PROTECTED FOREST LAND PROPOSED TO BE DIVERTED FOR 400 KV ANPARA VARANASI DC TRANSMISSION LINE THROUGH FOREST DIVISION MIRZAPUR, SONEBHADRA, OBRA, RENUKOOT AND KAIMUR WILDLIFE IN DISTRICT: SONEBHADRA & MIRZAPUR IN THE STATE OF U.P.

COST BENEFIT ANALYSIS

Purpose: This cost benefit analysis is being undertaken for proposed diversion of forest Land being affacted due to construction of access controlled. or Evaluation of the loss of forests

(a) Parameters for Evaluation of the loss of forests				000000-0	Wol age ac cu.
Net present value of forest area to be diverted is Ns.357700 per indias per iow	Net present value	of forest area to	be diverted	I IS KS.3577 ou per	חמ מז הכו ומת
T Crosystem act wice many act and act act and act act and act and act act act and act	density in Eco class III.	s III.			
		Proposed			Ecosystem
	Division	Forest Area	Density	NPV Rate	services Losses
		(ha)			in INR.
	Renukoot	98.28	0.3	957780	94130618.00
	Ohra	113.048	0.3	957780	108275113.00
CI		42.464X5	0.3	957780	7
28	Kaimur	12.188	0.3		
	Sonebhadra	15.79	0.3	957780	
	Mirzapur	37.51	0.3	957780	35926328.00
	Total	319.28			468484678.2
	Hence losses to Eco system =468484678	to system =4684	84678		
Loss of animal husbandry ,productivity including loss of	Considering 10% of NPV applicable of diversion area.	of NPV applicabl	e of diversion	n area. 78v10%=4684846	oc
2 foder	Hence Losses of A	nimai nusualiu	A TOTOLOG	DOTON STOTAGE	
3 Cost of human resttlement	NII				
4 Loss of public facilities and administrative Nil	Z				
infrastructure(roads,building,school,dispensaries,electric					
lines, railway etc) on forest land or which would require					
forest land or Which would require lotest rains in cross					
5 Possession value of forest land diverted.	Considering 30% of environmental costs (NPV) due to loss of forest. Hence losses =468484678x30%=140545403	of environments 8x30%=1405454	Il costs (NP\	/) due to loss of fr	orest. Hence
Cost of suffering to oustees.	NIL				
7 HabitalFragmentation Cost	Considering 50% of applicable NPV Total Losses =468484678x50%=234242339	of applicable NP 1484678x50%=2	V 34242339		
8 Compensatory Afforestation and soil & moisture conservation cost	Considering 957780/Ha including CA and soil & N Hence Total Losses= 957780x319.28=305799998	80/Ha including es= 957780x319.	CA and soil 28=305799	Considering 957780/Ha including CA and soil & Moisture Conservation cost. Hence Total Losses= 957780x319,28=305799998	ervation cost .

468484678 +46848468+140545403+234242339+305799998 Total loss to Environment

The project is of 10 Km line length which require direct employment for the construction of above project. Benefit from Direct Employment estimated :50 man day x500=25000 Directly or indirectly the complete state of Uttar Pradesh state will be benefited by this project Project is under the Tariff based and the tariff is fixed for next 35 years at the time of bidding Considering 957780/Ha including CA and soil & Moisture Conservation cost Description Hence Total Losses= 957780x319.28=305799998 Construction cost of project=4314.62 Lac. Revenue generated =21573.1 lac Parameters for evaluation of Benefit Not withstanding Loss Hence benefit=17258.48 lac. Same as of above No.of population benefited Economic benefit due to attribotable to the specific Economic benefit due to Benefit to economy due Increase in productivity due to specified project specified project employment potential to specified project direct and indirect **Parameters** 5.00 (p)

Benefit to Economy

1725848000+25000+305799998

2031672998

Cost Benefit ratio =1195920886/2031672998

उठ प्रव पाठ हाव काव तिव अधिशासी अभियन्ती निद्यतं प्रेषण खण्ड

प्रमानीय वनाधिकारी विद्यते प्रेयण उप खिण 歌唱唱咖

मिरवापुर

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उत्त खण्ड अधिकारी

FOREST LAND PROPOSED TO BE DIVERTED FOR 400 KV ANPARA VARANASI DC TRANSMISSION LINE THROUGH FOREST DIVISION MIRZAPUR SONEBHADRA, OBRA, RENUKOOT AND KAIMUR WILDLIFE IN DISTRICT: SONEBHADRA & MIRZAPUR IN THE STATE OF U.P.

