BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION SHIMLA

In the matter of :-

Himachal Small Hydro Power Association, an Association of Independent Power Producers, having its Head Office at B-99, Sector-3, New Shimla-171 009, Himachal Pradesh. ... Petitioner V/s (1) The Govt. of Himachal Pradesh, Shimla (HP) through its principal Secretary (Power). ... Respondent-1 The Himachal Pradesh State Electricity Board Ltd; (2)Vidyut Bhawan, Shimla-171 004, (HP) through its Executive Director (Per.) ... Respondent-2 (3) The HIMURJA, Urja Bhawan, SDA Complex, Kasumpti, Shimla-171 009, (HP) through its Director. ... Respondent-3

Petition Nos. 89/2010 (Decided on 24-01-2011)

CORAM YOGESH KHANNA CHAIRMAN

Counsels: for petitioners:

for respondent-1

for respondent-2

Sh.Arish Maitra, , Advocate, Sh. Satyan Vaidya, Advocate Sh. K.S. Chauhan (authorized representative) Sh. Ramesh Chaudhan (authorized representative)

<u>Order</u>

(Last heard on 24.12.2010 and Orders reserved)

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1. This order emanates from the petition of the Small Hydro Association who have requested the Commission to harmonize the tariff of the 0-25 MW segment in line with the orders of the Central Electricity Regulatory Commission (in brevity referred as "the CERC") taking into account that a number of other State

Commissions have undertaken a similar task, post enunciation of a new tariff regime by the CERC.

2. A major reason for issuance of this Order is because the Commission is of the view that its independence is under attack from segments within the governance structure who have still not been able to reconcile themselves to the ingress of independent regulation in the power sector. In fact the directions given by the Power Department are symptoms of "Paranoid Imperium" and are based on a biased and misplaced adherence to the theme that only the `Government knows what is the best for the people; and other stakeholders –consumers, IPPs, the Regulator ,FOR, APTEL, the Courts- have no role to play.

3. The Electricity Act, 2003 has been enacted to distance the governance structure from the tariff setting exercise and remains. the thrust of National Sovereignty as defined by the National Parliament. To negate it by using Section 108 implies that the fundamental basis of the Act's structure is being demolished without a thought as to the consequences emerging from such action.

4. The Commission have been set up as a independent body to carry out statutory functions. It is well settled that in the discharge of such functions it cannot be directed to decide matters in a particular manner. The word used in Section 108 is 'guided' and not 'bound'. To guide only means to show the way. It is not a ground which has to be obeyed. The Commission will always be happy to take into account the directions of the `Government, but the manner of such doing has to be left to the Commission. If the Commission has to perform a statutory function or has to discharge a statutory obligation, how can it do so, if it follows any such direction, which takes away its basic function from it. It is well known that directions issued to a quasi-judicial authority which place a fetter as to how that authority is to be exercised, would be ultra vires and therefore, void.

5. The State `Government may indicate that in view of the width of the language of Section 108(2), the view of the State `Government is final on whether the matter relates to public interest.

6. Since, however, this militates against the independence of the State Commission which is the basis of the Act, places fetters in the working of a Quasi Judicial Authority and uses Section 108 as a means to revert the tariff setting process back to the `Government, ,it is not justifiable and any such action is ultra vires.

7. The Commission is constrained to point out that a few months ago such directions had been received by the Commission as a generic input on the administrative side. As a measure of the education of the governance structure, the Commission did not resort to invocation of its judicial powers at that time in the hope that after due education and pointing out of fallacies in the missive of the Power Department of the State Government, it would be enough to advise the Power Department to consult their Law Department to ascertain the legality of what they were doing. This was done as it was felt that the bureaucracy within the Power Department was unaware of legal implications of its actions.

8. However, what has happened is that the Power Department has repeated the directions in a matter on the judicial side knowing fully well that such directions do not conform to the Supreme Court verdicts as quoted to them as Administrative Advice by the Commission..

9. Various orders of the Supreme Court cited below were indicated to Power Department of the State Government:-

APSEB V.Warangal Umapal Corporation AIR 2002 AP210, BSES Ltd. Vs.Tata Power. (2004)/SC 195; Chittoor Zilla Sangam Vs.APSEB 2004 SCC 396; AIR 2001 SC 107; WBERC Vs.CESC 2002 STPL(LE)3149 SC, PTC Vs.CERC, JT 2010 (3) SC 1, and Orient Paper Mills V.Union of India (1970)3SCC 76.

10. This implies that there is a flagrant disregard by the Department and its functionaries of the rulings of the Supreme Court, the advice given to the States by both the Attorney General of India and the Solicitor General of India, the minutes of FOR marked to the State and the request of this Commission to halt momentum till they had dissected their case contextually and rationally. This also evidence a callous indifference to the Rule of law and the basic fundamental tenet of a National Act. It also dilutes the basis for the setting up of the Regulatory Commissions and is an attempt by the State Government, as has happened in the other Sates, to turn the clock back to the 'Paranoid Imperium' of yore.

11. In view of the above the Commission vehemently rejects the contentions in the directions and proceeds to deal with the issue at hand as if these directions did not exist and are non-est.

12 The State has indicated that the setting up of the Hydro Electric Projects (in brevity referred as "the HEPs") has created inconvenience for the people of the State. Also that the consumer tariff will increase and the ` Government will have to provision for greater subsidies.

13. Both the above premises are sweeping generalisations. The setting up of HEPs may have inconvenienced people but so do the large projects set up by the State Agencies(including the Utility). These in fact lead to greater inconvenience as they are larger in size and the EMP"s are not evaluated systematically by the State and do not provision for disaggregated benefits to the local people ...Smaller projects, however, disperse the economic benefits across the State opening up new areas for economic emancipation. The Independent Power Producer (in brevity referred as "the IPP") investments eventually will exceed ₹ 20000 Crores. This magnitude of investment, spread across the State where industry does not disperse, is no mean factor, specially in the context of the opening up of remote regions. Simultaneously IPPs create link roads, generate local employment on a large scale, pay for setting up health centres and school buildings in remote areas and pay large sums for other infrastructural thrusts through the State Agencies.

