



# झारखण्ड ऊर्जा संचरण निगम लिमिटेड

संचरण अवर प्रमण्डल, चतरा  
ईमेल:- aeeitkhorigss@gmail.com

पत्रांक: 282 / प्रबंधक / सं०अ०प्र०, चतरा

दिनांक: 24/03/2021

सेवा में,

वन प्रमण्डल पदाधिकारी  
चतरा उत्तरी वन प्रमण्डल  
जिला - चतरा

**विषय:** चतरा से हंटरगंज 132 के० वी० डबल सर्किट संचरण लाईन निर्माण हेतु उत्तरी वन प्रमण्डल अंतर्गत 23.3355 हे० वनभूमि अपयोजन के सम्बन्ध में।

**प्रसंग:** आपका पत्रांक सं० 673 दिनांक 24.03.2021.

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के सम्बन्ध में कहना है के चतरा से हंटरगंज 132 के० वी० डबल सर्किट संचरण लाईन निर्माण में उत्तरी वन प्रमण्डल, चतरा अंतर्गत 23.3355 हे० वनभूमि उपयोगन के प्रस्ताव में Cost Benefit Analysis में त्रुटि को सुधार का संशोधित प्रस्ताव आपके कार्यालय में अग्रेतर कार्यवाही हेतु समर्पित है।

अनु० Cost Benefit Analysis की 09 प्रति

विश्वासभाजन

24/03/21  
प्रबंधक  
संचरण अवर प्रमण्डल, चतरा

- प्रतिलिपि :-** 1. वन प्रमण्डल पदाधिकारी, चतरा दक्षिणी वन प्रमण्डल को सूचनार्थ एवं Cost Benefit Analysis की 09 प्रति समर्पित।  
1 वरीय प्रबंधक, संचरण प्रमण्डल, हज़ारीबाग - को सूचनार्थ।  
2. उपमहाप्रबंधक, संचरण अंचल, हज़ारीबाग को सूचनार्थ।

**प्रमण्डल कार्यालय:** विद्युत कार्यपालक अभियन्ता, संचरण प्रमण्डल, झारखण्ड ऊर्जा संचरण निगम लिमिटेड, प्रथम तल, श्रृंगारी कॉम्पलेक्स निकट मोंटफोर्ट स्कूल, कनहरी हिल रोड, हज़ारीबाग।

**पंजीकृत कार्यालय:** झारखण्ड ऊर्जा संचरण निगम लिमिटेड भवन, कुसई कॉलोनी, डोरन्डा, राँची - 834002





# JHARKHAND URJA SANCHARAN NIGAM LTD.

Transmission Grid Sub-Station, Chatra

Email Id: [aeetkhorigss@gmail.com](mailto:aeetkhorigss@gmail.com)

Letter No 281 /CHATRA- HUNTJ TL/TSD/CHATRA

Date: 24 / 03 /2021

## COST BENEFIT ANALYSIS


Cost Benefit Analysis for 132kV D/C HUNTERGANJ – CHATRA Transmission Line of chatra District in Jharkhand state is Estimated as per the Guidelines of Govt. of India with Letter No. 7-69/2011-FC(Pt.) Dated – 01/08/2017 and given below:-

**Table – A : Estimation of Cost of Forest Diversion:**

| SL.No. | Parameters  | Cost (Rs. Lac) |
|--------|---|----------------|
| 1      | Eco system Services Losses Due to Proposed Forest Diversion (Economic Value of Eco system Services Due to Proposed Forest Diversion has been Taken as the "Net Present Value (NPV) of the forest land being Diverted as Prescribed by the Central Government (MoEF & CC) NPV rates taken as <b>9.39 lacks Per Ha.</b> Under Class II of medium Density Forest Born by the Project Works out to be <b>RS. 499.67 Lac (53.2129 Ha.x 9.39)</b> | 499.67         |
| 2      | Loss of Animal Husbandry productivity<br>(Taken at 10 % of NPV)   | 49.967         |
| 3      | Cost of the Human resettlement<br>(resettlement Due to Proposed Forest Diversion)   | NIL            |
| 4      | Loss of Public Facilities and Administrative Infrastructures (Road, Building, School, Dispensaries, Electrical Lines, Railways etc . on Forest land if these Facilities were Diverted Due to Project (No Public Facilities and Administrative Infrastructure are Involve)   | NIL            |
| 5      | Possession of Value of Forest land diverted<br>(Taken at 30% of NPV)  | 149.901        |

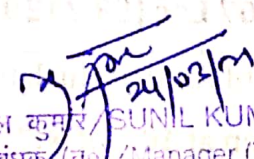
**Division Office** : J.U.S.N.L, Transmission Division, 1<sup>st</sup> Floor, Shringari Complex, Mariam Toli, Canary Hill Road, Hazaribag- 825301

