## HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION

(Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2017, Dated: 16.11.2017 with amendment Dated: 07.05.2018, 28.01.2019, 11.11.2019, 23.03.2020, 20.12.2020.

SI. No.	Description	Summary			
1.	Control Period	<ol> <li>The first control period for the small hydro projects under these Regulations shall start from the 1st October, 2017 and shall end on the 30th September, 2019.</li> <li>The second control period for the small hydro projects under these regulations shall start from 1start from 20ctober, 2019 and shall end on 31st March, 2020.</li> <li>The third control period for the small hydro projects under these regulations shall start from 1start from 2start fro</li></ol>			
2.	Applicability	These Regulations shall not apply in the following cases:  • where agreements for disposal/use of energy, whether on long term basis or under REC			
		mechanism or otherwise of energy have either already been signed by the renewable energy generators or have been approved by the Commission, or the joint petitions for the approval of the Power Purchase Agreements have been filed before the Commission, prior to the date of commencement of these Regulations.  • Small Hydro Projects upto 100 kW, for which the Commission may determine tariff through a separate order.  • where the tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government			
		where the renewable energy generator, implementing the small hydro project, has commenced the operation of its project, prior to the date of commencement of these Regulations.			
3.	Grid Connectivity	<ol> <li>The renewable energy generator shall construct, operate and maintain the project line(s) at his cost.</li> <li>The licensee shall, at the cost of renewable energy generator, provide, operate and maintain the interconnection facilities.</li> <li>The transmission licensee and/or the distribution licensee shall bear the cost of augmentation/establishment of network beyond the inter-connection point under the CAPEX PLAN and the new or the augmented network shall form part of the assets of the transmission or the distribution licensee, as the case may be.</li> </ol>			
4.	Tariff Period	The duration of tariff period in case of small hydro projects shall be 40 years and for other renewable technologies, the Commission may fix the same under these Regulations.			
5.	Tariff Design	<ol> <li>The single part levellised tariff structure shall be followed for the renewable energy technologies.</li> <li>For RE technologies having fuel cost component, like biomass power projects and non-fossil fuel based cogeneration, single part tariff with two components, i.e. fixed cost component and fuel cost component, shall be determined.</li> <li>Fixed cost components- Return on equity, Interest on loan capital, Depreciation, Interest on working capital and Operation and maintenance expenses.</li> <li>The generic or project specific tariff shall be determined on levellised basis for the tariff period.</li> </ol>			
6.	Discount Factor	For the purpose of levellised tariff computation, the discount factor equivalent to the post tax weighted average cost of capital shall be considered.			
7.	Generic Levellised Tariff	<ol> <li>For Small Hydro Projects up to and including 100kW, the Commission may determine the Generic Levellised Tariff for the balance period of the 3rd Control period ending on 30.09.2023 by taking into account the financial parameters specified for the RE technologies as per these Regulations may be fixed by it in the tariff determination Order in a manner as it may find appropriate.</li> <li>The generic levellised tariffs already determined for the SHPs, in relation to the first control period under these Regulations, shall remain in force upto 30th September, 2019:</li> <li>The generic levellised tariffs determined, for the solar PV technology in respect of the financial years 2017-18 and 2018-19 shall also remain in force until the expiry of the respective periods for which the same had been fixed.</li> <li>The tariff being normative, any shortfall or gain due to performance or any other reasons is to be borne/retained, as the case may be, by the renewable energy generator and no true up of any parameter, including additional capitalisation for whatsoever reasons, shall be taken up during the validity of the tariff except for the specific provisions in these Regulations.</li> </ol>			

