

Power Dynamics

Industry trends and opportunities in 2016

A host of policy measures targeting the revival of the distribution segment, enhancing coal production, increasing private participation in transmission and focusing on renewables, among others have been welcome moves in the power sector. However, their adoption in the true spirit, coupled with strict adherence to timelines, is critical. Sector experts share their views on the major developments in the power sector in the past year, and the outlook for the future ...

What are the top three trends that will shape the power and coal sectors in 2016?

Dipesh Dipu

The top industry trends that are likely to be witnessed in the coming year are: slower growth in thermal generation capacity addition, owing to the delay in announcements regarding new capacity addition in the past three years; greater investments in transmission capacities; continued enthusiasm in solar power even though caution is likely to set in; easing of constraints in coal supplies with a rise in domestic production and lower international coal prices; and increased participation by states in distribution sector reforms, leading to a spurring of demand for electricity. These trends are, however, dependent on the policy directions being set by the central and state governments. It is worth the wait to see how the distribution sector's financial engineering shapes up and if that enhances the availability of borrowings. This would

certainly set the tone for power sector growth in the medium term.

K. Raja Gopal

The top trends that will shape the power and coal sectors are as follows:

- How fast the financial health of discoms improves to ensure full cost recovery.
- How power purchase agreement (PPA) disputes are resolved, and how quickly and effectively stalled projects are revived.
- How coal production improves and policies for its allocation are finalised.

Ashok Khurana

Growth in renewable energy and consolidation in the conventional energy space are the key trends that will shape the power sector in the coming year. Solar power has drastically moved down the cost curve and bids for solar power have now come down to Rs 4.63 per unit, as against Rs 10 - Rs 13 per unit in 2010. However, a key point is

whether the price discovered at sub-Rs 5 is sustainable or not, considering the import of solar panels and depreciation of the rupee. The current trend of capacity addition in the renewable energy space is reminiscent of the rush to add conventional energy capacities back in 2006 – many were overly aggressive and their projects face viability issues till date. Meanwhile, for the purpose of renewable energy integration, we also need to ensure grid stability through ancillary power and flexible generation. Also, regulations, policies and market mechanisms need to evolve in order to meet the requirements of the increasing share of renewables in the energy basket.

R.K. Madan

Electricity being an essential input for the country's economic growth and society's well-being, the three major areas to be considered in the power and coal sectors during 2016 are:

- The poor financial health of the discoms, coupled with subdued demand, remains the key roadblock that has been hurting the power sector in a big way, despite a significant improvement in generation and transmission capacity addition, and an improvement in coal production in the recent past.

The government has recently unveiled a revival package for the debt-ridden state discoms in order to restore their financial health and enable them to perform more efficiently. However, earlier efforts by the government in 2002 and 2012 did not result in any significant improvement in



Dipesh Dipu

Founder and Partner,
Jenissi Management
Consultants



K. Raja Gopal

Director and CEO,
Lanco Power Limited



Ashok Khurana

Director General,
Association of Power
Producers



R.K. Madan

Director,
Adani Power



Rajesh Mokashi

Deputy Managing
Director,
Credit Analysis and
Research Limited



Kuljit Singh

Partner, Transaction
Advisory Services,
Infrastructure, Industrial &
Consumer, EY

their financial health. Therefore, it has to be ensured that the recently announced package is implemented in a timely manner and monitored regularly by a high level committee.

- In line with the government's 100 GW by 2022 solar power target, and encouraged by the reduction in solar panel costs and the operational success of implemented projects, a number of companies have committed to set up substantial solar capacity in the coming years. Government initiative is expected to play a major role in attracting investments to manufacturing and would go a long way in creating sustainable and continuous demand in setting up solar projects.

An issue of concern, however, is the timely availability of adequate transmission facility for solar power developers due to the lack of integrated generation and transmission planning for supporting solar projects.

- Our country is blessed with a vast hydro potential; however, so far, only about 41,000 MW – 30 per cent of total potential – has been exploited. Looking at the inherent advantages of hydropower, which is a clean source of energy that requires no fuel investments, as well as the failure to meet the growing demand for electricity, there is a need to focus on hydropower to bridge this gap. Further, for better energy security, discoms need to consider an appropriate hydro mix in their total power purchase portfolio. Since most of the issues related to thermal projects have been resolved, attention now needs to be paid to address the problems pertaining to hydropower projects.

Rajesh Mokashi

In 2015, the power and coal sectors were characterised by the following:

- Tepid power demand led by a decline in power offtake by discoms and a slowdown in the industrial sector.
- Allocation of cancelled coal blocks through reverse bidding.
- Record growth in domestic coal production led by Coal India Limited (CIL).

- A decline in international thermal coal prices.
- No let-up with respect to investments in the transmission and distribution (T&D) segment.
- A record dip in solar power tariffs (to sub Rs 5 per kWh levels) with a substantial ramp-up in renewable energy capacity addition.
- Announcement of the Ujwal Discom Assurance Yojana (UDAY) by the Ministry of Power (MoP) to improve the health of discoms.

