No SS | HP Forest Department. Dated Rohru the 19 14 | 916 -

From DFO: Rohru

To: CF Shimla.

Subject

Diversion of 14.55.10 Ha of forest land in favour of HPPTCL for the construction of 132KV D/C Transmission line from Tangnu-Romai HEP to 66/132/220KV P.S. Sunda (Chirgaon) within Jurisdiction of Rohru Forest Division.

Memo

This is with reference to the Endst No. Ft.48-2929/2014(FCA) dated 06<sup>th</sup> Feb 2016 by Nodal Officer-cum-Addl. Pr. CCF (FCA) O/o Pr. CCF. HP. The point wise reply/information sought by MOEF GOI Regional Office Dehradun is as under please:

- 1. The Soft Copy of Digital Map has been uploaded online.
- 2. Annexure-VIb, Annexure-VIc & Cost over Benefit Ratio attached herewith.
- 3. Revised Digital Map for CA scheme is attached herewith.
- 4. The District profile has been reviewed and updated.
- 5. The distance of site from Forest in Part-II has been updated.
- 6. The Eco Class/ NPV calculation has been reviewed and found correct.

It is, therefore, requested that the information may please be sent to higher authorities for according necessary approval under Forest Conservation act. 1980.

Divisional Forest Officer, Rohru, Forest Division Rohru,

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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 Chrigaon District Shimla (HP).

File No:	`		
Date of proposal:			

#### **Cost Benefit Ratio Chart**

Sr.	PARAMETERS	Amount	Remarks
No		(Crores)	
. 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 <u>years@0.10crore/year=3.00</u> 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 <a href="mailto:charges@0.1/Unit">charges@0.1/Unit</a> 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
<u>596.87</u>	40.54
14.72	1

Sr. Manager (Projects), HPPTCL Division Rohru, Divisional Forest Officer, Rohru Forest Division, Rohru 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 Chrigaon District Shimla (HP).

File No:	
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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:	
		<ul> <li>i) Forest having less than 10% Forest cover= 6.99 Lacs per Hac.</li> <li>ii) Forest having 10% to 40% forest Cover =8.97 Lacs per Hac.</li> <li>iii) Forest having more than 40% forest cover 9.91 Lacs per Hac.</li> </ul>	
6	Suffering of ouster	The Project will not affect any oustees.	

Sr. Manager (Projects) HPPTCL Division Rohru Divisional Forest Officer Rohru, Forest Division Rohru 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 Chrigaon District Shimla (HP).

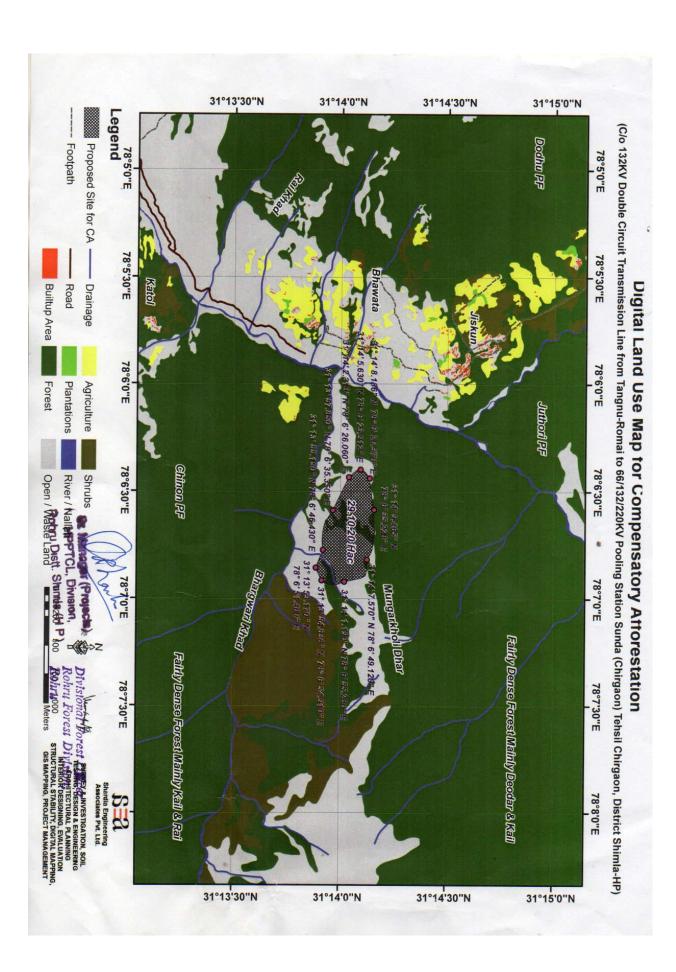
### Parameters for Evaluation of Benefit, Notwithstanding Loss of Forests. ANNEXURE-VI©

File no:	
Data of managed	

	Date of proposal:  S.No. Parameters ROADS, Tr. Lines & Railway Lines				
S.No.	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=  225x365x24x100x0.1=19.71 Crores per year,  So profit for 30 Years=19.71x30=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.			

