

VIEWS OF GRIDCO ON DRAFT CERC TARIFF REGULATIONS, 2019

1) Regulation-2: Scope and extent of application. (New Proviso in Draft Reg.):

Provided that any generating station for which agreement(s) have been executed for supply of electricity to the beneficiaries on or before 5.1.2011 and the financial closure for the said generating station has not been achieved by 31.3.2019, such projects shall not be eligible for determination of tariff unless fresh consent of the beneficiaries is obtained and furnished.

GRIDCO's Views: Welcome step by Hon'ble CERC.

2) Regulation-3: Definitions

Cl.(2) 'Additional Capital expenditure' means the capital expenditure incurred, or projected to be incurred after the date of commercial operation of the project by the generating company or the transmission licensee Generating Station or a Unit thereof or Transmission System or element thereof, as the case may be, in accordance with the provisions of these regulations;

Justification: The Units/Elements of a Generating/Transmission Project come up gradually after their completion. As such Unit/Element after its completion supplies power to the Beneficiaries at the Tariff claimed thereof, therefore each Unit of Station or each Element of Transmission System should be treated individually for additional capitalisation as was the condition in CERC Tariff Regulations, 2014, otherwise it will burden the consumers with additional IDC and IEDC upto the completion of the project.

3) Cl.(5) 'Auxiliary Energy Consumption' or 'AUX'

Proviso: Provided that auxiliary energy consumption shall not include energy consumed for supply of power to housing colony and other facilities at the generating station, Integrated Coal Mine and the power consumed for construction works at the generating station and integrated coal mine;

4) 'Block' (Omitted in Draft Regulations) in relation to a combined cycle thermal generating station includes combustion turbine-generator, associated waste heat recovery boiler, connected steam turbine-generator and auxiliaries;

GRIDCO's Views: The definition of 'Block' should be there in the finalized version of the Regulations since they are part of definition of Generating Stations and used at Regulation 59(C)(c) of the Draft Tariff Regulations, 2019

5) Cl.(14) 'Cut-off Date' means the last day of the calendar month after three years from the date of commercial operation of the whole or part of the project;

GRIDCO's Views/Justifications: As the Units of a Generating/Transmission Project come up gradually after their completion, Additional Capital Expenditure, IDC and IEDC will increase upto the completion of the project

for the Units/Elements, which were already in commercial operation, thereby overburdening the Consumers.

- 6) **Cl.(17) ‘De-capitalisation’** for the purpose of the tariff under these regulations, means reduction in Gross Fixed Assets of the project ~~corresponding to the removal/deletion of assets~~ as admitted by the Commission **corresponding to inter-unit transfer of assets or the assets taken out from service;**

GRIDCO’s Views: Inter-Unit transfer of assets within a project has got no effect on Fixed Cost. The same can be effected, if assets are transferred between two projects of a Generating Company.

De-capitalisation of Transmission Project is not addressed in the modified Regulations

GRIDCO’s Suggestion: CERC Tariff Regulations, 2014 may hold good for definition of de-capitalisation.

- 7) **Cl.(17) ‘De-Commissioning’** means removal from service of a generating station or a unit thereof or transmission system including communication system or element thereof, after it is certified by the Central Electricity Authority ~~or any other authorized agency~~, either on its own or on an application made by the project developer or the beneficiaries or both, that the project cannot be operated due to non performance of the assets on account of technological obsolescence or uneconomic operation or a combination of these factors;

Justification: There is neither any stipulation on any authority who will authorize any other authorized agency nor the Electricity Act has empowered the CEA to appoint any other Authorised Agency on its behalf for the above purpose.

- 8) **‘Designated ISTS Customers’ or ‘DICs’** (Omitted in Draft Regulations) shall have the same meaning as defined in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time or subsequent reenactment thereof;

GRIDCO’s Views: The definition of ‘Designated ISTS Customers’ should be there in the finalized version of the Regulations in the manner in which the same Regulations has been used at Cl. No.3(20) of CERC Tariff Regulations, 2014 and also at Regulation-3(72) of the above Draft Tariff Regulations.

- 9) **Cl.(20) ‘Element’** means an asset which has been distinctively defined under the scope of the transmission project in the Investment Approval such as transmission lines including line bays and line reactors, substations, bays, compensation device, Interconnecting Transformers, **which can be commissioned independently so as to transmit the Electricity;**

GRIDCO's Views: The definition of element is not clear so far as its functionality is concerned.

- 10) Cl.(27) 'Fuel Supply Agreement'** means the agreement executed between the generating company and the fuel supplier for ~~generation and~~ supply of fuel towards generation and supply of electricity to the beneficiaries;

Justification: The FSA is signed between the Fuel Supplier and the Generating Company for Supply of Fuel and not for Generation and Supply of Electricity.

- 11) Cl.(31) 'GCV as received'** (New insertion in Draft Reg.) means the GCV of coal or lignite as ~~measured~~ determined at the ~~unloading~~ receiving point of ~~the thermal generating station~~ as per terms and conditions of the Fuel Supply Agreement through collection, preparation and testing of samples from the loaded wagons, trucks, ropeways, Merry-Go-Round (MGR), belt conveyor and ship in accordance with the IS 436 (Part-1/Section 1)-1964:

Provided that the measurement of GCV of coal or lignite along with associated moisture levels shall be carried out through Third party sampling to be appointed by the generating companies in accordance with the guidelines, if any, issued by Central Government;

Provided further that samples of coal or lignite shall be collected either manually or through hydraulic augur or auto samplers or through any other method considered suitable; keeping in view the safety of personnel and equipment:

Provided also that the generating companies may adopt any advance technology for collection, preparation and testing of samples for measurement of GCV of Coal and associated moisture level in a fair and transparent manner through online coal analysers shall be carried out alongwith online publication of the analysis result.

Justification:

- (i) Un-loading point of the Generating Station is not necessarily the receiving point of the Coal by the Generating Company, unless otherwise the same is mutually agreed by the Coal Supplier and the Generating Company as per the Fuel Supply Agreement (FSA). As per FSA, available with GRIDCO, the receiving point of Coal by the Generator from the Coal Supplier is at the Colliery end.
- (ii) GCV of Coal is measured by Air-dried basis in all cases. The moisture level is also measured for the same Coal at different conditions so as to arrive at the GCV for the required condition and also for compensation purpose as per terms and conditions of the FSA.

