPSEBL shall hold discussions with developers of Small HEPs in Sahoo area and intimate them the cost to be shared by each developer.

HPSEBL may update the Committee.

9. Construction of IPPs' lines by HPPTCL

Progress for construction of following lines by HPPTCL shall be reviewed:



- i) Status of implementation of 220 kV D/C line from Tidong-I HEP to LILO point of 220 kV Kashang-Wangtoo D/C line in view of IPP's request for cancellation of Agreement signed with HPPTCL for construction of the line by HPPTCL.
- ii) 132 kV D/C line from Tangnu Romai (44 MW) HEP to 132/220 kV planned sub station of HPPTCL at Sunda.

10 Status of Inter Sate Transmission issues discussed in the Standing Committee on Power System Planning –N.R:

Following proposals to construct transmission lines and sub stations in H.P. were placed before the Standing Committee on Power System Planning- NR in its 31st meeting held on 2.1.2013 for approval of Regional Constituents:

- i) Construction of 220 kV Charor- Banala D/C (Twin MOOSE) Line by HPPTCL with ADB Assistance (Tranche-II) to evacuate Small Hydel power in Parvati valley.(Item 6-Annex. A)
- ii) Evacuation of Power from Sainj HEP (100 MW) by LILO of 400 kV Parbati-II- Parbati-III circuit.(Item 16- Annex. A)
- iii) Establishment of 400/220 kV, 2x315 MVA sub station at Kala Amb by LILO of 400 kV Wangtoo- Abdullapur D/C Interstate Line to meet the Industrial load requirement in Kala Amb area (Item 17-Annex. A)

Minutes of meeting have been issued and are placed at Annexure-A for further deliberations of the Committee.

11. Grant of Connectivity to Brua and Balargha HEPs:

- i) Brua HEP (9 MW) has been provided interfacing at 66 kV level at 66 kV Switching station planned at Urni in

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Distt. Kinnaur to be further connected with 66/220/400 kV sub station at Wangtoo through a 66 kV D/C line. 66 kV Switching station at Urni and 66 kV Urni-Wangtoo D/C line are being implemented by HPPTCL and are covered under Tranche-II of ADB loan. In accordance with the Procedure for grant of Connectivity in Intra State Transmission System, Developer of Brua HEP has applied for connectivity to HPPTCL (STU).

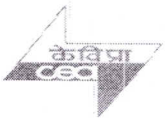
- ii) Balargha (9 MW) HEP has been provided interfacing at 33 kV level at 33/132 kV Sub station planned at Barsaini in Distt. Kullu to be connected with 132/220 kV sub station at Charor through a 132 kV D/C line and further with 400/220 kV Banala Pooling station of PGCIL through a 220 kV D/C (Twin MOOSE) line. 33/132 kV Sub station at Barsaini, 132 kV Barsaini-Charor D/C line and 220 kV Charor- Banala D/C line are being implemented by HPPTCL and are covered under Tranche-II of ADB loan. In accordance with the Procedure for grant of Connectivity in Intra State Transmission System, Developer of Balargha HEP has applied for connectivity to HPPTCL (STU).

Committee may approve the grant of connectivity for:

- a) Brua HEP at 66 kV Switching station planned at Urni at 66 kV level.
- b) Balargha HEP at 33/132 kV planned sub station at Barsaini at 33 kV level.



Annex - A



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



[ISO: 9001: 2008]

No. 1/9/SP&PA-1 2 /

Dated: 04/02/2013-

As per list enclosed-

Sub: Minutes of the 31st Standing Committee meeting on Power System Planning of Northern Region held on 2nd January 2013

Sir,

The 31st meeting of the Standing Committee on Power System Planning of Northern Region was held on 02.01.2013 at POWERGRID, Gurgaon. The minutes of the meeting has been uploaded on CEA website : www.cea.nic.in (path to access - wing specific document /power system related reports / standing committee on power system planning / northern region).

The minutes of the connectivity and long term open access meeting held on 02.01.2013 shall be given separately and uploaded shortly.

Yours faithfully,


(B. K. Sharma) 4/2/13

Director (SP&PA)



these lines, four (4) nos. 400 kV bays are to be constructed at 400/220 kV Kashipur substation of PTCUL. These transmission lines are under construction whereas the MOU for construction of 400 kV bays at 400/220 kV Kashipur sub-station could not be finalized till date in spite of regular interactions with PTCUL. It was further informed that PTCUL had proposed that the bays may be constructed by POWERGRID and 15% of total cost may be paid to them as supervision charges.

POWERGRID stated that the entire works of design, engineering, procurement & erection of above bays at Kashipur S/s will be done by POWERGRID and as such PTCUL should not ask for any charges for this work.

