

HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

Notification

Shimla, the 08th September, 2020

No. HPERC/428.- In exercise of the powers conferred under section 61, sub-section(1) of section 62, clauses (a), (b) and (e) of sub-section (1) of section 86 and clause (zd) of sub-section (2) of section 181 of the Electricity Act, 2003 (36 of 2003), read with section 21 of the General Clauses Act, 1897 (10 of 1897), and all other powers enabling it in this behalf, the Himachal Pradesh Electricity Regulatory Commission, hereby after previous publication, makes the following amendments in the Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2017, namely:-

Regulations

- 1. Short title and commencement.** - (1) These regulations may be called the Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) (Fourth Amendment) Regulations, 2020.
(2) These regulations shall come into force from 1st April, 2020.
- 2. Amendment of regulation 9.-** In sub-regulation (1) of regulation 9 of Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2017, read with first, second and third amendment thereto (hereinafter collectively referred as “the RE Tariff Regulations, 2017”), after the second proviso, the following proviso shall be inserted, namely;-
“Provided further that the third control period for the small hydro projects under these regulations shall start from 1st April, 2020 and shall end on 30th September, 2023:”.
- 3. Amendment of regulation 13.-** In the 3rd proviso of clause (aa) of sub-regulation(1) of regulation 13, of RE Tariff Regulations, 2017, for the words “zero date and issuing the certificate as per the preceding proviso to this regulation”, the words and signs “zero date, fixing or revising scheduled date of commencement of operation of the project, issuing certificates and also for providing such other information as may be required by the Commission to meet the requirements of these regulations and the State Hydro Policy” shall be substituted.

- 4. Amendment of Chapter-IV.-** In Chapter-IV of the RE Tariff Regulations, 2017, after regulations 32-AA, the following PART-III shall be inserted, namely;-

**“PART-III
FINANCIAL PRINCIPLES
(APPLICABLE FROM 01.04.2020 TO 30.09.2023)**

21-B. Capital Cost.- (1) The norms for the capital cost in case of small hydro projects shall be as specified in Part-III of Chapter-V of these Regulations and in case of other renewable technologies, shall be as stipulated under relevant orders of the Commission under regulation 18.

(2) The norms for the capital cost shall be inclusive of all the expenses required to be incurred as per prudent practices upto the commissioning of the project, including, but not limited to, the cost of capital works, land, preparation of the Detailed Project Report, Survey and Investigation, plant and machinery, civil works, erection and commissioning, financing and interest during construction, land acquisition, resettlement and rehabilitation, contribution towards Local Area Development Fund (LADF), statutory and non-statutory clearances and evacuation infrastructure up to inter-connection point (also including interconnection facilities), insurance charges against the risks during construction stage etc. and also all taxes, levies and duties on all such components/works capital works:

Provided that any cost pertaining to allotment of the project, including upfront premium and any other amount charged by the State Government while granting extension or capacity enhancement or/and any liquidated damages/penalty imposed by the licensee in accordance with the power purchase agreement executed with it, or by the State Government in accordance with the implementation agreement executed with it, will not form part of the capital cost:

Provided further that for project specific tariff determination, the renewable energy generator shall submit the item wise break-up of capital cost along with its petition in the manner specified under regulation 19 and the capital cost admitted by the Commission shall be taken into consideration.

22-B. Subsidy or incentive or grant/budgetary support by the Central/ State Government.- (1) While determining the generic levelled or project specific levelled tariff, as the case may be, for the renewable energy project(s) under these Regulations, the Commission shall take into consideration any incentive and/or subsidy and/or grant available under the schemes of the Central or State Government or their agencies, but excluding accelerated depreciation benefit under the Income Tax Act:

Provided that the capital subsidy under the schemes of the Central or State Government or their agencies shall be adjusted in the normative capital cost and the cost so arrived, after such adjustment, shall be considered for computing Debt-Equity Components for the purposes of determination of generic levelled tariffs:

Provided further that where the Central Government or the State Government notifies, or has notified, any generation based incentive (GBI) scheme for a particular kind of renewable technology, such technology based generating station shall be assumed to have availed the benefit of such a scheme and their tariffs shall be reduced by the amount of generation based incentive (GBI) per unit for the period during which such incentive remains applicable.

