Issues
brought out in
Consultation Paper
on
CERC (Terms and Conditions of Tariff) Regulations, 2019

Tariff Structure (Page 25/26)

Existing practice/ provision	Options proposed in the Approach Paper
Single part tariff structure is followed for determination of annual transmission tariff	▪ Transmission tariff can be on two-part basis, the first part (fixed component) can be linked to the extent of access (Transmission Access Charge) and second part (variable component) can be linked to the extent of use, to be recovered in proportion to the power flow (Transmission Service Charges). Methodology

Capital Cost (Page 31/32)

Existing practice/ provision	Options proposed in the Approach Paper
• Apportioned IA cost as a reference. • Capital cost based on the actual/projected expenditure duly certified by the Auditors. • Allows compensation towards increase in cost due to uncontrollable factor so as to place to the same economic position had this uncontrollable event not occurred.	▪ Shift to benchmark/reference cost ▪ In new projects, the fixed rate of return may be restricted to the base corresponding to the normative equity as envisaged in the investment approval/benchmark cost. (treatment of whether RCE would be considered - not indicated) ▪ The return on additional equity may be restricted to the extent of weighted average of interest rate of loan portfolio or rate of risk free return. ▪ Incentive for early completion and disincentive for slippage from scheduled commissioning can also be introduced.

Renovation and Modernisation (Page 33/34)

Existing practice/ provision	Options proposed in the Approach Paper
• Allows to undertake R&M for the purpose of extension of life beyond the useful life. • Special Allowance allowed in the 2009-14 in lieu of R&M for coal/lignite based thermal power stations.	▪ The R&M could include Residual Life Assessment of Sub-Station and Transmission Lines, Upgradation, System Improvement Scheme (SIS) and replacement of equipment. R&M & Sp. All ▪ Alternatively, allow special allowance in lieu of R&M of transmission assets. ▪ Such provision will enable the transmission companies to meet the required expenses including R&M on completion of 25/35 years of useful life without any need for seeking resetting of capital base.

Depreciation (Page 36)

Existing practice/ provision	Options proposed in the Approach Paper
• Straight Line method of depreciation is used. • Depreciation rate is arrived at by considering normative repayment period of 12 years to repay the loan (70% of the capital cost).	▪ Extend useful life of the transmission assets to 50 years. ▪ Continue the present approach of weighted average useful life in case of combination, due to gradual commissioning of units. ▪ Consider ADDCAP during the end of life with or without reassessment of useful life. ADDCAP after R&M (or special allowance) to be restricted to limited items/equipment. ▪ Reassess life at the start of every tariff period/every ADDCAP through a provision as is prescribed in Ind AS. ▪ Reduce rates which will act as a ceiling. ▪ Continue with the existing policy of charging depreciation.

GFA, Debt : Equity & RoI

Existing practice/ provision	Options proposed in the Approach Paper
Gross Fixed Asset (GFA) (Page 37)	
Gross Fixed Asset approach being followed	▪ Base the returns on the modified gross fixed assets, arrived at, by reducing the balance depreciation after repayment of loan in respect of original project cost. (i.e., Net Fixed Asset – RoCE approach)
Debt : Equity Ratio (Page 37)	
• Debt equity ratio of 70:30. • For some of the old projects, the equity base maintained beyond 30% (upto 50%).	▪ For new projects, modify the normative debt-equity ratio of 80:20, where financial closure is yet to be achieved.
Return on Investment (Page 38)	
RoE approach being following	▪ Continuation of fixed rate of return approach (RoE) or alternatives (RoCE), if any

Rate of Return on Equity (Page 41)

Existing practice/ provision	Options proposed in the Approach Paper
• Post tax base rate of 15.5%. • Additional return of 0.5% to incentivize for timely completion • No disincentive for delay in completion of the project.	▪ Review the rate of RoE considering the present market expectations and risk perception of power sector for new projects; ▪ Have different rates of return for generation and transmission sector and within these segments, have different rates of return for existing and new projects; ▪ Continue with pre-tax RoE or switch to post tax RoE; ▪ Have differential additional RoE for different line length of T/L and different size of S/s; ▪ Reduction of RoE in case of delay

Cost of Debt & IoWC

Existing practice/ provision	Options proposed in the Approach Paper
Cost of Debt (Page 43)	
• Weighted average interest rate based on actual loan portfolio. • Allows refinance the loan to lower the interest costs. • The refinancing costs borne by the beneficiaries. Savings on interest to be shared between the beneficiaries and utilities in the ratio of 2:1.	▪ Continue with existing approach or switch to normative cost of debt and differential cost of debt for the new transmission and generation projects; ▪ Link reasonableness of cost of debt with certain benchmark viz. RBI policy repo rate or 10 year Government Bond yield and have frequency of resetting; ▪ Review of the existing incentives for restructuring or refinancing of debt.
Interest on Working Capital (IOWC) (Page 44)	
• Linked to Base Rate of interest specified SBI. • Working capital determined based on maintenance spares @15% of O&M, 1 month O&M & 2 months receivables.	▪ Rates need to be reviewed in view of introduction of MCLR. ▪ To de-link "Maintenance Spares" in IWC from O&M expenses.

