

Heighten Power Crisis and Coal Shortage in India

Amid the soaring heatwave warning across the country where the temperature almost hit 50 degrees Celsius in many cities, the shortfall in electricity supply by 1.88 billion units or 1.6% is severely aggravating people's discontent. After October 2021, India is facing the worst power shortage in states viz; Andhra Pradesh, Haryana, Rajasthan, Uttarakhand, Gujrat, Maharashtra and Bihar, where the households are observing power cuts ranging from 2 to 8 hours per day. Since the first week of April, the average supply shortage in Jharkhand is about 10 to 12 per cent followed by Andhra Pradesh (10 per cent) Uttarakhand(8 per cent), Madhya Pradesh(6 per cent), and Haryana(4 per cent). In April, the power demand in Delhi surged to 6000 Megawatt. Uttar Pradesh experienced a 3000-Megawatt electricity deficit, similarly, Andhra Pradesh faced a deficit of about 50 million units of power against the required demand.

70 per cent of India's power demand is fuelled by coal and the required stock of coal at more than 100 thermal power plants in India, which fulfil 70 per cent of India's electricity demand, has fallen below 25 per cent, while, the eleven thermal plants running on imported coal have hit critical levels. The coal- stock has fallen below the 10 per cent mark in about 50 thermal plants following which states are compelled to seek the deficit coal supplies from Coal India Limited, the sole coal producer in India.

According to Central Electricity Authority(CEA), the electricity production of India is 182.39 GW via thermal plants using domestic coal and on an average 34 per cent of coal stock is maintained in them. 16.73 GW of electricity is generated in the plants using imported coal wherein an average coal stock of 34 per cent is maintained. Currently, the number of non-functional thermal plants is 9 which can generate 3.56 GW.

There are several reasons responsible for such an acute shortfall of coal supply in India. A look at the consumption pattern of power in India explicitly depicts a massive increase in power demand over the years. The power demand between 2019-2021 increased from 106.6 BU to 124.2 BU per month and in the year 2022, it is expected to further increase to 132 BU. Besides this, heavy rains during the monsoon season have flooded coal mining areas in the states like Tamil Nadu, Rajasthan, Dehli, Punjab and Gujarat resulting in lower coal production. Even, before the monsoon season, the coal -stock built up in the majority of the thermal plant was not adequate. The Russia -Ukraine war also impacted the international coal supply resulting in a high cost of coal import. The contribution of coal in power generation is over 70 per cent in India and out of this 12

per cent is through imported coal. In 2022-23 the cost of imported coal is predicted to be up by 35 per cent compared to the last year. The soaring heatwave and temperatures at the record level also pushed up the consumption of power. During the last week of March, a record increase of 13 per cent in power demand was recorded.

The government has during the second week of April 2022, increased the coal supplies to thermal power stations by 14.2 per cent increasing the coal generation to 1.64 million tonnes per day as compared to 1.43 million tonnes in 2021. Coal India Limited has increased coal production to 26.4 million tonnes in April 2022, registering 27 percent year on year growth. CIL till May 31, 2022, will make available, an additional, 8.75 million tonnes of coal to the state and Central generating companies.

A handwritten signature in black ink, appearing to read 'Mahima', with a stylized flourish at the end.

Prof. Mahima Birla
(Editor-In-Chief)