

THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA
IN THE MATTER OF

Determination of generic levellised tariffs for Small Hydro Projects under Regulation 13 of the Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2012- Mechanisms for adjustment of accelerated depreciation benefit and capital subsidy.

CORAM
SUBHASH C. NEGI
CHAIRMAN

1. In pursuance of the sub-regulation (1) of Regulation 13, read with Regulations 32, of the Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2012 (hereinafter referred to as “RE Tariff Regulations”), the Commission, vide its order 20.05.2013, determined separate generic levellised tariffs (i.e. with and without accelerated depreciation) and associated terms and conditions for each of the three categories of SHPs. The capital subsidy was taken into account at the rates under MNRE SHP subsidy scheme of 2009-10. The impact of accelerated depreciation benefit was however determined subject to review, on receipt of clarifications from CERC, on the issues raised by the objectors on the subject.
2. Subsequently the MNRE has introduced a new SHP subsidy scheme which necessitates the revision of the mechanism for adjustment of the subsidy. Moreover, the clarifications received from CERC on the issues with regard to accelerated depreciation benefit also necessitate review of the generic levellised tariffs with accelerated deprecation benefit.
3. The Commission invited objections/suggestions from public on its proposal relating to the mechanisms for adjustment of accelerated depreciation benefit and also for capital subsidy, by way of insertions in two News Papers i.e. “Hindustan Time” and “Amar Ujala” on 22nd April,

2015. The text of said proposal was made available on the Commission's website ww.hperc.org. The Commission received comments/suggestions on the aforesaid proposal from the following stakeholders:-

1. Himachal Pradesh State Electricity Board Ltd, Vidyut Bhawan, Shimla-171004.
2. M/s Bhavani Renewable Energy Private Limited, D-21, First Floor, Panchsheel Enclave, New Delhi- 110 017.
3. M/s Bonafide Himachalies Hydro Power Developers Association, Sai Bhawan, Sector-IV, Phase-II, New Shimla, Shimla- 09.
4. M/s Growel Energy Company Limited, 1, Electronic Complex, Chambaghat, Solan, HP. 173 213.
5. M/s Himadri Hydro Power Proejct (P) Ltd., 1, Electronic Complex, Chambaghat, Solan, HP. 173 213

The proposal has two distinct parts i.e. one relating to accelerated depreciation benefit and the other relating to adjustment of capital subsidy. The Commission now proceeds to deal with each of these two parts of the proposal in the succeeding paragraph of this order.

Part- 1 Adjustment of Accelerated Depreciation Benefit

In view of the provisions of RE Tariff Regulations, the Commission determined the generic levelled tariffs, with and without the benefit of accelerated depreciation separately, vide its order dated 20.05.2013. Rates for adjustment of accelerated depreciation benefit in accordance with the RE Tariff Regulations were worked out broadly on the pattern and by taking the depreciation rates followed by Central Electricity Regulatory Commission (CERC). The annual depreciation rate of 80% was considered to be available, apart from additional 20% depreciation under clause (iia) of sub section (1) of section 32 of the Income Tax Act. On the issue of quantification of the accelerated depreciation benefit to be adjusted in the tariff and objections raised by stakeholders about the entitlement of the

SHPs for the accelerated depreciation, the Commission expressed its views, as contained in para 24.3 (i) of the said order, as under:-

“ 24.3 (i) The Regulation 21 of the RE Tariff Regulations, 2012, provides that while determining the generic levelled or the project specific levelled tariff, as the case may be, the Commission shall take into consideration the accelerated depreciation benefit under the Income Tax Act. This concept has been adopted from the CERC’s RE Regulations, 2012. The proposed calculations made by this Commission for generic levelled tariff for small hydro projects in respect of these components were based on the calculations and the rates of accelerated depreciation adopted by the CERC for FY 2012-13 and the draft calculations made by the CERC for FY 2013-14, (which have now also been finalized by the CERC). The Commission finds some merit in the objections raised about the entitlement of SHPs for the benefits of accelerated depreciation. Accordingly, it feels that it shall be appropriate to seek clarification from the CERC in this regard before taking any final decision on this aspect. In the meanwhile, the Commission shall, however, not make any changes in the proposed tariff calculations for this component, which are based on the CERC pattern and shall review the relevant portion of calculations to account for the effect of this component, if necessary in due course of time. In case of such a review of the component of accelerated depreciation benefit, the Commission shall revise the generic levelled tariff with accelerated depreciation benefit and other associated terms and conditions for each category of SHPs, which shall be applicable in all the cases to which the generic levelled tariff (with accelerated depreciation benefit) determined under sub-regulation (1) of Regulation 13 is applicable i.e. from the date from which the RE Tariff Regulations, 2012, came into force. The Commission shall also include suitable stipulations in the Power Purchase Agreements which may be approved by it during the interim period under the RE Tariff Regulations, 2012.”

4. In view of above, the Commission requested the CERC, vide letters dated 28.05.2013, and 16.08.2013 to clarify factual position in this regard in case of Small Hydro Projects. The CERC, vide letter dated 10th September, 2013 has clarified that while determining tariff, it has taken into account accelerated depreciation for all the Renewable Energy (RE) projects including Small Hydro Projects. It has been further mentioned that the CERC has specified the tariffs with and without accelerated depreciation despite the fact that all the RE projects may not be eligible for the benefit of accelerated depreciation as per the Income Tax Act, 1961. They have also suggested that the State Commission may take a view by examining factual position in term of availing accelerated depreciation benefit by Small Hydro developers under their jurisdiction.
5. While calculating the levelled rate of the Accelerated Depreciation benefit as per the order dated 20.05.2013, depreciation under the Income Tax Act was considered to be available to the SHPs at annual rate of 80%, in addition to depreciation at an upfront rate of 20% of the project cost under clause (iia) of sub section (1) of section 32 of the Income Tax Act. However, the Commission, after further examination of the matter and keeping in view the reply received from CERC, considered that accelerated/additional depreciation may be available to the hydel projects, including SHPs, at annual rate of 15% only (instead of 80%) in addition to upfront rate of 20%. The Commission, in its proposal as per para-(3), worked out the rates for adjustment of accelerated depreciation on these lines.
6. **THE VIEWS OF STAKEHOLDERS AND COMMISSION'S ANALYSIS AND VIEWS ON IMPORTANT ISSUES:**

The Commission now proceeds to discuss and consider the comments received by it from the stakeholders, as under:

a) Himachal Pradesh State Electricity Board Ltd. have stated that they have been made to understand by the Chartered Accountants that, while IPP's file their IT return on completion of their projects, they automatically

get the benefits of the applicable accelerated/additional depreciation available to infrastructure projects including SHEPs as per the Income Tax Act and as envisaged in the RE Tariff Regulations, 2012 and RE Tariff order 2013 and proposed draft order 2015. It has been suggested that in order to avoid any ambiguity only one generic levelled tariff with accelerated deprecation benefits as finalized in column 4 of Table 2 of the proposed tariff order (i.e. per kWh rates of Rs. 3.19, Rs. 3.12 and 3.02 for the three categories of SHPs) be declared for implementation.

Commission View

The RE Tariff Regulations, 2012 clearly provide for determination of two separate generic levelled tariffs for each category i.e. with and without the accelerated depreciation benefit. The suggestion to determine only one tariff for each category is therefore not acceptable.

b) **M/s Bhavani Renewable Energy Private Limited** have focused their comments mainly in the background of their individual case and have stated that they could not have availed accelerated depreciation and cannot do so in the future either and accordingly are entitled to tariff (without accelerated depreciation) as given in Col 3, para 45.2 of order dated 20.05.2013. It has been stressed that they should receive tariff (without accelerated depreciation) as has been recognized under Regulation 21(4) and (5) of the Renewable Energy Regulations, 2012 and order dated 20.05.2013. It has been suggested that HPSEBL be directed forthwith to execute the long term PPA with them. It has also been stated that they are in no way affected by the current proposal to the extent of accelerated /additional depreciation. Copy of the CA Certificates stating that the Objector has not availed accelerated deprecation qua its Project has been annexed and it has been suggested that it may be taken on record that the objector is not entitled to availing any accelerated depreciation and in any event has not availed accelerated deprecation as is clearly established by certificates issued by its statutory auditors. Certain specific points have however also been raised.

