

No. L-7/138/153/2008-CERC

**Central Electricity Regulatory Commission
New Delhi**

Coram:

Dr. Pramod Deo, Chairperson

Shri. Rakesh Nath, Member

Shri R. Krishnamoorthy, Member

Shri S. Jayaraman, Member

Shri V. S. Verma, Member

In the matter of

Central Electricity Regulatory Commission (Furnishing of Technical Details by the Generating Companies) Regulations, 2009.

STATEMENT OF REASONS

The Commission, in exercise of its powers under the Electricity Act, 2003 (the Act), had published the draft of the Central Electricity Regulatory Commission (Furnishing of Technical Details by the Generating Companies) Regulations, 2008 (hereinafter referred to as “the draft regulations”) to invite suggestions and comments from the stakeholders.

2. The suggestions and comments have been received only from NTPC Limited who has proposed that once a generating company has furnished details of its generating stations in the prescribed format as required under the proposed regulations, submission of those details of the generating station in subsequent years may be required only if there is any change in the status. According to NTPC, it would avoid repeated submission of the same details every year in case of the generating stations where there is no change in the status. NTPC has accordingly sought appropriate change in the regulations to be notified.

3. We have considered the suggestion of NTPC Ltd. We feel that the advantages of comprehensive and self-contained reports are too obvious. Therefore, the modification in the draft already published on the lines suggested by NTPC is not called for.

4. On further consideration of the matter, we observe that it would be appropriate to obtain certain additional technical details relating to the operating parameters and conditions. Accordingly, we direct that the details as per the revised forms annexed to this order be called for. The regulations be notified with the revised forms.

5. We direct that the regulations be finalized accordingly and be notified in the Official Gazette, to come into force from the date of their publication,.

Sd/=	Sd/=	Sd/=	Sd/=	Sd/=
(V.S.Verma)	(S. Jayaraman)	(R. Krishnamoorthy)	(Rakesh Nath)	(Dr. Pramod Deo)
Member	Member	Member	Member	Chairperson

New Delhi, dated 14th October 2009

**TECHNICAL DETAILS TO BE FILED BY THE GENERATING COMPANIES IN
COMPLIANCE OF
SUB-SECTION (3) OF SECTION 10 OF THE ELECTRICITY ACT, 2003
Coal/Lignite Fired Thermal Generating Stations**

1	Name and address of the generating company		
2	Name of the generating station		
3	Location (District and State) of the generating station		
4	Type	Coal /Lignite	
5	Installed capacity and configuration (number of units x MW) of existing/ under execution project :		
(i)	Unit -I	MW	
(ii)	Unit-II	MW	
(iii)	.....	MW	
iv)	.....	MW	
6	Actual/expected dates of commercial operation, Unit-wise :	DD / MM / YYYY	
(i)	Unit -I		
(ii)	Unit-II		
(iii)	.....	
iv)	.....	
7	Details of tied up beneficiaries/target beneficiaries/merchant capacity along with percentage share with reference to the installed capacity for each beneficiary/category		
(i)	Beneficiary - 1	(%)	
(ii)	Beneficiary - 2	(%)	

(iii)	.....	(%)
iv)	.....	(%)
8	Associated transmission system or proposed evacuation arrangement		
9	Name of manufacturer:		
(i)	Steam generator		
(ii)	Steam turbine		
(iii)	Generator:		
10	Main fuel and Source	Indigenous/imported _____	
(i)	Linked Mine		
(ii)	Mode of Transport	MGR/Rail/Road/Sea/Rail-cum-Sea	
11	Gross Calorific Value (GCV) of fuel used/to be used	(Kcal/Kg)	
12	Secondary Fuel used/proposed to be used	LSHS/HFO/HSD/others-specify	
13	Rated Main Steam Pressure at inlet to turbine	kg/cm ² (abs.)	
14	Rated Main Steam Temperature at inlet to turbine	Centigrade	
15	Rated Reheat Steam pressure at inlet to turbine	Kg/cm ² (abs.):	
16	Rated Reheat Steam Temperature at inlet to turbine	Centigrade	
17	Range of Design fuel specified		
i)	Ash	(%)	Max. Min.
ii)	Moisture	(%)	Max. Min.
iii)	Gross Calorific Value (GCV)	(Kcal/Kg)	Max. Min.
iv)	Volatile Matter (VM)	(%)	Max. Min.
18	Guaranteed Turbine Cycle Heat Rate under reference conditions	(Kcal/kWh)	
19	Reference conditions for Guaranteed Turbine Cycle Heat Rate		