Member (PS), CEA advised PTCUL not to ask for any overhead charges for the line terminating bays to be implemented under ISTS scheme by POWERGRID, as the scheme is for the benefit of State. He further mentioned that PTCUL may modify its practices to be followed for the ISTS system planned in the state to this effect. PTCUL agreed for the same.

POWERGRID also informed that 400 kV D/c Bareilly-Kashipur & 400 kV D/c Kashipur-Roorkee line sections are in advanced stage of construction and implementation of bays at Kashipur may take some time and therefore proposed to directly, connect Bareilly-Kashipur 400 kV D/c & Kashipur-Roorkee 400 kV D/c line sections, temporarily bypassing Kashipur till the time, bays at Kashipur are implemented. With the commissioning of bays at Kashipur LILO of the line at Kashipur would be taken up.

Members agreed for the above proposal.

6. Evacuation of Power from Malana-II

Director (SP&PA), CEA stated that the evacuation of power from Malana-II HEP was planned by LILO of one circuit of AD HEP – Nalagarh 220 kV D/c line of M/s AD Hydro at 220/132kV Chhaur substation of M/s Everest Power Pvt. Ltd.(EPPL) and power from generation project was to be injected at Chhaur S/s through a 132 kV D/c line. Further, AD HEP – Nalagarh 220 kV D/c line is not adequate for reliable evacuation of power from both the projects especially under contingency condition. In the 30th Standing Committee Meeting of Northern Region, it was agreed to construct a 220 kV D/c line from 220/132kV Chhaur to Parbati Pooling Station enabling injection of power from Malana-II HEP at Parbati Pooling Station (ISTS). From Parbati Pooling Station, power can be evacuated over ISTS system. It was also decided to provide 2 nos. of 400/220 kV, 315 MVA ICTs (7x105 MVA single phase units) alongwith 4 nos. of 220 kV line bays (2 bays for M/s EPPL and 2 bays for HPPTCL).

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He further mentioned that HPPTCL had informed that only one 220 kV line could be constructed from Chhaur to Parbati Pooling Station due to ROW constraints and HPPTCL also intends to inject about 170 MW power from Small HEPs at Chhaur substation for its further transfer to Parbati Pooling station. As such, HPPTCL proposed that they would construct the 220kV D/c line from Chhaur substation to Parbati Pooling station for which funds are also being tied up with ADB. Further, HPPTCL would also take up the ownership of 132/220 kV Chhaur S/s from M/s EPPL to make it a part of their STU system.

Member (PS), CEA enquired HPPTCL about the expected commissioning schedule of the above 220kV line. HPPTCL informed that the same would be ready by 2015.

POWERGRID stated that Malana-II generation is directly connected to ISTS grid, for which Long Term Open Access has been processed and granted by CTU. In case this line is constructed by HPPTCL (STU), the direct connectivity of Malana-II with ISTS would be lost and M/s EPPL would have to bear STU charges in addition to PoC charges.

Member (PS) stated that under proposed proposal Malana-II would be treated as State-embedded generator and would have to pay applicable charges accordingly. He enquired M/s EPPL for their consent to the above proposal.

M/s EPPL informed that they are agreeable to the proposal and they would sort out all commercial issues with HP.

While finalizing the proposal it was also decided that **400/220 kV, 2x315 MVA ICTs (7x105 MVA single- phase units) along with the associated bays and 2 nos. of 220 kV line bays would be provided at Parbati pooling station (PG) under ISTS scheme and since it is augmentation work in existing switchyard of POWERGRID S/s, the same would be carried out by POWERGRID.**

Members agreed to the above proposal.

7. LILO of Gladini – Hiranagar S/c line at Samba 400/220 kV substation

POWERGRID stated that 220 kV Sarna – Jammu (Gladini) S/c line was implemented as a part of Salal transmission system (ISTS) and subsequently, LILO of this line at Hiranagar was carried out by PDD J&K at their cost. POWERGRID informed that PDD J&K intends to LILO Gladini – Hiranagar section of this line at 400/220 kV Samba substation of POWERGRID for meeting load requirement of the area. As this line is a part of ISTS system, therefore the proposal to LILO Gladini – Hiranagar section of the line at 400/220 kV Samba substation of POWERGRID was put up to Standing Committee for consideration.

Members agreed to the proposal.

Considering the fact that the substation is located in a very fertile area of Punjab where the acquisition of land would be a challenging task, it is proposed to develop this substation as Gas Insulated substation.

Members agreed to the above proposal.

16. Evacuation of Power from Sainj HEP (100 MW)

CEA stated that the evacuation of power from Sainj HEP was discussed during the 30th SCM of NR and it was stated that injection of Sainj HEP of HPPCL shall be through LILO of Parbati-II – Parbati-III 400 kV line however in case of outage of one circuit, 10% overload generation, 0.9 pu voltage and 0.9 power factor there may be certain constraints and generation would have to be backed down.

