Cost Benefit Analysis

Name of the Project:- **400 KV D/C Aligarh - Prithala Transmission Line being constructed by Gurgaon Palwal Transmission Limited**

1	Project Cost:-	810.13 Cr.
2	**Benefit From Projects:-**	
a) Capacity of Line (Power Transfer Capacity):--		1000 MW
b) Power to be transferred:--		1000 MW
c) Load Factor:--		90%
d) Line Loss:--		1%
e) Line Availability:--		99%
f) Average Cost of Energy transfer per unit:--		Rs.0.143
g) KWH per Year:--		1000*1000*0.9*24*365*0.99= **7805160000**
h)Transmission Charges/Cost of Supply per Year (Rs.):--		0.143*78051606000= **1116137880** 111.614 Cr/Year
i)Operational Cost & interest Charges per Year (Rs.) & Maintenance		3 Cr/Year
j) Net Transmission Charges per year (h-i) (Rs.):--		108.614 Cr/Year
k) Transmission Charges against Power transferper in 35 years(Rs.):-- 108.614*35		3801.49 Cr
Net Benefit from Transmission System in 35 years:--		**3801 Cr**
Cost Benefit Ratio		**810.13/3801** **1:5**

The benefit from this transmission lines is more than Rs. 108.614 Cr per year to the nation or Rs. 3801 Cr in 35 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. 810 Cr which is very less in compared to profit from this transmission line project.