COST BENEFIT ANALYSIS

This cost benefit analysis is being undertaken for proposed diversion of forest Land being affacted due to construction of access controlled. eters for Evaluation of the loss of forests

	Net present value	חוורים ביותרים ביו			
Ecosystem Services tosses due to proposed to the services in t	Idensity in Eco class III.	S III.			
	(According	Proposed			Ecosystem
	Division	Forest Area	Density	NPV Rate	services Losses
		(ha)			12.
	Rentikoot	98.28	0.3	957780	94130618.00
	Obra	113.048	0.3	957780	957780 108275113.00
		42.464X5	0.3	957780	957780 203355849.60
	Kaimur	12.188	0.3	957780	
	Sonebhadra	15.79	0.3	957780	
	Mirzoniir	37.51	0.3	957780	35926328.00
	Total	319.28			468484678.2
	Hence losses to Eco'system =468484678	co'system =4684	184678		
Loss of animal husbandry ,productivity including loss of	Considering 10% of NPV applicable of diversion area.	of NPV applicab	le of diversion	on area.	œ
2) foder	Hence Losses of	vuimai nusbano	ny-topto-ku	20100	
of human resttlement	Ni				
4 Loss of public facilities and administrative Nil	e Nii				
infrastructure(roads,building,school,dispensaries,electric					
lines, railway etc) on forest land or which would require	Q				
forest land or which would require forest land if these					
facilities were diverted due to the project	Considering 200%	of anvironment	al costs (NPV	Considering 20% of environmental costs (NPV) due to loss of forest. Hence	orest. Hence
5 Possession value of forest land diverted.	Losses =468484678x30%=140545403	78x30%=140545	403		
c Cost of suffering to oustees.	NIL		•		
7 HabitalFragmentation Cost	Considering 50% of applicable NPV Total Losses =468484678x50%=234242339	of applicable NI 8484678x50%=2	PV 34242339		
8 Compensatory Afforestation and soil & moisture conservation cost	Considering 957780/Ha including CA and soil & N Hence Total Losses= 957780x319,28=305799998	780/Ha including es= 957780x319	g CA and soil	Considering 957780/Ha including CA and soil & Moisture Conservation cost. Hence Total Losses= 957780x319.28=305799998	ervation cost .

Total loss to Environment 468484678 +46848468+140545403+234242339+305799998

1195920886

And a control of the	Parameters for evaluation of benefit wot writistening and parameters for evaluation		roductivity to the specific	2 Benefit to economy due Same as of above	to specified project	3 No.of population benefited Directly or indirectly the complete state of Ottal Francisco State	due to specified project	0	employment potential	Economic benefit due to Considering 957780/Ha including LA and soil or Mussual Conscient due to Considering 957780/Ha including LA and soil or Mussual Conscient due to Considering 957780/Ha including LA and soil or Mussual Conscient due to Considering 957780/Ha including LA and soil or Mussual Conscient due to Considering 957780/Ha including LA and soil or Mussual Conscient due to Considering 957780/Ha including LA and soil or Mussual Conscient due to Conscient	
2222200	Parameters	Parameters	1 Increase in patributable project	2 Benefit to e	to specified	3 No.of popul	due to spec	4 Economic b	employmen	5 Economic specif	
	(p)	Sno									ALC: CONTRACT OF THE PARTY OF T

Benefit to Economy

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1725848000+25000+305799998 2031672998

Cost Benefit ratio =1195920886/2031672998

अविशासी अभियना निद्यत क्षेत्रण खण्ड ठे० ४० ५० २० अ० तिठ

प्रतिहस्ताक्षरित

मीरजापुर-वन प्रमाग प्रसागीय वनाधिकारी

विधान प्रका उप खण्ड पूर्वा ज्य खण्ड अधिकारी

PROTECTED FOREST LAND PROPOSED TO BE DIVERTED FOR 400 KV ANPARA VARANASI DC TRANSMISSION LINE THROUGH FOREST DIVISION MIRZAPUR, SONEBHADRA, OBRA, RENUKOOT AND KAIMUR WILDLIFE IN DISTRICT: SONEBHADRA & MIRZAPUR IN THE STATE OF U.P.

COST BENEFIT ANALYSIS

Purpose: This cost benefit analysis is being undertaken for proposed diversion of forest Land being affacted due to construction of access controlled.

