COST BENEFIT ANALYSIS

BENEFITS FROM PROJECT

The 132 kV S/C Khajuwala to Chhattargarh Transmission Line providing following benefits considering 35 years of life

Sl No	Description	Unit	Quantity	Rate (in Rupees)	Total Benefit (in Crores)
1	Cost of transmitted power in the span of 35 years with 80% loading and 97.5% of the line availability (1022 MW x 2 Ckt x 365 days x 24 hr x 35 years x 97.5% Availability of the line x Loading of 80%)	KWH	6038487000	Rs. 0.19 per unit	114.73
(X)				Total Benefit (in Cr.)	114.73

PROJECT EXPENSES / COST , LOSS & OTHER MISCELLANEOUS EXPENSES FROM PROJECT

Y1	Cost of the Project (it includes the compensation to Forest Department like C.A. , NPV etc.) (in Cr.)	7.6
Y2	Operation & Maintenance Cost of the line - @ 0.487 Cr per year x 35 years (in Cr.)	17.05
Y3	Annual depreciation of Transmission line (Net value of TL / Estimated Life of Transmission Line) (in Cr.) Total Cost of the Line =7.6 Cr Expected life of Transmission Line = 35 years Scrap Value at the end of 35 years of life (10 % of cost) = 0.76 Cr Net Value (Cost of line - Scrap Value) = (7.6-0.76) = 6.84 Cr Annual Depreciation of the line = (209.59/35) = 0.1954	6.84
Y4	Annual interest on capital diminishing annually (0.836 Cr x 35) (in Cr.)	29.26
Y5	Losses : Cost of Human Resettlement , Loss of Public Facility,Suffering to outsees (in Cr.)	0
Y	Total Cost i.e. (Y1+Y2+Y3+Y4+Y5) (in Cr.) =	60.745
X/Y	Cost Benefit Ratio i.e. Project Benefit (X) / Total Cost (Y)	1.9

The CB Ratio is "1:1.9"

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