Commission View

The Comments have been focused on their individual case and the Commission does not find it necessary to address or to take on record any document relating to the individual case in this order. However, the specific points emerging out of the comments are being addressed in the succeeding sub paragraphs.

c) **M/s Bhavani Renewable Energy Private Limited**, have also suggested that in line with the CERC Regulations and orders, the tariff with accelerated depreciation benefit should be made applicable only if the accelerated depreciation benefit is actually availed by the generator. They have also given the following comments:-

“The Commission would appreciate that the sector needs the right sort of climate to ensure that there is a level-playing field for all investors, including the SHPs. Without prejudice to the submission that the Objector’s Project is not entitled to any Accelerated Depreciations, SHPs such as that of the Objector herein cannot absorb the benefits of any accelerated/additional depreciation as they have no profits and hence no appetite for depreciation benefits. Accordingly CERC has stated in multiple orders and clarifications that the Accelerated/Additional benefits can be passed on into the tariff ONLY IF availed by the Project. Where the Project is not in a position to avail of these benefits, the same cannot be deemed to have been availed and passed on in the Tariff, since it would make the Project completely unviable. The Petitioner strongly objects to any such a deeming provisions. If the SHP is forced to absorb the accelerated depreciation even if it is not in a position to do so, it will result in denying the stipulated return that it is entitled to. There is an urgent need to encourage SHPs in the state and not make them unviable. In this regard the Objector places reliance on the judgment of Hon’ble Appellate Tribunal of Electricity in Gujarat Urja Vikas Nigam Limited

vs Emco Limited & Ors. decided on 20th November, 2014, Appeal No. 252OF 2013.”

Commission View

Sub Section 5 of regulation 21 of the RE Regulation, 2012 provides that “it shall be assumed that the renewable energy generator shall avail the benefit of accelerated depreciation and accordingly the tariff, which accounts for the accelerated depreciation, shall be applicable unless the renewable energy generator establishes, to the satisfaction of the distribution licensee, that he has not availed or is not entitled to such a benefit.” The matter shall therefore be regulated accordingly as there is no binding for the generator under the regulations to avail accelerated depreciation benefit even if available to him under the law. The Commission would however also like to refer to sub para (e) of para 62 of Hon’ble APTEL’s order dated 20.11.2014 (appeal No. 252 of 2013) in the matter of Gujarat Urja Vikas Nigam Ltd. V/s M/s Emco Limited and Gujarat Electricity Regulatory Commission, as referred to by the objector, which reads as under –

“(e) Regarding the allegations with reference to the execution of the PPAs only with the Generators that agreed to avail the accelerated depreciation, it is to be pointed out that if the intention of the Appellant was to sign the PPAs only with those Developers availing the benefit of accelerated depreciations, the Appellant should have incorporated the same into the PPA. But the same is not referred to in the PPA.”

As would be clear from the above reproduced observation of Hon’ble APTEL also, the determination of two rates by the Commission (with and without accelerated depreciation) does not in any way debar the distribution licensee and the generator to mutually agree in the PPA that the generator shall avail accelerated depreciation, if available under the law, and to incorporate suitable conditions in the PPA.

d) **M/s Bhavani Renewable Energy Private Limited** have also stated that 20% additional depreciation under section 32 (1) (ii a) is available only on the cost of new plant and machinery and not on the entire capital cost of the project.

Commission's View

The Commission has considered the matter and decides to account for this 20% additional deprecation on the cost of plant and machinery only. As per the formulae given by the CERC for indexation of capital cost in their RE Regulations, the cost of plant and machinery is considered to be equal to 70% of the project cost. The Commission finds it appropriate to consider the plant and machinery cost as 70% of the capital cost for this purpose. Accordingly the calculations shall be based on 20% additional depreciation on 70% of the capital cost, which converts to 14% additional depreciation on the entire cost of the project.

e) **M/s Bhavani Renewable Energy Private Limited** have also suggested that the rate of 15% deprecation has not been confirmed by the CERC and the accelerated deprecation benefit is to be allowed on actual and not at a rate which is unreal and fictitious. Accordingly to them such a move will only further jeopardize the financial health of the SHPs and affect its financial viability and in such an event, this Commission will fall in its continuous duty to promote and support renewable energy under Section 86 (1) (e) of the Electricity Act, provisions of the Tariff Policy and the National Electricity Policy.

Commission's View

The rate of 15% appears in the table attached with the Income Tax Rules (new appendice under Rule 5 of Income Tax Rules) which specifies the rates of depreciation for various categories of assets from 2006-07 onwards. The rate of 15% is considered most appropriate for this purpose

keeping in view the fact that for some items such as time of day energy meters, automatic voltage control etc. forming a part of SHP, the depreciation is applicable at the rates which are as high as 80%. It is also pointed out that since the generic levelled tariffs are to be determined on normative basis, it may neither be feasible nor appropriate to go into detailed calculations in each case. The comment that the proposed rate is unreal and fictitious is thus not based on facts.

f) **M/s Bonafide Himachalies Hydro Power Developer's Association** have stated that income taxes are not affected by accelerated depreciation and it is only for a corporation with consistent taxable income that the use of accelerated depreciation on the income tax return instead of the straight line method, will defer some income tax until the later years of an asset's life. It has also been stated that over the entire life of the asset, the total depreciation expense is the same and so is the total taxation burden. According to them, the methods merely affect the timing of the depreciation and the consequent taxation.

Commission's View

The objector association have themselves agreed that the use of accelerated depreciation, instead of straight line method, in the Income Tax return will defer the Income Tax until the later years of the assets life and the two methods affect the timing of depreciation and consequent taxation. As per the proposed calculations, only the net impact on the tariff due to such deferment has been calculated. As such, the comment does not in anyway alter the proposal.

g) **M/s Bonafide Himachalies Hydro Power Developer's Association** have stated that every project can not reduce taxation burden with accelerated depreciation and this can be beneficial only to the project which has profit before taxation. It has been stated that most of the projects are reeling under heavy losses and many of the projects have become Non Performing Assets (NPA) with the banks and therefore,

assuming that a project will have reduction in taxation burden is inequitable.

Commission's View

The sub regulation 5 of regulation 21 of RE Regulation provides that it shall be assumed that the renewable energy generator shall avail the benefit of accelerated depreciation and accordingly the tariff, which accounts for the accelerated depreciation, shall be applicable unless the renewable energy generator establishes, to the satisfaction of the distribution licensee, that he has not availed or is not entitled to such a benefit. The onus of establishing to the satisfaction of the distribution licenses, that the generator has not availed or is not entitled to such a benefit vests with the generator. In this connection Commission's view under sub para (a) of this para may however also be seen.

h) **M/s Bonafide Himachalies Hydro Power Developer's Association** have stated that the reduction of the generic levelled tariffs by the so called benefit of accelerated depreciation is unjustifiable, arbitrary, unconsciously, inequitable and unacceptable.

Commission's View

The Commission finds that this comment is not based on the facts as no reduction in tariff is envisaged and in fact only two separate tariffs i.e. with accelerated depreciation or without accelerated depreciation are being determined in accordance with the provisions of the RE Tariff Regulations.

i) **M/s Growel Energy Company Limited and M/s Himadri Hydro Power Proeject (P) Ltd.** have also stated that they are not interested in availing the benefit of Accelerated Depreciation for their Ani-1 SHEP. They have also suggested that project cost of 750 lacs/MW and CUF of 55% be reviewed in view of high costs and erratic rainfall and snow precipitation

Commission's View

The views of the Commission on the issue regarding option to the generators to avail or not to avail accelerated depreciation benefit have already been expressed in sub para (c) and the matter shall be regulated accordingly. As regards the suggestions for increasing the normative capital cost and lowering the normative CUF, the Commission observes that determination of the capital cost and CUF are not the subject matter of the present proposal. These parameters have already been specified in the RE Tariff Regulations which were notified after following due process of prior publication.

