

HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

In the matter of formulation of the Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination), Regulations, 2017.

CORAM
Sh. S.K.B.S. Negi
Chairman
Sh. Bhanu Pratap Singh
Member

Statement of Reasons

BACKGROUND:

- 1.1 The Himachal Pradesh Electricity Regulatory Commission (hereinafter referred as “the Commission” or “the HPERC”), published the draft HPERC (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination), Regulations, 2017 on 19.08.2017 (hereinafter referred as to “draft RE Regulations, 2017”) in Rajpatra Himachal Pradesh in exercise of the power 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 (hereinafter referred as “the Act”).
- 1.2 As required vide sub-section (3) of the Section 181 of the Electricity Act, 2003, read with sub-regulation (5) of regulation 16 of the HPERC (Conduct of Business) Regulations, 2005 and rule 3 of the Electricity (Procedure for Previous Publication) Rules, 2005, the Commission invited public objections and suggestions by way of insertions in two Newspapers i.e. “Amar Ujala” and “The Tribune” on 20th August, 2017 and the full text of the draft RE Regulations, 2017 alongwith Explanatory Memorandum thereon, was made available on the Commission’s website www.hperc.org. A time of 21 days was allowed for filing objections and suggestions in relation to the said draft RE Regulations, 2017.
- 1.3 Subsequently a public hearing was held on 16.09.2017, wherein many stakeholders requested the Commission for adjournment of the hearing to enable them to present their view points in a better way.
- 1.4 Taking into consideration the request of adjournment of the public hearing by the stakeholders, the Commission decided to conduct another public hearing on the subject matter. Accordingly, the Commission again invited the fresh/additional public objections and suggestions by way of insertions in two News papers i.e. “Times of India” and “Danik Bhaskar” on 20.09.2017 and extended the submission date of filing objections/suggestions upto 29.09.2017 and subsequently second public hearing was held on 07.10.2017.
- 1.5 The Commission received comments/suggestions on the draft RE Regulations, 2017 from the following stakeholders:-

1. M/s Sai Engineering Foundation, Sai Bhawan, Sector-4, New Shimla-171009 (HP).
 2. The Bonafide Himachalies Hydro Power Developers Association, Sai Bhawan, Sector-4, New Shimla-171009 (HP).
 3. The Himalaya Power Producers Association, B-7, Sector-1, New Shimla- 171009 (HP).
 4. M/s Himadari Hydro Power Projects (P) Ltd, 1, Electronics Complex, Chamba Ghat, Solan-173213 (HP).
 5. M/s Growel Energy Company Ltd., 1, Electronics Complex, Chamba Ghat, Solan-173213 (HP).
 6. M/s Gaur Hydro Power (P) Ltd., 339, Functional Industrial Estate, Patparganj, Delhi-110092.
 7. M/s Soiel Dashed Hydro Power (P) Ltd., SCO-5, Block No. 2, SDA Complex, Kasumpti, Shimla-171009 (HP).
 8. M/s DLI Power (India) Pvt. Ltd., House No.-16, HP Officers' Colony (West End), Panthaghati, Shimla-171009 (HP).
 9. M/s Panchhor Hydro Power Pvt. Ltd., Gyamba House, South End, Lane-IV, Sector-1, New Shimla-171009 (HP).
 10. M/s Greenko Energies Private Limited, Plot No. 44, Jubilee, Hyderabad-500033, Telangana.
 11. M/s Puri Oil Mills Limited, 302, Jyoti Shikhar, District Centre, Janakpuri, New Delhi-110058.
 12. M/s Monte Cristo Hydro Private Limited, Sungal Tea Estate, VPO Sungal, Tehsil Palampur, Distt. Kangra-176061 (HP).
 13. M/s Leond Hydro Power Pvt. Ltd., Skipton Villa, the Ridge, Shimla-171001(HP).
 14. M/s DLI Power (India) Private Limited, House No.-16, HP Officers' Colony (West End), Panthaghati, Shimla-171009 (HP).(Additional comments).
 15. M/s Brua Hydrowatt Pvt. Ltd., Baddi, Tehsil Nalagarh, Distt. Solan(HP).
 16. The Directorate of Energy (DoE), Shanti Bhawan, Phase-III, Sector-4, Kagna Dhar, New Shimla-171009 (HP).
 17. The Himachal Pradesh State Electricity Board Limited (HPSEBL), Vidyut Bhawan, Shimla-171004 (HP).
 18. The Government of Himachal Pradesh in the Deptt. of MPP & Power, Shimla-171002.
- 1.6 The comments from the stakeholders mentioned at Sr. No 1 to 13 in para 1.5 were received before the stipulated date i.e. 11.09.2017 and those from Sr. Nos.14 to 18 were received after 11.09.2017 but within extended stipulated date i.e. 29.09.2017.
- 1.7 The list of participants who attended the public hearings on 16.09.2017 and 07.10.2017 is annexed at Annexure-“A”.

2 Objections and issues raised in public hearings:-

During the public hearings, the stakeholders and their representatives presented their views. The issues and concerns voiced by them are briefly given as under:-

- (i) The representative of M/s Panchhor Hydro Power Pvt. Ltd., Sh. M.G. Ramachandran, the Learned Senior Advocate stated that even though inefficiency should not be rewarded, the Commission may consider effective provisions of controllable and uncontrollable parameters

associated with determination of SHP tariff. He further stressed that since Renewable Energy Certificates (RECs) are available to the distribution licensee also (if it procures RE power beyond their RPO in respective year), the distribution licensee may be required to work out its RE power procurement planning accordingly. The distribution licensee be asked to procure SHP power from all those projects which are ready for construction. The construction time period of four years plus another one year with liquidated damages may be fixed for PPA validity. It was also suggested that the provision for adjustment on account of increase/decrease in taxes, effective RoE may be provided in the final RE Regulations, 2017. The higher royalty (free power) structure payable by the SHP developers may also be considered in the tariff determination.

- (ii) The representative of M/s Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; and M/s Gaur Hydro Power (P) Ltd.; Sh. Ajay Vaidya Advocate stated that the required NOCs for construction of small hydro project may require to be issued in time bound manner and after the expiry of stipulated time limit fixed for their issuance, the same may be considered as deemed sanctioned. He further stated that the provisions made in the draft regulations for linking applicability of new tariff under these regulations with the date of signing of IA may be deleted. The draft Regulations 3, 11 and 17 may be modified accordingly. The control period of these regulations may be made applicable with effect from 01.04.2017. The proposed capital cost for SHPs may be enhanced, to make the small hydro projects viable.
- (iii) The representative of Bonafide Himachalies Hydro Power Developers Association, Sh. Aditya Grover, Advocate stated that the generic tariff should be determined on yearly basis. He further stated that developers may be compensated for the project line cost as per the mechanism laid down by the Uttrakhand Electricity Regulatory Commission (UERC). The Central Electricity Regulatory Commission (CERC) norms be followed as SHP tariff determination with proposed norms may be lesser than the tariff on CERC norms by about one rupee per unit. It was suggested that the capital cost for SHPs may be considered as per the study carried out by the IIT Roorkee.
- (iv) The Chief Engineer (SO), HPSEBL made a power point presentation highlighting overall SHP development scenario in the State. He stated that HPSEBL is already surplus in their non-solar Renewable Power Purchase Obligation (RPPO). However, to tap the available potential of small hydro generation, a holistic approach may be required i.e. the State Hydro Power Policy needs to be revised. He further stated that in case the power procurement policy for mandatory purchase of power from SHPs is approved, the HPSEBL shall be required to be compensated through viability gap funding. On the provision of RECs availability to the distribution licensee for RE procurement beyond RPPO, as suggested by Sh. M.G. Ramchandran, he stated that an inventory of non-solar RECs approximately worth Rs. 80.00 Crore is already lying with the HPSEBL. The higher wheeling charges and losses etc. of respective systems are the main constraints which make the sale of non-solar RE power from Himachal Pradesh to other States unviable.

- (v) The Consumer Representative Shri Charanjit Singh stated that under the proposed Regulations a balanced approach has been adopted by the Commission. Any inefficiency on part of renewable energy developers may not be passed on to the consumers of the State.
- (vi) Some other stakeholders also reiterated their view points/ suggestions already submitted by them in writing to the Commission.

3 Consideration of written submissions and viewpoints expressed in the public hearing by the stakeholder(s) and analysis/Commission's view.-

3.1 General issues:-

(a) Comments of the RE developers:-

The developers and their associations, in their general comments, have highlighted the need to promote the SHP technology and stressed that unless reasonable returns are allowed, the SHPs may not be viable.

(b) Advice of State Government:-

Government of HP in its advice, has stated as under:-

Generation of electricity from renewable sources is a key component of the Government Policy for sustainable development of the State. Among the renewable, the major potential is small hydro and solar that can effectively and efficiently be utilized/distributed for generation to bring in efficiency in the supply and universal access to electricity in the rural and remote areas of the State. Emphasis in generation from renewable sources will also strengthen and sustain the policy of 100% green energy consumption in the State which is in line with Himachal Pradesh Government and HPERC Policy by supplementing the availability and substituting the power from fossil fuel (presently approx. 1500 MUs), on sustainable basis.

(c) Commission's View:-

- (i) As already brought out by the Commission in the Explanatory Memorandum posted on the HPERC's website at the time of publishing the draft RE Regulations, 2017, the Commission had adopted a very balanced approach while framing the draft regulations. In this connection, para 3.2 of the said memorandum is reproduced below for ready reference:-

"Proposed RE regulations take into account the multiple objectives of efficient and economic development of Renewable Energy, fairness to investors, choice of developer for disposal of power, interest of consumers, utility interests, operational and implementation simplicity, competition, continuity etc in a harmonious manner. The Commission felt it necessary to carefully balance all such aspects while preparing these draft regulations. With the advent of various mechanisms for sale of power from the Small

Hydro Projects in HP, the developers do not have to necessarily depend upon the distribution licensee for long term sale of power from their projects. Similarly the licensee also does not have to necessarily purchase power from all the projects. The Commission is aware that norms proposed in these Regulations may not fully meet the expectations of some of the SHPs which may be having unduly higher capital costs or lower CUF. The Commission feels that developers of such SHPs should work out the economics of their projects by economising costs or exploring the markets like Open Access, REC mechanism etc. which may yield higher returns to them. Since it is not binding for the utility to purchase power from all SHPs, any liberal norms leading to higher tariff could discourage the licensee to purchase power from SHPs. However, depending upon the market conditions and the energy requirements from renewable sources, the licensee can also resort to competitive bidding for purchase of power from such projects, after following due process and with the prior approval of the Commission”.

- (ii) The Commission, while agreeing that there is a need to further promote the SHP technology in the State, feels that this may require proactive steps by all the stakeholders and mere enhancement of the tariffs may not actually lead to promotion of SHPs as the procurement of power by HPSEBL from such projects shall materialize only if it finds the same to be prudent to do so, after comparing with the rates of power from other technologies. The Commission is required to balance the interest of all the stakeholders in an equitable manner. In order to facilitate optimum development of power sector in the State in particular context of SHP renewable technology, it is imperative that the viability gaps, if any, should be equitably shared, on the basis of predefined principles, by all the major stakeholders viz. by SHP developers, Government (State & Central) and to some limited extent by HPSEBL on behalf of consumers of the State. In the first instance, the developers must ensure efficient and cost effective development of the projects right from infancy stage to the operation stage and the tariffs shall have to be such that only such SHPs which are implemented in efficient manner are supported and inefficiencies are not rewarded. Another important factor is about the delays in implementation of SHPs due to various reasons. In order to ensure that inefficiencies are not rewarded, there has to be complete fairness, equity and justice in relation to applicability of tariff amongst the SHPs allotted in the similar time frame. The delays in getting the requisite clearances are obviously one of the major factors which leads to time and cost overruns. The developers as well as the Government authorities need to be proactive in the matter to avoid such situations. The Commission can obviously not take cognizance of such delays beyond reasonable limits while specifying the tariff norms, particularly when the time lines for implementation of the projects are mutually agreed by the parties in the Implementation Agreements (IAs) which cannot be totally over looked. The pro-active implementation of various remedial measures, as explained above, would certainly help in reducing the cost of power from SHP technology to such levels which, by and large, may be able to compete with the other sources of power. Once the cost of generation is brought down to reasonably lower levels, an assured market shall automatically be available to the SHPs, whether it be through HPSEBL or the other Discoms/consumers.