14 The most important facet, behind the setting up of IPPs, is the massive National interest which is served by increasing the generation of power. It is well known that national GDP enhancement cannot take place without greater availability of power. The State of Himachal Pradesh gets 90% of its resources from the rest of India. Can the State not even give back a miniscule amount to the rest of the country? Why is it that always the State officials talk about Utility interest and the State interest, but never do they get to mention National interest or the needs of the country? Why must all issues be dealt with on the basis of a "Not in my Backyard Syndrome".

15. It is also not as if entities put a great burden on the Utility. The Power Transmission System gets strengthened because of the new networks set up to service the evacuation needs of the entities. The Utility uses the power for sale during the summer at exaggerated prices and the winter input provides raw, physical capability to a starved system.

16. As far as the cost to the consumer is concerned extensive studies have shown this to be so in such marginally miniscule quantity as to be laughable when used as a argument by the governance structure. A 2-3 paise per unit increase in consumer ARR impacts per unit compared to the ₹ 3 - 4 per unit advantage obtained by IPP power sales accrues to the Utility and ₹ 4 - 5 per unit to the State. Obviously, the `Government has not done its homework and does not seem to be doing its math in a logical framework. Additionally, if the State has so much concern for obtaining power from IPPs at cheaper rates the advisory from the Commission given long back just needs to be operationalised viz. switch over from an MOU structure to a tariff based competitive bidding structure. In case the State `Government does that, there would be no reason for the Commission to work out generic tariff for any of the projects as that would become a self-regulatory mechanism.

17. The State ` Government has raised the issue of not revisiting the presently aligned tariff structure because (a) the tariff order had a likely retrospective component and (b) according to the State a revision was undertaken on 9.2.2010. Both arguments of the State are misleading and perverse. There was no retrospectivity; only a consequential action, if the State Government shifted the goal posts. If the State Government had chosen not to change policy on innumerable occasions, the changes in tariff would not have taken place. The changes were a direct consequence of ` the Government action and were not in the normal course of a tariff enhancement. Also, there was no revision of tariff per se in 2010. This was an action consequential to the APTEL's decision, in a case instituted by the Utility.

18. It is thus obvious that the State Government has failed to bring forward any arguments which would make the resetting of tariff on a CERC framework as a non-starter, specially since there has been sufficient replication across the country and different models in different States are being harmonized. There can be no denying the fact that determination of tariff is a continuous process, and the Central Commission had conducted detailed studies, surveys and investigations to bring out tariff orders which are the State and region specific.

19. After having addressed the legal position about the sanctity of the directions issued by the State ` Government, the Commission now proceeds further to consider the petition on merit.

20. The Petitioner Association requested the Commission vide Petition No.89/2010 to initiate proceedings to revise the norms and parameters and tariff as applicable to the Small Hydro generators in the State of Himachal Pradesh for sale of electricity to distribution company in the State by taking into consideration the norms and parameters determined by the Central Commission in its Regulations. Subsequently, the Petitioner vide MA No.209/10 has sought:-

- review of Order dated December 18, 2007-Small Hydro Power Projects-Tariff for purchase of energy from SHPs upto 5 MW capacity at levelised tariff rate of ₹ 2.95/unit; and
- (ii) fixation of generic tariff for SHPs with capacity more than 5 MW and upto 25 MW in-accordance with proviso to clause (1) of Regulation 6 of the HPERC(Power Procurement from Renewable Sources and Cogeneration by the Distribution Licensee)Regulations,2007.
- 21. The Petitioner Association has, in support of their prayer, pleaded:-
 - (a) that due to significant increase in the financial, implementation and operational cost elements including land price also, it has become imperative on the part of the SHPs to have the aforesaid tariff reviewed in order to sustain their financial viability and continuance. It has been stressed that the rate of ₹ 2.95 per kWh needs to be revised with appropriate discount rate, higher rate of Depreciation, Interest, RoE, Capital Cost and O&M Charges. It has also invited reference to the normative adopted by the CERC,UERC,HERC, PSERC and the SHPs funded by the IREDA as well as TECs given by the HPSEBL in the recent past. It has also been submitted that even though regulation 6(7) of the HPERC 2007 Regulations makes the aforesaid tariff "subject to review after every 5 years". It is not mandatory under the said Regulations to review the aforesaid tariff only after 5 years from its determination and if occasion arises, then the aforesaid tariff can be

reviewed even prior to the end of 5 years from its determination and at any time;

- (b) that because the SHPs below 5 MW are smaller in size and unable to explore other market models, therefore, they are perforce dependent on the local distribution licensee for sale of power generated;
- (c) that there is a need to harmonise the tariff for SHPs in line with the CERC Regulations operating at the national level. In the Regulations notified by the Central Commission, the tariff terms and conditions have been determined based on in depth study of nation-wide generating stations and the various factors affecting the tariff and other terms and conditions, considering the objections/representations/suggestions of various stakeholders in the public hearing process. The parameters for determination of tariff for Small Hydro Power Plants as applicable to the State of Himachal Pradesh have been outlined and it has been brought out that escalation factor, as specified by the CERC, to a large extent nullifies the inflation factor. It has stated that the Central Commission has also specified that the "Normative Capacity Utilisation Factor" prescribed shall be net of the free power to be supplied to the home State and it has been prayed that the HPERC may adopt a similar approach for determination of capital cost and also the CUF for Small Hydro Projects in the State. The Petitioner Association has further stressed that there is a need to scrutinize the regulations on determination of tariff for procurement from RE sources and SHPs as notified by the CERC, the UERC, the PSERC with a view to harmonize the HPERC Regulations, 2007 and SHP Tariff Order, 2007 so as to ensure uniformity and also to give the benefit of liberal indices specified by other ERCs to the SHPs in Himachal Pradesh. Copies of the CERC, UERC, PSERC Regulations have been annexed. The petitioner Association has also annexed a comparative Statement showing the assumptions made for calculating levelised tariff by the CERC & HPERC as well as those now prayed for by it;
- (d) it has been mentioned that the CERC has fixed the tariff for small hydro projects at ₹ 3.90 per unit. The policy of the State ` Government of Himachal Pradesh to encourage the Small Hydro Sector and to attract investments from the IPPs would require the

