Power Sector Round-up 2014

24x7 power supply critical to maintaining high growth: IPPAI

Investor confidence in the power industry has been tested severely over the past few years due to the drastic erosion in the creditworthiness of the sector, triggered mainly by fuel shortages which rendered several projects commercially unviable and the weakening financial health of state power distribution companies.

India has the world's fourth-largest generating capacity but per capita consumption of electricity is very low. About a quarter of the country's population still do not have access to electricity. In spite of fast-paced capacity addition in recent years, the country is still facing a power deficit. The primary reason is the fuel crisis which has left a sizeable chunk of the capacity unutilised.

The government introduced mandatory tariff bidding for allocation of power projects in 2006. Many developers quoted non-variable fuel costs to bag projects in competitive bidding. Their fuel cost calculations were based on assured coal supply from mines purchased overseas, especially Indonesia.

However, Indonesia shifted to international index-based coal pricing in September 2011, throwing haywire Indian power companies' fuel cost calculations. Since there was no provision for revision of fuel costs for these competitively bid power projects, developers got caught in a contractual bind and project viability was adversely affected.

REVIEWING THE YEAR: Progress and pitfalls

A quick peek into 2014 tells us that power project developers faced challenges of fuel shortages, stranded capacities and unviable tariffs. Power distribution companies are losing money for having to supply power below costs.

Overall, the Indian power sector experienced mixed fortunes in 2014. The en masse cancellation of captive coal blocks by the Supreme Court in September created a nightmarish situation for the new government at the Centre. However, the government moved quickly to contain the fallout of the SC's decision. An expeditious, time-bound action plan on re-auction helped restore the industry's confidence.

The new government has also focused on enhancing domestic coal production, ensuring coal linkages for power plants commissioned up to March 2015, reducing AT&C losses and providing thrust to renewable power, particularly solar power. Further, sops such as extension of tax holiday to power projects till the end of March 2017 and re-introduction of generation-based incentives to wind power generators in the form of 80% accelerated depreciation (AD) brought some respite to project developers.

However, the shares of major power sector players were under pressure in the wake of the SC verdict on coal blocks. Also, the dwindling plant load factor (PLF) of projects continued to be a major cause of concern. The average PLF for coal and gas-based plants was 64 per cent and 21 per cent respectively in 2015 (up to January 2015) as compared to 65 per cent and 25 per cent respectively in FY13.

India has harnessed less than a third of its hydropower potential of 1.5 lakh MW. Meanwhile, the share of hydropower in the country's electricity mix is falling precipitously due to the rather slow pace of capacity addition. The share of hydro-installed capacity in the total installed capacity, currently at around 16%, has been on a downward trajectory for long.

But despite the urgency of policy action to expedite capacity addition in hydel power, there was not much progress in 2014 on this front. Rather, the year proved a complete washout for hydropower projects as challenges of pending clearances and allied infrastructure continued and not much happened in terms of harnessing of hydropower potential. Given the power distribution companies' reluctance to sign long term contracts for procurement of electricity from hydel projects, expediting development of hydropower potential could prove a tough challenge for the Centre. Hydro Purchase Obligation (HPO) was mooted by the Ministry of Power but no progress has been made on it. It is high time that HPO is considered on the lines of the Renewable Purchase

Obligation (RPO) or Renewable Energy Certificates (RECs) used for renewable energy development. The government needs to ensure that there is an HPO on each obligated entity to ensure long-term stability of electricity prices which would insulate the consumer from the variable price volatility that is now being experienced through the import of fossil fuels which is due to forex and price fluctuations both for fuel and transportation. In addition, it would also boost the hydropower sector which is having difficulty getting financing for various reasons including the uncertainty due to absence of credible long-term buyers of such power.

In renewable energy, accelerated depreciation benefits were finally restored in the wind power segment. The renewable energy target to be achieved by 2022 has been revised to 175 GW (100 GW solar, 60 GW wind, 10 GW biomass and 5 GW in small hydro). However, more clarity is needed on how aggressive solar generation targets will translate into achievements. In order to meet its growing energy demand, India has embarked on a number of missions under the National Action Plan on Climate Change (NAPCC), an important one being the Jawaharlal Nehru National Solar Mission (JNNSM). Under the JNNSM, India plans to harness solar energy on a large scale. The mission, split into three phases spanning 12 years, aims to add 20,000 MW of grid capacity and 2,000 MW of off-grid capacity from solar by 2022. It is estimated that the current solar power capacity of India is around 2,600 MW and thus there is a large potential still to be tapped under JNNSM.

Nuclear power generation in India has more than doubled in the last six years while the capacity utilisation of nuclear reactors in country has increased from about 50 per cent to 83 per cent. The first unit of the Kudankulam nuclear power project started commercial operations at the back-end of last year and the second unit is likely to be commissioned by FY16, which will raise the nuclear capacity to 6780 MW.

