

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड

(भारत सरकार का उद्यम)

POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)



पू.क्षे.पा.प्र.-1, C-08, जे.सी.पी. ग्रुप कार्यालय, 400/220 केवी उपकेन्द्र, (जमशेदपुर), रामचन्द्रपुर, गम्हरिया, सराइकेला, झारखण्ड -832108
ERTS-1, C-08, JCP, Group Office, 400/220 kV Substation (Jamshedpur), Ramchandrapur, Gamharia, Seraikela, JH-832108
Phone: 0657-2944265, E-Mail: jcptatanagar@gmail.com

Ref.: ER-1/JCP/JSR/Forest /R-C/ 2155

Dated: 31/03/2016

To,
The Divisional Forest Officer,
Seraikela Forest Division, Seraikela

Sub: Forest proposal for 220 kV D/C Ramchandrapur-Chaibasa Tr. Line of JUSNL
for 4.672 Hec forest land (PF 4.052 Hec + JJ 0.62 Hec)

Ref: Our on-line Forest proposal no. FP/JH/TRANS/16674/2016 dated 24/11/2015

Dear Sir,

With reference to your letter no. 566 dated 19/03/2016 which has been subsequently uploaded in forest portal on 23/03/2016 regarding additional information in respect of forest proposal no. FP/JH/TRANS/16674/2016 dated 24/11/2015 for 220 kV D/C Ramchandrapur-Chaibasa transmission line, we would like to submit the point-wise reply as follows:

1. The total nos. of trees in forest land is 49 nos. (Forty nine). This figure is the same as furnished in the tree enumeration report attached with the proposal.
2. Due to typographical error, the forest area has been mentioned as 4.71 Hec. However it is 4.672 Hec only (PF+JJ land). An undertaking in this regard is attached.
3. It is submitted that the forest area 4.672 Hectare (PF 4.052 + JJ 0.62 Hec) is calculated considering around 27 (twenty seven) metre width of transmission line corridor. This corridor width is sufficient, prevents felling of more trees and protects forest land & environment. We have proposed to utilize less forest land than provided in the NOC.

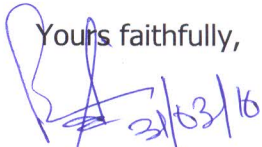
It is also certified that there is no thick vegetation in the forest land involved and enumerated trees is only 49 (forty nine) nos.

4. Accordingly, the cost-benefit analysis is submitted in line with 4.672 Hec forest land as per land schedule.

Hope the above will satisfy your queries and hence it is requested to kindly process our forest proposal for 4.672 Hec forest land at the earliest, as this transmission line is an important element in the new transmission system and planned to be commissioned on priority.

Thanking you.

Yours faithfully,


(R K Saini)
Manager (JCP), JSR.

Copy to: for kind inf. please.

1. GM (JCP), Ranchi
2. GM (JUSNL), Trans. Zone-III, JSR

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Phone: 0757-2944265, E-Mail: jcptatanagar@gmail.com

Ref: ERTS-1/JCP/JSR/R-C TL/2016/ 2156

Date: 31/03/2016

UNDERTAKING FOR 4.672 HEC. FOREST LAND

We hereby undertake that total forest area in our proposal no. FP/JH/TRANS/16674/2016 dated 24/11/2015 has been mentioned inadvertently as 4.71 Hec (PF 4.090 Hec + JJ 0.62 Hec) due to typographical error instead of actual 4.672 Hec (PF 4.052 Hec + JJ 0.62 Hec).

It is requested to kindly consider actual forest area as 4.672 Hec. (PF 4.052 Hec + JJ 0.62 Hec) for all purposes.

Signature

Name in block letters : R K SAINI
Designation: MANAGER (JCP)/JSR

रामचन्द्रपुर
R. K. SAINI
प्रबंधक (जेसीपी)
MANAGER (JCP)
पावरग्रिड, जमशेदपुर
POWERGRID, JAMSHEDPUR

COST BENEFIT ANALYSIS

220 KV D/C RAMCHANDRAPUR-CHAIBASA TRANSMISSION LINE

EVALUATION OF BENEFITS:

1. Increase in productivity attributable to the specific project:

Power Flow	=	2X200MVA
Load Factor	=	60%
Power Factor	=	0.8
Losses	=	2.5%
Average Value Added	=	Rs.6.00 per kWh
Energy sent out per year	=	$2 \times 200 \times 10^3 \times 0.6 \times 0.8 \times 0.975 \times (365 \times 24)$ kWh
	=	1639872000 (unit)
Value added	=	Rs. 9839232000
	=	Rs. 983 crore / year

