

Agenda for discussions in the 49th meeting of the STU Coordination Committee to be held under the chairmanship of Addl. Chief Secretary (MPP & Power)

Agenda Items-

i) LTA Applications to be submitted by IPPs in Pabbar and Rupin valleys:

- In 48th meeting of the Committee, it was apprised that only one application in respect of Sawra Kuddu HEP has been received and representative of M/S Jagdambey had informed that IPPs in Dodra Kwar area shall be submitting the applications for connectivity and LTA shortly.
- The matter regarding absence of payment security mechanism in these valleys due to continued reluctance by the IPPs to submit applications for Long Term Open access applications has been deliberated in the meetings taken by Pr. Secretary (Power), GoHP on 10.4.2019 and by Joint Secretary, MNRE at Shimla on 17.4.2019 and the proposal of HPPTCL to defer following three projects from GEC-I to GEC-II has been approved:
 - a) 22/132 kV, 2x31.5 MVA GIS substation near Tangnu Romai HEP.
 - b) 33/132 kV, 31.5 MVA GIS substation near Rupin HEP.
 - c) 132 kV Rupin-Sunda D/C line.

For information of the Committee.

ii) Commissioning of 400/220/66 kV substation at Wangtoo in Distt. Kinnaur and 400/220/33 kV substation at Lahal in Distt. Chamba:

- Constraints in transportation of transformers to the sites of above two substations have been discussed in a meeting chaired by Chief Secretary, GoHP on 4.4.2019 and remedial measures to overcome the irritants along with time lines have been suggested in the Action Taken Report submitted by Chief Engineer (PW) in pursuance of meeting dated 4.4.2019.

HPPTCL may update the Committee on the progress made on this account

iii) Finalization of site for 66/220 kV substation at Heling in Distt. Chamba:

- In its 48th meeting held on 3.1.2019, Committee was apprised that the site for the substation has been finalized and tender for the work shall be floated in next week.

HPPTCL may update the Committee.

iv) Land for construction of 220 kV Switching station at Hatkoti:

- In its 48th meeting held on 3.1.2019, Committee was apprised that land for the switching station at Hatkoti covered in Tranche-3 of the ADB loan is yet to be vacated by HPPCL although the cost for the land has been deposited by HPPTCL and HPPCL was advised to take immediate action in the matter.

HPPCL and HPPTCL may update the Committee.

2. **Grant of Long Term Open Access to Upper Nanti HEP (13.5 MW):**

- In the 48th meeting of the Committee, it was decided that HPSEBL shall revisit and sort out the issues connected with grant of LTA to Upper Nanti HEP with the Developer of Upper Nanti HEP.

HPSEBL, IPP and HPPTCL may update the Committee.

In 45th meeting of the Committee held on 20.9.2017, Developer of Upper Nanti (13.5 MW) had raised the issue of Long term Open Access of Upper Nanti HEP which shall inject its power in to Kotla substation of HPSEBL through 66 kV Ghanvi-I-Kotla line of HPSEBL. HPSEBL had linked the date of open access with COD of 400/220/66 kV substation of HPPTCL at Wangtoo due to the reason that 220 kV Bhaba-Kunihar line shall be over loaded after injection of Kut (24 MW) HEP. Developer of Upper Nanti HEP explained that they have PPA with Tata Power and because of absence of Long term open access for 3 months from March, 2018 to June, 2018, Tata Power may pull out of PPA. Spl. Secretary (Power) had informed that Kut (24 MW) HEP is being auctioned and should not be considered while assessing the evacuation capacity of 220 kV Bhaba-Kunihar line. He further informed that if need arises, issue regarding non availability of access for 3 months can be taken up by State Govt. with Tata Power.

Committee had directed HPSEBL to review the capacity of 220 kV Bhaba-Kunihar line after taking in to account the exclusion of Kut HEP. HPPTCL and HPSEBL shall have a meeting to consider giving LTA to Upper Nanti HEP within 15 days

3. **Grant of connectivity to Jari Hydel Project (12 MW):**

- In 48th meeting of the Committee held on 3.1.2019, it was agreed that in view of coming up of 33/132 kV substation at Barsaini, application submitted by the developer of Jari Hydel Project (12 MW) for connectivity at Malana-I 33/132 substation of HPSEBL can be considered and connectivity can be granted.