7. In view of above, the Commission has worked out the rates of accelerated depreciation benefit under various categories of SHPs on normative basis, based on the pattern/methodology followed by CERC while determining the same for the year 2012-13 i.e. the first year of the RE Tariff Regulations, except for the following changes:-

- a. the 20% additional depreciation under clause (iia) of sub section (1) of section 32 of the Income Tax Act has been considered for the cost of plant and machinery only, which on normative basis has been considered as 70% of the project cost;
- b. annual rate of depreciation has been taken as 15% instead of 80% taken by CERC; and
- c. since the capitalization is to be considered in the second half of year, only 50% of these depreciation values have been considered in the first year on the CERC pattern. However, the energy for the second half of the first year which mainly comprises of winter months with lean discharges has been taken as 30%. The same for the first six months of the last year i.e. 41st year of project life, has been taken as 70% of the annual generation.

All other parameters, including the book depreciation, have been considered on the CERC pattern. The net saleable energy and the discount factor have however been taken as per the specific provisions of RE Tariff Regulations. The tax rate has been taken at par with that adopted by CERC for the said year, even though the tax rate has otherwise undergone

slight changes in the subsequent years. The deduction on account of investment allowance for investment in new plant and machinery, as available in addition to depreciation as per (a) and (b) above subject to certain specified conditions, under section 32 AC of the Income Tax Act have also not been taken into account as CERC does not consider such deduction for such purpose and also in view of fact that this deduction is linked to performance within certain limits. The rates so determined are given in the Table -1 below. The calculations are depicted in Annexures 1, 2 and 3 of this order.

Table -1

Category	Capacity of SHPs	Generic levellised rate of depreciation (Rs./kWh)	Reference Annexures
I	Above 100 kW to 2 MW	0.14	Annexure-1
II	Above 2 MW to 5 MW	0.14	Annexure-2
III	Above 5MW to 25 MW	0.13	Annexure-3

8. (a) In view of above, the generic levellised tariffs (with accelerated depreciation benefit) and the associated terms and conditions with regard to specific provisions of accelerated depreciation benefits are determined as under:-

Table -2

Category	Capacity of SHPs	Generic levellised tariff of net saleable energy with accelerated depreciation benefit (Rs./kWh)#
I	Above 100 kW to 2 MW	3.20
II	Above 2 MW to 5 MW	3.13
III	Above 5MW to 25 MW	3.04

These rates have been worked out by deducting the rates as per Table-1 from the generic levellised tariff (without accelerated depreciation) a determined by the Commission vide its order dated 20.05.2013

The rates given in Table-2 above shall be subject to adjustments on account of variation in capital subsidy and free power structure as per the provisions of RE Tariff Regulations, Commission's order dated 20.05.2013 and Part-II of this proposal, as applicable. The following terms and conditions shall also apply in regard to the rates given in Table -2 above:-

- (i) The rates given in Table-2 shall be applicable from the date of commencement of RE Tariff Regulations for all the Power Purchase Agreements (PPAs) as may be approved, or already approved, under the said regulations. In accordance with sub regulation (5) of regulation 21 of RE Tariff Regulations, it shall be assumed that the renewable energy generator shall avail the benefit of accelerated depreciation and accordingly the tariff which accounts for accelerated depreciation, shall be applicable unless the renewable energy generator establishes, to the satisfaction of the distribution licensee, that he has not availed or is not entitled to such a benefit.
- (ii) Determination of two rates by the Commission (with and without accelerated depreciation) does not in any way debar the distribution licensee and the generator to mutually agree in the PPA that the generator shall avail accelerated depreciation, if available under the law, and to incorporate suitable conditions in the PPA. In such cases the matter shall be regulated in accordance with the PPA provisions.
- (iii) The levelled rates of accelerated depreciation benefit, being normative, shall not be subject to revision unless the depreciation rates which have been considered to be applicable for SHPs under the Income Tax law as on the date of commencement of RE Tariff Regulations and as continuing till date, are revised by Central Government or the Commission otherwise finds it appropriate, in order to remove any anomalies, re-determine the rate(s) of accelerated depreciation benefit and associated terms and conditions for adjustment in tariffs. In such specific events necessitating re-determination of rates of accelerated depreciation benefit or any of the associated conditions, the Commission may do so through a general or specific orders, as it may find appropriate. If the said rates or associated conditions are so revised, the provisions of such general or specific orders shall prevail.

(iv) The tariff shall be subject to the RE Tariff Regulations, 2012 and orders issued or as may be issued by the Commission from time to time under the said Regulations.

(b) Where the project specific tariff is to be determined as per the provisions of RE Tariff Regulations, the levelled rate of accelerated depreciation benefit shall be worked out in the similar manner and by taking into account the same depreciation rates as considered for generic levelled rates, in which the generic levelled rates of accelerated depreciation benefit have been worked out in this proposal. However, in such cases, the other project specific parameters, as approved by the Commission, shall be taken into account. Other provisions of the RE Tariff Regulation and Commission's order dated 20.05.2013 shall continued to be applicable.

PART- II Adjustment of Capital Subsidy

9. The RE Tariff Regulations provide for adjustment of 90% of the subsidy available to SHPs from MNRE etc. The regulation 19 of the RE Tariff Regulations also provides that if, after the determination of the generic levelled tariff for the control period or the project specific levelled tariff for a project, the mechanism or quantum of the capital subsidy or budgetary grant is changed as a matter of policy, the Commission may, suo moto 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. It also provides that while revising the tariff, the Commission may incorporate such terms and conditions, including the period for which such revised tariff shall be applicable, as it may deem fit.
10. The Commission, vide its order dated 20.05.2013, determined the generic levelled tariffs by taking into account 90% of the capital subsidy available for the SHPs under the SHP subsidy scheme of Ministry of New & Renewable Energy (MNRE) as prevalent at the time of commencement of RE Tariff Regulations i.e. MNRE scheme of 2009-10 (continued upto 2012-13). The Commission observes that the MNRE has, vide its letter No. 14(03)

2014-SHP dated 2nd July, 2014, revised the scheme for financial assistance in the form of capital subsidy to the SHPs to be set by private, co-operative and joint sector etc. This revised scheme of 2014 is applicable for the implementation of SHP programme (upto 25 MW capacity) during the year 2014-15 and remaining period for 12th Plan i.e. upto 31st March, 2017 in the special category States, including Himachal Pradesh. As per the said revised scheme, the SHPs are eligible for capital subsidy @ Rs.1.5 Crore per MW limited to Rs.5 Crores per project having capacity above 0.1 MW to 25 MW. This scheme shall be applicable for the SHPs where the project has commenced construction work on or after 1st April, 2013. A comparison of the effective per MW rates of capital subsidy based on MNRE scheme of 2009-10 which was taken into account while determining the generic levelled tariffs as per order dated 20.05.2013 and those available under the revised scheme reveals marginal increase in the capital subsidy for the SHPs having capacities from about 1.4 MW to 11 MW and a marginal reduction for the SHPs of the other capacities. Such increase or reduction also varies with the capacities of the SHPs. The Commission accordingly, in its proposal as per para-(3), proposed a mechanism based on the revised MNRE subsidy scheme and while doing so, it also proposed correction of an arithmetical error which had crept in for adjustment of subsidy in case of category- I of SHPs.

11. THE VIEWS OF STAKEHOLDERS AND COMMISSION'S ANALYSIS AND VIEWS ON IMPORTANT ISSUES:

The Commission now proceeds to discuss and consider the comments received by it, from the stakeholders as under:-

(a) HPSEBL have stated that projects which are likely to be commissioned/synchronized during the control period falling under the RE Tariff Regulations, 2012, both the subsidy schemes may be relevant and that most probably IPP's may get subsidy based on old orders i.e. mentioned in clause 39.3 of RE Tariff order 20.05.2013. It has been suggested that both the formulae along with both Annexure-D, should be

made part of this tariff order so that correct adjustment on account of differential rate of capital subsidy etc., is made while finalizing the tariff of individual SHEP's.

Commission's View

The proposal clearly takes into account the fact that both the subsidy schemes may be relevant to the control period. Whereas the new MNRE subsidy scheme may be applicable for new projects, in old cases the developer may get subsidy based on old scheme only. It clearly provides that the adjustment on account of subsidy shall be done on the basis of formula and annexure relevant to the applicable MNRE subsidy scheme. The suggestion that the formulae and Annexures for both the schemes should be annexed to this order for ready reference is however accepted as this would help in providing more clarity.

