

CHPL/CERC/TR2024/2024/031
14th March 2024



To
The Secretary,
Central Electricity Regulatory Commission,
3rd & 4th Floor, Chandralok Building,
#36, Janpath Road,
NEW DELHI 110 001

Respected Sir,

Sub : Draft Central Electricity Regulatory Commission (Terms and Conditions for tariff Determination from Renewable Energy Sources) Regulations, 2024 – Regarding.

Ref: RA-14026(11)/1/2023-CERC dated 17.02.2024

With reference to above subject, we wish to submit our comments/suggestions on above referred Draft Regulations:

Point no. 27 Capital Cost

Most of the projects Central India and Southern India are of low head and high flow projects. These projects generally need Kaplan turbines. Because of low head the diameter of runner is bigger and heavier compared to High head low flow turbines. Because of higher diameters, the RPM of the equipments is lower compared to high head machines. Due to low RPM, the cost of the generator is higher. Overall, the cost of Electromechanical equipments is higher. Due to the larger and heavier size of the turbine the civil cost will also be higher. The flows are higher, resulting in high cost of civil for low head projects. Comparison of Low head and High head projects are tabulated below:

High head Low flow Projects	Low head High Flow Projects
Generally, Kaplan Turbine more expensive	Francis/Pelton Turbine, less expensive
Due to High flows Diameters of runner is high	Due to low flow diameter of runner is low
Lower RPM, Generators are expensive	Higher RPM, Generators less expensive
Due to higher flows Civil works quantity is high	Simple civil works
Due to heavy construction Civil cost is high	Civil cost is low
Water conductor system is simple	Water conductor system is complex

The project cost of the low head, high flow projects is generally 20-30% higher than high head low flow projects. Especially for Smaller project < 5 MW cost is still higher compared to bigger project with same parameters. Generally, the cost of small projects of capacity < 5 MW will be more than Rs.13.5 Crore/MW.

Volthills Private Limited

No.304, 3rd Floor, Saket Callipolis Commercial Building Opp. Wipro Corporate Office, Sarjapur Road
Bangalore – 560035, Tel: +91 80 28440996, Email: info@volthills.com CIN: U40105KA2022PTC166855



Considering the technical parameters, steep increase in construction cost and to encourage small developers, we request honorable commission to consider capital cost of Rs. 13.0 Cr/ MW for projects 5 MW to 25 MW capacity and Rs. 13.5 Cr/MW for projects <5.0 MW capacity in other states.

Point no. 7 Project Specific Tariff

In this clause, Small Hydro Projects are not eligible for Project specific tariff determination. Every Small hydro projects are unique and face different challenges like Geological formation, natural calamities, infrastructure etc.. Hence, we request honorable commission to include Small Hydro Projects in the list of renewable energy projects covered under this provision.

Thanking you and hoping for your favorable consideration of our suggestions.

Yours sincerely,
For **Volthills Private Limited**,

Authorised Signatory

Volthills Private Limited

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