

# Giving Time

## MoEFCC extends timelines for compliance with emission norms by TPPs

Recently, the Ministry of Environment, Forest and Climate Change (MoEFCC) has extended the timelines for complying with the emission norms for coal-based thermal power plants (TPPs) by one to three years depending on the location of the plant. Besides, the ministry has introduced a penalty mechanism for the operation of non-compliant TPPs beyond the timeline. *Power Line* invited industry stakeholders to share their views on the revised timeline for meeting the emission norms, and highlight the key issues and suggest measures to expedite compliance...

**What are your views on the MoEFCC's recent order on the revised timeline and implementation plan for TPPs for meeting the emission norms?**

### Sachin Gupta

On April 1, 2021, the MoEFCC issued a notification to TPPs indicating the revised implementation schedule to meet the emission standards. The timelines to comply with the emission standards were first notified in 2015. In that notification, all the TPPs were given a fixed deadline of December 2017. Subsequently, given the various challenges faced by the TPPs, they were allowed to comply with the emission norms in a phased manner by December 2022, a relaxation of five years. As per the latest notification, the government has put in place a mechanism to penalise non-compliant TPPs by prescribing a graded penalty for each category of the TPPs linked to the duration of non-compliance.

On the face of it, these repeated relaxations in deadlines appear to be regres-

sive given the significant contribution of TPPs towards air pollution. To be fair to the government, it tried to balance the concerns of environmentalists and TPPs. While strict adherence to the implementation timeline is desirable, one must also account for the challenges faced by IPPs such as lenders' reluctance to finance flue gas desulphurisation (FGD) projects and other emission control projects, Covid-induced economic slowdown, import restrictions and lack of domestic capacity to fulfil the equipment demand.

### Ashok Khurana

We welcome the MoEFCC's decision to revise the timelines and implementation plan for meeting the new emission norms. The decision has been taken based on the extant ground realities the Association of Power Producers' (APP) has been highlighting ever since the new norms were notified in 2015 – that the one-size-fits-all approach of the previously stipulated timelines was not practical and that various systemic impediments

have hindered the operationalisation of these norms at the field level. Further, the recent Central Electricity Authority (CEA) report on plant location-specific emission standards was in line with APP submissions regarding the need for a graded action plan with higher priority for areas with poor ambient air quality. Right from the start, APP has focused on international experience with emission control equipment installation, believing that other countries have taken a more realistic and pragmatic approach in terms of timelines and implementation plans. Several countries, including the US, had consultation periods stretching over two years, after the initial publication of their revised norms. The norms were also generally implemented in a phased manner, with practical and reasonable gaps between the phases. The US, for example, provided a period of seven years for the first phase and 10 years for the second.

With inputs from the CEA, the Ministry of Power (MoP) and the industry, the MoEFCC has now finally acknowledged



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reduction and selective non-catalytic reduction systems.

As per the initial notification issued by the MoEFCC, the projects were required to comply with these standards by December 2017. Given the various challenges faced by the power generators, the timeline was subsequently extended to December 2022. Despite the extension, the progress in the installation of emission control equipment has remained slow, with bids awarded for only 40 per cent of the identified capacity (as of February 28, 2021) for the supply and installation of FGD systems. Moreover, only 1 per cent of coal- and lignite-based projects had commissioned FGD systems as of February 28, 2021. As per the timelines issued by the CEA, 18 per cent of the identified capacity, that is, 31 GW, was supposed to complete FGD installation by December 2020. FGD implementation by the centrally owned power units has been progressing at a much faster pace than private and the state-owned units. As of February 28, 2021, bids were awarded for 86 per cent of planned FGD capacity at centrally units as compared to only 8 per cent for private-owned and 27 per cent for state-owned capacities.

The key reasons for implementation delays by generators cited by the MoP include the Covid-19 pandemic, equipment import restrictions, minimum local component conditions under Aatmanirbhar Bharat, liquidity crunch, and credit refusals due to high stress in the power sector. Based on the current implementation progress, most of the coal- and lignite-based plants are likely to miss the December 2022 deadline to comply with the revised emission norms. In this context, the MoP requested the MoEFCC to extend the timeline by two years for about 106.5 GW of coal and lignite capacity (excluding certain critical units being monitored by the Supreme Court and under-construction projects), without levying any penalty.

Subsequently, the MoEFCC, vide its order dated March 31, 2021, revised the timelines for compliance with the emis-

"The extension of timeline provided by the MoEFCC has been a relief for thermal IPPs amid the sluggish progress in compliance with the revised emission norms."

Sabyasachi Majumdar

sion norms. The ministry proposed to categorise the TPPs into three categories – A (within 10 km radius of NCR or cities with a million-plus population), B (within 10 km radius of critically polluted areas or non-attainment cities) and C (remaining plants). While the timeline for category A plants remains December 31, 2022, the timeline for category B and category C plants has been revised to December 31, 2023 and December 31, 2024 respectively. The categorisation of the plants will be decided by a task force constituted by the Central Pollution Control Board (CPCB), comprising representatives from the MoEFCC, MoP, CEA and CPCB. The extension in timeline will provide relief for TPPs, especially in the private sector, given the challenges faced by these plants in securing funding and equipment to comply with the emission norms.

