Coal Crisis Saga

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Coal has emerged as a shining star in the basket of natural resources due to the shortage. Experts, therefore, renamed coal as "black diamond" as the commodity has become not only costlier in the last few years, but also its availability remained an issue which attracted Prime Minister Manmohan Singh's intervention. Hence, it would be fair to say that 2012 will be remembered as the "year of coal" in future. Used as a primary means of fossil fuel spread widely between a large number of kitchens to steel production furnace and power plans, coal is a major source of energy for all strata of Indian consumers. In mine bearing areas, coal is used as the only source of coking medium and most of residents around the mine site survive on this "black diamond". In distant Indian states, however, coal is used as a means of power generations for both industrial and domestic consumption.

The Industry

The Indian coal industry is the fourth largest in terms of reserves and third largest by production in the world. Coal is one of the primary sources of energy, accounting for about 70 percent of the total energy consumption in the country. Coal deposits in India occur mostly in thick seams and at shallow depths. Indian coal has high ash content (15-45%) and low calorific value. With the present rate of daily coal extraction in the country, the reserves are likely to last over 100 years. India's coal production is forecast to increase to 554 million tonnes in 2012, more than the 533.12 million tonnes the country produced in the previous year.

Despite its huge resource base, till date, India has not been able to minimize its coal deficit. A recent survey conducted by Research and Markets suggest that the demand-supply deficit of coal is estimated to grow at a CAGR of 17.2 percent till 2017. Exploration, technical, environmental and logistical issues have forced India to import the commodity. Coal has been recognized as the most important source of energy for electricity generation and industries such as steel, cement, fertilizers and chemicals are major sectors of coal consumption. So in order to satisfy the coal demand, the Indian coal industry needs more investment and private players to raise its production level. The coal washeries have to take bigger role in the industry to produce less moisture and ash-based coal to sustain in strict environment regulations.

According to the Indian coal ministry, imports of coal are expected to increase to 80 million tonnes from 69.76 million tonnes last year. Market experts believe that the rising trend to import coal will ultimately force the steel companies to increase prices. The government has upped the figure of its estimated coal shortage, expected by March 2012. New estimates now put the coal shortage at 112 million tonnes, up from 83 million tonnes forecast in December 2010. The entire shortfall is likely to be met by imports. Besides blending requirements, superior quality parameters and converging price trends of imported and domestic coal would lead to more imports. Indian companies have acquired overseas coal assets in Mozambique, Indonesia and Australia, but more efforts are required to reduce the coal imports. The government has taken some steps to reduce the demand/supply gap. A new policy being drafted for auction of coal blocks is among the various other steps that are being taken to mitigate the shortfall. The coal ministry has been working on the auction policy that will replace the existing system of allocating blocks for over a year.

The Crisis

India is currently passing through a huge coal crisis now. With many infrastructure related sector power, steel are immensely reliant on coal as major raw material to feed their operating units, the shortage of domestic availability is continuously to be met with imports. Currently, India requires 690 million tonnes (mt) of coal a year to fire plants, largely in the infrastructure sectors of power and steel. Domestic production was originally expected to touch 680 mt by the end of the current Plan period in March. This was scaled down to 630 mt in the mid-term appraisal and again to 554 mt at present, creating a 136 mt gap between demand and supply.

Interestingly, apart from the slowdown in production from state-owned Coal India (CIL), the private sector accounts for a bulk of the dip in production. Of the 208 captive coal blocks allotted since 1993, with a whopping 49 billion tonnes (bt) of reserves and a production potential of 657 mt per year (a notch less than India's annual coal demand), the estimated production is a dismal 37 mt per year from only 27 captive blocks the private sector has been able to commission so far. The lack of captive output has led to the government's coal production plan going completely awry, as projected production from captive blocks had to be brought down from the initial 104 mt to 81 mt in the mid-term assessment, and again to 56 mt, in line with the overall shortage. CIL's expected production, too, had to be brought down from the 486 mt projected in the mid-term assessment to 447 mt now.