HPERC to determine competitive tariffs viz-a-viz the tariff structure in adjoining States so as to discharge its responsibility of promotion of investment in the electricity industry. It has also been mentioned that the UERC has specified a control period of three years in regulations (Regulation 12). The HPERC may consider providing for a control period of 3 years in line with the CERC/UERC Regulations. It has also been submitted that Regulation 6(3) would require the HPERC to be guided by the CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2009 and the CERC Order dated 26.4.2010 in terms whereof generic tariff has been determined for procurement from the SHPs with capacity upto 25 MW; and that framing of Regulations is not necessary for determining the tariff;

- (e) that in order to provide level-playing field to the SHPs located in very remote locations, the HPERC should provide that cost of the laying down transmission lines upto ICP beyond 5 kms from the project's power house would need to be reflected in the higher project cost to be allowed to such developer. This would also act as an incentive to the project developers to set up the SHPs in remote areas and offset the disadvantage accruing to the SHPs located in remote areas. They have also referred to the CERC & the UERC regulations according to which the metering would be Ex-bus i.e after transformation losses. The line isolator on outgoing feeder on HV side of generator transformer to be considered as the Interconnection Point;
- (f) that a generic tariff be fixed for the SHPs above 5 MW and upto 25 MW. It has further been submitted that a generic tariff order will apply even to the Power Procurement Agreement (in brevity referred as "the PPAs" executed for such projects prior to the date of the generic tariff order. In this connection the judgement dated 15.3.2010 of Supreme Court in case of <u>PTC India Ltd;Vs. CERC 2010 ELR (SC) 0269.</u>has been quoted.

(g) that SHPs with capacity of more than 5 MW upto 25 MW are finding difficulties in achieving financial closure due to uncertainty of rate. Appropriate dispensation may be considered to provide for fixation of provisional tariff;

22. The HPSEBL has placed vide its MA Nos. 125/2010 and 235/2010 that there is no need to revise the norms and parameters for tariff fixation and to provide any further incentives to the SHPs. In particular the following points have also been raised:-

- (a) the increased cost for projects not exceeding 5 MW has already been taken into account while determining the tariff in 2007 and the SHPs have also an option to seek determination of project specific capital cost and CUF;.
- (b) in Himachal Pradesh the SHPs have been incentivised by waiving off royalty for a period of 12 years and this aspect might not have been taken into account while evolving policies at national level. The same can, therefore, not be affected;
- (c) the IPPs are already showing interest in setting up their units and there is no need for further incentives;
- (d) the capacity addition of the SHPs shall not benefit the State and shall only help other States of the region/grid;
- (e) even if a few changes are to be done in the existing Regulations, the same should be done with prospective effect only, as otherwise the IPPs may take undue benefit of two concurrent provisions which shall be against the law;
- (f) the Commission's mandate is to safeguard the interest of the consumers as well as the Discom and accepting prayer even by a marginal extent shall amount to granting benefit to generation at the cost of the consumers and the HPSEBL and, therefore, will be patently against the law.

23. The State Govt. Vide their MA No. 227/10, apart from raising the issue regarding directions issued by the State ` Government (as discussed in earlier part this Order) have endorsed the view point of the HPSEBL and have further emphasized the following points, in addition to those raised by HPSEB:-.

- (a) that the fact that the people of the State have been subjected to inconvenience on account of setting up of the HEPs in the State can not be denied. Besides, water, being the natural resource of the State, is utilized for generation of power and, therefore, on this premise alone, people of the State have every right to availability of cheap electricity;
- (b) that the GoHP is currently subsidising the sale price of power that is being supplied to domestic and agriculture consumers and is bearing an annual liability of nearly ₹ 146 cores. Any further increase in consumer tariff attributed to modification of existing regulations governing determination of tariff for the SHPs shall mean additional provision in the subsidy component to maintain consumer tariff at a reasonable level, which the State Govt. Shall find very difficult in view of its commitment to upliftment of other sectors as well;
- (c) that the present petition primarily seeks substantial increase in tariff payable to the Generating Company supplying power to a distribution licensee. Further increase in tariff in respect of existing generators, at least, will be jeopardizing the consumer interest particularly when in case of hydro generation; the cost of generation follows a downward trend;
- (d) that Himachal Pradesh has substantial quantum of resource in the shape of the SHPs to meet obligation of procurement of renewable in the techno-economic manner and the exploitation of the potential of the State, which is nearly 1/6th of the country inclusive of projects upto 25 MW capacity and is in a direction to create a resource for the State and not merely with an objective of meeting obligation under renewable power purchase set out by this Commission. Contrary to above, a State/Utility devoid of resource and resorting to

procurement of renewable(s) to meet the statutory obligation can afford to go for development of Hydro resource at a rate higher than the State of Himachal Pradesh and in this situation too it may be an economical proposition as compared to procurement from an external source and also against the cost of generation from various sources available with such State/Utility. Accordingly there has to be very clear distinction in devising the norms for determination of tariff in respect of renewable(s) and the present petition, in the context of Himachal Pradesh, is not tenable particularly when seen with reference to providing incentives for development of renewable(s) vis-a-vis developing the natural resources/potential;

(e) that the applicability of the CERC regulations and its order clearly states that the projects located at the sites approved by the State Nodal Agency/State Government are eligible for tariff determination under these Regulations, provided such generating company has a composite scheme for generation and sale of electricity in more than one State. The applicant, therefore, has the option and can harvest the so called benefits given in the CERC regulations by making such arrangements.

