

Cost Benefit Analysis


Cost of Project:

1000 Crores Approx.

1. Benefits from Project:

- a. Capacity of Line (Power transfer capacity): 143 MW
- b. Load Factor: 21%
- c. Line Loss: 2.5%
- d. Line availability: 97.5%
- e. Average Cost Energy transfer per unit: INR 5.67/kWh
- f. kWh per year:
 $143 \times 1000 \times 0.21 \times 24 \times 365 \times 0.975 \times 0.975 = 250074074 \text{ Kwh/Year}$
- g. Transmission charges/cost of supply per year:
 $5.67 \times 250074074 = 1417920001$
- h. Transmission charges against power transfer in 25 years
 $1417920001 \times 25 = 3545 \text{ Crores}$
- i. Cost Benefit Ratio (CB RATIO): $1000/3545 = 0.28$

The benefit from this Transmission line is more than Rs. 141 Cr per year to the Nation or Rs. 3545 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 and also interest during construction and other miscellaneous expenditure is Rs.1000 Cr which is very less in compared to profit from this Transmission Line Project. So payback period of the project is 7 years. The rest of the period is the profit which is added to the national income.


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