

Appendix-I

PART-I

TARIFF FILING FORMS (THERMAL)

PART-I**Checklist of Forms and other information/ documents for tariff filing for Thermal Stations**

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM- 1	Summary Sheet	
FORM-2	Plant Characteristics	
FORM-3	Normative parameters considered for tariff computations	
FORM- 4	Details of Foreign loans	
FORM-5	Abstract of Admitted Capital Cost for the existing Projects	
FORM-5A	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects	
FORM-5B	Break-up of Capital Cost for Coal/Lignite based projects	
FORM-5C	Break-up of Capital Cost for Gas/Liquid fuel based Projects	
FORM-5D	Break-up of Construction/Supply/Service packages	
FORM- 6	Financial Package upto COD	
FORM- 7	Details of Project Specific Loans	
FORM- 8	Details of Allocation of corporate loans to various projects	
FORM-9	Statement of Additional Capitalisation after COD	
FORM- 10	Financing of Additional Capitalisation	
FORM- 11	Statement of Depreciation	
FORM- 12	Calculation of Depreciation Rate	
FORM- 13	Calculation of Weighted Average Rate of Interest on Actual Loans ¹	
FORM- 13A	Calculation of Interest on Loans	
FORM- 14	Calculation of Advance Against Depreciation (AAD)	
FORM- 15	Calculation of Interest on Working Capital	
FORM- 16	Draw Down Schedule for Calculation of IDC & Financing Charges	
FORM-17	CALCULATION OF OPERATION AND MAINTENANCE EXPENSES	
FORM-18	DETAILS OF OPERATION AND MAINTENANCE EXPENSES	
FORM-19	Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges ¹	
Other Information/ Documents		
Sl. No.	Information/Document	Tick
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Station setup by a company making tariff application for the first time to CERC)	
2	Stationwise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures on COD of the Station for the new station & for the relevant years.	
3	Copies of relevant loan Agreements	
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	
7	Copies of the BPSA/PPA with the beneficiaries, if any	
8	Detailed note giving reasons of time and cost over run, if applicable.	
9	Any other relevant information, (Please specify)	

Note: Electronic copy in the form of CD/Floppy disc shall also be furnished.

Summary Sheet

Name of the Company _____

Name of the Power Station : _____

Region _____

State _____

District _____

(Rs. in lacs)

S.N o.	Particulars	Existing 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
1	2	3	4	5	6	7	8
1.1	Depreciation	0					
1.2	Interest on Loan	0					
1.3	Return on Equity ¹						
1.4	Advance against Depreciation	0					
1.5	Interest on Working Capital	0					
1.6	O & M Expenses						
	Total						
2.Calculation of Rate of Energy Charge(Rs./kWh)¹							
			During Stablisation	After Stablisation			
2.1	Rate of Energy Charge from Primary Fuel (REC) ^{p2}						
2.2	Rate of Energy Charge from Secondary Fuel (REC)						
2.3	Rate of Energy Charge ex-bus(REC) ^{3A,3B,3C}						

¹ Details of calculations, considering equity as per regulation, to be furnished.

² If multifuel is used simultaneously, give 2.1 in respect of every fuel individually.

^{3A} The rate of energy charge shall be computed for open cycle operation and combined cycle operation separately in case of gas/liquid fuel fired plants.

^{3B} The total energy charge shall be worked out based on ex-bus energy scheduled to be sent out in case of plants covered by ABT, and ex-bus energy sent out in case of plants not covered by ABT, as the case may be.

^{3C} Any escalation in fuel cost to be considered for subsequent years or FPA to take care of the escalation.

Petitioner

Plant Characteristics

Name of the Company _____

Name of the Power Station _____

Basic characteristics of the plant¹ _____

Special Features of the Plant

Site Specific Features² _____

Special Technological Features³ _____

Environmental Regulation related features⁴ _____

Any other special features _____

Fuel Details⁵	Primary Fuel		Secondary Fuel		Alternate Fuels		
Details	Module number or Unit number						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	& so on
Installed Capacity (IC)							
Date of Commercial Operation (COD)							
Type of cooling system ⁶							
Type of Boiler Feed Pump ⁷							

¹ Describe the basic characteristics of the plant e.g. in the case of a coal based plant whether it is a conventional steam generator or circulating fluidized bed combustion generator or sub-critical once through steam generator etc.