In July 2014, the new government had set a target of tripling the then existing nuclear power capacity of 4780 MW in the next 10 years by 2024. Keeping up with that ambitious plan, various sites have been given "In-principle" approval for additional reactors to be set up in future.

Tariff hikes by SERCs for FY 2015 had been very modest in some of the states, wherein SERCs had estimated the revenue gap at current tariff. However, such a revenue gap has not been recovered through tariff revision in full and this in turn has led to an unrecovered revenue gap in the form of

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regulatory assets. In case of distribution loss levels, actual losses for utilities across a majority of the states have remained higher than the loss trajectory approved by SERCs and such higher losses had been disallowed by SERCs, while approving the truing up of costs and determination of retail tariff.

The interconnection of the southern power grid with the national grid during January 2014, thereby completing the integration of transmission network in the country, was a significant development, through the commissioning of the Raichur-Solapur 765 kV single-circuit transmission line by the state-owned Power Grid Corporation of India Limited at a capital cost of Rs 8.2 billion, five months ahead of schedule. In FY12 and FY13, the southern region saw a higher power deficit than the northern, western and eastern regions. The deficit might come down in the near future along with short-term prices on power exchanges.

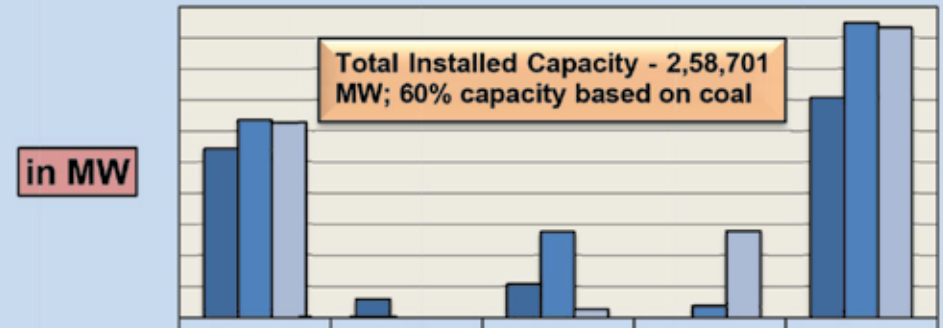
POWER CAPACITY ADDITION: Lagging but private sector leads the way

In any country, the power sector plays a crucial role in economic growth. In order to achieve sustainable GDP growth, India needs to consistently expand its power generation capacity through the best possible resources. By one estimate, to support the envisaged 8-9% GDP growth rate, which is critical to creating enough jobs and alleviating poverty, the electricity sector needs to grow at 6.7-7.9% compounded annual growth rate.

Capacity addition has increased manifold since 2009 and the private sector has been at the forefront of it. Private generators now contribute 36% to the installed generation in the country, leaving behind the central sector generators.

Against a target of installing an additional capacity of 88,537 MW from conventional sources during the 12th Plan, the country has achieved 52,078.22 MW, which is 58.82 per cent, up to January 2015. The private sector alone has added 31,546.50 MW. But nearly 28,000 MW of the commissioned capac-

Total Installed Capacity (MW) (As of Jan'15)

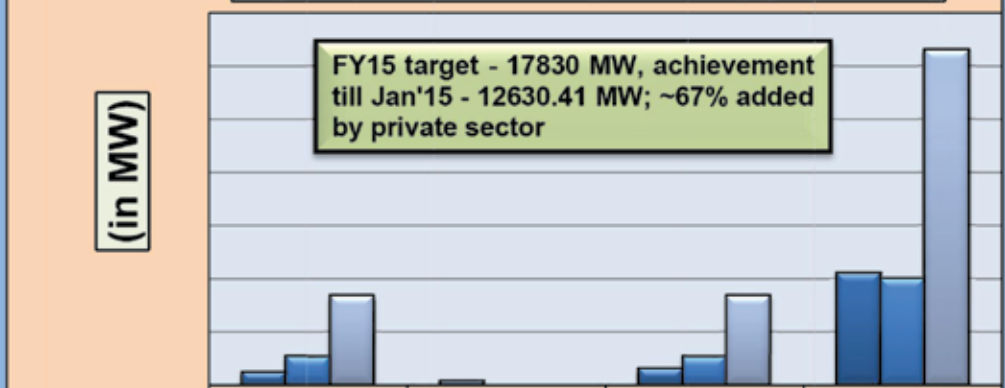


	Thermal	Nuclear	Hydro	RES	Total
Central sector	54203	5780	10691	0	70675
State sector	63467	0	27482	3803	94753
Private sector	62690	0	2694	27888	93272

Coal based capacity - 1,56,190 MW; Gas-based capacity - 22,971 MW; Captive generation capacity - 40,726 MW