(b) **Bonafide Himachalies Hydro Power Developer's Association** have stated that all the Small Hydro Projects do not get subsidy. It has been mentioned that out of 64 commissioned SHPs, 56% of the Commissioned projects received zero subsidy, 16% have received just fifty percent subsidy and only 28% of the Commissioned Projects could get full subsidy albeit with deductions for delayed implementation of the projects. It has also been mentioned that -

“ (i) The prime most requirements, among many others, for entitlement to MNRE subsidy are: Application to MNRE within 6 months of Commencement of Construction or within 6 months of the availment of the 1st installment of Term Loan, whichever event course earlier: Keeping the Bank Account in Good Health. Any lapse in its compliance disentitles a project for Subsidy. It has been observed that a vast majority of small hydro power developers have made a lapse on compliance to the stipulation for timely application to MNRE.

(ii) The projects who opt for seeking disbursement on commissioning of the project can get subsidy only with certification from “Alternate

Energy Centre, Roorkee” of having achieved either 80% of the Month to Month Generation as given in the DPR for 3 Consecutive months for 80% of the generation for whole of the year as given in the DPR. Not many projects satisfy this criteria for various reasons applicable to Run-of the River Small Hydro Projects. Hydrology may get drastically affected adversely during the time gap between compilation of the DPR and COD.

(iii) The projects who opt for seeking 50% disbursement during construction and the balance 50% on commissioning of the project can get balance 50% subsidy only with certification from “Alternate Energy Centre, Roorkee” of having achieved either 80% of the Month to Month Generation as given in the DPR for 3 Consecutive months for 80% of the generation for whole of the year as given in the DPR. Not many projects satisfy this criteria for various reasons applicable to Run-of the River Small Hydro Projects. Hydrology may get drastically affected adversely during the time gap between compilation of the DPR and COD.”

It has been stated that in view of above the reduction of generic levellised tariffs by the so called MNRE subsidy is unjustifiable, arbitrary, unconsciously, inequitable and unacceptable and no reduction should be done on this account.

COMMISSION VIEW

The mechanism for adjustment of tariff on account of capital subsidy has already been specified in RE Tariff Regulations which were notified after following due process of prior publication. The present proposal only envisages quantification based on applicable MNRE subsidy scheme. As such the comments stating that the reduction of tariff on this account is arbitrary, unconsciously, inequitable is totally out of context of the present proposal. Even otherwise the Commission observes that if 28% of SHPs have been able to avail full subsidy, the others should also be able to comply with the requirements of the subsidy scheme. The generators are expected to

implement the projects in a prudent manner. The statement that 56% of SHPs have not received even the first installment of the subsidy leads to a observation that either timely applications are not being made or conditions relating to healthiness of bank accounts are not being complied with. The consumers can obviously not be burdened due to such shortcomings on the part of generators. If a generator is unable to avail subsidy due to non compliance of standard requirements laid down by MNRE, he himself should be responsible and the inefficiencies on part of generator can not be passed on to the consumers.

12. In view of the foregoing, the Commission updates/determines the rates for adjustment of capital subsidy in the generic levellised tariffs for the SHPs covered under the MNRE SHP subsidy schemes, on the following lines:-

A. Category- I (above 100 kW to 2 MW)

The Commission has determined the generic levellised rates as Rs. 3.20 per unit (as per part -I) and Rs. 3.34 per unit with and without adjustment of accelerated depreciation benefit respectively which accounts for capital subsidy of Rs. 180 lacs per MW (i.e. 90% of the subsidy available for a 1 MW SHP as per MNRE subsidy scheme of 2009-10). These rates shall be adjusted for capital subsidy based on the rates under the applicable subsidy scheme and project capacity as under:-

(a) For cases in which MNRE scheme 2009-10 (continued upto the year 2012-13) is applicable.

In case of SHPs covered under the MNRE SHPs scheme 2009-10 (continued upto the year 2012-13) as per para 6 of Annexure-B of the MNRE letter No. 14(03)2014-SHP dated 2nd July, 2014, the adjustment in the aforesaid generic levellised rates shall be carried out based on Appendix-D of the Commission's order dated 20.05.2013 (a copy of which enclosed as Annexure -4 to this order) and the formula given below:

Table -3

[Applicable for adjustment for capital subsidy for category-I SHPs under MNRE subsidy scheme 2009-10]

Sr. No.	Description	Increase in paise/kWh on account of differential rate of capital subsidy
(i)	If the capacity is more than 100 kW but does not exceed 1000 kW	No increase.
(ii)	If the capacity is more than 1000 kW but does not exceed 2000 kW.	$=12/76.50*(180-“Y”)$ paise/kWh

In the above formula “Y”= 90% of the capital subsidy/ MW (in lac Rs.) as per Col-4 of Annexure-4 of this order for the project for which Generic levelled Tariff is to be computed.

The Commission would like to mention here that the formula at Sr. No. (ii) under Table-3 above is slightly different from what was incorporated by it in the table relating to category -I SHPs under sub-para (a) of para 45.3 of the order dated 20.05.2013. This modification has been made in order to rectify the arithmetical error that had crept in the order dated 20.05.2013. Accordingly, the said table, and consequently relevant Appendices also, of the order dated 20.05.2013, shall be considered to have been modified to this extent.

(b) For cases covered in new subsidy scheme of MNRE:-

In accordance with the new subsidy scheme circulated by MNRE on 2nd July, 2014 as aforesaid, the SHPs under this category shall be entitled to capital subsidy at a flat rate of Rs.1.5 crores per MW. Based on the rates of capital subsidy under revised scheme, the SHPs covered therein shall be entitled to an increase in these rates at a flat rate of seven (7) paise per unit. This shall however be applicable only for the SHPs covered under the revised scheme.

B. Category- II (above 2MW to 5 MW) & Category III (above 5 MW to 25 MW)

The Commission has determined the category wise generic levellised rates with and without adjustment of accelerated depreciation benefit as under:-

Category	Capacity of SHPs	Generic levellised tariff of net saleable energy (Rs./kWh)	
		with accelerated depreciation benefit	Without accelerated depreciation benefit
II	Above 2 MW to 5 MW	3.13	3.27
III	Above 5MW to 25 MW	3.04	3.17

These rates account for capital subsidy of Rs. 103.5 lacs per MW (i.e. 90% of the subsidy available for a 2 MW SHP) and Rs. 57.60 per MW (i.e. 90% of the subsidy available for a 5 MW SHP) as per MNRE subsidy scheme of 2009-10. These rates shall be adjusted for capital subsidy based on the rates under the applicable subsidy scheme and project capacity as under:-

(i) For cases in which MNRE scheme 2009-10 (continued upto the year 2012-13) is applicable.

In case of SHPs covered under the MNRE SHPs scheme 2009-10 (continued upto the year 2012-13) as per para 6 of annexure-B of the MNRE letter No. 14(03)2014-SHP dated 2nd July, 2014, the adjustment in the aforesaid generic levellised shall be carried out based on the respective formulae given in para- 45.3 of the Commission's order dated 20.05.2013 and Appendix-D of this said order of 20.05.2013. A copy of the aforesaid Appendix -D has also been enclosed as Annexure-4 to this order for ready reference. These formulae have also been depicted in Annexure-6 & 7 of this order for ready reference.

(b) **For cases covered in new subsidy scheme of MNRE:-**

In accordance with the new subsidy scheme circulated by MNRE on 2nd July, 2014, as aforesaid, the capital subsidy for the SHPs falling under the new subsidy scheme is available at Rs.1.5 crore per MW subject to a maximum of Rs.5 crore per project. The per MW capital subsidy and 90% thereof which is to be taken for computing the adjustments in generic levelled tariff for the SHPs covered under these two categories have been depicted in Annexure-5 to this order. In case of SHPs falling under revised scheme, the adjustments in the category wise generic levelled tariff as applicable (i.e. with or without accelerated depreciation benefit) shall be made based on the per MW figures given in Annexure-5 and the formulae, as given below:-

Table -4

Category-II (Above 2 MW to 5 MW Capacity)

Sr. No.	Description	Increase in paise/kWh on account of differential rate of capital subsidy
(i)	If the capacity is more than 2000 kW but does not exceed 5000 kW.	$=10/45.90*(103.5-"Z")$ paise/kWh

Table -5

Category -III (Above 5MW to 25 MW Capacity)

Sr. No.	Description	Increase in paise/Kwh on account of differential rate of capital subsidy
(i)	If the capacity is more than 5000 kW but does not exceed 25000 kW.	$=6/24.48*(57.60-"Z")$ paise/kWh

In Tables 4 & 5, "Z"= 90% of the capital subsidy/ MW (in lac Rs.) as per Col-4 of Annexure-5 of this order for the project for which Generic levelled Tariff is to be computed.