NHPC informed that enhancement of current carrying capacity of 400 kV XLPE cable is not possible and hence evacuation of power of Sainj through XLPE cable provide at Parbati-III HEP is not feasible.

Member (PS), CEA had informed to NHPC that cable limitation may come in case of outage of one circuit, 10% over generation, 0.9 pu voltage and 0.9 power factor and possibility of occurrence of above contingency was very remote and HPPCL had agreed to back down the generation at Sainj, if required with a view to prevent the overloading of the XLPE cable of Parbati-III switchyard. Considering the above, HPPCL was advised to implement LILO of 400 kV Parbati-II – Parbati-III line for evacuation of power from Sainj HEP.

Subsequently, NHPC informed that backing down of generation at Sainj HEP does not safeguard the overheating of XLPE cable provided at Parbati-III switchyard and as such the arrangement is not acceptable to NHPC. HPPTCL stated that due to severe R-o-W issues it is not possible to plan independent line from the generation project.

After deliberations, Member (PS) decided that a committee consisting of CTU, CEA, HPPTCL, HPPCL & NHPC would be formed to solve the issue and if required joint site visit may be undertaken.

Members agreed to the above proposal.

17. Establishment of 2x315 MVA 400/220 kV substation at Kala Amb



POWERGRID stated that HPPTCL has informed that the present load in Kala Amb / Poanta / Giri area is about 350 MVA, which is likely to increase to about 500 MVA by 2015-16 whereas the available generation and transmission network in the area is not adequate to meet the present load.

In order to meet the present and future load requirement of the area, HPPTCL had proposed for establishment of a 400/220/132 kV substation at Kala Amb by LILO of one circuit of either N'Jhakri – Abdullapur or Karcham Wangtoo – Abdullapur 400 kV line. The matter was analysed and it was observed that N'Jhakri – Abdullapur 400 kV D/c line has already been looped in looped out at Panchkula and LILO of the same line has been approved at Sainj (near Simla). Considering the capacity of the line, it would not be desirable to LILO the N'Jhakri – Abdullapur line at Kala Amb. Further, as Karcham Wangtoo – Abdullapur 400 kV D/c line is also passing in close proximity to Kala Amb area and to meet the loads in the area, the LILO of the Karcham Wangtoo – Abdullapur 400 kV D/c was proposed to be carried out at Kala Amb. HPPTCL had proposed to LILO only one circuit 400 kV line however LILO of one circuit would result into unbalanced loading, it was therefore proposed that LILO of both the circuits may be carried out at Kala Amb.

Considering the issues of hilly terrain & scarcity of land in Himachal Pradesh, it was proposed to establish this substation as GIS station. HPPTCL had proposed the substation as 400/220/132 kV substation, however it was decided that the substation be established as 400/220 kV under ISTS and further works of 220kV and 132kV may be carried out by HPPTCL as per their requirement. **It was also agreed that LILO may be carried out on Multi-circuit Towers to conserve R-o-W.**

The constituents agreed to take up the above proposed works as Northern Regional System Strengthening Scheme- NRSS-XXXI.

18. Constraints in NR GRID as per NLDC

POWERGRID stated that NLDC have informed constraints in Grid Operation in Northern Region. Remedial measures for most of these constraints in ISTS network have already been planned / are being planned. The details of these constraints were given in the agenda. The states were advised to take up adequate action to address the constraints being observed in state transmission system. The brief of the discussions on this agenda item, is summarized below:



भारत सरकार / Government of India
विद्युत मंत्रालय / Ministry of Power
केंद्रीय विद्युत प्राधिकरण / Central Electricity Authority
प्रणाली योजना एवं परियोजना मूल्यांकन विभाग /
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वेबसाइट / Website : www.cea.nic.in



[ISO : 9001 : 2008]

No. 1/9/SP&PA/2012/

Dated : 08.02.2013

-As per list attached -

Sub : Corrigendum - Item no. 6 of the Minutes of the 31st Standing Committee Meeting on Power System Planning of Northern Region held on 2nd January, 2013

Sir,

Kindly refer to our letter no. 1/9/SP&PA/2012-88-104 dated 04.02.2013 vide which intimation regarding uploading of the minutes for 31st Standing Committee meeting was sent.

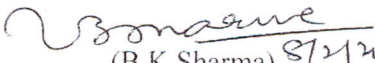
The last sentence of Para 2 of Item no. 6 given as :

“ Further, HPPTCL would also take up the ownership of 132/220 kV Chhaur S/s from M/s. EPPL to make it a part of their STU system”.

may be read as :

“Further, HPPTCL has also agreed to take up the ownership of 132/220 kV Chhaur S/s and 132 kV D/C line from Malana II HEP to Chhaur S/s from M/s. EPPL to make it a part of their STU system”.

Yours faithfully,


(B.K.Sharma) 8/21/2013
Director (SP&PA)

