



**Comments on
Draft CERC (Terms and Conditions of Tariff) Regulations, 2024
15th February 2024**

Gross Station Heat Rate [Reg 70(C)(b)]

Provisions in the Draft Regulations	Tata Power's Comments
<ul style="list-style-type: none"> ▪ Heat Rate Norms of 2375 kCal/kWh for Generating Stations having COD before 01.04.2009. ▪ Heat Rate Norms of 1.04 x Design Heat Rate (kCal/kWh) with minimum boiler efficiency of 86% for Sub-Bituminous Indian Coal and 89% for Bituminous Imported Coal. 	<ul style="list-style-type: none"> ▪ Heat Rate Norms for coal based Generating Stations are specified in two cluster i.e. Generating Stations having COD before or on and after 01.04.2009. ▪ Above Segregation was done w.e.f. 2009 Tariff Regulations to build safeguard against the lower design boiler efficiency (lower than 86% compared to earlier boiler design efficiency of about 87%) as per recommendations of CEA. Idea was to pass improved efficiency to consumers. ▪ Accordingly, CEA recommended to link GSHR with design heat rate subject to minimum boiler efficiency of 86% and operating margin for post 2009 plants and for pre-2009 plants based on actual with operating margin to cater above requirements/recommendations. However, it is also essential to ensure that Generators does not suffer because of coal quality. ▪ As per EM-2024, the actual average SHR of all 500 MW Generating Stations after removing the effect of degradation is shown as 2388 kCal/kWh and , hence, scope for further rationalization is not there. ▪ In view of above, it is proposed to <u>fix ceiling limit of 2388 kCal/kWh for all the plants regardless of vintage instead of 2375 kCal/Kwh proposed in the draft Regulations.</u> ▪ Further, to give a fair and equitable ground, i.e., benefits of design efficiencies to be passed through and impact on it due to actual coal quality on design efficiency which is a universal issue, SHR norm may be considered as <u>lower of 2388 kCal/kWh and actual Heat Rate during the year subject to minimum of the Heat Rate norm arrived at by design parameters for Units having COD on or after 01.04.2009.</u>

Station Heat Rate:

Reducing margin from 1.05 to 1.04:

- Hon'ble CERC / CEA has not elaborated in detail the reasons to reduce the margin from 1.05 to 1.04;
- As per EM-2024, at para 18.6.5 the Hon'ble Commission observes following
 - *“that the average actual SHR has increased to around 2477 kCal/kWh from FY 2018-19 to FY 2022-23 vis-à-vis 2381 kCal/kWh recorded for the period from FY 2012-13 to FY 2016-17. This degradation of actual SHR can be attributable to the increased backing down of thermal generating stations to accommodate the rapid integration of renewable energy.”*
- In our humble opinion RE penetration is mostly visible in last two years and hence, impact of such degradation for Control Period in our view is negligible.
- Proposed Reduction of the operating margin from 5% to 4 % in the draft appears to be a guesstimate only without detailed elaboration/figures.
- In our humble view, data represents the actual loading conditions and, hence, compensation need not be factored over and above it.
- As per data published in the EM at Table 47, the operating margin seems to be about 5.54% for 500 MW Units compared to their Normative Heat Rate and, hence, Operating Margin of 5% may be continued with for 2024-29 period as well.

Station Heat Rate:

Degradation due to installation of 'In Combustion Modification':

- Un-burnt Carbon (UBC) in bottom ash and fly ash shall increase
- Increase in UBC shall lead to drop in boiler efficiency.
- All Bidders/OEMs for meeting technical parameters, requested revising the limit for UBC Heat Loss (Drop in boiler efficiency by 0.8%).
- Therefore, there is a need for relaxation of normative SHR for sustainable and financially viable operations of De-NOx System by 1%.

Auxiliary Power/Energy Consumption [Reg 70(E)]:

- As per EM-2024, the actual average AEC of all 500 MW Generating Stations after removing the effect of degradation is indicated at 6.25% and , hence, there is no scope for further rationalization.
- In our humble opinion RE penetration is mostly visible in last two years and hence, impact of such degradation for Control Period in our view is negligible.
- Therefore, existing AEC norms for 500 MW Generating may kindly be continued with for 2024-29 tariff period instead of reducing it by 0.5% as proposed in the draft Regulations.