24. In order to consider the view points of the Petitioner and the Respondents in the right perspective, the Commission would in the first instance like to briefly mention the relevant enabling provisions and the background of the fixation of levelised rate of \gtrless 2.95/kWh, as under:-

(a) section 61 of the electricity Act, 2003 empowers the Commission to specify the terms and conditions for determination of tariff and also provides that in doing so it shall be guided by (1) the principles and methodologies specified by the Central Commission for determination of the tariff applicable to the generating companies and transmission licensee; and (ii) the promotion of co-generation and generation of electricity from renewable sources of energy; apart from various other factors listed in the said section;

- (b) the HPERC notified the Himachal Pradesh Electricity Regulatory Commission (Power Procurement from Renewable Sources and Cogeneration by Distribution Licensees) Regulations, 2007 on 12.6.2007 after following the due process of prior notification and hearing. The features of these Regulations, as are of direct relevance to the petition, are as under:-
 - (i) sub-regulation (1) of regulation 6 of the said regulations, envisages determination of the tariff for purchase of energy by the Distribution Lcensee from the renewable sources and cogeneration, by the Commission by a general or special order. The said sub-regulation further provides that the Commission may determine tariff for small hydro projects not exceeding 5 MW capacity by a general Order and the same for projects of more than 5 MW and not exceeding 25 MW capacity by a special Order on individual project basis;
 - (ii) in accordance with sub-regulation (6) of regulation 6 of the said regulations, the tariff for small hydro projects not exceeding 5 MW capacity as determined by the Commission shall be applicable for a period of 40 years from the date as notified by the Commission;
 - (iii) as per sub-regulation (7) of regulation 6, the tariff for small hydro projects not exceeding 5 MW capacity, determined by the Commission is subject to review after every 5 years and such revised tariff shall be applicable to power purchase agreements entered into after that date;
 - (iv) sub-regulation (3) of regulation 6 also provides that while deciding the terms and conditions of tariff for energy from renewable sources and co-generation, the Commission shall, as far as possible, be guided by the principles and methodologies specified by the Central Commission, the National Electricity Policy, the Tariff Policy and the tariff regulations notified by the Central Commission, provided

that the Commission, may for sufficient reasons and after exercising due diligence and applying prudency check, deviate from the terms and conditions of the generation tariff notified by the Central Commission;

- (v) as per the provisions under sub-regulation (1) of regulation
 6, the Commission shall adopt the tariff if such tariff has
 been determined through transparent process of bidding in
 accordance with the guidelines issued by the Central Govt.;
- (c) in pursuance to above, the Commission determined the tariff for the SHPs not exceeding 5 MW vide its order dated 18.12.2007. The Distribution Licensee as well as some of the IPPs, however filed appeals against the said order before Hon'ble Appellate Tribunal, which, after hearing both the sides as well as the HIMURJA, disposed off the appeals by a common order dated 18.9.2009. The Hon'ble Appellate Tribunal, while upholding the HPERC's order dated 18.12.2007, gave the following directions:-
 - (i) that the capital cost of ₹ 6.5 Crores/MW shall be treated as normative capital cost in all such cases as are found suitable by all parties;
 - (ii) that the promoters of hydel power in the State of Himachal Pradesh as well as the Himachal Pradesh State Electricity Board shall be entitled to apply to the Commission for fixing project specific capital cost for any project in case the normative capital cost is not suitable to either of them. Similarly, if the Capacity Utilization Factor (CUF) of 45% for a specific project is contested by either party, it may approach the Commission with the site specific Capacity Utilization Factor (CUF);
 - (iii) that the Commission shall factor in the cost of making up the deficit in the years in which the revenue falls short of cash flow to allow return on equity and enable repayment of loan;

- (iv) that the Commission shall factor in the additional return which can be gained by the hydel projects in the years in which the levelised tariff exceeds cost of generation including the return on equity, depreciation, O&M etc;
- (v) that the Commission while giving effect to directions (ii),
 (iii) & (iv) above, shall consider if the period of fixed levelised tariff can be reduced to about 25 years;
- (vi) that the Commission may also consider breaking up the period of levelised tariff into two parts; and
- (vii) that the Commission shall remove arithmetical errors while re-computing the levelised tariff;
- (d) the Commission accordingly proceeded further as per the advice of the Hon'ble Appellate Tribunal and revised the rate for the SHPs not exceeding 5 MW from ₹ 2.87 to ₹ 2.95 per kwh by rectifying the errors and also evolved formulation for allowing the impact of additional royalty levied by the State Govt. As per the aforesaid order dated 18.9.2009 either of the parties to the PPA can seek determination of tariff based on project specific capital cost and CUF;
- (e) subsequent to the notification of the said regulations by the HPEC in 2007, the CERC has, after following due process of prior publication, notified the CERC (Terms and Conditions for Tariff Determination from Renewable Sources) Regulations, on 16.9.2009 which also specify the norms for the first control period i.e. 2009-2012. The CERC has considered the SHPs located in HP, Uttranchal and NE States as a separate category. Moreover, the projects having capacity less than 5 MW have been considered in the first capacity block and these of 5 MW and upto 25 MW have been considered in the second capacity block. Based on the same, the CERC has also determined the tariff for various categories and blocks for renewable energy generating stations on the basis of suo-

moto petitions separately for each financial year of the control period vide its order dated 3.12.2009, 26.4.2010 and 9.11.2010.