In addition to the continuous fall in CIL's production, the private sector has also failed to increase production to expected levels. This might be related to delayed clearances in some cases. But the private sector's tendency to grab blocks and continue to sit over them for long is also to be blamed. Taking note of the dismal progress in the development of captive blocks, the coal ministry had conducted a review last year. Threatening cancellation of their captive coal blocks, the ministry had issued showcause notices to 84 companies, including Tata Steel, Reliance Energy, Vedanta Subsidiary Sterlite Energy, GMR Energy, Lanco Group, Jindal Steel and Power and the world's largest steel maker, ArcelorMittal. Blocks held by several firms, including NTPC and Damodar Valley Corporation, were cancelled. In a number of cases, captive block holders have been slow in exploiting the block. Their problems have been primarily that of environment, forest clearances and land acquisition, the

Planning Commission said in its recent review of the coal sector's performance during the current Plan period.

Power Sector Exemption from Coal Block Auctions

The government exempted power sector companies from going through the auction route for the allocation of coal blocks for captive use. The power sector's requirement of coal in the current financial year is estimated at 470 mt. The sector is likely to suffer an overall shortage of 70 mt. Last month, an 18-member delegation of power company chiefs, including Tata Power chairman Ratan Tata, Lanco Infratech chairman L Madhusudan Rao, Reliance Power chairman Anil Ambani and Naveen Jindal, a Congress member of Parliament and chairman of Jindal Power Ltd, approached the prime minister and other key ministers, alleging their investments were hit. This followed the severe coal crunch for power stations in November.

However, for users other than power sector companies, the competitive bidding method would replace the current practice of allocating blocks for notified captive use on the basis of recommendations of an inter-ministerial committee. The new system is expected to induce “transparency and objectivity” in the overall coal block allocation process. In the first phase, 54 blocks would be offered to both power and non-power users, under the new dispensation. Under the new system, while coal blocks would be allocated to companies in sectors other than power through an auctioning method, where bids would be invited over a floor price, power sector companies seeking blocks would be selected on the basis of electricity tariff for the power plant connected to the block. Power companies will, however, have to pay the “reserve price” fixed by the central government, according to the 'Auction by Competitive Bidding of Coal Mines Rules, 2012', notified by the coal ministry. All proceeds from the process would go to the coffers of the state governments concerned.

The power ministry had recently argued that projects would become uneconomical if a developer had to go through two rounds of bidding – one for

deciding the tariff for sale of electricity and the other for the allocation of coal blocks – under the coal block auctioning regime. The ministry had sought an exemption for projects bid out on tariff-based criteria. The coal ministry denies the move could create controversy. “The new rules have been firmed up only according to the existing provisions of the law. Even in the UMPP route, a power project is bid out without an auction for the captive coal block,” a senior official from the coal ministry said. He also clarified that under the new coal block auctioning rules, a mine would be shown upfront to a power company to enable the developer to quote a tariff for supply of power accordingly to save margin. The coal ministry had prepared draft guidelines with four models for selection of successful bidders during the multi-step auction process. The four models are – upfront payment, production-linked payment, upfront payment with 20 per cent preference for development status of end-use plant and production-linked payment with 20 per cent preference. “We are yet to decide which of the four models will be finalised,” the official said.

The private power industry, while satisfied with the exemption, sought more clarity. “The special treatment for power companies would go a long way in preserving margins. But, it would be a difficult move to implement in view of the latest Supreme Court directive in favour of auctioning. The move could lead to chaos,” a senior industry representative said on the condition of anonymity. Experts say the government could avoid controversy, even while exempting the power sector from bidding, by following a transparent and equitable process for allocation. As long as the government ensures that blocks are given to those who have projects in advanced stages of completion or are willing to give firm commitment, no controversy should arise. In August last year, Parliament passed the Mines and Minerals (Development and Regulation) Amendment Bill, 2010, which paved the way for the introduction of auction of coal blocks through competitive bidding to private companies for captive use.

