

**BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION
3RD AND 4TH FLOOR, CHANDRALOK BUILDING,
36, JANPATH, NEW DELHI - 110 001**

IN THE MATTER OF:

Comments/suggestions on “Draft Central Electricity Regulatory Commission
(Terms and Conditions of Tariff)(First Amendment) Regulations, 2020”.

SUBMISSIONS OF PRAYAS (ENERGY GROUP), Pune

1. The CERC vide public notice dated 1.4.2020 has invited comments and suggestions from all stakeholders on the “Draft Central Electricity Regulatory Commission (Terms and Conditions of Tariff)(First Amendment) Regulations, 2020”.
2. The present submission is in response to the said notice and the draft regulations published thereunder. We request the Commission to accept this submission on record.

Comments and Suggestions

3. The proposed regulations only account for installation or upgrade of specific technology options (such as ESP, FGD, SCR, etc.) to enable adherence to the norms prescribed by the Environment (Protection) Amendment Rules, 2015 and any revisions since. It does not account for adherence to the norms via other avenues. For instance, it may be possible that, for some units, procuring better quality coal may be sufficient to meet the norms, and may be the least cost way to do so though it may increase the variable cost of those units. The Commission should also allow for such avenues of adherence to the norms.
4. Supplementary charges and normative parameters:
 - 4.1. At various places, the proposed draft regulations mention the allowance and approval of expenditure incurred due to installation/upgradation of emission control systems (ECS) after due prudence check and lays out the procedure for it. For example, paragraphs 8, 11, 21 and 23, among others, refer to approval of expenditure and relaxation of operational norms as a result of installation of ECS. However, such approvals should be subject to another constraint, namely that they should be approved only if the ECS has been installed and operational before the deadline for compliance with the norms for the particular plant or unit, as published by the Central Electricity Authority (CEA).
 - 4.2. Further, while approving only prudent supplementary costs, the CERC must ensure that ECS related costs that are passed on are incurred due to actual operation, especially with regard to incremental operating costs. Toward this end, it is proposed that the ECS related capacity charge and energy charge should be paid to the generating plants only if the said plant can produce a

certificate issued by the appropriate Pollution Control Board, validating that the environmental norms were complied with, for a minimum threshold duration, say 95%, of the period that the plant was operational. Suggestions 4.1 and 4.2 of our submission together will ensure that the cost and performance approvals granted by the Commission actually serve the purpose of meeting the objectives of the norms announced by the MoEFCC.

- 4.3. The amendments proposed to Regulation 49 of the Principal regulations introduces norms for auxiliary consumption and consumption of reagent on account of ECS, and the Commission is required to approve any deviation of these normative parameters. As stated in paragraph 4.2 of this submission, the CERC could further hold generating stations accountable for actually using the installed ECS by approving the additional consumption subject to producing a certificate issued by the appropriate Pollution Control Board, validating that the environmental norms were complied with, for a minimum threshold duration, say 95%, of the period that the plant was operational.
- 4.4. Owing to insufficient data, the quantification of operation and maintenance expenses on account of emission control systems in coal or lignite based thermal generating station is difficult. The Commission, as per the proposed amendment of Regulation 35 of the Principal regulations, set the norm at 2% of the admitted capital expenditure (excluding IDC & IEDC) as on the date of its operation. It must be clarified that this norm is set as **2% of admitted capital expenditure for the ECS (excluding IDC & IEDC)**. Further it should be clarified that this approach shall be valid only until the normative impact of operation and maintenance expense is calculated based on adequate data in due course.
5. As per Clause(1)(a) of Regulation 34 of the Principal regulations, the working capital for coal-based/lignite-fired thermal generating stations includes the cost of limestone, if applicable, for ten days for pit-head generating stations and twenty days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity, whichever is lower. The proposed amendment to Regulation 34 introduces Clause (1)(aa) which states that the working capital for ECS of coal-based/lignite-fired thermal generating stations also includes the cost of limestone or reagent towards stock for 20 days corresponding to the normative annual plant availability factor. The Commission should clarify whether, and if so why, the cost of limestone/reagent is accounted for twice in the working capital cost of thermal generating plants.
6. The proposed amendment of Regulation 30 of the Principal regulations, pertains to return of equity with regard to additional capitalisation due to ECS. In order to avoid ambiguity, it is suggested that the Clause (3) of Regulation 30 should read
“(3) The return on equity in respect of additional capitalization due to emission control system shall be computed at the weighted average rate of interest on actual loan portfolio for the ECS of the generating station or in the absence of actual loan portfolio for the ECS of the generating station, the weighted

average rate of interest of the generating company as a whole shall be considered;”

7. With regard to the proposed amendment 26.2, we suggest that note 3 under Form 15 should read *“3. Details to be provided for each type of coal, i.e., Domestic, Imported, and E-auction separately.”*
8. As per the draft regulations and its appendices, currently ECS systems are in the pilot stage or under implementation. The operation norms are worked out by the Central Electricity Authority based on inputs from utilities and original equipment manufacturers. Given that such a repository of data regarding ECS is under compilation, the Commission could consider developing a benchmarking framework for ECS and other solutions to ensure adherence to the revised emission norms. It can provide indicative solution and technology options to thermal generating stations, with the related cost ranges for them for different combinations of all the relevant parameters. Comprehensive benchmarking would also be tremendously useful to the Commission in its approval process by making it much less tedious and onerous. Additionally, the regulatory certainty provided by such a benchmarking exercise can spur the investment required to install ECS and make financing it easier. Such an undertaking would ensure efficiency and transparency in the adoption and utilisation of ECS.
9. We once again request the Commission to accept this submission on record and to allow us to make further submissions in this matter, if any.

Ashok Sreenivas and Maria Chirayil
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PLACE: Pune
DATE: 30th April 2020