HPSEBL may update the Committee.

4. **Construction of 132/220 kV substation at Patti and 220 kV Patti-Hamirpur D/C line:**

- HPPTCL is constructing 132/220 kV GIS sub station at Patti along with 220 kV Patti-Hamirpur (PGCIL 400/220 kV substation) D/C line to evacuate power of Small HEPs incident at 33/132 kV Dehan substation of HPSEBL. Due to congestion at Dehan substation, 132 kV S/C line which was under construction by M/S SPML from their pooling station to Dehan substation of HPSEBL was planned to be extended to Patti substation of HPPTCL and for this purpose, 132 kV bay was kept in the scope of award of 132/220 kV Patti substation. It is further to apprise that 132/220 kV substation at Patti and 220 kV Patti-Hamirpur D/C line were earlier planned to be constructed with Tranche-3 of the loan by ADB. However, due to above mentioned congestions at 33/132 kV substation of HPSEBL at Dehan, these works were given priority and were shifted from ADB loan to GEC-I.

HPSEBL has now intimated that 132 kV S/C line under implementation by M/S SPML can not be completed and the projects planned to be evacuated through this line may be given connectivity at 33 kV level to the existing distribution lines.

Since, the proposal to drop the 132 kV line under construction by M/S SPML shall materially affect the scope of award of Patti substation in addition to augmentation of transformers at Dehan substation of HPSEBL, Committee may deliberate on the proposal to drop the construction of 132 kV S/C line by M/S SPML.

- Lambadug HEP (25 MW) in joint mode with other HEPs is constructing 132 kV D/C line from Lambadug HEP to 132 kV yard at Bassi power House of HPSEBL. Currently, space for only one bay at Bassi has been kept and system beyond Bassi is inadequate to handle the pooled power at Bassi till 132/220 kV substation at Patti is completed. It is proposed that instead of terminating 132 kV D/C line from Lambadug HEP at Bassi, the line may be taken to 132/220 kV substation at Patti as the power is to be evacuated at Patti only and proposed LILO of Dehan-Bassi line at Patti shall provide S/C connectivity for these projects where as direct termination of 132 kV Lambadug line at Patti shall provide D/C connectivity and shall render the system (n-1) compliant. Moreover, generators shall have to pay only HPPTCL charges where as in the earlier proposed system IPPs have to pay HPSEBL and HPPTCL charges.

The Committee may deliberate.

5. **Construction of 132/220 kV substation of HPPTCL at Mazra:**

To evacuate power of various HEPs in Tissa valley of Distt. Chamba, HPPTCL has planned one 132/220 kV, 2x100 MVA substation at Mazra which shall be established by LILO of both circuits of 132 kV Kurthala-Bathri D/C line of HPSEBL at Mazra. It is further apprised that after commissioning of Mazra substation, 132 kV Kurthala-Bathri D/C line shall evacuate entire power through Mazra substation and shall virtually become integral part of HPPTCL system. It would be appropriate if the line along with 33/132 kV Kurthala substation is transferred to HPPTCL. This would also remove the duplicity of wheeling charges payable by the IPPs to HPPTCL as well as HPSEBL.

6. **Evacuation arrangements for projects in Ravi Basin:**

As per Master Plan for evacuation of Hydel projects in Ravi basin (Bharmour valley), 220 kV D/C line from the valley has been planned up to 220/400 kV Lahal substation under construction by HPPTCL. One 33/220 kV, 50/63 MVA transformer has been planned at Lahal to cater to evacuation requirements for projects located down stream of Holi which shall inject power at 33 kV level in to Lahal substation through Holi-Gharola 33 kV lines of HPSEBL. HPPTCL has received proposals for injection of following projects in Bharmour valley at 33 kV:

- i) Jai Banni Mata- 24 MW
- ii) Tundah-II- 18 MW
- iii) Dhancho- 18 MW
- iv) Tundan- 15 MW

In order to evacuate power of these projects, it is proposed that these projects pool their power at an optimum location at 33 kV level and step up the pooled power at 220 kV level and bring the pooled power in joint mode at 220 kV level up to Lahal P.S.

