## HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

Suo-Motu Petition No. 08/2023

CORAM: Sh. Devendra Kumar Sharma, Chairman

Sh. Yashwant Singh Chogal, Member (Law)

Sh. Shashi Kant Joshi, Member

Date of Order: 04.11.2023

In the matter of:-

Fixation of normative O&M charges to be paid by the Small Hydro Power Project(s) (upto 25 MW) and other RE generators connected at Substations owned by the Distribution Licensee where maximum nominal voltage level at any point in such Sub-stations does not exceed 33 kV.

### ORDER

- 1. The Section 86 (1)(e) of the Electricity Act, 2003 provides as under:-
  - "86 (1)(e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee."
- 2. The Commission, in due discharge of the mandate under aforesaid provision of the Electricity Act, 2003 proposes to fix the normative O&M charges to be paid by the Small Hydro Power Projects, selling power to the Distribution Licensee, for utilizing its infrastructure and associated terms and conditions as per the proposal enclosed as **Annexure-"I"**;
- 3. The comments and suggestions of the stakeholders on the above proposal are invited by 4<sup>th</sup> December, 2023. A public hearing on the above proposal will be held on 6<sup>th</sup> December, 2023 at 11.30 AM onwards or soon thereafter in the HPERC.

Sd/- Sd/- Sd/-

(Shashi Kant Joshi) (Yashwant Singh Chogal) (Devendra Kumar Sharma)

Member Member (Law) (Chairman)

#### Annexure-"I"

Fixation of normative O&M charges to be paid by the Small Hydro Power Projects, selling power to the Distribution Licensee, for utilizing its infrastructure.

- 1. The Section 86 (1)(e) of the Electricity Act, 2003 provides as under:-
  - "86 (1)(e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee."
- 2. The Commission has laid down the guidelines to work out the cost of O&M charges for providing interconnection facilities to various IPPs of (upto 25.00 MW) in Para 18 of the Order dated 23.11.2010 passed in the Petition No. 81 of 2010–M/s Astha Projects (India) Ltd. Vs. HPSEBL & another which are reproduced as under:-
  - "18. The Commission, therefore, lays down the guidelines to work out the cost of O&M charges for interconnection facilities for the SHPs (upto 25 MW) as under:-
    - (i) the total amount of normal O&M cost for the interconnecting manned substation shall be apportioned in the ratio of number of feeders for which interconnection facilities are provided to SHPs to the total number of incoming and outgoing feeders irrespective of the voltage level of such feeders. The normal O&M cost of substation shall also include the maintenance costs of the infrastructure works, such as approach roads, staff quarters, sanitation, repair of buildings etc., as per provisions of the agreement;
    - (ii) the prorata amount worked out on the above lines in respect of the interconnection facilities shall be suitably increased to amount for the applicable departmental charges as stipulated in the agreement;
    - (iii) the other provisions including those relating to detailed mechanism for payment of the charges in this regard as contained in the agreement executed by the petitioner with the respondent Board shall remain unchanged. However, the amount billed/ recovered by the Board on account of normal O&M charges in excess of that determined as per the above formulation shall be withdrawn/refunded alongwith the penalty, if any charges on such excess amount.
- 3. The Commission in the above Order has also specified the following in Para No. 16 &17:-
  - "16. The Commission is aware that it lacks jurisdiction to interfere with the agreement voluntarily entered into between the parties but simultaneously such agreement are to be interpreted keeping in view its provisions vis-vis the objective to be achieved. The Commission has also perused the Clause 6.3 of the interconnection agreement as referred to by the respondent Board, as reproduced in para 14 of this order and finds that the same does not make any distinction

- between 33 kV and 11 kV bay/feeders. A plausible interpretation of the said clause would also imply that all the incoming and outgoing feeders should be considered for working out the proportionate amount to be charges to SHPs for normal O&M of the interconnection facilities.
- 17. The Commission finds it appropriate that the normal O&M cost of sub-station should be apportioned for the beneficiaries on the basis of the number of incoming and outgoing feeders at the sub-station."
- 4. Although the HPSEBL has filed a Petition (Petition No.28 of 2018) for determination of O&M charges for the interconnection facilities for the projects having solid tap connections upto 2.00 MW capacity under Section 86 & 94 of the Electricity Act, 2003, but the petition lacks in specific proposal relating to normative O&M charges for solid tap connectivity. Accordingly, the Commission has made following observation in Para-5(F), Para-7 and Para-8 of its Order dated 07.08.2018 in Petition No. 28 of 2018, as are reproduced hereunder:-
  - "5(F) In response to HPSEBL's above proposal, the Commission vide letter dated 31.03.2016 has mentioned that in order to bring the equity, fairness in cost recoveries and to make a transparent & fair process for determining the O&M expenses as well as Infrastructure Development Charges (IDC) of interconnection facilities, HPSEBL is required to examine the possibility for normative approach for IDC and levellised/normative O&M expenses with escalation factor. The Commission accordingly asked HPSEBL to workout proposal for normative approach for IDC and levellised/normative O&M expenses with escalation factor taking into consideration the relevant field data.
  - 7. Taking into consideration the oral and written submissions of HPSEBL, the Commission observes that the Astha Guidelines as referred to by the applicant pertain to the manned sub-stations only and shall not be automatically applicable in case of solid tap connections, which are obviously unmanned. The Commission further observes that the Central Electricity Authority (CEA) has already specified the technical requirements to be met for connectivity to the distribution system as well as for the transmission system in their various regulations. The equipments to be provided at the interconnection point in all such cases involving connectivity with distribution system is so called solid tap mode accordingly essentially have to be identified by the distribution licensee based on the site specific situation in each case. The O&M charges for all such equipments so provided at the interconnection point primarily to meet the technical requirements shall also have to be charged to the beneficiaries i.e. the person seeking such interconnection.
  - 8. As mentioned by the petitioner in their submissions reproduced in para-5(F) of this Order, the HPSEBL is directed to file a proposal for approval of normative O&M expenses on annual basis within three months from the date of this Order for interconnection facilities for SHPs and other RE projects (may be upto 25.00