- (iii) Auto-Samplers are available for sampling of Coal without human intervention. There is separate Safety Regulations to deal with safety issues.
- (iv) On-line Coal Analysers and online publishing of the analysis result are the best means to maintain transparency so far as the result of 'GCV of Coal is concerned, which is used for fixing the rate of Coal and also for ECR calculation for billing to Beneficiaries and ultimately to consumers.
- (v) However, the stage of sampling for determination of 'as received GCV of Coal' shall be subject to the decision of Hon'ble High Court of Delhi in Writ Petition No.1641/2014 & Hon'ble APTEL in Appeal No.238/2017 and shall stand modified accordingly.

12) Cl.(43) 'Long-Term Customer' or ' LTC' shall have the same meaning as 'Long Term Customer' as defined in the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) 2009, as amended from time to time;

Provided that the Long-Term Customer in relation to an Interstate Generating Station shall also include the person, who has allocation in Interstate Generating Stations.

Justification: the Long Term customer as per Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) 2009 has not included the Long Term Customers of the Inter State Generating Stations excluding those owned and controlled by the Central Government (i.e. Independent Power Producers coming under composite scheme).

13) Cl.(55) 'Prudence Check' means scrutiny **by the Commission** of reasonableness of capital expenditure incurred or proposed to be incurred **by the Generating Company or Transmission Licensee as the case may be.** **While carrying out the Prudence Check, the Commission shall look into whether the generating company or transmission licensee, as the case may be, has been careful in its judgments and decisions for executing the project or has been careful and vigilant in executing the project;**

14) Cl.(57) 'Revised Emission Standards' in respect of the thermal generating station means the revised norms notified as per Environment (Protection) Amendment Rules, 2015 or any other **subsequent** rules as may be notified from time to time;

15) Cl.(73) 'Transmission Service Agreement' means the agreement entered into between the transmission licensee and the designated inter-State transmission customers in accordance with the Sharing Regulations and ~~any other agreement between the transmission licensee and the long term~~

~~transmission customer where the payment of transmission charges are not made through the POC mechanism under Sharing Regulations~~ shall include the Bulk Power Transmission Agreement and Long Term Access Agreement;

GRIDCO's Views: Bulk Power Transmission Agreement is as per PoC Regulations and Long Term Access Agreement to be defined.

16) Cl.(79) 'Useful life'

Sl. No.	Item	Tariff Reg. 2014-19 (Years)	Approach Paper (Years)	Draft Reg. 2019-24 (Years)	GRIDCO's Proposal (Years)
(a)	Coal/Lignite based thermal generating station	25		25	40 [#]
(b)	Integrated Mine of thermal generating station			As per approved Mining Plan	As per approved Mining Plan
(c)	Gas/Liquid fuel based thermal generating station	25		25	-
(d)	AC and DC sub-station	25		25	40 [#]
(e)	Gas Insulated Substation (GIS)	25		25	-
(f)	Hydro generating station including pumped Storage hydro generating stations	35	50	40	40 [#]
(g)	Transmission line (including HVAC & HVDC)	35		35	40 [#]
(h)	Communication system	15		15	

[#] As per Companies Act, 2013

17) Variable Cost: Needs to be defined as it has got a major role in Chapter-3 'Procedure for Tariff Determination' & Chapter-10 'Computation of Variable Cost'

18) Cl.3(79)(New proviso to be inserted): Provided that the Original/Existing Beneficiary(ies) should be given the first right of refusal to procure power from such extension project. Only after refusal by Original/Existing Beneficiary(ies) for procurement of Power from such extension Project, the Project Developer can move on to other perspective buyers.

19) Regulation-6 Treatment of mismatch in date of commercial operation: (1) In case of mismatch of the date of commercial operation of the

generating station and the transmission system, the treatment of the transmission charges shall be determined as under:

- (a) Where the generating station has not achieved the commercial operation as on the date of commercial operation of the associated transmission system (which is not before the SCOD of the generating station) and the Commission has approved the date of commercial operation of such transmission system in terms of Regulation 5(2) of these regulations, the generating company shall be liable to pay the transmission charges of the associated transmission system in accordance with clause (5) of Regulation 14 of these regulations to the transmission licensee till the generating station or unit thereof achieves commercial operation;

Provided that the Transmission Charges of the associated Transmission System as paid by the Generating Company to the Transmission Licensee due to the delay in achievement of COD by the Generating Station shall not be passed on to the Beneficiary(ies) of the Generating Station.

- (b) Where the associated transmission system has not achieved the commercial operation as on the date of commercial operation of the concerned generating station or unit thereof, the transmission licensee shall make alternate arrangement for the evacuation from the generating station at its own cost, failing which, the transmission licensee shall be liable to pay the transmission charges to the generating company at the rate of the applicable transmission charges of the region as determined in accordance with the Sharing Regulations till the transmission system achieves the commercial operation.

Provided that despite making alternative arrangement of evacuation, if the associated transmission system does not achieve the date of commercial operation within the six months of date of commercial operation of the generating station, the transmission licensee shall be liable to pay to the generating company the applicable transmission charges of the region as determined in accordance with the Sharing Regulations in addition to the above.

Provided that the Transmission Charges and the Fixed Cost of the Generating Company along with other charges, if any, due to delay in achieving COD of the Transmission System shall not be passed to the Long Term Customers of the Transmission Licensee and the Beneficiaries of the Generating Station respectively.

Justification: Penalty due to inefficiency of any entity should not be passed on to Beneficiaries and ultimately to Consumers, who have got no role to play in such delay.