It is worth mentioning that in certain cases these formulae may give negative values. This means that the generic levelled tariffs which accounted for capital subsidy at a certain level would need to be reduced to that extent in view of the fact that per MW capital subsidy has increased in such cases.

C. The following terms and conditions shall be applicable with regard to adjustment on account of capital subsidy for the SHPs covered under revised subsidy scheme as well as those covered under 2009-10 scheme.

- (i) The parties to PPA may, at the time of finalization of PPA, mutually agree to the particular subsidy scheme of MNRE under which the tariff shall be adjusted. The Renewable Energy Generators (SHPs) may ascertain their eligibility and all the attached conditions of the relevant scheme before signing the PPAs. In such cases, adjustment on account of capital subsidy in the applicable tariff shall be carried out on the basis of 90% of the per MW capital subsidy worked out as per the applicable subsidy scheme agreed in the PPA or 90% of the subsidy actually availed, whichever is higher.
- (ii) In case the subsidy scheme applicable in a particular time frame envisages financial support at rates other than those taken into account in the relevant calculations, the Commission may, by general or specific order, determine or re-determine the rate(s) and the associated conditions including those relating to applicability of such rates, for adjustment(s) on account of subsidy.

Part -III General

Sheets containing Generic Levellised Tariffs and Associated terms and Conditions for various categories of SHPs as per RE Tariff Regulations are enclosed as Annexure -6, 7 and 8 to this order. In addition to the conditions specifically included in these sheets and various provisions of this order, these tariffs shall also be subject to the applicable provisions of RE Tariff Regulations and the Commission's order of 20.05.2013.

Place: Shimla
Dated: 30.06.2015

Sd/-
(Subhash C. Negi)
Chairman

Annexure-1

Computation of Per Unit Benefit of Accelerated Depreciation (Above 100kW to 2 MW)

As per HPERC (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2012.

Depreciation amount	90.00%																		
Book Depreciation rate	5.28%																		
Tax Depreciation rate	15.00%																		
Additional Depreciation	14.00%																		
Income Tax (Normal Rates)	32.445%																		
Capital Cost (In Lacs per MW)	780.00																		
Years ----->	Unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Book Depreciation	%age	2.64%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	2.88%
Book Depreciation	Rs. Lacs	20.592	41.184	41.184	41.184	41.184	41.184	41.184	41.184	41.184	41.184	41.184	41.184	41.184	41.184	41.184	41.184	41.184	22.464
Additional Depreciation																			
Opening	%	100.00%	85.50%	66.69%	56.69%	48.18%	40.96%	34.81%	29.59%	25.15%	21.38%	18.17%	15.45%	13.13%	11.16%	9.49%	8.06%	6.85%	5.83%
Allowed during the year	%	14.50%	18.81%	10.00%	8.50%	7.23%	6.14%	5.22%	4.44%	3.77%	3.21%	2.73%	2.32%	1.97%	1.67%	1.42%	1.21%	1.03%	0.87%
Closing	%	85.50%	66.69%	56.69%	48.18%	40.96%	34.81%	29.59%	25.15%	21.38%	18.17%	15.45%	13.13%	11.16%	9.49%	8.06%	6.85%	5.83%	4.95%
Accelerated Depreciation	Rs. Lacs	113.10	146.72	78.03	66.32	56.37	47.92	40.73	34.62	29.43	25.01	21.26	18.07	15.36	13.06	11.10	9.43	8.02	6.82
Net Depreciation Benefit	Rs. Lacs	92.51	105.53	36.84	25.14	15.19	6.73	-0.45	-6.56	-11.76	-16.17	-19.92	-23.11	-25.82	-28.13	-30.09	-31.75	-33.17	-15.65
Tax Benefit	Rs. Lacs	30.01	34.24	11.95	8.16	4.93	2.19	-0.15	-2.13	-3.81	-5.25	-6.46	-7.50	-8.38	-9.13	-9.76	-10.30	-10.76	-5.08
Net Saleable Energy	MU	1.32	4.40	4.40	4.41	4.41	4.40	4.40	4.41	4.41	4.40	4.40	4.41	4.33	4.12	4.12	4.12	4.13	4.12
Average Discounting Factor For a Full year		1.00	0.95	0.86	0.78	0.70	0.64	0.58	0.52	0.47	0.43	0.39	0.35	0.31	0.28	0.26	0.23	0.21	0.19
Discounted Tax Benefit	Rs. Lacs	30.01	32.60	10.29	6.35	3.47	1.39	-0.08	-1.11	-1.80	-2.23	-2.49	-2.61	-2.64	-2.60	-2.51	-2.40	-2.27	-0.97
Discounted Net Saleable Energy	MU	1.32	4.19	3.79	3.43	3.11	2.81	2.54	2.30	2.08	1.88	1.70	1.54	1.36	1.17	1.06	0.96	0.87	0.78
Discounted Benefit	Rs./ kWh	2.27	0.74	0.23	0.14	0.08	0.03	0.00	-0.03	-0.04	-0.05	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.05	-0.02
Tax Benefit Levellised (Rs. Lacs)	5.7365																		
Net Saleable Energy (Levellised)	4.0425																		
Levellised Benefit Rs./kWh	0.142																		

Continue.....

Computation of Per Unit Benefit of Accelerated Depreciation (Above 100kW to 2 MW)

Depreciation amount	90.00%																							
Book Depreciation rate	5.28%																							
Tax Depreciation rate	15.00%																							
Additional Depreciation	14.00%																							
Income Tax (Normal Rates)	32.445%																							
Capital Cost (In Lacs per MW)	780.00																							
Years ----->	Unit	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Book Depreciation	%age																							
Book Depreciation	Rs. Lacs																							
Additional Depreciation																								
Opening	%	4.95%	4.21%	3.58%	3.04%	2.58%	2.20%	1.87%	1.59%	1.35%	1.15%	0.97%	0.83%	0.70%	0.60%	0.51%	0.43%	0.37%	0.31%	0.27%	0.23%	0.19%	0.16%	0.14%
Allowed during the year	%	0.74%	0.63%	0.54%	0.46%	0.39%	0.33%	0.28%	0.24%	0.20%	0.17%	0.15%	0.12%	0.11%	0.09%	0.08%	0.06%	0.06%	0.05%	0.04%	0.03%	0.03%	0.02%	0.02%
Closing	%	4.21%	3.58%	3.04%	2.58%	2.20%	1.87%	1.59%	1.35%	1.15%	0.97%	0.83%	0.70%	0.60%	0.51%	0.43%	0.37%	0.31%	0.27%	0.23%	0.19%	0.16%	0.14%	0.12%
Accelerated Depreciation	Rs. Lacs	5.79	4.92	4.19	3.56	3.02	2.57	2.19	1.86	1.58	1.34	1.14	0.97	0.82	0.70	0.60	0.51	0.43	0.37	0.31	0.26	0.22	0.19	0.16
Net Depreciation Benefit	Rs. Lacs	5.79	4.92	4.19	3.56	3.02	2.57	2.19	1.86	1.58	1.34	1.14	0.97	0.82	0.70	0.60	0.51	0.43	0.37	0.31	0.26	0.22	0.19	0.16
Tax Benefit	Rs. Lacs	1.88	1.60	1.36	1.15	0.98	0.83	0.71	0.60	0.51	0.44	0.37	0.31	0.27	0.23	0.19	0.16	0.14	0.12	0.10	0.09	0.07	0.06	0.05
Net Saleable Energy	MU	4.12	4.12	4.13	4.12	4.12	4.12	4.13	4.12	4.12	4.12	4.13	4.12	4.12	4.12	4.13	4.12	4.12	4.12	4.13	4.12	4.12	4.12	2.89
Average Discounting Factor For a Full year		0.17	0.16	0.14	0.13	0.12	0.10	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02
Discounted Tax Benefit	Rs. Lacs	0.32	0.25	0.19	0.15	0.11	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Discounted Net Saleable Energy	MU	0.71	0.64	0.58	0.52	0.47	0.43	0.39	0.35	0.32	0.29	0.26	0.23	0.21	0.19	0.17	0.16	0.14	0.13	0.12	0.11	0.09	0.09	0.06
Discounted Benefit	Rs./ kWh	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax Benefit Levellised (Rs. Lacs)	5.7365																							
Net Saleable Energy (Levellised)	4.0425																							
Levellised Benefit Rs./kWh	0.142																							

Annexure-2

Computation of Per Unit Benefit of Accelerated Depreciation (Above 2 MW to 5 MW)

As per HPERC (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2012.