MW capacity), with or without solid tap arrangement, with escalation factor, after taking into consideration the relevant field data and other factors like geographical and site specific situation etc."

- 5. The provisions of clause 3.3 of the Model PPA for solar PV generation is reproduced as under:-
  - "3.3 The Company shall enter into a separate agreement with the HPSEBL and any other entities owning the System where connectivity is to be provided, within the timelines specified in the HPERC (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2012, as amended from time to time or in three (3) months from the Effective Date, whichever is earlier, for execution, operation and maintenance of the Interconnection Facilities. The agreement shall inter alia lay down the details of the Interconnection Facilities and also the charges and other terms and conditions for the execution, operation and maintenance of the Interconnection Facilities, duly taking into account the principles, if any, laid down by the Commission."
  - 6. The Dept. of MPP & Power, GoHP vide office order No. MPP-F(10)-28/2018 dated 21.01.2021 has constituted a working group to study and examine the existing bay and maintenance charges paid by the Independent Power Producers to the Distribution Licensee (i.e. HSPEBL) and HP Power Transmission Corporation (i.e. STU).
  - 7. The HPSEBL, vide letter No. HPSEBL/CE-(Comm.)/SERC-54/ 2022-23-5809 dated 04.07.2022 forwarded the proceeding of Minutes of Meeting of constituted committee for deciding the bay and maintenance charges to be paid by the IPP in the Himachal Pradesh. The Committee has worked out the cost of ASI bay(s) of different voltage level and based on cost so worked out, the O&M charges calculated as 3% of such cost to be recovered from the IPPs subjected to approval of the HPERC.
  - 8. Further, the aforesaid Committee also recommended that the IPPs will continue to pay the HPSEBL, the O&M charges as raised by the HPSEBL based on presently applicable methodology i.e. as per Astha Guidelines till approval of above referred rates by the HPERC.

- 9. In the meantime Bonafied Himachalies Hydro Power Developer Association has filed a Petition, bearing No. 166/2022 for rationalization of the O&M charges for the interconnection facilities alongwith other issues by referring the Minutes of Meeting of the committee constituted by State government vide notification dated 21.01.2021.
- 10. The Commission heard the matter of Petition No. 29/2023 through court proceeding in detail and decided the issue vide order dated 16.10.2023 with the following observation:-
  - "47. In view of the above discussion and findings, the Commission, in order to promote RE generation in the State, agrees in principle to fix the normative O&M charges of bays for the SHPs (upto 25 MW) and other RE generator connected at such Sub-stations as are owned and operated by the Distribution Licensee i.e. HPSEBL (Respondent No.1) and the maximum nominal voltage level at any point in such Sub-station does not exceed 33 kV. However, such normative charges shall not be applicable for Sub-stations owned and operated by the transmission licensee/STU or for the Sub-stations having GIS.
  - 48. The proposal to fix the normative O&M charges of bay(s), to be recovered by the Distribution Licensee for the uses of its system, from the RE generator, shall require to go through a prior publication process, by floating the proposal on the HPERC website to give an opportunity to all stakeholders to file their objections/suggestions."
- 11. Taking into account the observations made by the Commission in its order dated 16.10.2023 in Petition No. 29/2023 and points elaborated in the preceding paragraphs, the Commission proposes to fix the following O&M charges of bays for the SHPs (upto 25 MW) and other RE generators connected at such Sub-stations as are owned by and operated by the Distribution Licensee i.e. HPSEBL and the maximum nominal voltage level at any point in such Sub-stations does not exceed 33kV.