25. The State Govt. has pleaded that whereas the States/Utilities devoid of resource and resorting to procurement of renewable(s) to meet the statutory obligation can afford to go for development of Hydro resources at a rate higher than the State of Himachal Pradesh. The situation is quite different in case of Himachal Pradesh which has nearly $1/6^{th}$ of the total potential and the exploitation of the same is in a direction to create a resource for the State and not merely with an objective of meeting obligations under the renewable power purchase set out by the Commission. In this connection the Commission observes as under:-

- (i) the HPERC (Power Procurement from Renewable Sources and Cogeneration by Distribution Licensee) Regulations, 2007 do not bind the Distribution Licensee to purchase power from the SHPs. The provisions regarding Renewable Purchase Obligation also do not bind the Distribution Licensee to purchase power from the renewable in any specific mode;
- (ii) Section 86(1)(e) of the Electricity Act, 2003 entrusts on the appropriate Commission the responsibility of promotion of cogeneration and generation based on renewable energy sources and para 5.12 of National Electricity Policy of the `Government of India also stresses on the encouragement of renewable energy sources, keeping in view the need for energy security of the country. Subsequently in 2008, one of the important measures identified in National Action Plan for Climate Change (NAPCC) involves increasing the share of renewable energy in total electricity consumption in the country. The NAPCC has set the target of 5% renewable energy purchase for FY 2009-10 against existing level of around 3.5%. Further, the NAPCC envisages that such target will increase by 1% for next 10 years. This would mean the NAPCC envisages renewable energy to constitute approx 15% of the energy mix of India. This would require quantum jump in deployment of renewable energy across the country. Strong policy measures and proactive regulatory framework and innovative financing instruments are required, if the desired level of penetration of

renewable energy is to be achieved. One such policy instrument prescribed in the NAPCC is Renewable Energy Certificate (REC) Mechanism which would enable large number of stakeholders to purchase renewable energy in a cost effective manner.

26. In compliance to the aforesaid provisions of the Electricity Act, 2003, the National Electricity Policy and the NAPCC, to implement the REC Mechanism, the Central Electricity Regulatory Commission (CERC) has framed regulations namely the CERC (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificates for Renewable Generation) Regulations, 2010. The CERC has also issued orders for giving effect to renewable energy certificate framework.

27. Keeping in line with above requirements and to promote renewable sources within the State of Himachal Pradesh, the Himachal Pradesh Electricity Regulatory Commission has also adopted the REC Mechanism specified in the CERC Regulations in Himachal Pradesh Electricity Regulatory Commission (Renewable Power Purchase Obligations and its Compliance) Regulations, 2010.

28. The REC mechanism has been extensively used as a successful market based policy system to promote renewable energy in many countries such as Australia, Japan, USA, Neitherland, Denmark and UK. In Indian context also the notified REC framework is a market based instrument to promote renewable energy and to facilitate renewable energy (RE) purchase obligations amongst the various obligated entities as the obligated entities such as the Distribution Licensees, Open Access customers etc. are required to buy a minimum of renewable energy as notified by State Electricity Regulatory Commission.

29. Since purchase of the RECs will be deemed as a purchase of power generated from renewable sources it will accordingly be allowed for compliance of the RPO target set for Obligated Entities. The REC mechanism will enable the Obligated Entities in any State to procure the RECs generated in any of the States in India and surrender the same to satisfy its RPO target. The RE resource deficient States can fulfil the RPO by purchasing the REC, in the power exchange approved by the CERC. In addition, in RE rich States, the REC mechanism will reduce the risks for the Obligated Entities in continued procurement of renewable power beyond their

RPO targets. Thus REC system would help to offset, to a certain extent, the anomaly of uneven distribution of renewable energy potential in the country.

30. For RE generator the REC mechanism provides another option to sell renewable energy. With this mechanism the RE generator has two options – either to sell the renewable energy at preferential tariff as fixed by the concerned Electricity Regulatory Commission or to sell the electricity component and environmental attributes associated in the form of the REC. On using the second option the RE generator can sell the electricity component to either (i) to the Distribution Licensee of the area, in which the eligible entity is located, at a price not exceeding the pooled cost of power purchase of such Distribution Licensee, or (ii) to any other licensee or to an open access consumer at a mutually agreed price, or through power exchange at the determined price. For this purchase 'Pooled Cost of Purchase' means the weighted average pooled price at which the Distribution Licensee has purchased the electricity including cost of self generation, if any, in the previous year from all the energy suppliers, long-term and short-term, but excluding those based on renewable energy sources, as the case may be.

31. In Himachal Pradesh, the pooled power purchase cost shall be notified by the HPSEBL on annual basis after getting due approval from the HP Electricity Regulatory Commission. The REC will be exchanged only in the power exchange approved by the CERC within band of minimum (floor) and maximum (forbearance) price to be determined by the CERC from time to time. The CERC has already notified the floor and forbearance price for years up to FY 2012 as ₹ 1.5 per unit and ₹ 3.9 per unit respectively.

32. In view of above this Commission strongly feels that renewable energy certificate mechanism may bring about a paradigm shift in the way the renewable based electricity i.e. energy from small hydro plants would be promoted in future in Himachal Pradesh. The mechanism provides a win-win situation for all the stakeholders in the State. The Utility would get power at the pooled cost of its power purchase which in all probability be less than the preferential tariff determined by the Commission and on another hand the RE generator may get a higher return through the REC mechanism as compared to the preferential tariff. For example for the FY

2011-12 the floor price of the REC fixed by the CERC is ₹ 1.5 per unit and assuming that this is the rate at which the REC gets traded at power exchange and also assuming the pooled cost of power purchase at ₹ 2.00 per unit, then the RE generator gets ₹ 3.50 per unit against preferential tariff of ₹ 2.95 per unit determined by the Commission.