² Any site specific feature such as Merry-Go-Round, Vicinity to sea, Intake /makeup water systems etc. scrubbers etc. Specify all such features.

³ Any Special Technological feature like Advanced class FA technology in Gas Turbines, etc.

⁴ Environmental regulation related features like FGD, ESP etc.

⁵ Coal or natural gas or naphtha or lignite etc.

⁶ Closed circuit cooling, once through cooling, sea cooling etc.

⁷ Motor driven, Steam turbine driven etc.

PETITIONER

**PART-I
FORM-3**

Normative parameters considered for tariff computations

Name of the Company _____

Name of the Power Station _____

Particulars	Unit	Year Ending March					
		As Existing	As Notified by CERC				
		2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
(1)		(2)	(3)	(4)	(5)	(6)	(7)
Rate of Return on Equity	%						
Target Availability	%						
Target PLF	%						
Auxiliary Energy Consumption	%						
Gross Station Heat Rate	kCal/kWh						
Specific Fuel Oil Consumption	ml/kWh						
O&M Cost	Rs.Lakh/MW						
Cost of Coal/Lignite for WC ¹	in Months						
Cost of Secondary Fuel Oil for WC ¹	in Months						
Fuel Cost for WC ²	in Months						
Liquid Fuel Stock for WC ²	in Months						
O & M Expenses for WC	in Months						
Maintenance Spares for WC	%						
Receivables for WC	in Months						
Prime lending Rate of SBI as on _____.	%						
Incentive Rate	Paise / kWh						

¹For Coal based/Lignite based generating stations

²For Gas Turbine/Combined Cycle generating stations duly taking into account the mode of operation on gas fuel and liquid fuel

Abstract of Admitted Capital Cost for the existing Projects

Name of the Company : _____

Name of the Power Station : _____

Capital Cost as admitted by CERC	
Capital cost admitted as on _____	
(Give reference of the relevant CERC Order with Petition No. & Date)	
Foreign Component, if any (In Million US \$ or the relevant Currency)	
Domestic Component (Rs. Cr.)	
Foreign Exchange rate considered for the admitted Capital cost	
Total Capital cost admitted (Rs. Cr)	

PETITIONER

**PART-I
FORM-5A**

Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects

Name of the Company : _____

Name of the Power Station : _____

New Projects

Capital Cost Estimates

Board of Director/ Agency approving the Capital cost estimates:	
---	--

Date of approval of the Capital cost estimates:	
---	--

	Present Day Cost	Completed Cost
Price level of approved estimates	As of End of _____Qtr. Of the year _____	As on Scheduled COD of the Station

Foreign Exchange rate considered for theCapital cost estimates		
--	--	--

Capital Cost excluding IDC & FC		
--	--	--

Foreign Component, if any (In Million US \$ or the relevant Currency)		
---	--	--

Domestic Component (Rs. Cr.)		
------------------------------	--	--

Capital cost excluding IDC & FC (Rs. Cr)		
---	--	--

IDC & FC		
---------------------	--	--

Foreign Component, if any (In Million US \$ or the relevant Currency)		
---	--	--

Domestic Component (Rs. Cr.)		
------------------------------	--	--

Total IDC & FC (Rs.Cr.)		
------------------------------------	--	--

Rate of taxes & duties considered		
-----------------------------------	--	--

Capital cost Including IDC & FC		
--	--	--

Foreign Component, if any (In Million US \$ or the relevant Currency)		
---	--	--

Domestic Component (Rs. Cr.)		
------------------------------	--	--

Capital cost Including IDC & FC (Rs. Cr)		
---	--	--

Schedule of Commissioning

COD of Unit-I/Block-I	
-----------------------	--

COD of Unit-II/Block-II	
-------------------------	--

-------	--

-------	--

COD of last Unit/Block	
------------------------	--

- Note:
- Copy of approval letter should be enclosed.
 - Details of Capital cost are to be furnished as per FORM-5B or 5C as applicable.
 - Details of IDC & Financing Charges are to be furnished as per FORM-16.