- (iii) In view of the forgoing, the Commission shall, while finalizing the regulations adopt a balanced approach so as to take into account the multiple objectives of efficient and economic development of Renewable Energy, fairness to investors, choice of developer for disposal of power, interest of consumers, utility interests, operational and implementation simplicity, competition, continuity etc in a harmonious manner.

3.2 The Commission now proceeds further to discuss the issues arising out of the comments submitted by the stakeholders. In this regard, the Commission observes that the comments given by the stakeholders representing the developers, directly or through their associations, are, by and large, similar, repetitive, and overlapping in nature. Some of the issues raised are, in fact, not relevant to the regulations under consideration. As such, the Commission finds it appropriate to discuss only the main issues relevant to the present regulations, instead of discussing each of the submissions of such stakeholders. The comments of other stakeholders i.e. State Govt., Director (Energy) and HPSEBL have however been discussed in separate sub paragraphs under the respective issues. The main issues arising out of the submission of stakeholders and the views of the Commission have been discussed in the following paragraphs:-

3.3 Date of Commencement of Regulations.-

(a) Comments of the RE developers:-

The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; The Himalaya Power Producers Association, M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company;Ltd.; M/s Gaur Hydro Power (P) Ltd.; M/s Panchhor Hydro Power Pvt. Ltd.; M/s Soiel Dashal Hydro Power (P) Ltd.; and M/s Leond Hydro Power Pvt. Ltd. have made submissions mainly as under:-

- The draft RE Regulations, 2017 should be applicable from 1st April, 2017 since 'year' means 'financial year' and RE Regulations, 2012 also clearly state that these are applicable up to 31st March 2017. The six month period is a transitional period for finalisation of new Regulations. RE Regulations 2012 do not account for price increase during its control period and cost of construction has increased to more than Rs 10 Crore per MW on 31st March 2017 as against Rs. 7.3 Crore envisaged in the RE Regulations.2012. Thus, IPPs are facing financial hardships and return on equity is almost NIL or even negative.
- The Commission has notified the HPERC (Promotion of Generation from Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations 2012 under Sections 61, 62(1), 86(1) (a), (b) and (e) and 181(2)(zd) of the Act. These Regulations were framed for setting the norms for determination of tariff for renewable energy produced in the State. The preamble to the 2012 Regulations records that:

“AND WHEREAS the existing Himachal Pradesh Electricity Regulatory Commission (Power Procurement from Renewable Sources and Procurement from Renewable Sources and Co-generation by

Distribution Licensees) Regulations 2007 specify that the tariff for SHPs not exceeding 5 MW capacity is subject to review after every 5 years” (emphasis supplied)

- Regulation 1(2) of the RE Regulations, 2012 states that they shall remain in force for the period between 18.12.2012 and 31.3.2017. Regulation 2 (1)(f) defines “Control Period or Review Period” to mean the period during which the norms for determination of tariff specified in the Regulations shall remain valid. Regulation 9 mandates that the Control Period shall expire on 31.3.2017. Regulation 13(3) of the RE Regulations, 2012, also provides that the generic levellised tariff determined by the Commission in accordance with the Regulations shall remain valid for the entire *control period*, i.e. upto 31.03.2017.
- It is evident from a perusal of the aforesaid submissions that the premise of the RE Regulations, 2012, was that the norms for determination of tariff, are to be revised every five years. Vide the draft RE Regulations, 2017, the Commission has sought to exclude those IPPs who have signed the IA prior to 31.3.2017 which is arbitrary, discriminatory and against the Spirit of the Act.
- RE Regulations, 2012 and draft RE Regulations, 2017 state that ‘year’ is a ‘financial year’ and norms for calculating the tariff are to be considered for the norms prevailing for the years of the control period during which construction of the project is to take place. It has been suggested that control period should start from 1st April, 2017 for proposed draft RE Regulations.

(b) Commission’s Views:-

The stakeholders/objectors representing the developers have suggested that the new regulations should be applicable w.e.f. 01.04.2017 instead of 01.10.2017, keeping in view the submissions that as per the HPERC (Promotion of Generation from Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations 2012 (hereinafter referred as to “RE Regulations, 2012”), the term ‘year’ means the ‘financial year’ and extension of RE Regulations, 2012 upto 30.09.2017 shall cause financial hardships to them. The Commission observes that as per the RE Regulations, 2012 read with the amendment dated 31st March, 2017, the control period under the RE Regulation, 2012 extends upto 30.09.2017. The Commission therefore finds it appropriate that the new regulations should commence from the 01.10.2017 only.

3.4 Project line and interconnection. –

(a) Comments of the RE developers:-

- (i) The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; The Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd.; M/s Panchhor Hydro Power Pvt. Ltd.; and M/s Greenko Energies Private Limited have made submissions mainly as under:-

- Regulation 6 states that renewable generator shall construct line at his own cost. It has been submitted that in most of the cases sub-Stations are far away and length of project line vary for every project. Therefore transferring such variable cost of project line and its O&M expenses, based on actual, by the Discom, to the developer is against the concept of generic tariff determination. To keep all the generators at same level, the cost of project line should be borne by the licensee.
 - The definitions of the Interconnection Facilities and Interconnection point [Regulation 2(1) (k) and (I)] are not as per the CERC RE Regulations and its Statement of Reasons. The interconnection point is to be located in project switch yard and all expenditure on project line and incoming bays is to be borne by the State Discom. This is based on the fact that the length of evacuation line varies in every project and generic tariff cannot include such project specific variable expenditure. However, the proposed RE Regulations, 2017 have put this expenditure in the scope of the developer. This needs to be reviewed and either, the cost of project be enhanced to cover this expenditure up to a certain limit or else it should be in the scope of Discom. Accordingly, definition of 'Net Saleable Energy', 'Project', 'Project Line' and 'SHP' may also be amended.
 - There is no justification given in Para 4.2.2 of Explanatory Memorandum for passing on the cost of project line and bay of Discom Grid, for connectivity of the project, in developer's scope, except that it is proposed to retain the existing provision. This is highly unjustified and discourages the developers from investing in the state as compared with other states where such costs are borne fully or partly by the Discom. As per this para, not only the cost of project line/bay but its O&M expenses, for the duration of PPA, is also to be borne by developer. The cost of these components (project line and interconnection facilities) should not be formed a part of the project and as such of the capital cost also.
- (ii) M/s Leond Hydro Power Pvt. Ltd. have made the following submission:-
- Regulation 6 states that renewable generator should construct line at his own cost. In most of the cases sub-Stations are far away, therefore cost of transmission line beyond 2 km should be repaid by the licensee. Regulation 5(8) provides for generators to augment or establish transmission system beyond interconnection point. It has been suggested that the generators should be responsible for construction of only 2 km long transmission line and beyond distance of 2 km the transmission system should be constructed by generators on build and transfer basis. Any expenditure incurred by the generators beyond 2 km distance should be repaid by the licensee alongwith interest in five installments. The provision of pass through expenditure as envisaged in this draft RE Regulations, 2017, should be extended to transmission system beyond 2 km for every IPP.

(b) Advice of State Government:-

The Government of Himachal Pradesh has advised stating that IPPs shall evacuate their power upto the inter-connection point of HPSEBL/ HPPTCL at their own cost.

(c) Commission's View.-

As per the general policy followed by the State Government and the Commission, the developers are responsible for delivery of power at the interconnection point. The interconnection facilities are however to be provided and maintained by the concerned licensee at the cost of the developer. The Commission finds it appropriate to continue following this policy. As regards the cost of these components, the same has to form part of the capital cost as these components form the part of the project only, which is also in line with the advice given by the State Government. In relation to the suggestion to consider the project line of only 2 KM length as a part of the capital cost and to compensate the developer for longer lengths, the Commission feels that it may not be appropriate to link the generic norms with the project specific features of individual projects. The developers are expected to exercise due prudence while selecting the projects sites. A project having long project line may still be viable if its impact can be offset by better hydrology and lower costs of other components having impact on the final tariff. Adjustments in generic tariff cannot be allowed for each specific parameter.

3.5 Promotion of renewable energy sources. –

(a) Comments of the RE developers:-

The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; M/s Soiel Dashed Hydro Power (P) Ltd and M/s Leond Hydro Power Pvt. Ltd. have made submissions mainly as under:-

Timelines for connectivity:-Regulation 5 (2) and 5 (3) of draft RE Regulations, 2017, state that generator should apply for connectivity at least 24 months prior to intended date of such connectivity. This period should be reduced to 12 months since HIMURJA accords only 24 months construction time for small hydro projects. It shall also promote fast construction of the projects. It has been suggested that the Licensee is not allowing connectivity at some of their sub-Stations even when same is approved by the nodal agency HPPTCL (STU). Therefore, in Regulation 5 (3) in the first line the word 'may' should be replaced by the word 'shall'. Moreover, the words “mutual acceptance between the Licensee and the renewable generator” in the last line should be deleted because it is not a transparent process and this issue shall be sorted out at the time of according Techno-Economic Clearance (TEC) itself. For Ease of Doing Business, such human interface should be reduced as far as possible.

(b) Comments of Directorate of Energy:-

Directorate of Energy (DoE) have made the following submission:-

Regulation 5- Promotion of Renewable Energy Source: The period for applying to the licensee for connectivity should be 30 months instead of 24 months. The period of 30 months should be bifurcated for 24 months for construction and 6 months for system study/strengthening of the transmission/evacuation system. In case of renewable technologies other than small hydro projects, the application shall be made at least 18 months instead of 12 months also. The period of intimation by the Project developer to licensee should be 6 months instead of 4 month for preparation of activities related to SLDC and declaration of COD by Directorate of Energy (DoE) after completion of all codal formalities. It has also been submitted that the provision in this regard may be made in the State Grid Code, 2010.

(c) Commission's view:-

- (i) The developer stakeholders have suggested that the minimum advance period to apply for connectivity should, in case of SHPs, be reduced from 24 months to 12 months as HIMURAJA allows only 24 months for construction of the project. The submission seems to be self defeating in view of the fact that developer can apply for connectivity immediately after signing the implementation agreement and there is no reason as to why the SHP developers should not apply for connectivity at least 24 months prior to the intended date of such connectivity. This is important keeping in view the fact that the licensee(s) also require at least reasonable time to make necessary arrangements. As regards the suggestion for deletion of the provision for mutual acceptance on the time limit, the Commission observes that such provision shall only provide more flexibility in cases involving site specific problems and does not in any way debar the developer to enter into written understanding with the licensee in advance.
- (ii) In relation to the suggestion to replace word 'may' with 'shall', the Commission feels that the existing provisions in this regard is quite balanced and is not required to be changed.
- (iii) As regards the suggestion for increasing the time line of advance notice of 4 months to 6 months (for synchronization etc.), the Commission feels that the period of 4 months shall be quite reasonable if the progress at site during construction is shared by all concerned on periodical basis in mutually agreed manner.
- (iv) Some of the developers have also raised specific issues about delays in transmission/distribution system for their projects. The Commission does not find it appropriate to address the individual issues herein.

