

VAIDYANATH SAHAKARI SAKHAR KARKHANA LTD.PANGRI
21 MW BAGASSE BASED CO-GENERATION PROJECT

Sr.No.	Technical Data	SEASON	OFF SEASON
1	Crushing capacity licensed	3500 TCD	
2	Crushing capacity Actual	4320 TCD	
3	Crushing capacity considered for Co-gen project (Average of last 5 years)	4000 TCD	
4	Boiler parameters-pressure ata/Temp 0c/THP(existing)	33 ata/380° C/38 TPH	45 ata/440° C/10TPH
5	Boiler parameters-pressure ata/Temp 0c/THP(existing)	* 33 ata/380° C/38 TPH, * 45 ata/440° C/10TPH	----
6	T.G. Set Type & capacity (existing)	B P / 3 MW	B P / 1 MW
7	T.G. Set Type & capacity (existing)	B P / 1 MW	---
8	Operating days	160	110
9	Steam requirement TPH (existing)	76 TPH	10 TPH
10	Steam consumption% on cane sugar (Existing)	42 %	---
11	Stem to HP Header TPH	76 TPH	---
12	Steam requirement to Distillery TPH(Existing)	10 TPH	10 TPH
13	Steam required to dearator THP(Existing)	4 TPH	4 TPH
14	Steam Throw condenser THP	---	---
15	Topping cycle efficiency % (>45%)	Yes	Yes
16	Thermal use (>20%)	Yes	Yes

	FUEL UTILIZED	SEASON	OFF SEASON
1	Ratio of bagasse to steam (Existing)	2.1	2.1
2	Bagasse production % cane & TPH Biogas Equivalent Bagasse cane trash Total Bagasse used MT	30%, 54 TPH 2 TPH 153600MT	 2TPH 13200MT
3	Bagasse used during season % cane /TPH Total Bagasse used MT	40 TPH 153600 MT	5 TPH 13200MT
4	Bagasse saved % cane & MT	14 TPH	----
5	Bagasse used during off season TPH/Total Qty MT	---	5 TPH 13200MT
6	Alternate fuel used During season TPH/Tatal Qty MT 1. Biogas 2. Cane Trash	--- ---	--- ---

	POWER BALANCE	SEASON	OFF SEASON
1	Specific steam consumption/kwh/8ata/2.5ata From 9 MW DEC TG set Specific Steam Consumption - steam at 8 ata extraction - steam at 2.5 ata extraction - steam at 0.1 ata condensing From 12 MW BP TG set Specific Steam Consumption - steam at 2.5 ata extraction	7.5 Kg/KWH 5.5 Kg/KWH 3.5 Kg/KWH 8.5 Kg/KWH	7.5 Kg/KWH ---- 3.5 Kg/KWH -----
2	Power generation MW/MUS	21(12+9) MW	9 MW
3	Captive power MW/MUS	7.175 MW	1.680 MW
4	Power Export MW/MUS	11.385 MW	7.016 MW

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Sr. No.	Financial Data	Rs(laks)
1.	Co-Gen project Cost Rs.	8010.42
2.	Modernization project cost Rs.	491.57
3.	Total project Rs.	8501.99
4.	Capital cost per MW with modernization	404.86
5.	Capital cost per MW without modernization	318.45
6.	Production cost Rs.per unit	4.5crore/MW
7.	Cost of Steam for distillery use Rs./MT	400/MT
	Total cost Rs.	23328000
8.	Cost of Electricity for distillery use Rs/unit	3.05
	Total Cost Rs..	7905600
9.	Tariff considered Rs./Units	3.05
10.	Total revenue/Cash accrual(Rs. Laks)	
	1 st Year	1443.43
	2 nd Year	1583.47
	3 rd Year	1651.84
	4 th Year	1769.64
11.	Debit : Equity	
12.	Equity 5% SSK	400.52
13.	Equity 5% State Govt.	400.52
14.	SDF (38.07 %)	3049.20
15.	FI Bank (47.44%)	3800.48
16.	IRR (%)	19.74 %
17.	DSCR (Average)	1.81
18.	Break Even (%)	49.25%
19.	Pay Back period	4 YEAR 10 MONTH