



No. HPERC/PPA/2014-15-3234-43

Dated:27-12-2014

To

**The Managing Director,
HPSEB Ltd., Vidyut Bhawan,
Shimla-4.**

Subject: Guidelines for providing interconnection points for SHPs.

**Reference: Office letter No. HPSEBL/CE(SO&P)/PHT-II/DB-65(A)NP/ 2014-5116-17
dated 04.12.2014, from Chief Engineer (SO&P).**

Sir,

Please refer to office letter under reference, wherein clarification has been sought on the item No.16 of the H.P. Hydro Policy, 2006 as amended by the Government of H.P. vide notification No.MPP-F(1)2/2005-VIII dated 04.03.2014, on the recommendation of the Committee headed by the Chairman, HPERC.

2. In this connection, it is observed that the above referred notification which has been issued by H.P. Govt. pursuant to the report submitted by the Committee on expeditious harnessing on small hydro power potential in Himachal Pradesh, does not envisage interconnection of the SHP with grid system at 33 kV through solid tap. The option for interconnection of SHPs upto 2 MW through solid tap is to be provided upto 22kV voltage only and that too with appropriate protection and loss adjustment, if any, without any facility of deemed generation. Moreover, the applicability clause of the aforesaid report as well as the notification also clearly provide that in case of ongoing projects, all the NOCs, approval and clearances already obtained shall be valid and to that extent new provision will not apply.

3. The Commission finds the following merits in restricting the solid tap upto 22kV level:-

- i) In case of solid tap at distribution voltages of 11 kV and 22 kV upto certain limited capacities, there can be chances of absorption of this power within the local system, atleast for some part of the day. The chances of absorption in local distribution system, in case of solid tap at 33 kV, will not be there except for situations where some 33 kV loads may exist.
- ii) In case of the disruptions, the quantum of disrupted load/generation shall be much smaller in case of interconnection at 11 kV or 22 kV as compared to the same in case of 33 kV system.
- iii) Since the command area of 11 kV and 22 kV lines would generally be less than that for 33 kV, the number of SHPs seeking such solid tap in case of 11 kV and 22 kV lines would generally be lesser as compared to 33 kV.

4. Accordingly, the Commission agrees in principles to the recommendations made by the Committee, including the policy changes notified by the Govt. vide the aforesaid notification, with regard to option of solid tap connection for projects upto 2 MW capacity with appropriate protection and loss adjustment, if any, without any facility of deemed generation.

5. The Commission has, in order to address the situations requiring interim arrangements for evacuation of power, also already made a specific provision under Article 4 of the model PPA for SHPs as under:-

“4.4 INTERIM ARRANGEMENT FOR EVACUATION OF POWER

In case power cannot be evacuated from the Project at the Interconnection Point due to non commissioning of the Project Line, non availability of evacuation system beyond the Interconnection Point or any other technical constraints, the Parties may mutually agree to an interim arrangement, alongwith the terms and conditions thereof, for evacuation of power from the Project till such time the same can be evacuated under the regular arrangement envisaged in the Agreement. However, the Deemed Generation benefit under Section 6.4 or any other provisions of the Agreement shall not be available to the Company for the period during which power is evacuated under such interim arrangement.”

This provision shall be extended, in principle, in case of SHPs availing open access.

6. In view of above, the Commission lays down the following guidelines for deciding the location of Interconnection Point in case of SHPs:-

- (A) Under the regular arrangement, the Interconnection Point has to be allotted at the Control Sub-Station.
- (B) In case of SHPs with capacity upto 2 MW, an option for the interconnection on permanent basis with a line having nominal voltage of not more than 22 kV shall be available, subject to the following conditions :-
 - i) The capacity of SHP does not exceed 2 MW.
 - ii) The developer opts for interconnection through solid tap with line upto 22 kV level if it is technically feasible.
 - iii) The developer shall provide adequate protection for interconnection.
 - iv) The developer shall not be entitled to the benefit of the deemed generation.
 - v) The metering shall be done at the interconnection point. However, in cases where it is not feasible to do so and the meter is installed at some other point, the energy so recorded shall be reduced by the percentage loss estimated on the basis, actual data of line length, conductor size and loading conditions etc. However, in case the distance between the metering point and the interconnection point exceeds 30 meters, the losses shall be deducted at a minimum rate of 0.7 percent of the recorded energy.
- (C) In cases where interim interconnection arrangement is to be made in accordance with para 5 above, the interconnection may be allowed at some Control Sub-Station, other than that at which interconnection has been allotted on regular basis or through LILO arrangement. However, in cases where it is not feasible to do so, the licensee may consider allowing interconnection with an electric line having nominal voltage of not more than 33 kV, subject to the following conditions:-
 - i) Sufficient capacity is available in the electric line and such interconnection shall not adversely affect the voltage regulation beyond the permissible limits, in the time frame in which such interim

