



**Maharashtra State Electricity Distribution Co. Ltd.**

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**Ref. No. MSEDCL/CERC/ 16221**

**DATE: 05.10.2020**

To  
The Secretary,  
Central Electricity Regulatory Commission,  
3<sup>rd</sup> & 4<sup>th</sup> Floor, Chandralok Building,  
36, Janpath, New Delhi -110 001.

**Subject: Submission of comments /suggestions /objections on ‘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)’.**

**Reference:** Public Notice No. EN-(01)/8/2020-CERC by Hon’ble CERC dated 5th September’ 2020

Respected Sir,

This is in reference to public notice issued by Hon’ble CERC on Staff paper on Mechanism for Compensation for Competitively bid thermal generation stations on account of change in law for compliance of Revised Emission Standards notified by MoEF&CC. MSEDCL welcomes the initiative by Hon’ble CERC to devise a standard mechanism for compensation to avoid ambiguity and disputes among parties. However, there are still some issues which need to be addressed MSEDCL is hereby submitting the comments/ suggestions on some of proposed draft regulations, which are highlighted as under.

**1. Capital cost benchmarking and technology assessment**

It is request to Hon’ble Commission should formulate a benchmark capital cost for Emission Control Systems (ECS) compliance considering suggestions from CEA and on the basis of balance or expected useful life of plant, capacity of the plant, location i.e. costal base or non-costal etc. The Hon’ble Commission is well aware that the capital cost can vary with factors such as economies of scale, and technologies. It is submitted that cost of ECS should be planned by generators based on the balance life of plant and accordingly select the available technologies in the market based on cost economics (effective cost per mw). Hence it is requested to Hon’ble Commission to also fix the technology (wet limestone based FGD or dry limestone based FGD or sea water based FGD etc.), else generators may come up with different solutions and it would affect the Capital cost. The Capital cost should be benchmarked for each of the technology at various scales, to serve as a ceiling capital cost.

**2. Measures to mitigate the financial impact to the overall power sector value chain**

The ECS installations are to be installed to comply with the emission norms notified by Ministry of Environment, Forest and Climate Change, Government of India (MoEF&CC). There have been multiple mechanisms such as Clean Energy Cess on coal collected by Govt and Environmental Fund with thermal Generators as mandated by MoEF under which cess/payments are being collected by Govt. or with thermal Generators which are indirectly paid by distribution licensees by way of energy charges in quoted tariff or change in law payments to generators. The very purpose of these funds/cess/taxation are to finance clean environment initiatives. The ECS installation is for the purpose of reducing the emissions and is a clean environment initiative. Hence, there shall be an opportunity provided to generating companies to utilize the environment funds which is collected by way of sell of ash or mandatory allocation as per MoEF regulations or other means. Further the Govt. has collected the considerable amount of clean energy cess. The CESS which was Rs. 50/- per tonne of coal in year 2010 has increased by @ 9 times to Rs. 440/- and is presently @ 400/- since 2016. From FY 2010 to FY 2018, CESS equivalent to ~Rs. 86,440 Crore has been collected (Department of Expenditure, 2018) and this is equivalent to creation of ECS systems for approximately ~2,16,000 MW of thermal capacity considering ~0.40 Crore/MW.

MSEDCL alone has made the payment of about Rs. 2,590 Crs in one year indirectly by way of tariff for the additional cost towards coal cess. Considering the current cess of Rs. 400/MT which is prevailing from 2016, MSEDCL payments towards such compensation over last 4 years amounts to ~Rs. 10,361 crs. This would alone be sufficient for installation ECS for ~25,000 MW thermal stations, without even considering the future cash flows of coal CESS. It is seen during last few months how bad financial situation of distribution licensees is turning into. Hon'ble CERC has acknowledged the grave situation of licensees faced during the COVID-19 period and given some relaxations such as reduced late payment surcharge. Any additional burdens to distribution licensees will further deteriorate the financial situation of distribution companies and ultimately leads to abnormally high tariffs for electricity consumers.