(a) Parameters for Evaluation of the loss of forests

Divident Real Results of the Property of the P	density in Eco class III. Proposed Prop	Proposed Forest Area (ha) 98.28 113.048 42.464X5 12.188 15.79 37.51 319.28 co system =4684 of NPV applicable Animal Husbandr	Density 0.3 0.3 0.3 0.3 0.3 0.3 0.3 e of diversic	NPV Rate 5 1 2 2 2 2 2 2 2 2 2	Ecosystem services Losses in INR. 94130618.00 108275113.00 203355849.60 11673422.64 15123347.00 35926328.00 468484678.2
forest land or wnich would require forest land in the forest land in the forest land diverted. 5 Possession value of forest land diverted.		of environment 78x30%=140545	al costs (NP\	Considering 30% of environmental costs (NPV) due to loss of forest. Hence losses =468484678x30%=140545403	orest. Hence
Cost of suffering to oustees.	NIL	2000			
	Considering 50% of applicable NPV Total Losses =468484678x50%=234242339	of applicable NF 8484678x50%=2:	۰۷ 34242339		
8 Compensatory Afforestation and soil & moisture conservation cost	Considering 957780/Ha including CA and soil & N Hence Total Losses= 957780x319.28=305799998	780/Ha including es= 957780x319	CA and soil .28=305799	Considering 957780/Ha including CA and soil & Moisture Conservation cost. Hence Total Losses= 957780x319.28=305799998	ervation cost .

Total loss to Environment

468484678 +46848468+140545403+234242339+305799998

1195920886

Parameters for evaluation of Benefit Not withstanding Loss

(b) S.no	Parameters for evaluation or parameters I Increase in productivity attributable to the specific project 2 Benefit to economy due to specified project No. of population benefited due to specified project 4 Economic benefit due to direct and indirect employment potential employment potential	Parameters for evaluation of Benefit Not withstanding Loss Parameters Parameters Parameters Project is under the Tariff based and the tariff is fixed for next 35 years at the time of bidding attributable to the specific Construction cost of project=4314.62 Lac. Project Project is under the Tariff based and the tariff is fixed for next 35 years at the time of bidding attributable to the specific Construction cost of project=4314.62 Lac. Revenue generated =21573.1 lac Hence benefit=17258.48 lac. Benefit to economy due to specified project No. of population benefited Directly or indirectly the complete state of Uttar Pradesh state will be benefited by this project due to specified project A Economic benefit due to Benefit from Direct Employment estimated :50 man day x500=25000 Benefit due to considering 957780/Ha including CA and soil & Moisture Conservation cost Economic benefit due to Considering 957780x319.28=305799998
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Benefit to Economy

1725848000,+25000+305799998

2031672998

Cost Benefit ratio =1195920886/2031672998 06.02.1023

अधिशासी अभियम्ता निशुत प्रेषण खण्ड उठ प्र० षा० ट्रा० का० तिंठ गानीपुर

रेणुकूट वन प्रमाण, रेणुकूट-तोनमङ्

(स्नमीहन पित्र)

नुनीय उप खण्ड अधिका विद्युत स्रेषण उप डण्ड

PROTECTED FOREST LAND PROPOSED TO BE DIVERTED FOR 400 KV ANPARA VARANASI DC TRANSMISSION LINE THROUGH FOREST DIVISION MIRZAPUR, SONEBHADRA, OBRA, RENUKOOT AND KAIMUR WILDLIFE IN DISTRICT: SONEBHADRA & MIRZAPUR IN THE STATE OF U.P.

Purpose: This cost benefit analysis is being undertaken for proposed diversion of forest Land being affacted due to construction of access controlled.

in INR. 94130618.00 35926328.00 15123347.00 468484678.2 203355849.60 11673422.64 Considering 957780/Ha including CA and soil & Moisture Conservation cost. 108275113.00 services Losses Net present value of forest area to be diverted is Rs.957780 per Ha as per low Considering 30% of environmental costs (NPV) due to loss of forest. Hence Ecosystem Hence Losses of Animal Husbandry=468484678x10%=46848468 957780 957780 957780 957780 957780 NPV Rate Hence losses to Eco system =468484678 Considering 10% of NPV applicable of diversion area. Hence Total Losses= 957780x3,19,28=305799998 0.3 0.3 Total Losses =468484678x50%=234242339 0.3 0.3 0.3 Density losses =468484678x30%=140545403 Considering 50% of applicable NPV 42.464X5 12.188 15.79 37.51 319.28 113.048 98.28 Forest Area Proposed (ha) density in Eco class III. Sonebhadra Renukoot Mirzapur Division Kaimur Total NIL lines,railway etc) on forest land or which would require forest land or which would require forest land if these administrative Ecosystem services losses due to proposed forest diversion infrastructure(roads,building,school,dispensaries,electric Loss of animal husbandry , productivity including loss of Compensatory Afforestation and soil & moisture facilities were diverted due to the project Possession value of forest land diverted. (a) Parameters for Evaluation of the loss of forests facilities Cost of suffering to oustees. Habital Fragmentation Cost Cost of human resttlement public conservation cost