3.6 Options to developers to establish system beyond the interconnection point at the cost of the Licensee.-

(a) Comments of the RE developers:-

M/s Greenko Energies Private Limited and some other stakeholders have invited reference to Para 4.2.4 of Explanatory Memorandum and Regulation 5 (8) which provides for generators to augment or establish transmission system beyond interconnection point. It has been submitted that if the IPP does not undertake the construction of said line, it should not be an excuse for the state licensee not to construct the facility and such facility should be commissioned in synergy with the commissioning of the Power Project. In case of delay, liquidated damages should be payable to IPP.

(b) Commission's View:

Regulation 5(8) only provides an option to generators to augment or establish the system beyond the interconnection point after following a process and it is not binding for them to opt for this mode. However, any delay in the commissioning of works so undertaken by generators cannot entail any penalties on the licensee.

3.7 Adoption of CERC Regulations.-

(a) Comments of the RE developers:-

(i) The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; The Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd. and M/s Greenko Energies Private Limited, have made submissions mainly as under:-

- The unreasonableness of the draft Regulations can be seen from the fact that even this Commission while framing the 2012 Regulations realized that the norms for determination of tariff ought to be revised every 5 years on account of several factors.
- The draft Regulations result in an arbitrary discrimination between Projects within the same State, and therefore is ultra vires Article 14 of the Constitution. This for the reason that for a project regulated by CERC, the generic levellised tariff has been determined on the basis of the CERC RE Regulations 2017, while for projects in the State of the same capacity regulated by HPERC, the generic levellised tariff for the period commencing 1.4.2017 will be at a much lower rate.
- In recognition of the fact of increase in various costs, the Central Commission has by way of its order dated 31.05.2017, determined the tariff at the rate of Rs. 5.07 per kWh, whereas the generic levellised tariff as per draft RE Regulations, 2017 may be on lower side.
- The norms for finalising levellised tariff for small hydro projects up to 25 MW be based on the Regulations notified by the CERC for the period 2017-20 otherwise SHP generators shall not have any incentive to establish the small hydro projects.

- (ii) M/s Soiel Dashal Hydro Power (P) Ltd. and M/s Leond Hydro Power also advocate for finalizing levellised tariff for SHPs upto 5 MW based on the guidelines framed by the CERC.

(b) Commission's View:-

It has been suggested that the CERC (Terms and Conditions for tariff determination from Renewable Energy Sources) Regulation, 2017 (hereinafter referred as to "CERC RE Regulations, 2017") should be followed as the draft RE Regulations, 2017 shall result in arbitrary discrimination between the projects within the same State which ultra vires of Article 14 of the Constitution. The Commission observes that in accordance with the Electricity Act, 2003 even though the State Commission, while specifying the terms and conditions for the determination of tariff, shall be guided by the principles and methodologies specified by the Central Commission for determination of tariff applicable to generating companies, yet the State Commissions have the power to frame their own regulations in this regard. It is therefore not mandatory for the Commission to follow the CERC Regulations. The Commission has accordingly proposed its own regulations for the purpose by taking into account the various State specific situations as well as the CERC RE Regulations, 2017 after duly balancing the consumers' interests in the State and the need for promotion of generation of electricity from renewable sources and also to encourage efficiencies. Since the regulations framed by the Commission and those specified by CERC are applicable under different situations, the question of any discrimination does not arise. The Commission otherwise also observes that there are hardly any SHPs in the State which may, in actual practice, be governed by the CERC Regulations, 2017. As such the rate of Rs. 5.07 per kWh as determined by CERC lacks relevance for its applicability in case of SHPs selling power to the Discom of this State.

3.8 Purchase of Power and PPA.-

(a) Comments of the RE developers:-

The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; The Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd. and M/s Panchhor Hydro Power Pvt. Ltd. have made submissions mainly as under:-

- Small power plant owners do not have means and expertise to sell their power through any other mechanism except to sell the same to HPSEBL. Therefore, the generation of such plants up to 25 MW capacity, wherever the developer so chooses, should be purchased by the State Licensee on generic tariff basis under long term PPA and Regulation 8(1) should provide accordingly.
- The Govt. of HP should seek the approval of the HPERC, where HPSEBL should come forward to either give his consent or refusal to purchase the Power and only thereafter, SHPs should be offered to private investors. In order to promote SHPs in the state, the Commission may direct the HPSEBL to purchase all the power

generated from such projects on long term basis on generic tariff determined for the year of commissioning of such projects.

- For development of SHPs in the state, either the power shall have to be purchased by the State Discom or wheeling charges have to be reduced substantially, to make the sale of power competitive in the market. No developer will take the risk of investing in the SHPs and no bank will finance the project. Keeping in view the limitations of SHPs, it will be appropriate for the Commission to direct the Distribution Licensee in the State to hold discussions with Punjab, Haryana and Rajasthan Discoms, for long term PPAs rather than forcing small developers to explore for sale outside the State.
- As a matter of commercial prudence, no business entity would enter into an Agreement for setting up of a power generation plant with huge investment without first ascertaining the existence of a purchaser for the electricity to be generated from the plant. It has been further submitted, that SHPs have virtually no option except to sell the power generated to HPSEBL in the State. It has been stated that the IA is entered into by the State Government with the objective, to meet the power needs in the State itself. Therefore, the terms of the IA are such that sale to purchasers, other than within the State, are subject to more stringent conditions. The purchase of power by the HPSEBL in future is a legitimate expectation of the objector(s) and the same is embodied in the IA itself.
- Regulation 5(1) provides for the consent of state licensee as a pre-requisite for permission of HPERC for long term PPA or PPA under REC. This is against the provisions of the Section 86 (1) (b) of the Act 2003 which provides that the State Commission shall regulate electricity purchase and procurement process of distribution licensees. It has been submitted that in order to promote SHPs in the state, the Commission may direct HPSEBL to purchase all the power generated from such projects on long term basis on Generic tariff determined for the year of commissioning of such projects.
- The RE projects who initially choose to make captive use of the plants but may subsequently want to dispose of their power, for interim period or the entire residual useful life of the project, by sale to the Discom should also be allowed to do so, as has been done in case of REC mechanism.

(b) Comments of Directorate of Energy:-

Directorate of Energy (DoE) has made the following submission:-

The Genuine Projects who have not achieved the zero date as per IA/SIA within stipulated period due to not obtaining of clearance must be given due consideration. Suitable changes, if any, in the IA shall be done after examining the matter. Such provisions should also be incorporated in the PPAs. All the projects may be allowed to execute PPAs (either through bidding process or on long term basis) with HPSEBL (Requirement ascertained by HPSEBL) after achieving the zero date. It has also been suggested that HPSEBL should also be allowed to exit from the PPAs executed with non serious project

developers who are not adhering to the construction schedule even after achieving the zero date.

(c) Comments of HPSEBL:-

The HPSEBL has submitted that in so far as State of HP is concerned, the presently available non-solar RE power from HPSEBL's own projects and power available from IPP owned SHPs under long term PPAs is more than sufficient to meet up the State's Non-Solar RPPO. However, HPSEBL may consider purchase of power from the SHPs with capacity upto 2 MW with accelerated depreciation and which should be restricted to existing tariff (i.e. under RE Regulations,2012) only. The decision shall be taken keeping in view the market rate for disposal of surplus RE power, HPSEBL will not be able to purchase power from the SHPs with capacity varying from above 2 MW to 25 MW unless there is some exceptional merit in a particular case (which could include quality power supply to remote areas, addressing of voltage problems, improvement of system reliability or capability to operate on standalone mode to feed local areas without the impact of deemed generation etc.) and which should be restricted to existing tariff only. HPSEBL shall purchase power under this mechanism with accelerated depreciation and should be restricted to existing tariff only.

(d) Advice of State Government:-

The State Government has advised that:

- (i) Mode of Purchase/Outgo- The HPSEBL shall purchase entire power generated from all the SHPs upto 25 MW capacity as per existing policy as is applicable on this date. The IPPs shall also have the following options for selling their power:-
 - (a) Under REC mechanism;
 - (b) Under captive use;
 - (c) Third party sale outside the State.
- (ii) The genuine IPPs who have not achieved the zero date as per IA/SIA within stipulated period due to non-obtaining of clearance must be given due allowance by suitable changes in the IA. Such provisions need to be incorporated in the PPAs. All the projects may be allowed to execute PPAs with HPSEBL after achieving the zero date and not from the date of signing of IA/SIA.
- (iii) The HPSEBL shall be under obligations to purchase power if the IPPs commence the generation within 4 years of signing of PPAs.

(e) Commission's View:-

- (i) The objectors have suggested that the distribution licensee must purchase, at the option of the developers, all the power generated from the SHPs, at the generic tariff determined under the new Regulations, on long term basis irrespective of the year of

commissioning of such projects. It has also been submitted that consent of Distribution Licensee should not be required. The licensee has categorically stated that they have already tied up sufficient non-solar RE power to meet the RPPOs and may not require additional power for quite some time. The Distribution Licensee is essentially a party to the PPA and any proposal to purchase power has essentially to be concurred by the Licensee in first instance before it comes up for consideration of the Commission's approval particularly when it is not experiencing any long term shortage of power.

- (ii) A suggestion has also been made that the licensee should be directed to hold discussions with Punjab, Haryana and Rajasthan Discoms for long term PPAs rather than forcing small developers to scout and purchase outside the State. During the course of public hearing on 07.10.2017, the suggestion was also made that Discom should purchase all the power from the SHPs and meet the revenue gap by selling RECs in the exchange. The Discom had clarified during the same hearing that in absence of adequate demand of RECs in the market, they do not find it a viable proposition. In view of above, the Commission declines to accept the suggestions for giving any direction to the Discom or making any provision to the effect that Discom should essentially purchase power from all the SHPs particularly when this aspect neither forms the subject matter of the regulations under consideration nor otherwise falls under the purview of the Commission. The provision under the Act which mandates the State Commission to regulate purchase of power by the licensee does not in any way empower the Commission to direct the Discom to purchase power which is not required by them. The regulations neither impose any bar nor give any mandate on/to the Discoms to purchase power from SHPs. The matter about purchase of power has to be essentially examined and decided by the Discom by making due diligence in prudent and transparent manner before submitting any proposal for Commission's approval in this regard.
- (iii) In relation to the State Government's advice conveyed vide their letter dated 06.10.2017, it is observed that the State's Hydro Power Policy, 2006 (as amended upto 04.03.2014) does not in any way mandate HPSEBL to essentially purchase power from SHPs above 2.00 MW. Comment therefore, does not in way support the suggestion made by other stakeholders in this regard. The Commission also feels that the matter regarding mandatory purchase of power is not only beyond the scope of these regulations but may also be beyond the purview of the Commission. As such any suggestions of this nature can be considered at the level of the State Govt. only through appropriate discussions with concerned stakeholders. Needless to mention here, even if entire power from SHPs were to be purchased by HPSEBL irrespective of its requirement and prudence, it shall have to be compensated/ subsidized suitably for the financial losses as may be suffered by it

on this account. As regards the linkage of PPA with zero date instead of date of Implementation Agreement, the matter has been discussed in a separate paragraph.