Source: CEA Reports

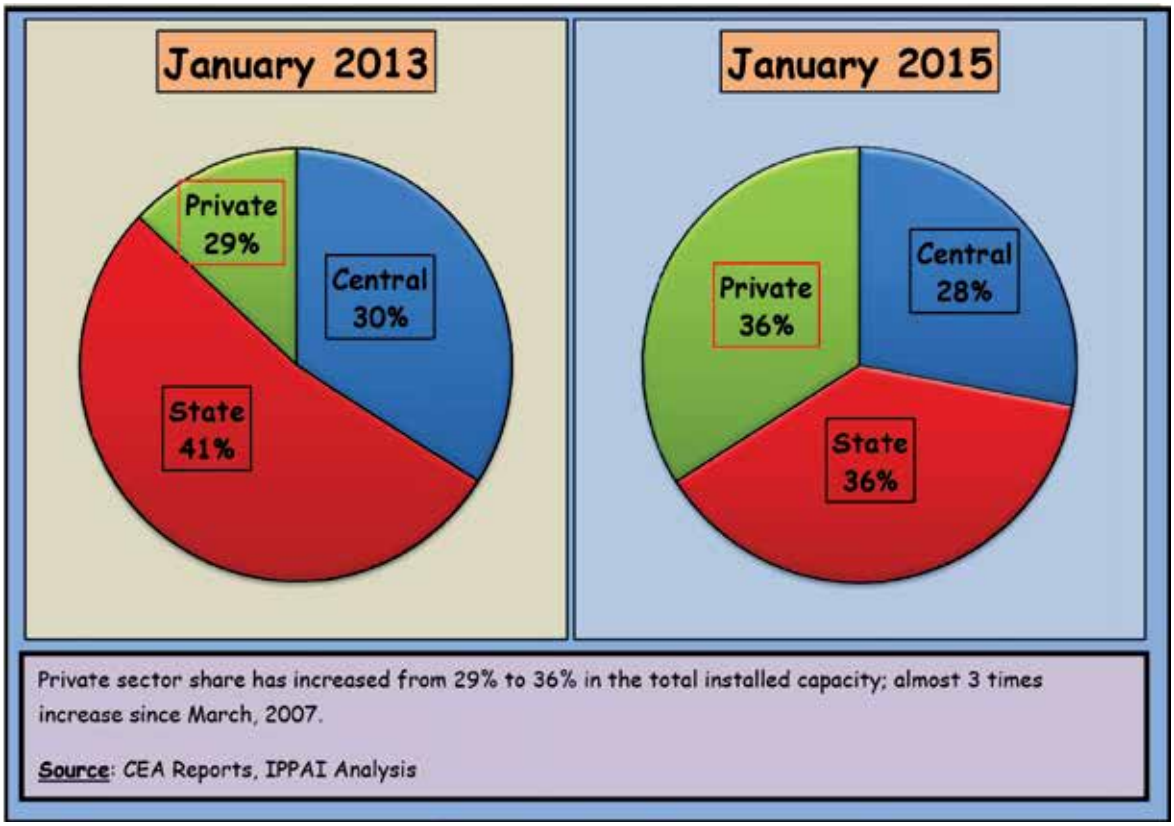
Capacity Addition during 2014-15 (up to Jan'15)



	Thermal	Hydro	Total for FY15 (up to Jan'15)	Achievements up to Jan'15 during 12th Plan
Central sector	1213.30	336.01	1,549.31	10520.62
State sector	2676.10	0	2,676.10	10011.10
Private sector	8405.00	0	8,405.00	31546.50

Capacity Addition target for 12th Plan - 88,537 MW, achievement till Jan'15 - 52,078.22 MW; Private sector contributed 31,546.50 MW (~61%)

Source: CEA Reports, IPPAI Analysis



ity in thermal (coal and gas-based) has been left stranded due to fuel shortages. The Central government is looking to auction 40 million tons of coal reserves to the power sector. But it will take a while before coal is available from these mines to fuel the power projects. In the meantime, developers are banking on coal supply from Coal India to kick-start their projects. It remains a big question, if their hopes will be fulfilled. There is no new capacity coming till 2017. Not a rupee of fresh capital investment is going to come in the power sector in the next three to four years.

Coal blocks de-allocation: Economic impact of decision

In September last year, the Supreme Court cancelled allocation of 204 coal mines, terming illegal the whole process which began in 1993. The decision hurt the confidence of power project developers and also of banks which had lent to these projects. As a consequence, private sector confidence in public-private partnership has further dipped. A much more transparent way of allocation of natural resources through the ongoing coal block allocation process though will go a long way in ensuring investor confidence in the coal sector.