PETITIONER

Break-up of Capital Cost for Coal/Lignite based projects

Name of the Company : _____

Name of the Power Station : _____

Sl.No.	Break Down	Cost in Rs. Crores		Variation (Rs. Cr.)	Reasons for Variation	Admitted Cost (Rs. Cr.)
		As per original Estimates	As on COD			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.0	Cost of Land & Site Development					
1.1	Land					
1.2	Rehabitation & Resettlement (R&R)					
1.3	Preliminary Investigation & Site development					
	Total Land & Site Development					
2.0	Plant & Equipment					
2.1	Steam Generator Island					
2.2	Turbine Generator Island					
2.3	BOP Mechanical					
2.3.1	External water supply system					
2.3.2	CW system					
2.3.3	DM water Plant					
2.3.4	Clarification plant					
2.3.5	Chlorination Plant					
2.3.6	Fuel Handling & Storage system					
2.3.7	Ash Handling System					
2.3.8	Coal Handling Plant					
2.3.9	Rolling Stock and Locomotives					
2.3.10	MGR					
2.3.11	Air Compressor System					
2.3.12	Air Condition & Ventilation System					
2.3.13	Fire fighting System					
2.3.14	HP/LP Piping					
	Total BOP Mechanical					
2.4	BOP Electrical					
2.4.1	Switch Yard Package					
2.4.2	Transformers Package					
2.4.3	Switch gear Package					
2.4.4	Cables , Cable facilities & grounding					
2.4.5	Lighting					
2.4.6	Emergency D.G. set					
	Total BOP Electrical					
2.5	C & I Package					
	Total Plant & Equipment excluding taxes & Duties					
2.60	Taxes and Duties					
2.6.1	Custom Duty					
2.6.2	Other Taxes & Duties					
	Total Taxes & Duties					
	Total Plant & Equipment					
3.0	Initial spares					
4.0	Civil Works					
4.1	Main plant/Adm. Building					
4.2	CW system					
4.3	Cooling Towers					
4.4	DM water Plant					
4.5	Clarification plant					
4.6	Chlorination plant					
4.7	Fuel Handling & Storage system					
4.8	Coal Handling Plant					
4.9	MGR & Marshalling Yard					
4.10	Ash Handling System					
4.11	Ash disposal area development					
4.12	Fire fighting System					
4.13	Township & Colony					
4.14	Temp. construction & enabling works					
4.15	Road & Drainage					
	Total Civil works					
5.0	Construction & Pre- Commissioning Expenses					
5.1	Erection Testing and commissioning					
5.2	Site supervision					
5.3	Operator's Training					
5.4	Construction Insurance					
5.5	Tools & Plant					
5.6	Start up fuel					
	Total Construction & Pre- Commissioning Expenses					
6.0	Overheads					
6.1	Establishment					
6.2	Design & Engineering					
6.3	Audit & Accounts					
6.4	Contingency					
	Total Overheads					
7.0	Capital cost excluding IDC & FC					
7.1	Interest During Construction (IDC)					
7.2	Financing Charges (FC)					
8.0	Capital cost including IDC & FC					

Note:

1. In case of time & Cost over run, a detailed note giving reasons of such time and cost over run should be submitted clearly bring out the agency responsible and whether such time & cost over run was beyond the control of the generating company.