Depreciation amount	90.00%																		
Book Depreciation rate	5.28%																		
Tax Depreciation rate	15.00%																		
Additional Depreciation	14.00%																		
Income Tax (Normal Rates)	32.45%																		
Capital Cost (in Lacs per MW)	750.00																		
Years ----->	Unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Book Depreciation	%age	2.64%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	2.88%
Book Depreciation	Rs. Lacs	19.8	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	21.6
Accelerated Depreciation																			
Opening	%	100.00%	85.50%	66.69%	56.69%	48.18%	40.96%	34.81%	29.59%	25.15%	21.38%	18.17%	15.45%	13.13%	11.16%	9.49%	8.06%	6.85%	5.83%
Allowed during the year	%	14.50%	18.81%	10.00%	8.50%	7.23%	6.14%	5.22%	4.44%	3.77%	3.21%	2.73%	2.32%	1.97%	1.67%	1.42%	1.21%	1.03%	0.87%
Closing	%	85.50%	66.69%	56.69%	48.18%	40.96%	34.81%	29.59%	25.15%	21.38%	18.17%	15.45%	13.13%	11.16%	9.49%	8.06%	6.85%	5.83%	4.95%
Accelerated Depreciation	Rs. Lacs	108.75	141.08	75.03	63.77	54.21	46.08	39.16	33.29	28.30	24.05	20.44	17.38	14.77	12.56	10.67	9.07	7.71	6.55
Net Depreciation Benefit	Rs. Lacs	88.95	101.48	35.43	24.17	14.61	6.48	-0.44	-6.31	-11.30	-15.55	-19.16	-22.22	-24.83	-27.04	-28.93	-30.53	-31.89	-15.05
Tax Benefit	Rs. Lacs	28.86	32.92	11.49	7.84	4.74	2.10	-0.14	-2.05	-3.67	-5.04	-6.22	-7.21	-8.06	-8.77	-9.39	-9.91	-10.35	-4.88
Net Saleable Energy	MU	1.32	4.40	4.40	4.41	4.41	4.40	4.40	4.41	4.41	4.40	4.40	4.41	4.33	4.12	4.12	4.12	4.13	4.12
Average Discounting Factor For Full year		1.00	0.95	0.86	0.78	0.70	0.64	0.58	0.52	0.47	0.43	0.39	0.35	0.31	0.28	0.26	0.23	0.21	0.19
Discounted Tax Benefit	Rs. Lacs	28.86	31.35	9.90	6.11	3.34	1.34	-0.08	-1.07	-1.73	-2.15	-2.39	-2.51	-2.54	-2.50	-2.42	-2.31	-2.18	-0.93
Discounted Net Saleable Energy	MU	1.32	4.19	3.79	3.43	3.11	2.81	2.54	2.30	2.08	1.88	1.70	1.54	1.36	1.17	1.06	0.96	0.87	0.78
Discounted Benefit	Rs./ kWh	2.18	0.71	0.22	0.14	0.08	0.03	0.00	-0.02	-0.04	-0.05	-0.05	-0.06	-0.06	-0.06	-0.06	-0.06	-0.05	-0.02
Tax Benefit Levellised (Rs. Lacs)	5.5159																		
Net Saleable Energy (Levellised) in MU	4.0425																		
Levellised Benefit Rs./kWh	0.136																		

Continue.....

Computation of Per Unit Benefit of Accelerated Depreciation (Above 2 MW to 5 MW)

Depreciation amount	90.00%																								
Book Depreciation rate	5.28%																								
Tax Depreciation rate	15.00%																								
Additional Depreciation	14.00%																								
Income Tax (Normal Rates)	32.45%																								
Capital Cost (in Lacs per MW)	750.00																								
Years ----->	Unit	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
Book Depreciation	%age																								
Book Depreciation	Rs. Lacs																								
Accelerated Depreciation																									
Opening	%	4.95%	4.21%	3.58%	3.04%	2.58%	2.20%	1.87%	1.59%	1.35%	1.15%	0.97%	0.83%	0.70%	0.60%	0.51%	0.43%	0.37%	0.31%	0.27%	0.23%	0.19%	0.16%	0.14%	
Allowed during the year	%	0.74%	0.63%	0.54%	0.46%	0.39%	0.33%	0.28%	0.24%	0.20%	0.17%	0.15%	0.12%	0.11%	0.09%	0.08%	0.06%	0.06%	0.05%	0.04%	0.03%	0.03%	0.02%	0.02%	
Closing	%	4.21%	3.58%	3.04%	2.58%	2.20%	1.87%	1.59%	1.35%	1.15%	0.97%	0.83%	0.70%	0.60%	0.51%	0.43%	0.37%	0.31%	0.27%	0.23%	0.19%	0.16%	0.14%	0.12%	
Accelerated Depreciation	Rs. Lacs	5.57	4.74	4.02	3.42	2.91	2.47	2.10	1.79	1.52	1.29	1.10	0.93	0.79	0.67	0.57	0.49	0.41	0.35	0.30	0.25	0.22	0.18	0.16	
Net Depreciation Benefit	Rs. Lacs	5.57	4.74	4.02	3.42	2.91	2.47	2.10	1.79	1.52	1.29	1.10	0.93	0.79	0.67	0.57	0.49	0.41	0.35	0.30	0.25	0.22	0.18	0.16	
Tax Benefit	Rs. Lacs	1.81	1.54	1.31	1.11	0.94	0.80	0.68	0.58	0.49	0.42	0.36	0.30	0.26	0.22	0.19	0.16	0.13	0.11	0.10	0.08	0.07	0.06	0.05	
Net Saleable Energy	MU	4.12	4.12	4.13	4.12	4.12	4.12	4.13	4.12	4.12	4.12	4.13	4.12	4.12	4.12	4.13	4.12	4.12	4.12	4.13	4.12	4.12	4.12	2.89	
Average Discounting Factor For Full year		0.17	0.16	0.14	0.13	0.12	0.10	0.09	0.09	0.08	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02
Discounted Tax Benefit	Rs. Lacs	0.31	0.24	0.18	0.14	0.11	0.08	0.06	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Discounted Net Saleable Energy	MU	0.71	0.64	0.58	0.52	0.47	0.43	0.39	0.35	0.32	0.29	0.26	0.23	0.21	0.19	0.17	0.16	0.14	0.13	0.12	0.11	0.09	0.09	0.06	
Discounted Benefit	Rs./ kWh	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tax Benefit Levellised (Rs. Lacs)	5.5159																								
Net Saleable Energy (Levellised) in MU	4.0425																								
Levellised Benefit Rs./kWh	0.136																								

Annexure-3

Computation of Per Unit Benefit of Accelerated Depreciation (Above 5 MW to 25 MW)

As per HPERC (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2012.

