



## Webinar on Emission Control in Thermal Power Stations: Key Issues, Challenges and Way Forward

**Date:** 07.10.2020

**Time:** 03:00 p.m.

**Venue:** Virtual platform

Ministry of Environment, Forest and Climate Change (MoEFCC) revised the emission norms for thermal power stations (TPSs) on 7 December, 2015 requiring an implementation of the emission control systems (ECSs) within 2 years from the date of notification. The deadline had to be pushed to December 2022 for all the power stations in the country in view of the sheer volume of work, implementation issues and challenges as well as the critical need for maintaining supply of electricity. Power stations in national capital region (NCR) were however required to comply with the revised norms by December, 2019. Implementation of these measures in NCR stations brings out that the measures for control of PM<sub>2.5</sub> are on a better footing as compared to the same for control of NO<sub>x</sub> and SO<sub>x</sub>. The same holds true for other plants in the country as well.

Deployment of pollution control equipment (PCE) such as ESP, FGD, SCR, etc., in thermal power stations has been very slow and does not seem to be on track for completion by the target dates. While central sector has awarded bids for most of its capacity, implementation of PCE in state sector stations is not progressing as required. For PM emission norm compliance, 66 GW TPS capacity has been considered for ESP implementation / up-gradation, out of which implementation plan for 65 GW (99%) is already in place. Main concerns are regarding the compliance of SO<sub>x</sub> emission norm. As of now, only 1% of the total plant capacity complies with new norms of SO<sub>x</sub> emission. Out of planned installation of FGD in units aggregating 166GW capacity, bids have been awarded for only for 40GW (24%) thermal capacity, out of which 33 GW capacity is in the central sector. More importantly in the critically polluted

areas, awards in respect of only 50% of the plants have been placed for PCE implementation<sup>1</sup>. As mercury abatement from the emission can be achieved as co-benefit of reduction of NO<sub>x</sub>, SO<sub>x</sub> and dust, a higher degree of focus as of now, therefore is towards the reduction of SO<sub>x</sub> and NO<sub>x</sub> emissions.

Economic crises due to novel virus Covid-19 has made the situation worse. As a result of the national lockdown and slowdown of economy, power demand was down by about 20-30% as compared to the demand during corresponding period of 2019. The financial health of DISCOMs, particularly their liquidity position, has been impacted significantly; thereby challenging their ability to pay for increased generation tariff on account of pollution control equipment. On the other hand, due to reduction in electricity demand, many coal plants have been getting lower despatch schedule.

TERI, after conducting stakeholder consultation, released a discussion paper<sup>2</sup> in February, 2020 which presents issues, challenges, and way forward for emissions control in TPSs. During the stakeholder discussion many concerns related to technology selection, continuity of electricity supply, regulatory aspects, downgrading in merit order dispatch, overall timelines, etc., came to fore and potential measures/way forward were suggested. We plan to take the discussion on the subject forward in the above backdrop and also taking note of the developments in the intervening period – reported relaxation in NO<sub>x</sub> norms, fall out of non-compliance of norms by the power stations located in NCR within the stipulated time as well as plea of generating companies seeking more time for compliance to norms, more importantly under the challenges due to Covid-19 pandemic. A webinar is planned in the above backdrop to discuss the key financial, regulatory and technical issues and challenges as well as way forward.

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<sup>1</sup> Quarterly Review Report Renovation & Modernisation of Thermal Power stations, CEA  
[http://www.cea.nic.in/reports/quarterly/trm\\_quarterly\\_review/2020/trm\\_qrr-03.pdf](http://www.cea.nic.in/reports/quarterly/trm_quarterly_review/2020/trm_qrr-03.pdf)

<sup>2</sup> <https://www.teriin.org/sites/default/files/2020-02/emissions-control-thermal-power.pdf>

## Webinar Agenda

<b>3:00 p.m. – 3:10 p.m.</b>	<b>Setting the context by <i>Mr. Ajay Shankar</i></b>
<b>3:10 p.m. – 3:20 p.m.</b>	<b>Theme setting presentation by TERI</b>
<b>3:20 p.m. – 4:20 p.m.</b>	<b>Panel Discussion</b> Mr. R V Shahi, Chairman, Energy Infratech Mr. Ajay Shankar, Distinguished Fellow, TERI Mr. A S Bakshi, Former Member, CERC Mr. B C Mallick, Chief Engineer, CEA Mr. Vijay Menghani, Chief (Engineering), CERC* Mr. Girish Kadam VP, ICRA Mr. Jarnail Singh, MacArthur Foundation Mr. Vikas Mehta, ED, SED Funds Representatives from NTPC and CPCB*
<b>4:20 p.m. – 4.50 p.m.</b>	<b>Questions and Responses</b>
<b>4:50 p.m.- 5:00 p.m.</b>	<b>Wrap up and way forward by <i>Mr. Ajay Shankar</i></b>

\*yet to confirm