

No. FU-5/2019-IPC (Part-I)
Government of India
(भारत सरकार)
Ministry of Power
(विद्यत मंत्रालय)

नई दिल्ली, ८ मार्च , २०२४ New Delhi, 8th March, 2024

OFFICE MEMORANDUM

Subject: Report on finalization of 'Norms for Annual Contracted Quantity (ACQ) for Thermal Power Plants' - regarding.

The undersigned is directed to refer to subject mentioned above and to forward herewith the Revised ACQ Norms for determination of Normative coal requirement for different sizes of Thermal Power Plants in two categories (a) Pit head Thermal Power Plants (Captive Mode of Coal Transportation) and (b) Non-Pithead Thermal Power Plants (Other than Captive Mode of Coal Transportation).

- 2. The undersigned is further directed to convey that these norms shall be applicable for fresh linkages of any Thermal Power Plant.
- 3. This issues with the approval of Hon'ble Minister of Power & NRE.

Encl: As above

(Subhash Chand/सुभाष चंद)

Under Secretary to the Government of India

अवर सचिव, भारत सरकार

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Ministry of Coal (कोयला मंत्रालय)

[Kind attn.: Smt. Vismita Tej, Additional Secretary (CPD)]

[श्रीमती विस्मिता तेज, अपर सचिव (सीपीडी)]

Shastri Bhawan, New Delhi

[शास्त्री भवन, नई दिल्ली]

The Normative Coal Requirement for different sizes of <u>Pit Head (Captive Mode of Coal Transportation)</u> Thermal Power Plants for determination of ACQ w.e.f. 08.03.2024

	GCV Range (kcal/kg)	Adjusted GCV after considering storage loss & effect of Total Moisture* (kcal/kg)	Sub Critical Technology					
Grade			Less than 100 MW	100 MW to less than 200 MW	200 MW to less than 250 MW **	250 MW and above	Super critical units \$	
			Unit Heat Rate (kcal/kWh)					
			2600	2600	2500	2375	2250	
			Annual coal consumption at 85% PLF					
C1	7000 0 1	(710	(Tonnes per MW per Annum)					
G1	7000 & above	6712	2890	2890	2779	2640	2501	
G2	6700-7000	6427	3018	3018	2902	2757	2612	
G3	6400-6700	6142	3158	3158	3037	2885	2733	
G4	6100-6400	5857	3312	3312	3185	3025	2866	
G5	5800-6100	5572	3481	3481	3347	3180	3013	
G6	5500-5800	5287	3669	3669	3528	3352	3175	
G7	5200-5500	5002	3878	3878	3729	3543	3356	
G8	4900-5200	4717	4112	4112	3954	3757	3559	
G9	4600-4900	4432	4377	4377	4209	3998	3788	
G10	4300-4600	4147	4678	4678	4498	4273	4048	
G11	4000-4300	3862	5023	5023	4830	4588	4347	
G12	3700-4000	3577	5423	5423	5214	4954	4693	
G13	3400-3700	3292	5893	5893	5666	5383	5099	
G14	3100-3400	3007	6451	6451	6203	5893	5583	
G15	2800-3100	2722	7126	7126	6852	6510	6167	
G16	2500-2800	2437	7960	7960	7654	7271	6888	
G17	2200-2500	2152	9014	9014	8667	8234	7801	

^{*}Adjusted GCV in above table has been calculated as follows:
Adjusted GCV = Mid Value of GCV range - {Storage Loss as per existing CERC regulations & GCV loss due to difference between GCV (ARB) & GCV(EQ)}
Where GCV (ARB) is GCV As Received Basis & GCV (EQ) is GCV at

Equilibrated Basis

^{**} In case of main steam pressure is 150 ata or above the Unit Heat Rate shall be reduced by 100 kcal/kWh.

^{\$} In case of units having Motor Driven Boiler Feed Pump (MDBFP) of 500 MW and above size units including Super Critical units, the unit heat rate shall be reduced by 50 kcal/kWh.