20) Regulation-6(2) In case of mismatch of the date of commercial operation of the transmission system and the transmission system of other transmission licensee, the treatment of the transmission charges shall be determined as under:

- (a) Where an interconnected transmission system of other transmission licensee has not achieved the commercial operation as on the date of commercial operation of the transmission system (which is not before the SCOD of the interconnected transmission system) and the Commission has approved the date of commercial operation of such transmission system in terms of Regulation 5(2) of these regulations, the other transmission licensee shall be liable to pay the transmission charges of the transmission system in accordance with clause (5) of Regulation 14 of these regulations to the transmission licensee till the interconnected transmission system achieves commercial operation;
- (b) Where the transmission system has not achieved the commercial operation as on the date of commercial operation of the interconnected transmission system of other transmission licensee, the transmission licensee shall be liable to pay the transmission charges of such interconnected transmission system to the other transmission licensee and in the absence of transmission charges, at the applicable transmission charges of the region as determined in accordance with the Sharing Regulations till the transmission system achieves the commercial operation.

Provided that such liability to pay transmission charges and any liability to pay fixed cost to the Generator(s) due to delay in achieving Commercial Operation of Transmission Lines shall not be passed on to the Beneficiary(ies).

21) Regulation-8(4) ~~Assets installed for implementation of the revised emission standards shall form part of the existing generation project~~ **In case the Emission Control System is required to be installed for an existing Generation Project as per MoEFCC notification dated 7.12.2015, such Emission Control System shall form the part of the Generation Project** and tariff thereof shall be determined separately on submission of the completion certificate by the Board of the generating company **subject to due verification on achievement of the required norms as per MoEFCC notification.**

Justification: MoEFCC notification dated 7.12.2015 and Order Dtd. 20.03.2017 of Hon'ble CERC in Case No 72/MP/2016.

22) Regulation-9(3) In case of emission control system **if** required to be installed in existing generating station as per revised emission standards, the application shall be made for determination of supplementary tariff (fixed

charges or variable charge or both) based on the actual capital expenditure duly certified by the Auditor;

Provided that due approval by CEA in terms of its requirement, technology and associated cost etc shall be obtained prior to installation of such emission control system.

Justification: MoEFCC Notification dated 7.12.2015 and Order Dtd. 20.03.2017 in Case No 72/MP/2016 of Hon'ble CERC are to be complied.

23) Regulation-10 Determination of tariff:

10(8) where the capital cost considered in tariff by the Commission on the basis of projected capital cost as on COD or the projected additional capital expenditure submitted by the Generating company or the Transmission Licensee exceeds the actual additional capital expenditure capital cost incurred on year to year basis by more than 10% 5%, the generating company or the transmission licensee shall refund to the beneficiaries or the long term transmission customers as the case may be, the tariff recovered corresponding to the additional capital expenditure not incurred, as approved by the Commission, along with interest at 1.20 times of the bank rate as prevalent on 1st April of the respective year.

10(9) where the capital cost considered in tariff by the Commission on the basis of projected capital cost as on COD or the projected additional capital expenditure falls short of the actual additional capital expenditure capital cost incurred by more than 10% 5% on year to year basis, the generating company or the transmission licensee shall be entitled to recover from the beneficiaries or the long term transmission customers/DICs as the case may be, the shortfall in tariff corresponding to difference in capital cost, as approved by the Commission along with interest at 0.80 times of bank rate as prevalent on 1st April of respective year.

Justification: Estimation of Capital Cost or Projected Additional Expenditure is provided by the Generator/Transmission licensee and not by the Beneficiary(ies). Moreover, tolerance of 5% is reasonable instead of 10%.

24) Regulation-16 ~~Variable Charges or~~ Energy Charges: Energy charges shall be derived on the basis of the landed fuel cost (LFC) or variable cost of a generating station (excluding hydro) and shall consist of the following cost:

- (a) Landed Fuel Cost of primary fuel; and
- (b) Cost of secondary fuel oil consumption:

Provided that any refund of taxes and duties along with any amount received on account of penalties from fuel supplier shall have to be adjusted in fuel cost.

GRIDCO's views: The term Variable Charges is ambiguous with respect to Energy Charges and hence not required which should be omitted.

Provided further that the methodology of determination of supplementary energy charges, if any on account of implementation of revised emission standards in case of a thermal generating station shall be determined separately by the Commission;

GRIDCO's views:

2nd Proviso may be deleted because the Reagents are necessary for functioning of Emission Control Systems, but not for generation of Electrical Energy.

Supplementary energy charges, if any on account of implementation of revised emission standards in case of a thermal generating station can be taken care of in O&M Expenses, as is the case with Reagents, used for treatment of water for Thermal Power Station.

- 25) Regulation-18(5)(b)** De-capitalisation of Assets after the date of commercial operation on account of replacement or removal on account of obsolescence as certified by CEA or shifting from one project to another project;

- 26) Regulation-19(4)** Where the power purchase agreement entered into between the generating company and the beneficiaries provides for ceiling of actual capital expenditure, the Commission shall take into consideration such ceiling for determination of tariff for prudence check of capital cost.

GRIDCO's views: Regulation 10(4) of Tariff Regulations, 2014 may be retained

- 27) Regulation-20(1)** Interest during construction (IDC) shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds upto SCOD.

GRIDCO's views: Currently in the Regulations, there is no scope regarding propriety check of source and terms and conditions of loan availed. Whenever a loan is taken, there should be mechanism for prudence check to examine whether the applicable Rate of Interest is as per the prevailing market conditions or not. It would be more prudent if a Ceiling Rate of Interest is decided with reference to MCLR to avoid burden on the consumer.

- 28) Regulation-20(4)** If the entire period of delay or part thereof is not attributable to the generating company or the transmission licensee as the case may be due to uncontrollable factor as specified in Regulation 21 of these Regulations, IDC and IEDC beyond SCOD may be allowed after due prudence check and the liquidated damages, if any, recovered or to be recovered from the contractor or supplier or agency shall be adjusted in the

capital cost of the generating station or the transmission system, as the case may be.

GRIDCO's views: 11(A) (2) Proviso (2) of Tariff Regulation, 2014, as quoted under, should be retained with Regulation 20(4) and (5) of Draft Regulations.

“11(A) (2) Proviso (2) of Tariff Regulation, 2014:

Provided further that only IDC on actual loan may be allowed beyond the SCOD to the extent, the delay is found beyond the control of generating company or the transmission licensee, as the case may be, after due prudence and taking into account prudent phasing of funds.”