Sr. Manager (Projects)
HPPTCL Division Rohru

Divisional Forest Officer Rohru Forest Division, Rohru



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

File n	o:										
Date of	of propos	al:	PAR	T II							
	(TO BE	E FILLED BY CONCERNI		PUTY ( al No. (				OF F	ORI	STS	5)
7.		TION OF THE ECT/ SCHEME:					D	)etail	s as	und	ler
(i)	State /U	Inion Territory					Н	imac	hal l	Prad	esh
(ii)	District							S	him	la.	
(iii)	Forest I	Division					Fore	est D	ivisi	on F	lohru
(iv)	Area of	forest land proposed for di	vision (	(in Ha)			·	14.	55.1	0Ha	
(v)	Legal s	tatus of forest				- 1	UPF Fotal=	14.5	5.10		
(vi)	Density	of vegetation				]	Less th	an 10	%		
(vii)	Species	-wise (Scientific names) an	d diam	eter clas	ss wise	enun	neratio	n of t	rees		
		Tot	al Detail o	f trees Rol	ıru Divisi	on					
	Sr. No.	Name of Species	v	IV	ш	IA	IIA	IIB	IC	ID	Total
	1	(Pinus Walichina) Kail	1	2	1	0	0	0	0	0	4
	2	( Cedrus Deodara) deodar	0	0	0	0	0	0	0	0	0
	3	(Pinus Roxburghi) Chil	4	11	1	0	0	0	0	0	16

	Total frees 5 15 2	) 0 0 0 0 20
(viii )	Brief of vulnerability of the forest area to erosion.	There is no possibility of erosion to forest land by the construction of the proposed 132KV Double Circuit Transmission Line from Tangnu-Romai HEP to 66/132/220KV Pooling Station Sunda(Chirgaon) Tehsil Chirgaon Distt Shimla(HP) because the same has been proposed on the hard rocky strata.
(ix)	Approximate distance of proposed site for diversion from	

(ix) Approximate distance of proposed site for diversion from boundary of forest.

7 to 8 KM



		partly.
(y)	Whether forms part of national park, wild life sanctuary, biosphere reserve, tiger reserve, elephant corridor, etc. (If so, the details of the area and comments of the Chief Wildlife Warden to annexed).	No ,
(xi)	Whether any rare/endangered/unique species of flora and fauna found in the area-if so details thereof.	No rare endangered species of flora or fauna is found in the area.
(xii)	Whether any protected archaeological/ heritage site/defense establishment or any other important monument is located in the area. If so, the details thereof with NOC from competent authority, if required.	No
8.	Whether the requirement of forest land as proposed by the user agency in col. 2 of Part-I is unavoidable and barest minimum for the project. If no, recommended area itemwise with details of alternatives examined.	Yes
9.	Whether any work in violation of the act has been carried out (Yes/No.) If yes, details of the same including period of work did, action taken on erring officials. Whether work in violation is still in progress.	No
10.	Details of compensatory afforestation scheme: i). Details of non forest area/degraded forest identified for company afforestation, its distance from adjoining forest, number of patches, size of each patch.	The compensatory afforestation over double the land being diverted will be raised over <b>29.10.20 Ha.</b> in degraded forest land in the detailed compensatory afforestation scheme is attached.
	ii) Map showing non-forest/degraded forest area identified for compensatory afforestation, and adjoining forest boundaries.	Attached
	iii) Detailed compensatory afforestation scheme including species to be planted, implementing agency, time schedule, cost structure, etc.	Attached
	(iv) Total financial outlay for compensatory afforestation scheme.	=5175655.00
	(v) Certificate from competent authority regarding suitability of area identified for compensatory afforestation and from management point of view. (to be signed by the concerned Deputy Conservator of Forest)	Attached
11.	Site inspection report of the DCF (to be enclosed) especially highlighting facts asked in col. 7(xi, xii), 8 and 9 above.	Attached
12	Division/District Profile  (i) Geographical area of the district	



White the second		
	ii) Forest area of the districts	DPF-24503.97 ha UPF- 57260.02 ha
	iii) Total forest area diverted since 1980 with number of cases	202-80-73 ha=64cases
	iv) Total compensatory afforestation stipulated in the districts/division since 1980 as on 31-03-2016	-
	a)Forest land including penal compensatory afforestation	482-49-70 hact
* .	b) Non-forest land	Nil
	V) Progress of compensatory afforesta- tion as on dated 31-03-2016 on a)Forest land b) Non forest land	284-03-87 ha
13,	Specific recommendations of the DCF for acceptance or otherwise of the proposal with reasons;	Nil The proposal recommended for approval please.

Dated 14.4.2016

Place: Rohru

(Chaman Lal )HPFS Divisional Forest Officer, Rohru Forest Division, Rohru Office Seal\_\_\_