O&M Expenses [Reg 36]

Tata Power's Comments

- Normalization for Covid Years: Escalation has been considered with escalation of 2.94% which should be at least considered at escalation of 3.22% i.e. Avg Escalation for five years as considered in the EM. Likewise in transmission.
- Escalation for Mid-Year to Base Year escalation should be done at Escalation Factor (5.89% based on last five years CPI & WPI escalation) as usually followed in the previous control period or have kept it very close to the actual inflation;
- For 2004-09 Regulations, escalation rate of 4% was considered based on weightage of 60% for WPI and weightage of 40% for CPI, for 2009-14, escalation rate of 5.17% on similar WPI/CPI principles, For 2014-19, escalation of 5.72% was factored considering actual inflation to be slightly higher at 8.35%. For, 2019-24, escalation of 3.31% was considered, considering it to be very close to actual escalation of 3.41%.
- In view of above established practice, in our humble opinion, actual inflation factor of 5.89% may kindly be considered for arriving at base year expenses too. Similar principle may also be considered for arriving at O&M expenses for Transmission Assets.
- O&M expenses norms for generating companies with single plant should get a higher O&M expense norms with a factor of 1.10 times, as IPPs neither get the benefit of economies of scale nor their plants form part of the population for normative O&M computation;
- Wage Revision: So far, impact of Pay Revision has been included in the Normative O&M expense norms itself without any differentiation between Govt and Pvt Entities.
- Accordingly, In our humble view, the above established practice should continue for giving a fair and equitable treatment to all the Generators. Further, if impact of wage revision is to be allowed during true-up based on wage revision, in such scenario, in our view, whenever CPSUs are allowed pay revision, O&M Norms may kindly be revised retrospectively and allowed to all Generators during the truing-up.

O&M Expenses [Reg 36 and Reg 3(56)]

Provisions in the Draft Regulations	Tata Power's Comments
<p>36 (1) Thermal Generating Station: Normative Operation and Maintenance expenses of thermal generating stations shall be as follows...</p>	<ul style="list-style-type: none"> ▪ <u>Regarding Ash Disposal/Transportation Expenses:</u> ▪ In EM-2024, the Hon'ble Commission has observed following: <i>"15.5.2 (d)...Further, the costs associated with handling and transporting ash are treated separately. Therefore, due to the variable and irregular nature of ash disposal activities, such expenses have not been considered for computing the O&M expense Norms"</i> ▪ In view of above, Regulations may provide for dealing Ash Disposal expenses separately as such expenses have not been considered in past due to absence of any specific reference in Regulations. ▪ <u>Minimum threshold for Change in Law.</u> It may kindly be compensated at actuals for restitution as per settled principles of law without having any threshold.
<p>'Operation and Maintenance Expenses' or 'O&M expenses' means the expenditure incurred for operation and maintenance of the project and includes the expenditure on manpower, maintenance, repairs and maintenance spares, other spares of capital nature valuing less than Rs. 20 lakhs, additional capital expenditure of an individual asset costing up to Rs. 20 lakhs</p>	<ul style="list-style-type: none"> ▪ <u>For Capital Spares:</u> There should be different capping limit for Transmission (INR 1 lakh) and Generation (INR 20 lakh); ▪ Request Hon'ble CERC to provide detailed computation/data on how impact of Add-Caps and Capital Spares up to INR 20 Lakh has been included in the proposed O&M expenses Norms for analysis and comments;

Gross Calorific Value of Primary Fuel[Reg 60]

Provisions in the Draft Regulations	Tata Power's Comments
<p>'GCV as Received' to be considered for Energy Charges :</p> <p>Provided:</p> <ul style="list-style-type: none"> ▪ Third Party sampling is done at both, the billing end and the receiving end through an agency certified by the Ministry of Coal ▪ In absence of 3rd party sampling, GCV As Received would be As Billed GCV less 300 kCal/ kg for pit head and 600 kCal/ kg for non pit head. 	<ul style="list-style-type: none"> ▪ Generating Company has no control over the coal supply and its quality; ▪ Coal Companies have monopoly over supply. ▪ Above fact has also been acknowledged by the Hon'ble CERC in past: <ul style="list-style-type: none"> “22.5 In the entire value chain from mine end to generating station end, the loss of GCV can take place on account of grade slippage at mine end, during transportation (transit with railway) and during storage (at generating stations). The generating companies generally have no control over the grade/GCV of coal received at their generating stations. There are several cases of grade slippages between the mine mouth and at the site of generating stations. Further, there is loss in GCV during transport of coal through Railway. Therefore, the generator may receive lower energy than what was billed by the coal companies. These are beyond the control of the generating companies.” ▪ In view of above, in our humble opinion, the existing practice may kindly be continued with. ▪ In case, Hon'ble CERC wish to continue with the proposal, it is humbly submitted to enhance the margin of loss to 900 kCal/kg for non-pit head generating station because the actual loss is in the range of 600 to 1200 kCal/kg ▪ It may also be clarified that this margin shall be calculated on an average basis for entire quantity of coal in a particular month.

