1. Cl. 2.8 – Role of Old Generating Stations

Comments:-

The old Generating units of 110 MW / 100 MW / 200 MW / 210 MW need to be retired considering the low cycle efficiency and high heat rate and also high specific coal consumption.

- Cost of meeting New Environmental Norms need to be considered. High quantity of Ash generation, due to higher sp. Coal consumption
- Increased O&M cost, Flexible Operation limitations, etc.
- High APC
- Aim should be for maximizing the utilization of efficient generating stations having supercritical technology units. The old units of lower sizes need to be retired, because of the high inefficiency involved.

2. <u>Cl 2.9</u> : Cost Factor

Comments:-

- (a) It has been mentioned that the focus of this approach Paper has been on the following key aspects that impacts costs:
 - (i) Efficient and performance based norms
 - (ii) Maximizing the utilization of efficient generating stations
- (b) The above being the focus of approach paper, the continued operation of old units / lower size units need to be re-considered and retired at the earliest. These should be replaced by supercritical Technology units which are more efficient and would be consuming lower coal and also lesser APC.

3. <u>CI – 2.10</u> Regulatory certainty :

<u>Comments</u>:-

 Any coal based power plant which is proposed to be set up by a Utility is planned with respect to the prevalent regulatory norms having a margin for operational uncertainty. Therefore, it is very much essential that for the already existing generating stations, the Norms which were prevalent at the time of installation should be allowed to be followed.

However, in case more stringent Norms are specified, additional O&M costs /Capex should be allowed under 'Change in Law' as recommended by OEM's / Expert Agencies.

(ii) Similarly the costs incurred for studies and further modifications as required based on above studies should be allowed in order to comply with the Regulations 2023 for Flexible Operations. The degradation in operating parameters for Units which were not designed for such operations need to be considered adequately.

4 <u>Cl. 3.1</u> : Tariff Determination – General approach

<u>Comments</u>:-

<u>Approach – 2</u> Performance Based hybrid approach is preferable as additional capitalization is considered for certain factors on a normative basis. Additional capitalization is an important factor for an operating power plant particularly due to obsolescence, change in Technology, safety related improvements, for ease of operation and maintenance, etc.

5 <u>Cl. 3.3</u> : Performance based Hybrid Approach Generation Tariff

Comments:-

- 1. Energy charge Fuel cost and GCV require consideration of actual values
 - Actual values need to be considered as they have a wide financial impact for the Generator. Both these factors get substantially impacted due to wide variation in coal quality and mode of procurement apart from FSA etc.

6 <u>Cl. 4.2.1</u> : Capital cost

Comments:-

The provision of interim Tariff need to be continued in the next Tariff period as well as this will enable certainty on cash flows once the COD of a unit or Project are completed.

7 <u>CI.4.2.2</u> : Procurement of Equipment and Services

Need to mandatorily award work and services contract for developing projects under regulated tariff mechanism through a transparent process of competitive bidding duly complying with the policy guidelines issued by Govt. of India as application from time to time.

Comments:-

- Competitive bidding can be followed in general however wherever required due to quality and timeline/schedule considerations exceptions need to be allowed with justification.

8. <u>Cl. 4.2.4</u>

With respect to para :-

As these expenses towards the advancement of the Local Area are required for the development of the project and for alleviating public resistance and delays, such expenses may be allowed as part of capital cost which certain limits. Alternatively, these expenses may be met through budgetary support for funding the enabling infrastructure, i.e. roads and bridges, on a case-to-case basis which could be (i) as per actuals, limited to Rs. 1.5 crore per MW for up to 200 MW projects and (ii) Rs. 1 crore per MW for above 200 MW projects, as per the Ministry of Power guidelines dated 29.09.2021 for budgetary support for "Flood Moderation" and for budgetary support for "Enabling Infrastructure".

<u>Comments</u>: It is suggested as below:

- **Rs**. 1.5 crore per MW for Projects upto and including 200 MW
- **Rs**. 300 crore for Projects above 200 MW and below 300 MW
- **Rs**. 1 crore per MW for Projects including and above 300 MW

Chapter 7.0 Summary and Way Forward

<u>CI 7.1.1</u> : Alternative approach to Tariff determination

<u>Comments</u>:-

The Hybrid approach is best as only some of the figures need verification of documents but majority of calculations are based on

normative basis for calculation of Tariff. In case of dispute / disagreement concern parties may approach CERC for the same.