**Registered Office:** Jharkhand Urja Sancharan Nigam Limited, JUSNL Building, Kusan Colony, Bazar, Ranchi – 834002.

  
सुनील कुमार / SUNIL KUMAR  
प्रबंधक (तट) / Manager (T)  
संचरण अपर प्रमण्डल/TSD  
झारखण्ड ऊर्जा संचरण निगम/JUSNL  
चतरा/Chatra



|   |  |                      |
|---|--|----------------------|
| 6 | Cost of suffering to ousters<br>(There are no ousters Due to Proposed Forest Diversion)  | NIL                  |
| 7 | Habitat Fragmentation Cost<br>(Take at 50% of NPV)   | 249.835              |
| 8 | Compensatory Afforestation and Soil & Moisture Conservation Cost (2,50,000- per Ha For 53.2129 Ha.)(Cost For Double Area)  | 133.032              |
| 9 | <b><u>Project Cost: -</u></b><br>Fixed assets, inclusive of investment, Current assets<br>Loans & advances Other Expenditures like<br>preoperative expenses, interests during<br>construction etc. | 1646.81              |
|   | <b>TOTAL: -</b>  | <b>2729.215 Lac.</b> |

  
 सुनील कुमार / SUNIL KUMAR  
 प्रबंधक (त) / Manager (T)  
 संवर्धन और प्रमण्डल / TSD  
 झारखण्ड राजा संवर्धन विभाग / JUSNE  
 चतरा / Chatra





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Letter No \_\_\_\_\_/CHATRA- HUNTJ TL/TSD/CHATRA

Date: \_\_\_\_/\_\_\_\_/2021

**Table- B: Estimating Benefit of Forest Diversion**

| SL. NO | Parameter   | cost (RS.Lac) |
|--------|---|---------------|
| 1      | <b><u>Increase in Productivity Attributable to the Specific Project:</u></b><br>Power Flow = 140mw(2x70)<br>Load Factor = 60 %<br>Losses = 2.5%<br>Average Value Added = 0.25 per kwh<br>Energy Send out Per Year = 140x1000x0.6x8760x0.975kwh<br>Value Added = 71.744x10 <sup>7</sup><br>= 71.7444x10 <sup>7</sup> x 0.25<br>= 17.936/crore/year<br>= 18 crore/year<br>value Added for 50 Years = 50x18 = 900 crore                          | 90000         |
| 2      | Benefit to Economy Due to The Specific Project. The Power Will be Transmitted Through This Line to The Power deficit of Huntergunj& Chatra Block of Chatra District. This Project Will provide sustained and Incessant Supply of Power to this Block Which will be Utilized by Large Commercial, Domestic and Agriculture Growth Leading to Increase output Which in turn Will lead to Increase in GDP (Gross Domestic Product) of Jharkhand) | 9000          |
| 3      | No of population benefited due to Specific Project. Assuming Average 10 Units Consumption per Day House Hold. Total 1.5 Million House Hold can Be Provided Electricity Per Year   | NA            |

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सुनील कुमार / SUNIL KUMAR  
प्रबंधक (तट) / Manager (T)  
संचरण और प्रमण्डल/TSD  
झारखण्ड ऊर्जा संचरण निगम/ JUSNL  
चतरा/Chatra



|   |   |                  |
|---|---|------------------|
| 4 | Economic Benefit due to Direct and Indirect Employment Due to the Project During Project Stage, The Project Will Provide Employment 6 nos. of Permanent and 250 Temporary Employments for a period of 18 months (For Permanent Employment Benefit of RS 4.20 lacks/ per Year person and Temporary Employment Rs0.96 Lacks/Year per Person | 397.8            |
| 5 | Economic Benefit Due to Compensatory Afforestation (The NPV of the CA land Considered as Prescribed by the Guidelines 7-69/2011-FC(Pt)dated 01-08-2017 NPV rates taken as Class III medium Density Forest Rs-8.03 lacks/Hs for 53.327Ha   | 427.299          |
|   | <b>TOTAL:-</b>  | <b>99825.099</b> |

**Cost Benefit Ratio:-**

i) Table -A Estimation of Cost of Forest Diversion :- 2729.215

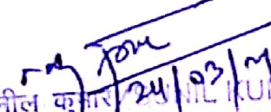
ii) Table -B : Estimating Benefit of Forest Diversion : 99825.099

Cost Benefit Ratio = 2729.215 lakhs/99825.099 lakhs

= 1:36.57

**The Cost Benefit Ratio of the Project is Estimated at 1:36.57**

Signature :

  
 सुनील कुमार (T) / Manager (T)  
 संचरण और प्रमाणन/TSD  
 प्रारम्भिक उद्योग संचरण विभाग/JUSNL

Name In Block Letter : SUNIL KUMAR

Designation : Manager

Office Address : Transmission Division, Jharkhand Urja Sancharan Nigam Limited, 1<sup>st</sup> Floor, Shringari Complex, Canary Hill Road, Near Montfort School, Hazaribag-825301, Jharkhand.