Differential Rates of Return on Equity [Reg 30]

Provisions in the Draft Regulations	Tata Power's Comments
<p>Existing Projects:</p> <ul style="list-style-type: none"> • Thermal, Transmission, RoR Hydro – 15.50% • Storage and RoR with Pondage Hydro – 16.50% <p>New Projects:</p> <ul style="list-style-type: none"> • Transmission – 15.00% • Thermal, RoR Hydro – 15.50% • Storage, Pump-Storage and RoR with Pondage – 17.00% <p>Proviso:</p> <ul style="list-style-type: none"> • Add-Caps beyond Original Scope, ECS, Change in Law, Force Majeure – One-Year SBI MCLR + 350 basis points [presently 12.00% (8.50% + 3.50%)], subject to maximum of 14.00% 	<ul style="list-style-type: none"> ▪ There cannot be any differentiation of risk-return perception between two tranches of equity infusion for existing and new assets in same Project; ▪ Hon'ble CERC in its earlier Order dated 21.12.2000 recognized the principle that, returns are to be estimated at company levels and, therefore, there shall be no differentiation between old and new assets for providing returns. ▪ No distinction is made in declaring Dividends on equity infusion at different dates, it's suggested that Return on Equity (ROE) should also follow a similar principle and Asset Wise RoE should not be considered. Relevant extract of the Order dated 21.12.2000: <p><i>“2.4.7....We also understand that pricing bodies for other industrial products have not made any distinction in the return on account of vintage of assets. <u>In the circumstances, we consider it appropriate that no distinction need be made in the return on equity on account of vintage of assets.</u>”</i></p> ▪ This will discourage equity infusion in new Add-Caps and, hence, shall push-up the lending rates for such Add-Caps and hence the WACC, defeating the objective of reducing Annual Fixed Cost; ▪ Disparity between Existing and New Stations – Rate of RoE for new Stations on these components would be 15.50%, while for existing Stations would be much lesser at One-Year SBI MCLR + 350 basis points [presently 12.00% (8.50% + 3.50%)], subject to maximum of 14.00%, which is not fair.

Differential Rates of Return on Equity [Reg 30]

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Tax on Return on Equity [Reg 31]

Provisions in the Draft Regulations	Tata Power's Comments
<p>Proposed Approach:</p> <p>Grossing up of the base rate of RoE with Effective Tax Rate</p> <p>Rate of pre-tax return on Equity = $\text{Base Rate} / (1 - t)$</p> <p>T = effective tax rate</p> <p>Provided</p> <p>In case of MAT , t = MAT including surcharge & cess</p> <p>In case of tax under Section 115BAA, t = Tax rate including surcharge and cess as specified in section 115BAA</p>	<ul style="list-style-type: none"> ▪ Effective Tax Rate (ETR) may be computed as (Actual Tax Paid) divided by Profit Before Tax (PBT), without any capping to Normal Tax Rate. ▪ Current formula does not fully capture the tax implications of the company with multiple businesses particularly when other businesses have huge income or losses. This formula needs to capture the effect of change from PBT to Taxable income of regulated business. ▪ The Hon'ble Tribunal in its Judgement in Appeal No. 104, 105, 106 of 2012 dated 28.11.2013 has held that the taxable income of the regulated business must be computed independently, irrespective of the overall tax impact to ensure that regulated businesses neither subsidizes not get subsidized by other businesses. ▪ Therefore, even if the actual tax paid is zero due to losses in other businesses(which would not be available for carry forward to those businesses), either grossing up with applicable tax rate may be allowed or the benefit of lower tax due to other businesses may be allowed to be recovered subsequently when tax payable on other businesses is not lowered due to carry forward of its losses already availed for the benefit of Regulated businesses. ▪ Hence, it is requested to modify the formula for Effective Tax Rate suitably to take care of the non-adjustment of current year loss, credit for carry forward losses, unabsorbed depreciation and credit for MAT on other businesses.

Depreciation for Emission Control System[Reg 33(11)]

Provisions in the Draft Regulations	Tata Power's Comments
<p>Depreciation for ECS where operation of ECS is subsequent to operation of TPPs:</p> <ul style="list-style-type: none">▪ Depreciation as per SLM at rates specified in Appendix -1▪ Remaining Depreciable value as on 31st March of year closing after a period of 12 years to be spread over the balance period of 13 years or balance <u>operational life</u> of Generating Station, which ever is lower.	<ul style="list-style-type: none">▪ Existing PPAs were signed for 25 years, hence, extending life beyond it or reducing depreciation rates, without corresponding assurance of the PPA extension would result in under-recovery of capital cost and cash flow challenges.▪ It would negatively impact utility finances and hinder debt servicing.▪ Altering the existing practice of depreciation recovery within the useful life shall reduce uncertainty, reduce investments, and raise interest rates due to the limited availability of long-term loans.▪ In view of above, in our humble opinion Useful life of the existing projects may not be increased unilaterally, till the related issues like extension of PPA/Fresh tie-up, recovery of depreciation within existing useful life and additional cost of wear and tear, etc. are addressed.