i)	Make up	(%)	
ii)	MCR	(%)	
iii)	Design inlet cooling water temperature	Centigrade	
20	Guaranteed boiler Efficiency(on GCV Basis)	%	
21	Reference fuel as specified for guaranteed Boiler efficiency		
i)	Ash	(%)	
ii)	Moisture	(%)	
iii)	Gross Calorific Value (GCV)	(Kcal/Kg)	
iv)	Volatile Matter (VM)	(%)	
22	Number and Type of Boiler Feed Pumps	Steam Turbine driven / Electrical Motor driven	
23	Source of cooling water		
24	Type of cooling cycle used	Once Through / Close cycle	
25	Type of cooling Tower	Draft / Induced Draft Natural	

Note:

a	Any other relevant information or any site specific information in respect of generating station e.g FGD etc. may also be furnished.
b	beneficiary” shall have the meaning as specified in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation, 2009.
c	Installed capacity” shall have the meaning as specified in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation, 2009
d	merchant capacity” means the quantum of power proposed to be sold, other than that sold through long-term power supply agreement;
e	Target beneficiary” means an agency who is likely to be entering into a long-term power purchase agreement with the generating company;
f	A soft copy of above details (Electronic form) shall also be furnished.

FORM-B

**TECHNICAL DETAILS TO BE FILED BY THE GENERATING COMPANIES IN
COMPLIANCE OF
SUB-SECTION (3) OF SECTION 10 OF THE ELECTRICITY ACT, 2003
Gas/Liquid/Diesel Generating Stations**

1	Name of the generating station		
2	Location (District and State) of the generating station		
3	Type	Gas /Liquid fuel/Diesel	
4	Installed capacity and configuration (number of units x MW) of existing/ under execution project :	(Capacity of GT and ST to be given separately)	
(i)	GT-I	MW	
(ii)	GT-II	MW	
(iii)	ST & Block-I	MW	
iv)	.....	MW	
5	Actual/expected dates of commercial operation, Unit-wise :	DD / MM / YYYY	
(i)	GT-I		
(ii)	GT-II		
(iii)	ST & Block-I		
iv)	.....	
6	Details of tied up beneficiaries/target beneficiaries/merchant capacity along with percentage share with reference to the installed capacity for each beneficiary/category		
(i)	Beneficiary - 1	(%)	
(ii)	Beneficiary - 2	(%)	
(iii)	.....	(%)

iv)	.....	(%)
7	Associated transmission system or proposed evacuation arrangement		
8	Name of manufacturer:		
(i)	Gas Turbine		
(ii)	Steam Turbine		
(iii)	Heat Recovery Steam Generator (HRSG)		
(iv)	Generator		
9	Main fuel and Source	_____ (Indigenous/imported)	
(i)	Linked Source		
(ii)	Mode of Transport	Rail/Road/Sea/Rail-cum-Sea/Pipe line	
10	Gross Calorific Value (GCV) of fuel used/to be used	Kcal/S CM or Kcal/litre	
11	i) Alternate fuel (Specify)		
	ii) Gross Calorific Value (GCV) of alternate fuel	Kcal/S CM or Kcal/litre	
12	Rated Gas Pressure at inlet to gas turbine	kg/cm ² 2 (abs.)	
13	Rated Temperature at inlet to gas turbine (tit)	Centigrade	
14	Rated Steam pressure at inlet to steam turbine	Kg/cm ² (abs.)	
15	Rated Steam Temperature at inlet to steam turbine	Centigrade	
16	Source of Cooling water		
17	Type of Water Cooling Cycle used	Once Through /Closed cycle	
18	Type of Cooling Tower	Natural Draft or Induced Draft	
19	Guaranteed Gross Station Heat Rate		