29) Regulation-21: Controllable and Uncontrollable factors:

(1) The “controllable factors” shall include but shall not be limited to the following:

a) Variations in capital expenditure on account of time and/or cost overruns on account of land acquisition issues;

(2) The “uncontrollable factors” shall include but shall not be limited to the following:

~~e. Time and cost over-runs on account of land acquisition except where the delay is attributable to the generating company or the transmission licensee;~~

GRIDCO's views: Controllable and Uncontrollable factors to be retained as in Regulation 12(1) and 12(2) of Tariff Regulations, 2014

Provided that no additional impact of time overrun or cost over-run shall be allowed on account of non-commissioning of the generating station or associated transmission system by SCOD, as the same should be recovered through Implementation Agreement between the generating company and the transmission licensee:

Provided further that if the generating station is not commissioned on the SCOD of the associated transmission system, the generating company shall bear the IDC or transmission charges if the transmission system is declared under commercial operation by the Commission in accordance with Clause 2 of Regulation 5 of these regulations till the generating station is commissioned:

Provided also that if the transmission system is not commissioned on SCOD of the generating station, the transmission licensee shall arrange the evacuation from the generating station at its own arrangement and cost till the associated transmission system is commissioned.

GRIDCO's views: Provisos to Uncontrollable factors as in Regulation 12 of Tariff Regulations, 2014 may be retained

30) Regulation-26(2) Where the generating company or the transmission licensee, as the case may be, makes an application for approval of its proposal for renovation and modernisation, approval may be granted after due consideration of reasonableness of the proposed cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, expected duration of life extension, consent of the beneficiaries or long term customers, if obtained, and such other factors as may be considered relevant by the Commission.

GRIDCO's views: Consent of the beneficiaries or long term customers may be made mandatory

31) Regulation-27: Special Allowance for Coal-based/Lignite fired Thermal Generating station:

Provided that if the Generating Company doesn't avail R&M and opts for Special Allowance then the Generating Company shall guarantee for extension of useful life period for at least 5 Years from the date of completion of such investment.

GRIDCO's views: Life extension should be there

32) Regulation-28: Special Provision for thermal generating station which have completed 25 years of operation from commercial operation date:

GRIDCO's views: Detailed mechanism needs to be developed for such arrangement.

33) Regulation-29(3): Where the generating company makes an application for approval of additional capital expenditure on account of implementation of Emission Control Standards, the Commission may grant approval after due consideration of the reasonableness of the cost estimates, cost arrived through international competitive bidding, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, and such other factors as may be considered relevant by the Commission.

34) Regulation-30(2): Return on equity shall be computed at the base rate of 15.50 14.00% for thermal generating station, **and** transmission system including communication system, at the base rate of 15.5% for **and** run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Justification:

- i) As per K P Rao Committee Report, the resources from return and depreciation are used as internal resources for capacity addition programmes.

- ii) In the 21st Meeting held on 06.07.2018, the Central advisory Committee has recommended that *“Cost of power and its affordability need be seen from the point of view of all stakeholders. As regards RoE, effective RoE turns out to be lower than 15.5%”*
- iii) As per Cl.6.3.1 of Explanatory Memorandum *“CEA has estimated that in view of present demand growth rate and availability of commissioned and under construction capacity, no new coal based capacity may be required till 2027”*
- iv) The higher Rate of Return is meant to promote investment so as to add extra Generating Capacity in the Country. As there is no scope for any addition of extra Thermal Generation Capacity upto 2027, the question of investment on Thermal Capacity Addition and associated risk thereof does not arise.
- v) In case of transmission, there is no such risk involved as in the generation sector.
- vi) As Hydro Generation is essential, not only that it is a green energy source, but also it is required for integration of intermittent power from renewable sources due to its inherent characteristics of quick Ramp-up and Ramp-down, therefore, it is absolutely necessary to encourage for more investment in hydro generation sector. Moreover, the risk involved in investment for Hydro Generation sector is much higher than that for Thermal Generation.
- vii) During 2014-19, the ROE was kept at 15.50%; whereas the SBI Base Rate as on 1st April 2014 was 9.65%. Further, in Draft Tariff Regulations, 2019, the ROE is kept at 15.50% while the SBI 1 year MCLR is 8.5% as on 10.12.2018.

35) Regulation-32(5): The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

GRIDCO's views: Currently in the Regulations, there is no scope regarding propriety check of source and terms and conditions of loan availed. Whenever a loan is taken, there should be mechanism for prudence check to examine whether the applicable Rate of Interest is as per the prevailing market conditions or not. It would be more prudent if a Ceiling Rate of Interest is decided with reference to MCLR to avoid burden on the consumer.

36) Regulation-33: (Depreciation):

Regulation-33(5) 1st Proviso

Provided that the remaining depreciable value as on 31st March of the year closing after a period of **12 18** years from the effective date of commercial

operation of the station shall be spread over the balance useful life of the assets.

Justification:

- i) When the Commission has proposed for Salvage Value of the asset at 5% as per Companies Act, 2013, simultaneously the useful life of the assets as per the said Companies Act may have to be followed as the Salvage Value and the Useful Life of the assets are co-related. In view of the above, the Useful Life of the Generating Station from the Date of Commercial Operation may be modified as per Companies Act, 2013. (As reflected in GRIDCO's Proposal to Regulation-3(79) of these Draft Tariff Regulations)
- ii) The Generating Stations and Transmission Systems are designed with required Factor of Safety to run at full load capacity for the entire life period on sustained basis, but practically those are not operating at full load for most of the time during its useful life period. Therefore, the useful life of the said assets is not fully utilized, which leaves a scope to go for a longer useful life.
- iii) Further, the apprehension of Hon'ble Commission not to extend the useful life on the grounds of Technical Limitations can be taken care of through the gain in useful life due to operation of the assets at reduced load.
- iv) Due to penetration of large quantum of Renewable Energy, the Thermal Power Plants will operate at a very low Load Factor to the extent of around 60% upto the year 2027, which allows a wide margin to go for longer useful life as per the Companies Act, 2013.
- v) The other difficulty, as expressed by Hon'ble Commission in terms of negating the benefit and overall levelised Annual Fixed Cost due to continued increase in the O&M Expenses may not happen, as the Thermal Generating Stations have already operated below full load condition for most of the time and will also continue to operate at around 60% Load Factor due to penetration of large quantum of Renewable Energy.
- vi) Moreover, as reflected at Cl.5.3.1(14.5), RBI's Notification dated 15th July, 2014 has recommended regarding flexible structuring of Long-Term Project Loans to Infrastructure and Core Industries, which covers Power Industry.

