

POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprises)

Annexure – VI (C)

COST BENEFIT ANALYSIS

1. PROJECT COST : 350.00Cr. Approx.
2. BENEFITS FROM PROJECT
 - a) Capacity of line (Power Transfer Capacity) : 1360MW
(680MW per circuit of 400KV Transmission Line)
 - b) Load Factor : 80%
 - c) Line Loss : 2.5%
 - d) Line Availability : 97.5%
 - e) Average cost of energy transfer per unit : Rs. 0.2 per KWH
 - f) KWH per year : $1360 \times 1000 \times 0.80 \times 24 \times 365 \times 0.975 =$
929,26,08,000 KWH/Year
 - g) Transmission Charges/ Cost of supply per year: 0.20×9292608000
= Rs. 185,85,21,600.00
 - h) Transmission Charges against power transfer in 50years : 9292.60 Cr
 - Net benefit from Transmission system in 50 years : 9292.60 Cr
3. COST BENEFIT RATIO (CB RATIO) : $350/9292.60 = 0.0376$

The benefit from these transmission lines is more than Rs. 185.85 Cr per year to the nation or Rs. 9292.60 Cr. in fifty years if flow of power is continued through this transmission system whereas the cost of project including the compensation against forest area involved, interest during construction and other misc. expenditure is Rs. 350 Cr which is very less in compared to profit from this transmission line project.

Place: Kadapa
Date: 16.12.2015



(Y.N.M. Rao)

Asst. General Manager,
Power Grid Corporation of India Limited,
Construction Area Office, Kadapa, (A.P).

FUNDING ASSURANCE

It is agreed to pay the cost towards cutting, conversion, logging and transportation charges of project affected trees to Forest Dept. in addition to Compensatory Afforestation (CA) and net present value (NPV) of the proposed construction of 400 KV Power Transmission line in Rayachoti & Kadapa Ranges in the proposed Reserve forest areas to the rates as fixed by the Forest Department, including all escalation charges.

Place: Kadapa

Date: 16.12.2015



(Y.N.M. Rao)

Asst. General Manager,
Power Grid Corporation of India Limited,
Construction Area Office, Kadapa, (A.P).

ANNEXURE - A.1

**STATEMENT SHOWING THE RF WISE BREAKUP FOR REQUIREMENT OF FOREST LAND
FOR CONSTRUCTION OF 400 KV DOUBLE CIRCUIT POWER TRANSMISSION LINE
FROM HINDUPUR TO KADAPA IN KADAPA DIVISION.**

Sl. No.	Name of the District	Name of the Division	Name of the RF	Comp No.	Chainage		Length in Mtrs.	Width in metres	Area Required in Ha.	Remarks
					From	To				
1	Kadapa	Kadapa	Pandikunta R.F	736	125255.99	125753.67	497.68	46	2.289	Details are given in purpose wise statement.
2	Kadapa	Kadapa	Idupulapaya Redcharla RF	758	158439.07	155297.97	3141.1	46	14.449	
3	Kadapa	Kadapa	Idupulapaya Redcharla Extension RF	504						
4	Kadapa	Kadapa	Ganganpalli R.F	505	160648.2	161004.61	356.4	46	1.639	
					TOTAL		3995.18		18.378	

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Sl. No.	Name of the District	Name of the Division	Name of the RF	Name of Range	Co-Ordinates				Length in Mtrs.	Width in metres	Area Required in Ha.	Remarks
					Start Point		End Point					
					LAT	LON	LAT	LON				
1	Kadapa	Kadapa	Pandikunta R.F	Rayachoti Range	14.13743900	78.56314000	14.14024100	78.56674400	497.68	46	2.289	Details are given in purpose wise statement.
					236928.427(E)	1564293.461(N)	237320.865(E)	1564599.528(N)				
2	Kadapa	Kadapa	Idupulapaya Redcharla RF	14.30754800	78.75603400	14.33429700	78.76126600	3141.1	46	14.449		
3	Kadapa	Kadapa	Idupulapaya Redcharla Extension RF	Kadapa Range	257943.375(E)	1582911.871(N)	258536.630(E)	1585866.725(N)				
					14.34595400	78.77617800	14.34916900	78.77598700	356.4	46	1.639	
4	Kadapa	Kadapa	Ganganpalli R.F		260158.144(E)	1587141.389(N)	260141.013(E)	1587497.380(N)	3995.18		18.378	

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