## Where the parties to a power purchase agreement, for a project have mutually agreed, in such power 8. **Project specific** purchase agreement for which joint petition is filed before the Commission on or after commencement levellised Tariff: of these Regulations, and is thereafter approved by the Commission, and executed thereafter by the parties, opted for a project specific levellised tariff, the Commission shall determine such tariff taking into consideration. Where the project specific levellised tariff exceeds 105% of the corresponding generic levellised tariff, duly adjusted for permissible rate of free power if any, determined by the Commission in relation to the control period or other provisions under which the power purchase agreement was approved by the Commission, the distribution licensee shall have the option to exit from the power purchase agreement, provided that this option shall not be available to the distribution licensee if the renewable energy generator agrees to keep the tariff within the aforesaid limit. Where the project specific levellised tariff is less than 95% of the corresponding generic levellised tariff, duly adjusted for permissible rate of free power if any, determined by the Commission in relation to the control period or other provisions under which the power purchase agreement was approved by the Commission, the renewable energy generator shall have the option to exit from the power purchase agreement, provided that this option shall not be available to the renewable energy generator if the distribution licensee agrees to keep the tariff within the aforesaid limit. In cases where, after sale/purchase of net saleable energy to/by the licensee as per the power 9. Tariff for residual purchase agreement approved by the Commission, under REC mechanism in the mutually agreed period after initial period(s) starting from the date of commencement of operation of the project or even if the sale/purchase project has not commenced its operation during such initial period(s), the net saleable energy for the under REC residual period of the useful life of the project is to be sold to the distribution licensee under long term mechanism power purchase agreement, the tariff for sale/purchase of net saleable energy during such residual period shall, save as-In cases where any specific conditions in relation to the rate/tariff applicable for the residual period, referred to these regulations, have been stipulated while approving the power purchase agreement under REC mechanism, such conditions shall also be applicable; If the circumstances so warrant, the Commission may, even after the commencement of these regulations, on the merit of a case, approve the rate/tariff prevailing in any of the earlier time frames prior to the commencement of HPERC (Power Procurement from Renewable Sources and Cogeneration by Distribution Licensee), Regulations, 2007 or the commencement of HPERC (Renewable Energy Tariff Determination) Regulations, 2012 or these Regulations, as the case may be, for sale/purchase of the net saleable energy during the residual period. Where, prior to commencement of HPSERC RE Tariff Regulations, 2017: 10. Capacity

## **Enhancement**

- any part of the original capacity as well as that of the additional capacity has been synchronized with the grid at least once; or
- joint petition(s) for the approval, whether under the REC mechanism or on long term basis, of PPA(s) in relation to the original capacity as well as of the supplementary PPA in relation to additional/ enhanced capacity, has/have been filed before the Commission; or
- PPA(s), or the supplementary PPA, whether under the REC mechanism or on long term basis, for purchase of net saleable energy from the original capacity and the additional capacity or the enhanced capacity has/have been signed by the concerned developer with Distribution Licensee:

the tariff(s) for the original capacity and the additional capacity, or the composite rate for the enhanced capacity as the case may be, and the associated conditions for each of such tariffs, shall be regulated as per the provisions of Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 201

- Where, prior to commencement of HPERC RE Tariff Regulations, 2017:
  - in relation to the original capacity of the project or a part thereof,- (i) either synchronization of the same with the Grid has taken place at least once, or (ii) a joint petition for the approval of PPA for purchase/sale of net saleable energy has been filed before the Commission, or (iii) the PPA for the sale/purchase of net saleable energy from the same, whether under REC mechanism or on long term basis, has been signed by the developer of the concerned project with the Distribution Licensee; and
  - in relation to the additional capacity of the project or a part thereof,- (i) neither any synchronization of the same, with the Grid has taken place even once, nor (ii) any joint petition for approval of any PPA (or supplementary PPA), in relation for such additional/enhanced capacity, whether under REC mechanism or long term basis, has been filed before the Commission, nor (iii) any PPA, or supplementary PPA, for such additional/enhanced capacity has been signed by the developer of the concerned project with the distribution licensee for such additional/enhanced capacity.

the tariff for the net saleable energy in relation to the original capacity shall be determined as per the provisions of HPERC RE Tariff Regulations, 2012 and the same for the additional capacity