3.9 Competitive Bidding.-

(a) Comments of the RE developers:-

M/s Greenko Energies Pvt. Ltd. have suggested that the Competitive bidding u/s 63 of the Act may not be held unless Standard Bidding Guidelines and Documents are notified by the Central Govt. (MNRE/MOP). It has also been suggested that the SHPs are site specific and competitive bids for such projects shall have to be invited by Govt. of HP which presently owns the site, with the Licensee as procurer. The Regulation 13(1) (ii)(d) needs to be modified accordingly.

(b) Commission's View:-

These Regulations do not apply in cases where the tariff is determined through transparent process of bidding in accordance with the guidelines issued by the Central Government. Moreover, the Regulations only provide that the distribution licensee shall endeavour to procure power through competitive bidding, which, to start with, may be done separately for each type of renewable technology. The Discom can always resort to tariff based competitive bidding for procurement of power. This however, does not in any way empower the Discom to resort to competitive bidding through a process which lacks transparency. The suggestion to modify the Regulation 13(1)(ii)(d) of draft RE Regulations, 2017 is therefore not accepted.

3.10 Revision of PPAs.-

(a) Comments of the RE developers:-

(i) M/s Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd; M/s Panchhor Hydro Power Pvt. Ltd. and M/s Greenko Energies Private Limited have made submitted that the IPP should be permitted to seek revision of power purchase agreements approved or signed before 1st April, 2017.

(ii) M/s Soiel Dashal Hydro Power (P) Ltd. and M/s Leond Hydro Power have submitted that IPPs should be permitted to seek revision of power purchase agreements approved or signed after 1st April, 2017.

(c) Commission's View:

(i) In cases where the PPAs have already been approved or executed, the tariff and all other terms & conditions have essentially to be regulated as per the provisions of the PPAs read with the applicable Regulations under which such PPAs have been approved. Question of allowing any party to seek revision of the PPA approved, or signed, before the commencement of these Regulations therefore does not arise.

- (ii) Similarly in cases where the PPAs are approved by the Commission after the commencement of these Regulations, on the basis of joint petitions under the RE Regulations, 2012 filed before the Commission prior to the commencement of these Regulations, the provisions of the PPAs and the applicable regulations under which such petitions were filed shall be applicable. The Commission shall also incorporate suitable provisions in the Regulations to provide more clarity in this regard so as to avoid any chances of confusion.

3.11 Mutual agreement on the PPA clauses:-

(a) Comments of the RE developers:-

The developers have submitted that Regulation 8(2) provides for mutual understanding on various issues of power purchase agreement between both the generator and licensee but in actual practice, model PPA and RE Regulations finalised by the Commission do not leave any room or space for mutual understanding and the generators are forced to agree to such PPA.

(b) Comments of Directorate of Energy:-

Directorate of Energy (DoE), has suggested that HPSEBL should also be allowed to exit from the PPA executed with non serious project developers who are not adhering to the construction schedule even after achieving the zero date.

(d) Commission's View:-

- (i) The intention of making this provision under Regulation 8(2) is not to allow the parties for the PPA any unreasonable/un-justified changes but is to provide flexibility in cases where the deviation in one particular provision/feature can be compensated by suitable modifications in other provisions, of PPA. For example, in case of a project having better hydrology it may be able to support marginally higher capital cost and still the overall tariff may be within the generic tariff. Accordingly the comment shall not hold good, if the provision is considered in proper perspective.
- (ii) As regards the option to the HPSEBL to exit from the PPA in case of non serious developers, as suggested by the Directorate of Energy, the Commission feels that this being a subject matter of PPA, HPSEBL can always propose such clauses in PPA format.

3.12 Control period or review period.-

(a) Comments of the RE developers:-

The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; M/s Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd.; M/s Panchhor Hydro Power Pvt. Ltd.; M/s Leond Hydro Power and M/s Greenko Energies Private Limited have made submissions mainly as under:-

- Regulation 13(1)(ii) and 14(3) also state that the tariff applicable shall be as per the control period. It should instead be applicable for the

year of commissioning, to account for the inflation in capital cost and O&M charges.

- The Para 5.1.3 of Explanatory Memorandum indicates that the determination of Tariff every year based on normative inflation provided by the CERC and determination of tariff after a control period by the HPERC are same which is not the case. CERC RE Regulations give level playing field, whereas, same tariff based on parameters of 2017 payable to all projects who sign IA between 1.10.2017 to 31.3.2020 and to be commissioned by 31.3.2020 to 31.9.2022 (30 Months commissioning period as per IA) is injustice to Developers and over protection of consumers/state licensees interests. Therefore, when new regulations are being framed, the anomalies need to be set right.

(b) Commission's View:-

The developers and the Associations have suggested that generic tariffs should be determined on annual basis on CERC pattern and not for the entire control period. The Commission does not find it appropriate to accept the suggestion that the generic levelled tariff for SHPs should be determined on annual basis particularly when the provisions relating to applicability of tariff do not envisage linkage of tariff to the year of commissioning. Moreover, in any case, the control period envisaged in the draft RE Regulations, 2017 is much shorter than that in the previous RE Regulations of 2012 and this also takes care of the concerns expressed by developer in this regard to some extent.

3.13 Tariff linkage with Year of Commissioning:

(a) Comments of the RE developers:-

M/s Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd.; M/s Panchhor Hydro Power Pvt. Ltd. and M/s Greenko Energies Private Limited have submitted that the CERC RE Regulations allow the tariff as determined by the CERC for the year in which the project is actually commissioned to include the escalation in the capital cost and O&M expenses. The IPPs should therefore, be permitted to avail tariff of the year of commissioning in the RE Regulations, 2017.

(b) Commission's View:-

The normative capital costs considered in these Regulations include all the cost components including, without limitation, escalation and interest costs likely to be incurred upto the commissioning of the project. As such the tariff determined on this basis shall reflect the tariff reasonably due at the time of commissioning of the project. The Commission feels that in case the submission for allowing the tariff applicable as per the regulations prevalent at the time of commissioning of the project were to be allowed, the same would

essentially amount to the rewarding the inefficiencies in case of cost and time over-runs without any restrictions. As such, the Commission declines to accept the request to allow tariff applicable at the time of commissioning of project and decides to continue with its general practice to regulate the tariff as per the regulations applicable at the time of receipt of joint petitions for approval of PPA.

3.14 Special provisions for Small Hydro Projects.-

(a) Comments of the RE developers:-

- (i) The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; M/s Panchhor Hydro Power Pvt. Ltd.; M/s Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd.; M/s Leond Hydro Power and M/s DLI Power (India) Pvt. Ltd. have made submissions mainly as under:-
 - The provision in Regulation 11 i.e. “Special provision for Small Hydro Projects” of the draft Regulations is detrimental to the small hydro projects as well as for the state as it does not give any incentive to generators to develop small hydro projects because the time period of seven to ten (7 to 10) years is generally being taken for development of small hydro projects due to delay in obtaining statutory clearances, lease of land, labour and local problems, non-availability of adequate evacuation system etc. Application of parameters at the time of signing of IA to generators, for working the tariff rate shall put generators in huge financial strain and such generators will have no other alternative but to back away from the small hydro projects and surrender their IAs.
 - The normal cost inflation during seven to ten year period is about 70% to 100% and developers need to be compensated for this rise through increase in tariff which is possible only if the Capital cost is enhanced every year on normative basis. Non-revision of parameters for tariff calculations for such a project and binding them to RE Regulations, 2012 shall put generators in financial loss. Therefore, the tariff of SHPs should be determined every year taking into account the inflations indexes and tariff determined in the year of commissioning of the project should be payable to the IPP as provided in CERC RE Regulations. The RE Regulations 2017 should be linked to commissioning of the project and not to the date of signing of IA.
 - Regulation 11(2) provides for applicability of RE Regulations, 2017 to projects whose IA is signed after 1st April, 2017. Instead of applicability of RE Regulations, 2017 for IAs signed after 1.4.2017, it should be for the SHPs where scheduled commissioning falls after 1st April, 2017 because the parameters fixed in these Regulations like capital cost of the small hydro project are less than the actual cost of projects being commissioned even these days since cost of small hydro projects at present is about Rs. 10 Crore per MW. The actual cost of construction is about 40 to 50% more than the parameters fixed in RE Regulations, 2012 and is about 14 to 20% more as compared to the proposed cost in RE Regulations, 2017.

- The exclusion of the persons signing the IA by the cut-off date i.e. 31.3.2017 may deprive the grant of higher tariff to the objectors which it is entitled to on account of the fact that the Project is commissioned in control period of FY 2017-2018 to 19-20. On this account, the draft Regulations are unreasonable and therefore liable to be withdrawn so far as they treat the IPPs signing the IA by the cut date of 31.3.2017 as ineligible for the said regulations.
- (ii) M/s DLI Power (India) Pvt. Ltd., have made submissions mainly as under:-
- Regulation 11 of the Draft Regulations restricts a SHP to become eligible under RE Regulation, 2017, if its first Implementation Agreement is executed before 31.03.2017 execution of IA prior to 31.03.2017 has little significance towards above eligibility in certain proven circumstances and thus the eligibility needs to be governed by the following:
 - a. Whether setting up of the project was forced to delays due to failure of the Government or Licensee to fulfill their obligations?
 - b. Whether an essential requirement for setting up the project for which the Government or Licensee was responsible was not made available till the terminal date of 31.03.2017?
 - c. Whether the time period between allotment or signing IA and the terminal date 31.03.2017 was adequate to set up the project with any possible impact of para (a) and (b) above?
 - d. Whether it was prudent to sign PPA with uncertainty on project completion due to continue impediments on account of failure of the Government or Licensee to fulfill their obligations?
 - With the commitment of Government or Licensee to make essential infrastructure available in time and consistent with commissioning, the project implementation starts and expenditure continues. Periodic and repeated revision in timeline of the commitment by Government or Licensee keep adding to delay and cost due to general inflation and IDC on borrowed capital. Interconnecting sub-station of the Licensee is one such pre-requisite for setting up and commissioning a project.
 - When a Government or Licensee induced impediment delays a project, the cost and time overrun cannot be attributed to the Generator. Extending fairness, equity and justice to the IPP in such situation by the Commission does not amount to rewarding inefficiencies. Thus the tariff determination needs to account for such induced delays that are not attributable to the Generator and the tariff eligibility should not be linked to execution of IA in such eventuality as proposed in the draft Regulations.
- (iii) M/s Greenko Energies Private Limited have made submissions mainly as under:-

- Regulation 11 (2) provides for applicability of RE Regulations, 2017 to project for which the implementation agreement is signed after 01.04.2017. Instead of implementation agreement, applicability of HPERC RE Regulations, 2017 should be for the SHPs commissioned after 01.04.2017, the parameters fixed in said Regulations pertaining to capital cost of the small hydro project are less than the actual cost of projects being commissioned as on date, since cost of small hydro projects at present is about Rs. 10 Crore per MW. This cost of actual construction is about 40 to 50% more than the parameters fixed in RE Regulations, 2012 and is about 14 to 20% more as compared to proposed RE Regulations, 2017.
 - In light of Regulation 3 read with Regulation 11, the projects such as ours which have executed implementation agreements prior to 31.03.2017 but commissioned/will Commission the project in control period under the draft Regulations will be given a lower tariff under RE Regulations, 2012 and treated differently than projects for which the Implementation Agreement has been executed on or after 01.04.2017. In view of the Regulation 11 (1) of said Regulations, where the first Implementation Agreement (IA) of a small hydro project has been executed on or before 31st March, 2017 and no power purchase agreement, whether under REC Mechanism or otherwise, has been even submitted before the commission for such project before the date of commencement of these Regulations, the norms, tariffs and other associated terms and conditions as per RE Regulations, 2017 should be applicable instead of RE Regulations, 2012, in the same manner as applicable to the small hydro projects covered in the draft Regulations 2017.
- (iv) M/s Puri Oil Mills Limited has submitted that there is no rationale of applying RE Regulations, 2012, to the Projects where PPA's has not been signed because the commissioning of the project would be at much later date. For such projects, the RE Regulations, 2017 should be applicable, because the tariff to be determined vide these Regulations would be based upon the current status of capital cost and other parameters as well as non CERC norms.
- (v) M/s Monte Cristo Hydro Pvt. Ltd. have submitted that the date of IA may not be linked with control period as the projects get delayed due to many factors such as delay in requisite clearances by different agencies and that by linking IA with control period, all allotted projects will go stale.
- (vi) The following submissions have also been made by the developers:-
- The CERC RE Regulations allow the tariff as determined by the CERC for the year in which the project is actually commissioned to include the escalation in the capital cost and O&M expenses. Therefore, to be fair to developers as well as to consumers, it is submitted that wherever scheduled date of commissioning (SCOD) of projects as per signed IA falls prior to 31.3.2017, previous regulations should be applicable and wherever such date falls beyond 1.4.2017, present regulations should be applicable. It is suggested that the IPPs should be permitted to avail tariff of the year

of commissioning in the RE Regulations, 2017 and permitted to seek revision of power purchase agreements approved or signed after 1st April, 2017.

