

## **India: the Power Sector; what you also need to know**

It seemed the entire world sat up and took note of disturbances in the Indian Power Grid on July 30 and 31, 2012, which affected major parts of Northern, Eastern and North Eastern India. While alarm bells rang, and the commentariat was rife with advice about what India should do to “fix” its power sector, it went hardly noticed that essential services in Railways, Metro Rail and Airports were restored, on both days, within a few hours. By all accounts, the Grid is functioning normally since, and is being closely monitored by a phalanx of engineers and specialists. At the highest levels of Government there is the firm resolve that these instances should not happen in future. Steps are being taken to review trans-regional and other critical links, strengthen and re-inforce the weaker elements, impose substantial congestion charges to curb over-drawal by States, and so on.

***The failure of the Indian grid on July 30 and 31, 2012 should be viewed as an isolated incident. Electricity to all major sectors was restored within a few hours of the grid failure....***

I know that the spate of media articles following the grid failures have sought to highlight the supposedly dysfunctional nature of the Indian power sector, its failure to add capacity at a rate commensurate to the demand of a growing population and economy, the sad state of financial health of the distribution utilities, the low penetration of electricity in rural areas and so on. Then, doubts have also been cast on the country's ability to sustain high growth rates of 9% and above, in an unsatisfactory power supply scenario. All this paints a rather dismal picture.

I do not deny that there are huge challenges in providing a reliable supply of electricity to the more than 1.2 billion residents of the country, particularly at a time, when global economic conditions have impacted economic activity and growth in tax and non-tax revenues to finance developmental expenditure. It is also a fact that there are problems of fuel availability, expeditious clearances from forest and environment agencies for upcoming power plants, financially stressed power utilities and persistent theft of electricity by vested and criminal elements. However, these problems should not

become a screen to obscure some major achievements that we, as a country, have notched up in building an efficient and reliable power infrastructure. An isolated incident, however unfortunate, of grid failure should not be perceived as the final word of terminal illness in the Indian power sector. This portrayal is neither objective nor fair, since it masks the substantial progress that has been made by India in revamping its power infrastructure and making it more relevant to the needs of a dynamically growing economy.

***Substantial progress has been made in revamping India's power infrastructure in the last few years....***

To elaborate, we enacted the Electricity Act in 2003, which de-licensed power generation, spurred open access, enabled a framework for private sector participation in electricity generation, transmission and distribution, allowed power utilities to be unbundled and privatized and created independent energy regulators at the federal and State levels. Since then, there has been substantial progress in electricity capacity creation, particularly through private producers.

During the 11th Five Year Plan period, spanning 2007-2012, India added 55,000 MW of electric power generating capacity, which is almost the same as was added during the three preceding Plan periods. And, significantly, the capacity addition of 20,500 MW in the Financial Year (FY) 2011-12 is the highest ever capacity addition in any year. In fact, this capacity addition led to the deficit in power supply, in terms of peak availability and total energy availability, to decline during the 11th Five Year Plan. While the energy deficit decreased from 9.6 per cent in the terminal year of the 10th Plan (2006-07) to 7.9 per cent during April-December 2011, the peak deficit declined from 13.8 per cent in 2006-7 to 10.6 per cent during the same period.

***During a period of five years between 2007-2012, India added 55,000 MW of electric power generating capacity, which is almost the same as was added during the preceding fifteen years....***

Similarly, inter-regional transmission capacity created during the 11th Five Year Plan period exceeds that created during the previous Plan period eleven and a half times. We are endeavoring to transmit electricity from the remote North-Eastern part of the country to a place near Delhi, the Indian capital, at a voltage level of 800 kilo Volts, which is the highest voltage level anywhere in the world at which electricity transmission has been attempted. Surely, this is no mean achievement for a country, which, when it started its march towards a new modern, nation state in 1947, had a total installed generation capacity of 1,376 MW?

***India is geared to transmit electricity from a remote location in its North East to its capital Delhi at a voltage level of 800 kilo Volts, which is the highest transmission voltage level attempted anywhere in the world.....***

The issue of distribution utilities being made viable and self-sustaining has moved centre-stage, since this affects the pace of capacity addition. Demonstrating an increased sense of responsibility, in the current financial year, 2012-13, so far, tariff revisions have taken place in 18 of the 28 Indian States and are under finalization in a few more. A scheme for financial re-structuring of power utilities is under finalization which will offer assistance to the distribution companies, contingent on reform measures being undertaken by them in the area of regular tariff filing, periodic revision of tariffs, reduction of line losses and so on. Already, the total aggregate technical and commercial losses have been showing a declining trend, in State after State, as the realization that controlling these losses is paramount to building a modern power sector, is dawning on the Governments in power. At the same time, a scheme - the re-structured accelerated power development reform program - has been launched, which will fund efforts by State Governments to ring-fence urban and high economic activity areas, establish benchmarks for loss reductions and invest in infrastructure for reducing distribution losses.

***The federal Government in India, in recent months, has taken a spate of measures to work with the States and improve the financial health of their distribution utilities.....***

A flagship scheme has been in place for a number of years for electrification of rural areas and dwellings that belong to below poverty line families. Under this scheme, 100,000 villages have been electrified so far and free power connections provided to nearly 17.5 million below poverty line households. A recent survey has found that this scheme has provided immense benefits to the rural population, and nearly all public places in electrified villages, e.g., schools, rural dispensaries, community halls etc, have been provided access to electricity. In his address to the nation on August 15, 2012, our Prime Minister has laid special emphasis on rural electrification. The relevant excerpts of his speech are quoted as under:

***Almost all the villages in the country have been electrified under an ambitious scheme of rural electrification launched in 2004.....the Prime Minister, in his Independence Day address on August 15, 2012 has said that the next target is to provide electricity to each and every household over the next 5 years....***

".....when the UPA Government came to power in 2004, we had promised that we would provide electricity to all villages. To fulfill this promise, we launched the Rajiv Gandhi Rural Electrification Scheme. More than 1 lakh new villages have been provided with electricity connections under this scheme and now almost all the villages in the country have been electrified. Our next target is to provide electricity to each and every household in our country in the next 5 years and to also improve the supply of electricity...."

Moreover, given the huge financing requirements of power infrastructure creation, steps have been taken to enable private sector participation in transmission of electricity, distribution of electricity in urban areas, and, power exchanges.

These achievements can, by no means, be dismissed as insignificant. India is a large country, with many remote areas, and a large population. It will take time to build capacities to reach every household, 24x7, with affordable and reliable electricity, in a manner which is sustainable and viable. However, efforts in this direction have continued apace, particularly since 2003, when the Electricity Act, 2003 came into force,

and may I say that we remain confident that we will achieve self-sufficiency in this most important public good within a foreseeable time frame.

Let's not make the power grid failure the signature tune for India's power sector. The achievements to augment our capacity in the last few years have been significant, and we must not fail to recognize them. For a country as large and as complex as ours, we've come a long way, in terms of progress, from where we were even a few years ago. Let's not ignore this basic fact. There are many more miles for us to go, the journey is long, but the structure is sound, the fundamentals strong, and we will overcome challenges.