468484678 +46848468+140545403+234242339+305799998 Total loss to Environment

119592U886 Parameters for evaluation of Benefit Not withstanding Loss Parameters for evaluation of Benefit Not withstanding Loss Parameters Parameters	Increase in productivity Construction cost of project=4314.62 Lac. attributable to the specific Revenue generated =21573.1 lac project Hence benefit=17258.48 lac.	2 Benefit to economy due Same as of above to specified project to specified project to specified project	The project is of 10 km line length which require direct employment for the construction of above project.	lirect and indirect Benefit from Direct Employment CA and soil & Moisture Conservation cost Benefit from Direct Employment potential	Considering 957780x319.28=305799998 Hence Total Losses= 957780x319.28=305799998
	I Increase in productivity attributable to the specific project	2 Benefit to economy due to specified project	3 No. of population benefited due to specified project	direct and indirect employment potential	Economic benefit due to specified project
(b)		2			

Benefit to Economy

1725848000+25000+305799998

Cost Benefit ratio =1195920886/2031672998

उठ प्रव पाठ हार कार तिर आवशासी आवयना निद्यत प्रेषण खण्ड

म मामीय बनाविकारी

राष्ट्रंसगंब - बोचना

होनसइ बन प्रकाय

विद्युत प्रेषण उप खण्ड तृतीय खण्ड अधिकारी साबद्धाणंज

PROTECTED FOREST LAND PROPOSED TO BE DIVERTED FOR 400 KV ANPARA VARANASI DC TRANSMISSION LINE THROUGH FOREST DIVISION MIRZAPUR ,SONEBHADRA ,OBRA,RENUKOOT AND KAIMUR WILDLIFE IN DISTRICT: SONEBHADRA & MIRZAPUR IN THE STATE OF U.P.

COST BENEFIT ANALYSIS

Purpose: This cost benefit analysis is being undertaken for proposed diversion of forest Land being affacted due to construction of access controlled.

1	Ecosystem services losses due to proposed forest diversion	Net present value density in Eco class	s III.					
		density in Eco class	Proposed			Ecosystem		
		. 30.0	Forest Area	Density	NPV Rate	services Loss		
		Division	(ha)			in INR.		
			98.28	0.3	957780			
		Renukoot	113.048	0.3	957780			
		Obra	42.464X5	0.3	957780			
		Kaimur	12.188	0.3	957780			
		a blades	15.79					
		Sonebhadra	37.51		957780			
		Mirzapur	319.28			468484678		
		10tal						
	Loss of animal husbandry ,productivity including loss of	Considering 10% of NPV applicable of Arethodology Hence Losses of Animal Husbandry=468484678x10%=46848468						
	2 foder	Hence Losses of Animal Husbandry—records						
	3 Cost of human resttlement							
	4 Loss of public facilities and administrative	NII						
	infrastructure(roads.building.school,dispensaries,electric							
	lines railway etc) on forest land or which would require	e						
	forest land or which would require forest land if these	2						
	facilities were diverted due to the project	200/	of anvironmenta	l costs (NP)	V) due to loss of fo	rest. Hence		
	5 Possession value of forest land diverted.	Considering 30% of environmental costs (NPV) due to loss of forest. Hence						
		losses =468484678x30%=140545403						
	6 Cost of suffering to oustees.	NIL						
	7 HabitalFragmentation Cost	Considering 50%	Considering 50% of applicable NPV Total Losses =468484678x50%=234242339					
	/ Induction regulation	Total Losses =468	4846/8X5U%=23	CA and cail	& Moisture Cons	ervation cost		
	8 Compensatory Afforestation and soil & moisture	Considering 9577	80/Ha including	CA 300 200	008			
	conservation cost	Considering 957780/Ha including CA and soil & Moisture Conservation cost Hence Total Losses = 957780x319.28=305799998						

Total loss to Environment

468484678 +46848468+140545403+234242339+305799998

1195920886

b)		f Benefit Not withstanding Loss Description
i.no	attributable to the specific project	Project is under the Tariff based and the tariff is fixed for next 35 years at the time of bidding Construction cost of project=4314.62 Lac. Revenue generated =21573.1 lac Hence benefit=17258.48 lac.
	to specified project 3 No.of population benefited	
	due to specified project 4 Economic benefit due to direct and indirect employment potential	The project is of 10 Km line length which require direct employment for the construction of above project . Benefit from Direct Employment estimated :50 man day x500=25000
	5 Economic benefit due to specified project	Considering 957780/Ha including CA and soil & Moisture Conservation cost . Hence Total Losses= 957780x319.28=305799998

Benefit to Economy

1725848000+25000+305799998

2031672998

Cost Benefit ratio =1195920886/2031672998