For deliberations of the Committee.

7. **Confirmation of Interconnection Points for HEPs for TEC:**

HPPTCL confirms the interfacing points for evacuation of power from various HEPs after studying the feasibility of proposals submitted by the project authorities in the DPRs forwarded by Energy Directorate to HPPTCL. In case of those proposals where interconnection point proposed is the substation/line of HPSEBL, HPPTCL seeks the consent of HPSEBL before confirming the evacuation arrangement to Energy Directorate for accordance of TEC. In the recent past, generators are directly approaching HPPTCL for confirmation of interfacing point after the allotment of the project to them. It is pertinent to

mention here that evacuation arrangement for a project, detailed analysis which includes power absorption survey in the project area, joint mode with downstream/upstream projects, choice of optimum transmission voltage etc. which is included in the DPR as a separate chapter for “Power Evacuation”.

For deliberations of the Committee. Concerned agencies may be directed not to entertain the evacuation proposals with out the Detailed Project report (DPR).

8. **Green Energy Corridor-II (GEC-II) scheme for creation of Intrastate Transmission system for evacuation of power from Small HEPs:**

HPPTCL has already availed funds to the tune of INR 910 Crore from Govt. of India for creation of Intrastate Transmission system under Green Energy Corridor-I (GEC-I) scheme. The funds shall flow to 40% loan from KfW bank of Germany, 40% Grant from National Clean Energy Fund (NCEF) from MNRE. The scheme is already under implementation with completion date as in 2020.

Proposal for availing funds under Green Energy Corridor-II (GEC-II) has been technically concurred by CEA, MoP, Govt. of India and the funds to the tune of INR 1000 Crore shall be available to HPPTCL for taking up works proposed in GEC-II. The major work proposed in the scheme is 400 kV D/C line from a pooling station located in Pangi valley to Mazra substation and shall be routed through Sach Pass. The line is highly capital intensive and shall be completed at an estimated cost of Rs 528 Crore. However, there is no activity for implementation of Small HEPs and medium HEPs in this valley and it is apprehended that there is going to be a huge mismatch between the generation and evacuation arrangement. Impetus needs to be given to early completion of HEPs in this valley.

For deliberations of the Committee.

9. **Construction of 132/33 kV Moginand substation by HPSEBL.**

The work of execution of 220/132 kV, 2x80/100 MVA Andheri (KalaAmb) along with associated 220 kV lines was transferred to HPPTCL on 22.02.2018. The work has been awarded by HPPTCL with the same provisions as were present in HPSEBL’s original scope of work, which also included 2 (two) no. 132/33 kV, 25/31.5 MVA transformers along with 5 (five) no. 33 kV line bays. The whole system & equipments are being planned accordingly.

Now HPSEBL is also proposing 132/33 kV substation at Moginand which is 5-8 Km from HPPTCL’s substation.

Committee may deliberate the requirement of Moginand substation in view of already awarded 220/132/33 kV Andheri substation.

10. **Evacuation arrangements for Small HEPs in Bharmour and Tissa valley of Distt. Chamba:**

- About 40-50 MW of Small HEPs are located upstream of 33 kV Holi substation of HPSEBL. At Holi substation and beyond, the system is not adequate to evacuate the power of these projects. It is proposed to construct 33/220 kV, 63 MVA substation in the yard of GMR Bajoli Holi HEP where the power proposed at Holi substation of HPSEBL can be pooled at yard of GMR Bajoli Holi HEP and further injected in to 220 kV Bajoli Holi-Lahal line of HPPTCL.
- About 60 MW of Small HEPs are planned at Siul Nalla in Tissa valley. The nearest 33 kV substation of HPSEBL at Salooni is inadequate to cater to evacuation requirements of these projects. It is proposed to construct one 33/220 kV, 2x50/63 MVA substation for these HEPs and inject the pooled power in to 220 kV Mazra-Karian line of HPPTCL.