The generating companies are expected to rely on debt funding from banks and financial institutions to meet a substantial part of the capital cost towards the installation of emission control systems. However, lenders have been apprehensive of extending credit to generating companies, especially private IPPs, due to the lack of regulatory certainty with respect to the tariff implications of this capex.

"Air pollution is much wider in scope and pollution control in the power sector is not a solution in itself."

Malcolm Wrigley

Given the concerns raised by lenders and based on the advisory issued by the MoP, the CERC has issued orders approving the capital cost for FGD systems on a provisional basis for power generating companies. The commission also allowed power generating companies to claim actuals post commissioning of the FGD system, and approved the additional O&M cost and increase in auxiliary consumption. The CERC has amended its regulations applicable to Section 62 projects, that is, cost-plus tariff-based PPAs. Similar regulations from the state electricity regulatory commissions are also required in a timely manner. Further, the CERC released a staff paper in September 2020 with a proposed mechanism to recover the cost incurred to comply with the revised emission norms under the change in law for competitively bid TPPs. It is assumed that the recovery of the additional costs will happen over the useful life of the emission control equipment, which is 25 years. In this context, the availability of an adequate balance power purchase agreement (PPA) period remains important. Moreover, an operational private thermal capacity of around 20 GW does not have long-term PPAs. There is no clarity or mechanism in place for the recovery of FGD-related costs for projects that sell power through short-term PPAs. Thus, securing debt financing could be a challenge for projects that do not have long-term PPAs, for projects that have unviable tariffs under the PPA, or those that have a balance PPA tenor of less than 12 years.

Overall, the creation of a time-bound approval process by the central and state regulators for additional tariff under change in law remains important for the TPPs to secure funding and complete the installations. Also, the availability of equipment from domestic sources remains a challenge in meeting the minimum local component condition under Aatmanirbhar Bharat.

#### Malcolm Wrigley

We are extremely happy to witness and play an integral part in the government's efforts to improve TPP compliance in the



limited domestic manufacturing capacity is ramped up in an expedition manner. This will curb the avoidable outflow of foreign exchange and will greatly complement the prime minister's Atmanirbhar Bharat scheme by opening a manufacturing order book of around Rs 400 billion for the domestic industry (considering the capacity of 101,000 MW for which tenders have not yet been awarded).

This will also help avoid sourcing of equipment from countries with impaired trust. However, a shift to domestic manufacturers may increase the cost of FGDs by 20-25 per cent. In order to offset this increase in power tariff and avoid burdening consumers, the government could agree to provide a viability gap funding Rs 2 million per MW for each FGD commissioned, payable to lenders directly. This will not only mitigate the risk for lenders, but will also ensure that consumers do not have to bear any increase in tariff due to FGD installations. Alternatively, any increase in tariff may be funded through the coal cess being collected. This option will have the added advantage of a clear linkage between cause (reduction of emissions) and effect (utilisation of coal cess), thereby justifying the usage of these funds.

#### **Malcolm Wrigley**

The ministry has implemented various measures to ensure that the power sec-

tor becomes more reliable and efficient. In line with these initiatives, there needs to be an accelerated and fair process for the hearing of all change in law claims, and not just those related to the pollution control issue. In many instances, genuine claims are deferred with delays in hearings and subsequent challenges, with higher authorities increasing the overall time taken to resolve issues.

Pollution control clearly assists in improving the air quality in cities as this is an immediate issue. That said, air pollution is much wider in scope and pollution control in the power sector is not a solution in itself. The authorities need to look at air pollution in its entirety and give it top priority. We should work towards implementing holistic measures, which include elimination of crop residue burning or refuse burning as well as positive initiatives such as tree planting. We should also incentivise and reward power plants that are compliant. Such plants should be given priority in scheduling. Currently, we are scheduling TPPs as per the merit order of cost only without giving any consideration to emission standards.

**What are the measures needed to expedite compliance?**

#### **Sachin Gupta**

Expediting compliance will require con-

certed actions by regulators (both central and state), lenders and project developers such that the open issues are addressed. While Section 62 projects (cost-plus projects, particularly those owned by central sector companies) have already progressed ahead in terms of equipment installation (48,580 MW out of 55,260 MW of capacity under the central sector is either under implementation or has been implemented), the projects under Case 1 bidding still require regulatory clarity regarding the applicability of change in law towards the recovery of capex on FGD equipment. Amongst all the types of power projects, the worst affected are companies that do not have long-term PPAs or have a significant portion of merchant sales in their revenue profile. The very business model of such TPPs fully exposes them to all the risks. Like any commodity company, they will have to bear this burden and recover it during market upswings. It would thus be imperative for such TPPs to make use of this extension for funding and implementing the FGD capex lest they find themselves in a tougher position post the extended timelines.

#### **Malcolm Wrigley**

Some of the measures that can expedite compliance are planning ahead for all clearances, fair change in law rulings and strict enforcement of rules. ■