#### HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

Suo-Motu Petition No.: 08/2023

Date of Order: 23.02.2024

CORAM: Sh. Devendra Kumar Sharma, Chairman Sh. Yashwant Singh Chogal, Member (Law)

Sh. Shashi Kant Joshi, Member

#### In the matter of:-

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

#### **ORDER**

- One of the functions of the State Commission as listed out under Section 86 (1)(e) of the Electricity Act, 2003 is as under:-
  - "Promote co-generation 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."
- A petition under Section 86 of the Electricity Act 2003 was filed before the commission by the Bonafide Himachalies Hydro Power Developers Association bearing Petition No. 29 of 2023 for adjudication of the existing dispute with respect to the Operation and Maintenance Charges being levied/ raised by the Respondent/ HPSEBL in respect of the Interconnection facility/ Bay provided to the Generating Companies who have set up and are operating Small Hydro Electric Projects in the State of Himachal Pradesh and for issuance of directions thereof which was disposed off by the commission vide order Dated 16.10.2023 observing that the proposal to fix the normative O&M charges of Bay(s) shall require to go through a prior publication process by floating the proposal on HPERC's website to give an opportunity to all the stake holders to file their objections/ suggestions. Para 47 to 50 of the said Order are reproduced as under:-

"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.
- 49. The Technical Division of the Commission is directed to formulate a proposal within 15 days from this order for fixing the normative operation and maintenance charges of bays (including solid tap), to be recovered by the Respondent No.1 from the SHPs (upto 25 MW) and other REs generators, connected at 33 kV or lower voltage at the Discom's Sub-stations having maximum nominal voltage of 33 kV by taking into account the data/inputs submitted by the Respondent No. 1 in this Petition, which shall be finalized by the Commission after following the prior publication process.
- 50. The petition is disposed off in view of the aforesaid terms."
- 3. Pursuant to the direction in Para 49 of the Order dated 16.10.2023, as mentioned above, a proposal was put up before the Commission which was registered as Suo-Moto Petition No. 8 of 2023. Therefore, the Commission, in due discharge of the mandate under aforesaid provision of the Electricity Act, 2003 proposed to fix the normative O&M charges to be paid by the SHP and other RE projects, selling power to the Distribution Licensee and RE developer selling power under open access, for utilizing its infrastructure.
- 4. As required under Sub-section (3) of the Section 181 of the Electricity Act, 2003, (hereinafter to be referred as the Act for short) the Commission invited public objections and suggestions by way of insertion of public notice in two News papers i.e. "Dainik Bhaskar" and "The Tribune" on 05.11.2023 under Rule (3) of Electricity (Procedure of Previous Publication) Rules, 2005 and the full text of the draft proposal was made available on the Commission's website: <a href="https://www.hperc.org">www.hperc.org</a>. The last date for filing objections/ suggestions was 04.12.2023.
- 5. The Commission, vide letter dated 06.11.2023 also requested the major stakeholders, including Small Hydro Project Developers Associations, State Government, Directorate of Energy, HIMURJA and Distribution Licensee to

send their objections/suggestions as per the aforesaid public notice. A Public hearing in the matter was also held on 06.12.2023.

- Meanwhile, the Bonafide Himachalies Hydro Power Developers Association also approached the Commission vide their office letter No. BHHPDA 23/394 dated 20.11.2023 requesting to share the data inputs considered in the proposal. Although the HPSEBL had already shared the data with the association, however, the Commission vide email dated 04.12.2023, conveyed the Association that data/inputs w.r.t O&M charges may be collected from the HPSEBL.
- 7. In pursuance of the notice dated 06.11.2023, the Commission received comments/suggestions on the draft proposal from the following Stakeholders:-
  - (i) The Bonafide Himachalies Hydro Power Developers Association, Sai Bhawan, Sector-4, New Shimla-171009 (HP).
  - (ii) Shri. R.P. Suman & Co., VPO Jahu, Teh.-Bhoranj, Distt.- Hamirpur-176048, HP.
  - (iii) KKK Hydro Power Ltd. I-41, DLF Industrial Area, Phase-I, Faridabad-121003.
  - (iv) M/s Padhas Hydel Projects Pvt. Ltd., R/o VPO & Tehsil Shahpur District Kangra (HP) 176206.
  - (v) Umesh Raheja, B-27A, Sushant Lok Phase-1, Gurugram, Haryana-122009.
  - (vi) Gowthami Hydro Electric Co. Pvt. Ltd., Andhra Stage II.