PETITIONER

Break-up of Capital Cost for Gas/Liquid fuel based Projects

Name of the Company : _____

Name of the Power Station : _____

Sl.No.	Break Down	Cost in Rs. Crores		Variation (Rs. Cr.)	Reasons for Variation	Admitted Cost (Rs. Cr.)
		As per original Estimates	As on COD			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.0	Cost of Land & Site Development					
1.1	Land					
1.2	Rehabilitation & Resettlement (R&R)					
1.3	Preliminary Investigation & Site development					
	Total Land & Site Development					
2.0	Plant & Equipment					
2.1	Steam Turbine generator Island					
2.2	Turbine Generator Island					
2.3	WHRB Island					
2.4	BOP Mechanical					
2.4.1	Fuel Handling & Storage system					
2.4.2	External water supply system					
2.4.3	CW system					
2.4.4	Cooling Towers					
2.4.5	DM water Plant					
2.4.6	Clarification plant					
2.4.7	Chlorination Plant					
2.4.8	Air condition & Ventilation System					
2.4.9	Fire Fighting system					
2.4.10	HP/LP Piping					
	Total BOP Mechanical					
2.5	BOP Electrical					
2.5.1	Switch Yard Package					
2.5.2	Transformers package					
2.5.3	Switch gear Package					
2.5.4	Cable , Cable Facilities & grounding					
2.5.5	Lighting					
2.5.6	Emergency D.G. set					
	Total BOP Electrical					
2.6	C & I Package					
	Total Plant & Equipment excluding taxes & Duties					
2.7	Taxes and Duties					
2.7.1	Custom Duty					
2.7.2	Other Taxes & Duties					
	Total Taxes & Duties					
	Total Plant & Equipment					
3.0	Initial spares					
4.0	Civil Works					
4.1	Main plant/Adm. Building					
4.2	External water supply system					
4.3	CW system					
4.4	Cooling Towers					
4.5	DM water Plant					
4.6	Clarification plant					
4.7	Fuel Handling & Storage system					
4.8	Township & Colony					
4.9	Temp. construction & enabling works					
4.10	Road & Drainage					
4.11	Fire Fighting system					
	Total Civil works					
5.0	Construction & Pre- Commissioning Expences					
5.1	Erection Testing and commissioning					
5.2	Site supervision					
5.3	Operator's Training					
5.4	Construction Insurance					
5.5	Tools & Plant					
5.6	Start up fuel					
	Total Construction & Pre- Commissioning Expences					
6.0	Overheads					
6.1	Establishment					
6.2	Design & Engineering					
6.3	Audit & Accounts					
6.4	Contingency					
	Total Overheads					
7.0	Capital cost excluding IDC & FC					
7.1	Interest During Construction (IDC)					
7.2	Financing Charges (FC)					
8.0	Capital cost including IDC & FC					

Note:

1. In case of time & Cost over run, a detailed note giving reasons of such time and cost over run should be submitted clearly bring out the agency responsible and whether such time & cost over run was beyond the control of the generating company.

PETITIONER

Break-up of Construction/Supply/Service packages

PART-I
FORM-5D

Name of the Company : _____

Name of the Power Station : _____

Sl.No.	Name/No. of Construction/Supply/Service Package	Scope of works ¹ (in line with head of cost breakdowns as applicable)	Whether awarded through ICB/DCB/ Departmentally/ Deposit Work	No. of bids received	Date of Award	Date of Start work	Date of Completion of Work	Value of Award ² (Rs. Cr.)	Firm or With Escalation in prices	Actual expenditure till the completion or up to COD whichever is earlier (Rs.Cr.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

¹ The scope of work in any package should be indicated in conformity of Capital cost break-up for the coal/lignite based plants in the FORM-5B to the extent possible. In case of Gas/Liquid fuel based projects, break down in the similar manner in the relevent heads as per FORM-5C.

² If there is any package, which need to be shown in Indian Rupee and foreign currency(ies), the same should be shown separatly alongwith the currency, the exchange rate and the date e.g. Rs.80 Cr+US\$50m=Rs.280Cr at US\$=Rs40 as on say 4.1.1999.

PETITIONER

Details of Project Specific Loans

Name of the Company _____

Name of the Power Station _____

(Amount in lacs)

Particulars	Package1	Package2	Package3	Package4	Package5	Package6
1	2	3	4	5	6	7
Source of Loan ¹						
Currency ²						
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto 31.03.2004/COD ^{3,4,5,13,15}						
Interest Type ⁶						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest ⁷						
Margin, if Floating Interest ⁸	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor ⁹						
If above is yes,specify caps/floor						
Moratorium Period ¹⁰						
Moratorium effective from						
Repayment Period ¹¹						
Repayment effective from						
Repayment Frequency ¹²						
Repayment Instalment ^{13,14}						
Base Exchange Rate ¹⁶						

¹ Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

² Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.

³ Details are to be submitted as on 31.03.2004 for existing assets and as on COD for the remaining assets.

⁴ Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given seperately in the same form.

⁵ If the Tariff in the petition is claimed seperately for various units, details in the Form is to be given seperately for all the units in the same form.

⁶ Interest type means whether the interest is fixed or floating.

⁷ Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

⁸ Margin means the points over and above the floating rate.

⁹ At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

¹⁰ Moratorium period refers to the period during which loan servicing liability is not required.

¹¹ Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

¹² Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

¹³ Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayment may also be given seperately

¹⁴ If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to be furnished seperately.

¹⁵ In case of Foreign loan, date of each drawal & repayment alongwith exchange rate at that date may be given.

¹⁶ Base exchange rate means the exchange rate prevailing as on 31.03.2004 for existing assets and as on COD for the remaining assets.