(2) Where any additional project specific grant or budgetary support is available to any project, apart from the incentive and/or subsidy and/or grant available under sub-regulation (1) of this regulation, the Commission shall account for such budgetary support also, while determining project specific levelled tariff.

(3) The amount of subsidy shall be considered for each renewable source as per the applicable policy of the MNRE/State Government/Central Government and if the amount and/or mechanism of subsidy is changed by the MNRE/State Government/Central Government, consequent corrections in tariffs may be carried out by the Commission in accordance with regulation 20.

23-B. Debt-Equity Ratio.- (1) The normative debt equity ratio shall be 70:30.

(2) For generic levelled tariff, the Commission shall adopt debt equity ratio of 70:30:

Provided that for arriving at the amount of debt and equity, the debt equity ratio shall be considered after deducting, from the normative capital cost, the amount of incentive, grant and capital subsidy available for the project.

(3) For project specific levelled tariff, the following provisions shall apply-

(i) if the equity actually deployed is more than 30% of the net capital cost arrived at after subtracting the incentive, grant and capital subsidy from the capital cost admitted by the Commission under regulation 15, the equity deployed in excess of 30% limit shall be treated as normative loan in accordance with the National Tariff Policy and shall be deemed as advanced at the weighted average rate of interest and for a weighted average tenor of the long term debt component of the project after ascertaining the reasonableness

- of the interest rates and taking into account the effect of debt restructuring, if any;
- (ii) in case the equity deployed is equal to or below the normative level of 30%, the actual equity would be used for determination of Return on Equity in tariff computations;
 - (iii) the equity invested in foreign currency, if any, shall be designated in Indian rupees on the date of each investment.
 - (iv) for arriving at the amount of equity in cases involving project specific determination of tariff, the debt equity ratio shall be considered after deducting, from the capital cost admitted by the Commission under Regulation 15, the amount of incentive, grant and capital subsidy available for the project.

Explanation.- For the purposes of return on equity, any resources available to the renewable energy generator from its share premium account or from its internal resources that are used to fund the equity commitments of the project under consideration shall be treated as equity subject to the limitations contained in this regulation and regulation 26-B.

(4) The Commission shall treat any incentive or subsidy and/or grant/budgetary support available from the MNRE/State Government/Central Government, to have been availed and shall adjust the same as per the provisions of these regulations.

24-B. Loan and Finance Charges.- (1) For the purpose of determination of tariff, loan tenure of 15 years shall be considered:

(2) Interest Rate.-

(a) The loan amount (i.e. the debt component) arrived at in the manner indicated in the regulation 23-B shall be considered as gross normative loan for calculation of interest on loan. The normative loan outstanding as on 1st April of every year shall be worked out by deducting the cumulative repayment up to 31st March of previous year from the gross normative loan.

(b) For the purpose of computation of tariff(s) under these Regulations, normative interest rate of two hundred (200) basis points above the average State Bank of India Marginal Cost of Funds based Lending Rate (MCLR) (one year tenor) prevalent during the last available six months, prior to the respective date(s) from which such tariff(s) the respective generic levelled tariffs are to be made applicable, shall be considered:

Provided that in case where the project specific tariff is to be determined, such average rate of SBI, as prevalent during the respective periods in which the loan has been availed, shall be taken into account on weighted average basis and the rate so worked out on this basis or the

weighted average rate at which the loan has been availed, whichever is lower, shall be considered.

- (c) Notwithstanding any moratorium period availed by the renewable energy generator, the repayment of loan shall be considered from the first year of the tariff period and shall be equal to the annual depreciation allowed.
- (d) The loan repayment for a financial year or the relevant part period thereof shall be considered to have been done in the middle of that financial year or the relevant part period thereof, as the case may be.