Lime Stone Purity: Minimum Purity of 85% proposed in Draft Regulations [Reg 70(F)] :

Provisions in the Draft Regulations	Tata Power's Comments
<p>70(F) Norms for consumption of Reagent Limestone purity shall not be less than 85%</p>	<ul style="list-style-type: none"> ▪ As per Indian Standard (IS-1290-1973), Mineral Gypsum of quality Type IV (Gypsum of 70% to 75 % purity) has been specified for cement industry. ▪ Only for Export Quality Cement, IS indicates gypsum of 80 to 85% purity may be used. ▪ In view of availability of limestone and opportunity for Gypsum utilization, third party study has <u>recommended for usage of domestic cement grade limestone for MPL.</u> ▪ Flexibility may be provided to Generators to decide the purity based on demand/market of Gypsum else it shall increase the delta ECR (i.e. ECR on account of reagent consumption) by about 1.5% to 3% without GYPSUM being sellable. ▪ <u>Therefore, there is a need for relaxation of limestone purity to minimum of 70% compared to 85% as per draft.</u>

Interest During Construction [Reg 21]

Provisions in the Draft Regulations	Tata Power's Comments
<p>Computation of IDC: In case of delay, IDC shall be deducted pro-rata corresponding to delay not condoned vis-à-vis total implementation period.</p> <p>In case of activities, where delay is on account of delay in approval from concerned government authority, maximum condonation shall be allowed up to 90% of the delay associated with obtaining such approvals or clearances.</p>	<ul style="list-style-type: none"> Allow IDC as per Investment Approval and pro-rata for additional IDC as per the delay condoned by the Commission based on the proportion of (time upto SCOD + delay condoned)/ total time taken. $(X)+(Y-X) \times [(A+B)/C]$ <p>X= IDC approved in IA Y= Actual IDC incurred upto COD A= No. of months approved for the project to be commissioned B= Total no. of months of delay condoned C= Total no. of months taken for the project to be commissioned</p> <ul style="list-style-type: none"> In case delay beyond control of the developer (due to delay in approvals) is acknowledged, entire 100% of the delay should be condoned without any deductions and same would be fair and just.

Capital Cost for Projects acquired through NCLT Proceedings [Reg 19(5)]

Provisions in the Draft Regulations	Tata Power's Comments
<p>For projects already under operation:</p> <ul style="list-style-type: none"> • lower of historical GFA as approved by the Appropriate Commission till date of acquisition (or to be considered based on audited accounts, subject to prudence check) or the acquisition value paid, shall be considered; • Post acquisition Add-Caps of an operational projects shall be allowed as per Chapter 7 of the draft CERC Tariff Regulations. <p>In case any under construction project:</p> <ul style="list-style-type: none"> • lower of the acquisition value or the actual audited cost incurred till the date of acquisition, shall be considered; • Post acquisition Add-Caps up to CoD – as per Investment Approval by BoD, subject to prudence check; • Post CoD, Add-Caps shall be allowed as per Chapter 7 of the draft CERC Tariff Regulations. 	<ul style="list-style-type: none"> ▪ Acquisition Valuation of a Project (whether operation or under construction) depends upon future revenue streams, which in turn depends upon the historical/approved cost for Section 62 projects and bid tariff for Section 63 projects. ▪ Acquisition values of stressed operational assets under NCLT proceedings are likely to be lower than the historical costs as some part of recovery would have been made till resolution and balance recovery period would be less than 25 years. Since, the resolution is aimed, at maximum valuation to minimize losses to bankers and financing institutions, fixing tariff based on lower acquisition value shall give lower valuations. ▪ If acquisition value itself would be the basis of tariff determination then tariff stream can be determined but then it will be difficult to arrive at optimum acquisition value during bidding and may yield depressed valuations. ▪ If such discounted acquisition values are considered for tariff determination, it will completely defeat the objective of resolution through NCLT Proceedings. ▪ In our humble opinion, Hon'ble CERC should only consider approved capital cost by the Appropriate Commission (if any) or the historical cost, subject to prudence check, and should NOT consider the acquisition value at all.

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