“No – go” Policy

The government came out with “no-go” policy two years ago under which many private miners were denied granting environment clearance. According to Ashok Khurana, director general of the Association of Power Producers, the government lost two years due to this policy. “Captive blocks have been delayed because of land and environment clearance issues. CIL's production has stagnated during the period,” he said. Meanwhile, the private sector does not agree that delays in developing captive blocks have played a major role in augmenting the shortages, and attributes the slump to unavailability of linkage coal. CIL supplies 343 mt, Singareni Collieries 33 mt and an additional 22 mt from captive mines. However, according to the Planning Commission, the shortfall can be easily met with 50 mt of imports, which is equivalent to 70 mt of domestic coal.

Even otherwise, the 70 mt of pithead coal stocks with Coal India can be liquidated to meet the entire shortfall. The company has seen a 1.6 per cent decline in production between April and January 2011-12. The company's output remained flat at 431 mt in the financial year ended March 2011.

PM's Intervention

To bridge the gap, Prime Minister Manmohan Singh directed to CIL to import coal to ensure supplies for 20 years to the power sector. Prime Minister's office is working overtime on urgent measures to address the 'coal crisis', the private power industry's hue and cry over the issue seems to have subsided for now. Experts, however, say private developers have no right to complain, as they have failed to develop their own captive coal reserves over the past two decades.

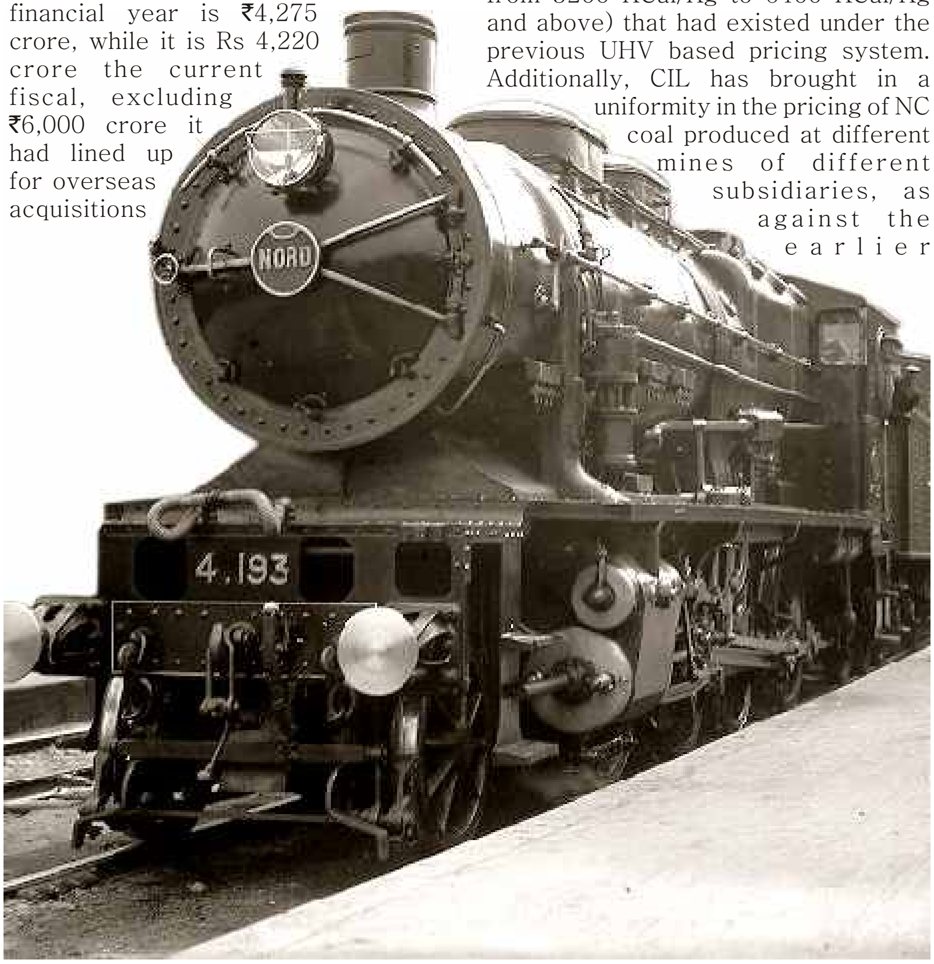
In response to the PM's direction, the CIL's acting chairman and managing director Zohra Chatterji said, "We are not in the business of imports and have not yet received any direction from the coal ministry. Once the direction comes, we will look into other factors. We had tried to import several times earlier also, but it did not work out, import is not our USP." Chatterji's statement came even as she holds the dual charge of both the acting chairman and also an additional secretary in the Union ministry of coal. Early this week, the PMO had said in a statement that to ensure supply for 20 years to power plants of 50,000 mega watt that would be commissioned by March 2015, the Kolkata-based firm can import coal. The decision was taken after a delegation of power majors led by Ratan Tata and Anil Ambani met the Prime Minister seeking relief on this front. The statement said that the coal major would be penalised if it fail to meet the supply trigger of 80 per cent. Chatterji said, "We have to abide to the government rules, if such a directive comes. To import, demand should also be there" Meanwhile, the firm is confident enough to meet the rising demands from the power sector. "Offtake is going to increase. The availability of rakes has touched an all-time high of 197 now. It is expected to touch 205 by March," Chatterji said.