It is further proposed that funding and implementation of these projects shall be taken up only after HPPTCL receives connectivity and LTA applications from the generators.

Submitted for deliberations of the Committee.

11. **Duplicity of Transmission Planning :**

Prior to formation of HPPTCL, planning of transmission lines and substations of 66 kV and above were done by HPSEBL after due deliberations in EHV transmission Committee of HPSEBL. After the formation of HPPTCL, the mandate to plan the EHV network and coordination with CTU, CEA and other Utilities has been entrusted with HPPTCL and the proposals of HPPTCL in this regard are regularly deliberated in the meetings of STU Coordination Committee. However, despite the fact that transmission proposals are planned and posed by HPPTCL in the meetings of STU Coordination Committee, similar planning is also going on in HPSEBL and such proposals are being deliberated and approved in the EHV Transmission Committee of HPSEBL with out consultation of STU, which is leading to confusion at the level of meetings of Standing Committee of Northern Region, where HPPTCL is recognized as the State Transmission Utility but the transmission proposals posed in the meeting have been planned and are proposed to be executed by HPSEBL.

It is proposed that henceforth, all the proposals pertaining to Intrastate Transmission network may only be approved after consultation / ratification with STU.

12. Evacuation arrangement for Chirhind (5 MW) and Kiunr (5 MW) HEPs in Distt.

Chamba:

Chirhind (5 MW) and Kiunr (5 MW) SHEPs in Distt. Chamba have been granted connectivity at 33 kV level at 33/220/400 kV Lahal substation of HPPTCL. The two developers shall jointly construct 1 No. 33 kV S/C line on D/C structures from a common pooling station to Lahal substation of HPPTCL and shall evacuate their power in joint mode. Currently, these two projects have been provided interim connectivity with 33 kV Gharola-Chamba line of HPSEBL till the time Lahal substation is commissioned by HPPTCL.

While the developer of Chirhind HEP has taken initiative and started construction activities, there are issues on the cost sharing of the line between the two developers and in order to resolve the differences, the two parties were invited for discussions in HPPTCL where in they agreed to conclude the joint agreement after mutual discussions. However, it has been informed that consensus on cost sharing has not been formed as yet.

IPPs may apprise the Committee on the status of agreement on cost sharing of the line and its completion.

13. Proposal for EHV Infrastructure strengthening under 24x7 Power For all Scheme.

“24x7 Quality Power Distribution Infrastructures for Hilly State of H.P.”scheme has been formulated to strengthen/ reinforce the existing EHV and power delivery infrastructure in the State. The scheme also includes distribution system strengthening by installation of smart metering, AMI, online billing & Distribution SCADA. To achieve this, EHV infrastructure in the State needs to be strengthened which shall enable higher power consumption and shall boost economic growth of the State in line with vision of Power for All document of GoHP. HPPTCL shall execute the EHV projects proposed in the scheme.

In order to increase the power consumption and reduce losses in the system following works have been proposed:

- a. LILO of 132kV Giri-Kulhal transmission line at 132/33kV Paonta (Gondpur) sub-station.

- b. 132/33kV, 2x20 MVA new sub-station in Rajgarh area at Charna by LILO of 132 kV Giri-Gaura S/C transmission line.
- c. Up gradation of existing 33/11kV sub-station Bahri (Dharampur) to 132/33kV, 2x16/20 MVA by LILO of 132kV Bassi-Hamirpur Transmission line.
- d. 220/132kV, 2x100 MVA Sub-station at Ochaghat (Solan) alongwith LILO of 132kV Solan Gaura Line and reorientation of remaining 132 kV Giri Solan Line with Proposed 220/132 kV Ochaghat S/Stn..
- e. 220 kV D/C transmission line from 220/132kV Ochaghat Substation to 400/220kV Arandwala Substation (PGCIL) and 220/132 kV Giri Substation to 400/220kV Arandwala Substation (PGCIL) after dismantling existing 132 kV Giri-Solan S/C transmission line.
- f. 132/33kV, 2X31.5 MVA sub-station in Dharamshala area & 132 kV D/C transmission line from proposed substation to 220/132 kV Patti (Dehan) substation.

For information and approval of the Committee.