## Comments and Suggestions on the CERC Staff Approach Paper – CERC MYT Regulations for 2024-29

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The Central Electricity Regulatory Commission (CERC) has sought comments and suggestions from the public on the *Approach Paper on Terms and Conditions of Tariff Regulations for Tariff Period 1.4.2024 to 31.3.2029.* In response to that solicitation, we are submitting the following comments.

**Clarity regarding the purpose and intent**: The staff paper correctly highlights the need for providing regulatory certainty and simplifying the regulatory process. However, these are not the only concerns that need to be considered. Thinking about the tariff revision process from the consumer's point of view, it becomes equally important to focus on measures aimed at improving efficiency, transparency, and enabling well informed public participation. While the approach paper does talk about safeguarding the consumers' interest, the focus seems to be more on protecting the investors' interests. Our submission aims at achieving a more balanced and just approach without compromising the governance aspects of the process.

- 1. Approaches suggested for Annual Fixed Cost (AFC) calculation: The Approach paper suggests two approaches for computing the AFC components. Below are our comments on both the suggested approaches. We also suggest an alternative approach that can further incentivize efficiency.
  - a. **Approach 1 Normative Tariff**: This approach states that once the capital cost, including additional capitalisation up to the cut-off date, is approved for a certain project, the fixed charges for such projects follow a certain trajectory, except in the case of sporadic impacts of additional capitalisation. Therefore, it is suggested to shift to a 'Normative Tariff' wherein, once the capital cost is approved on actual basis after prudence check, all other AFC components are determined on normative basis. We have the following concerns with this proposed approach:
    - **Prudence of base year costs needs to be established**: It is proposed that for projects under operation for more than five years, the AFC components for base year (FY 2024-25) shall be first determined. Then, tariff for the entire MYT period is to be determined by applying indexation to these base year components. Further, upon expiry of each tariff period, the Commission would only revise the indexation factor. This approach puts excessive importance on one year's AFC and if in that particular year the AFC has been abnormally high/low for any reason, that will become the base and will be reflected in tariff for the entire control period. Hence, if such an approach is to be adopted a more calibrated base AFC must be considered for indexation. This could be done by considering the average

<sup>&</sup>lt;sup>1</sup>These comments represent the individual views of the authors. The Centre for Social and Economic Progress (CSEP) does not hold an institutional view on any subject.

AFC of the last control period or lowest or most efficient AFC as the base value.

- No automatic pass-through of fixed costs should be allowed: The attempts at simplifying the tariff process should not lead to any automatic passthroughs and the crucial aspects of the current regulatory process that entail a public hearing and filing of all relevant data as per regulatory formats should not be done away with. This is absolutely crucial for safeguarding not just transparency and public interest, but also the credibility of the regulatory process and enabling independent scrutiny of the tariff filings.
- Methodology of indexation and underlying assumptions needs to be made public: While the approach paper calls it normative approach, it also argues that "...normative tariff for these stations appears to be feasible only when determined Asset specific." Thus, it is not clear how much ease this approach would bring in terms of simplification, as the Commission would anyway require to develop and maintain a separate index for each station and perhaps for each unit as some of the newly commissioned units might be of different make and could be funded from different sources. In any case, if such an approach is to be adopted, simply defining the general principles of the approach as part of the tariff regulations cannot be sufficient. The Commission must disclose the methodology and all the underlying assumptions made by it for computing the indexation factor(s) for each station/unit in the form of a reasoned order for each station/unit.
- b. **Approach 2 Performance Based Hybrid Approach**: It is argued that under existing approach, most of the regulatory burden is on account of recurring but low value additional capitalization claims. Hence, in the proposed Approach 2, it is suggested to continue with the current practice of tariff determination with more AFC components being allowed on a *normative basis*. Again, the points made above with respect to Approach 1 apply in this case as well. Thus, our main submission in this regard is as follows:
  - The approach should not lead to any automatic cost pass-through and due public process along with tariff filings as per all relevant regulatory formats must continue to be followed.
  - The principles of the approach should be clearly laid out in the regulations and the detailed station/unit specific approach, norms and the underlying assumptions should be spelt out in the form of a reasoned order for that specific station/unit.
  - Care should be taken that any anomalously high or low value(s) should not form the base value being considered for indexation purposes.
- c. **An alternate approach-3**: The so-called normative approaches proposed in the staff paper are not truly normative since they are tailored for each individual station/unit and strive to be as close to the actual costs as possible. Instead, if one were to take a

truly normative approach that incentivizes efficiency, one could think of the following alternate approach:

