

Comments and Suggestions on the Draft Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

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20th February 2024

The Central Electricity Regulatory Commission (CERC) has sought comments and suggestions from the public on its Draft Terms and Conditions of Tariff Regulations, 2024. In response to that solicitation, we are submitting the following comments.

Purpose and intent: In the draft regulations, CERC has rightly signalled its intention to balance investor and consumer interests. However, we find that on some issues, the draft regulations seem to be more protective of investor and generator interests. In our submission we highlight such areas where consumer interests have been neglected. We hope that our comments will result in a more balanced and just approach without compromising the governance of the tariff-setting process.

Proposed Approach to Calculate Fixed Costs

1. **Use of Gross Equity to Calculate Return is incorrect:** The draft regulations continue to use a Gross Fixed Assets (GFA) based approach stating that it is important for attracting investments in the sector. They allow repayment of loans in the first 15 years and deem the annual repayments equivalent to the annual depreciation charges. Thus, at the end of 15 years, the net assets consist of equity only, and they equal 30 per cent of the original investment assuming a debt/equity ratio of 70/30. From the 16th year onwards, the draft regulations say that the return on equity will be calculated on the original value of equity which is 30 per cent of the original investment. The useful life of a thermal power plant is only 25 years, but many plants run for a much longer period. If the generator continues to collect a return on the entire equity that was invested at the beginning, he will make huge profits at the expense of consumers.
2. **Return should be given only on net equity:** For the first 15 years, depreciation should match loan repayments. At the end of the 15th year, when the loan is completely paid off, only equity will remain. For the remaining life of the plant (another 10 years for a coal plant), straight-line depreciation of the equity can be used and the annual return should be calculated on the remaining (net) equity in that year. The use of net equity to calculate the return is the conceptually correct approach for the following reasons.
 - a. Return on investment has two components: the return of and return on the investment. Return **of** the investment is covered by depreciation. (Depreciation is a charge that consumers pay. Total depreciation at the end of the life of the plant is equal to the initial investment.) Return **on** the investment at any time should be calculated on the remaining investment in the plant.
 - b. Depreciation accounting and calculation of return should be consistent. If the asset base on which the return is calculated is higher than the net assets (initial investment less accrued depreciation), then the generator gains at the expense of consumers. GFA, as proposed in the draft regulations, forces consumers to pay a return on an investment already charged to operating costs as depreciation charges, effectively charging consumers twice.
 - c. Using GFA is equivalent to the case where someone takes a loan from a bank, makes regular payments to return the principal, yet is required to pay interest on the total initial amount of the loan until the end of the period of the loan. Such an arrangement would be patently unfair and similarly, the use of GFA is unfair to consumers.
3. **CERC's Reasons for Proposing the GFA Approach Not Convincing:** The explanatory memorandum accompanying the draft regulations provides two main reasons for continuing the GFA-based approach. They include GFA providing internal resources for capacity replacement or addition, and increasing investor confidence. CERC bases the need to increase investor

¹These 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.

confidence on the recent spikes in the electricity prices at power exchanges signalling a power shortage. We submit that both these reasons do not stand detailed scrutiny for the following reasons:

- a. Regarding resources for capacity replacement or addition: One of the reasons given is that GFA can provide internal resources for capacity replacement or addition. We would like to point out that the amounts deposited in the depreciation account, even they if not getting returns from customers, are invested by the plant owner and earn a return. In other words, even with the NFA approach, internal resources can, and are, generated by power plant owners that should be more than adequate to meet the financial needs for replacement and addition of capacity.
 - b. About return on equity allowed to generating companies, a report of the Forum of Regulators (FOR) on “Analysis of Factors Impacting Retail Tariff And Measures To Address Them” notes as follows:
Return on equity allowed to Generation / Transmission and distribution companies needs to be made more realistic and at par with interest rates (emphasis added)
 - c. No shortage of capacity in the pipeline: According to the National Electricity Plan notified by the CEA on 31st May 2023, thermal capacity of around 27 GW and large hydro capacity of about 11 GW is currently under construction. Additionally, 31 GW of thermal capacity and 9 GW of large hydro capacity is in the pipeline and is expected to be commissioned during 2022-32. Given the highly ambitious renewable energy capacity addition targets as well as the targets for pumped storage hydro capacity, it seems unlikely that such a large quantum of thermal and large hydro capacity will be needed. In any case, there seems to be no paucity of funds or projects in the pipeline and hence this reason too does not hold ground.
4. Our submission:
- a. We submit that the Gross Fixed Asset based (GFA) approach should be replaced by the Net Fixed Asset (NFA) based approach since the use of NFA is a conceptually correct and fair approach.
 - b. As pointed out earlier, the power plant owners can, and do, invest funds in the depreciation account resulting in amounts that can fund replacement capacity and additional capacity that may be needed.
 - c. The existing return of 15.5% is itself too high for power plants with the level of associated risk and needs to be made more realistic and at par with interest rates as suggested by the FOR as well. If the CERC still thinks that a return higher than 15.5% is required, it should initiate a separate proceeding on the issue so that any increase in the rate of return is decided to in a transparent manner.
 - d. There are sufficient incentives for capacity addition, as seen by the new power plants in the pipeline.
 - e. On the issue of GFA vs NFA, the Commission should decide on the merits of the case and not rely solely on the view of stakeholders which are likely to be influenced by their respective expected benefits.

