

COMMENTS ON CERC DRAFT REGULATIONS 2019-24
EFFECTIVE FROM 1ST APRIL 2019

1. Chapter I, Clause No. 31 : 'GCV as received'

- a) The FSA with the coal companies provides a procedure for coal sampling which is in variance to the above IS Standard IS: 436 (Part I/Section I), 1964. The coal companies provide the GCV of coal on equilibrated basis both for testing done at mine end and at the un-loading (in plant end) end also. The 3rd party agency appointed by Govt. of India i.e. M/s. CIMFR carries out the sampling as per FSA procedure and not as per IS Standard IS:436 (Part I/Section I), 1964. However, for the Power Procurers the GCV on ARB basis is required. IS 436 provides a procedure for sample collection which is more representative than the FSA procedure. As such the coal companies need to amend the FSA as per above IS Standard. Similarly, the GCV should be provided either on ARB basis or CERC should specify the standard formula for conversion of GCV equilibrated basis to ARB basis.
- b) The advance technology of collection of samples at the mine end is very much essential as billing is done by coal companies based on the GCV measured at mine end. The more representative or scientific way the sample is collected the tested GCV value would also be more representative of coal dispatched from the mines.
- c) Measuring of Gross Calorific Value by third party sampling to be defined as there is difference in methodology as per FSA and Tariff Guidelines. Third party sampling agencies to be developed for the same.

2. Chapter I, Clause No. 51 : 'Plant Load Factor' :

PLF of the station should be calculated based on the actual generation and actual Aux. Power Consumption and not on the scheduled generation and normative APC which is the prevailing practice in the Power Sector.

3. Chapter 3, Clause No. 8 (4): Tariff Determination :

The procedure on tariff determination for the assets installed for meeting the new environmental norms should be clearly defined as it involves capital cost expenditure which may be part of fixed cost and cost of limestone etc. would be part of variable cost. Apart from the above there has to be revision in operating norms especially for APC, additional O&M cost, etc. which need to be addressed.

4. Chapter 3, Clause No. 9, Sl. No. 3:

This does not cover the components of capital expenditure which would be considered particularly like storage facilities required for lime or Ammonia, etc. and for by products like Gypsum, etc.

5. Chapter 3, Clause No. 11:

A multi stage approval is required for additional capital expenditure on account of change in law i.e. in-principle approval from the CERC / State Regulator after providing notice to the beneficiaries before tendering and further approval for finalizing the tariff after the expenditure is incurred as CEA is already giving in-principal approval for the capital expenditure on account of new environmental norms, CERC may consider waiving in-principal approval by the Regulator in order to reduce the overall time period required.

6. **Chapter 4, Clause No. 15 (e)** : Additional O&M expenses would be required to meet the expenses on account of FGD during O&M stage which also should be considered as part of the capacity charges.

7. **Chapter 5, Clause 17: Debt Equity ratio**

After completion of the useful life the accumulated depreciation less cumulative repayment of loan to be utilized for reduction of the equity is loss to the generator and reduces the entitled ROE of promoter.

8. **Chapter 6, Clause 18 (j) Computation of Capital cost :**

The capital expenditure incurred for transporting lime, required for the FGD during operation should also be considered. Similarly capital expenses involving for disposal of by product i.e. Gypsum, etc. should also be considered.

9. **Chapter 7, Clause 29: Additional Capitalization on account of Revised Emission Standards:**

As per the procedure outlined a 3 stage approval is required for implementing the capital expenditure on account Revised Emission Standards:

- i) CEA approval for the technology and cost
- ii) In-principle approval of CERC/State Regulator
- iii) Tariff approval after incurring expenditure

It may be reviewed to at least remove the In-principle approval required from CERC/SERC as CEA approval is being obtained.

10. **Chapter 8, Clause 34: Interest on Working Capital**

Change in Working capital to cover Cost of coal for 20 days for non-pit-head generating stations for generation from 30 days as per existing guidelines will reduce tariff and cause hardship to generators.

Generators has to invest in stock at coal sidings and pay advance for coal, the total of which some time goes to 3-4 month consumption of coal.

Hence the advance for coal and stock of coal for 60 days being allowed for calculating working capital to be remain unchanged rather the same to be increased to 90 days.

Similarly Receivables equivalent to 2 months of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor changed to 45 days will also will reduce tariff and cause hardship to generators.

For calculation working capital receivable of at least 2 month to be considered as due to delayed payments by DISCOMs actual receivable goes to 3-4 months of sale.

This also should include working capital required for stock to be maintained for lime / other chemicals which are to be required during operation of FGD. Further provision is to be made for maintaining spares required for the FGD plant.

11. Chapter 8, Clause 35: Operations & Maintenance charges

Rs Lakh per MW					
Year	200/210/ 250 MW Series	600 MW Series	Year	200/210/ 250 MW Series	600 MW Series
FY 2014-15	23.90	14.40	FY 2019-20	30.59	17.39
FY 2015-16	25.40	15.31	FY 2020-21	31.57	17.94
FY 2016-17	27.00	16.27	FY 2021-22	32.58	18.52
FY 2017-18	28.70	17.30	FY 2022-23	33.62	19.11
FY 2018-19	30.51	18.38	FY 2023-24	34.69	19.72

O&M expenses for FY19-20 are increased at very lower rate and for 600MW series the same are reduced from 18.38 to 17.39.