Depreciation amount	90.00%																		
Book Depreciation rate	5.28%																		
Tax Depreciation rate	15.00%																		
Additional Depreciation	14.00%																		
Income Tax (Normal Rates)	32.45%																		
Capital Cost (in Lacs per MW)	700.000																		
Years ----->	Unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Book Depreciation	%age	2.64%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	2.88%
Book Depreciation	Rs. Lacs	18.48	36.96	36.96	36.96	36.96	36.96	36.96	36.96	36.96	36.96	36.96	36.96	36.96	36.96	36.96	36.96	36.96	20.16
Accelerated Depreciation																			
Opening	%	100.00%	85.50%	66.69%	56.69%	48.18%	40.96%	34.81%	29.59%	25.15%	21.38%	18.17%	15.45%	13.13%	11.16%	9.49%	8.06%	6.85%	5.83%
Allowed during the year	%	14.50%	18.81%	10.00%	8.50%	7.23%	6.14%	5.22%	4.44%	3.77%	3.21%	2.73%	2.32%	1.97%	1.67%	1.42%	1.21%	1.03%	0.87%
Closing	%	85.50%	66.69%	56.69%	48.18%	40.96%	34.81%	29.59%	25.15%	21.38%	18.17%	15.45%	13.13%	11.16%	9.49%	8.06%	6.85%	5.83%	4.95%
Accelerated Depreciation	Rs. Lacs	101.50	131.67	70.02	59.52	50.59	43.00	36.55	31.07	26.41	22.45	19.08	16.22	13.79	11.72	9.96	8.47	7.20	6.12
Net Depreciation Benefit	Rs. Lacs	83.02	94.71	33.06	22.56	13.63	6.04	-0.41	-5.89	-10.55	-14.51	-17.88	-20.74	-23.17	-25.24	-27.00	-28.49	-29.76	-14.04
Tax Benefit	Rs. Lacs	26.94	30.73	10.73	7.32	4.42	1.96	-0.13	-1.91	-3.42	-4.71	-5.80	-6.73	-7.52	-8.19	-8.76	-9.24	-9.66	-4.56
Net Saleable Energy	MU	1.24	4.12	4.12	4.12	4.13	4.12	4.12	4.12	4.13	4.12	4.12	4.12	4.13	4.12	4.12	4.12	4.13	4.12
Discounting Factor For Full year		1.00	0.95	0.86	0.78	0.70	0.64	0.58	0.52	0.47	0.43	0.39	0.35	0.31	0.28	0.26	0.23	0.21	0.19
Tax Benefit Levellised	5.15	26.94	29.26	9.24	5.70	3.11	1.25	-0.08	-1.00	-1.61	-2.01	-2.23	-2.34	-2.37	-2.33	-2.26	-2.15	-2.03	-0.87
Electricity Generation (Levellised) in MU	3.85	1.24	3.92	3.55	3.21	2.91	2.62	2.37	2.15	1.94	1.75	1.59	1.44	1.30	1.17	1.06	0.96	0.87	0.78
Levellised Benefit	0.13	2.18	0.71	0.22	0.14	0.08	0.03	0.00	-0.02	-0.04	-0.05	-0.05	-0.06	-0.06	-0.06	-0.05	-0.05	-0.05	-0.02
Tax Benefit Levellised (Rs. Lacs)	5.1481																		
Net Saleable Energy (Levellised) in MU	3.8530																		
Levellised Benefit Rs./kWh	0.134																		

Continue.....

**(COPY OF APPENDIX –D OF THE COMMISSION’S ORDER DATED 20.05.2013
Per MW Amount of Capital subsidy for SHPS in Private Sector**

			Rs. In Lacs
Capacity in MW	MNRE capital subsidy	Capital subsidy/MW	90% of capital subsidy/MW
Col-1	Col-2	Col-3	Col-4
Capacity in MW	As per MNRE scheme	Col-2/ Col-1	=0.9*Col-3
1	200.00	200.00	180.00*
2	230.00	115.00	103.50*
3	260.00	86.67	78.00
4	290.00	72.50	65.25
5	320.00	64.00	57.60*
6	350.00	58.33	52.50
7	380.00	54.29	48.86
8	410.00	51.25	46.13
9	440.00	48.89	44.00
10	470.00	47.00	42.30
11	500.00	45.45	40.91
12	530.00	44.17	39.75
13	560.00	43.08	38.77
14	590.00	42.14	37.93
15	620.00	41.33	37.20
16	650.00	40.63	36.56
17	680.00	40.00	36.00
18	710.00	39.44	35.50
19	740.00	38.95	35.05
20	770.00	38.50	34.65
21	800.00	38.10	34.29
22	830.00	37.73	33.95
23	860.00	37.39	33.65
24	890.00	37.08	33.38
25	920.00	36.80	33.12

* These values have been considered in the Tariff Calculation in respect of category –I,II & III respectively.

The values under col.-4 shall be used (i.e. as value of ‘Y’ in lac Rs.) for working out the adjustment on account of differential rate of Capital subsidy as per the formulae given in sub-para 45.3(a) of main order[@]. In cases where the capacity of the SHPs involves in fraction of MW, the value of ‘Y’ (in lac Rs.) in the said formulae shall be worked out on similar lines on which the values under Col.2, 3 & 4 have been worked out.

[@] Refers to the Commission’s order dated 20.05.2013.

Per MW Amount of Capital subsidy for SHPs in Private Sector
[Based on the prevalent rates as per MNRE scheme dated 2nd July, 2014]

Rs. In Lacs			
Capacity in MW	MNRE capital subsidy	Capital subsidy/MW	90% of capital subsidy/MW
Col-1	Col-2	Col-3	Col-4
Capacity in MW	As per MNRE scheme	Col-2/Col-1	=0.9*Col-3
3	450.00	150	135
4	500.00	125.00	112.50
5	500.00	100.00	90
6	500.00	83.33	75
7	500.00	71.43	64.29
8	500.00	62.50	56.25
9	500.00	55.56	50
10	500.00	50.00	45
11	500.00	45.45	40.91
12	500.00	41.67	37.50
13	500.00	38.46	34.62
14	500.00	35.71	32.14
15	500.00	33.33	30.00
16	500.00	31.25	28.13
17	500.00	29.41	26.47
18	500.00	27.78	25
19	500.00	26.32	23.68
20	500.00	25.00	22.50
21	500.00	23.81	21.43
22	500.00	22.73	20.45
23	500.00	21.74	19.57
24	500.00	20.83	18.75
25	500.00	20.00	18

The values under col.-4 shall be used (i.e. as value of '**Z**' in lac Rs.) for working out the adjustment on account of differential rate of Capital subsidy for the projects above 2 MW to 25 MW capacity as per the formulae given in this order. In cases where the capacity of the SHPs involves in fraction of MW, the value of '**Z**' (in lac Rs.) in the said formulae shall be worked out on similar lines on which the values under Col.2, 3 & 4 have been worked out.

Generic Levellised Tariffs and Associated terms and Conditions for category-I of SHPs (i.e. above 100 kW to 2MW) as per HPERC (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2012:

1. The generic levellised tariff for the SHP's under this category (i.e. above 100 kW to 2 MW Capacity) shall be as under:

- | | | |
|-----|----------------------------------|-----------------------------|
| i) | Without accelerated Depreciation | Rs. 3.34/kWh |
| ii) | With accelerated Depreciation | Rs. 3.20/kWh ^(#) |

^(#) The generic levellised tariff with Accelerated Depreciation shall be applicable unless the renewable energy generator establishes, to the satisfaction of the distribution licensee that he has not availed or is not entitled to such a benefit.

2. The above generic levellised tariff shall be subject to adjustments in accordance with the following sub-paragraphs (a) to (c):-

(a) Adjustment on account of differential rate of capital subsidy and grants, budgetary support and Generation based Incentives.

(i) For cases in which MNRE scheme 2009-10 (continued upto the year 2012-13) is applicable.

Sr. No.	Description	Increase in Paise/kWh on account of differential rate of capital subsidy
(i)	If the capacity is more than 100 kW but does not exceed 1000kW.	No Increase
(ii)	If the capacity is more than 1000 kW but does not exceed 2000 kW.	$=12/76.50 * (180 - "Y")$ Paise/kWh

Where "Y" = 90% of the capital subsidy/MW (in lac Rs.) as per Col-4 of Annexure -4 of this order for the project for which Generic Levellised Tariff is to be determined.

(ii) For cases covered in new subsidy scheme of MNRE, as circulated by MNRE vide their letter No.14 (03) 2014-SHP dated 2nd July, 2014:-

Based on the rates of capital subsidy under revised scheme, the SHPs covered therein shall be entitled to an increase at a flat rate of seven (7) paise per unit in these rates. This shall however be applicable only for the SHPs covered under the revised scheme.

⁽ⁱⁱⁱ⁾ The adjustments on account of grant or budgetary support and the generation based incentive if any, shall be made separately on case to case basis in accordance with the Regulation 21 of the RE Tariff Regulations, 2012. Similarly, the adjustments on account of additional MNRE subsidy to Government Sector Projects shall also be made separately on case to case basis. The above formulae given in (i) and (ii) above shall be

applicable only for adjustment on account of capital subsidy under applicable MNRE subsidy scheme for SHPs.

