



**ORDER**  
**OF**  
**WEST BENGAL ELECTRICITY REGULATORY COMMISSION**  
**IN THE MATTER OF**  
**CASE NO. OA-440/22-23**

IN REGARD TO THE APPLICATION SUBMITTED BY INDIA POWER CORPORATION LIMITED (IPCL) ON 22.12.2022 SEEKING CLARIFICATION / INTERPRETATION OF REGULATION NO. 18.2.1(H) OF THE WEST BENGAL ELECTRICITY REGULATORY COMMISSION (OPEN ACCESS) REGULATIONS, 2022 IN RESPECT TO APPLICABILITY OF INTRA-STATE TRANSMISSION CHARGES FOR WIND-SOLAR HYBRID RENEWABLE ENERGY.

**PRESENT:**

**DR MALLELA VENKATESWARA RAO, CHAIRPERSON**  
**SRI PULAK KUMAR TEWARI, MEMBER**

**DATE: 23.03.2023**



### **CASE IN BRIEF**

- 1.0 IPCL has submitted an application vide letter RA/II/002/22-23/84 dated 22.12.2022 seeking the clarification/ interpretation of the Hon'ble West Bengal Electricity Regulatory Commission on Regulation 18.2.1(h) of the West Bengal Electricity Regulatory Commission (Open Access) Regulations, 2022, with respect to applicability of intra-state transmission charges for Wind-Solar Hybrid RE.
- 2.0 The petition has been admitted by the Commission and marked as OA-440/22-23.
- 3.0 In the petition, IPCL has made the following submission:
  - a) Regulation 18.2.1(h) of the WBERC (Open Access) Regulations 2022 has specified concessional charges for transmission of renewable energy from pure wind and pure solar at  $1/4^{\text{th}}$  of normal long-term or medium-term transmission charges. However, it is silent over the applicability of regulation 18.2.1(h) on the power generated from Wind-solar hybrid project.
  - b) Regulation 18.2.1(h) refers to pure solar and pure wind sources, but no such definition of "pure solar" and "pure-wind" is provided in the Regulations. It is also stated in SOR that such concessional rate ( $1/4^{\text{th}}$ ) is provided to promote RE sources having low CUF ranging from 17% to 30%.
  - c) It has entered into a 100 MW wind-solar hybrid PPA with SECI, with a minimum guaranteed CUF of 30%. It is also mentioned that based on actual supply of power IPCL is expecting 30% annual CUF considering seasonality trend. It is further stated that, though the PPA is termed as hybrid but injection schedule of solar and wind are declared separately. Thus, according to IPCL, the  $1/4^{\text{th}}$  transmission charge mentioned in regulation 18.2.1(h) of the WBERC (Open Access) Regulations, 2022 will also be applicable to its solar-wind hybrid power.
  - d) Transmission charges are waived or paid at concessional rates by CERC and some other Regulatory Commissions (CERC, Odisha, Chhattisgarh) for RE sources, but no differentiation has been made between RE and hybrid RE sources.





- e) In view of above IPCL sought clarification, whether wind & solar energy from Wind-solar hybrid RE sources qualify for concession under Regulation 18.2.1(h).

### OBSERVATIONS

#### 4.0 The Observations of the Commission are as follows:

- a) in the Statement of Reason (SOR) of WBERC (Open Access) Regulations, 2022 it was clearly mentioned that, the reason of allowing 1/4<sup>th</sup> transmission charge to solar / wind is not to promote a particular sector but to protect solar / wind sources having lower CUF (ranging from 17% to 30%) from higher landed cost. Relevant portion of SOR is reproduced below:

“79.2 Commission’s stand:

The transmission charges under clause 18.2.1(h) are meant for Long term Open Access and Medium-Term Open Access only. The reason is not to promote a particular renewable segment but to protect the solar and wind sources from higher landed cost. As the utilization factor (CUF) of solar and wind are comparatively lower (ranges from 17% to 30%), paying the transmission charge based on capacity contract will effectively increase their transmission charge per unit of generation 4 to 6 time from the sources who do not suffer from such natural variations. The proposed reduction in transmission charge and wheeling charge will put the solar and wind sources in same footing to other open access sources. This concessional transmission charges shall be applicable for pure solar or pure wind open access sources. For others like hybrid RE or storage, etc. no such concessional tariff shall be applicable.”

- b) From the above, it may be evident that the objective is to protect the RE sources with lower CUF, so that the effective transmission cost/ unit of energy transacted remains within same range with that of conventional energy sources. It may further be noted that no specific definition of “pure-solar” and “pure-wind” has been provided in the Regulation.



- c) Conventional power plants like thermal plants have Plant Load Factor (PLF) around 85%. The Capacity Utilization Factor (CUF) for the solar plants as well as wind plants varies from 17% to 30%. It means that energy available from a conventional plant is significantly more than that of Renewable Energy (RE) plants. Now, transmission charges are to be paid on MW capacity basis. It means that a 100 MW conventional power plant will pay the same transmission charge as that of a 100 MW RE plant. However, the energy available from the 100 MW RE plant is much less compared to that of conventional 100 MW plant. It means that RE plants end up in paying more transmission charges per unit than that of conventional plant.
- d) Hybrid power procured by IPCL is a mix of solar and wind power. IPCL has informed that there is separate scheduling for solar and wind power. The combined CUF is around 30%. As such concessional transmission charges should also be applicable for this hybrid power.

### ORDER

5.0 The STU charges for the 100 MW of wind-solar hybrid RE power procured by IPCL under a long term PPA dated 15.01.2020 with Solar Energy Corporation of India and duly approved by the Commission vide order dated 18.01.2021 in Case No. PPA-103/20-21 shall be 1/4<sup>th</sup> of the normal long-term transmission charges of STU provided that the combined annual CUF does not exceed 30%. In case the combined annual CUF exceeds 30% then normal STU charges shall be applicable.

6.0 With the above direction, the petition is, thus, disposed off.

7.0 Let a copy of this order be served upon IPCL and WBSETCL.

Sd/-  
**PULAK KUMAR TEWARI**  
MEMBER

Date: 23.03.2023

Sd/-  
**MALLELA VENKATESWARA RAO**  
CHAIRPERSON

Sd/-  
**SECRETARY**