CIL to Invest in Railway Lines

The state-run coal major which is sitting on a cash reserve of about ₹55,000 crone will now invest on infrastructural projects based on direction by the Centre. In the next four to five years, CIL is planning to invest about ₹6,000 crore in developing railway lines across three states. Since the company has enough cash reserve, it would invest in infrastructural projects as directed by the Central government. The company will be developing railway lines across three states — Jharkhand, Orissa and Chhattisgarh — in the next four to five years. This will see an investment of more than ₹6,000 crore. Some of these would connect coal fields in the Ib Valley, North Karanpura and Mand-Raigarh coal fields. CIL's plan is to handle a total of about 300 million tonne through these routes. Plans are also there to form a special purpose vehicle for the Chhatisgarh projects — in which the Steel Authority of India and other public sector undertakings in the region are likely to participate. During the 12th Five Year Plan Period the company's total expenditure is expected to be about Rs 25,000 crore. Coal India's proposed capital expenditure in India for the next financial year is ₹4,275 crore, while it is Rs 4,220 crore the current fiscal, excluding ₹6,000 crore it had lined up for overseas acquisitions

Change in Mechanism

CIL has migrated to a new system for pricing its non-coking (NC) coal on the basis of Gross Calorific Value (GCV) w.e.f. from January 01, 2012. Till December 2011, the company used to follow the Useful Heat Value (UHV) based method to price its NC coal. The revised mechanism is more in line with the international system as against the previous mechanism, which was an old method and depended on moisture and ash content through the application of an empirical formula. ICRA's analysis shows that prices of certain grades of NC coal may rise significantly under the new price regime, while for certain other grades, prices may actually decline (refer Table 1). Prices of coking coal would not change under the new mechanism. The revised pricing system has divided the entire spectrum of GCVs into 17 bands, from 2200 kilo calorie per Kg (KCal/Kg) to 7000 KCal/Kg and above, in intervals of 300 KCal/Kg, as against 7 grades (A to G, from 3200 KCal/Kg to 6400 KCal/Kg and above) that had existed under the previous UHV based pricing system. Additionally, CIL has brought in a uniformity in the pricing of NC coal produced at different mines of different subsidiaries, as against the earlier



practice of subsidiary-wise and mine-wise differential prices. Only coal produced from ECL would command a 6% higher price over the prescribed notified rates. For notifying the revised price bands, CIL has continued with its broad classification of consumers; viz. power / fertiliser / defence (core sector) and the rest of the industries (non-core sector). However, the price difference between the core and non-core sectors has now been revised upwards. Under the UHV based system, D, E and F grade coal for the non-core sector had a price premium of a flat rate of 30% over the same for the core sector, which now varies between 33% to 60% under the new GCV based pricing system.