<u>Cl. 7.1.2</u> : Normative Tariff

Comments:-

The clustering of AFC cannot be done as rate of interest on Loan and working capital may differ. The tariff for increase and decrease has to be approved on actual basis and on the same terms it can be approved on normative basis for future.

The impact of additional expenses has to be through a separate revenue stream as the rate of interest, life of equipment and some additional consumable may be required for operations of additional capitalized items.

<u>Cl. 7.1.3</u> Interim Tariff

Comments:-

Yes the interim tariff to be approved at the earliest so that generator can raise bills as per tariff immediately after the COD of project.

<u>Cl. 7.1.4</u> : Procurement of Equipment and Services

Comments:-

Already comment covered in cl. 4.2.2

<u>Cl. 7.1.5</u> : Reference Cost – Benchmark cost vs Investment Approval

Comments:-

Investment approval costs are preferable as benchmarking is difficult proposition to be followed as individual Project would be having site specific issues which would have a cost impact.

<u>Cl. 7.1.6</u> : Capital Cost – Hydro Generating Stations

<u>Comments</u> :-

<u>Cl. - 10</u>

In hydro power plant every state /area has different local area development plan. No particular amount can be fixed / limited, as every state has different policies and every area has different requirements. It may be fixed for a state or particular basin but cannot be fixed pan-India. This expenditure need to be allowed for every project independently, subject to verification by local administration.

<u>Cl. - 11</u>

Yes developer should be incentivize for executing project faster and vice – versa if it delays except when the delay is on account of government policies/approvals/force majeure.

Cl. 7.1.7 : Capital Cost – Project Acquired post NCLT Proceedings

<u>Comments</u> :-

<u>Cl. – 12&13</u>

Total cash out flow on the project to be considered for determination of Tariff (including penalties / fine / additional cost on account of delay due to CIRP proceedings) and penalties due to delay on account of CIRP proceeding may be waived off / if subject to prudence check.

Cl. 7.1.8 : Computation of IDC

<u>Comments</u> :-

<u>Cl. – 14,15,16</u>

Computation of IDC should be based on SCOD and if SCOD is revised the full IDC should be allowed if delay is condoned after the confirmation that delay was beyond the control of developer and developer has taken all measures and made best effort to minimise the delay. If delay is accepted then full IDC to be allowed.

Cl. 7.19 Treatment of LD

<u>Comments</u> :-

<u>Cl. – 17</u>

LD received by the generator from supplier may be adjusted in capital cost.

Cl. 7.1.10 Price Variation

<u>Cl- 18</u>

<u>Comments</u> :-

Price Variation in hard cost to be allowed if delay in SCOD is condoned and the delay was beyond the control of Generator.

<u>Cl. 7.1.11</u> : Renovation and Modernisation (R&M)

<u>Cl. – 19, 20</u>

<u>Comments</u> :-

The R&M expenses should be treated as additional capital cost and not as a special allowance, as R&M cost is different for each project depending upon the unit condition and quantum of replacement / rectification required.

<u>Cl. 7.1.12</u> : Initial Spares

<u>Comments</u> :-

<u>Cl. – 21</u>

Yes all the classification of transmission line is equally important hence initial spare norms may be same for above mentioned classification.

Additional Comments for Coal Stations

- As life is being increased to 35 years initial spares need to be reviewed for coal stations also.

<u>Cl. 7.1.13</u> : Controllable & uncontrollable factors

<u>Comments</u> :-

<u>CI. – 22</u>

Yes Forest clearance is a uncontrollable factor and depends upon the confirmation / report from different departments including local administration, local residents / Organizations / State administration/ Other ministries etc but the developer should be able to demonstrate that there is no delay on its part for providing information / follow up in getting the clearance.

Cl. 7.1.14 Differential Norms – Servicing Impact of Delay

Comments :-

<u>Cl. – 23, 24, 25</u>

(i) As per the tariff guidelines the revenue / income from Power project is restricted and if the ROE is further reduced there may not be any further investment in the sector.

(ii) If the delayed SCOD is condoned then there should not be any reduction in ROE.

