

# UTTAR PRADESH POWER TRANSMISSION CORPORATION LIMITED

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 affected due to construction of access controlled.

(a) Parameters for Evaluation of the loss of forests

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1	Ecosystem services losses due to proposed forest diversion	Net present value of forest area to be diverted is Rs.957780 per Ha as per low density in Eco class III.				
		Division	Proposed Forest Area (ha)	Density	NPV Rate	Ecosystem services Losses in INR.
		Renukoot	98.28	0.3	957780	94130618.00
		Obra	113.048	0.3	957780	108275113.00
		Kaimur	42.464X5	0.3	957780	203355849.60
			12.188	0.3	957780	11673422.64
		Sonebhadra	15.79	0.3	957780	15123347.00
		Mirzapur	37.51	0.3	957780	35926328.00
		Total	319.28			468484678.2
		Hence losses to Eco system =468484678				
		Considering 10% of NPV applicable of diversion area.				
		Hence Losses of Animal Husbandry=468484678x10%=46848468				
		Nil				
		Nil				
		</				

### Total loss to Environment

468484678 +46848468+140545403+234242339+305799998

1195920886

(b) Parameters for evaluation of Benefit Not withstanding Loss

S.no	Parameters	Description
1	Increase in productivity 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.
2	Benefit to economy due to specified project	Same as of above
3	No.of population benefited due to specified project	Directly or indirectly the complete state of Uttar Pradesh state will be benefited by this 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

0.59

*(Handwritten signatures and dates)*  
06.02.2023

अधिकासी अभियन्ता  
विद्युत प्रेषण खण्ड  
उ० प्र० का० हा० का० लि०  
गजीपुर

प्रभागीय वनाधिकारी  
कैमूर वन्य जीव प्रभाग  
मीरजापुर

उप खण्ड अधिकारी  
विद्युत प्रेषण उप खण्ड वृत्ति  
राबईसंगन



# UTTAR PRADESH POWER TRANSMISSION CORPORATION LIMITED

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.

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		Total	319.28			468484678.2
		Hence losses to Eco system =468484678				
	Loss of animal husbandry ,productivity including loss of	Considering 10% of NPV applicable of diversion area.				
2	foder	Hence Losses of Animal Husbandry=468484678x10%=46848468				
3	Cost of human resettlement	Nil				
4	Loss of public facilities and administrative infrastructure(roads,building,school,dispensaries,electric lines,railway etc) on forest land or which would require forest land or which would require forest land if these facilities were diverted due to the project	Nil				
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	Habitat Fragmentation Cost	Considering 50% of applicable NPV Total Losses =468484678x50%=234242339				
8	Compensatory Afforestation and soil & moisture 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

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Benefit to Economy

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2031672998

Cost Benefit ratio =1195920886/2031672998  
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प्रतिहस्ताक्षरित

प्रभामीष वनाधिकारी  
मीरजापुर-वन प्रभाग  
मीरजापुर

उप खण्ड अधिकारी  
विद्युत प्रेषण उप खण्ड तृतीय  
राजदरभोज

अधिसारी अभियन्ता  
विद्युत प्रेषण खण्ड  
उ० प्र० मा० टा० का० लि०  
गाजीपुर



# UTTAR PRADESH POWER TRANSMISSION CORPORATION LIMITED

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.

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		Considering 10% of NPV applicable of diversion area.				
		Hence Losses of Animal Husbandry=468484678x10%=46848468				
2	Loss of animal husbandry ,productivity including loss of fodder	Nil				
3	Cost of human resettlement	Nil				
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8	Compensatory Afforestation and soil & moisture conservation cost	Considering 957780/Ha including CA and soil & Moisture Conservation cost . Hence Total Losses= 957780x319.28=305799998				

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2031672998

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0.59

(प्रमोहन मिश्र)

प्रभागीय वनाधिकारी,  
रेनुकूट दन प्रभाग, रेनुकूट-सोनभद्र

अधिसासी अभियन्ता

विद्युत प्रेषण खण्ड  
उप प्र० मा० द्रा० का० लि०  
गजीपुर

उप खण्ड अधिकारी  
विद्युत प्रेषण उप खण्ड तृतीय  
रावईसगंज



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8	Compensatory Afforestation and soil & moisture conservation cost					
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		Hence Total Losses= 957780x3.1928=305799998				

Total loss to Environment

468484678+46848468+140545403+234242339+305799998

1195920886

Parameters for evaluation of Benefit Not withstanding Loss

(b)	Parameters	Description
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प्रसादीय बर्नाधिकारी  
सोनसद वन प्रभाग  
राजदरगांज - सोनसद

अध्यासी अभियन्ता  
विद्युत प्रेषण खण्ड  
उ० प्र० नं० १०० का० लि०  
मजीपुर

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		<table><tr><th>Division</th><th>Proposed Forest Area (ha)</th><th>Density</th><th>NPV Rate</th><th>Ecosystem services Losses in INR.</th></tr><tr><td>Renukoot</td><td>98.28</td><td>0.3</td><td>957780</td><td>94130618.00</td></tr><tr><td>Obra</td><td>113.048</td><td>0.3</td><td>957780</td><td>108275113.00</td></tr><tr><td rowspan="2">Kaimur</td><td>42.464X5</td><td>0.3</td><td>957780</td><td>203355849.60</td></tr><tr><td>12.188</td><td>0.3</td><td>957780</td><td>11673422.64</td></tr><tr><td>Sonebhadra</td><td>15.79</td><td>0.3</td><td>957780</td><td>15123347.00</td></tr><tr><td>Mirzapur</td><td>37.51</td><td>0.3</td><td>957780</td><td>35926328.00</td></tr><tr><td>Total</td><td>319.28</td><td></td><td></td><td>468484678.2</td></tr></table>	Division	Proposed Forest Area (ha)	Density	NPV Rate	Ecosystem services Losses in INR.	Renukoot	98.28	0.3	957780	94130618.00	Obra	113.048	0.3	957780	108275113.00	Kaimur	42.464X5	0.3	957780	203355849.60	12.188	0.3	957780	11673422.64	Sonebhadra	15.79	0.3	957780	15123347.00	Mirzapur	37.51	0.3	957780	35926328.00	Total	319.28			468484678.2
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ओबरा वन प्रभाग  
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