Since CIL has a near monopoly position in the domestic coal market, with a market share of around 80%, the new prices would be applicable to almost all NC coal consumers in the country. ICRA notes that the migration to the GCV based system would lead to different price increases for different grades of coal (refer Table 1), and therefore the impact on various companies' coal costs would also be different. In the absence of adequate data at this stage on CIL's product mix across the new GCV bands, it is difficult to arrive at the exact impact on various coal consumers. However, a study of the revised price bands enables one to make a few critical inferences as listed below. For the analysis, ICRA has considered the extent of price increase from the lowest and highest price levels prevailing in each of the earlier grades, and has also calculated the same from the middle level.

Price of erstwhile A, C and D grades of coal impacted significantly. Cumulatively, these grades contributed around 19%-23% of the total NC coal dispatch volumes between 2006-07 and 2009-10. Additionally, within each of the grades between A and D, the price would increase the most in the highest GCV band for that particular grade, and would decrease progressively along lower GCV bands within that particular grade. Prices of the medium grades (C and D) are likely to increase quite steeply. A significant proportion of this coal is used by non-core industries including sponge iron and cement. As per quick calculations, coal costs account for around 25% of the total operating costs of a sponge iron manufacturer having 100% coal linkage from CIL (this would however vary, depending upon factors like the distance of the plant from the coal mine). Similarly, the share of coal costs in the total operating cost of a cement player would be around 30% (cost of power could be another 15% or so from a coal based captive power plant, if the cement plant has any). Consequently, a sharp increase likely for these two grades would impact the cost structure of sponge iron and cement players significantly, more so since prices are higher for the non-core sectors. Nevertheless, ICRA notes that given the coal shortage scenario that has been prevailing in the country in recent years, many non-core players were dependent anyway on costlier coal procured from e-auction and/or imports, and the overall impact of the revised coal price on their cost of operations would be limited to that extent.

The power sector is the largest consumer of NC coal, accounting for around 73% of CIL's volumes in 2010-11 . The impact on the power sector, which is the primary consumer of E and F grade coal, is expected to be mixed. The price rise could be quite sharp for the highest GCV bands within the E and F grades. However, moving towards lower GCV bands within E and F grades, the effect would be mixed across various collieries. Consumers which were procuring E grade from Western Coalfields Limited (WCL) and F grade from Eastern Coalfields Limited (ECL) at higher prices earlier would now stand to benefit if they get to procure coal from the lower GCV band within the respective grades. For other consumers, the impact would be adverse. However, many power producers buy higher grade coal for blending with the inferior E and F grades, and the overall impact on their fuel costs would be impacted because of the rise in the prices of coal in the grades A to D. Captive power plants would not be eligible for being classified under the core sector. Consequently, power costs of companies in energy intensive industries including primary aluminium, cement and steel, many of which have coal based captive power plants,

primarily using E and F grade coal, would witness some pressure on their production costs going forward, especially considering the fact that the premium for the non-core sector consumers have been increased under the revised system. For instance, power cost would typically

Conclusion

The Auction by Competitive Bidding of Coal Mines Rules, 2012, lays out a process by which mines will be handed out on the basis of competitive bidding, subject to all bids being above a mandated floor price. The notification for the Rules, however, makes the mistake of specifically exempting the power industry from competitive auction. The government should rethink this poorly conceived loophole. While there is little doubt that India's power sector is short of capacity and resource, causing it to be unable to meet the demands of a fast-growing economy, the government's intention is doubtful for the growth and stimulation in investment in power generation. Even in the medium term, basic economic principles will be violated by this exemption of power companies from competitive bidding. For one, it gives a clear incentive to those bidding on tariffs to quote unrealistically low figures.