(iii) If ROE is matched with rate of Interest on Loans then, Investments in New Projects would be impacted as there are many other attractive avenues for Investors.

Cl. 7.1.15 Additional Capitalisation's

Comments :-

<u>Cl. – 26</u>

Yes any additional expenditure which result in cost saving and or enhancement of performance safety / obsolescence requirements etc. for the plant to be allowed with prior approval and tariff should be paid to the developer.

Cl. 7.1.16 Normative Add-Cap Generating Stations

<u>Cl. 27</u> : Thermal Generating Stations

<u>Comments</u> :-

Yes based on the size of plant yearly allowance can be allowed on the additional capex on normative basis

Cl. 28 : Hydro Generating Stations

Comments :-

Yes in hydro sector, station wise norms need to be approved for additional capex on normative basis

<u>CI.29</u>

While determining such special compensation for a thermal or hydro generating station, costs incurred towards works presently covered under Regulation 26 to Regulation 29, wherever applicable, may not be included as these expenses may be allowed separately.

Comments:

Yes this expense may be allowed separately to avoid any delay in normal tariff approval.

<u>CI. 30</u>

Further, any items that costs below Rs. 20 lakhs that may be in the nature of minor items such as tools and tackles and those pertaining to Capital Spares may be allowed only as part of O&M expenses and may not be considered as part of additional capitalisation in case of both thermal and hydro generating stations.

Comments:

However the O&M cost allowed in Rs./MW need to be accordingly revised upward with an escalation.

<u>Cl. 31</u>

Further, discharge of liabilities of works already admitted by the Commission as on 31.03.2024 may be allowed as and when such liability is discharged.

Comments:

Yes the same is as per prevailing guidelines.

<u>CI. 32</u>

By extending the cut-off date from the current 3 years to 5 years which shall allow time to close contracts and discharge liabilities and eliminate the need to allow additional capitalisation post cut-off date unless in the case of Change in Law and Force Majeure.

Comments:

Yes the cut-off date to be extend upto 5 years as it take times to close the contracts in terms of supply and commercial terms.

<u>CI. 33</u>

However, based on past data of similar existing generating stations, if there is a need to allow additional capitalisation that may be legitimately required post cut-off date other than those presently allowed under Regulations 26 to 29, the same may be allowed as special compensation as proposed in the case of existing station that have crossed the cut-off date.

<u>CI. 34</u>

While determining such special compensation for a thermal or hydro generating station, costs incurred towards works presently covered under Regulations 26 to Regulation 29, wherever applicable, may not be included as these expenses but may be allowed separately.

Comments for Cl. 33/34:

Special compensation allowance need to be allowed post the cutoff date in case of both Thermal and Hydro Stations for expenditures covered under Regulation 26 to 29.

<u>**Cl. 35**</u>: Further, any item that costs below Rs. 20 lakhs that is in the nature of minor assets, including Capital Spares below Rs 20 lakh, can be allowed only as part of O&M expenses and may not be considered as part of additional capitalisation in case of both thermal

and hydro generating stations. Further, any major capital spares costing above Rs. 20 lakh may form part of the special compensation.

Comments:-

In above case the O&M expenses are covered for both thermal and hydro stations can be reasonably increased.

Cl. 7.1.17 : Normative Add-cap Transmission system

Comments:-

Yes the additional capex to be allowed on requirements due to obsolescence, change-in-law and force majeure.

Cl. 7.1.18 : GFA/NFA / modified GFA approval

Comments:-

Existing GFA approach may be continued as it is time tested and assured returns are there for developer.

Cl. 7.1.19 : O&M Expenses :

<u>Cl. 39</u>

Comments:-

It is preferable that O&M expense may be allowed as one expense as this methodology is being followed historically.

<u>Cl. 41</u>

Comments:-

Yes additional O&M expenses should be given not only for transmission assets being operated in North Eastern Region but also in other specific areas such as deserts, reserve forests, Kutch deserts, etc.

<u>Cl. 42</u>

<u>Comments</u>:-

- (i) Recurring loss value of spares below Rs. 20 lakhs may be made part of normative O&M expenses.
- (ii) For capital spares with a value in excess of Rs. 20 lakhs case wise reimbursement may be permitted with required justification.

<u>CI. 43</u>

Comments:-

Yes change in law (imposition of tax, statutory payments, labour perks) make substantial impact on the O&M expense and the same should be allowed additionally in normative O&M.