- For a given unit size, identify the most efficient unit in terms of its AFC. Setting this cost as the benchmark for the given category, give 50% weightage to this benchmark AFC and 50% to the actual AFC of a give unit based on its average AFC or lowest or most efficient AFC during the last control period. The base AFC thus arrived at should be used for indexation.
- Indexation can either be station specific or can be generic for a given category of plants based on certain common characteristics, such as unit size, technology, make, funding pattern, etc.
- Advantage of this alternate approach: It brings in the essential element of efficiency improvement and forces the stations/units to move closer to the best performing unit in term of AFC. In terms of ease of implementation or process simplification, it is comparable to the approaches proposed in the staff paper.
- As submitted earlier, this approach too should not lead to any automatic cost pass-through and the due public process along with tariff filings as per all relevant regulatory formats must continue to be followed.
- 2. Lowering fuel costs and ensuring accountability of the generators: More than 60% of the generation tariff of a coal based power plant is towards fuel cost. Therefore, measures aimed at improving economical operation of the plant can go a long way in lowering overall costs. It is equally important to enforce measures that ensure the generator's accountability for providing supply as per the PPA agreed terms and conditions. This can be done in the following ways:
  - a. Ensuring that all new capacity addition happens through competitive bidding route. Despite the various set-backs and governance challenges, tariffs of competitively bid projects have been lower than those of Section 62 projects.
  - b. Using benchmarking to lower station heat rate and hence the fuel costs of coal based generating stations. While doing this, net station heat rate should be used for benchmarking. Also, care should be taken to ensure consistency between the PAT scheme, carbon credits trading scheme, and the norms set by the CERC.
  - c. Non-compliance with reporting requirements of Section 40: Section 40 of the existing MYT regulations requires generators to publish copies of the bills and details of parameters of GCV and price of fuel such as domestic coal, imported coal, e-auction coal, details of blending ratio of the imported coal with domestic coal, proportion of e-auction coal, etc. to be displayed on the website. Considering the recent coal shortages and the impact of coal imports on consumers tariffs, compliance with this requirement is crucial, but it is not being followed. The Commission should take serious note of such non-compliance and put in place appropriate measures to ensure compliance.
  - d. **Accountability towards coal procurement**: It has been highlighted time and again that lack of clarity regarding coal requisitioning, supply, and allocation of coal shortage amongst the various coal consumers leads to obfuscation of responsibility

and makes it difficult to hold the generating companies accountable for their coal procurement. Unless the generators are held accountable for their coal procurement, there will not be any pressure on the coal supplier or the railways to deliver on their contractual terms. If the entire value chain has to function on commercial principles, it is of utmost importance that generators are held accountable for their fuel procurement and inefficiencies of fuel and transport sector are not passed on to electricity consumers.

- e. Amend Regulation 43 of the current 2019 MYT regulations: This regulation allows the use of alternative fuel from sources other than those agreed by the generating company and beneficiaries in their power purchase agreement (PPA) for supply from the contracted capacity. Among other reasons, such use is permitted on account of shortage of fuel or optimization of economical operation through blending, but without any prior consent of the beneficiary, unless the PPA explicitly requires the generator to seek such consent or the cost of such procurement crosses a certain threshold. *The Regulation should be amended such that any use of alternate fuel that leads to increase in the energy charge must necessitate prior consent of the beneficiary*. This is the only way to check unwarranted blending and/or ensure that the generator makes the best possible efforts to provide power at PPA agreed terms and conditions.
- 3. **Capital expenditure related costs**: Below are some suggestions regarding costs related to capital expenditure.
  - a. GFA vs NFA: The staff paper argues in favor of Gross Fixed Assets (GFA) based approach stating that it is important for attracting investments in the sector. It is our submission that using GFA as the base for calculating return on equity is not appropriate as it results in unnecessarily high returns for the generator at the cost of the consumers. Also, a large part of the capacity addition that happened in the last decade was by the private sector and through competitive bidding, which is not affected by the tariff regulations, which demonstrates that there can be other ways to boost investor confidence. More importantly, adopting GFA based approach is conceptually wrong. Hence, we submit that it is important to move to NFA based approach for the following reasons:
    - The current regulations allow repayment of loan in the first twelve years and deem the annual repayments equivalent to the annual depreciation charges. Thus, at the end of twelve years, the net assets consist of equity only, and they equal 30 percent of the original investment assuming a debt/equity ratio of 70/30 when the plant is commissioned. The economically useful life is only 25 years for coal plants, but many run for a much longer period. If the generator continues to collect a return on the entire equity he invested at the beginning, he will make huge profits at the expense of the consumers.
    - At the end of the 12<sup>th</sup> year, when the loan is completely paid off, only equity will remain. For the remaining life of the plant (another 13 years for a coal plant), straight line depreciation of the equity should be used and