33. The entire regulatory and operational framework with reference to the REC Mechanism has been specified in the CERCregulations and its subsequent orders and also in HPERC's regulations and its orders. The accreditation of renewable energy projects in the State of Himachal Pradesh shall be done by the Directorate of Energy which has been designated as State Agency by the HPERC. The process of accreditation shall be in accordance with the detailed procedure as notified by the State agency. Consequent to the accreditation, the registration of renewable energy generation projects shall be done by the National Load Despatch Centre which has been designated as the Central Agency by the CERC. The fee and charges for accreditation shall be as per the orders of the HPERC dated 23-10-2010 and fee and charges for registration shall be as per the order of the CERC dated 21st September, 2010.

Keeping in view the benefits to all stakeholders as mentioned above the Commission strongly suggests the Utility and the SHP developers to take up the REC mechanism earnestly.

34. In order to promote generation from renewable sources the Central Electricity Regulatory Commission has framed regulations and issued orders for giving effect to the Renewable Energy Certificates framework and the Commission has also framed the Himachal Pradesh Electricity Regulatory Commission (Renewable Power Purchase Obligations and its Compliance) Regulations, 2010 by adopting the Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2010. In accordance with the clause (c) of sub-regulation (1) of regulation 5 of the said regulations of the Central Electricity Regulatory Commission, a generating company engaged in generation of electricity from renewable energy sources shall be eligible to apply for registration for issuance and dealing in certificates, if it fulfils the following conditions that :-

- (a) it has obtained accreditation from the State Agency.
- (b) it does not have any power purchase agreement for the capacity related to such generation to sell electricity at a preferential tariff determined by the Appropriate Commission; and
- (c) it sells the electricity generated either (i) to the Distribution Licensee of the area in which the eligible entity is located, at a price not exceeding the pooled cost of power purchase of such Distribution Licensee, or (ii) to any other licensee or to an open access consumer at a mutually agreed price, or through power exchange at market determined price.

35. Under this option, the SHPs shall thus, be entitled to the benefit of selling the RECs to the obligated utilities, apart from the revenue from sale of power to the distribution licensee. On the other hand, the Distribution Licensee can purchase power at a cheaper rate. It is accordingly for the Distribution licensee and the SHPs to avail the benefits under this win-win option. In order to facilitate this mechanism, the respondent Board should also regularly post the pooled cost of power purchase as defined above on yearly basis on its website.

36. In accordance with the Tariff Policy notified by the Central `Government all future requirement of power is to be procured competitively by the Distribution Licensee and the tariff thereof is to be decided on the basis of competitive bidding. This is however subject to certain exemptions. The said policy contains certain special provisions with regard to procurement of power from the non-conventional source of energy including co-generation. The relevant provisions from clause 6.4 of the Tariff Policy are re-produced below:-

"It will take some time before non-conventional technologies can compete sources in terms of cost of electricity. Therefore, procurement by distribution companies shall be done at preferential tariffs determined by the Appropriate Commission." "Such procurement by Distribution Licensees for future requirements shall be done, as far as possible, through competitive bidding process under Section 63 of the Act within suppliers offering energy from same type of non-conventional sources. In the long term, these technologies would need to compete with other sources in terms of full costs."

The Tariff policy thus envisages intra-category competitive bidding in the interim stage and inter category competitive bidding in the ultimate scenario. In case the State Govt. and the Distribution Licensee feel that there are sufficient takers for SHPs in Himachal Pradesh and there is no need for preferential tariff to the future SHPs in Himachal Pradesh, they should resort to tariff based competitive bidding while allotting SHPs and executing PPAs for the future the SHPs. The HPERC Regulations of 2007 already provide that the Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issues by the Central ` Government. In case of tariff based bidding, the scope of tariff and related terms and conditions to be specified by the HPERC in future shall automatically get diluted and tapered off to a great extent. The Commission shall accordingly expect the State ` Government and the Distribution Licensee to discharge its functions for putting the mechanism of tariff based competitive bidding in place so that the tariff for the future SHPs is determined on the basis of competitive bidding only. However, till such time such mechanism is resorted to the tariff and related terms and conditions shall need to be revised by the Commission in accordance with the regulations in force from time to time.

37. The State `Government and the Distribution Licensee has also pleaded that the increase in tariff in respect of existing generators, at least, shall jeopardize the consumer interest particularly when in case of hydro generation, the cost of generation follows a downward trend. The plea has not been supported by any facts and figures. As discussed, in subsequent portions of this Order, in greater detail, the Commission is quite clear in its mind that as and when the tariff is revised by amending the norms, the same shall be applicable for the future projects only and further shall be applicable to only such projects as shall fulfil the eligibility conditions as may be incorporated in the Regulations after hearing all the stakeholders. The revision of tariff, if any, for the existing projects shall continue to be regulated under

the terms and conditions of the tariff applicable to them. The Commission has however also estimated the impact of revision of tariff for the future projects (not exceeding 5 MW capacity) for the next three to four years and has found that tariff increase of about 10% (say) shall have an impact of hardly 0.2 per cent in the overall tariff for the consumers in the State. As regards the downward trend of the cost of generation for hydel projects, the Commission observes that this aspect is automatically taken care of while working out the levelised rate.

38. The State ` Government has also stated that the plea; taken by the applicant/petitioner is to revise the norms, parameters and tariff as applicable to the small hydro generators in the State of Himachal Pradesh for sale of electricity to the distribution company in the State on the basis of norms and parameters notified by the CERC and that the applicability clause of the CERC regulations and its order clearly states that the projects located at the sites approved by the State Nodal Agency/State ` Government are eligible for tariff determination under these regulations provided such generating company has a composite scheme for generation and sale of electricity in more than one State. The applicant, therefore, has the option and can harvest the so called benefits given in the CERC regulation by making such arrangements.

