

Comments on the CERC's Regulations 2009

(Draft Terms and Conditions for Tariff Determination from Renewable Energy Sources)

SUBMISSION TO
HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION

Presentation by Kalpan Hydro Company
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1. Kalpan Hydro Company - An overview

Vision

- To be a leading independent Run-of-River (ROR) hydro power producer in India (~1000MW) by 2020 by aggregating a portfolio of projects in the range of 30-150MW

Business Focus

- ROR hydro power projects only
- Triple Bottom Line business (Ecological, Social and Economic)

History

- Established in Sept 2007
- Raised Series 'A' funding in June 2008 from two leading global private equity groups (with > USD 6 bn in assets and an exclusive renewable energy focus)

Management Team

- Created and managed by a world-class team with extensive expertise in hydro power projects delivery within budget (time and costs), carbon credit financing and CSR activities
- Current team members have successfully constructed >2500 MW of hydro power projects; raised > USD 1 bn of hydro power financing
- Current team strength of 30; will be >100 by Nov'09

Current Projects

- 60MW project acquired in the PFR stage ; DPR in progress
- Kalpan is engaged with 3 canal based projects aggregating to a potential of 19MW for complete execution, implementation, construction and commissioning.

2. Guiding Principles of Power Sector

Kalpan believes that the Development in Power Sector needs to be guided by the following principles

Principles	Kalpan's View
Availability	Power to all consumers round the clock
Accessibility	Access to Transmission system for the available power
Implementation	<ul style="list-style-type: none"> • Expedite clearances so as to enable early execution • Single window approach to expedite approvals
Quality	Stable Frequency of the Power and Quality Transmission system.
Pricing	<ul style="list-style-type: none"> • Affordable price for the consumers • Incentive to the developer for better efficiency. • Increased competition

Comments / Suggestions on Draft Regulations 2009

Acknowledgement

We complement the Commission for forward thinking and proposing policy changes that would have a positive impact towards hydro development. Hydro Power Sector has come a long way now and the Commission has been continuously evolving with the reforms that are pushing the developers to the next level.

Kalpan Group acknowledges the significance of norms and procedures laid down by the Commission and will make itself a contributor in the times to come.

As Kalpan is a an Independent Hydro power Producer, our comments will be limited to Hydro Power sector only.

3. Eligibility

CERC has stated the criteria for Hydro Projects which will be covered under this notification:

Small hydro project which are located at the sites approved by MNRE using new plant and machinery, and installed power plant capacity to be lower than or equal to 25 MW at single location.

Clarification Required

- Projects that will be Self Identified by the Developer and are then allotted by the State Nodal Agency on submission of application for allotment, whether all such projects will get automatic approval of MNRE if they are approved by State Nodal Agency OR we will have to go to MNRE for fresh approval.
- What will be status of the Self Identified projects already approved and allotted by the State Agency. Whether they will also need separate approval of MNRE going further.

Kalpan's Recommendations

- We propose to have a system of automatic approval of MNRE once the Self Identified projects are approved by the State Nodal Agency so as to remove additional bottlenecks, bureaucracy and expedite project development

4. Control Period and Tariff Period

CERC has stated General Principles regarding :

1. **Control Period** - Starting from 1.4.2009, reset for every three years
2. **Tariff Period** – 13 years for RE projects

Kalpan's View

Control Period

- Kalpan is convinced about resetting the control period at 3 years as the dynamics of power sector are emerging every year and it will help the developers to put forth their views before the tariff norms for next control period are fixed.

Tariff Period

- The proposed 13 years tariff period for RE projects appear to be reasonable because by that time loan repayment would have been completed and tariff can be reviewed after that.

5. Scheduling of Electricity and Grid Connectivity

CERC has stated General Principles regarding :

1. Scheduling of Electricity:

All small Hydro projects shall be treated as “Must Run” power plants and shall not be subjected to ‘merit order dispatch” principles

2. Grid Connectivity

The concerned licensee shall be responsible for providing grid connectivity to the renewable energy power plants from the inter-connection point, on payment of wheeling or transmission charges as the case may be, in accordance with the regulations of the Appropriate Commission.

Kalpan's View

Scheduling of Electricity:

- Commission has taken a very positive step by giving top priority to the small hydro projects in term of scheduling of electricity which in effect overcomes the barrier of transmission network bottlenecks.

Grid Connectivity

- This is also a very encouraging step for the project Generator that the licensee shall bear the cost of transmission beyond the Interconnection point and effectively no transmission losses shall accrue to the project developer.

6. Capital Cost and Indexation

CERC has stated in its Regulation 27 :

Capital Cost (includes all capital work including plant and machinery, civil work, erection and commissioning, financing and IDC, and evacuation infrastructure up to inter-connection point)

- The normative capital cost for small hydro projects during first year of Control Period (FY 2009- 10) shall be Rs 630 Lakh/MW for SHP projects installed in Himachal Pradesh, Uttarakhand and North Eastern States.
- For SHP projects in other States, the normative capital cost during the first year of Control Period (FY 2009-10) shall be Rs 500 Lakh/ MW.
- Indexation benefits over the above stated costs based on pre-determined formula by applying weights to Civil, E&M and other costs.

