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Full Title of the Project: - **Construction of 132KV Double Circuit Transmission Line from Tangnu-Romai HEP to 66/132/220KV Pooling Station Sunda (Chirgaon) Tehsil Chirgaon District Shimla (HP).**

File No: _____

Date of proposal: _____


Cost Benefit Ratio Chart

Sr. No	PARAMETERS	Amount (Crores)	Remarks
1	Total Cost (Investment incurred)		
(A)	Construction cost of Project	36.00	
(B)	N.P.V. amount to be deposited @6.99 Lacs/Hac 14.55.10=1.017 Crore	01.02	
(C)	Substitute/Alternation Plantation Cost to be Deposited 2X14.5510X177845=5175655	00.52	
(D)	Maintenance charges for 30 year	3.00	Average maintenance charges for 30 years@0.10crore/year=3.00 crore.
	Total	40.54	
2	Benefits: Benefits from (Taking Age of line as 30 Years)		
(A)	Economics Benefits- Market Development Taking yearly amount of wheeling charges@0.1/Unit for the generated units of 300MW P/H= 225x365x24x100x0.1=19.71 Crores per year, So profit for 30 Years=19.71x30=591.3	591.3	Assuming 75% average power generation against maximum generation capacity for the complete year. 75% of 300MW=225MW
(B)	Direct Employment of Labours: Skilled Labour 5 No @ 500 per day for 30 Years= 5x500x365x30=2.7 Crore Line man 1 No. @800 Per day for 30 Years= 1x800x365x30=0.87 Crore Junior Engineer 1 No @ 1000 Per day for 30 Years= 1x1000x365x30=1.1 Crore Total=2.7+0.87+1.1=4.67	4.67	
(C)	Employment Generation Due to other activities Setting of small industries in the surrounding area due to availability of electricity supply. Take 100 people get per month @ 300/-=0.030 Crores. Benefit for 30 years=0.030x30=0.9 Crores.	0.90	
	Total	596.87	
(D)	Therefore construction of said Trans Line is economically viable and socially beneficial		

Profit Loss Ratio:-

Profit	Loss
596.87	40.54
14.72	1


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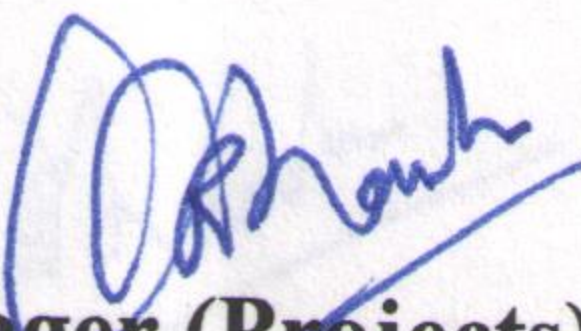
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**PARAMETERS FOR LOSS OF FORESTS
ANNEXURE-VI (B)**

Sr. No	PARAMETERS	Road, Trans Line Railways lines. QUANTITY
1	Loss of value of timber, fuel wood and minor forest produce on an annual basis including loss of man hours per annum of people who derived livelihood and wages from the harvest of these commodities.	Loss of timber ect. Taken as out turn of District Shimla having cost of Rs 9.20 per hectare. No minor forest product grows in these lands and therefore question of its harvesting does not arise.
2	Loss of animal husbandry productivity including loss of fodder.	Loss of Grass and Fodder product 50 Qtl Costing Rs. 2500.00
3	Cost of human resettlement	No one is to be ousted and hence will be no human settlement.
4	Loss of public facilities and administrative infrastructure (Roads, Buildings, Schools, dispensaries, electrical lines, railway lines etc.) on forest land or which would require forest land if these facilities were diverted due to the project.	No public facilities and administrative infrastructure (roads, Buildings, schools, dispensaries, electric line railway line etc) is coming in the alignment of the project. The construction of Transmission line will improve the reliability and improve the low voltage problem
5	Environmental losses: (Social erosion, effect on hydrological cycle, wild life habitat, micro climate upsetting of ecological balance).	There will be no adverse effect on hydrology cycle, wild life habitat or microclimate and will not cause soil erosion Area of the reserve forest and Civil soam land i.e. 14.55.10 Hac. will be paid for NPV /Environment value of forest land as: i) Forest having less than 10% Forest cover= 6.99 Lacs per Hac. ii) Forest having 10% to 40% forest Cover =8.97 Lacs per Hac. iii) Forest having more than 40% forest cover 9.91 Lacs per Hac.
6	Suffering of ouster	The Project will not affect any oustees.


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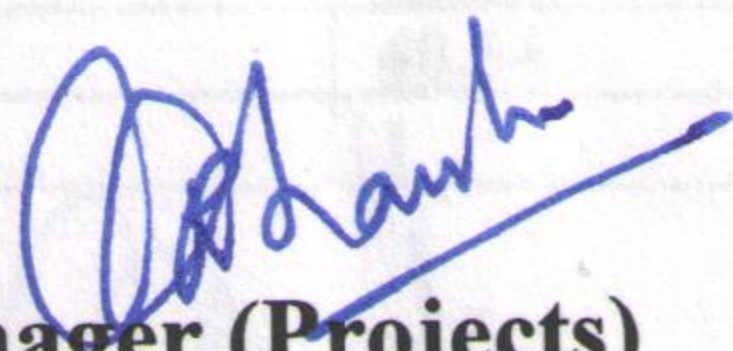
**Parameters for Evaluation of Benefit,
Notwithstanding Loss of Forests.**


ANNEXURE-VI©

File no: _____

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S.No.	Parameters	ROADS, Tr. Lines & Railway Lines
1	Increase in productivity attributable to the specific project.	The above Transmission line is very important in respect of evacuation of Power from Tangnu-Romai HEP-I ,Tangnu-Romai HEP-II, Tangnu-Romai HEP-III,Chander Nahan, Janglik-I & II , Supin , Sungru and other HEP's coming in Pabber Valley of District Shimla HP.
2	Benefits to economy	Wheeling charges@0.1/Unit for the generated units of 300MW P/H= $225 \times 365 \times 24 \times 100 \times 0.1 = 19.71$ Crores per year, So profit for 30 Years= $19.71 \times 30 = 591.3$
3	No of population benefited	After construction of this line –Govt. of HP state and other states will be benefited.
4	Employment potential	During the construction period of Line i.e. about 6 months approximately 50 persons will be engaged in construction activities.
5	Cost of acquisition of facility on non forest land whether feasible	Non forest land not required
6	Loss of (a) agriculture & (b) animal husbandry production due to diversion of forest land	There will be no loss of agriculture and animal husbandry production as sufficient forest land is available.
7	Cost of rehabilitating the displaced persons as different from compensatory amounts given for displacement	Rehabilitation not required.
8	Cost of supply of free fuel-wood to workers residing in or near forest area during the period of construction	No fuel wood will be supply to the staff as well as workers. Only Kerosene and LPG will be provided by the user agency during construction.


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