

KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM

Present : Shri T K Jose, Chairman
Adv. A.J Wilson, Member
Shri B Pradeep, Member

OP No. 25/2024

In the matter of : Petition seeking approval of Generic Tariff for Micro/
Mini Hydro projects below 500kW installed capacity.

Petitioner : M/s Sleeba Vellakayam Hydro Project Pvt. Ltd.

Petitioner represented by : 1. Y. Sleebachan, M/s Sleeba Vellakayam
2. S. Padmakumar, M/s Sleeba Vellakayam

Respondents : 1. The Additional Chief Secretary to Government.
Power Department. Government of Kerala
2. Kerala State Electricity Board Ltd
(KSEB Ltd)
3. The Director, Energy Management Centre

KSEBL represented by : Shri. Shine Raj, Asst: Executive Engineer
Shri. Rajesh R, Asst: Executive Engineer

EMC represented by : Shri. Dineshkumar A.N, Jt Director

Power Dept: represented by : Smt Preethy C.S, J.S Power dept

Date of hearing : 13.08.2024, 02:30 PM

Venue : Court hall of the commission

Order dated 21.05.2025

1. M/s Sleeba Vellakayam Hydro Project Pvt. (hereinafter referred to as petitioner), filed a petition dated 15.07.2024 before the Commission with the following prayers;
“
 1. *The request of petitioner to provide Generic Tariff of Rs. 6.25 per unit with accelerated depreciation and Rs.6.5 per unit without accelerated depreciation for micro/mini hydro projects with installed capacity up to 500kW being developed by the private investors in Kerala after 1-04-2024 due to increase in capital cost and operation and maintenance cost of these projects.*

2. *To consider the request of the petitioner to provide generic tariff in the letter of comfort issued by the state utility, KSEB Ltd including a draft PPA for the benefit of financial closure of the project.*
3. *To pass any order as the Honourable Commission may consider deem fit and approve under the circumstances of the case and in the public interest.”*

2. Summary of the petition filed by the Petitioner is given below;

- (1) Mr.Y.Sleebachen, a private developer identified Vellakkayam MHP (90kW) at Vellakkayam, Vananppuram Panchayath, Thodupuzha Taluk in Idukki District under own land category as per the Small Hydro policy 2012.
- (2) State Government has allotted sanction to develop 90 kW Vellakkayam MHP of the Petitioner vide GO (MS) No 17/2019/PD dated 31-08-2019 under own land category. The developer has formed a private limited company, viz. M/s Sleeba Vellakkayam Hydro Project Pvt. Ltd for the implementation of the Project.
- (3) KSEBL vide letter dated 10.12.2019 has provided letter of comfort for the purchase of power from the project subject to determination of suitable tariff by the Commission.
- (4) MNRE had earlier provided Central Financial Assistance Scheme (CFA) for the development of small, mini and micro hydel projects upto 25 MW till March 2017.

The developer has approached MNRE with the request to sanction CFA from MNRE for their project. MNRE in its reply, informed that at present there is no such scheme to support Micro Hydel Project and requested to approach the State Government for providing Incentive from State Government for setting up of such micro hydel Projects.

- (5) Accordingly, the developer has taken up the matter with State Government and also with Energy Management Centre (EMC), state nodal agency for promotion of small hydel projects to provide incentives for micro/ mini hydel projects below 500kW.
- (6) Energy Management Center (EMC) has put forth the following recommendations to the Government for due consideration:
 - (a) Provide Generic Tariff in line with CERC guidelines to the projects with capacity up to 500kW.
 - (b) Provide capital subsidy to eligible investor to the hydel projects with installed capacity up to 500kW through EMC by providing necessary budgetary support from the Government in this regard in the ensuing years to EMC.
 - (c) Utilize the grant allocated to the LSGDs for infrastructure development for this purpose for the projects being developed in the concerned Panchayath.

