



Mosh Varaya Infrastructure Limited

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Phone : 0771-4000018, E-mail : hr@mvil.co.in

CIN : U45203CT1998PLC012921

Date : 12/03/2024

The Secretary
Central electricity Regulatory Commission
3rd& 4th Floor, Chandralok Building
36, Janpath Road, New Delhi -110001

Sub : Comments and suggestions on draft CERC (Terms and conditions for tariff determination from Renewable Energy Sources) Regulations, 2024

Ref : Public Notice No. RA-14026(11)/1/2023-CERC dated 17.02.2024

Hon'ble Sir,

We take this opportunity to present our comments and suggestions on the captioned draft Regulations.

These Regulations shall have a significant impact on how upcoming hydropower projects in the nation turn out. The hydropower sector is presently facing several challenges, such as building projects, getting funding, and setting reasonable rates for long-term, sustainable operations. In recent years, only a small number of projects have been effectively constructed despite government efforts to increase the amount of renewable energy projects in electricity generation.

Since we work in the dual capacity, developer as well as civil contractors for small hydro power projects, we closely understand the problems being encountered by this industry due to low capital cost ceiling norms. We face constraints in negotiating contract price as most of the developers expect us to execute contracts at such low cost at which we are not even in the position to break even. This is the reason why many giant construction companies have either liquidated or on the verge of insolvency.

We request the Hon'ble Commission to please consider our below submissions for determination of tariff for small hydro plants.

MOSH VARAYA INFRASTRUCTURE LIMITED,

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1. Capital cost:

Draft Regulation 27: Commission's Proposal:

(1) *The normative capital cost for small hydro projects during the first year of the Control Period, i.e. the financial year 2024-25, shall be as follows:*

Region	Project Size	Capital Cost (Rs. lakh /MW)
Himachal Pradesh, Uttarakhand, West Bengal, Union Territory of Jammu and Kashmir, Union Territory of Ladakh and North Eastern States	Below 5 MW	1200
	5 MW to 25 MW	1200
Other States	Below 5 MW	890
	5 MW to 25 MW	1027

Our recommendations:

We request the Hon'ble Commission to kindly consider normative capital cost of Rs. 15 Cr/MW for SHP of 5 MW to 25 MW in other States.

It may kindly be observed that the cost of basic construction material like cement, steel, fuel and manpower has increased substantially in the recent years. Moreover, timely execution of project requires adequate and advanced construction equipment. As hydro power projects sites are located in remote or rugged terrains, making transportation of equipment, materials, and man power is difficult and costly. Also, there are significant expenses associated with the upkeep and operation of hydroelectric plants, including regular maintenance and repairs. Moreover, managing local and Naxalite issues requires enormous cost and resources. Tunneling requires specialized workforce and advanced drilling equipment. Geological surprises are not uncommon in any hydel project. Unless the developers are compensated with adequate tariff, the project contractors cannot expect fair price. Hence, in the overall interest of the sector, we request to increase the ceiling limit of capital cost to match with the actual cost of execution.

Hence, we request the commission to consider the above mentioned points, and to accept the data of financial institutions like IREDA and PFC in order to bring the capital cost in line with market and consider minimum of Rs. 15 Cr/MW capital cost for SHP of 5 MW to 25 MW in other States.

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Rajesh Mundra

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2. Capital cost Indexation:

Clause (2) of draft Regulation 27 provides as below:

The capital cost for small hydro projects as specified for the first year of the Control Period shall remain valid for the entire duration of the Control Period unless reviewed earlier by the Commission.

Our recommendations:

Based on wholesale price index, we request the Commission to provide the provision for capital cost indexation for arriving at the capital cost of the projects which commission during the second and third year of the control period.

3. Auxiliary Consumption:

Draft Regulation 29: Commission's Proposal:

Normative auxiliary consumption for the small hydro projects shall be considered as 1.0%.

Our recommendations:

We request the Hon'ble Commission to allow auxiliary consumption as 1.50%.

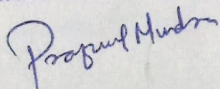
It takes more energy to operate and monitor complex hydroelectric systems with numerous components and subsystems. The efficiency of hydroelectric operations can be impacted by variations in water availability or variable in input rates, which may result in a need for more auxiliary energy to offset variations in power generation. Auxiliary systems must use more energy in order to be integrated with the electrical grid and meet related requirements like voltage management and frequency regulation, which guarantee consistent performance and grid stability.

4. Operation and Maintenance expenses:

Draft regulation 30: Commission's Proposal:

(1) Normative O&M Expenses for the first year of the Control Period, i.e. financial year 2024-25 shall be as under:

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Region	Project Size	Capital Cost (Rs. lakh /MW)
<i>Himachal Pradesh, Uttarakhand, West Bengal, Union Territory of Jammu and Kashmir, Union Territory of Ladakh and North Eastern States</i>	<i>Below 5 MW</i>	<i>49.54</i>
	<i>5 MW to 25 MW</i>	<i>37.15</i>
Other States	<i>Below 5 MW</i>	<i>39.90</i>
	5 MW to 25 MW	28.90

Our recommendations:

We request the Commission, to consider normative O&M expenses for project of 5 MW to 25 MW in 'Other States' as Rs. 36 lakh/MW.

Re-consider the proposed norms for O&M expenses in case of small hydro plants due to following factors:

- i. As hydroelectric facilities age, they often require more frequent maintenance and repairs, leading to higher O&M costs. Wear and tear on turbines, generators, and other components over time can lead to decreased efficiency and reliability, necessitating more frequent maintenance and higher O&M expenses.
- ii. Labor costs: Increases in labor wages or shortages of skilled labor and Fluctuations in the prices of materials such as steel, copper, and concrete can impact the cost of repairs and replacement parts for hydroelectric equipment, contributing to higher O&M charges. Also, Upgrading to more advanced equipment or incorporating new technologies may improve efficiency but could also increase O&M costs due to the need for specialized maintenance and training.
- iii. Severe weather events such as floods, storms, or landslides can cause damage to hydroelectric infrastructure, resulting in unexpected repairs and increased O&M costs. Compliance with stricter safety standards and regulations require additional inspections, maintenance, and safety measures, driving up O&M expenses.

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Prasanna Mudra

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5. Return on Equity

Draft regulation 16: Return on Equity

Commission's Proposal:

The normative Return on Equity for renewable energy projects other than small hydro projects shall be 14%, and that for the small hydro projects shall be 14.5%.

Our recommendations:

We request to increase the pre-tax ROE to minimum 16% for small hydro power projects.

Considering the difficulties faced by the developers in implementing and operating hydro power projects, unless a higher ROE is assured, this sector cannot expect better investment opportunities. Amongst all RE projects, hydro projects are the riskiest assets. Apart from execution challenges, the risk of unforeseen natural calamities causing catastrophic damage to the plant has become very common. No investor shall undertake investment decision unless optimum return is assured. Merely, additional allowance of 0.50% for hydro projects proposed in the draft regulations is not at all justified.

We request the Hon'ble Commission to please consider our above submissions for determination of tariff for small hydro plants.

Thanking You,

Yours Faithfully,

For, Mosh Varaya Infrastructure Limited

MOSH VARAYA INFRASTRUCTURE LIMITED

Propyud Madhu

AUTHORISED SIGNATORY/

Authorised Signatory