- The IPPs who have invested and will invest are governed by the Power Policy of the State which in its Sovereign Power has decided the means by virtue of which the IA has to be implemented. The non Implementation of the RE Regulations, 2017 to the persons/ IPP who have signed the IA prior to 31.3.2017 imposes an unreasonable restriction. The draft RE Regulations, 2017 are also contrary to the National Tariff Policy and the Objectives of the Electricity Act, 2003.
- Regulation 13 (i) bars small hydro projects covered under sub-regulation (1) of regulation 11 from the RE Regulations, 2017. This shall lead to un-viability of these SHPs since some of these projects are yet to obtain all the clearances, lease of land etc., and shall lead to closure of these projects. It is therefore submitted that applicability of these Regulations shall be linked to commercial operation of the project rather than IA. The Regulation 11 (1) needs to be deleted for promotion of SHPs otherwise SHPs shall become unviable.
- The implementation agreements entered with State Govt. nowhere says that tariff is to be linked with the IA date.
- Regulation 3 (b) and Para 5.1 of Explanatory Memorandum states that these Regulations shall not apply to the project where IA was signed before 1.4.2017 or where power purchase agreement approved by the Commission prior to the commencement of these Regulations. This amounts to grant of same generic tariff for the projects commissioned over a period of 5 to 8 years since same tariff will be granted to project for which IA was signed on 1.4.2013 or 31.3.2017. Such projects shall have scheduled commissioning by say 30.6.2015 to 30.6.2019 and all shall be given one tariff irrespective of inflation in project cost and increase in O&M expenses etc. Though we agree that delays should not be rewarded but denial of rightful increases to developers should not be denied.

(b) Comments of Directorate of Energy:-

Directorate of Energy (DoE) has made submissions mainly as under:-
The Genuine Projects who have not achieved the zero date as per IA/SIA within stipulated period due to not obtaining of clearance must be given due consideration. Suitable changes, if any, in the IA shall be done after examining the matter. Such provisions should also be incorporated in the PPA's. All the projects may be allowed to execute PPA (either through bidding process or on long term basis) with HPSEBL (Requirement ascertained by HPSEBL) after achieving the zero date.

(c) Advice of State Government:-

The State Government in their comments have advised that the genuine IPPs who have not achieved the zero date as per IA/SIA within stipulated period due to non obtaining of clearances must be

given due allowance by suitable changes in the Implementation Agreement. Such provisions need to be incorporated in the PPAs. All the Projects may be allowed to execute PPAs with HPSEBL after achieving the zero date and not from the date of signing of Implementation Agreement/Supplementary Implementation Agreement. It has also been advised by the State Government that HPSEBL shall be under obligation to purchase power, if the IPPs commence the generation within four (4) years of signing of the PPAs.

(d) Commission's View.-

- (i) The draft RE Regulations, 2017 inter alia provide that the SHP developers who have signed their first Implementation Agreement (IA) on or before 31.03.2017 (except for the cases involving augmentation of capacity) shall be governed by the terms and conditions of the RE Regulations, 2012. All the objectors representing the developers have strongly objected to these provisions in one shape or other. Whereas some objectors have commented that the tariff applicable on the date of commissioning of the project should be applicable instead of the date of the Implementation Agreement (IA) or the PPA, some other stakeholders have suggested that the cutoff date of 31.03.2017 is too harsh and impracticable keeping in view the fact that the clearances required before starting the construction work at the site, consume a lot of time. Some other developers have also agreed that even though the inefficiencies should not be rewarded but zero date should start from the date of all the clearances are available. The Commission agrees to the submission that it is not practically possible for the developer to arrange all clearances within 6 months after the signing the Implementation Agreement. However, it declines to accept the suggestion that the tariff applicability should not be linked with the Implementation Agreement and instead should be linked with the commissioning date or the date on which the clearances are available, as in both cases this shall not only add to litigations but the inefficiencies, if any, by the developers may also get incentivized, directly or indirectly. The Commission also observes as per the Implementation Agreements being signed in the present time frame, the SHPs are required to be commissioned within 30 months. The Commission in fact has also considered the suggestions that the tariff should be linked with the Schedule COD, but feels that determination of scheduled COD on project to project basis for the purpose of generic tariff may, by itself, also involve various complications and may, only add to litigations. As such it may be necessary to specify some cutoff date on firm and normative basis for the purpose. The Commission would also like to point out that even if there is no provision in the Implementation Agreement to link the tariff with the date of Implementation Agreement, it does not any way debar the Commission to specify the Regulations in a manner as is considered reasonable and prudent by it.

- (ii) As regards the advice of State Govt. it is observed that the same envisages amendments in Implementation Agreements (IAs) which does not fall under the purview of the Commission. The Commission, however, feels that basic concern shall be taken care of to a large extent if the cutoff date of 31.03.2017 as proposed in the draft RE Regulations, 2017 is revised to a reasonable extent, keeping in view the concerns expressed by the developers about the abnormal time delays in getting the requisite approvals. The Commission, otherwise finds it worth mentioning that the Regulation 11 of draft RE Regulations, 2017 which is being objected to by the various developers, does not, in anyway, debar the developers who have signed IAs before the cutoff date to enter into PPA with HPSEBL as this matter is not within the purview of these Regulations and the proposed Regulations only provide the applicability of tariffs in different situations.
- (iii) After taking into account the submissions made by stakeholders in this regard and to evolve a provision which does not reward the inefficiencies/delays beyond certain reasonable limits, or at least infinitely, the Commission finds it appropriate to retain the provision with regard to linkage of tariff with the date of signing of implementation agreement. However, keeping in view the concerns expressed by the developers about the delays that generally take place in spite of their best efforts, the Commission decides to now fix the cutoff date as 31.12.2014 instead of 31.03.2017 incorporated in the draft RE Regulations, 2017. The Regulation 11 of the draft RE Regulations, 2017 shall accordingly be modified on these lines while finalizing the Regulations.

3.15 Tariff structure.-

(a) Comments of the RE developers:-

The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; M/s Soiel Dashed Hydro Power (P) Ltd.; M/s Greenko Energies Private Limited and M/s Leond Hydro Power have suggested that in order to make small hydro projects economical viable, the Commission may consider to split the duration of tariff period in two parts i.e. first twelve years of operation and next 28 years of operation. 40 years single tariff design gives negative cash flow in initial years as levelled tariff is less than the actual cost of generation which includes debt servicing. It has been suggested that 40 years may be broken into two periods of first 12 years and subsequent 28 years and tariff design in levelled structure for each period separately shall give more incentive to small hydro developers as first 12 year period may yield higher tariff for repayment of loan whereas remaining 28 year period may have a lesser tariff for the project.

(b) Comments of HPSEBL:-

The HPSEBL has submitted that all bilateral tieups under long term PPAs are for the entire life cycle of the projects (CPSUs/Joint Venture) etc. and the long term planning for procurement of power has also been undertaken based upon long terms PPAs. It has been stated that after thorough examination it is concluded that HPSEBL shall avail power from SHPs under generic tariff for 40 years only

(c) Commission's View:-

The objectors representing the developers have not supported their view point with any sample calculations or specific proposal. The Commission feels that suggestion made by the developers may prove to be counter- productive for the developers so far as the cash flow as per tariff for the first few years (say 10 years) is concerned. In absence of any specific proposal, the Commission finds it appropriate to retain the provisions of the draft RE Regulations,2017. Needless to mention, the useful life and tariff period of the SHPs shall continue to be followed as forty years only and the issue raised by HPSEBL in this regard is not the subject matter of consideration, as developers have not objected to useful life of tariff period of 40 years.

3.16 Discount Factor:

(a) Comments of the RE developers:-

M/s Soiel Dashed Hydro Power (P) Ltd. and M/s Leond Hydro Power have submitted that provision under "Regulation 12(4) to the effect that discount factor is equivalent to post tax weighted average cost is vague and that discount factor should be around 9%."

(b) Commission's View:-

Clear provisions have been incorporated in the draft regulations, which are also in conformity with the CERC RE Regulations, 2017. The discount rate shall be calculated on the basis of the provision proposed in the regulations. As such, this does not require any changes in the draft Regulations.

3.17 Tariff options/applicability.-

(a) Comments of the RE developers:-

The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; M/s Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd.; M/s Panchhor Hydro Power Pvt. Ltd. and M/s Leond Hydro Power have made submissions mainly as under:-

- Regulation 13(1)(ii) and 14(3) state that the tariff applicable shall be as per the control period. It should instead be applicable for the year of commissioning, to account for the inflation in capital cost and O&M charges.

- (ii) M/s Puri Oil Mills Limited have suggested that the Regulation(i) of sub-regulation (1) of Regulation 13 should be amended as:-

“(i) for the small hydro projects covered under sub-regulation (1) of regulation 11, to be governed by the generic levelled tariff and associated terms and conditions in accordance with the provisions of Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2017, in the same manner in which such tariff would have been applicable if the power purchase agreement would have been signed before the commencement of these Regulations.”

(b) Commission’s View.-

The suggested amendment is not agreed to, keeping in view the discussions under a preceding paragraph relating to special provisions for SHPs.

3.18 Project specific levelled tariff.-

(a) Comments of the RE developers:-

- (i) M/s Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd.; M/s Leond Hydro Power and M/s Soiel Dashed Hydro Power (P) Ltd. have submitted that the opportunity available under Regulation 15 (1) to a category of SHPs to seek project specific levelled tariff, should be made available to all the SHPs since the provisions, norms/parameters adopted in the draft RE Regulations, 2017 are on lower side than the current practices/level and generators may not have any return even on their equity.
- (ii) M/s Puri Oil Mills Limited has made following submissions:-

The line “other than the small hydro projects covered in sub-regulation (1) of regulation 11” should be deleted from the first paragraph of regulation 15 of the draft RE Regulations, 2017. The proposed amended paragraph is reproduced as:-

(1) Where the parties to a power purchase agreement, for a project, have mutually agreed, in such power purchase agreement approved by the Commission after commencement of these Regulations, and executed thereafter by the parties, opted for a project specific levelled tariff, the Commission shall determine such tariff taking into consideration.