i)	Combined cycle mode	(Kcal./kWh)	
ii)	Open cycle mode	Kcal./kWh)	
20	Reference condition for Guaranteed Gross Station Heat Rate		
i)	Make up	%	
ii)	MCR	%	
iii)	Design Inlet Cooling Water Temperature	Centigrade	
iv)	Ambient Air Temperature	Centigrade	
v)	Ambient Air Pressure	(kg/cm2)	
vi)	Relative Humidity	%	
21	Specified Site Ambient Air Conditions:		
i)	Temperature	Centigrade	
ii)	Pressure	(kg/cm2)	
iii)	Humidity	%	

Note:

a	Any other relevant information or any site specific information in respect of generating station may also be furnished.
b	beneficiary” shall have the meaning as specified in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation, 2009.
c	Installed capacity” shall have the meaning as specified in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation, 2009
d	merchant capacity” means the quantum of power proposed to be sold, other than that sold through long-term power supply agreement;
e	Target beneficiary” means an agency who is likely to be entering into a long-term power purchase agreement with the generating company;
f	A soft copy of above details (Electronic form) shall also be furnished.

**TECHNICAL DETAILS TO BE FILED BY THE GENERATING COMPANIES IN
COMPLIANCE OF
SUB-SECTION (3) OF SECTION 10 OF THE ELECTRICITY ACT, 2003
Hydro Electric Generating Stations**

1	Name and address of the generating company		
2	Name of the generating station		
3	Location (District and State) of the generating station		
4	Type	Run of River/Pondage	
5	Installed capacity and configuration (number of units x MW) of existing/ under execution project :		
(i)	Unit -I	MW	
(ii)	Unit-II	MW	
(iii)	.....	MW	
iv)	.....	MW	
6	Actual/expected dates of commercial operation, Unit-wise :	DD / MM / YYYY	
(i)	Unit -I	MW	
(ii)	Unit-II	MW	
(iii)	.....	MW	
iv)	.....	MW	
7	Details of tied up beneficiaries/target beneficiaries/merchant capacity along with percentage share with reference to the installed capacity for each beneficiary/category		
(i)	Beneficiary - 1	(%)	
(ii)	Beneficiary - 2	(%)	
(iii)	.....	(%)

iv)	.....	(%)
8	Associated transmission system or proposed evacuation arrangement		
9	Name of manufacturer:		
(i)	Turbine (Francis/Kaplan/Pelton)		
(ii)	Generator		
10	Design Energy (MU)	(MU)	
11	Average Head	(M)	
12	Rated Head	(M)	
13	Full Reservoir Level (FRL)	(M)	
14	Minimum Draw Down Level (MDDL)	(M)	
15	Variation in machine output at different levels between Full Reservoir Level and Minimum Draw Down Level	MW	
16	Design Silt Levels for desilting chamber:		
i)	Maximum at inlet	(ppm)	
ii)	Maximum at outlet	(ppm)	
17	Expected annual energy generation	(MU)	
18	Design guaranteed efficiency of turbine		

Note:

a	Any other relevant information or any site specific information in respect of hydro generating station may also be furnished.
b	beneficiary” shall have the meaning as specified in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation, 2009.
c	design energy” shall have the meaning as specified in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation, 2009
d	Installed capacity” shall have the meaning as specified in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation, 2009

e	merchant capacity” means the quantum of power proposed to be sold, other than that sold through long-term power supply agreement;
f	Target beneficiary” means an agency who is likely to be entering into a long-term power purchase agreement with the generating company;
g	A soft copy of above details (Electronic form) shall also be furnished.