39. The Commission agrees with the plea of the State ` Government in this regard and feels that it is for the State ` Government and the Distribution Licensee to watch their interests based on the overall economics and to decide as to whether they want the power generation of the SHPs to be exported outside the State or to utilize the same in the State. The regulatory frame work for the various options is already available. This is only one of the modes for disposal of power from the SHPs and there is no binding whatsoever for the Distribution Licensees to purchase power from the SHPs under this mode only. In fact, the State needs to move further and provision for aggregators so that marketing and export can be facilitated.

40 The need for making power available to the people at the cheapest possible rates hardly needs any emphasis and the efforts have to be continuously made by all the stakeholders in this direction. However, the provision of a fair rate cannot be denied to the SHP Developers and for that matter to any stakeholder so as to encourage investment in all related fields of the power sector. In this connection, the Commission will like to point out that the State `Government is selling the free power available to it as royalty from various sources including the SHPs to the HPSEBL which is higher than the rate applicable for purchase of power by the Distribution Licensee from the SHPs. Reduction in this rate can also help reduction in the tariff to the consumers of the State.

41. Apart from the applicability criteria etc. the tariff is basically a function of capital cost, CUF and financing costs (interest rate and RoE etc.). The Distribution Licensee as well the State ` Government have objected to the revision of terms and conditions of tariff for the SHPs based on the CERC norms, but have not provided any inputs to the Commission as to on any of these three basic parameters which could help the Commission in confirming the reasonableness of these vital parameters.

42 The Petitioner Association has pleaded that there is a need for harmonizing the tariff for the SHPs in line with the CERC regulations operating at the national level. This has however, been refuted by the respondents with the plea that the CERC regulations do not take the peculiar situations of Himachal Pradesh into account. The Commission is not averse to the suggestion of harmonization with the CERC regulations. In this connection, the Commission also observes that neither the Distribution Licensee nor the State Govt seem to have filed any objections with the CERC by availing opportunities available to them at four different stages when the CERC was in process of finalizing its regulations and determining year-wise tariffs for the three years under first Control period (2009-12). The next control period shall start from FY 2012-13 and as per the provisions of the said regulations, the CERC shall undertake the terms and conditions for the next control period at least 6 months prior to the end of the first control period. Accordingly the draft norms for the next control period starting from 01-04-2012 are now expected to be published by the CERC in mid, 2011. All the stake-holders should in their interest file their objections, if any, with the CERC at the appropriate stage so that the issues involved in their adoption by the HPERC get minimized.

43 Tariff setting being a dynamic process, the HPERC has to fix the tariff from time to time as per the terms and conditions specified in the regulations after duly taking into account the normative level of cost involved in implementation of SHPs and the objections/comments/suggestions as may be received by the Commission at that stage. In the process it shall be guided as far as possible by the principles and methodologies specified by the Central Commission the National Electricity Policy, theTariff Policy and tariff regulations notified by the Central Commission (through it can also deviate from the same if there are sufficient reasons to do so) and the promotion of generation of electricity from the renewable sources of energy. However, the Commission have also to take into account various terms and conditions as specified by it in its own regulations.

44. The petitioner Association has also given justification for a review of the rate of ₹ 2.95/kWh for SHPs exceeding 5 MW based on the tariff notified by the CERC vide their order dated 26-04-2010 for the projects commissioned in FY 2009-2010. The CERC has fixed the following rates for the 3 years in the first control period:

| For SHPs less than 5 MW capacity | | |
|----------------------------------|-------------------------|---|
| Year | Levellised rate (₹/kWh) | Adjustment(Reduction) in case of AcceleratedDepreciation (₹/kWh) |
| 2009-10 | 3.90 | 0.23 |
| 2010-11 | 3.68 | 0.48 |
| 2011-12 | 3.78 | 0.47 |

| For SHPs of 5 MW capacity and above (upto 25 MW) | | | |
|--|-------------------------|--|--|
| Year | Levellised rate (₹/kWh) | Adjustment(Reduction)in case ofAcceleratedDepreciation (₹/kWh) | |
| 2009-10 | 3.35 | 0.21 | |
| 2010-11 | 3.06 | 0.43 | |
| 2011-12 | 3.22 | 0.42 | |

The Commission observes that the rates fixed by the CERC for FY 2010-2011 and FY 2011-2012 are lower than thOse fixed for FY 2009-10 in view of reduction in price indices. The Commission also observes that the rate for sale of power for the projects of 5 MW capacity commissioned in FY 2011-12, net of the benefit due to accelerated

depreciation, as per the CERC's order dated 09-11-2010 works out to \gtrless 2.80/kWh per unit which is even less than the rate of \gtrless 2.95 per unit notified by the Commission. For the projects having capacity lower than 5 MW, the CERC rates would, however, be more than the HPERC rate of \gtrless 2.95/unit.

45 The scheduled date for review of tariff determined vide order dated 18-12-2007, by and large synchronizes with the start of the next control period under the CERC Regulations. Even though the Commission is empowered to change the review period of 5 years by amending the regulations, the HPERC finds it expedient and reasonable to fix the tariff structure as well as terms and conditions for the tariff for the new SHPs upto 25 MW at that appropriate stage. The revised terms and conditions shall however be applicable to only such new SHPs as shall fulfil the eligibility condition to be incorporated in the revised terms and conditions, which shall be done only after hearing all the stake-holders. The Commission shall accordingly initiate necessary steps to revise the norms and parameters for determination of the levelised tariff for sale of power to the Distribution Licensee from the SHPs not exceeding 5 MW in accordance with sub-regulation (7) of regulation 6 of the HPERC (Power Procurement from Renewable Sources and Cogeneration by the Distribution Licensee) Regulations, 2007, soon after the CERC finalises and notifies the revised norms and parameters for determination of tariff for the next control period starting from financial year 2012-13 in respect of the SHPs covered by the CERC Regulations.