The list of participants who attended the public hearing on 06.12.2023 is annexed as **Annexure-"A"**.

# 8. Objections and issues raised during the public hearing.-

During the public hearing, the stakeholders and their representatives presented their views. The main issues and concerns voiced by them are briefly given as under:-

8.1 Shri. R.P. Suman, the representative of M/s R.P. Suman & Co has reiterating the written suggestions already submitted to the Commission stated that the HPSEBL has worked out the charges for FY 2020-21 as Rs. 10 Lakhs per annum for his project of 4 MW capacity connected at 132/33 kV Sub-station at

Jahu through 33 kV transmission line. These charges were hiked to Rs. 16.88 Lakhs per annum for FY 2022-23. He submitted during the hearing that the HPSEBL has adopted the methodology for calculating the O&M charges of bays for solar PV projects similar to O&M charges of bays adopted for SHPs according to Astha Guidelines and that the hydro power projects run around the clock and need continuous operation whereas the solar power projects run only for 8 to 9 hours in a day. The representative requested the Commission to look into the matter and fix the reasonable normative O&M charges for solar PV at 33 kV level.

- 8.2 The representatives of Raheja Power and Virender Dogra Power project Pvt. Ltd. stated in the Public hearing that the smaller capacity projects upto 2 MW connected at 33 kV level at Sub-station have to pay Rs. 8 Lakhs normative O&M charges as per the proposal which is about 10% of their revenue of Rs. 87 Lakhs (per annum) for 1 MW project which needs to be rationalized accordingly.
- 8.3 The representative of the Bonafide Himachalies Hydro Power Developers Association stated during the hearing that the proposed normative O&M charges of Rs. 8 Lakhs per annum for smaller capacity upto 5 MW is on higher side and by considering the escalation, it works out to be Rs. 53 Lakhs per annum in 40 years of the tariff period which is quite high compared to the O&M charges considered for the project in the tariff calculation. The representative of the Association has also highlighted the annual percentage escalation proposed in the draft proposal and submitted that it should be 3.84 % as considered in the tariff calculation under RE Regulations, 2017.

# 9. Consideration of written submissions and viewpoints expressed in the public hearing by the stakeholder(s) and Commission's analysis/view.-

After having gone through the written submissions relevant with the proposal and the viewpoints expressed by the various stakeholders in the public hearing, the Commission now proceed to analyze the various suggestions which are considered to be relevant for the finalization of the proposal.

#### 9.1 Comments/suggestions:-

# (a) Rational of the proposal:-

M/s KKK Hydro Power Ltd., M/s Padhas Hydel Projects Pvt. Ltd., Umesh Raheja, Virender Dogra Power Projects Pvt. Ltd. and M/s Gowthami Hydro Electric Co. Pvt. Ltd., Andhra Stage II:-

The stakeholders have submitted that it is challenging to comprehend the rationale behind the proposed normative O&M charges of bays in the absence of documented calculation/methodology. The substantial magnitude of these charges in relation to projects (for projects upto 5MW & specially up to 2 MW) is greatly disproportionate to their gross annual revenue.

The Bonafide Himachalies Hydro Power Developers Association has submtted that the detailed breakdown elucidating the methodology behind arriving at the specified figure of 8 lakhs (for 33 kV system) for normative O&M charges may be disclosed by the Commission.

#### Commission's Analysis:-

The main contention of the Small Hydro Project Developers upto 2 MW capacity Projects connected upto 33 kV level at Sub-station have to pay a very high charges i.e. around Rs. 8 lakhs. Similarly, the main contention and concern of the Project Developers upto 5 MW capacity is that the too are being charged O&M charges of bays which are not sustainable and may make the Projects unviable in the long run and, therefore, the charges are required to be rationalized by the Commission so that SHPs are in a position to pay the same and sustain and operate the Projects. Thus, on careful consideration of the submissions of the developers that the bay charges being paid are very high, the Commission is of the view that the bay charges should be linked with the installed capacity. The Commission, therefore, has tried to rationalize the bay charges, as per the capacity of the Project especially keeping in view the hardships being faced by the Small Hydro Projects, some of which are only upto 2 MW capacity and need to pay bay charges as high as Rs. 8 lakhs to Rs. 10 lakhs anually. Hence, the objections

of aforesaid Project Developers have been considered as far as possible while finalizing the bay charges in the subsequent paras.