2. Benefits to economy:

The 2500MW Power (share of Jharkhand State) to be Generated from the Power plants of Private Sectors will be transmitted through 20 Nos. of 400/230/132/33 KV Transmission lines including this 220 KV D/C Ramchandrapur - Chaibasa Tr. Line being constructed by POWERGRID for JUSNL under implementation of 400/230/132/33KV Transmission system for Jharkhand State. This project will provide sustained and incessant supply of power to Jharkhand State which will be utilized by large and SMEs industries leading to increased industrial output in Jharkhand State which in turn will lead to increase in GDP of India.

3. No. of population benefitted:

Assuming average 10 units consumption per day per household.
Total of around 163987200 **households** can be provided electricity per year.

4. Employment potential

During Construction, the project will employ an average of 200 labours with an average of 200 days of work in an year for 1.25 years (15 Months).

Therefore, total man-days generated= $200 \times 200 \times 1.25 = 50000$.

Value of mandays generated assuming the labour cost of Rs. 200/manday= $50000 \times 200 = 1$ crore.

5. Cost of Acquisition of facility on non-forest land wherever feasible:

Nil


 R. K. SAINI
 प्रबंधक (जेसीपी)
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 पावरग्रिड, जामशेडपुर
 POWERGRID, JAMSHEDPUR

(a) Loss of Agriculture

Nil

(b) Animal husbandry production due to diversion of forest land

Nil

6. Cost of rehabilitating the displaced persons as different from compensatory amounts given for displacement.

Nil

7. Cost of supply of free fuel-wood to workers residing in or near forest area during the period of construction.

Nil

EVALUATION OF LOSS OF FORESTS

I. Loss of value of timber, fuelwood 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:

Only one time loss of vegetation occurs during construction and there is no loss of man-hours. Considering the NPV of 8.04 lakhs per hectare, the total loss of timber, fuelwood and minor forest produce for 4.672 hectares of forest may be calculated as $4.672 \times 8.04 = 37.56$ lacs (say Rs. 0.38 crore)

II. Loss of animal husbandry productivity, including loss of fodder.

Nil

III. Cost of human resettlement.

Nil

IV. Loss of public facilities and administrative infrastructure:


Nil

V. Losses due to soil erosion/effect on hydrological cycle/wildlife habitat etc.

In the present case total forest involvement is 4.672 ha. Assuming the value of 01 Ha. of fully stocked forest (density 1.0) as 126.74 lakhs, to accrue over a period of 50 years.

Total value of forest

= 4.672 x Rs.126.74 lakhs
= Rs. 592.13 lakhs
= Rs. 5.92 crores.


R. K. SAINI
प्रबंधक (जैसीपी)
MANAGER (JCP)
पावरग्रिड, जमशेदपुर
POWERGRID, JAMSHEDPUR


For the purpose of cost benefit analysis

The total cost= (I) + (V) = 0.38 + 5.92 = 6.3 crores.

The total value of benefits yearly = (1) + (4) = 983 + 1.0 = 984 crores.

Hence Cost: Benefit Ratio = 6.3 crores : 984 crores
= 1 : 156.03
Say 1 : 156

Thus the construction of 220 KV D/C Ramchandrapur-Chaibasa Tr. line would be advantageous in monetary terms.



र. क. सैनी
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220 KV D/C Ramchandrapur-Chaibasa Transmission Line										
Mauza wise breakup of Forest Land										
SL	AP - AP	Mouza	Thana No	Name of Thana	Plot no.	Nature/ Kisham	Khatian No	Requirement of Area		
								Decimal	Acre	Hectares
1	1A-2	Ramchandrapur	452	Seraikela	87	P.F.	50	14.8	0.148	0.060
2	5-6	Bara hariharpur	76	Seraikela	245	P.F.	51	112.7	1.127	0.456
3	5-6	Bara hariharpur	76	Seraikela	250	P.F.	51	6	0.060	0.020
4	5-6	Bara hariharpur	76	Seraikela	256	P.F.	51	45.5	0.455	0.184
5	7-8	Birarajpur	457	Seraikela	17	P.F.	5	260	2.600	1.052
6	8-9	Barkatanr	74	Seraikela	2	P.F.	84	385.4	3.854	1.560
7	11-12	pratappur	113	Seraikela	2	P.F.	45	177.9	1.779	0.720
Total Requirement of Forest Land								1002.300	10.023	4.052