annual return should be calculated on the remaining (net) equity in that year.

- The GFA based approach leads to higher returns on equity than prescribed in the regulations. Instead, there could be more transparent and direct performance linked incentives to encourage investments, if that is the goal.
- b. Depreciation: As the approach paper correctly points out, the existing practice of considering loan tenure of twelve years and hence specifying depreciation rate in accordance to it, has resulted in front loading of tariff. The proposal to increase the depreciation rate considering loan term of fifteen years is therefore a welcome measure. It needs to be further explored if even longer term loans can be availed and if the term of the loan can be stretched to twenty or more years.
- 4. **Measures related to hydropower capacity**: The staff paper proposes several measures to boost hydropower development. Given the serious issues with financial viability and construction delays, it is no surprise that for the past two decades the performance of hydropower sector in India has been abysmal. In this regard, the following points need to be considered:
  - a. Lack of analysis of the failures of the past policy and regulatory measures: It would have been more useful if the paper had provided some analysis of why a slew of policy changes, tax reductions, relaxation of various norms and requirements, regulatory certainty of cost recovery along with a fixed rate of return on investment, and repeated financial restructuring and bailouts, have resulted in precious little capacity addition in the last two decades. In the absence of such analysis, it is inappropriate to propose more of the same measures that have proved to be ineffective, especially since they come at the cost of the consumers or the exchequer, and with little or no accountability for the hydropower developers and investors.
  - b. Skewed sharing of hydrological risks: The hydropower project gets to keep all the revenue from excess generation (capped at 120%) than design energy. However, if there is shortfall in energy charges in comparison to fifty percent of the annual fixed cost, the generator is allowed to recover it in six equal monthly installments. Thus, the downside is borne by the consumers while the up-side benefits are kept by the generator. The existing regulations state that "in case actual generation from a hydro generating station is less than the design energy for a continuous period of four years on account of hydrology factor, the generating station shall approach the Central Electricity Authority with relevant hydrology data for revision of design energy of the station." It will be useful to know how many hydropower projects have had to approach the CEA in this regard in the last control period and what actions have been taken by the CEA and/or the CERC in these matters, if any.
- 5. **Review of delayed capacity**: With the power sector amid an energy transition and there being strong mandates for quick and ambitious renewable energy capacity addition, a

detailed review of delayed thermal and hydropower projects becomes crucial. As a sector, we may need some amount of new thermal or hydropower capacity, but it is very important to ask who is willing to pay for it and whether the said resource will be available and dispatchable when needed. It is not just hydropower projects that have been delayed, but there are several thermal projects, including those being constructed by NTPC, which have been delayed significantly. Given the changes in the demand supply scenarios of the states, it cannot be assumed that they will be always willing to buy this power whenever the projects get commissioned eventually.

Being the central sector regulator, the CERC needs to institutionalise a process to review the delayed/stranded thermal and hydro capacity and to undertake its cost-benefit analysis. There needs to be an undertaking from the concerned discoms regarding their willingness to buy this power after accounting for the delays and cost-overruns, in the absence of which such projects should be scrapped. Considering the high likelihood of the discoms terminating such excessively high-cost contracts in future, it would be highly imprudent to push for them without an explicit undertaking from the concerned beneficiaries. Presently, there is no mechanism to check the need or cost effectiveness of such projects till they either become fait accompli or non-performing assets. The CERC must step-in to fill this regulatory lacuna and prevent such NPAs.

We request the Commission to accept this submission on record and to allow us to make further submissions on this matter, if necessary.

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