### 12 Normative Charges Determination:

- a. The Commission acknowledges various variables impacting charges from Renewable Energy (RE) generators below 25 MW capacity for bay operation and maintenance. These include voltage level, Sub-station capacity, bay count, and loading pattern.
- b. The Commission find it appropriate not to fix the bay charges of respective voltage level as recommended by the Committee since the construction of

bay have different components such as geographical area, involvement of transportation cost, number of bays at Sub-station, men power involvement etc. etc. Moreover, the Distribution Licensee have a transparent process to procure the material associated for construction of bays.

c. After considering data/inputs w.r.t current O&M charges being recovered by the HPSEBL from the RE generators up to 25MW for AIS, the Commission hereby propose the normative O&M charges to be recovered from Small Hydro Power Producers and other RE generators for system usage for Sub-Stations and/or lines (infrastructure) owned and operated by Distribution Licensee (HPSEBL), where maximum nominal voltage level at any point in such Sub-stations/lines does not exceed 33kV:-

Sr. No.	Interconnection voltage level	Per bay normative O&M charges for SHPs & Other RE Technologies in Rupee (Lakhs) per annum applicable from FY 2024-25	O&M charges for Solar PV Generation in Rupee (Lakhs) per
1	Connected at control Point/Su	b-station at-	
	(a) 11 kV	2.50	1.25
	(b) 22 kV	8.00	6.00
	(c) 33 kV	8.00	6.00
2	Connected through solid tap a	t-	
	(a) 11/22kV (Above I MW and upto 2 MW capacity)	2.20	1.10
	(b) 11/22kV (above 500 kW and upto 1MW capacity)		0.60
	(c) 11/22kV (above 250 kW and upto 1MW capacity)	1.80	_
	(d) 11/22kV (above 250kW and upto 500 kW capacity)	_	0.50
	(e) 11/22kV (upto 250 kW capacity)	0.70	0.35
	(f) 33 kV(existing cases only)	8.00	_

d. These Normative charges won't apply to Sub-stations owned and operated by the transmission licensee/STU or involving Gas Insulated Switchgear

(GIS) and also for 66 kV and 132 kV owned and operated by the transmission licensee/STU and Distribution licensee and also limited connections at these levels.

# e. Applicability of Normative Charges:

(i) The normative O&M charges shall be applicable from 01.04.2024:

Provided that Small Hydro Project (25 MW) and other RE Generators who have signed O&M agreement with the Distribution Licensee as per the provisions of PPA/connectivity agreement shall have an option to continue with such agreement or to switch over to the regime of normative O&M charges:

Provided further that such an option shall be exercised by the interested Generators within a period of 30 days from the date of this Order:

Provided further that such an option shall be exercised for a period of 10 years at a time:

Provided further that in cases where the Distribution Licensee is not recovering any O&M charges from existing generators particularly having sold tapping, the charges as worked out above for the respective category shall be recovered w.e.f. 01.04.2024 or date of interconnection whichever is later. Any modification/ amendment in this regard if required to be carried out in the O&M agreements the same shall be carried out accordingly.

- (ii) The normative O&M charges shall be escalated @ 5% per annum on compounding basis.
- (iii) The following provisions shall be applicable for RE Generators who exercised option as per the Sub-para 12 (e)(i):
  - (a) Generators switching over to the normative O&M mechanism, having projected payable amount for 2024-25, worked out by compounding the amount payable as per existing O&M agreements for FY 2023-24 by 10%, lesser than the normative rates for FY 2024-25, will follow a gradual adjustment plan. They will pay the current charges escalated at a rate of 10% per annum on annual compounding basis until the total amount reaches the normative value for that year duly escalated as per Sub-para 12(e)(ii). This approach allows for a smoother

transition to normative charges over time, aligning with industry standards.

(b) For Generators switching over to the normative O&M mechanism, in case where the charges payable as per existing O&M agreements for a year exceeds the amount payable at the normative rates, the generator shall continue to make payment without arrear, equivalent to the amount payable by it for 2023-24, without any escalation, till such time the same is higher than the normative rates duly escalated as per Sub-para 12(e)(ii). The amount payable for a year shall in no case be less than the normative rate and escalation as per the Sub-para 12(e)(ii).

### 12.1 Safeguards:

The Commission in order to safeguard the interest of the RE Generators in case which may meet eligibility conditions but otherwise do not exercise the option under Sub-para 12(e)(i) shall continue to pay such charges as per the provisions of the O&M agreements executed by them with Distribution Licensee:

Provided that the amount payable for any year as per the agreement shall not exceed the same worked out by escalating the amount payable for 2023-24 duly escalated on compounding basis @ 10% per annum.

**Illustration:** For computing the maximum payable rate, the amount payable for 2023-24 shall be compounded irrespective of the year for which such rate is to be worked out.

- **12.2** Fixation of normative charges in case of Solid Tap will not automatically entitle the generator to get connectivity through Solid Tap.
- **12.3** Apart from normative O&M charges, the other terms and conditions as agreed in the respective O & M agreements shall be applicable.

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