

KARNATAKA POWER TRANSMISSION CORPORATION LIMITED.

Check List No: 28


Office of the
Executive Engineer, (Elec)
MWD. KPTCL,
Bagalkot

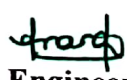
NAME OF THE WORK.

DIVERSION OF FOREST LAND FOR THE PURPOSE OF CONSTRUCTION OF NEW 110KV LILO LINE ON DC TOWERS FROM 110KV GULEDGUDDA - ILKAL LINE TO PROPOSED 110/11KV NAGARAL S P S/S CORRIDOR FOR A DISTANCE OF 10.235KMS.

Cost Benefit Analysis

1	CONSTRUCTION OF 1x10 MVA, 110/11 KV Sub-Station along with 110 kV LILO LINE ON DC TOWERS FROM 110KV GULEDGUDDA - ILKAL LINE TO PROPOSED 110/11KV NAGARAL S P S/S CORRIDOR FOR A DISTANCE OF 10.235KMS A) Estimated Cost	Rs.1275.49 Lakhs
2	A) Annual energy saving due to loss reduction Generation station to National Grid B) Cost of energy (Rs/Unit) C) Cost of annual energy Saving due to loss reduction (2(a)x2(b))	2.27 MU 5.34/Rs 122.65 Lakhs
3	a) Life of the project b) Interest rate c) Discount factor	30 Years (Every thirty years line should be renewed) 12% 8.055
4	Net Present value of benefits (cost of saving due reduction in losses of 30 Years + cost of transmission charges for sale of additional energy)	1859.60 Lakhs
5	a) annual O&M expenses on 1(a) @ 1% b) Present value of annual O & M expenses over a project period of 30yrs = 5(a)x3(c)	Rs.12.75 Lakhs Rs.102.740 Lakhs
6	Total investment + present value of O&M=1(a)+5(b)	Rs.1378.23 Lakhs
7	Benefit to cost ratio = 4/6	1.36


Assistant Executive Engineer (Elec)
Major Works sub- Division, KPTCL,
Bagalkot


Executive Engineer, (Elec)
Major Works Division, KPTCL,
Bagalkot