The same should be increased as per current escalation rate and other technical compliances as notified from time to time.

The rates of O&M expenses needs to be revised.

Further O&M expenses for transmission lines have also reduced heavily (by 45%) the same will affect the viability of the projects. The said change should not be made.

12. Chapter 10 : Computation of Variable Cost

Apart from cost of re-agents, it should also include cost of lime or other raw material used for FGD.

13. Chapter 10 : Sl. No. 48: Variable Cost:

The transit losses are higher particularly where Road-cum-Rail mode is involved which is presently forming almost 50% of the total coal supply from various coal companies due to their inability to provide coal by FSA rail mode only. In such RCR transportation the transit losses additionally include transportation losses from mine to the stacking at siding and re-loading of the coal into the rakes, As the whole operation involves multiple

handling of coal the provision of additional losses during these operations is required. A provision of 2% transit losses is suggested.

14. **Chapter 10: Sl. No. 49 : Computation of Gross Calorific Value (of Coal) :**

The gross calorific value is computed on As Received Basis. The 3rd party sampling is done and the tested values are given on equilibrated basis. In view of the above it is preferable to specify standardized formula for conversion.

15. **Chapter 10: Sl. No. 50: Landed Price of Reagent**

As there is no gathered data on actual consumption of lime stone / other reagents in Indian conditions, the normative values may have to be arrived after 3-5 years of operation and during that period the actual consumption values needs to be considered during the stabilization of the systems. Similarly, the Nox control system is still at the pilot stage and as such providing specific consumptions at this stage would be premature.

16. **Chapter 11, Clause 51: Capacity Charges**

Provided that if the cumulative peak period PAF achieved during a quarter is more than the specified NQPAF for peak period and the cumulative Off-Peak period PAF achieved during the quarter is less than the specified NQPAF for Off-Peak period, the loss in recovery of Capacity Charge for Off-Peak period shall be off-set against the notional gain on account of over-achievement in Peak period, subject to the ceiling of full recovery of Capacity Charge for Off-Peak period;

The same adjustment is not available when PAF achieved in Off peak period is high and PAF achieved in peak period is lower.

Further PAF to be calculated on annual basis not on quarterly basis as the generation / demand depends on weather condition during the year and fluctuate during the year.

The said adjustment should also be allowed

17. **Chapter 11: Sl. No. 52 (3):**

The use of alternative source of coal / alternate mode of supply is basically occurring due to poor materialization from the original source identified during the project implementation stage. In the last few years materialization from coal companies have been at about 50% forcing the Utilities to go for alternate source / alternate mode of supply and as such price of coal thereby arrived is not in the hands of the Power Utilities. Therefore, the stipulation "30% of base price of fuel computed as per clause (7) of this Regulation" needs to be deleted. Further in such cases requirement of prior permission from beneficiary should not be a pre condition as it would affect the capability of achieving full fixed cost recovery for the IPP's such mode of transportation (i.e. RCR) is not there for NTPC / State PSU's.

18. **Chapter 11, Clause 53: Declaration of Availability and Dispatch in case of thermal generating station:**

The generating company shall declare day ahead availability or any revision thereof in respect of generating station for each fuel source which may be differentiated in terms of their price and calorific value and the beneficiaries shall have an option to schedule the power based on their merit order dispatch.

The availability of above said information is not practical as some time plant is being operated on 1-2 days stock and report take 5-6 days to confirm the GCV etc.

19. **Chapter 12, Clause 59 (C): Gross Station Heat Rate**

The suggested station Heat Rate is 2410 kcal/kwh for generating stations of 200/210/250 MW units will be very difficult to achieve considering part load operations due to prevailing grid conditions. Achieving a PLF of more than 60% in a year particularly for non-pit head stations is difficult. The design turbine heat rate at 60% TMCR are in the range of 2050 kcal/kwh with the design boiler efficiency of 84.6% the Unit Heat Rate with 0% operating margin works out as 2382 kcal/kwh.

The suggested station Heat Rate would leave an operating margin of less than 2%. As such the unit Heat Rate 2450 kcal/kwh needs to be retained for this size of unit. Similarly boiler efficiency of 86% for sub-bituminous Indian Coal as mentioned at Page No. 125 under Chapter 12 Clause 59 C (b) is difficult to achieve as design boiler efficiency itself is in the range of 84.5 to 85% only (for example for Bina 2 x 250 MW Boiler efficiency as per Design is 84.6%). The above norm needs to be re-considered.

20. **Chapter 14 Clause 71: Sharing of Benefits**

net savings on re-financing of loan shall be shared by the beneficiaries with generating company, in the ratio of 50:50, however in existing regulation beneficiaries is entitled for 1/3rd share. Increase in share of benefit of share for beneficiary is not required as the same is done on the credibility and efforts of generator.