- arrangement is proposed, after duly taking into account the additional flows on the line due to commissioning of other projects in the area.
- ii) The capacity of the project does not exceed 5 MW.
 - iii) Maximum of only two SHPs with aggregate capacity not exceeding 7MW (i.e. about 50% of the normal average capacity of 33 kV line) be interconnected with a line under such interim arrangement.
 - iv) The interconnection point assigned for the project under the regular arrangement shall remain unchanged and the interim arrangement shall normally be allowed for a maximum period of two years unless the situation demands otherwise.
 - v) The benefit of deemed generation, normally available under the PPA in case of sale of power to HPSEBL, shall not be available for the period in which such interim arrangement remains in force.
 - vi) Auto Re-closers shall be provided, operated and maintained on all the three branches at the T- point at the cost of the developer in case where such interim interconnection is to be allowed with 33 kV line.
 - vii) In case the implementation of the joint dedicated project line under the regular arrangement is held up due to delay in construction of the other projects forming a part of the joint dedicated system, the other projects in the vicinity shall be included as a part of joint dedicated system duly taking into account the master plan evolved by the Distribution Licensee/STU for evacuation of power from the SHPs etc. However, this shall not entitle the developer to seek change in the interconnection point already allotted to him.
 - viii) The metering shall be done at the interim interconnection point. However, in cases where it is not feasible to do so and the meter is installed at some other point, the energy so recorded shall be reduced by the percentage loss estimated on the basis actual data of line length, conductor size and loading conditions etc. However, in case the distance between the metering point and the interim interconnection point exceeds 30 meters, the losses shall be deducted at a minimum rate of 0.7 percent of the recorded energy.
 - ix) In case where the interim arrangement is to be allowed due to the non-commissioning of the project line and the same causes the additional losses on the HPSEBL's system beyond the interconnection point, as allotted as an interim measure, the parties may mutually agree for the loss compensation on this account while deciding the terms and conditions for the interim arrangement in accordance with the provisions discussed under para 5 above.

7. The guidelines as per part (A) and (B) of para 6 above shall be followed as a general policy. However, deviations, if necessary, may be made in exceptional cases where the availability of grid is normally very erratic due to climatic and other conditions and most of the generation capacity, say above 60%, sought to be connected in deviation of such guidelines is expected to be absorbed in the local area itself on yearly basis. However, the total capacity of SHPs to be connected under such arrangement shall not exceed 5 MW in the area concerned.

8. These guidelines shall also be applicable, in principle, in case of interconnection for the Projects based on other Renewable Energy Technologies.

9. The Technical Standards for construction of electrical plants, electric lines and for connectivity to the grid as well as the Measures relating to Safety as specified by the Central Electricity Authority, and relevant provisions as per other Codes/Regulations shall be followed meticulously and these guidelines shall, in no way be construed as a relaxation to any of such provisions.

It is requested that above guidelines/findings be duly taken in to account while deciding such matters. As regards the specific case mentioned in letter under reference, the same has also to be dealt accordingly based on the facts and merits of the case.

Yours faithfully,

Sd/-
Secretary

Copy forwarded for information and necessary action to the following:-

- 1) The Principal Secretary (Power) to the Govt of H.P., H.P. Secretariat, Shimla-2 with particular reference to notification No. MPP-F(1)2/2005-VIII dated 04.03.2014.
- 2) The Managing Director, HPPTCL, Barowalia House, Khalini, Shimla-2.
- 3) The Director, Directorate of Energy, Shanti Bhawan, Phase-III, New Shimla.
- 4) The Director, HIMURJA, SDA Complex, Kasumpti, Shimla-9.
- 5) The Chief Engineer (SO&P), HPSEBL, Vidyut Bhawan, Shimla-4.
- 6) The Himalaya Power Producer Association, Himurja, SDA Complex, Block No.8-A, Kasumpti, Shimla-9.
- 7) The Bonafide Himachali's Hydro Power Developers Association, Sai Bhawan, Sector-IV, Phase-II, New Shimla-9.
- 8) The Himachal Small Hydro Power Association, Grover Cottage, Opposite Brockhurst Cottage, Shimla-2.
- 9) The RC(IT), HPERC, Shimla-2 for uploading on HPERC website.

Sd/-
Secretary