		<ul> <li>shall be determined as per the provisions of HPERC RE Tariff Regulations, 2017.</li> <li>Where, prior to commencement of HPERC RE Tariff Regulations, 2017:</li> <li>no part of the original or enhanced capacity has been synchronized with the grid even once; and</li> <li>no joint petition for the approval of PPA(s), whether under REC mechanism or long term basis, in relation to any part of the enhanced capacity of the project, i.e. the original capacity and/or for the additional capacity and/or for the enhanced capacity, has been filed before the Commission; and</li> <li>no PPA, whether under the REC mechanism or on long term basis, for the original capacity or for the additional capacity or for the enhanced capacity or any part thereof has/have been signed by the developer of the concerned project developer with the Distribution Licensee; and</li> <li>the joint petition(s) for approval of PPA(s) or for the supplementary PPA, in relation to of the original capacity as well as for the additional capacity or for the enhanced capacity is filed before the Commission for the first time only after the commencement of HPERC RE Tariff Regulations, 2017;</li> <li>the tariff for the net saleable energy for the relevant capacity/capacities for which PPA, or supplementary PPA, is sought to be approved shall be fixed in accordance with the norms and Generic Levellised rate and other conditions as per the provisions of HPERC Tariff Regulations, 2017.</li> <li>In cases where the incremental capacity is commissioned in phases, the tariff(s) during such interim stages shall be computed based on such incremental energy generation corresponding to the additional capacity actually installed from time to time.</li> </ul>
11.	Tariff for renewable energy projects, other than small hydro projects	Where the technological specific parameters and other terms and conditions, including the tariff period and useful life of the project, have not been specified, the Commission may, by an order, at any time and at such intervals as it considers appropriate to do so, fix the same.
12.	Review of tariff	<ul> <li>If, after the determination of the generic levellised tariff for the control period or the project specific levellised tariff for a project:-</li> <li>a water cess or tax on generation is levied which impacts all or any of the projects; and/or</li> <li>the limit of 13% for the pass through of free power in the tariff as per the National Hydro Policy/Tariff Policy is revised by the Central Government, or staggered by the Government; and/or</li> <li>the mechanism or quantum of the capital subsidy or budgetary grant mentioned in these regulation is changed as a matter of policy; and/or</li> <li>the State Government revises its instructions with regard to the minimum flow of water downstream of diversion structure of the small hydro projects and implements the same;</li> <li>The Commission may, suo-motu or on an application made to it, by generic or specific order, review the tariff for the residual tariff period or such other part as it may deem fit, for the projects or group of projects actually impacted, to account for the impact of such changes</li> </ul>
13.	Capital Cost	<ul> <li>As per the Regulatory Commission Order.</li> <li>Small hydro projects upto 100 kW capacity, commissioned between FY 2020-25, such norms shall be as fixed in the relevant orders of the Commission under these Regulation.</li> </ul>
14.	Subsidy or incentive or grant/budgetary support by the Central/ State Government	<ol> <li>While determining the generic levellised or project specific levellised 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 its agencies, but excluding accelerated depreciation benefit under the Income Tax Act.</li> <li>For tariff determination, only 75% of the capital subsidy available to the project as per applicable scheme of the MNRE/State Government shall be considered.</li> <li>Where any additional grant or budgetary support is available to any project, apart from the incentive and/or subsidy and/or grant available, the Commission shall account for 100% of such budgetary support, while determining project specific levellised tariff.</li> </ol>
15.	Debt-Equity Ratio	<ol> <li>For generic levellised tariff, the Commission shall adopt debt equity ratio of 70:30.</li> <li>For project specific levellised tariff, the following shall apply:         <ul> <li>if the equity actually deployed is more than 30% of the capital cost admitted by the Commission, 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;</li> </ul> </li> </ol>