37) Regulation-34: (Interest on Working Capital):

Regulation-34(1)(a)(i): The working capital shall cover: [Coal-based/lignite-fired thermal generating stations](#) Cost of coal or lignite and limestone towards stock, if applicable, for [15 10](#) days for pit-head generating stations

and **20 15** days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity, whichever is lower;

Justification:

- i) As per Cl.5.10 of National Electricity Plan (Generation) for January, 2018 [Table-5.14(c)], the PLF of Coal based Plants will hover around 56.5% in 2021-22 to 60.5% in the year 2026-27.
- ii) Therefore, the requirement of Coal during this Control Period (2019-24) will come down drastically.
- iii) The Commission has arrived at the average Coal Stock basing on the data for F.Y. – 2012-13 to F.Y. – 2016-17 as 16.5 days for Non-Pit Head Plants and 11.3 days for Pit Head Plants.
- iv) Keeping in view the reduced requirement of Thermal Generation for the above Control Period, it is proposed that the Average Coal Stock for 10 Days and 15 Days should be considered for Pit Head & Non-Pit Head Thermal Power Plants respectively towards calculation of Interest on Working Capital.

38) Regulation-34(3): (Interest on Working Capital): Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

GRIDCO's views: In the Draft Regulations, the Bank Rate is defined as "SBI MCLR + 350 Basis Points" which is the Rate of Interest on Working Capital. Consideration of 350 Basis Points above the SBI MCLR seems to be at higher side. It may be reduced to SBI one year MCLR + 100 Basis Points.

39) Regulation-35: Operation and Maintenance Expenses:

(1) Thermal Generating Station: (i)

As the PLF of Coal based Plants will hover around 56.5% in 2021-22 to 60.5% in the year, 2026-27, the Employee Expenses, Repair and Maintenance Expenses and Administrative and General Expenses need to be scaled down accordingly to reduce the O&M Expenses so as to reduce the Capacity Charge.

40) Regulation-42C (Interest on Working Capital):

- (1) The working capital of the integrated mine shall cover:

42C(1)(i) Input cost of coal towards stock, if applicable, for 15 days of coal production corresponding to the normative production level as per the approved mining plan;

GRIDCO's Views: Provision is already there for stacking of Coal at Generator end, hence the above clause needs to be omitted.

- 41) **Regulation-46: Variable-Cost Energy Charge:** The ~~variable-cost Energy Charge~~ in respect of the thermal generating Stations shall comprises landed fuel cost of primary fuel, and Cost of secondary fuel oil consumption and cost of reagents on account of implementation of the revised emission control standards.

GRIDCO's Views: Many Chemicals and Reagents are used as day to day requirements in a Thermal Power Plant such as for Water Treatment and other Purging purposes, the cost of which is met from O&M Expenses. Similarly, the reagents to be used for operation of the Emission Control System should also be included in O&M Costs.

- 42) **Regulation-47 (Components of Landed cost of Primary Fuel):**

Proviso-2 of Regulation-47

“Provided further that landed cost of primary fuel shall be worked out based on the actual bill paid by the generating company including any adjustment on account of quantity and quality as per terms and conditions of the Fuel Supply Agreement;”

(New Proviso to be inserted)

Provided further that the Bill to be submitted by the Generating Company to the Beneficiaries shall accompany the Test Reports towards determination of GCV as well as Moisture Levels for each consignment corresponding to the bills.

Provided that the details of adjustment in terms of quality and quantity shall also be furnished by the Generating Company along with the Bill to the Beneficiaries.

Regulation-49(1)

“The gross calorific value for computation of energy charges as per Regulation 52 of these regulations shall be done in accordance with GCV on as received basis as per terms and conditions of the Fuel Supply Agreement”

Regulation-52(2)(b)

CVPF = (b) Weighted Average Gross calorific value of primary fuel as received as per terms and conditions of the Fuel Supply Agreement, in kCal per

kg, per litre or per standard cubic meter, as applicable for lignite, gas and liquid fuel based stations.;

Justification:

- i) As per Regulation-49 (Computation of Gross Calorific Value), the ECR is directly proportional to the rate of the Coal whereas it is inversely proportional to the GCV of Coal.
- ii) As per Regulation-47 (Components of Landed Cost of Primary Fuel), the Base Price of Coal corresponds to the Grade and Quality of Coal.
- iii) Therefore, the Quality of Coal (GCV) should be same for Rate of Coal as well as that used for ECR Calculation.
- iv) In spite of third party sampling both at Mines end and at Generating Station end, as per Commission's Proposal at Cl.22.5.3 of Explanatory Memorandum, it is seen that there is wide difference in the Quality of Coal (GCV), adopted for determination of Coal Price and that used for calculation of ECR i.e. the GCV adopted for billing of Coal is much higher to the extent of 967kCal/kg than that used for ECR calculation, for which the Beneficiaries and ultimately the Consumers pay high energy charges;
- v) While the Commission has proposed the so-called loss of GCV inside the Generating Station on the recommendation of CEA, but the loss in GCV from the Mines end to the Generating Station end has not been addressed in the Draft Regulations, although CEA has certified the equality of GCV between Mines end and Generating Station end, as reflected at Cl.34.27 in SoR to CERC Tariff Regulations, 2014.
- vi) To avoid such type of ambiguity on one Quality of Coal for Coal Price and another quality for the same Coal for ECR Calculation, GRIDCO is of the opinion that 'As received GCV' should be based on the terms and conditions of the Fuel Supply Agreement, as mutually agreed by the Coal Supplier and the Generating Company.
- vii) Hon'ble Supreme Court of India in its judgment in Sasan COD Case has opined "*It is thus clear that if there is any element of public interest involved, the court steps in to thwart any waiver which may be contrary to such public interest.*"

Therefore, the Hon'ble Commission may consider the views of GRIDCO for modification of the above Regulations:

43) Regulation-48 (Transit and Handling Losses):

Reg-48: The landed cost of coal or lignite during the month shall include the transit and handling losses as per the following norms:

Pit head	-	0.20%
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Non-pit head	Upto 1000 KM	0.80%
	Above 1,000 KM	1.20%

GRIDCO's Views:

- i) At Regulation-3 of the Draft Regulations the Pit Head and Non-Pit Head Stations have not been defined, for which it is necessary to bring out the same at Regulation (Definitions) of the CERC Tariff Regulations, 2019.
- ii) The basis for allowing Transit and handling Loss to the extent of 0.2% for Pit Head Stations and 0.8%/1.2% for Non-Pit Head Stations has not been classified in the Explanatory Memorandum.
- iii) It is also not clear, whether the terms and conditions of the contract between the Generating Company and the Railways/other means of Transport allow such transit and handling loss.
- iv) In its 21st Meeting, held on 06.07.2018, the Central advisory Committee has recommended that *"As Railways hold the key responsibility of Fuel Transportation, there is a need for sharing the Commercial Risk between the Transporter and the Power Utilities"*.
- v) Therefore, the loss of Coal during transit should be shared between the Transporter and the Power Utilities, for which it is necessary to bring out necessary Provision in the CERC Tariff Regulations, 2019.
- vi) Considering the above, the Regulation-48 on Transit and Handling Loss may be modified suitably so as to relieve the Consumers from such additional financial burden due to such arbitrary Transit and Handling Loss.

44) Regulation-49 (Computation of Gross Calorific Value):

Provided further that copies of the [Coal](#) bills and details of parameters of GCV [and Moisture Level](#) and price of fuel i.e. domestic coal, imported coal, e-auction coal, lignite, natural gas, RLNG, liquid fuel etc., details of blending ratio of the imported coal with domestic coal, proportion of e-auction coal shall also be displayed on the website of the generating company [prior to raising of the Energy Bills to the Beneficiaries and shall continue at least for the Control Period](#).

Justification:

To maintain transparency in recovery of cost of Energy Charges from the Beneficiaries and ultimately the Consumers.

45) Regulation-50: Landed Price of Reagent (Limestone, Sodium Bi-Carbonate, Urea and Anhydrous Ammonia etc.):

The Landed Price of Reagent may be met from O&M Expenses

46) Regulation-51: Computation and Payment of Capacity Charge for Thermal Generating Stations:

Regulation-51(2): The Capacity Charge rate for Peak hours shall be 25% more than that of Off-Peak hours.

GRIDCO's View:

The proposal for recovery of Capacity Charge for the month in two parts i.e. Capacity Charge for Peak Period of the month and Capacity Charge for Off-Peak Period of the month is a welcome step by Hon'ble CERC.

Regulation-51(7):

In addition to the capacity charge, an incentive shall be payable to a generating station or unit thereof @ 65 paise / kWh for ex-bus scheduled energy during Peak period and @ ~~50~~ 35 paise / kWh for ex-bus scheduled energy during Off-Peak period corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Quarterly Plant Load Factor (NQPLF) as specified in Regulation 59 (B) of these Draft Regulations.

Justification:

It is reasonable to incentivize the Generating Company to generate more than 85% of the PLF during Peak Load Hours. However, to maintain an equilibrium with the CERC Tariff Regulations, 2014 specifying 50 Paise for both Peak and Off-Peak Hours, it is proposed that an incentive of 35Paise per kWh may be incentivized to the Generator in excess of specified NQPLF for off-peak energy.

47) Regulation-52: Computation and Payment of Energy Charge for Thermal Generating Stations:

52.2.(a) CVPF = (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations less 85 Kcal/Kg on account of variation during storage at generating station;

GRIDCO's Views: No justification/basis has been given by Hon'ble Commission/CEA for specifying the Loss in GCV to the extent of 85 kCal/kg on account of variation during storage at Generating Station. Such loss in GCV should not be considered to be passed on to the Beneficiary/Consumers due to the following facts:

- i) On the effect of moisture in GCV of Coal sample taken from Wagon Top as per CEA, it is observed from views of CIMFR that proper sampling of Coal is not possible due to constraint for drawing samples upto the bottom of the Wagon. CIL also has acknowledged the difficulties in drawing sample as per BIS standard in Power Plants. From the above statements, it is clear that the Coal Supplier is benefited due to this improper sampling. In the above scenario, the loss in GCV, recommended by CEA is the gain for Coal Supplier. This loss should, therefore, be recovered by the Generator from the Coal supplier instead of recovering from the Beneficiaries/Consumers.

- ii) Clause No. 34.28 of SoR to CERC Tariff Regulations, 2014 stipulates that *“The CEA in its recommendations has specifically mentioned that international publications indicate a loss of heat value of about 1% for 1 year storage for high rank coal and 3% for low rank coals and thus, considering 3% heat loss, the average loss of heat value for 10 days storage would be about 0.08% or 3 kcal/kg. The CEA has recommended to consider GCV on “as received” basis”.*
- iii) As per Clause No. 34.36 of SoR to CERC Tariff Regulations, 2014 stipulates that:

“Xxx... It provides that loss of calorific value of coal during stacking period is not significant even if it is stored for one year period. Considering the findings of the studies mentioned above, it could be inferred that there will be negligible loss attributed to the generating station on account of stacking of coal for 8-10 days.”

“Coal being a natural resource, needs to be judiciously utilized. With electricity pricing being inelastic as coal price implications (this has become predominant after the shift from UHV based pricing to internationally accepted GCV based pricing) being a pass through, factors such as quality and quantity becomes paramount while handling the reasonability and efficiency aspects in tariff setting.”

“Xxx... There is no reason for allowing any difference to the benefit of the generator on account of GCV. The gross station heat rate norms fixed by the Commission for various sizes of units have sufficient margin to absorb this negligible difference.”

- 48) Regulation-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.

GRIDCO's Views: To procure the power on Merit Order Despatch, the Generating Company has to furnish its Day-ahead availability along with Energy Charge Rate for each source of power along with GCV of Fuel from such fuel Source.

- 49) Regulation-56: Computation and Payment of Transmission Charge for Inter-State Transmission System and communication system:**

Regulation-56(1) The fixed cost of the transmission system or communication system forming part of transmission system shall be computed on annual basis, in accordance with norms contained in these regulations, aggregated as appropriate, and recovered on monthly basis as

transmission charge from the users, who shall share these charges in the manner specified in clause (2) of this Regulation.