(b) Variation in free power structure:

The tariffs as mentioned above account for free power (energy) @ 7 % for the first 12 years and @13% for the balance tariff period of 28 years. The levelled net saleable energy for this structure of free power has been worked out as 4.326 MU per annum per MW.

In case the structure of free power(energy) applicable for SHP for which the PPA is to be approved by the Commission is different from that considered in the tariff computation, the adjustment shall be carried out in accordance with the para 41.4 of the order dated 20.05.2013. However, it shall be ensured that free power (energy) to be accounted for in the tariff does not exceed the permissible limits, as specified in sub-regulation (2) and (3) of Regulation 35 of the RE Tariff Regulations, 2012 during any part of the tariff period. The adjustment on this account, if required, shall be carried out after carrying out the adjustment(s), if any, under sub-para 2(a) above.

(c) Rounding:

The tariff worked out after carrying out the adjustments on the above lines shall be rounded to the nearest Paisa. The fraction of 0.5 and above shall be rounded to the next higher value and the fraction of less than 0.5 shall be ignored.

3. The tariff shall be subject to the RE Tariff Regulations, 2012 and orders issued or as may be issued by the Commission from time to time under the said Regulations.

Annexure-7

Generic Levellised Tariffs and Associated terms and Conditions for category-II of SHPs (i.e. above 2 MW to 5 MW) as per HPERC (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2012:

1. The generic levellised tariff for the SHP's under this category (Above 2 MW to 5 MW Capacity) shall be as under:

- i) Without accelerated Depreciation Rs. 3.27/kWh
- ii) With accelerated Depreciation Rs. 3.13/kWh^(#)

^(#)The generic levellised tariff with Accelerated Depreciation (Rs.3.13/kWh^(#)) shall be applicable unless the renewable energy generator establishes, to the satisfaction of the distribution licensee that he has not availed or is not entitled to such a benefit.

2. The above generic levellised tariff shall be subject to adjustments in accordance with the following sub-paragraphs (a) to (c):-

(a) Adjustment on account of differential rate of capital subsidy and grants, budgetary support and Generation based Incentives.

(i) For cases in which MNRE scheme 2009-10 (continued upto the year 2012-13) is applicable.

Sr. No.	Description	Increase in Paise/kWh on account of differential rate of capital subsidy
(i)	If the capacity is more than 2000 kW but does not exceed 5000 kW.	$=10/45.90 * (103.5 - "Y")$ Paise/kWh

Where "Y" = 90% of the capital subsidy/MW (in lacs Rs.) as per Col-4 of Annexure -4 for the project for which Generic Levellised Tariff is to be determined.

(ii) For cases covered in new subsidy scheme of MNRE, as circulated by MNRE vide their letter No.14 (03) 2014-SHP dated 2nd July, 2014:-

Sr. No.	Description	Increase in Paise/kWh on account of differential rate of capital subsidy
(i)	If the capacity is more than 2000 kW but does not exceed 5000 kW.	$=10/45.90 * (103.5 - "Z")$ Paise/kWh

Where "Z" = 90% of the capital subsidy/MW (in lacs Rs.) as per Col-4 of Annexure -5 for the project for which Generic Levellised Tariff is to be determined.

- (iii) The adjustments on account of grant or budgetary support and the generation based incentive if any, shall be made separately on case to case basis in accordance with the Regulation 21 of the RE Tariff Regulations. Similarly the adjustments on account of additional MNRE subsidy to Government Sector Project shall also be made separately on case to case basis. The above formulae shall not be applicable in any of such cases.

(b) Variation in free power structure:

The tariffs as mentioned above account for free power (energy) @ 7 % for the first 12 years and @ 13% for the balance tariff period of 28 years. The levelled net saleable energy for this structure of free power has been worked out as 4.326 MU per annum per MW.

In case the structure of free power (energy) applicable for SHP for which the PPA is to be approved by the Commission is different from that considered in the tariff computation, the adjustment shall be carried out in accordance with the para 41.4 of the order dated 20.05.2013. However, it shall be ensured that free power (energy) to be accounted for in the tariff does not exceed the permissible limits, as specified in the sub-regulation (2) and (3) of Regulation 35 of the RE Tariff Regulations, 2012 during any part of the tariff period. The adjustment on this account, if required, shall be carried out after carrying out the adjustment(s), if any, under sub-para 2(a) and (b) above.

(c) Rounding:

The tariff worked out after carrying out the adjustments on the above lines shall be rounded to the nearest Paisa. The fraction of 0.5 and above shall be rounded to the next higher value and the fraction of less than 0.5 shall be ignored.

3. The tariff shall be subject to the RE Tariff Regulations, 2012 and orders issued or as may be issued by the Commission from time to time under the said Regulations.

Generic Levellised Tariffs and Associated terms and Conditions for category-I of SHPs (i.e. above 5 MW to 25 MW) as per HPERC (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2012:

1. The generic levellised tariff for the SHP's under this category (Above 5 MW to 25 MW Capacity) shall be as under:

i) Without accelerated Depreciation	Rs.3.17/kWh
ii) With accelerated Depreciation	Rs. 3.04/kWh ^(#)

^(#)The generic levellised tariff with Accelerated Depreciation (Rs.3.04/kWh^(#)) shall be applicable unless the renewable energy generator establishes, to the satisfaction of the distribution licensee that he has not availed or are not entitled to such a benefit.

2. The above generic levellised tariff shall be subject to adjustments in accordance with the following sub-paragraphs (a) to (c):-

(b)Adjustment on account of differential rate of capital subsidy and grants, budgetary support and Generation based Incentives.

- (i) For cases in which MNRE scheme 2009-10 (continued upto the year 2012-13) is applicable.

Sr. No.	Description	Increase in Paise/kWh on account of differential rate of capital subsidy
(i)	If the capacity is more than 5000 kW but does not exceed 25000 kW.	$=6/24.48*(57.60-“Y”)Paise/kWh$

Where “Y”= 90% of the capital subsidy/MW (in lacs Rs.) as per Col-4 of Annexure - 4 for the project for which Generic Levellised Tariff is to be determined.

- (ii) For cases covered in new subsidy scheme of MNRE, as circulated by MNRE vide their letter No.14 (03) 2014-SHP dated 2nd July, 2014:-

Sr. No.	Description	Increase in Paise/kWh on account of differential rate of capital subsidy
(i)	If the capacity is more than 5000 kW but does not exceed 25000 kW.	$=6/24.48*(57.60-“Z”)Paise/kWh$

Where “Z”= 90% of the capital subsidy/MW (in lacs Rs.) as per Col-4 of Annexure -5 for the project for which Generic Levellised Tariff is to be determined.

(iii) The adjustments on account of grant or budgetary support and the generation based incentive if any, shall be made separately on case to case basis in accordance with the Regulation 21 of the RE Tariff Regulations. Similarly the adjustments on account of additional MNRE subsidy to Government Sector Projects shall also be made separately on case to case basis. The above formulae shall not be applicable in any of such cases.

(b) Variation in free power structure:

The tariffs as mentioned above account for free power (energy) @ 13% for the entire tariff period of 40 years. The levelised net saleable energy for this structure of free power (energy) has been worked out as 4.123 MU per annum per MW.

In case the structure of free power (energy) applicable for SHP for which the PPA is to be approved by the Commission is different from that considered in the tariff computation, the adjustment shall be carried out in accordance with the para 41.4 of the order dated 20.05.2013. However, it shall be ensured that free power (energy) to be accounted for in the tariff does not exceed the permissible limits, as specified in the sub-regulation (2) and (3) of Regulation 35 of the RE Tariff Regulations, 2012 during any part of the tariff period. The adjustment on this account, if required, shall be carried out after carrying out the adjustment(s), if any, under sub-para 2(a) and (b) above.

(c) Rounding:

The tariff worked out after carrying out the adjustments on the above lines shall be rounded to the nearest Paisa. The fraction of 0.5 and above shall be rounded to the next higher value and the fraction of less than 0.5 shall be ignored.

3. The tariff shall be subject to the RE Tariff Regulations, 2012 and orders issued or as may be issued by the Commission from time to time under the said Regulations.