25-B. Depreciation.- For the purpose of tariff determination, depreciation shall be computed in the following manner, namely:-

- (a) the value base for the purpose of depreciation shall be equal to sum total of the debt and equity components as per the provisions of regulation 23-B;
- (b) the salvage value shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the value base as per clause (a) of this regulation:

Provided that no depreciation shall be allowed to the extent of incentive, grant and capital subsidy available for the project.

- (c) depreciation per annum shall be based on 'Differential Depreciation Approach'. For tariff purposes, the depreciation shall be allowed @ 4.67% per annum of the value base as per clause (a) of this regulation till such time the requirement for repayment of loan component of the capital cost as per regulations 21-B, 23-B and 24-B is fully provided and the remaining depreciation shall be spread over the residual useful life of the project on straight line method;
- (d) depreciation shall be chargeable from the first year of commencement of operation of the project:

Provided that in case of operation of the asset for part of the year, depreciation shall be charged on pro rata basis for the purposes of project specific determination of tariff.

26-B. Return on Equity.-(1) The value base for the equity (on which return on equity shall be calculated) shall be equal to the equity component computed in accordance with the provisions of regulation 23-B.

(2) The normative Return on Equity shall be 14%. The normative Return on Equity shall be grossed up by the latest available notified Minimum Alternate Tax (MAT) rate for the first 20 years of the Tariff Period and by the latest available notified Corporate Tax rate for the remaining Tariff Period.

27-B. Interest on working capital: (1) The working capital requirement in respect of wind energy projects, small hydro power, solar PV and solar thermal projects shall be computed in accordance with the following: -

- (a) operation and maintenance expenses for one month;
- (b) receivables equivalent to 45 days of energy charges for sale of electricity calculated on the net saleable energy corresponding to the CUF considered for tariff determination on normative basis;
- (c) maintenance spare @ 15% of operation and maintenance expenses.

(2) The working capital in respect of biomass power projects with Rankin Cycle technologies, biomass gasifier based power projects, non-fossil fuel based cogeneration projects, Municipal Solid Waste power projects and Refused Derived Fuel project shall be computed in accordance with the following:-

- (a) fuel cost for four months equivalent to normative Plant Load Factor (PLF);
- (b) operation and maintenance expenses for one month;
- (c) receivables equivalent to 45 days of energy charges (fixed and variable charges) for sale of electricity calculated on the net saleable design energy on normative basis;
- (d) maintenance spare @ 15% of operation and maintenance expenses.

(3) In case of the renewable technologies not covered in sub-regulations (1) and (2), the Commission may adopt such norms, as it may consider appropriate, at the time of determination of tariff.

(4) Interest on Working Capital shall be at interest rate equivalent to the normative interest rate of three hundred and fifty (350) basis points above the average State Bank of India Marginal Cost of Funds based Lending Rate (MCLR) (One Year Tenor) prevalent during the last available six months, prior to the respective date(s) from which the generic tariff(s) are to be made applicable:

Provided that in case where the project specific tariff is to be determined, such average rate for the last available six months prior to the date from which the project specific tariff is to be made applicable, shall be considered.

28-B. Operation and maintenance expenses.- (1) Operation and maintenance expenses mean the expenditure incurred on operation and maintenance of the project, or part thereof, and includes, without limitation, the expenditure on manpower, establishment (including employees expense, administrative and general expenses), repairs, spares, consumables,

insurance and overheads as well as the taxes, duties and other levies on any or all such activities.

(2) Operation and maintenance expenses shall be determined for the tariff period based on normative operation and maintenance expenses specified in Part-III of Chapter-V of these Regulations for the small hydro projects and as stipulated in relevant orders of the Commission for other renewable technologies.

(3) Normative O&M expenses allowed under these Regulations shall be escalated over the tariff period at the rate of 3.84% per annum.