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 the 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 supplying as per the PPA agreed terms and conditions. This can be done in the following ways:

5. **Regulation 17(2) and the Discom’s First Right of Refusal**: Regulation 17(2) of the 2019 MYT Regulations which dealt with ‘*Special Provisions for Tariff for Thermal Generating Stations which have Completed 25 Years of Operation from Date of Commercial Operation*’ had a provision that allowed the beneficiaries, i.e., the discoms to exercise **First Right of Refusal** before the generating company was free to sell the electricity generated from such a station to any third

parties. The proposed draft regulations have done away with this second part of Regulation 17 which allowed the discoms their first right of refusal.

- a. **Regulatory certainty for Distribution companies (Discoms):** One of the tenets of the tariff regulations as has been repeatedly cited by the Commission is to ensure regulatory certainty. This is indeed a critical role and function of the regulator. However, the certainty should not be only for the generators and the investors alone. It is equally important to provide certainty to all the stakeholders, including the distribution companies and the electricity customers.
- b. **Against natural justice:** The modified regulation goes against the principles of natural justice. The consumers of a discom pay for a generation asset right from its inception, including the delay in its commissioning (which on average is 6-8 years for new thermal plants and 10-12 years for new large hydro plants), plus all the additional capitalisation and repair and maintenance throughout its useful life. Considering the discussion above on GFA versus NFA, under the current regulatory regime the project proponent is also allowed to create higher internal resources by accounting strategies such as the GFA and a higher than warranted rate of return at the cost of the discom's consumers. In addition, the consumers must pay for fuel-procurement-related inefficiencies of the generator in the form of coal imports. After having paid for all these expenses over the life of the asset, it is highly unfair to let the generator or any other entity decide how such a fully depreciated capacity should be utilised. The principles of natural justice dictate that the discom and its consumers should have the first right of refusal and only after they have exercised it can the CERC or any other appropriate agency take decisions in this regard.
- c. **Order in Petition No. 60/MP/2021 and 65/MP/2021:** It is important to remember that the CERC has itself very clearly spelt out its views in this matter in its order concerning Petition No. 60/MP/2021 and 65/MP/2021. The cases deal with petitions filed by BSES Yamuna Power Ltd (Petition No. 60/MP/2021) and BSES Rajdhani Power Ltd (Petition No. 65/MP/2021), regarding disputes with NTPC about the supply of power from the Dadri-I generating station. The petitions were filed under Sections 60, 61, 79(1)(f), 86(1)(e) and Section 29(5) of the Electricity Act, 2003 read with Regulation 17 of the CERC (Terms and Conditions of Tariff) Regulations, 2019. Since the Commission has so eloquently put forth its thought and intent behind introducing Regulation 17(2) in this order, it is worth reproducing certain passages of the said order here to make the intent of the Commission in 2019 clear:

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22. NTPC has submitted that Regulation 17 is an option provided to a generating company and that if the generating company does not provide an arrangement, provisions of this Regulation cannot be triggered. We note that Regulation 17(1) provides that "the generating company and the beneficiary may agree on an arrangement" in respect of generating stations that have completed 25 years and, therefore, it would be incorrect to say that the option to propose an agreement under 17(1) vests only with the generating company. In fact, the regulation requires both the generating company and beneficiaries to agree on an arrangement beyond 25 years of useful life. In such cases, either party is entitled to initiate the process of reaching an arrangement and the other party has to either agree or disagree to the proposed arrangement. In case of agreement, the arrangement is made and in case of disagreement, the arrangement does not materialise. In the present case, the beneficiaries initiated the process by writing to NTPC to work on an arrangement in terms of Regulation 17(1) of the 2019 Tariff Regulations, but NTPC did not respond and consequently, the arrangement envisaged under the said regulation did not materialise. Therefore, the contention of NTPC that Regulation 17 vests a discretion in the generating company only to initiate the process of reaching an arrangement cannot be countenanced.