- (d) After commissioning the project and connecting to KSEB's grid, Government can provide financial incentives on the basis of unit of energy supplied to grid, Generation based incentive.
 - (e) Directed the developer to approach KSERC to amend the existing regulation to accommodate a generic tariff for Micro/Mini Hydel projects below 500kW
 - (7) The petitioner further submitted that projects below 500kW cannot be compared with projects with higher installed capacity since the saleable tariff from the project increases with decrease in installed capacity, but the O&M cost remains almost same. Further per kW capital cost also is higher for smaller installed capacities.
 - (8) The petitioner has also submitted that currently the Generic levelised tariff approved by the Commission for hydel projects with installed capacity of and below 2MW limiting capital cost of the project to 779 Lakhs per MW is Rs.5.39 per unit with the benefit of accelerated depreciation and Rs 5.72 per unit without the benefit of accelerated depreciation for projects implemented during the period from 01-08-2022 to 31-03-2024. This tariff will not compensate the higher capital investment made by developer for Micro Hydro Projects up to 500kW and also increase in operation and maintenance cost due to smaller installed capacity.
3. Commission admitted the petition as OP No. 25/2024. Hearing on the petition was conducted on 13.08.2024. Shri.Y. Sleebachan Presented the matter on behalf of the petitioner. Shri. Shine Raj presented the comments of KSEBL.

Summary of the deliberations during the hearing is given below.

- (1) Shri. Y. Sleebachen, Director, M/s Sleeba Vellakayam Hydro Projects Pvt Ltd, on behalf of the petitioner submitted the following;
 - (i) State Government vide the GO (MS) No. 17/2019/PD dated 31.08.2019 has allotted sanction to develop the 90kW Vellakayam SHP under own land category at Vellakkayam, Vananppuram Panchayat, Thodupuzha Taluk, Idukki District.
 - (ii) KSEBL vide the letter dated 10.12.2019 has issued 'letter of comfort' for the purchase of power from the project subject to suitable tariff determined by KSERC.
 - (iii) Capital cost required for the implementation of micro hydel projects of this type is much higher than the capital cost of SHPs with capacity of and above 1MW.

MNRE has dispensed with providing CFA for the micro, mini and small hydel projects since March 2017. MNRE vide its letter dated 11.03.2020 has informed that, at present there is no scheme to support micro hydel projects, and suggested to approach the State Government for providing some incentive from the State Government side for setting up of such Micro Hydel Projects.

- (iv) Energy Management Center, the State Nodal Agency, vide its letter dated 30.05.2024 has recommended the following to the State Government on this issue;

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- (i) *Provide Generic Tariff in line with CERC guidelines to projects with capacity up to at least 500kW. EMC informed investor to approach KSERC and file petition for the inclusion of projects below 500 kW in the generic tariff since it falls within the jurisdiction of the Kerala State Electricity Regulatory Commission (KSERC).*
- (ii) *Presently, EMC have no provision for granting subsidy scheme for projects with capacity up to 500kW for the fiscal year 2024-25. But EMC may include providing subsidy for such SHPs with capacity below 500 kW if possible in our future plan proposals.*
- (iii) *Utilize the grant allocated for Local Self Government Department (LSGD) for infrastructure development since the implementation of SHPs is an infrastructure development program.*
- (iv) *After commissioning the project and connecting it to KSEBL grid, Government can provide financial incentives on the basis of unit of energy supplied to grid.”*

- (v) High land cost, labour cost, difficult terrains, higher logistic cost, higher construction cost and present high steel cost attributes to higher per MW project cost.
- (vi) Hence, the generic tariff approved by the Commission for the SHPs having capacity upto 2MW is no more valid for micro/mini hydro projects.
- (vii) The general letter of comfort issued by KSEBL will not be entertained by the financial institutions to sanction term loans for the projects without collateral security as the revenue from the sale of power is not clear because of the tariff applicable to purchase of power is not mentioned in the comfort letter.
- (viii) The Commission has been offering generic tariff for wind and solar RE project. Compared to the SHPs, installation of wind and solar power plants are easy, requires limited land. However, turbines, water conductor systems etc of SHPs are unique.

Considering the above, small hydel projects can be implemented only with the support of the Government incentives and generic tariff protection.

- (2) KSEBL submitted the following during the hearing held on 13.08.2024.
- (i) KSEBL has issued letter of comfort to the petitioner on 10.12.2019 with the condition that, KSEBL is willing to procure power from the 90kW Vellakayam Micro Hydro Power at a project specific tariff keeping the generic tariff as the ceiling rate, as determined by KSERC subject to other terms and conditions specified in the letter.
 - (ii) The Commission vide the KSERC (Renewable Energy & Net Metering) (1st Amendment) Regulations, 2022 has determined the generic tariff for SHP having capacity of and below 2 MW.

