Comments and suggestions on CERC Staff Paper on: Mechanism for Compensation for Competitively Bid Thermal Generating Stations for Change in Law on account of Compliance of the Revised Emission Standards of the Ministry of Environment, Forest and Climate Change, Government of India (MoEF&CC)

Prayas (Energy Group) *1st October 2020*

Central Electricity Regulatory Commission (CERC or the Commission) published a staff paper on 'Mechanism for Compensation for Competitively Bid Thermal Generating Stations for Change in Law on account of Compliance of the Revised Emission Standards of the Ministry of Environment, Forest and Climate Change, Government of India (MoEF&CC)' on the 5th of September 2020, and invited public comments on the same.

The CERC, in its staff paper, has proposed several progressive provisions. For instance, in section 4 (A) (a) of the staff paper, the useful life of the Emission Control System (ECS) has been considered as 25 years, irrespective of the duration of associated Power Purchase Agreements (PPA) or remaining life of the station. This consideration is in line with other major generating station equipment, and ensures that ECS will have a useful life at least as long as that of the generating station. This section further states, in para 4.6, that the procurer is liable to pay compensation for Change in Law on account of installation of ECS only for the duration of its contract, and for contracted capacity on a pro rata basis. This provision safeguards procurers from unjustified expenditure on compensation due to ECS beyond the pre-existing contract period.

Further, in section 4 (A) (b), it is proposed that the additional capital expenditure due to ECS installation is to be serviced fully by debt, at either the weighted average rate of interest of loans raised by the generator or at the marginal cost of lending rate of SBI plus 350 basis points. Such a compensation mechanism does not allow for profits. This is a step in the right direction, as this mechanism is applicable to Change in Law cases, where compensation is based on the principle of restitution.

Provisions such as the above are progressive, and integral to the effective roll out of the compensation mechanism to be undertaken for generating stations covered under Section 63 of the E-Act 2003, on account of compliance to the revised emission norms. Prayas (Energy Group) supports these provisions because they also benefit electricity consumers.

In addition to this, Prayas (Energy Group) has some comments and suggestions toward the implementation of the proposed compensation mechanism, which are listed below:

1. Compensation subject to timely adherence:

The staff paper discusses the computation of additional capital expenditure incurred by the generating station on account of adherence to the revised environmental norms, in Section 4 (A). As per this, such expenditure is to be serviced by an increase in monthly tariff spread over the useful life of the ECS in the form of supplementary capacity charge. However, such adherence to the revised environmental norms should not be deferred or delayed by generating stations. The Commission must ensure that generating stations are compliant with environmental norms as per the schedule prescribed by the Central Electricity Authority, and within the deadline set by the MOEFCC.

Toward this end, the staff paper should include a provision by which any additional capacity charge incurred by the generating station on account of compliance to the revised emission norms beyond the deadline set by the MOEFCC (currently 31st Dec 2022) is disallowed.

2. Compensation subject to operation of ECS:

Section 5 (C) of the staff paper, discusses the procedure of payment of monthly supplementary capacity and energy charges, and states the following:

"5.4. PPAs already have a procedure for payment of Bills and there is no need to devise any separate procedure for the purpose of payment of monthly Supplementary Capacity Charges and monthly Supplementary Energy Charges. The generating company may raise the Bill for payment <u>on account of operation of ECS</u> in the same manner as any other bill provided in the PPA and such Bill shall be paid by the procurer(s). Provisions related to Due Date, Rebate, Late Payment Surcharge etc. will be as provided in the PPAs." [<u>Emphasis added</u>]

It is understood that while approving only prudent supplementary costs, the CERC must ensure that ECS related costs that are passed on are incurred due to actual operation, as opposed to only installation, of ECS. The compensation due to Change in Law can only applicable if the revised emission norms are met, and not merely by installation of the ECS.

Toward this end, it is proposed that the ECS related supplementary capacity and energy charge should be paid to the generating station only if the said station produces 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 and required to meet the norms.

3. Applicability of the compensation mechanism:

In para 1.7, the staff paper discusses conditions under which generating stations can find the compensation mechanism applicable to them.