# (b) Additional implication in some cases and disproportionate bay charges:

M/s Virender Dogra Power Projects Pvt. Ltd. has submitted that as per the current O&M demand notice from HPSEBL, the stakeholder received a demand of Rs. 3.7 Lakhs for the FY 2023-24, whereas an amount of Rs. 8 Lakhs against this actual expenditure of Rs. 3.7 Lakhs, seems very much on the higher side and need more detailed breakdown elucidating the methodology arriving at the specified figure of 8 Lakhs for the O&M normative charges.

M/s KKK Hydro Power Ltd., M/s Padhas Hydel Projects Pvt. Ltd., Umesh Raheja, Virender Dogra Power Projects Pvt. Ltd. and Gowthami Hydro Electric Co. Pvt. Ltd., Andhra Stage II:-

The stakeholders have submitted that the proposed normative O&M charges may have a severe impact on the project's financials and have impact on the project's viability and investor's interest. The smaller capacity SHPs i.e. 1 MW connected at 33 kV may lead to non performing asset.

#### Commission's Analysis:-

(i) As observed in Para 9.1, the Commission is of the view that while determining the bay charges, installed capacity of the project should also be considered. The Commission, therefore, has tried to rationalize the bay charges, as per the capacity of the Project especially keeping in view the hardships being faced by the Small Hydro Power Projects and, therefore, the objections of aforesaid Project Developers have been considered as far as possible while finalizing the bay charges in the subsequent paras.

## (c) Annual escalation factor:-

#### **Bonafide Himachalies Hydro Power Developers Association**

The Bonafide Himachalies Hydro Power Developers Association has made submission that the percentage escalation proposed in the proposal is on higher side and submitted that it should be 3.84% as considered in the

generic levellised tariff determination calculation under RE Regulations, 2017.

# Commission's Analysis:-

With respect to the suggestions of the stakeholder(s) for considering escalation as 3.84% against 5%, the Commission after careful consideration of the matter, is of the view that escalation of 3.84% is just, right and reasonable as this marginal hike shall be sufficient to meet the annual escalation. Therefore, the Commission decides to fix the annual escalation factor of 3.84% on compounding basis.

## (d) Other issues:-

- (i) M/s R.P. Suman and Company, a solar power developer has submitted that its 4 MW (3+1 MW) Solar Power Project is connected through 33 kV line/feeder at 132/33 kV Jahu Sub-station. According to it, in the absence of separate model O&M agreement for Solar PV Projects, the O&M agreement in line to the agreement applicable to SHPs were signed with the HPSEBL. According to him, the hydro power project runs round the clock and needs continuous operation whereas the solar power project runs only for 8-9 hours in a day. The Plant Load Factor of hydro project is more than 60% whereas the Plant Load Factor of solar project is only 16 %. Further, the HPSEBL has raised the demand of Rs. 10,62,975 Lakhs in FY 2018-19 and the same increased to Rs. 16,88,212.00 Lakhs in FY 2022-23 which needs to be rationalized considering the annual income of solar PV plants as well as uses of the system.
- (ii) The Bonafide Himachalies Hydro Power Developers Association has also submitted that the interconnection point may be defined at the bus-bar of the project and these costs may not be burdened upon the developer.

  Commission's Analysis:-
  - (i) The present proposal being considered by the Commission is limited to the nominal voltage level of 33 kV at any point in the Sub-station. The case as represented by M/s R.P. Suman does not fall under the ambit of present proposal as the Solar Project of M/s R.P. Suman & Co. is connected at

- 132/33 kV Sub-station. Hence, the submissions cannot be considered under this proposal.
- (ii) Similarly, the issue raised by the Bonafide Himachalies Hydro Power Developers Association pertaining to the Interconnection Point has no bearing with the present matter and, accordingly can't be considered under the present proposal.
- 10. In view of the above, the Commission, after taking into consideration the objections and suggestions received on the proposal and the deliberation in the public hearing conducted thereon is of the view that there is dire need to rationalize the bay charges to make the same viable and, accordingly, decides to fix the normative O&M charges as per succeeding paragraphs.