46. During the course of hearing on 24-12-2010, the Petitioner Association pleaded that the Commission may revise its Order dated 18-12-2007 regarding levelised rate of ₹ 2.95 per unit for purchase of energy by the Distribution Licensee for SHPs not exceeding 5 MW in view of significant increase in the implementation and operational cost elements and the revised rates should be made applicable even for the SHPs for which the PPAs have already been signed. In support of the plea they have also referred to judgment of the Supreme Court in <u>UP power Corporation Ltd V/s NTPC 2009 ELR (SC) 0013</u> in which it has been held that making of tariff is a continuous process and that it can be amended or attended by the Commission if any occasion arises therefore, either on a application filed by the generating companies or on its own motion. The respondents, have, however, pleaded that the

judgment does not apply to the facts and circumstances of the present matter. The primary question before the Commission in this regard is not about the power of the Commission to amend the tariff but the same is about the reasonableness and justification to revise the generic tariff. As explained in detail elsewhere in this order, the levelised tariff has been finalized after taking the orders of the APTEL into account and either of the parties can approach the Commission for determination of the tariff on the basis of project specific capital cost and CUF which are the two main parameters impacting the tariff. In this connection, the Commission also observes that even though the option for specific determination of Capital Cost and CUF is available to both the parties for the PPAs, till date no party has filed any petition before this Commission for such project specific determination. This only leads the Commission to an impression that the tariff fixed by the HPERC for such projects is considered to be reasonable by both sides. In any case the option continuous to be available to the concerned parties even today.

47. In view of the foregoing and specific provision about applicability of tariff for a period of 40 years as per the sub-regulation (6) of Regulation 6 of the aforesaid HPERC Regulations, 2007, the Commission does not find any merit in the petitioner's claim for retrospective revision of the rate of \gtrless 2.95 per kWh and as such the Commission does not find it prudent to revise the generic levelised tariff already fixed by the Commission after following due process for the SHPs (not exceeding 5 MW) covered by the Commission's order dated 18-12-2007. Accordingly, the tariff and associated terms and conditions for sale of power from the SHPs (not exceeding 5 MW) for which the rate upto \gtrless 2.95 per unit is applicable in terms of Commission's order dated 18-12-2007 and 09-02-2010 shall remain unchanged.

48. The petitioners have also expressed that in the absence of any generic rate for the projects exceeding 5 MW but less than 25 MW, problems are being experienced with regard to achieving the financial closure and have requested that a generic tariff be fixed for such projects also. It has also been pleaded that the generic tariff shall also apply even to the Projects which have already executed PPAs. It has further been requested appropriate dispensation may be considered to provide for fixation of provisional tariff. The Commission observes that the prevailing regulations envisage determination of tariff for such projects by the Commission on individual project basis and not on the basis of a generic paradigm. However, there is a need to provision for a generic tariff based on the due diligence undertaken by the CERC., based on the 0-5 MW pattern in the State, the CERC's own orders and regulations and action taken by Uttrakhand and Punjab in a similar scenario. The right thing therefore, to be undertaken would be to take wholly on board the processes adopted by the CERC and to define the tariff determination for HPERC in the light of the due diligence of the CERC. The present regulations do not meet the requirements of generic tariff. Any minor differentials can be tweaked when the Commission goes into a harmonisation phase for the total 0-25 MW segment post 2012. The present period can be suitably covered for purposes of determination by the HPERC by mutatis mutandis application of the CERC Regulations and Tariff Order to be applied from July 1, 2011 on these entities. Six months is sufficient period for the necessary groundwork to be done.

The Commission is of the view that starting July,1, 2011 generic tariff as specified by the CERC in its order applicable to the State of Himachal Pradesh shall be valid for all projects in that range which fulfil the necessary conditions prescribed by the CERC Order. It is presumed that by the given date the HPERC would have nuanced the Regulations effectively to be in consonance with the national Norms and will be able to take advantage of the due diligence carried out by the CERC. However, it is obvious that certain IPPs may face difficulties during the interim period. The Commission therefore fixes the provisional rate equivalent to the rate fixed for the 0-5 MW projects as given by its orders post APTEL's decision i.e. at ₹ 2.95 per unit. The Commission, however, makes it clear that even if generic tariff is fixed for such projects, the same shall not be applicable to the projects for which the PPAs have already been signed, but shall be made applicable to such projects as shall fulfil the eligibility conditions as may be incorporated in Regulations/Orders by fixing such generic tariff.

49. In view of the foregoing, the Commission directs as under:-

(i) The Commission shall initiate necessary steps to revise the norms and parameters for determination of the levelised tariff for sale of power to the distribution licensee from the SHPs not exceeding 5 MW in accordance with sub-regulation (7) of regulation 6 of the HPERC (Power Procurement from Renewable Sources and Co-generation by the Distribution Licensee) Regulations, 2007 soon after the CERC finalizes and notifies the revised norms and parameters for determination of tariff for the next control period starting from financial year 2012-13 in respect of the SHPs covered by the CERC Regulations the HPERC (Power Procurement from Renewable Sources and Co-generation by the Distribution Licensee) Regulations, 2007 on the subject.

- (ii) The tariff and associated terms and conditions for sale of power for the SHPs not exceeding 5 MW for which the rate upto ₹ 2.95 per unit is applicable in terms of Commission's order dated 18-12-2007 and 09-02-2010 shall remain unchanged.
- (iii) The Commission shall fix generic tariff for the SHPs of higher capacities (upto 25 MW) as per orders of the CERC applicable to HP w.e.f. 01-07-2011 as heretofor mentioned. Necessarily, the tariff orders of the CERC for the next control period will be valid from 2012 control period and will become co-terminus. The Commission, however, makes it clear that even if generic tariff is fixed for such projects, the same shall not be applicable to the projects for which PPAs have already been signed, but shall be made applicable to such projects as shall fulfil the eligibility conditions as may be incorporated in the Regulations/Orders by fixing such generic tariff.

The petition is disposed of accordingly.

(Yogesh Khanna) Chairman