29-B. Taxes and duties.- Tariff determined under these Regulations shall be inclusive of all taxes and duties and shall not be subject to any change except for the provisions specified under regulation 20.

30-B. Rebate.- (1) The due date for payment of bills shall be 45 days from the date of billing.

(2) For payment of bills of the generating company through revolving and valid letter of credit on presentation or through National Electronic Fund Transfer (NEFT) or Real Time Gross Settlement (RTGS) payment mode within a period of 5 days of presentation of bills, a rebate of 1.5% on bill amount shall be allowed.

(3) Where payments are made on any day after 5 days within a period of thirty (30) days from date of presentation of bills by the generating company, a rebate of 1% shall be allowed.

Explanation.- For computing the '5 days' and other cutoff dates for the purposes of this regulation and regulation 31-B, the number of days shall be counted consecutively without considering any holiday. However, in case the last day is official holiday, the last day for these purposes shall be construed as the immediate succeeding working day.

31-B. Late payment surcharge.- The distribution licensee shall make timely payments of energy bills of the renewable energy generators by assigning priority over and above all other payments. In case the payment of any bill for charges payable under these Regulations is delayed beyond a period of 45 days from the date of billing, a late payment surcharge at the simple interest rate of 1.50% per month shall be levied by the renewable energy generator for the actual number of days by which the payment is delayed.

32-B. Ceiling norms.- The financial norms, except for capital cost, as specified in this Chapter of these Regulations, shall be considered as ceiling norms and the same shall not preclude the licensee or renewable energy generator from agreeing to improved norms, including operation and

maintenance norms, which may lead to overall reduction in the levelled tariff and in case the improved norms are agreed to, such improved norms shall be applicable for determination of the project specific levelled tariff.

32-BB. The provisions of this Chapter shall be applicable for all the RE technologies for the matters to be dealt under third control period irrespective of the intervals at which the generic levelled tariffs are determined under this control period.”

5. Amendment of Chapter-V.- In Chapter-V of the RE Tariff Regulations, 2017, after regulation 39-AA, the following PART-III shall be inserted, namely;-

**“PART-III
TECHNOLOGY SPECIFIC PARAMETERS FOR SMALL HYDRO PROJECTS
(APPLICABLE FROM 01.04.2020 TO 30.09.2023)**

33-B. Categorisation.- For the purpose of tariff determination, the small hydro projects shall be categorized as under:-

(i)	Above 100 kW to 2 MW capacity
(ii)	Above 2 MW but below 5 MW capacity
(iii)	5 MW to 25 MW capacity

34-B. Normative Capital Cost.- (1) In case of small hydro projects, the normative capital cost, inclusive of all its components as specified in regulation 21-B of these Regulations, for the control period shall be as under:-

Sr. No.	Category of small hydro project	Rupees (in Lac) per MW of the installed capacity.
(i)	Above 100 kW to 2 MW capacity	1100
(ii)	Above 2 MW but below 5 MW capacity	1100
(iii)	5 MW to 25 MW capacity	1100

(2) The subsidy/grant/budgetary support or incentives etc. provided by the Central/State Government or their agencies shall be adjusted in accordance with the regulation 22-B of these Regulations.

35-B. Normative saleable energy.- (1) The normative saleable energy at the interconnection point for the purpose of generic levelled tariff shall be computed on the following lines namely:-

(i) the normative annual capacity utilisation factor (CUF), net of 13% free power (including 1% contribution towards the Local Area Development Fund (LADF)), shall be 47.85% for all the small hydro projects upto 25 MW. The number of hours in a year for calculations of CUF shall be 8766;

(ii) the quantum of normative annual saleable energy worked out for the

installed capacity of the project at the normative CUF under preceding clause (i) shall be reduced by 1.7%, to account for the auxiliary consumption, transformation losses and the losses in the project line(s) at the normative rates as per regulations 37-B and 38-B, to arrive at the normative saleable energy at the interconnection point;

- (iii) the generic levelled tariff determined on the basis of the normative saleable energy at the interconnection point as per the preceding clause (ii) shall be deemed to have accounted for total free power of 13% (including 1% contribution towards the Local Area Development Fund (LADF)):

Provided that in case where the generic levelled tariff is to be determined for a free power structure which is at variance from the above, the net saleable energy shall be adjusted suitably after taking into account the free power structure corresponding to which such tariff is to be determined.