In respect of capital cost, it has been submitted that it should be considered as per DPR (TEC) approved by DoE for the determination of project specific tariff. The ceiling norm rider provided under clauses a, b, c and provisos of Regulations 15 will defeat the spirit of project specific tariff determination and same caveats should be removed.

- (b) Comments of Directorate of Energy:-**
Directorate of Energy (DoE) has submitted that no ceiling or limit has been specified for HPSEBL to exit from the Power Purchase Agreement and a limit of 105% or 110% may be allowed to HPSEBL.
- (c) Commission's View.-**
- (i) The option for project specific determination of tariff is available to the parties who may, after approval of the Commission, enter into PPA containing provision for project specific determination of tariff. This option cannot be allowed in cases where the PPAs do not contain any provision for project specific determination of tariff.
- (ii) Regulation 15 of draft RE Regulations, 2017 already provide that the cost approved in DPR shall also be kept in view, apart from other relevant factors, while determining the capital cost to be considered for tariff purposes. The financial norms, other than capital cost, are only to be considered as ceiling norms. The Commission feels that the provisions existing under the draft RE Regulations, 2017 in this regard are quite reasonable and balanced and do not require any modification. Such norms can obviously not be left open ended without any restriction. For the SHPs concerned under Sub-Regulation (1) of Regulation 11, the tariff and other terms and conditions, shall be in accordance with RE Regulations, 2012 and no separate provision is to be made in these Regulations.
- (iii) The suggestion given by Directorate of Energy merits consideration and the Commission decides to modify clause (i) of sub-regulation 2 of Regulation 15 of the draft RE Regulations, 2017 to provide a limit of 105% for the purpose.

3.19 Midterm Review of Tariff.-

- (a)** The Directorate of Energy (DoE) has submitted that whereas the draft Regulations, 2017, the proposed generic levelled tariff or project specific tariff, as determined by the Commission, shall be firm and shall not to subject to any review, they are the view that the tariff should be reviewed at least once after a duration of 10 years keeping in view of Capacity Utilization Factor and variation in discharges. CUF/Design Energy shall be substituted with the actual after reviewing to avoid the loss of the generator/HPSEBL and adjustment of tariff can take place at some time intervals.
- (b) Commission's View:-**

The difference between the CUF actually achieved and the normative CUF can be due to different reasons, including upkeep of plant, quality of maintenance and variation in discharges etc. The Commission does not find it feasible to carry out such review particularly when it is understood that the discharge data are also not getting recorded in a transparent manner. The Directorate of Energy may examine the matter in further detail and may come up with suggestions for the next control period at appropriate stage.

3.20 Subsidy or incentive or grant/budgetary support by the Central/State Government.-

(a) Comments of the RE developers:-

- (i) M/s DLI Power (India) Pvt. Ltd.; M/s Greenko Energies Private Limited; M/s Puri Oil Mills Limited and other SHP developers have suggested that the subsidy amount should not be adjusted in tariff. In this regard they have made submissions mainly as under:-
- In Regulation 22, the Commission is discounting incentive/subsidy/grant/budgetary support from Government for determination of tariff. The Commission should appreciate that subsidy is a support against high cost to encourage development of green power. The CERC while determining the tariff, considers Rs. 9 to 10 Crore per MW as project cost and adjusts subsidy component. In the RE Regulations, 2017, the Normative Capital Cost taken by the Commission is Rs.780 Lac to 830 Lac, which itself is kept very low and provides no room for such adjustments. Hence, the Commission should not make any adjustment towards such support. However, if the Commission still desires to follow CERC approach, they should, at the same time, also consider CERC specified capital cost of Rs. 9 to 10 Crore per MW.
 - In regards to Regulation 22, it has been submitted that the MNRE subsidy may not be considered for determination of tariff. This is a cushion provided by the Central Govt. if MNRE had intended for this subsidy to be passed to States, it would have done so directly.
 - If the subsidy is adjusted in the capital cost and passed in the tariff, the actual nature of incentive will get lost.
- (ii) M/s Monte Cristo Hydro Private Limited have submitted that as per the Income Tax notification (*Finance Act, 2015 w.e.f. 01/04/2016 with due insertion of Sub clause (xviii) in section 2(24) of the Income Tax Act, 1961 providing on inclusive definition of the expression 'Income' under the taxing law*) a subsidy is not taxed as income. If SERCs deduct the subsidy from tariff (which really defeats the definition of a subsidy) they must do so on a post-tax basis.
- (iii) The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; M/s Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd. and M/s Gaur Hydro Power (P) Ltd. have suggested in relation to Regulation 22 of the draft RE Regulations,2017 that since the subsidy of MNRE is available only after commissioning/stabilization of the project and processing time is also taken for final release, as such the availability of subsidy should be considered as availed after 6 months of commissioning of the project and Interest on debt be allowed on full amount for first 6 months after commissioning.

(b) Commission's View:-

- (i) The Commission feels that the main intention of providing subsidy to any project is to improve the viability and competitiveness of the project for marketing the power produced by it. The intention cannot certainly be to allow the developer to pocket the subsidy amount at least in such cases where all the reasonable costs are being considered while determining the generic levelled tariffs. As such, the Commission declines to accept the suggestion that the subsidy amount should not be adjusted while determining the tariff. However, keeping in view, the difficulties that are experienced by the developers in realising the subsidy amount, the Commission decides that only 75% of the available subsidy shall be considered instead of the 80% subsidy as proposed in the draft regulations, inspite of the fact that the CERC RE Regulations, 2017 provide adjustment of entire amount of subsidy. It is, however, worth-mentioning that in accordance with the draft RE Regulations, 2017, the CDM benefit is not to be adjusted in case of SHPs even through the CERC RE Regulations, 2017 provide for adjustment on this account on sharing basis. Moreover, the provision for adjustment of CDM benefit in case of other RE technologies on sharing basis shall also be slightly rationalized to provide for more clarity in favour of the RE generators.
- (ii) The comment that since the subsidy amount does not constitute income under the Income Act, 1961 the adjustment should be done on post tax basis, lacks relevance in the context of these Regulations.
- (iii) As regards the suggestion that this subsidy amount shall be accounted for in the middle of the first year of the commissioning of the project, the Commission observes that similar practice is already being followed and shall be followed while determining the tariffs under these regulations also. However, a mention shall be made in the final regulations about the aspect.

3.21 Loan and Finance Charges.-

(a) Comments of the RE developers:-

M/s Puri Oil Mills Limited have suggested that the Regulation 24 of the draft RE Regulations, 2017 should be replaced by Regulation 14 of CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2017.

(b) Commission's View:-

The objector has not given any specific, or even general, reason or justification for doing so and as such the suggestion is not accepted. The Commission, however, otherwise also observes that the provisions under the regulation 24 of draft regulations are, by and large, in line with CERC regulations only.

3.22 Depreciation.-

(a) Comments of the RE developers:-

M/s DLI Power (India) Pvt. Ltd. have stated that on one hand the Commission has considered the salvage value of the Project as 10% and depreciation is allowed up to maximum of 90% of the capital cost of the Project and on the other hand the Commission must appreciate that as per the GoHP Hydro Power Policy, on completion of the agreement period, the Project reverts back to the Government as free of cost. It has further been stated that there is no salvage value available to the developer and the Commission must consider 100% depreciation for the purpose of calculating the tariff instead of 90%.

(b) Commission's View:-

It is a standard practice to allow depreciation to the extent of only 90% of the capital cost and the Commission does not find it appropriate to allow any depreciation beyond 90% of the capital cost. However, since the issue may involve policy intervention, the developers may take up the matter with the appropriate Govt. authorities.

3.23 Return on Equity.-

(a) Comments of the RE developers:-

(i) The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; M/s Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd. and M/s Panchhor Hydro Power Pvt. Ltd., have made submissions mainly as under:-

- As per para 5.16 of Explanatory Memorandum and Regulation 26(2): CERC allows ROE of 14% to be grossed up for MAT, which works out to be 17.56%. However, the Commission has proposed the ROE as 17% on the plea that ROE in RE Regulations, 2012 was lower as compared to the CERC. The CERC has lowered the ROE, as cost of arranging funds has come down and there is fall in the rate of interest due to lower inflation. However while, earlier HPERC allowed ROE as per the CERC, now it has lowered it by 0.56% compared with CERC. It may also be pointed out that useful life as per CERC for SHPs is 35 years whereas in HP this is 40 Years and after initial about 13-15 years, full income tax will be applicable to the developer. This loss of 0.56% for 40 years to developers of SHPs and additional liability of Income Tax will work out to be huge amount and drive away the investors particularly when such SHPs can have better options in other states, where CERC RE Regulations, 2017 have been adopted in toto. It has been suggested that ROE of 14% may be allowed on pre-tax basis and Income Tax on Profits should be reimbursed as per actuals paid to GoI.
- (ii) M/s Greenko Energies Private Limited have submitted that despite SHPs being higher risk category projects, pre-tax ROE of 17% has been proposed, which even academically it results as post-tax ROE of

12-13%. Moreover, the MAT benefit of section 80-IA has been discontinued with effect from FY17-18.

- (iii) M/s Puri Oil Mills Limited have submitted that the normative post tax return on equity should be 14% as on 1st April of previous year, for the entire useful life of the project, as per CERC RE Regulations, 2017.
- (iv) M/s Monte Cristo Hydro Pvt. Ltd. have submitted that the HPERC may adopt the CERC guidelines as far as rate of ROE is concerned.

(b) Commission’s View.-

The rates of return of equity and the provisions relating to accelerated depreciation benefit allowed by this Commission as well as CERC as per the RE Regulations, 2012 and RE Regulations, 2017 are indicated below:

Description		CERC	HPERC
RE Regulations, 2012	ROE	20% per annum for first 10 years. 24 % per annum 11 th years onwards. (Pre-tax)	19% per annum for first 10 years. 22 % per annum 11 th years onwards. (Pre-tax)
	Accelerated depreciation benefit	Adjustable as per the provision of Regulations.	Adjustable as per the provision of Regulations.
RE Regulations, 2017	ROE	14%, to be grossed up by prevailing Minimum Alternate Tax (MAT).*	17% per annum on pre tax basis. (Proposed)
	Accelerated depreciation benefit	Adjustable as per the provision of Regulations.	Not-Adjustable (as proposed)

* The CERC worked out pre-tax ROE as 17.56% in its RE Tariff Order dated 31.03.2015.

A perusal of the above table shall reveal that gap in the ROE rate vis-à-vis CERC provision has been reduced. As a matter of fact, the rate of ROE proposed in the draft RE Regulations,2017 is effectively higher than that allowed in the CERC RE Regulations, 2017 in view of the fact that the draft RE Regulations,2017 do not envisage any reduction in tariff on account of accelerated depreciation benefit even though CERC RE Regulations, 2017 do provide for certain reduction in tariff on this account, at least under certain situations. In view of above the Commission decides to retain the provisions of draft RE Regulations,2017 in this regard. The Commission shall also retain the provisions of the draft RE Regulations, 2017 to the effect that the benefit of accelerated depreciation shall not be adjusted.