(New Proviso to be inserted)

Provided that the cost of the Un-Used/Stranded Assets of the transmission system and Communication System shall be excluded from the Transmission Charge of Transmission System and Communication System

(4) **N** is total number of communication channels which is based on the requirement of RLDCs or NLDC and the same would be decided in consultation with respective;

GRIDCO's Views: The above Sentence is incomplete, which may be rectified

50) Regulation-59(A)(a): Normative Quarterly Plant Availability Factor for all thermal generating stations, except those covered under clauses (b), (c), (d), & (e) – **83 86%**

Regulation-59(B)(a): Normative Quarterly Plant Load Factor (NQPLF) for Incentive for all thermal generating stations, except those covered under clauses (b), (c) – **85 88%**

Justification:

As per Commission's proposal at 16.6.1 of the Explanatory Memorandum, for 29 NTPC Coal based Plants the Average Availability Factor works out to 91.63% and the Median works out to 91.57% with Standard Deviation of 4.81%, which means the Availability Factor of the Plant varies from 96.39% and 86.75%. Considering the lower Availability Factor of 86.75%, it is justified to fix the NQPAF at 86% towards recovery of full Fixed Cost and NQPLF at 88% for getting Incentive.

Further, the apprehension on shortage of Coal for Thermal Power Generation may be ruled out in view of declaration of availability to the extent of 90% and above, as stated in the Explanatory Memorandum.

(f) Normative Quarterly Plant Availability Factor (NQPAF)

<u>Talcher TPS</u>	<u>90%</u>
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Normative Quarterly Plant Load Factor (NQPLF) for Incentive:

<u>Talcher TPS</u>	<u>92%</u>
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(C) Gross Station Heat Rate:

59(C)(b) New Thermal Generating Station achieving COD on or after 1.4.2009 1.4.2019:

59(C)(b)(i) For Coal-based and lignite-fired Thermal Generating Stations:

GRIDCO's Views/Justification: Cl.5.11(f) of Tariff Policy, 2016 stipulates:

f) Operating Norms

“Xxx... The norms should be efficient, relatable to past performance, capable of achievement and progressively reflecting increased efficiencies and may also take into consideration the latest technological advancements, fuel, vintage of equipments, nature of operations, level of service to be provided to consumers etc. Continued and proven inefficiency must be controlled and penalized.”

51) Regulation 61 :

Total fixed cost recovery linked with

(1) AC system: 98.00%

(2) HVDC bi-pole links & back-to-back: 95.00%

Incentive linked with

(1) AC system: 98.50%

(2) HVDC bi-pole links & HVDC back-to-back Stations: 97.50%

GRIDCO's View:

Total fixed cost recovery linked with :

(1) AC system: 99.00%

(2) HVDC bi-pole links & back-to-back 98.00%

Incentive linked with:

(1) AC system: 99.50%

(2) HVDC bi-pole links & HVDC back-to-back Stations: 98.50%

52) Inter-State Transmission Loss (New Norm to be specified)

GRIDCO's Views:

- i) It is seen that there is no norm in the CERC Tariff Regulations on 'Inter-State Transmission Loss'.
- ii) As per Para-2 of Cl. No. 21.3.1(b) of the Explanatory Memorandum the Transmission Losses of about 4.5 – 5% is considered in the present scheduling framework, which has got no basis.
- iii) As the Inter-State Transmission System is very much under-loaded, the loss may not be to the extent of 4.5-5%, which is very much higher. The Inter-State Transmission Licensee may be asked to justify such higher Transmission Loss.
- iv) CEA may be asked to determine the Inter-State Transmission Loss.

- v) However, the norm for Inter-State Transmission Loss may be specified as maximum of 3.0-3.5% in the CERC Tariff Regulations, 2019 and trajectory for reduction of the said loss may be fixed by Hon'ble Commission on year to year basis.

53) Regulation-65: Billing and Payment of charges: (1) Provided that the physical copy of the Bill in Original at the office of the Authorised Person and/or the scanned copy of Original Bill through Official Email ID of the Authorised Person of the Generating Company or the Transmission Licensee, as the case may be shall only be recognized as valid mode of presentation of Bill.

Provided further that Signatory or Signatories (official designation only) shall be authorized in advance by the Managing Director of the company and any change in the list of Authorised Signatory or the purpose, shall be communicated in the same manner.

Provided further that the date of presentation of the bill shall be deemed do be presented only when the associated documents as specified in the CERC Tariff Regulations, 2019 are also submitted along with the original bill.

54) Regulation-68(1): (Rebate) For payment of bills of the generating company and the transmission licensee through letter of credit on presentation or through National Electronic Fund Transfer (NEFT) or Real Time Gross Settlement (RTGS) payment mode within a period of **2 7** days of presentation of bills along with specified documents as per CERC Tariff Regulations, 2019 by the generating company or the transmission licensee, a rebate of 2% shall be allowed.

Justification:

Period of 2 (Two) days is very much inadequate for verification of bills along with associated documents on its correctness, which may be increased to 7 days for smooth processing of the bills to avail a Rebate of 2%.

55) Regulation-68(2): (Rebate) Where payments are made on any day after 2 days and within a period of 30 days of presentation of bills by the generating company or the transmission licensee, a rebate of 1% shall be allowed.

GRIDCO's Views: Presently there is no such provision for Graded Rebate System in the Regulations. Neither in the existing Regulations nor in the Draft Regulations, there is any financial benefit to the Beneficiaries who could not pay the Bill Amount on 2nd Day/30th Day of presentation of Bill but are willing to make payment without waiting upto 30th day/DPS Date.

So, Graded Rebate System may be incorporated in the CERC Tariff Regulations, 2019 to facilitate Beneficiaries for payment of Bills as and when

fund will be available with them within the period of DPS Date which would reduce the Rebate from 2% to 0%, linearly from 3rd Day to DPS Date of Bill.