Petitioner

Details of Allocation of corporate loans to various projects

Name of the Company _____
Name of the Power Station _____

(Amount in lacs)

Particulars	Package1	Package2	Package3	Package4	Package5	Remarks
1	2	3	4	5	6	7
Source of Loan ¹						
Currency ²						
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto 31.03.2004/COD ^{3,4,5,13,15}						
Interest Type ⁶						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest ⁷						
Margin, if Floating Interest ⁸						
Are there any Caps/Floor ⁹	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	
If above is yes,specify caps/floor						
Moratorium Period ¹⁰						
Moratorium effective from						
Repayment Period ¹¹						
Repayment effective from						
Repayment Frequency ¹²						
Repayment Instalment ^{13,14}						
Base Exchange Rate ¹⁶						
	Distribution of loan packages to various projects					
Name of the Projects						Total
Project 1						
Project 2						
Project 3 and so on						

¹ Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

² Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.

³ Details are to be submitted as on 31.03.2004 for existing assets and as on COD for the remaining assets.

⁴ Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.

⁵ If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.

⁶ Interest type means whether the interest is fixed or floating.

⁷ Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

⁸ Margin means the points over and above the floating rate.

⁹ At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

¹⁰ Moratorium period refers to the period during which loan servicing liability is not required.

¹¹ Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

¹² Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

¹³ Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayment and its allocation may also be given separately

¹⁴ If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to be furnished separately.

¹⁵ In case of Foreign loan, date of each drawal & repayment alongwith exchange rate at that date may be given.

¹⁶ Base exchange rate means the exchange rate prevailing as on 31.03.2004 for existing assets and as on COD for the remaining assets.

Petitioner

PETITIONER

Calculation of Depreciation Rate

Name of the Company
Name of the Power Station

(Amount in lacs)

Sl. no.	Name of the Assets ¹	Gross Block as on 31.03.2004 or as on COD, whichever is later	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount
1	2	3	4= Col.2 X Col.3	
1	Land			
2	Building			
3	and so on			
4				
5				
6				
7				
8				
9				
10				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
	TOTAL			
	Weighted Average Depreciation Rate (%)			

¹ Name of the Assets should conform to the description of the assets mentioned in Depreciation Schedule appended to the Notification.

Petitioner

PART-I
FORM- 15

Calculation of Interest on Working Capital

Name of the Company _____
Name of the Power Station _____

(Amount in lacs)

Sl. No.	Particulars	Existing 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
1	2	3	4	5	6	7	8
1	Cost of Coal/Lignite ¹						
2	Cost of Secondary Fuel Oil ¹						
3	Fuel Cost ²						
4	Liquid Fuel Stock ²						
5	O & M expenses						
6	Maintenance Spares						
7	Recievables						
	Total Working Capital						
	Rate of Interest						
	Interest on Working Capital						

¹For Coal bsaed/Lignite based generating stations

²For Gas Turbine/Combined Cycle generating stations duly taking into account the mode of operation on gas fuel and liquid fuel

Petitioner

Details/Information to be Submitted in respect of Fuel for Computation of Energy

Name of the Company _____

Name of the Power Station _____

Sl. No.	Month	Unit	For preceeding 3rd Month	For preceeding 2nd Month	For preceeding 1st Month
1	Quantity of Coal/Lignite supplied by Coal/Lignite Company	(MMT)			
2	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)			
3	Coal supplied by Coal/Lignite Company (1+2)	(MMT)			
4	Normative Transit & Handling Losses (For coal/Lignit based Projects)	(MMT)			
5	Net coal / Lignite Supplied (3-4)	(MMT)			
6	Amount charged by the Coal /Lignite Company	(Rs.)			
7	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)			
8	Total amount Charged (6+7)	(Rs.)			
9	Transportation charges by rail/ship/road transport	(Rs.)			
10	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)			
11	Demurrage Charges, if any	(Rs.)			
12	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)			
13	Total Transportation Charges (9+/-10-11+12)	(Rs.)			
14	Total amount Charged for coal/lignite supplied including Transportation (8+13)	(Rs.)			
15	Weighted average GCV of coal/ Lignite as fired	(kCal/Kg)			

Note:

¹ Similar details to be furnished for natural gas/liquid fuel for CCGT station and secondary fuel oil for coal/lignite based thermal plants

PETITIONER