3.24 Interest on working capital.-

(a) Comments of the RE developers:-

- (i) The Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s

Gaur Hydro Power (P) Ltd. and M/s Panchhor Hydro Power Pvt. Ltd. have made submissions mainly as under:-

Regulation 27(4) provides the rate of interest for working capital as same for interest on Debt/Loan as per Regulation 24(2) i.e. 200 basis points above the MCLR rate. It is again loss to the developer as CERC has allowed Interest on working capital as 300 basis points above the MCLR rate. It is well known that banks always charge higher interest on working capital and interest on capital loans is always less. This Loss of 1 % over 40 years will also work out to be huge amount and cannot be borne by the developer. As such interest on Working Capital be allowed as per CERC i.e. 300 basis point above MCLR.

(b) Commission's View:-

The Commission has already proposed normative interest rate on working capital as three hundred (300) basis points above the average State Bank of India (MCLR) (one year tenor) prevailing during last average six (6) months, prior to respective date(s) from which the generic tariff(s) are to be made applicable. This is sufficiently higher than the MCLR. As such the comment made in this regard is not based on facts. The provision of the draft RE Regulations, 2017 which is also in line with the provisions of CERC RE Regulations, 2017, is considered to be quite reasonable. However, in order to facilitate the timely payment of energy bills of RE Generators, which could reduce the requirements working capital to some extent, the Commission shall incorporate suitable provision in the Regulations to the effect that the Distribution Licensee shall make timely payment of energy bills of renewable energy generators by assigning priority over and above other payments.

3.25 Operation and maintenance expenses.-

(a) Comments of the RE developers:-

- (i) The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; The Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd.; M/s Greenko Energies Private Limited and have made submissions mainly as under:-

The operation and maintenance charges proposed in Para 6.7 of Explanatory Memorandum and Regulation 39 have also been proposed less than what have been finalised by CERC. HPERC has retained the O&M charges of RE Regulations, 2012 with annual escalation. There is no reason that it should be lower than what has been provided by the CERC. It is submitted that the O&M charges have increased compared with those specified in 2012. There is the additional expenditure of operation and maintenance of the project line and bay also which is escalated every year as per HPSEBL pay structure and not @ 5.72% per year. Therefore these charges in HP should be higher than CERC whereas HPERC has proposed much lower. This discrepancy needs to be set right and O&M charges be

allowed at par with the CERC if our request for excluding the Project line and bay from Capital Cost of project is acceded to otherwise these should be higher than CERC.

- (ii) M/s Puri Oil Mills Limited have submitted that the Operation and maintenance expenses should be @ Rs. 27 lakhs per MW as per CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2017 and the normative O&M expenses allowed under draft regulations be escalated at the rate of 5.72% per annum for the Tariff Period for the purpose of determination of levelled tariff.

(b) Commission's View.-

The basic rate of per MW O&M charges of the SHPs, including the project components of project line and inter connection facilities, have been incorporated in the draft RE Regulations, 2017 after allowing escalation of the compound rate of 5.72% per annum for a period of 5 years which is considered to be quite reasonable, particularly keeping in view the fact that the annual inflation rate as per the present trend may be lesser than 5.72% and also the fact that this inflation rate is also to be allowed for the entire useful life of the project. In view of above, the Commission decides to retain the provisions of the draft RE Regulations, 2017 in this regard.

3.26 O&M expenses for interconnection facilities (Escalation)

(a) Comments of the RE developers:-

The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; M/s Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd.; M/s Panchhor Hydro Power Pvt. Ltd., and M/s Greenko Energies Private Limited, have submitted that even though as per their submissions in a separate paragraph, the cost of project line and bays should not be considered a part of the project, yet without prejudice to the above, the following submissions have been made:-

- While project tariff is constant for the 40 years period being levelled, the O&M charges of the state licensee for the project line and bay will increase every year as per their actual expenditure. The developers already operating the power plants have observed abnormal increases in this expenditure of state licensee over the years thus wiping out the profits of the projects. Therefore, O&M charges should be fixed as a percentage of the cost of assets and annual escalation should be limited to 5.72% (as assumed for determination of generic tariff or actual whichever is lower).

(b) Commission's View:-

The Commission does not find it appropriate to fix the normative for each component separately and considers the existing provisions are considered to be quite reasonable which shall be retained.

3.27 Taxes and duties.-

(a) Comments of the RE developers:-

The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; The Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd., M/s Gaur Hydro Power (P) Ltd. and M/s Panchhor Hydro Power Pvt. Ltd. have made submissions mainly as under:-

- The normative tariff determined will be inclusive of all taxes and duties, whereas, CERC allows it as exclusive of all taxes and duties. No reason has been given for this deviation from CERC guidelines. As normative tariff has been worked out on the basis of ground situation prevailing as on date, such risk of future taxes and duties cannot be passed on to the developer for mere 17% Return on Equity. As such CERC RE Regulation needs to be followed.
- (ii) M/s Puri Oil Mills Limited and Panchhor Hydro Power Pvt. Ltd. have also submitted that any change in law or taxes in future, 'other than those factored in the tariff determination' should be passed through tariff.

(b) Commission's View:-

Certain factors which shall enable review of tariff have already been incorporated in Regulation 20 of draft RE Regulations, 2017 and shall be retained in the Final Regulations also with certain modification as explained in para 3.31. However, the Commission feels that it is not feasible to provide for adjustment of each and every tax and duty in cases where only generic norms tariffs are being fixed and actual project wise complete details of taxes and duties may not even be available.

3.28 Rebate.-

(a) Comments of Directorate of Energy:-

Directorate of Energy (DoE) has suggested that the applicable rebate @ 2% shall also be allowed for the payments made through RTGS. The rebate on payment should be in graded manner instead of fixed value, for fixed no of days.

(b) Commission's View:-

- (i) The rebate is linked with timelines of payment and not with the mode of banking transactions. As such, the suggestion to allow rebate for payment through RTGS is not acceptable. More important factor in this regard shall be the timeline in which the payment is made and accordingly if the payment is made within one month of presentation of bills, the rebate shall automatically be admissible.
- (ii) As regards the suggestion for graded rates, it is observed that no rebate is available, if the payment is made after expiry of one month, and the same takes care of the concern to a large extent. The Commission is not inclined to carry out any change in the existing practice, which is otherwise also in conformity with the CERC RE Regulations,2017.

3.29 Normative Capital cost.-

(a) Comments of the RE developers:-

- (i) The Bonafide Himachalies Hydro Power Developers Association and M/s Sai Engineering Foundation have made submissions mainly as under:-
- Para 6.2.1 of Explanatory Memorandum and Regulation 34- The Normative Capital Cost as specified herein is on the lower side and is totally unjustified in view of the costs incurred by recently commissioned projects. The CERC has also carried out exercise to determine the capital cost as per data available and has allowed higher cost. Completion cost of the SHPs projects even today is more than Rs 10 Crore per MW. Rs 10 Crore per MW is parameter adopted by the CERC also for Himachal Pradesh, since it is based on the actual expenditure incurred currently by IPPs on SHPs. With increase in the tax rates under GST to 28% on electrical items and 12% on civil contracts post determination of capital cost by CERC, the completion cost is likely to increase further and till 31st March, 2020 (Control Period), it is estimated to reach Rs. 12 Crore per MW. Therefore the normative capital cost need revision as per current market costs and should be fixed as Rs. 10 Crore plus GST to be revised every year of the control period for all the SHPs.
 - The capital cost has been fixed based on average of the capital costs as per TEC for 6 projects of each category of SHPs as per Table given in para 6.2.3 of Explanatory Memorandum, we have re-worked out the capital costs of the projects by updating the price base to July 17 with 70% component of capital cost indexed to WPI and 30% to CPI as per usual practice. The averages of the revised project costs on price level July 2017 are as under:-

Capacity of Project	Up to 2 MW (per MW in Crores)	2-5 MW (per MW in Crores)	5-25 MW (per MW in Crores)
Avg. of Capital Costs as per Table of Explanatory Memorandum.	8.61	8.60	8.57
Avg. of Capital Costs Updated for July 17.	8.87	8.86	8.83
Normative Capital Cost proposed in the draft RE Regulations, 2017.	8.60	8.30	7.80
Normative Capital Cost may be considered by HPERC.	10.00		9.00

- Keeping in view the fact that Normative capital Cost as proposed, to be fixed for the control period, the normative capital cost(s) proposed by HPERC are less than actuals and need to be enhanced as specified by the CERC.
- (ii) M/s Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd.; M/s Soiel Dashed Hydro Power (P) Ltd.; M/s Panchhor Hydro Power Pvt. Ltd.; M/s Greenko Energies Private Limited and M/s Leond Hydro Power have made submissions mainly as under:-

The normative capital cost as proposed for SHPs is on lower side and is totally unjustified in view of the costs incurred by recently commissioned projects. CERC has also carried out exercise to determine the capital cost as per data available and has allowed

higher cost. The CERC Tariff Order dated 31.5.2017, in recognition of the fact of increase in various costs, has determined the tariff at the rate of Rs. 5.07 per kWh. Completion cost of the SHPs projects even today is more than Rs 10 Crore per MW. Rs 10 Crore per MW is parameter adopted by the CERC also for Himachal Pradesh, since it is based on the actual expenditure incurred currently by IPPs on SHPs. With increase in the tax rates under GST to 28% on electrical items and 12% on civil contracts post determination of capital cost by CERC, the completion cost is likely to increase further and till 31st March, 2020 (Control Period) it is estimated to reach Rs 12 Crore per MW. The capital cost considered by the CERC is also based on the studies conducted by the IIT Roorkee of the various SHPs in the different States including HP. As per this study the cost of projects works out to more than Rs.10.00 Crores per MW in HP. The normative capital cost need revision as per current market costs and should be fixed as Rs. 10 Crore plus GST to be revised every year of the control period for all the SHPs.

(iii) M/s Puri Oil Mills Limited has made following submission:-

The Normative Capital cost inclusive of all components for small hydro projects should be considered as per CERC RE Regulations, 2017 which is Rs. 1000 lakh per MW for below 5 MW project and 900 lakh for 5 MW to 25 MW project. Further in case of project specific tariff, the actual cost of the project should be considered while determining project specific tariff.

(iv) M/s Monte Cristo Hydro Pvt. Ltd. has made the following submission:-

The Capital cost proposed for Small hydro projects for both categories (i.e. below 5MW and 5MW to 25MW) is unrealistic. As per IIT Rorkee study the average capital cost in SHP in north is of Rs. 10.5 Crore for below 5 MW project and Rs. 9.5 Crore for 5 MW or upto 25 MW project. The IREDA data is also supporting Rs. 9.5 Crore per MW capital cost for hilly areas. The 7.8 Crore per MW capital cost proposed is not as per the ground reality. It is submitted that the CERC guidelines may be adopted as far as capital cost of SHPs is concerned.

(b) Comments of Directorate of Energy:-

The Directorate of Energy (DoE) has submitted that the capital cost considered by HPERC nearly equals to the TEC granted by DoE, which seem to be in order, as the GST on the major Electrical equipments has been reduced from 28% to 18% and that time and cost overrun is mainly due to not getting the clearances and NOCs from various departments. A mechanism is required to be in place to get all the clearance in a time bound manner.

(c) Commission's View:-

Almost all the objectors representing the developers have suggested that the per MW capital cost provided in the draft RE Regulations,

2017 should be increased at least to the per MW cost specified by the CERC in their RE Regulations, 2017. The Commission observes that the per MW capital cost as incorporated in the draft RE Regulations, 2017 is higher than that provided in RE Regulations, 2012 by about 10%. This appears to be quite reasonable, keeping in view of the fact that the combined inflation, over the period of last about 5 years, in the steel index and the electricity machinery index was of the order of 5.2% only. Moreover the proposed costs are also in conformity with the DPRs being concurred in the present time frame, as also confirmed by the Directorate of Energy in their comments. This cost includes all the components of the capital cost including the escalation, interest during construction and taxes etc.

