

No. C-28-b-1599/ FCA (Online)/Rohroo/ 2003
Himachal Pradesh Forest Department

Dated, the Shimla-02 20.05.2016

From:

CF Shimla

To: Nodal Officer-cum-Addl.Pr. CCF (FCA)
O/o Pr.CCF (HoFF) HP, Shimla-I.

Subject:

Diversion of 14.5510 ha of forest land for the construction of 132 KV D/C Transmission Line Tangnu-Romai HEP to 66/132/220 KV Pooling Station Sunda (Chirgaon) Tehsil Chirgaon District Shimla, HP within the jurisdiction of Rohroo Forest Division, Distt. Shimla, Himachal Pradesh.

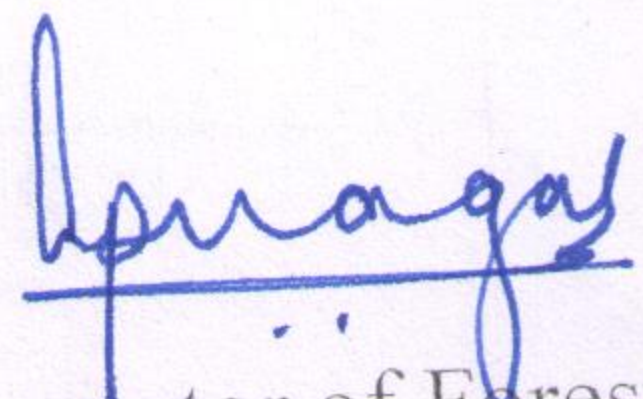
Memo:

Kindly refer to your office endst. No. Ft.48-2929/2014(FCA) dated 06.02.2014 on the subject cited above.

The point wise clarification desired vide above quoted reference is given as under:

1. Needful has been done now by User Agency.
2. Revised performa VI b and VI c and cost benefit ratio is enclosed herewith.
3. Digital map of area proposed for CA in the shape of hard copy as well as soft copy is enclosed herewith.
4. District proposal w.r.t. CA stipulation is corrected now. Hard copy of revised part-II is also enclosed herewith.
5. Needful has been done now.
6. ECO class is reviewed and found correct.

Encl: As above.


Conservator of Forests
Shimla Forest Circle

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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 $2 \times 14.5510 \times 177845 = 5175655$	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= $225 \times 365 \times 24 \times 100 \times 0.1 = 19.71$ Crores per year, So profit for 30 Years= $19.71 \times 30 = 591.3$	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= $5 \times 500 \times 365 \times 30 = 2.7$ Crore Line man 1 No. @800 Per day for 30 Years= $1 \times 800 \times 365 \times 30 = 0.87$ Crore Junior Engineer 1 No @ 1000 Per day for 30 Years= $1 \times 1000 \times 365 \times 30 = 1.1$ 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= $0.030 \times 30 = 0.9$ 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

Sr. Manager (Projects),
HPPTCL Division Rohru,

Divisional Forest Officer,
Rohru Forest Division, Rohru


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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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HPPTCL Division Rohru


Divisional Forest Officer
Rohru, Forest Division Rohru

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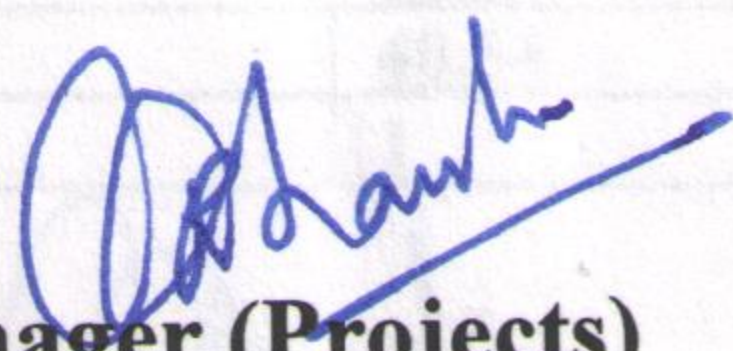
**Parameters for Evaluation of Benefit,
Notwithstanding Loss of Forests.**