Gas-based projects left stranded

The power sector has been the biggest consumer of natural gas in India in the past and is expected to remain so in the future. Currently, gas fires 9% of total installed capacity in India. Gas-based power generation is constrained by the higher cost of imported gas (LNG) and its availability across all the regions. The PLF of gas-based power plants has dropped to around 50% due to lack of natural gas availability at affordable prices. As of January 2015, PLF levels have dropped to 21 per cent, indicating an urgent need to kick-start the stranded projects.

Out of India's 24,000 MW generation capacity based on gas, nearly the entire capacity is stranded for paucity of fuel. The government is reported to be working on a gas price pooling scheme to help idling power plants of companies such as Lanco Infratech, Essar Power, Reliance Power, GVK Group and GMR Energy. The proposal to pool prices of domestic and international gas has been mooted as there is no additional fuel available from NELP fields till March 2017. When the proposal is going to see the light of the day is anybody's guess.

YEAR OF MULTI-MILLION DEALS: TRACKING TAKEOVERS

It's a buyers' market out there.

Many infrastructure companies forayed into power over the past decade, sensing good opportunities. These included Jaiprakash Associates, Lanco Infratech and Avantha Group. The infrastructure companies now want to get out of power as their balance sheets are overstretched and they are desperately looking for buyers. Most developers feel new purchases would allow a quicker return on investment (RoI) as setting up new greenfield projects takes time. Last year NTPC received an Expression of Interest for sale from 35 power projects. This clearly illustrates the market sentiments.

Consolidation deals during 2014:

AUGUST: Adani Power acquires 1,200-Mw Udupi plant from Lanco Infrastructure for INR 6,000 Cr

NOVEMBER: Adani Power acquires 600-Mw Korba West power plant from Avantha Group for INR 4,200 Cr

NOVEMBER: JSW Energy acquires two hydro plants with capacity 1,391-Mw from Jaiprakash Power Ventures for INR 9,700 Cr

DECEMBER: Tata Power acquires 540-Mw thermal plant from Ideal Energy for estimated INR 3,500 Cr

TRACKING POLICY CHANGES IN 2014

Policies adopted during Budget FY 14 and Interim Budget FY 15:

- To reduce dependence on imported coal, a public private partnership (PPP) policy framework would be devised with Coal India Limited to increase coal production.
- Extension of tax sops to all power projects which begin generation, distribution or transmission of power by 31st March 2017.
- Adequate quantity of coal will be provided to power plants which are already commissioned or would be commissioned by March 2015. An exercise to rationalise coal linkages to optimise transport of coal and reduce cost of power is underway.
- Rs 500 crore provided for ultra mega solar power projects in Rajasthan, Gujarat, Tamil Nadu, Andhra Pradesh and Ladakh.
- Low-interest–bearing funds to be provided from National Clean Energy Fund (NCEF) to Indian Renewable Energy Development Agency Ltd (IREDA) for on-lending to viable renewable energy projects.
- Government re-introduced generation-based incentives (for wind power projects) in the form of 80% accelerated depreciation (AD) to boost capacity addition in the sector; cutting of custom duty by 5 per cent on capital goods import.

India is facing serious constraints in adding power generation capacity at a pace adequate to support targeted 8-9% economic growth. Besides shortages, the rising cost of electricity also poses a challenge. Securing fuel for stranded coal/gas-based projects remains an utmost priority. At the same time the government must give a strong policy impetus to increase domestic coal production to achieve a target of 1 billion tons of coal production by 2019.

Speaking at the World Economic Forum's India Economic Summit in November last year, Power Minister Piyush Goyal said that the Indian power sector offers investment opportunity of $250 billion, of which $100 billion will be for renewable energy and $50 billion for transmission. However, expected investment for future growth might not come unless the government takes steps in time to address the current prevailing issues.

It is high time power sector reforms are taken up with a focus on the consumer and with full involvement of states rather than through complicated, central driven initiatives. Removing disconnects between retail tariff and the actual cost of electricity supply will be a good starting point. Timeliness and adequacy of subsidy support to utilities from their respective state governments remains extremely crucial in order to recover past revenues. Over the past few years, most of the states, including Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Punjab, Rajasthan and Tamil Nadu, have raised electricity tariffs by 3.6%, to 37%, to compensate for losses. Some states are working to control electricity loss from the grid, implementing electronic monitoring and control systems, enacting anti-theft laws and even setting up special police stations. As the government's 24x7 power initiative builds up momentum, state utilities need to make sure they are well prepared to use the funds that will become available—to strengthen their transmission grids and distribution infrastructure, create robust corporate governance mechanisms, enhance billing and collection systems, institutionalise regular tariff reviews, and position themselves for extending reliable electricity service to all.

After all, ensuring adequate electricity supply is critical to fuelling the country's growth ambitions.

- Inputs from Independent Power Producer's Association of India (IPPAI)