Hence, it is suggested that the amount recovered through cess and environmental funds to be utilised for funding ECS installations which is ultimately being getting recovered through green energy cess even today. Otherwise, it would lead to double penalty/cess for the same issue i.e. emissions by way of CESS and FGD costs. Only one should prevail on the basis of principles of natural justice.

Moreover, going forward, such cess should be reduced in proportion to the emissions reduced and savings of that mechanism shall be passed on to the procurers /distribution licensees.

Existing environmental related funds by sale of fly ash and by products should be exhausted first for expenditure towards ECS installations and only the remaining capital costs are to be claimed under this mechanism.

Based on the wet/ dry scrubbing technologies using different reagents different by-products will be generated. There is no mention about such by products (Sodium bi carbonate, Sodium sulfate, Ammonium sulfate {fertilizer} etc) and income through sale of such by products. Such revenue should be adjusted periodically in the supplementary energy charges through proper disclosure and certified documents.

Further, it is also suggested that in future, if there are any schemes at Central/ State/ International level where credits/concessions are available due to reduction of carbon footprints/ emissions, the generator has to mandatorily participate in the scheme and take the benefit of the same. Such benefits/ gains have to be compulsorily and in a transparent manner passed on to the Discoms.

Hon'ble Commission is well aware of the fact that the change in law event on account of installations of ECS equipment would result in severe financial impact to the procurers i.e. distribution licensees through increased tariffs, decreased contracted capacities would ultimately be paid by the electricity consumers across all States of India by way of increased tariffs. It is submitted that Discoms are already reeling under severe financial stress due to Covid-19. The collections from consumers have reduced to 50%. Hence, all the opportunities and options to compensate the expenditure for installation of ECS should be explored and exhausted before passing on the burden to the distribution licensees / consumers.

### **3. Additional O&M Charges and escalation**

Additional Operations & Maintenance charges are proposed to be allowed at 2% of the admitted capital cost for installation of FGD (excluding IDC & IEDC) in the first year and further escalated @ 3.5% on the first year O&M rate. It is submitted that escalation of 3.5% per annum is proposed by Hon'ble Commission without sufficient rationale. Before proposing such charges, it is required to look into multiple aspects of ECS such as requirements for O&M, frequency of O&M, type of operation (static or rotating parts etc.). The 'Emission Control Systems (ECS)' equipment proposed to be installed will be completely new equipment and proposed escalation of 3.5% p.a. appears to be higher. Creation of such higher benchmarks would give undue benefits to generators. It is welcoming that Hon'ble Commission has proposed a review of O&M charges based on actual O&M expenses. Till such time, it is requested that Hon'ble Commission allows only 1% O&M charges for the first year on the admitted cost of capital of ECS and subsequently escalate the same at rate of 2%. Post review of actual expenses, the Commission should fix a ceiling for O&M charges.

### **4. Interest and Interest on working capital**

Hon'ble Commission has proposed O&M expenses in respect of emission control system for one month and maintenance spares @20% of operation and maintenance expenses in respect of emission control system amongst others for the purpose of computing working capital. Hon'ble Commission has proposed such higher O&M expenses without having any historical operational data for such requirements. While MSEDCL is of the view that the O&M charges can be allowed to the extent of monthly proportion i.e. 8.3% remaining 11.7% for the purpose of spares is unjustified for the ECS equipment being new and without having information on whether such spares are really required. Hon'ble Commission is well aware of the fact that the change in law event on account of installations of ECS equipment would result in severe financial impact to the procurers i.e. distribution licensees and their consumers. Hence, any additional cost should only be allowed only after thorough review on quantum and necessity.