ANNEXURE-VI©

File no: _____

Date of proposal: _____

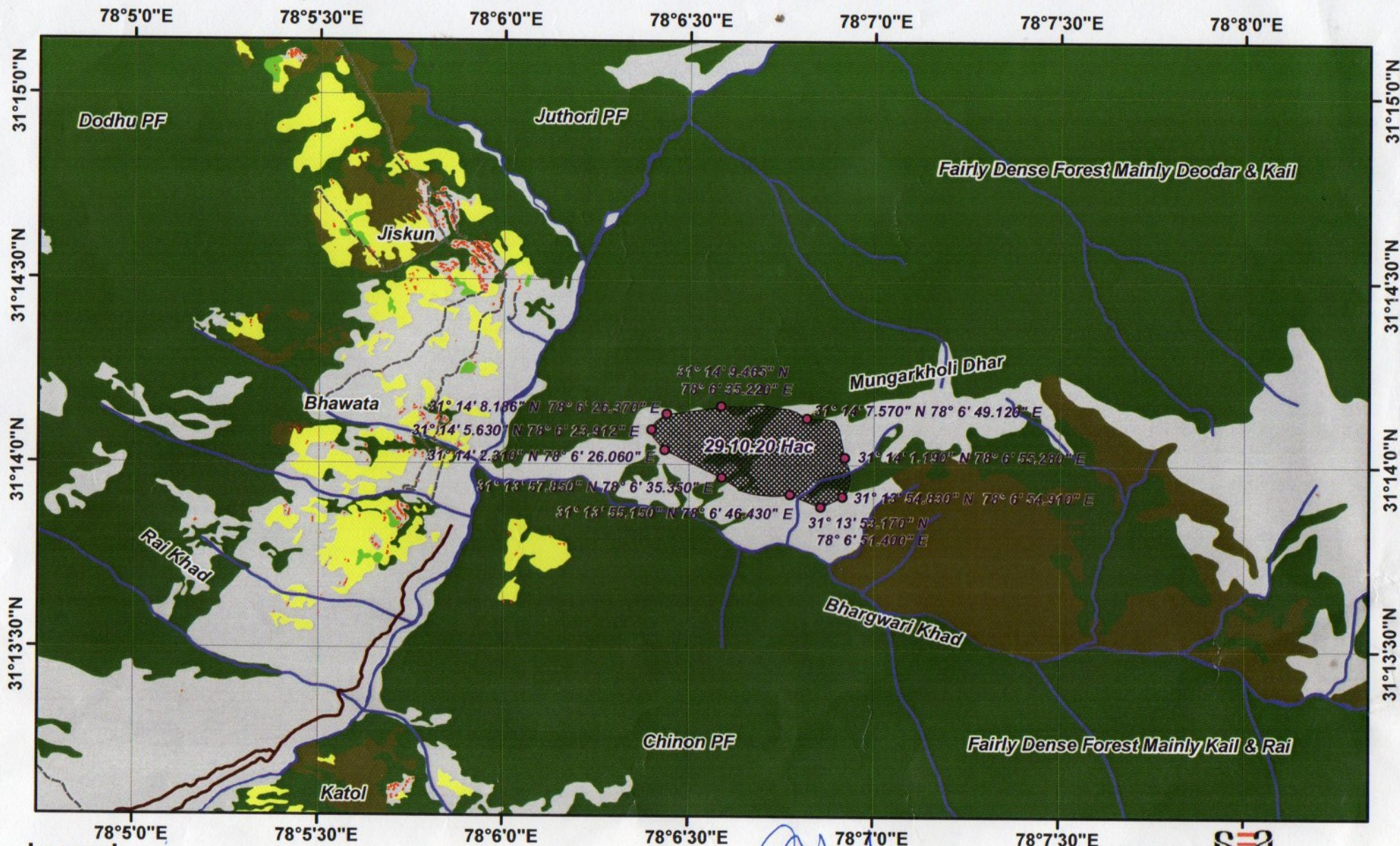
S.No.	Parameters	ROADS, Tr. Lines & Railway Lines
1	Increase in productivity attributable to the specific project.	The above Transmission line is very important in respect of evacuation of Power from Tangnu-Romai HEP-I ,Tangnu-Romai HEP-II, Tangnu-Romai HEP-III,Chander Nahan, Janglik-I & II , Supin , 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.


