

Proposal for diversion of Forest Land of 02-29-26 Hectares for

Banu SHEP (5MW) in Kangra District, (H.P.)

Check list - 29

Cost benefits analysis as per the guidelines under Forest (Conservation) act, 1980 in prescribed format, wherever required.

COST BENEFIT ANALYSIS

Banu SHP is a small hydroelectric project envisaged as a run of the river type project. The project is located in remote area of Himachal Pradesh and shall generate 5 MW of power. The annual energy generation is anticipated to be 27.9 Million units per year. The project is estimated to cost Rs 4467.08 lac. Annual Expenses shall be 12 % interest, 3% depreciation, 2 % operation and Maintenance charges i.e. 17% annual charges. Rate of sale of electricity per unit fixed by Himachal Pradesh Electricity Regulatory Commission for 5 MW project is Rs 3.16 per unit. Therefore. Cost benefit ratio is as under;

Annual Energy generation	=	28.46 MU
Free power to the state	=	2.7 MU
Net Saleable Energy	=	25.76 MU
Sale rate of Energy	=	Rs 3.27 per unit
Annual Income	=	25.76 x 10 x 3.27
	=	Rs 842.35 Lac
Cost of The Project	=	Rs 4109.71 lac
Central Subsidy	=	Rs 500 lac
Net Cost of the project	=	Rs 3609.71lac
Annual Expenses	=	18%
Annual Expenses in Rs in Lac	=	3967 x .18
	=	649.74 lac
Cost Benefit ratio	=	842.35/ 649.74
	=	1.29

This ratio is more than one therefore, project is economically beneficial.

Additional Benefit:

1. The project shall provide about 2.7 MU of energy as royalty to the State Government per year, which is equivalent to about Rs 75 lac of revenue to the State annually.
2. The project shall provide employment to the local youth about 70 people shall be deployed during construction period and about 20 people shall be employed during 40 years of operation of the project.

Hence this project is financially viable and economic one.

Place: Shimla

Date: 12-3-2018

Authorised Signatory

For LEOND HYDRO POWER (P) LTD.
Varun Khandelwal
Leond Hydro Power Pvt Ltd