As per the said Regulation, the generic tariff for 35 years is Rs 5.72/unit without the benefit of accelerated depreciation and Rs 5.39/unit with the benefit of accelerated depreciation.

Thus, the Commission has already determined the generic tariff for small, mini, small hydro projects with capacity upto 2MW.
 - (iii) KSEBL further submitted that, for the determination of new generic tariff necessitates framing/amending KSERC (Renewable Energy & Net Metering) Regulations.
 - (iv) KSEBL also submitted that, the changes proposed in the 'letter of comfort' dated 10.12.2019 is not acceptable to KSEBL.
 - (v) If the Commission approve the tariff as proposed by the petitioner, KSEBL may allow right of refusal for the procurement of power from the project as the said tariff is not viable to KSEBL.
- (3) The representative of the EMC recommended the proposal of the petitioner and requested before the Commission to determine generic tariff for small, mini and micro hydel projects with capacity upto 2MW.
- (4) The Commission during the hearing clarified that, as the Government owned power utility, KSEBL has the right to implement the provisions in the SHP policy notified by the State Government time to time. The Commission also clarified that, it cannot determine the generic tariff for RE projects based on a petition filed by the developer/ generator, since it involve amendment/modifications of the KSERC (Renewable Energy & Net Metering) Regulations, 2020 and its amendments.

Commission also clarified during hearing that, both the parties can discuss and finalize a mutually agreed tariff with the generic tariff determined vide the KSERC (Renewable Energy & Net metering) (1st Amendment) Regulations, 2022.

4. KSEBL vide the letter dated 20.09.2024 has submitted its comments, wherein the licensee has reiterated its comments submitted during the hearing held on 20.09.2024.
5. The petitioner vide the letter dated 08.05.2025 has submitted before the Commission that, the petitioner vide the letter dated 25.01.2025 has requested KSEBL to issue a revised letter of comfort specifying the current generic tariff determined by the Commission for hydel projects with capacity of and below 2MW as ceiling tariff so as to enable the developer to achieve the financial closure. However, KSEBL yet to provide the same.

Hence, the petitioner has requested to issue necessary proceedings of the hearing held on 13.08.2024 to enable them to get a letter of comfort from KSEBL so as to achieve financial closure for the project.

Analysis and Decision of the Commission

6. Commission having examined the petition filed by M/s Sreeba Vellakayam Hydro Projects Pvt Ltd, the comments of KSEBL, the provisions of the Electricity Act, 2003, Small Hydro Policy 2012 notified by the State Government, KSERC (Renewable Energy & Net Metering) Regulations, 2020 and its amendments, and other relevant Rules and Regulations in force, decide on the matter as follows;
7. The petitioner M/s Sreeba Vellakayam Hydro Projects Pvt Ltd has filed the instant petition with the prayer to provide the generic tariff of Rs 6.25/unit with accelerated depreciation and Rs 6.50 per unit without accelerated depreciation for micro/ mini hydro projects with installed capacity upto 500kW being developed by private investors in Kerala after 01.04.2024. The petitioner also requested to direct KSEBL to issue letter of comfort specifying the generic tariff including a draft PPA for the benefit of financial closure of the project.

On a preliminary examination, the Commission has noted that, the petitioner failed to explain, under what provisions in the Electricity Act, 2003 and, the Rules and Regulations in force, the instant petition is filed before the Commission. The petitioner also not submitted the details, including the technical and financial norms and parameters adopted for arriving the generic tariff proposed by them.

Considering the above, the instant petition filed by the petitioner is liable to be rejected at the admission stage itself.

8. However, as a potential investor interested in developing micro/ mini hydel projects in the State, and also considering the fact that, the State Government has allotted

the 90kW micro hydel project at Vellakkayam, Vanappuram Panchayat, Thodupuzha Taluk in Idukki under own land category as per the Small Hydro Policy, 2012 notified by the State Government, the Commission has decided to appraise the matter as per the provisions of the Electricity Act, 2003, KSERC (Renewable Energy & Net Metering) Regulations, 2020 and its amendments, in the subsequent paragraphs.

