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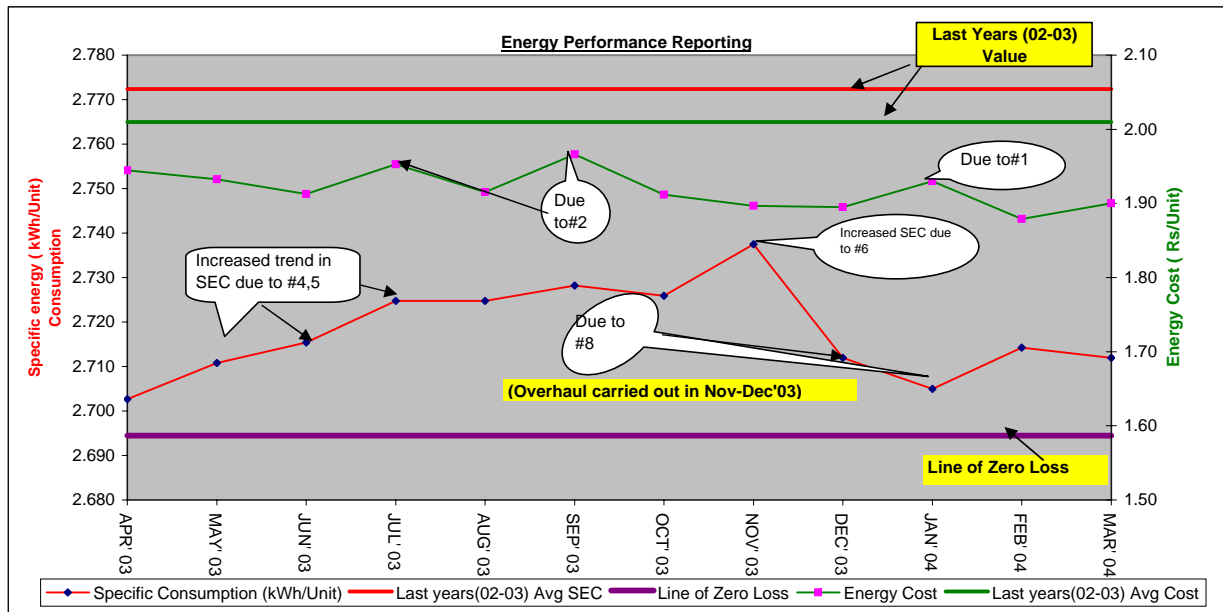


## **DAHANU THERMAL POWER STATION** **FINANCIAL YEARWISE PERFORMANCE REPORT**

<b>PERFORMANCE INDICES</b>	<b>Financial Year</b>		
	2001-2002	2002-2003	2003-2004
GENERATION (MUS)	3846.81	3965.15	4406.83 *
PLF (%)	87.83	90.53	100.34 *
AVAILABILITY (%)	93.02	91.03	96.84
LOADING FACTOR (%)	94.42	99.45	103.61 *
AUX. POWER CONSUMPTION (%)	7.82	7.43	7.34
SP. OIL CONSUMPTION (ML/KWH)	0.17	0.31	0.115 *
SP. COAL CONSUMPTION (KG/KWH)	0.534	0.545	0.526
DM MAKE UP (%)	0.74	0.67	0.39 *
TOTAL OUTAGE (Nos.)	10	17	6 *
HEAT RATE (KCAL/KWH)	2320	2312	2268 *

\* BEST ACHIEVED SO FAR.

**Energy Performance Reporting**  
( Under Issue No 19, posted at www.energymanagertraining.com)



One factor has been applied to the real data to get this data represented above. Trend of both the parameters are realistic in nature. There was remarkable improvement in the Heat rate after the overhaul of the Unit. Due to cleaning of Cw system, improvement in vacuum was observed, which decreased the overall Specific energy consumption.

**02-03** Both the Specific Energy Consumption and the cost were high in the previous year (2002-2003) as compared to the Financial year 2003-2004 due to various reasons such as **increased no of outages, lower generation due to lower offtake, lower availability (major non availability was due to Flash Flood at Dahanu, which led to closure of the plant)**, lower loading factor, higher Aux power, higher specific oil consumption, higher DM make up, etc as is evident from the statistical figure given.

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**a) Increased Specific consumption or Cost List- Coal Based TPP**

#	Reason of increased energy consumption kWh/unit of output	Reason of increased energy cost Rs./unit output
1	More Nos of Forced Outages	High Cost of Good Quality Imported Coal
2	Loss due to low Main Steam Temp	Due to increased SEC
3	Loss due to low Main Steam Pressure	Increase in Coal cost componentssuch as Freight Charges,Washing Charges
4	Higher losses due to poor condenser vacuum in summer season	Increase in Demmorage Charges ( Railways) for not unloading the coal in the stipulated time
5	Higher losses due to Higher CW Inlet temp in summer season	Higher Ash content in Coal
6	Increased wet flue gas loss, due to high moisture in coal	Increase in Basic Prices of Coal(@12%-June04)
7	Losses due to high unburnt carbon due to milling problem	Overloading Charges
8	After Overhauling, the vacuum improved effectively and credit for the gain in vacuum was taken	Increased transit loss
9	Losses due to more hydrogen content in Coal	Increase in Auxiliary power consumption, due to higher power consumption in the electrical equipment due to various reasons
10	Losses due to partial loading of Generator	Increase in consumption of Oil for longer durations during start up of the Plant
11		Increase in DM water/ Boiler water leakages, Blow downs

**b) Decreased Specific consumption or Cost List- Coal based TPP**

#	Reason of decreased energy consumption kWh/unit of output	Reason of decreased energy cost Rs./unit output
1	Coal Blending with better Imported Coal	Decresed cost of coal
2	Lower Boiler Losses or Higher Boiler Efficiency	Lower Ash content
3	Overhauling of major Equipments including turbine	Higher GCV of coal
4	Lower Startup time with Oil, after tripping	Use of benefeciaded coal , resulting in Lower Boiler tube failure,Lower maintenance,Lower Aux Power consumption, etc
5	Lower Nos of outages	
6	Use of benefeciaded Coal	