

CAPITAL INVESTMENT PROPOSAL (ANNEXURE - I)

PLANT	Kunigal	TITLE	Fluidized bed hot air generator for Spray Dryer
COST CENTRE		CIN	

Nature of Capex

	(Tick)
Replacement / Maintenance	X
Insurance Spares	
Cost Reduction	
R & D / Others (Pl specify)	

Summary

Total Cost	8000000
Completion Time	6 months
Plan Start Date	Aug.03
Plan Finish Date	Feb.04

Brief Description and Objective

Fluidized bed hot air generator is used to produce hot air at a maximum temperature of 700 deg C. This hot air will be used in spray dryer to produce dust. Purpose of installing this hot air generator is to replace furnace oil in the spray dryer. This fluidized bed hot air generator has the flexibility of using various solid fuels like coal, lignite, various biomass and agricultural residue. Other advantage associated with the FBC system are -- 1) It is an environment friendly system. 2) Ensure complete combustion of fuel. 3) Since it fires at low temperature i.e. 900 deg C, therefore chance of formation of NOX is also eliminated.

Alternate Options & Present Arrangement

Present arrangement is to fire furnace oil in the hot air generator attached to the spray dryer. Other alternate option was to fire gaseous fuel like natural gas in the hot air generator. This option is ruled out due to the unavailability of natural gas at site.

Although the manufacturing cost is higher with biomass as compared with coal, part of it can be offset by registering the project under clean development mechanism making it more attractive.

Cost Analysis

Component (Imported/Indig Eqpt, Civil, Structural Work may be mentioned separately)	Time	Quantity	Unit Price	Amount
	Months		INR Lacs	INR Lacs
1. Equipment & machinery	6			32
2 Civil	6			13
3 Mechanical & Electrical	6			35
4				
5				
Total				80

(Detailed payback / cost-benefit analysis, assumptions, supporting documents and expected cash-flow to be attached separately)

	Name	Sign	Date
Proposer	Satish S Chitwadgi		02/01/03
Plant Head	A. K. Kaviraj		02/01/03

Apex Technical Committee: Approved / Not Approved

REF: Discussions in the Executive Committee meeting dtd 9 & 10 Jan 2003.

Ok f 15/01/2003