Annex – 2

(Tables)

Table 1: Design rating of the Bhusawal TPS (100 % MCR)

Sl. No.	Particular	Units	Unit 2	Unit 3
1	Unit installed capacity	MW	210	210
2	Unit de-rated Capacity (present)	MW	210	210
3	Gross over unit efficiency	%	36.34	36.34
4	Unit design heat rate	kcal/kWh	2367	2367
5	Station capacity (present study)	MW	420	
6	Station heat rate	kcal/kWh	2367	

Table 2: Capacity and age of units

No of Units	Unit Capacity (MW)	De-rated Capacity (MW)	Date of commissioning	Make		Age (years)
				Boiler	Turbine	
1	2		3	4	5	6
Unit-2	210	210	30-Aug-1979	BHEL	BHEL	32
Unit-3	210	210	18-Sep-1982	BHEL	BHEL	29

Table 3: Performance against targets

Year	**Generation** (MUs)		
	Petitioned	ERC Approved	Achieved
2008-2009	3108	3329	3042.493
2009-2010	3121	3108	3084.607
2010-2011	2893	3293	2501.849
2011-2012	2980	3240	1617.68

Year	**A V F** (%)			
	Petitioned	ERC Approved	Achieved as per	
			ERC	CEA
2008-2009	74.69	86.44	75.85	89.62
2009-2010	86.41	80	76.59	90.7
2010-2011	76.9	80	66.84	83.81
2011-2012	80	80	67.99	78.62

Year	**P L F** (%)			
	Petitioned	ERC Approved	Achieved as per	
			ERC	CEA
2008-2009	74.69	80	77.15	73.12
2009-2010	79.2	80	77.25	74.6
2010-2011	76.9	80	66.84	62.7
2011-2012	80	80	67.99	58.36

Year	**Auxiliary Consumption** (%)		
	Petitioned	ERC Approved	Achieved
2008-2009	10.74	9.75	10.47
2009-2010	9.8	10.57	10.63
2010-2011	11	10.55	11.44
2011-2012	10.5	10.5	11.41

Year	**Heat Rate** (kcal / kwh)		
	Petitioned	ERC Approved	Achieved
2008-2009	2914	2719	3125
2009-2010	2933	2652	3013
2010-2011	3149	2734	2882
2011-2012	2827	2742	2960

Year	**Sp. Oil Consumption** (ml / kWh)		
	Petitioned	ERC Approved	Achieved
2008-2009	3.86	2	5.52
2009-2010	3.8	2	3.61
2010-2011	3.8	2	9.36
2011-2012	3.8	2	5.36

Year	**Transit Loss** in **Coal** (%)		
	Petitioned	ERC Approved	Achieved
2008-2009	0.2	0.78	0.72
2009-2010	2.04	0.8	3.22
2010-2011	0.8	0.8	0.89
2011-2012	0.8	0.8	1.64

Table 4: Classification of measures for convenience of project management.

Project Code	Project Name
P-1	To measure , monitor coal consumption and reduce coal loss
P-2	To measure , monitor water consumption and reduce water loss
P-3	To measure and monitor coal quality
P-4	To measure , monitor fuel oil consumption and reduce fuel oil loss
P-5	Improvement in monitoring of heat rate & auxiliary consumption
P-6	Improvement in condition monitoring system
P-7	Improvement in purchase and procurement procedure
P-8	Improvement in maintenance procedures and decisions
P-9	Improvement in ABT and GCR
P-10	Improvement in operation procedures and decisions
P-11	Improvement in HRD training and quality circle
P-12	Upgradation & technology interventions in the system
P-13	Improvement of heat rate & auxiliary consumption
P-14	Improvement in workplace area