Note

- 1. The above norms include Storage loss of 85 kcal/kg & Transit Loss as 0.2% as per existing CERC Regulations.
- 2. Transit losses shall depend on their mode of coal transportation i.e. Captive mode of transportation & other mode of coal transportation. Transit loss for TPPs having captive mode of coal transportation shall be 0.2%. TPPs with captive mode of coal transportation where coal supply by captive mode is <50%, transit losses will be taken at 0.8% for calculation of ACQ.
- 3. In case of power projects where approved heat rate by the Regulator is higher than the above considered value, the Heat Rate approved by the Regulator would be considered with upper ceiling of 2600 kcal/kWh.
- 4. ACQ determined above shall be Fixed. While Commercial billing of coal by coal companies may be as per FSA & applicable Mechanism.
- 5. These norms will be applicable for captive power plants also.

The Normative Coal Requirement for different sizes of Non-Pit Head (Other than captive Mode of Coal Transportation) Thermal Power Plants for determination of ACQ w.e.f. 08.03.2024

	GCV Range (kcal/kg)	Adjusted GCV after consideri ng storage loss & effect of Total Moisture* (kcal/kg)	Sub Critical Technology				Supercritical units \$			
Gra de			Less than 100 MW	100 MW to less than 200 MW	200 MW to less than 250 MW **	250 MW and abov e \$				
			Unit Heat Rate (kcal/kWh)							
			2600	2600	2500	2375	2250			
			Annual coal consumption at 85% PLF (Tonnes							
			per MW per Annum)							
G1	7000 & above	6712	2907	2907	2796	265	6 2516			
G2	6700-7000	6427	3036	3036	2920	277				
G3	6400-6700	6142	3177	3177	3055	290	2 2750			
G4	6100-6400	5857	3332	3332	3204	304	3 2883			
G5	5800-6100	5572	3502	3502	3368	319	9 3031			
G6	5500-5800	5287	3691	3691	3549	337	2 3194			
G7	5200-5500	5002	3901	3901	3751	356	4 3376			
G8	4900-5200	4717	4137	4137	3978	377	9 3580			
G9	4600-4900	4432	4403	4403	4234	402	2 3810			
G10	4300-4600	4147	4706	4706	4525	429	8 4072			
G11	4000-4300	3862	5053	5053	4859	461	6 4373			
G12	3700-4000	3577	5456	5456	5246	498	3 4721			
G13	3400-3700	3292	5928	5928	5700	541	5 5130			
G14	3100-3400	3007	6490	6490	6240	592	8 5616			
G15	2800-3100	2722	7169	7169	6893	654	9 6204			
G16	2500-2800	2437	8008	8008	7700	731	5 6930			
G17	2200-2500	2152	9068	9068	8719	828	3 7847			

^{*}Adjusted GCV in above table has been calculated as follows:

Adjusted GCV = Mid Value of GCV range - {Storage Loss as per existing CERC regulations & GCV loss due to difference between GCV(ARB) & GCV(EQ)}

Where GCV (ARB) is GCV As Received Basis & GCV(EQ) is GCV at Equilibrated Basis

Note

- 1. The above norms include Storage loss of 85 kcal/kg & Transit Loss as 0.8% as per existing CERC Regulations.
- 2. Transit losses shall depend on their mode of coal transportation i.e. Captive mode of transportation & other mode of coal transportation. Transit loss for TPPs having

^{**} In case of main steam pressure is 150 ata or above the Unit Heat Rate shall be reduced by 100 kcal/kWh.

^{\$} In case of units having Motor Driven Boiler Feed Pump (MDBFP) of 500 MW and above size units including Super Critical units the unit heat rate shall be reduced by 50 kcal/kWh.

- other than captive mode of coal transportation shall be 0.8%. TPPs with captive mode of coal transportation where coal supply by captive mode is <50%, transit losses will be taken at 0.8% for calculation of ACQ.
- 3. In case of power projects where approved heat rate by the Regulator is higher than the above considered value, the Heat Rate approved by the Regulator would be considered with upper ceiling of 2600 kcal/kWh.
- 4. ACQ determined above shall be Fixed. While Commercial billing of coal by coal companies may be as per FSA & applicable Mechanism.
- 5. These norms will be applicable for captive power plants also.
