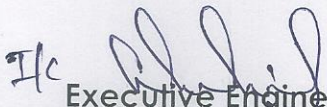# Computation of Benefit to Cost Ratio (BCR)

Establishment of 1x8 MVA, 66/11KV Substation at Hegganur in Kanakapura Taluk, Ramanagara Dist

1	Estimated cost	Lakh	991.51
2	Annual Energy Savings	MU	1.82
3	Cost of Energy per unit	Rs	5.34
4	Proposed addition of the capacity	MVA	8
5	Energy sale per MVA per year for 30 years	MU	11.3623
6	% load growth of the area	%	5.00
7	Additional energy available for sale (item 4 x 5)	MU	90.90
8	Present Transmission charges	Rs	0.33
9	Transmission charges for sale of additional energy (Item No 8 x 7 x 10)	Lakhs	299.96
10	Cost of Annual Energy savings due to loss reduction (2x3x10)	Lakhs	97.19
11	Total cost of savings due to reduction in losess + cost of transmission charges for sale of additional energy	Lakhs	782.85
12	Net present value (Item No 9+ 11)	Lakhs	1082.81
13	Annual O & M charges expenses @ 1% of item No 1	Lakhs	9.92
14	Present value of Annual O & M exprenses over a project period of 30 years (13x8.055)	Lakhs	79.87
15	Total investment + present value of O & M	Lakhs	1071.37
16	Benefit to cost ratio		1.011

Date:
Place: Ramanagara

I/c
Executive Engineer Ele.,
Major Works Division,
KPTCL, Ramanagara.