#### 11. Normative O&M charges.-

- a. After considering data/inputs w.r.t O&M charges being recovered by the HPSEBL from the RE generators including small hydro projects for Air Insulated Substation (AIS), the Commission hereby fixes the normative O&M charges to be recovered from Small Hydro Power Producers and other RE generators for O&M of interconnection facilities at the Sub-Stations and/or lines (infrastructure) owned and operated by Distribution Licensee (HPSEBL), in cases where maximum nominal voltage level at any point in such Sub-stations/lines does not exceed 33kV:-
  - (i) Normative O&M charges for generators connected at control Point/Substation at 11/22/33 kV having maximum nominal voltage level i.e. 33 kV at any point in Sub-station /control point (AIS) and lines:

SN	Interconnection voltage level	Normative O&M charges for Solar PV Generation in Rupee Lakhs per annum applicable from FY 2024-25	_
(a)	upto 2 MW	Rs. 1.125 Lakhs per MW	Rs. 2.25 Lakhs per MW
(b)	above 2 MW and upto 5 MW	Rs. 1.25 Lakhs per MW with a maximum ceiling of 5 Lakhs	Rs. 2.50 Lakhs per MW with a maximum ceiling of 10 Lakhs
(c)	above 5 MW and upto 6 MW		Rs.12 Lakhs
(d)	above 6 MW		Rs.16 Lakhs

(ii) Normative O&M charges for Solar PV generators connected through solid tap:

SN	Interconnection voltage level	Normative O&M charges for Solar PV Generation in Rupee Lakhs per annum applicable from FY 2024-25
(a)	11/22kV (Above I MW and upto 2 MW capacity)	Rs.1.10 Lakhs
(b)	11/22kV (above 500 kW and upto 1MW capacity)	Rs.0.60 Lakh
(c)	11/22kV (above 250kW and upto 500 kW capacity)	Rs.0.50 Lakh
(d)	11/22kV (upto 250 kW capacity)	Rs.0.35 Lakh
(e)	33 kV (existing cases only)	Rs.4.00 Lakhs

(iii) Normative O&M charges for SHPs & Other RE Technologies (other than solar PV generation) connected through solid tap:

SN	Interconnection voltage level	Normative O&M charges for SHPs & Other RE Technologies (other than solar PV generation) in Rupee Lakhs per annum applicable from FY 2024-25
(a)	11/22kV (Above I MW and	Rs.2.20 Lakhs
	upto 2 MW capacity)	
(b)	11/22kV (above 250 kW	Rs.1.80 Lakhs
	and upto 1MW capacity)	
(c)	11/22kV (upto 250 kW	Rs.0.70 Lakh
	capacity)	
(d)	33 kV (existing cases only)	Rs.8.00 Lakhs

b. These Normative charges won't apply to Sub-stations owned and operated by the transmission licensee/STU or involving Gas Insulated Sub-station (GIS) and also for 66kV and 132 kV owned and operated by the transmission licensee/STU and Distribution licensee and also limited connections at these levels.

#### c. Applicability of Normative Charges:

(i) The normative O&M charges shall be applicable w.e.f 01.04.2024 and shall be escalated as per item (ii) below.

Provided further that in cases where the Distribution Licensee is not recovering any O&M charges from existing generators particularly having connectivity through solid tapping, the charges as worked out above for the respective category shall be recovered w.e.f. 01.04.2024.

- (ii) The normative O&M charges shall be escalated @ 3.84% per annum on compounding basis.
- (iii) For joint mode evacuation, the normative charges shall be recoverable based on the individual capacity actually connected.
- 12. Fixation of normative charges in case of Solid Tap will not automatically entitle the generator to get connectivity through Solid Tap.
- 13. The Commission may review the normative O&M charges after a period of 10 years or any other shorter period as it may consider appropriate:

# **Announced** 23.02.2024

Sd/- Sd/- Sd/- (Shashi Kant Joshi) (Yashwant Singh Chogal) (Devendra Kumar Sharma)

Member Member (Law) (Chairman)