9. The Commission, in exercise of the statutory powers conferred on it under sub-section (1) of Section 181 of the EA-2003 read with Clause (e) of sub-section (1) of Section 86 of the EA-2003 has notified the KSERC (Renewable energy & Metering) Regulations, 2020 and its first amendment in 2022 (herein after referred to as RE Regulations 2020 and RE (1st Amendment) Regulations, 2022.

The Commission has notified the said Regulations, after completing the due procedures for notifying the Regulations specified in the 'Electricity (Procedure for Previous Publications) Rule, 2015 notified by the Central Government vide the General Statutory Rules (GSR) 387(E) dated 09.06.2005.

10. The relevant provisions in the said Regulations for determination of generic tariff of RE and related aspects are discussed below.

(1) Definition of 'Generic tariff'.

The Regulation 2(1) (z) of the RE Regulation 2020 defines the 'generic tariff' as follows;

“ 2(z) 'Generic tariff' means the tariff determined in these Regulations for the electricity generated from the Renewable Energy Plants as per the norms and parameters specified in these Regulations;

(2) Determination of 'Generic Tariff'.

Regulation 35 of the RE Regulations, 2020 provides the procedures and other aspects of the determination of the 'generic tariff' for the renewable sources of energy. The relevant Regulations is extracted below for ready reference;

“ 35. Generic Tariff for the Electricity Generated from Renewable Sources of Energy.-

(1) The Commission may, if considered necessary determine, , the generic tariff for each financial year of the control period, for the electricity generated from the following categories of renewable sources of energy in accordance with the principles, norms and parameters specified or adopted by the Commission in these Regulations and considering the normative values of capital cost, rate of interest and other parameters notified under these Regulations, by an order published in the official Gazette.

- (i) Solar Photo Voltaic (PV) of capacity of and below 5 MW at a location,*
- (ii) Wind Energy of capacity of and below 25 MW at a location,*

- (iii) Small Hydro Electric plants having capacity of and below 5 MW.

Provided that, the generic tariff so determined shall be the upper ceiling limit and shall not prevent the generator and distribution licensee from agreeing to a lower tariff than the generic tariff determined by the Commission.

Provided further that, the generic tariff so determined by the Commission as mentioned above shall not prevent the right of the generator to get a project specific tariff determined, if they so desire, by the Commission as per the provisions of these Regulations. However, the distribution licensee/ purchaser of electricity from RE sources under these Regulations shall pay only the lower of the 'generic tariff of the year of CoD or the project specific tariff' as determined by the Commission.

Provided also that, the generic tariff determined by the Commission shall also not prevent the right of the distribution licensee to procure power from the renewable energy sources through competitive bidding route as per Section 63 of the Electricity Act, 2003.

(2) The generic tariff determined by the Commission for a financial year under these Regulation, shall be applicable to the renewable energy projects which declares commercial operation (COD) during that financial year.

Provided that the generic tariff determined by the Commission for a financial year shall be applicable provisionally to the renewable energy projects which are commissioned after the close of that financial year, till such time, the tariff is revised by the Commission:

Provided further that, as soon as the generic tariff is revised by the Commission for the financial year in which the renewable energy project is commissioned, the revised generic tariff shall be assigned to such renewable energy projects, for which provisional tariff is assigned as per the above proviso from the date of declaration of its Commercial Operation.

(3) For claiming the generic tariff applicable to the wind energy projects in a wind zone, the project developer shall submit necessary and sufficient details for classification of the project into a particular Capacity Utilization Factor (CUF) based on Annual Mean Wind Power Density (W/m^2) validated by the National Institute of Wind Energy.

(4) Notwithstanding anything to the contrary contained in these Regulations, the normative parameters and the generic tariff applicable to Small Hydro projects having capacity of and below 5 MW, Wind Energy having capacity of and below 25 MW and Solar PV plants having capacity of and below 5 MW, for the financial year 2019-20 is specified in Annexure I to III attached."