Hon'ble Commission has considered an interest rate of Marginal Cost of Lending Rate (MCLR) of State Bank of India (for one-year tenor) plus 350 basis points, as on 1st April of the year in which emission control system is put into operation as a benchmark for ceiling of the interest rate. MSEDCL requests Hon'ble Commission to consider only 150 basis points on and above the Marginal Cost of Lending Rate of State Bank of India (for one-year tenor). Over the last few years, MCLR rate of SBI has been reducing consistently. The MCLR (for one-year tenor) of SBI is 9.20%, 8.00%, 8.15%, 8.50%, 7.40%, and 7.00% as on 1st April 2016, 1st April 2017, 1st April 2018, 10th April 2019, 10th April 2020, and 10th September 2020 (latest) respectively. This trend has been downward and it is expected to fall go down further considering the trend. This reflects that the rates of interest are going down and using floating rate of interest shall help the generators. And necessity of more additional basis points is not justified. Hence actual rate of Interest on working capital or benchmark rate whichever is lower should be allowed.

### **5. Commercial terms of reagents**

Hon'ble Commission needs to specify the norms for permissible weighted average landed price of reagent for ECS (in Rs/Kg). It is suggested to Hon'ble Commission to devise a mechanism similar to that of variable / transportation escalation index of coal, so as to properly compensate both positive side or negative side variations in reagent cost. The payments towards reagents can be made using such indexation/price reference and there should be an annual reconciliation exercise to compensation or any under/over payments based on the actual expenses. The Commission is also requested to specify technical specifications if any for reagents for ECS.

The Commission should also provide provisions/guidelines for signing reagent supply agreements on the lines of Fuel Supply Agreements, with standard clauses such as indexation to ensure common practices across industry which promotes transparency and uniformity.

Hon'ble Commission should also direct the generators to have long term reagent supply agreements for reagents such as lime stone on the lines of fuel supply agreements. It would serve both purposes of secured supply for long term and mitigated risk against the fluctuations.

The basis of consideration of the various standards used in the formulation of normative consumption of the reagents such as % purity, specific reagent consumption etc. is ambiguous and the Hon'ble Commission needs to support them with scientific substantiation along with operation data, if any.

## **6. Consultation with stakeholders**

Though the proposed ECS equipment will be funded by the generators to procure and install, energy procurers i.e. distribution companies and its consumers are the parties who need to bear the cost of this ultimately through tariff based on the mechanism suggested by Hon'ble Commission. However, it is seen that the procurers are having limited role in the entire process of finalizing technology, installation and the compensation mechanism. It is requested to Hon'ble Commission to propose mandatory consultation by the generators with the procurers with a detailed techno-commercial report and cost-benefit analysis of the various options available under ECS before finalising the proposal and submitting applications to Commission. The technology/ vendors should be finalised based on parameters such as plant remaining life, PPA term, and equipment life, in consultation with the procurers.

## **7. Mechanism to monitor ECS working**

MSEDCL welcomes Hon'ble Commissions direction that the supplementary capacity charges shall not be payable for such period in which ECS is not under operation but the generating station is in operation, at any period of time, for any reason whatsoever based on instruction of CPCB or SPCB, Regional Load Despatch Centre or State Load Despatch Centre. However, for accounting the same, there shall be proper monitoring mechanism and it should be on a verifiable basis unlike the monthly undertakings/ format submitted by generators.

## **8. Payment of Supplementary Energy Charge Rate (SECR)**

Hon'ble Commission has proposed that the supplementary energy charges recoverable during a month shall be arrived at by multiplying the energy scheduled by a procurer during the month with SECR. MSEDCL requests Hon'ble Commission to consider only actual energy generated instead of scheduled energy considering that the additional variable cost incurred would be related to actual generation and not the scheduled generation.

## **9. Additional auxiliary consumption on account of ECS**

It is observed from the staff paper that increased auxiliary consumption on account of ECS installation is leading to decrease in contracted capacity which leads to increase of all the four components of tariff. Hon'ble Commission should propose ceiling of additional auxiliary consumption on account of ECS based on the market/technical data and after few years, there should be a review on the same backed by detailed study of operational history of ECS units.

We request you to take these comments/ suggestions on record and consider while finalizing the compensation mechanism.

Thanking you,

Yours faithfully

S/d  
Paresh Bhagwat  
Chief Engineer (Power Purchase)  
MSEDCL

Copy s.w.r. to

The Director (Commercial), MSEDCL, Mumbai.