

COST BENEFIT ANALYSIS - HEO HEP (240MW)
PARAMETER FOR EVALUATION OF LOSS OF FOREST

Sl. No	PARAMETER	HYDRO ELECTRIC PROJECT	VALUE (Rs. MILLION)
1	Loss of value of timber, fuel wood and minor forest produce on annual basis, including loss of man-hours per annum of people who derived livelihood & wages from the harvest of these commodities.	a) Timber 59.9 ha X213m ³ /ha/annum@ Rs 4000/m ³ b) Firewood 2995 Mt(50Mt per ha)xRs 100MT c) Loss of wages 2995 man days Rs 148/-	51.77
2	Loss of animal husbandry productivity inclusive of loss of fodder	Loss of Fodder 59.9x0.5MT/Ha/Annum@Rs500/MT	0.03
3	Cost of human resettlement	No human resettlement	
4	Loss of public facilities & administrative infrastructure (Roads, Buildings, Schools dispensaries, electric line, railways ect.) of forest land or which would require forest land if facilities were diverted due to the project	One foot bridge at Purying village will be submerged. A new road bridge will be constructed in replacement and for construction activities. Actually this will involve an improvement.	0.50
5	Environmental Losses (soil erosion, wild life, habitant, effect on hydrological cycle, microclimate upsetting of ecological balance)	59.9x50.696 lakhs x 0.40(density) As per thumb rule of environmental value mentioned in the Forest Act 1980.	121.47
6	Suffering to oustees.	There is no resettlement of humans in the area	
	Total		173.77



For Heo Hydro Power Pvt. Ltd.


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ANNEXURE-V (b)

COST BENEFIT ANALYSIS-HEO HEP (240MW)

PARAMETER FOR EVALUATION OF BENEFIT NOTWITHSTANDING LOSS OF FORESTS

Sl. No	PARAMETER	HYDRO ELECTRIC PROJECT	Value (Rs million)
1.	Increase productivity and attributable to the specific project	The road construction, electricity supply and telecommunication improvement will ease the economic activity of the surrounding remote villages. Net increase not valued	
2.	Benefits of economy	<ul style="list-style-type: none"> The project involved an investment of 1604.18Cr. at completion cost. This will directly benefit the entire Indian GDP. This benefit has not been taken into account. In addition a 90% dependable year with 95% machine efficiency, the project will generate annual revenue from sale of 87% of the production (1048MU@4Rs/Unit)=Rs3654 million. Direct benefit to the state (13% free power) for a 90% dependable year with 95% machine efficiency, the project will generate an annual revenue from sale of 13% of the production(1048MU@4Rs/Unit)=Rs546million 	4192
3.	No. of population benefited	<ul style="list-style-type: none"> The project will benefit to the population of the North-eastern region as well as rest of India through electricity export. The Population of the West Siang district, more than 100000 persons as per 2001 census, will be the one drawing directly the more benefits as it will benefit immediately from the new infrastructure and employment opportunities. 	
4.	Employment Potential	Employment potential during construction <ul style="list-style-type: none"> Highly skilled:30@Rs 60000/Man month Skilled labor :100 @Rs 30000/Man month Semi-Skilled: 150 @Rs 10000/Man month Un-Skilled: 150 @Rs 7000/Man month 4Years construction salary =Rs 350 millions During operation: <ul style="list-style-type: none"> 8400 Man month@ Rs30000/Man month=252millions 	604
5.	Cost of acquisition of facility on non forest land wherever feasible.	Nil	



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6.	Loss of Agriculture land, Animal husbandry product due to diversion of forest land.	Nil	
7.	Cost of rehabilitating the displaced person as different from compensatory amount given for displacement.	Nil <ul style="list-style-type: none"> • There is no displacement of habitation due to the diversion of the land of the project. Hence there is no resettlement issue related to project. Compensation would be paid to the PAFs, who are losing part of their land as per prevailing land revenue norms of state government and provision of NPRR-2007 • Besides that various welfare measures would be ensured notably under state Government policies, of which the amount would be finalized at a later stage and will result in additional direct benefit to the local people. 	
8.	Cost of Supply of fuel wood to workers residing in or near forest area during the period of construction.	Nil Alternative sources of fuel like LPG and Kerosene will be provided to the workers to avoid illegal falling of trees for cooking purpose. The amount will be finalized at a later stage.	
	Total		4796



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