(2) The normative capacity utilization factor (CUF) under clause (i) of sub-regulation (1) takes into account the impact of mandatory release of water discharge immediately downstream of diversion structure of the project based on the existing instructions of the State Government which provide that for the purpose of determination of minimum discharge, the threshold value not less than 15% of the minimum inflow observed in the lean season shall be considered.

(3) The normative year wise net saleable energy for the purpose of project specific tariff determination shall also be worked out on similar lines given in sub-regulations (1) and (2) but by taking into account the annual Capacity Utilisation Factor (CUF) in accordance with clause (ii) of sub-regulation (1) of regulation 15, the normative auxiliary consumption and transformation losses under regulation 37-B and the energy losses in the project line under regulation 38-B.

36-B. Free Power.- (1) The Commission shall consider appropriate structure(s) of free power for determination of generic levelled tariffs for various categories of small hydro projects, as mentioned in regulation 33-B, duly keeping in view of the provisions of the State Hydro Policy for allotment of sites for small hydro projects, National Hydro Policy, Tariff Policy and the limits specified under sub-regulation(3):

Provided that in case the structure of free power actually applicable to a project, duly curtailed as per sub-regulation (3), is at variance from the structure considered while determining the generic levelled tariff, such tariff shall be suitably adjusted based on the structure of free power applicable subject to the limit specified in sub-regulation(3):

Provided further that in cases requiring determination of the project specific tariff, the Commission shall consider the structure of free power actually applicable to that project subject to the above and the limits specified in sub-regulation(3).

(2) In case of any change in the structure of free power for a small hydro project from that considered for the determination of generic levelled tariff or project specific levelled tariff in accordance with sub-regulation (1) or in cases where the adjustment in tariff on account of variation in free power has to be allowed as per the specific provisions contained in these Regulations, including those covered in regulation 17 and sub-regulation (2) of regulation 20, the distribution licensee shall adjust the tariff as per the following formula:-

Rate payable for the month for the net saleable Energy (Rs/kWh)	= a x (100-b)/(100-c)
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Where,-

“a” is the levelled tariff (in Rs/kWh) which is required to be adjusted under this regulation

“b” is the free power (in percentage) taken into account or deemed as taken into account for the month, in “a” in the corresponding month of the tariff period by reckoning the date of commencement of operation of the project as the starting date of the tariff period.

“c” is the free power (in percentage) to be allowed in the tariff for the month subject to maximum limit of 13% free power(energy) and the provisions of sub- regulation (3)-

Where free power is applicable at different rates for different parts of a month, the permissible free power (i.e. “c”) shall be determined under this sub-regulation separately for each such part and weighted average rate for the month as a whole shall be worked out by considering the total quantum of energy for each day of the month.

(3) The free power (in percentage) to be taken into consideration for the purpose of determination of tariff under sub-regulation (1) and/or any adjustment under sub-regulation (2) shall be subject to the following: -

- (i) The free energy to be taken into account for any part of the tariff period for the purposes of sub-regulation (1), or to be allowed for any part of the tariff period for the purposes of sub-regulation (2), shall not exceed 13% free power (energy) which includes 12% free power to home State and 1% additional free power for Local Area Development Fund, as stipulated in the National Hydro Policy/ Tariff Policy;