In addition, the staff paper should explicitly state that such compensation is applicable only to competitively bid generating stations for which:

- The Environment Clearance granted to the station does not already mandate the installation of ECS
- Cut-off date of the generating station's Power Purchase Agreement is before 7th December 2017

This will ensure that the compensation mechanism is in line with the direction issued by the Ministry of Power to the CERC on 30th May 2018, which includes:

"5. After considering all aspects with due regard to the need for safeguards against environmental hazards, and accordingly to ensure timely implementation of new environment norms, the Central Government has decided that:

5.1 <u>The MOEFCC Notification requiring compliance of Environment (Protection) Amendment Rules, 2015 dated 7th December, 2015 is of the nature of Change in Law event except in following cases:</u>

<u>a) Power Purchase Agreements of such TPPs whose tariff is determined under Section 63 of the Electricity Act, 2003 having bid deadline on or after 7th December, 2015; or</u>

b) TPPs where such requirement of pollutions control system was mandated under the environment clearance of the plant or envisaged otherwise before the notification of amendment rules;" [Emphasis added]

4. Alternative methods to meet the revised environmental norms:

The proposed mechanism for compensation only accounts 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. The Commission, vide order in Petition No. 446/MP/2019 dated 23rd April 2019, issued direction to its staff as follows:

"*41. Therefore we direct staff of the Commission to float a staff paper at the earliest on the issue of compensation mechanism and tariff implications on account of the 2015 Notification in case of those thermal power plants where the PPA does not have explicit provision for compensation mechanism during the operation period and the PPA requires the Commission to devise such mechanism, inviting comments from all the stakeholders." [Emphasis added]*

As is seen, the Commission addresses the issue of compensation and tariff implication on account of adherence to the revised environmental norms, which could include adherence to the norms via avenues other than ECS installation. 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. While this may not result in additional capital expenditure, it may increase the variable cost of those units.

The Commission should allow for such avenues, and the compensation mechanisms proposed in the staff paper should also apply to increase in costs on account of these alternate methods to meet the revised environmental norms.

5. Lack of clarity regarding additional interest on working capital:

Section 4 (B)(b) on additional interest on working capital mentions the components of working capital, which includes the cost of limestone/reagent stock, operation and maintenance expenses for one month, and receivables equivalent to 45 days of supplementary capacity and energy charge. However, the staff paper does not discuss the basis of approval of the additional interest on working capital and the parameters that constitute it.

The staff paper should clarify whether the approval of the components of the working capital requirement are based on pre-set normative parameters, or if they are based on actuals submitted by the generating stations, subject to prudence checks.

6. Other comments:

- Footnote 6 of the staff paper reads as follows *"[For every cumulative increase/decrease of each Rupees Fifty crores (Rs. 12.50 crores) in the Capital Cost over….".* It should, instead, read *"[For every cumulative increase/decrease of each Rupees Twelve and a half crores (Rs. 12.50 crores) in the Capital Cost over…."*

- Section 5 (A), para 5.1 proposes formulae for supplementary annual capacity charges, which includes: $SACC_{(PPAi)} = SACC \times [CC_{(revised2)} / (IC\ X(1-AUX_{Total}))]$
  However, the formula should read: $SACC_{(PPAi)} = SACC \times [CC_{(revised\ i)} / (IC\ X(1-AUX_{Total}))]$

- In Annexure-I 2, regarding the norms for consumption of reagent, the staff paper discusses the use of sulphur content in percentage (S) and Limestone Purity in percentage (LP) in the calculation of specific limestone consumption for various ECS technology. These parameters can vary widely subject to source, type, treatments, etc. Since calculation of such normative parameters is not a recurring task, and in order to confirm the dependability of these parameters, the Commission must ensure that the values for S and LP are decided based on independent validation, through methods such as third party sampling.

The above suggestions would clarify and strengthen the proposed compensation mechanism for competitively bid generating stations, while also holding them accountable to compliance with the revised environmental norms. Thus, action in this regard would be beneficial to all stakeholders.

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