		<ul> <li>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;</li> <li>the equity invested in foreign currency, if any, shall be designated in Indian rupees on the date of each investment.</li> </ul>					
16.	Loan and Finance Charges	<ul> <li>For the purpose of determination of tariff, loan tenure of 13 years, inclusive of moratorium period, if any, shall be considered.</li> <li>Interest Rate: 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 levellised tariffs are to be made applicable, shall be considered.</li> </ul>					
17.	Depreciation	<ol> <li>The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.</li> <li>Depreciation per annum shall be based on "Differential Depreciation Approach". For tariff purposes, the depreciation shall be allowed @ 5.28% per annum till such time the requirement for repayment of loan component of the capital cost as per these regulations is fully provided and the remaining depreciation shall be spread over the residual useful life of the project on straight line method.</li> </ol>					
18.	Return on Equity	<ol> <li>The value base for the equity shall be 30% of the normative capital cost.</li> <li>The normative return on Equity shall be 17% per annum on pre - tax basis and shall not be subject to any adjustment on account of any taxes, or changes in the tax rates, under the Income Tax Act.</li> </ol>					
19.	Interest on Working Capital	Interest on Working Capital shall be at interest rate equivalent to the normative interest rate of three hundred (300) 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.					
20.	Operation and Maintenance Expenses	<ul> <li>Normative O&amp;M expenses allowed under these Regulations shall be escalated at the rate of 5.72% per annum over the tariff period.</li> <li>Project commissioned during FY 2021-25, Normative O&amp;M expenses allowed under these Regulations shall be escalated over the tariff period at the rate as the Commission may consider appropriate</li> </ul>					
		Sr. No.	Installed capacity of SHP	O&M expenses in Rs. (in Lac) per MW of installed capacity also applicable for project commissioned during 2020-25	O&M expenses in Rupees (in Lac) per MW of installed capacity (For project commissioned during 2019-20)		
		1.	Above 100 kW to 2 MW capacity	39	33		
		2.	Above 2 MW to 5 MW capacity	34	32		
		3.	Above 5 MW to 25 MW capacity	29	27		
21.	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.					
22.	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 Review of Tariff.					
23.	Rebate	<ol> <li>The due date for payment of bills shall be 60 days from the date of billing.</li> <li>For payment of bills of the renewable energy generator through letter of credit, a rebate of 2% shall be allowed.</li> <li>Where payments are made other than through letter of credit within a period of one month of presentation of bills by the renewable energy generator, a rebate of 1% shall be allowed.</li> </ol>					
24.	Late payment surcharge	In case the payment of any bill for charges payable under these Regulations is delayed beyond a period of 60 days from the date of billing, a late payment surcharge at the simple interest rate of 1.25% per month shall be levied by the renewable energy generator for the actual number of days by which the payment is delayed.					

25.	Capital Cost of small hydro project	Sr. No.	Category	Rs. (in Lac) per MW of the installed capacity	Rs. (in Lac) per MW of the installed capacity (For project commissioned during 2019-20)	
		1.	Above 100 kW to 2 MW capacity	1000	1050	
		2.	Above 2 MW to 5 MW capacity	1000	1050	
		3.	Above 5 MW to 25 MW capacity	900	945	
26.	Capacity Utilisation Factor	<ol> <li>The normative annual capacity utilisation factor (CUF) for all the small hydro projects upto 25 MW shall be 55%. The number of hours in a year for calculations of CUF shall be 8766.</li> <li>The normative capacity utilization factor (CUF) 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.</li> </ol>				
27.	Free Power	The Commission shall consider appropriate structure(s) of free power for determination of generic levellised tariffs for various categories of small hydro projects, as mentioned in these regulations, 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 these Regulations.				
28.	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%.				
29.	Energy Losses	The normative energy losses in the project line(s) shall be 0.7% of the net generation (i.e. after deducting auxiliary consumption and transformation losses, on normative basis, from the gross generation).				
30.	CDM Benefits	<ol> <li>In case of small hydro projects, the proceeds of carbon credit from approved CDM project shall be retained by the Small Hydro Project generator and shall not be adjusted in the tariff.</li> <li>In case of renewable energy technologies, other than the small hydro projects, the CDM benefit shall be shared in the following manner, namely:         <ul> <li>100% of the gross proceeds on account of CDM benefit to be retained by the project developer for the year in which the project commences its operation and the first year immediately thereafter;</li> <li>In the second year i.e. after the expiry of period mentioned in clause (a) above, the share of the beneficiaries shall be 10% which shall be progressively increased by 10% every year till it reaches 50%, where after the proceeds shall be shared in equal proportion, by the generating company and the beneficiaries.</li> </ul> </li> </ol>				
31.	Overriding effect	The provisions of these Regulations shall have effect notwithstanding anything inconsistent therewith contained in any other regulations, framed by the Commission, relating to the determination of tariff and/or making provisions for open access under the Act.				