Sr. Manager (Projects)
HPPTCL Division Rohru


Divisional Forest Officer
Rohru Forest Division, Rohru

Digital Land Use Map for Compensatory Afforestation

(C/o 132KV Double Circuit Transmission Line from Tangnu-Romai to 66/132/220KV Pooling Station Sunda (Chirgaon) Tehsil Chirgaon, District Shimla-HP)



Legend

- | | | | | | | | |
|--|----------------------|--|----------|--|-------------------|--|----------------|
| | Proposed Site for CA | | Drainage | | Agriculture | | Shrubs |
| | Footpath | | Road | | Plantations | | River / Nallah |
| | Builtup Area | | Forest | | Open / Waste Land | | |

[Signature]
 St. Manager (Projects)
 HPPTCL, Division,
 Rohru Distt. Shimla (H.P.)



[Signature]
 Divisional Forest Officer
 Rohru Forest Division
 Rohru

SEA
 Sharda Engineering
 Associates Pvt. Ltd.
 SURVEY & INVESTIGATION, SOIL
 TESTING, DESIGN & ENGINEERING
 ARCHITECTURAL PLANNING
 INTERIOR DESIGNING, EVALUATION
 STRUCTURAL STABILITY, DIGITAL MAPPING,
 GIS MAPPING, PROJECT MANAGEMENT

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: _____

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PART II

(TO BE FILLED BY CONCERNED DEPUTY CONSERVATOR OF FORESTS)

Serial No. Of the proposal _____

7.	LOCATION OF THE PROJECT/ SCHEME:	Details as under																																																																										
(i)	State /Union Territory	Himachal Pradesh																																																																										
(ii)	District	Shimla.																																																																										
(iii)	Forest Division	Forest Division Rohru																																																																										
(iv)	Area of forest land proposed for division (in Ha)	14.55.10Ha																																																																										
(v)	Legal status of forest	UPF Total= 14.55.10																																																																										
(vi)	Density of vegetation	Less than 10%																																																																										
(vii)	Species-wise (Scientific names) and diameter class wise enumeration of trees																																																																											
	<table border="1"> <thead> <tr> <th colspan="11">Total Detail of trees Rohru Division</th> </tr> <tr> <th>Sr. No.</th><th>Name of Species</th><th>V</th><th>IV</th><th>III</th><th>IA</th><th>IIA</th><th>IIB</th><th>IC</th><th>ID</th><th>Total</th> </tr> </thead> <tbody> <tr> <td>1</td><td>(Pinus Walichina) Kail</td><td>1</td><td>2</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>4</td> </tr> <tr> <td>2</td><td>(Cedrus Deodara) deodar</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td>3</td><td>(Pinus Roxburghi) Chil</td><td>4</td><td>11</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>16</td> </tr> <tr> <td></td><td>Total Trees</td><td>5</td><td>13</td><td>2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>20</td> </tr> </tbody> </table>										Total Detail of trees Rohru Division											Sr. No.	Name of Species	V	IV	III	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 Trees	5	13	2	0	0	0	0	0	20
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(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 boundary of forest.	7-8 Km																																																																										

	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 item-wise 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 29.10.20 Ha. 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	170705Ha of this division

	(ii) Forest Area of the districts	Demarcated:- 24503.97 Ha Un Demarcated:-57260.02 Ha
	(iii) Total forest area diverted since 1980 with Number of cases.	=202-80-73Ha=64 Cases
	(iv) Total compensatory afforestation stipulated in the District/Division since 1980 as on 31-03-2016	
(a)	Forest land including penal compensatory afforestation	482-49-70 Ha
(b)	Non Forest land	Nil
(c)	Progress of compensatory Afforestation as on. 31-03-2016	
	(a) Forest land.	284-03-87 Ha
	(b) Non Forest land.	Nil
13.	Specific Recommendation of the DCF For acceptance or otherwise of the proposal with reasons.	The proposal is recommended for approval please.

Dated19.5.16.....
Place ...Rohru.....

Y. S. Singh
Divisional Forests Officer,
Rohru Forest Division, Rohru
Rohru