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35. *The question that arises for consideration of the Commission is whether the “first right of refusal” mentioned in the first line of Regulation 17(2) can be exercised only if there is no existing arrangement between the parties or it can even be exercised de hors any PPA between the parties. **We note that neither Regulation 17(1) nor Regulation 17(2) provides for or depends upon any pre-existing agreement between parties for its provisions to kick in. It simply requires that the generating station should have completed 25 years of operation from its COD.***

... (Emphasis added)

- d. **Need to avoid unnecessary legal confusion:** Regulation 17 is a special provision dealing with generating assets that completed their useful life. It was introduced in 2019 and as highlighted above, the Commission through its order dated 1st July 2021, has laid out the complete regulatory scheme for introducing such a regulation. The order has been challenged by NTPC and the matter is pending before the APTEL. Under such circumstances, if the Commission now suddenly changes its stance, it would not only send very wrong signals for regulatory certainty but also create unnecessary and avoidable legal confusion.
 - e. **Our submission:** To ensure due compliance with the principles of natural justice, provide regulatory certainty to distribution companies and consumers, and avoid unnecessary legal confusion, the provisions of Regulation 17(2) should be retained as they were in the Terms and Conditions of Tariff Regulations notified in 2019.
6. **Regulation 64(4) Computation of Energy Charge for Thermal Power Plants:** This clause states that allows the use of an alternative source of fuel supply by coal-based thermal generating stations. More specifically, it permits the generating station to use an alternative source of fuel supply such as imported coal, up to a maximum of 6% blending by weight. 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. We submit that such a provision is unnecessary and harmful for the following reasons.
- f. As pointed out by TANGEDCO in its submission during the public hearing, as per the Ministry of Power circular dated 25.10.2023, blending at 6% by weight is allowed only upto March 2024. The Ministry is not forecasting a long-term fuel shortage scenario. In the absence of such a forecast, a blanket provision as proposed in the draft regulations which is applicable for the entire tariff period can potentially impose a huge financial burden on the end users.
 - g. The provision makes it possible for the generator to not make efforts to source domestic coal from CIL to the maximum extent possible. Instead, the generator may simply choose to procure coal from an alternate source such as imports or e-auction (both of which are far more expensive than coal supplied by CIL under linkage FSA). Since no prior approval is required for such high-cost fuel purchases, it would be difficult for the beneficiary to monitor such transactions and/or to evaluate their prudence. It would be simply forced to bear the excess price of such procurement.
 - h. Most important, it dilutes CIL’s responsibility of ensuring minimum coal supply that it is mandated to be provided as per the amended fuel policies. Given the lack of transparency in coal requisitioning, supply, and allocation of coal shortage amongst the various coal consumers, such a provision creates various gaming possibilities and potential neglect of coal requirements of plants regulated under Section 62 by the coal suppliers.
 - i. **Our Submission:** Considering the serious issues highlighted above, we submit that the **proposed provisions under Regulation 64(4)** allowing blanket approval for sourcing of alternate fuel upto 6% blending by weight **should be removed**. In case of fuel shortages in future, if any, if the Ministry of Power issues directions to the CERC to allow the generators to use imported coal, the same can be done only for a limited period by using the provisions of Regulation 103 which grants the Commission the power to issue

suo moto orders and practice directions, as needed. The Commission must use such powers judiciously and sparingly. In any event, the beneficiary who is paying for the power should always be informed about changes in the prices and should have the right of refusal, if the price is going to increase beyond a certain threshold.

7. **Regulation 60(1)(2) Gross Calorific Value of Primary Fuel:** Like the 2019 Terms and Conditions of Tariff Regulations, the proposed draft regulations also have very useful and commendable provisions which require the generating companies to publish and maintain 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 past and recent coal shortages and the impact of coal imports on consumer tariffs, compliance with this requirement is crucial, but unfortunately, it is not being followed. The Commission should take serious note of such non-compliance and put in place appropriate measures to ensure compliance. Penalties for non-compliance need to be considered to ensure timely disclosure of information.
8. **Analysis of the effectiveness of hydropower-related regulatory measures:** The last two decades have seen a slew of policy changes, tax reductions, and relaxation of various norms and requirements, along with regulatory certainty of cost recovery and a high fixed rate of return on investment for large hydropower projects. Despite this, there have been repeated financial restructurings and bailouts, and very little capacity addition. One would imagine that such results would lead to serious regulatory and policy rethinking. There needs to be a thorough analysis of why all these measures have failed to achieve their stated objectives. 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. Being the sector regulator the CERC is best positioned to undertake such analysis and provide data and insights into this issue.
9. **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 large hydropower projects becomes crucial. The power sector 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, 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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