Clarification Required

Whether the above cost includes all preliminary cost incurred for SPV formation, ROC charges, cost of printing Memorandum and Articles of Association, cost of obtaining clearances and other preliminary activities.

Capital Cost and Indexation contd

Kalpan's View

- The normative costs for projects in Northern and North-Eastern regions has been considered at 6.30 crs / MW and for other states @ 5 crs / MW plus the indexation benefit. These costs are considerably low keeping in mind the Geological risks, cost of procurement of machinery, manpower costs, material costs, hydrological risks, time lag for approvals, bureaucratic delays that may come up during construction.
- Indexation has been worked by applying weights (F1, F2 and F3) to Land & Civil works, erection and commissioning and IDC. These weights appear to be low for working out escalated capital cost.

Kalpan's Recommendations

- We propose that the commission consider the following normative costs
 - ✓ 700 lacs per MW for Northern and North Eastern states
 - ✓ 600 lacs per MW for other states.
 - ✓ We propose to have a flat rate of Indexation per annum on capital cost to avoid any further calculation and different interpretations.

7. Capacity Utilization Factor

CERC has stated in its Regulation 29 :

Capacity Utilization factor / Plant load Factor for the small hydro projects located in Himachal Pradesh, Uttarakhand and North eastern States shall be 45% and for other States, CUF shall be 30%.

Clarification Required

- Is Capacity Utilization factor Net of Free Power to the state OR the Tariff will be determined at this factor of 45% / 30% and then Free Power needs to be provided for to the state ?

Kalpan's View

- Normative PLF considered for tariff calculations is quite high for Hydro Projects.
- Hydrological risks will not be properly covered at this PLF.
- There is no protection in Tariff if PLF falls below 45% or 30% as the case may be.

Kalpan's Recommendations

We propose that the commission consider the following PLFs as Gross PLF –

- ✓ **40% for Northern and North Eastern states**
- ✓ **25% for other states**

8. Auxiliary Consumption

CERC has stated in its Regulation 30 :

Normative Auxiliary Consumption for the small hydro projects shall be 0.5%.

Kalpan's Recommendations

We propose that the commission consider the following an additional “Transformation loss” of 0.50% over and above the auxiliary consumption

9. Operations and Maintenance Expenses

CERC has stated in its Regulation 31 :

Normative O&M expenses for the first year of the Control period (i.e. FY 2009-10) shall be 12.0 Lakh per MW escalated @ 5.72% p.a.

Kalpan's View

O&M expenses include cost of Manpower, spares and maintenance, establishment and other site expenses which are quite high and are relatively fixed.

These expenses do not vary proportionately with the change in size of the project. Therefore they should not be linked to capacity/size of the project

Kalpan's Recommendations

We propose that the commission consider the following slab of O&M expenses :

- ✓ **20 lacs per MW for projects less than or equal to 25 MW.**
- ✓ **12 lacs per MW is reasonable for projects more than 25 MW (however this is not covered by virtue of this policy under discussion)**

10. Sharing CDM Benefits

CERC has stated in its Regulation 21 :

The proceeds of carbon credit from approved CDM project shall be shared between generating company and concerned off-taker in the following manner:

- a) 100% of the gross proceeds on account of CDM benefit to be retained by the project developer in the first year after the date of commercial operation of the generating station ;
- b) In the second year, the share of the beneficiaries shall be 10% which shall be progressively increased by 10% every year till it reaches 50%, where after the proceeds shall be shared in equal proportion, by the generating company and the beneficiaries.

Kalpan's View

- Project owners shall be the sole owner of CDM benefits as it completely arising out of the decision of the Project developer to implement Hydro Power projects and its consciousness towards Environment.
- Project developer like Kalpan, who have an agenda towards Environment and Social causes in their business model, are very much dependent on such kind of Revenue stream.

Kalpan's Recommendations

- ✓ **CDM benefits shall be completely accrued to the Project Developer and we strongly oppose any sharing of CDM benefits.**

11. Summary

1. Automatic system of Approval from MNRE will be required
2. Normative capital cost should be kept on the higher side keeping the risks involved in developing a hydro power plant
3. Capacity utilization factor should be rationalized so as to cover Free power to be provided to the state and also the downside risks of Hydrology.
4. Auxiliary consumptions needs to account for Transformation losses also.
5. O&M expenses should be refined further and be increased to cover the increasing prices.
6. Sharing of CDM benefits shall completely accrue to the Project Developer. if the CDM benefits are shared then they defeat the additonicity argument of CDM registration and as such there is a strong possibility that UNFCC may not consider award of carbon credits

THANKS
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