- 56) Regulation-69: Late payment surcharge:** In case the payment of any bill for charges payable under these regulations is delayed by a beneficiary or long term transmission customers as the case may be, beyond a period of 45 60 days from the date of billing, a late payment surcharge at the rate of 1.25 1.00% per month shall be levied by the generating company or the transmission licensee, as the case may be.

Justification:

The cost of financing has come down drastically to the range of 8.35% for F.Y. – 2016-17 from the previous Control Period Value of 12-13%.

GRIDCO's Views: In CERC Tariff Regulations, 2014, the due date for payment of Bills without Late Payment Surcharge (LPS) was kept at 60 Days. But in the Draft Tariff Regulations, 2019 it has been proposed to be reduced to 45 days which may put an undue financial pressure on the Beneficiaries as the Credit Period they were availing has been reduced by a fortnight, which is 1/4th of the previous Credit Period.

Further, taking into account the downward trend of Lending Rate, the proposed DPS of 1.25% per month seems to be at higher side.

- 57) Regulation-70: Sharing of gains due to variation in norms:**

Regulation-70(2) The financial gains by the generating company or the transmission licensee, as the case may be, on account of controllable parameters shall be shared between generating company or transmission licensee and the beneficiaries or long term transmission customers, as the case may be, on monthly basis with annual reconciliation. The financial gains computed as per the following formulae in case of generating station other than hydro generating stations on account of operational parameters as shown in Clause 1 of this Regulation shall be shared in the ratio of 50:50 between the generating stations and beneficiaries.

(New Proviso)

Provided that the Generating Company shall submit the Data Sheet on the Net Gain as per Regulation 72(2) along with the Original bill presented to the Beneficiary for payment. If there is no net gain, a Nil Report shall also be furnished along with the Original Bill, presented for Payment.

- 58) Form-15 of Annexure-I:** has been revised to maintain transparency in terms of calculation of ECR and billing of Energy to Beneficiary(ies) and ultimately the Consumers (As Enclosed)

Details of Source Wise Fuel for Computation of Monthly Energy Charges.					
Name of the Petitioner:-					
Name of the Generating Station:-					
Sl.No	PARTICULARS	UNIT	Source-1	Source-2	Imported
A	QUANTITY		1	2	3
1	Opening stock of coal as on 1st Day of the Month (Closing stock of Previous Month)	(MT)			
2	Value of opening stock as on 1st Day of the Month	(Rs.)			
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	(MT)			
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company (Supported by Documents from the coal Supplier with the adjustment details)	(MT)			
5	Coal Supplied by Coal/Lignite company (3+4)	(MT)			
6	Normative Transit & Handling Losses (For coal/Lignite based Projects) (as per CERC regulations)	(MT)			
6. (a)	Up to 1000 km- (as per CERC regulations)	(MT)			
6. (b)	Beyond to 1000 km - (as per CERC regulations)	(MT)			
6. (c)	Pit head Station - (as per CERC regulations)	(MT)			
7	Net Coal/Lignite Supplied (5-6a-6b-6c)	(MT)			
B	PRICE				
8	Amount charged by the Coal /Lignite Company (Supported by Consignment wise Bill)	(Rs.)			
9	Adjustments(+/-) made in amount charged by coal/ Lignite company (Supported by documents on Consignment wise adjustment in details)	(Rs.)			
10	Total amount Charged (8+9+10)	(Rs.)			
C	TRANSPORT				
11	Transportation charges by Rail/Ship/Road transportation (Supported by Consignment wise Transportation Bills)	(Rs.)			
12	Adjustment (+/-) in amount charged made by Railways/Transport Company (Supported by Documents from Railways/Transport Company)	(Rs.)			
13	Demurrage Charge, if any	(Rs.)			
14	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)			
15	Total transportation charges (12+/-13-14+15)	(Rs.)			
D	TOTAL COST				
16	Total amount charged for Coal/lignite supplied including transportation(11+16)	(Rs.)			
17	Quantity of coal at station for the month (1+7)	MT			
18	Total amount charged for coal (2+17)	(Rs.)			
19	Wtd. Avg. Landed cost of coal	Rs/MT			
20	Coal Quantity consumed	MT			
21	Value of coal Consumed (20*21)	Rs			
22	Closing Stock of Coal	MT			

E	QUALITY				
24	Wtd. Avg. GCV _(on EM Basis) of Opening Coal Stock (Wtd. Avg. GCV of Closing Coal Stock of the previous month).	Kcal/Kg			
25	Wtd. Avg. GCV _(on TM Basis) of Opening Coal Stock (Wtd. Avg. GCV of Closing Coal Stock of the previous month). [For reference of Generator]	Kcal/Kg			
26	Wtd. Avg. GCV _(on EM Basis) of Coal as per the Bill of the Coal Company (Supported by test reports of GCV of Coal for each Consignment)	Kcal/Kg			
27	Wtd. Avg. GCV _(on TM Basis) of Coal at unloading point (Supported by test reports of GCV of Coal for each Consignment) [For reference of Generator]	Kcal/Kg			
28	Wtd. Avg. Equilibrated Moisture of Coal at Loading End (Supported by Test report of Equilibrated Moisture for each Consignment)	%			
29	Wtd. Avg. Total Moisture of Coal at Loading End (Supported by Test reports of Total Moisture for each Consignment)	%			
30	Wtd. Avg. Equilibrated Moisture of Coal at Unloading End (Supported by Test reports of Equilibrated Moisture for each Consignment) [For reference of Generator]	%			
31	Wtd. Avg. Total Moisture of Coal at Unloading End (Supported by Test reports of Total Moisture for each Consignment) [For reference of Generator]	%			
32	Gross Energy generated during the month	kWh			

Note:

1. GCV_(on EM Basis): GCV determined on Equilibrated Moisture at 40°C and 60% Relative Humidity
2. GCV_(on TM Basis): GCV determined on Total Moisture basis.
3. Similar details to be furnished for natural gas/liquid fuel for CCGT station and secondary fuel oil for coal/lignite based thermal plants with appropriate units.
4. Copies of Invoices towards quantity of Coal and price of Coal along with Test Reports for GCV and Moisture of Coal as per as per Sampling and testing by Third Party Agency.
5. Details to be provided for each source separately. In case of more than one source, add additional column.
6. Break up of the amount charged by the Coal Company is to be provided separately.