Cl. 7.1.20 : Depreciation

<u>CI. 44</u>

Comments:-

Yes Depreciation may be allowed in 15 years in place of 12 years, as repayment period of 10 to 12 years starts after 1-2 years from COD of project. Further there should be uniform deprecation rate for all plants and no deviation to be allowed for lower depreciation as it will create confusion between generators and beneficiaries.

Cl. 7.1.21 : Interest on Loan

<u>Cl. 45</u>

Comments:-

No actual rate of interest is to be allowed as the applicable interest rate is different for new / old generators / private / government generators. Actual rate of interest is to be allowed.

Cl. 7.1.23 : Rate of Return on Equity

Methodology : Cl. 47 to 50

Comments:-

ROE at fixed rate as per existing regulations should be continued as there are many risks in this sector. Power sector is in losses for many years and new investments are comparatively less.

<u>Cl. 51 to 55</u>

Comments:-

ROE at fixed rate should be continued in all cases and further has to be incentivized on timely competition (it will encourage for timely completion and further investment)

<u>Cl. 56</u>

Comments:-

Yes provision of additional incentive may be provided to encourage higher plant availability and generations in all plant (old and new both) as this will reduce requirement of additional new capacity to some extent.

Cl. 7.1.24 : Tax Rate

<u>Cl. 57 to 58</u>

<u>Comments</u>:-

Tax should be paid at applicable rate (MAT/Normal or special which ever it may be) however there must be some provision that if tax is not being paid due to brought forward losses or other corporate loss, tax has to be paid at minimal applicable rate. Payment of tax as condition may be deleted.

Cl. 7.1.25 : Interest on Working Capital

<u>Cl. 59 to 62</u>

Comments:-

Existing norms of Interest on working capital including rate of interest to be retained as any reduction in ROI will not only be detrimental to existing generators but also discourage to new investors.

Cl. 7.1.26 : Life of Generating Stations and Transmission System

<u>Cl. 63 & 64</u>

<u>Comments</u>:-

Yes the useful life of 25 years at present can be increased to 35 years subject to following provisions which need to be considered:

- (i) Capex for replacements due to obsolescence in technology
- (ii) Capex for replacements / modifications for efficiency improvement
- (iii) Capex due to replacements of Boiler/Turbine/Generator components due to creep/fatigue and other requirements
- (iv) Capex required due to replacements / modifications on account of Flexible Operations of Coal Plants
- (v) Any other change-in-law requirements, etc.

Cl. 7.1.27 : Input Price of Coal – Integrated Mine

<u>Cl. 65</u>

Comments:-

In some cases while Determination of Input price of coal bid discount are deducted, however while deducting Tax paid by the developer should be allowed on 100%.

Cl. 7.1.28 : Sharing of Gains

<u>Cl. 66 & 67</u>

<u>Comments</u>:-

Sharing of gains should be discontinued as developer has the first right on the income / incentive earned by the extra efforts / efficiency in operations and other initiative of developers.

Cl. 7.1.29 : Treatment of Arbitrations Award – Servicing of Principal and Interest payment

<u>CI. 68</u>

<u>Comments</u>:-

Principal and Interest both are outflow on account of developer and treatment of both the payment should be same. Interest can be substantial and it will not be feasible for beneficiary to pay the same to developer along with carrying cost. If interest is also allowed to capitalized it will be convenient to pay the tariff rather than upfront payment.

Cl. 7.1.30 : Treatment of Interest on differential tariff after truing up:-

<u>Cl. 69</u>

<u>Comments</u>:-

If there is any delay beyond six month interest should be paid on truing up tariff claims.

Cl. 7.1.31 : Normative Annual Plant Availability Factor (NAPAF)

<u>Cl. 70 & 71</u>

Comments:-

Whether changes to be made should be applicable to new developers, existing PPAs to be maintained same and there should not be any change.

Cl. 7.1.32 : Peak & Off-peak Tariff

Comments:-

Peak and off Peak tariff should be declared for each region as the demand /supply of each region is different. Further developer supplying to many regions should be given some leverage as it is difficult to take care peak / off peak season of all regions.