Even though the normative capital cost included in the draft Regulations provides for adequate increase over and above the normative capital cost as per RE Regulations, 2012 and is considered to be quite reasonable, the Commission, keeping in view the concerns including the those relating to projection of the normative capital cost to September, 2017 level, expressed by the various stakeholders, the Commission decides to allow further increase of Rs. 20 lacs per MW in the normative capital cost for all the categories of SHPs considered in these Regulations.

As regards the need for timely clearances as brought out by DoE, it is felt that primarily, this matter does not fall within Commission's purview and pro-active steps are required to be taken by the concerned stakeholders i.e. concerned Govt. authorities and the developers. The Directorate of Energy may accordingly pursue the matter with the concerned.

3.30 Normative CUF.-

(a) Comments of the RE developers:-

- (i) The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; M/s Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd.; M/s Panchhor Hydro Power Pvt. Ltd.; M/s DLI Power (India) Pvt. Ltd and M/s Greenko Energies Private Limited have made submissions mainly as under:-
 - As discussed in para 6.3 of Explanatory Memorandum, the CERC has finalised the CUF for HP as 45% net of free energy (but inclusive of 15% mandatory release of water at the diversion structure). After taking into account the 15% mandatory release, the CUF as per CERC will work out as 39%. With 12% free energy, the CUF as per the CERC works out 51%. However, as per Regulation 35(2), HPERC has proposed the CUF as 55% inclusive of free energy and 15% mandatory release of water at the diversion structure as per Regulation 35. Thus here also the Commission has taken additional generation of 4% purely on normative basis for calculation of generic tariff which will reduce the tariff payable to the developer. Therefore after accounting for additional 1% free energy towards LADF, the

CUF is higher by 5% and therefore, it should be fixed as 50%. The reason given in the Explanatory Memorandum that it has to take a higher CUF to keep the tariff low, to be attractive to HPSEBL for purchase of such power, is against the concept of generic tariff. The artificially inflated CUF/generation will lower the tariff. It is submitted that as generic tariff is being worked out on levelled basis for 40 years,

(b) Comments of HPSEBL:-

The HPSEBL has stated that the month wise power house generation in respect of IPP owned SHPs, the Capacity Utilization Factor (CUF) for the IPP owned SHPs is mostly over 55%, it is of the view that the CUF should be kept above 55% only as per the existing HPERC provisions.

(c) Commission's View:-

As explained by the Commission in the Explanatory Memorandum issued alongwith draft RE Regulations, 2017, the CUF in case of purely run of the river SHPs should ideally be higher particularly in view of the fact that fixing of capacity by taking a higher CUF can make the projects more viable without any loss to either side. In case the suggestion for a lower CUF were to be accepted, the SHP technology may become more unviable and marketability of such power shall get reduced. In view of above the Commission decides to retain the provisions of draft RE Regulations, 2017 in this regard.

3.31 Adjustment of free power.-

(a) Comments of the RE developers:-

- (i) M/s Puri Oil Mills have suggested that the CUF for small hydro projects should be considered @ 45% as prescribed in the CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2017 and also that for energy calculation, the reduction by the permissible rate of free power subject to maximum of 13% is not correct because the generator would be bound to pay the royalty as per the terms of IA/SIA.
- (ii) M/s Brua Hydrowatt Pvt. Ltd. have submitted that the Royalty rates have been imposed abnormally high above the National Hydro Policy issued by MOP, GoI rates of 12%. The stakeholder has further submitted that in a span of 40 years, project developers are to pay 80% more power than envisaged in National Policy and this may require further rationalization:-
- (iii) The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; The Himalaya Power Producers Association; M/s Himadari Hydro Power Projects (P) Ltd.; M/s Growel Energy Company Ltd.; M/s Gaur Hydro Power (P) Ltd.; M/s Panchhor Hydro Power Pvt. Ltd.; M/s DLI Power (India) Pvt. Ltd and M/s Greenko Energies Private Limited have, while requesting for consideration of higher free power structure in the tariff, also submitted as under

- Paras 6.3 and 6.4 of Explanatory Memorandum and Regulations 35 and 36 provide for the Free Energy accounting in Net Saleable Energy and determination of tariff. The regulation provide that the maximum quantum of energy (on account of royalty) in any year will be limited to 13% (12%+1%). As Developers have requested for readjustment of year wise free energy and lower rate of free power in initial years to repay debt and agreed for higher rate of free power in the last few years so that the quantum to be received in 40 years remains the same (40X13%=520%) and GOHP has agreed to their request, the Commission is also requested to make enabling provision in the Regulations so that the gain in staggering of free power is not wiped out. Therefore if the overall quantum of free energy for 40 years remains 520%, it should be pass through. Under these circumstances the year wise free energy be allowed as per year wise agreed quantum. However, any quantum agreed by IPP over and above the 520% over 40 years may not be allowed as pass through. Taking actuals wherever the free power is less than 13% and limiting the free power to 13% wherever it is more than 13% for the initial 520% spread over 40 years as per GoHP orders will put the generators to a great loss and will wipe out the equity of the developer. As such the Regulations should provide accordingly. Alternatively, HPERC may work out the preferential generic tariff with 13% free power irrespective of actuals agreed by Developer and GoHP.

(b) Commission's View:-

The ceiling limit of free power for adjustment in the tariff has been incorporated in the National Hydro Policy which came into force in 2008 and the Commission does not find it appropriate to make a provision in violation of the said policy. As regard the suggestion to consider the total free power as 520% over 40 years period, the Commission does not find it appropriate to make a provision on the lines it has been proposed. However, in order to enable the Commission to review the matter at appropriate stage, it decides to amend clause (ii) of sub-regulation (3) of Regulation 20 to provide for review of tariff if the limit of 13% for 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.

3.32 Auxiliary consumption and transformation losses.-

(a) Comments of the RE developers:-

The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; M/s Greenko Energies Private Limited and M/s Leond Hydro Power have submitted that the parameter of 1% loss clubbed for auxiliary consumption and transformation loss for SHPs up to 5 MW capacity, is on lower side because in SHPs up to 5 MW capacity it has been observed to be more than 2%. Therefore, for SHPs upto 5 MW capacities, this parameter should be kept as 2%.

(b) Comments of Directorate of Energy:-

The Directorate of Energy (DoE) has suggested that the adjustment on this account, after evaluation of actual basis, restricted to a value of 1% shall be carried out during review of the tariff.

(c) Commission's View:-

The norms have been picked up from the RE Regulations, 2012 which are also in conformity with the norms specified by the CERC in their regulations. As such the Commission declines to allow these components at a level higher than what has been provided in the draft RE Regulations, 2017. The suggestion made by the Directorate of Energy (DoE) to restrict the actuals to 1% is also not acceptable as no midterm review of tariff is envisaged on this account.

3.33 Energy losses.-

(a) Comments of the RE developers:-

The Bonafide Himachalies Hydro Power Developers Association; M/s Sai Engineering Foundation; M/s Soiel Dashed Hydro Power (P) Ltd.; M/s Greenko Energies Private Limited and M/s Leond Hydro Power have submitted that the Energy loss of 0.7% of the net generation in Regulation 38(1) is on lower side, transmission losses up to inter connection point are 2% as per CEA norms. It has been suggested that this parameter should be kept as 2% for losses in project lines.

(b) Commission's View:-

The Commission had taken this parameter as 0.7% energy loss in RE Regulations, 2012 also is not inclined to review it particularly when the CUF has not been increased as compared to RE Regulations, 2012 in spite of adequate justification of doing so.

4. The Commission, after going through all the submissions made by the various stakeholders including those discussed specifically in the preceding paragraphs, decides to finalize the regulations by incorporating changes specifically discussed herein above and other minor modifications of general nature, as may be felt necessary while finalising the regulations.

Sd/-
(Bhanu Pratap Singh)
Member

Sd/-
(S.K.B.S. Negi)
Chairman

Place: Shimla.
Dated: 15.11.2017

Annexure-A**List of stakeholders/participants attended the Public Hearing held on 16.09.2017.**

Sr. No.	Name
1	Er. Suneel Grover (Chief Engineer), HPSEBL.
2	Er. Anshual Thakur (AEE), HPSEBL.
3	Sh. Amit Joshi (Consultant), HPSEBL.
4	Sh. Munish Sharma, Sr. GM, Sai Engineering .
5	Sh. Arun Kumar, Leond HEP.
6	Sh. Shyam Vaidya, DLI HEP.
7	Sh. S.N. Kapoor, The HPPA.
8	Sh. Dharam Pal Reddy , Greenko Energy Pvt. Ltd.
9	Sh. S.V.A. Rao, DLI HEP.
10	Sh. Arvind Kaul, Puri Oil Mills Ltd.
11	Sh. Prabhat Kumar, Puri Oil Mills Ltd.
12	Sh. Anil Kumar Dogra, Brua HEP.
13	Sh. Vindo Kumar Thakur, Greenko Energy HEP
14	Sh. Shyam Kumar, Batot HEP.
15	Sh. K.S. Jolly, Himachali Bonafide Power Association.
16	Sh. S.K. Tiwari, Brua HEP.
17	Sh. Munish Sharma , Sr. GM, Sai Engineering.
18	Sh. Rahul Puri, AE, Directorate of Energy.
19	Sh. Charnjit Singh, Consumers Representative, HPERC.
20	Sh. Bhushan Bramta, Sr. Manager Purchase, Sai Engineering.
21	Sh. Manoj Tiwari, Greenko Energy HEP.
22	Sh. Vishal Anand, Advocate, Greenko Energy HEP.
23	Sh. Janmali Manikala, Greenko Energy HEP.
24	Sh. Maan Singh Thakur, Himadari Hydro Power.
25	Sh. Pankaj Thakur, Laision Officer, Bonafide Himachali.

List of stakeholders/participants attended the Public Hearing held on 07.10.2017.

Sr. No.	Name
1	Sh. M.G. Ramachandran, Senior Advocate, Panchhor HEP
2	Sh. Anushree Bardhan, Advocate, Panchhor HEP.
3	Sh. Shubham Arya, Advocate, Panchhor HEP.
4	Sh. S.N.Kapoor, The HPPA.
5	Sh. Ajay Vaidya, Advocate.
6	Sh. Maan Singh Thakur, Himadari HEP.
7	Sh. Shyam Vaidya, DLI(Power) HEP.
8	Sh. Munish Sharma, Sai Engineering Foundation.
9	Sh. Bhushan Bramta, Sai Engineering Foundation.
10	Sh. Aditya Grover, Advocate.
11	Sh. Tanya Sareen, Panchhor HEP.
12	Sh. Pankaj Thakur, Shree Naina Hydro.
13	Sh. Satish Chauhan, Monte Cristo.
14	Sh. Ashok Kumar.
15	Sh. Arun Kumar, Leond HEP.
16	Sh. Suneel Grover, CE (Sy.& Op.), HPSEBL.
17	Sh. Maneesh Mahajan, Sr. XEN, DoE.
18	Sh. Rahul Puri, AE, DoE.
19	Sh. N.P. Gupta, SE (Comm.), HPSEBL.
20	Ms. Megha Rana, AE, HPSEBL.
21	Sh. Surjan Kumar, Batot Hydro Power Ltd.
22	Sh. Amit Joshi, Consultant, HPSEBL.
23	Sh. Vinod K. Thakur, Greenko Energy Power.
24	Sh. Ashok Ahluwalia, O.S.D Growel Energy.