- (ii) Any quantum of free energy, if committed by the renewable energy generator over and above the 13% free power (energy) for any period shall not be factored into the tariff;
- (iii) Additional free energy, if any, to be provided by the renewable energy generator to the State Government, on account of curtailment of waiver period due to delay in commissioning of project as per provisions of Implementation Agreement and/or for enhancement of capacity and/or for any reason attributed to the renewable energy generator shall not be taken into account even if the total free power for any period, including such additional free power, does not exceed 13% free power(energy);
- (iv) The quantification and adjustment of free energy as well the energy accounting shall be made with reference to the energy projected/ received at the interconnection point;
- (v) The free energy to be allowed for any period for the purpose of sub-regulation (2) shall in no case be more than that actually deducted for that period in the energy accounts, out of the total energy received at the interconnection point.

37-B. Auxiliary consumption and transformation losses.- Normative auxiliary consumption and transformation losses for the small hydro projects shall be 0.5% of the gross generation and the same for transformation losses at the switchyard linked to the generating station of the projects shall also be 0.5%:

Provided that for the sake of simplicity, these two factors shall be clubbed together and accounted for as 1% of the gross generation.

38-B. Energy losses.- (1) The normative energy losses in the project line(s) shall be 0.7% of the gross generation.

(2) For the project specific levellised tariff, the percentage losses worked out on the basis of actual length of the project line(s), conductor size and expected power flow shall be taken into consideration.

39-B. Operation and maintenance expenses.- (1) Normative annual O&M expenses for the control period shall be as follows:-

Sr. No.	Installed capacity of SHP	Annual O&M expenses in Rupees (in Lac) per MW of installed capacity
(i)	Above 100 kW to 2 MW capacity	41.78
(ii)	Above 2 MW but below 5 MW capacity	41.78
(iii)	5 MW to 25 MW capacity	31.34

39-BB. Adjustment for fraction of a MW of the installed capacity.- The installed capacity shall be rounded to one decimal place by ignoring the fraction of less than 0.05 MW and by considering the fraction of 0.05 MW and above as 0.1 MW.”

6. Consequential amendments in the Regulations.-

On and from the commencement of these amendment regulations, in relation to the Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation for the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2017, in the regulations mentioned in Column (2) of the Table given below, the references to the regulations mentioned in Column (3) shall be construed as if references therein are the references to the regulations mentioned opposite thereto in the Column(4) of the said Table.

Table

Sr. No.	Regulations of the said regulations	For existing references	Substitute reference to
(1)	(2)	(3)	(4)
1.	Clause (c) of sub-regulation (1) of regulation 2.	regulation 21 or 21-A, as the case may be	regulation 21 or 21-A or 21-B, as the case may be
2.	Proviso of clause (iii) of sub-regulation (1) of regulation 14.	Chapter-IV and Chapter-V	PART-I of Chapter-IV and PART-I of Chapter-V
3.	Sub-regulation (2) of regulation 14.	regulations 33 or 33-A, as the case may be	regulations 33 or 33-A or 33-B, as the case may be
4.	Proviso to sub-regulation (1) of regulation 15.	regulation 32 or 32-A, as the case may be	regulation 32 or 32-A or 32-B, as the case may be
5.	Clause (b) of sub-regulation (1) of regulation 16.	regulations 20 to 39 or 20-A to 39-A, as the case may be	regulations 20 and 21 to 39 or 21-A to 39-AA or 21-B to 39-BB, as the case may be
6.	Sub-regulations (5) and (7) of regulation 17.	regulation 36 or 36-A, as the case may be (wherever occurs)	regulation 36 or 36-A or 36-B, as the case may be
7.	Sub-regulation (5) of regulation 18	regulations 32 or 32-A, as the case may be	regulations 32 or 32-A or 32-B, as the case may be
8.	regulation 20	(i) regulation 36 or 36-A, as the case may be (wherever occurs)	i) regulation 36 or 36-A or 36-B, as the case may be
		(ii) regulations 22 or 22-A, as the case may be	(ii) regulations 22 or 22-A or 22-B, as the case may be

By order of the Commission

Sd/-
Secretary