Cl. 7.1.33: Operational Norms

<u>Cl. – 72</u>

Comments:-

- (i) As in the Tariff period of 2024-2029 most of the thermal stations would be operating at part load upto 40% and varying Ramp rates of 1 to 3%, the operating norms fixed should be adequate as there is no experience in Indian Power sector of such operations.
- (ii) Further the life of thermal plants is being proposed to be increased to 35 years. This would require additional O&M provisions on account of increased maintenance / forced outage etc.

Cl. 7.1.34 : Operational Norms – Inefficient Generating Stations

<u>Cl. – 73</u>

Comments:-

Inefficiency has to be borne by the Developer with a limited support, however to utilize the existing resources some relaxation can be given with some restrictions on tariff.

Cl. 7.1.36 : Operational Norms – Emission Control Systems

<u>Cl. 75,76 & 77</u>

Comments:-

- (i) The deadline for implementing the Sox reduction measures is Dec 2026 which would be falling within the Tariff Regulations 2024-2029. Therefore provision is required to be made on the operational Norms upfront itself.
- (ii) The parameter of increase in Auxiliary consumption, Reagent consumption, etc. need to be observed at least for the initial 2 to 3 years and therefore adequate norms are to be provided in the tariff period of 2024-2029.
- (iii) Incentivising for proper operation of Emission control Equipment may have to be taken up after careful analysis of initial data on the performance of these equipment's

Cl. 7.1.37 : Compensation for Part load operations

<u>Cl. 78</u>

<u>Comments</u>:-

The norms for compensation as per the GRID CODE are satisfactory. The provision of same should be made in the new regulations at the earliest.

Cl. 7.1.38: Gross Calorific Value (GCV) of Fuel

<u>Cl. 79</u>

Comments:-

Proper sampling & testing need to be implemented in a systematic manner at mine end for avoiding Grade slippages to a large extent. This grade slippage minimization is not in the control of the Generators and only coal companies need to put additional efforts on remedial actions.

Cl. 7.1.39: Blending of Coal

<u>CI. 80</u>

Comments:-

- (i) Linkage of the consent of Beneficiaries to percentage blending of coal may be done. The requirements of consent of beneficiaries may be limited to say beyond 10% so that in peak demand seasons, the generation is not impacted upon and an early action is taken by the Generators
- (ii) A competitive bidding process may be stipulated for procurement of Imported Coal.

Cl. 7.1.40 Incentives

<u>CI. 81</u>

Comments:-

Current provisions for incentive for higher productions are sufficient.

Cl. 7.1.41 : Separate Norms for ROR / Storage Based Hydro Projects

<u>CI. 82</u>

Comments:-

Current provisions for incentive for higher productions are sufficient.

Cl. 7.1.42 : Tariff Structure for Cost Recovery for Emission Control System

<u>CI. 83</u>

Comments:-

- (i) The existing tariff recovery mechanism need to be continued as only by Dec 2026, presently requirement is there for installing FGD for Sox reduction. Based on the feedback in the subsequent tariff periods the tariff recovery mechanism may be reviewed.
- (ii) Timely tariff approvals need to be provided considering the huge additional capital expenditure involved.

Cl. 7.1.44 : Modification of Tariff Formats

<u>Cl. 85</u>

Comments:-

Tariff Forms related to historical data should be avoided and only Tariff calculation forms should be continued

Cl. 7.1.46 : Tariff Structure for Cost Recovery for Emission Control System

<u>CI. 88</u>

Comments:-

The Depreciation allowed upto the date of deletion may be reduced from cost of machinery and balance amount should be reduced from fixed assets. Further new machinery cost to be added in fixed assets, however depreciation on new machinery should be provided upto 95% of cost from the replacement date to end of useful life of plant.

Cl. 7.1.47 : Assumed Deletions

<u>Cl. 89</u>

Comments:-

Rate of 5% per annum to be replaced by rate of depreciation defined in schedule of tariff regulation.

Cl. 7.1.48 : Necessity to Review the need of Regulation 17(2)

<u>CI. 90</u>

Comments:-

The terms of operation / tariff after 25 years operation should be mutually decided by the Generator and beneficiary but subject to capping of Peak fixed Tariff as per regulations (under the tenure of last PPA), and if tariff is higher the same should be approved by CERC / SERC on case to case basis. Variable cost should be allowed as per the regulations.