Calculation of NPV and IRR : For 2X100 MVA, 220/33KV Sub-Station at Landeihill

CoC (%) =	70%	x	8.03	+	30%	x	15.50	Average	6.580		RoI on Loan P.a		=	7.75		IRR =	14.51%																										(Rs. in Crores)
Particulars	**Constuction Period**			**Benefits Period**																																								**Total**
Financial Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	
Cash Inflow (CI)																																											
Equity	3.80	8.55	6.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.00
Loan(Principal)	8.86	19.95	15.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44.32
Loan (Interest)	0.71	2.31	3.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.58
Revenue	-	-	-	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	266.40
Salvage Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.99	6.99
Total (CI) - (A)	**13.37**	**30.81**	**25.72**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**7.61**	**14.60**	**343.29**
Cash Outflow (CO)																																											
CWIP	12.66	28.50	22.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63.32
IDC	0.71	2.31	3.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.58
Loan Repayment	-	-	-	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.90
Interest on Loan	-	-	-	3.92	3.58	3.24	2.90	2.55	2.21	1.87	1.53	1.19	0.85	0.51	0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.52
R&M exp. @ 3 % PC	-	-	-	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	73.50
Total (CO) - (B)	**13.37**	**30.81**	**25.72**	**10.26**	**9.92**	**9.58**	**9.24**	**8.89**	**8.55**	**8.21**	**7.87**	**7.53**	**7.19**	**6.85**	**6.51**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**2.10**	**218.82**
Net Cash Inflow (A-B)	**-**	**-**	**-**	**(2.65)**	**(2.31)**	**(1.97)**	**(1.63)**	**(1.28)**	**(0.94)**	**(0.60)**	**(0.26)**	**0.08**	**0.42**	**0.76**	**1.10**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**5.51**	**12.50**	**124.47**
DF @ CoC	*1.000*	*0.938*	*0.880*	*0.826*	*0.775*	*0.727*	*0.682*	*0.640*	*0.601*	*0.564*	*0.529*	*0.496*	*0.465*	*0.437*	*0.410*	*0.384*	*0.361*	*0.338*	*0.318*	*0.298*	*0.280*	*0.262*	*0.246*	*0.231*	*0.217*	*0.203*	*0.191*	*0.179*	*0.168*	*0.158*	*0.148*	*0.139*	*0.130*	*0.122*	*0.115*	*0.107*	*0.101*	*0.095*	
Net Present value(NPV)	**-**	**-**	**-**	**(2.19)**	**(1.79)**	**(1.43)**	**(1.11)**	**(0.82)**	**(0.57)**	**(0.34)**	**(0.14)**	**0.04**	**0.20**	**0.33**	**0.45**	**2.12**	**1.99**	**1.86**	**1.75**	**1.64**	**1.54**	**1.44**	**1.36**	**1.27**	**1.20**	**1.12**	**1.05**	**0.99**	**0.93**	**0.87**	**0.82**	**0.77**	**0.72**	**0.67**	**0.63**	**0.59**	**0.56**	**1.19**	**19.71**

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CoC - Cost of Capital
IDC- Interest During Construction
CWIP- Capital Work in Progress
DF- Discounting Factor
IRR- Internal Rate of Return
ARR- Average Annual Rate of Return