Operation and Maintenance Expenses (Page 45/46)

Existing practice/ provision	Options proposed in the Approach Paper
• Normative O&M expenses based on actual expenditure during the past five FYs. • Specified as per ckm for line and per bay for substation.	▪ Review the escalation factor based on WPI & CPI indexation as they do not capture unexpected expenditure; ▪ Rationalization and review of the multiplying factor in case of addition of bays/transformer/lines in existing stations (on the basis of MVA capacity instead of individual components else some weightage may be accorded to different components); ▪ Separate norms on the basis of vintage of the transmission system. ▪ Treatment of income from other business (e.g. telecom business) while arriving at the O&M cost.

Transmission Availability Factor (Page 55/56)

Existing practice/ provision	Options proposed in the Approach Paper
• During 2009-14 the availability of Trans. System was computed by applying weightage factor for respective s/s equipment. • During 2014-19, the weightage factor is based on actual availability.	▪ To validate the existing approach for computation of Transmission system availability and weightage factors to be applied for outage hours for transformer and reactors; ▪ Review of the incentive formula for HVDC bi-pole and HVDC BtB stations at par with AC system; ▪ Specify appropriate region for certifying the availability of Inter-regional links (AC and HVDC line); and ▪ Review of the existing methodology or procedure for computation of availability, monthly availability and cumulative availability.

Transmission Losses & Incentive

Existing practice/ provision	Options proposed in the Approach Paper
Transmission Losses (Page 56)	
No existing norms	▪ The transmission losses about 4.5-5% for ISTS. ▪ To introduce the norms based on factors within control and international benchmarks ▪ The existing approach for operational norms and level of Normative Annual Transmission Availability Factor (NATAF) to be reviewed.
Incentive (Page 57/58)	
Incentive is being recovered only through monthly formula of billing and collection of transmission charges	▪ In the absence of clear provision regarding reconciliation of annual transmission charges and incentive with monthly billing, the concept of NATAF requires review. ▪ Review the norms for availability of transmission system

Surcharge/Rebate, Non-Tariff Income & Billing Process

Existing practice/ provision	Options proposed in the Approach Paper
Late Payment Surcharge & Rebate (Page 59)	
• Surcharge @1.5% per month for delay beyond 60 days. • Rebate provided if payment made within 2 days.	▪ To review late payment surcharge linked to MCLR. ▪ Definition of 2 days needs elaboration.
Non-Tariff Income (Page 59)	
• Present Regulatory framework does not account for other income for reduction of operation & maintenance expenses. • Income earned from telecom business are adjusted in the billing separately.	▪ To review the revenue from telecom business at the rate of Rs. 3,000/km, which was fixed in 2007. ▪ To account for the income on account of disposal of old assets, interest on advances and revenue derived from telecom business for reducing O&M expenses.
Non-Standardization of Billing process (Page 59/60)	
Generating companies and the transmission licensees are following different practice for raising bills on the basis of tariff order.	Whether standardization of billing process including formats, verification and timeline etc. may be done in order to avoid possible disputes in billing.

Commercial Operation or Service Start date (Page 62)

Existing practice/ provision	Options proposed in the Approach Paper
The COD declared after successful completion of the trial operation/run and is in regular service after successful charging and trial operation to ensure grid security.	▪ Addressing shortcomings in existing methodology for the trial operation through appropriate regulatory mechanism; ▪ Issue of acceptance of COD of T/L if the generation or upstream/downstream assets not commissioned; ▪ Pre-requisite of completion of data telemetry and communication facilities for declaring COD; ▪ Linking of COD with schedule commercial operation/ commencement date of the PPA/LTA; ▪ Linking the COD of the transmission system with the commissioning of the generating units; ▪ Separation of the COD of the transmission element or system from the service start date under the contract.

Energy Storage System (ESS) (Page 63/64)

Existing provision	Options proposed in the Approach Paper
-	▪ Two different uses of energy storage - one as a part of the ISTS and other as a part of ISGS. ▪ Implementation of the ESS for use - to combine the tariff with transmission, subjected to regulatory approval, and generation projects, as per the consent of the procurer. ▪ Energy storage at transmission level can be used for overall optimization of power from the grid, irrespective of the owner of storage capacity and may be dispatched when needed. Alternatively, it can be used as ancillary support services. ▪ The annual fixed charges of ESS may be determined separately as per the pre-specified operational and financial norms and may be recovered from the beneficiaries of the region as supplementary to the transmission charges.

Approach to Tariff Design & Application

Existing practice/ provision	Options proposed in the Approach Paper
Alternative Approach to Tariff Design (Page 64/71)	
AFC is determined based on the admitted capital cost as COD after carrying out prudence check.	Alternate approaches for Normative tariff determination: • by Benchmarking of Capital Cost • by fixing AFC as a percentage of Capital Cost • by fixing each component of AFC as a percentage of total AFC
Application for Tariff Determination (Page 72)	
	▪ For existing assets : Determination of tariff based on actual capital expenditure instead of projected capital expenditure. ▪ Tariff of new assets to be determined after commissioning. AFC may be determined on consolidated basis and apportioned on proportion to the capital cost of individual elements. The true up on completion of the project based on balance sheet of individual project.

Thank You