As extracted above,

- (i) 'generic tariff' is the tariff determined by the Commission for the electricity generated from the 'renewable energy plants' as per the norms and parameters including normative capital costs, specified in the RE Regulations, 2020 and its amendments.

- (ii) The generic tariff has to be determined as part of the RE Regulations, 2020 and its amendments, and has to be published in official Gazette.
 - (iii) Generic tariff determined by the Commission shall be the upper ceiling tariff, and the distribution licensee and the generators are permitted to agreeing to a lower tariff through mutual consensus, than the generic tariff determined by the Commission.
 - (iv) The generator, if so desires, can approach the Commission for determination of 'project specific tariff' as per the provisions of the RE Regulations, 2020 and its amendments. However, the distribution licensee is permitted to pay only the 'lower of the generic tariff or the project specific tariff determined by the Commission.
 - (v) The distribution licensees is also permitted to procure power from the RE plants through competitive bidding as per Section 63 of the EA-2003.
11. The Commission vide the KSERC (Renewable Energy & Net Metering) (1st Amendment) Regulations, 2022, dated 15.07.2022, has determined the generic tariff for the Small Hydro Plants having capacity, of and below 2MW @5.39/unit with the benefit of accelerated depreciation and Rs 5.72/unit without the benefit of accelerated depreciation.

The Commission has notified the said Regulations, after completing all the due procedures including pre-publications, stakeholder consultations including public hearings.

Without complying the provisions of the Electricity Act, 2003, and the Electricity (Procedure for previous publication) Rules, 2005, the Commission cannot modify or amend the generic tariff determined as part of the KSERC (Renewable Energy & Net Metering) (1st amendment) Regulations, 2022, based on a petition filed by the interested parties including distribution licensees, generators etc. Hence the petition filed by the petitioner is liable to be rejected.

12. As discussed above, the Commission has already determined the generic tariff for the small hydro power plants having capacity of and below 2MW as part of the KSERC (Renewable Energy & Net Metering) (1st Amendment) Regulations, 2022. The generic tariff so determined is applicable to the proposed mini hydro plants of the petitioner with the capacity of 90kW. **However, the distribution licensee KSEBL has to take the appropriate decision on whether they desires to purchase power from the plant at the generic tariff or at a tariff lower than the generic tariff duly considering the various factors including the market trend of electricity price of renewables, availability of power, RPO obligations etc.**

13. KSEB Ltd, the incumbent distribution licensee fully owned by the State Government, has been implementing the various policy directives of the Government in the power sector. Hence, in line with the Small Hydel Policy, 2012, and other directives of the State Government, KSEBL may take appropriate decision on procuring power from the small, mini and micro hydel projects being developed in the State at the appropriate tariff with the ceiling at the generic tariff approved by the Commission.
14. The Commission is also aware that, small, mini and micro hydel projects are capital intensive due to various factors, however non-optimal capital cost, if any, cannot be factored in the electricity tariff determined by the Commission. The Commission has been following normative capital cost for the determination of electricity tariff.
15. Hence, the petitioner through Energy Management Center (EMC) may approach the State Government to get VGF/ subsidy for the accelerated development of small/mini and micro hydel projects in the State and to offer electricity at reduced tariff to the Government utility KSEBL.
16. Considering the facts and circumstances as discussed in the previous paragraphs, the petitioner and KSEBL may mutually discuss and arrive a consensus on the tariff for the electricity generated from the project with ceiling at generic tariff determined by the Commission. Once a consensus is arrived between the parties on tariff, the parties may finalise the draft PPA to be entered between them for the purchase of power from the project and approach the Commission with the draft initialed PPA for formal approval.

Order of the Commission

17. Commission after examining the petition filed by M/s Sreeba Vellakayam Hydro Projects Pvt Ltd, the comments of KSEBL, the provisions of the Electricity Act, 2003, KSERC (Renewable Energy & Net Metering) Regulations, 2020 and its amendments, and other relevant Rules and Regulations in force, hereby Orders to reject the petition, due to the reasons explained in the preceding paragraph.

Petition disposed of. Ordered accordingly.

Sd/-
T K Jose
Chairman

Sd/-
Adv. A J Wilson
Member

Sd/-
B Pradeep
Member

Approved for issue

C R Satheesh Chandran
Secretary