For 2016, some clear trends emerge for the power and coal industries:

- Growth in power demand led by an expected revival in industrial demand.
- An increase in domestic coal production by CIL as well as from captive mines to ease the fuel woes of thermal power plants – better plant load factors (PLF) are expected.
- Traction in setting up three critical railway lines for coal evacuation from CIL's coal mines. UDAY will address coal logistics issues across the country.
- Coal imports are set to top out in 2015-16. However, there could be a decline in coal imports going forward, with higher domestic availability.
- Completion of southern grid connectivity to integrate the southern power market with the rest of India. There will be a ramp-up in power supply from the surplus western region to the deficit southern region, thereby correcting the higher merchant tariffs prevailing in the southern region.
- Implementation of UDAY in states with substantial losses and debt.
- Improvement in T&D capex led by green energy corridors.
- A substantial increase in renewable energy capacity, led by planned investments in the solar segment.

Kuljit Singh

The top trend in the coal sector will be that auctions for coal blocks will see a major reduction in bid premiums as bidders will no longer load premium onto fixed power costs (regardless of the outcome of the ongoing litigation concerning the Mandakini coal block). Alter-

natively, in order to avoid a scenario of reduced premiums, the government may do away with auctions on the basis of premium and introduce some other methodology, such as bids on tariff (this would lead to a significant loss of revenue for coal-bearing states).

Another major trend would be that CIL will become far more accountable under fuel supply agreements in terms of quality and quantity of coal supplied. Currently, there are complaints of significant grade slippages as well. The government may also announce some major policy measures for coal-to-gas projects as one of the environmentally positive ways of using India's abundant coal resources.

The top trend witnessed in the power sector will be a continued focus on renewable energy. The government could bring about competitive bidding in wind projects so as to capture the tariff gains achieved in solar projects through auctions. Of course, it will have to contend with the formidable wind equipment lobby to implement competitive bidding in the wind segment. Many mature renewable energy portfolios in India may seek to exit their investments and hence, the merger and acquisition market may become very vibrant in 2016.

Also, the government may take some steps to salvage existing thermal power projects that are stranded due to the lack of PPAs or unviable tariffs. Further, it may decide to enable such projects to renegotiate contracts or set up a state-owned company to take over the distressed assets (or else the lenders to such projects may get adversely affected). A few ultra mega power projects may finally be bid out and the government may be surprised to get a positive response from some Indian and international developers for such projects.

Distribution privatisation tenders may be invited for some states, but their success will be dependent on how risk-free investments are made under these tenders.

Which will be the most attractive areas of opportunity in the power sector?

Dipesh Dipu

The opportunities in renewable energy are immense with ambitious targets for 2019-20. Large capacities are likely to be bid out. The tariffs observed in solar projects have been revealing and at such aggressive bids, project viability may be a cause of concern in terms of financing. As a result, such projects may require a large proportion of equity funding. The transmission segment is also likely to offer greater investment opportunities, even though government-owned companies have been competitive and the segment is facing several challenges relating to land acquisition, clearances and permits.

As far as the coal sector is concerned, the government and CIL have committed to supply sized and beneficiated coal with effect from October 2017. This will result in a number of opportunities for investing in coal washing, apart from the opportunities in coal contract mining arising from CIL's production ramp-up plan to achieve 908 mtpa by 2019-20.

K. Raja Gopal

There are many completed power projects as well as projects under execution that will come up for acquisition at a good price.

Ashok Khurana

As far as the conventional energy space is concerned, it has a lot of stranded capacity and plants are running at a PLF of around 60 per cent. The entire investment in the power sector is moving towards the renewable energy space and this is expected to grow further considering the government's commitment of achieving 40 per cent of its cumulative electric power generation capacity from non-fossil fuel-based energy resources by 2030. Accordingly, we will see a clear shift in investments from the conventional energy space to the renewable energy space in the coming years. Meanwhile, investments in the transmission segment are picking

up and there are many opportunities in the inter- and intra-state transmission segments. As a result, transmission and renewable energy generation will be the key focus areas for investment's in the coming year.

R.K. Madan

The most attractive areas of opportunity in the power sector are:

- Solar and wind power development through competitive bidding.
- The execution of transmission network projects for the timely transfer of all sources of power, including solar, wind and hydro.
- Resolving the financial health of discoms as distribution is the weakest link in the country's power sector.

Rajesh Mokashi

The most attractive areas of opportunity in the sector would be:

- Renewables, mainly led by solar: Significant opportunities are expected to emerge with the tendering of solar projects by states; engineering, procurement and construction opportunities on account of the capacity planned to be set up by central PSUs; and the state governments' active interest in setting up solar parks in a joint venture with the Solar Energy Corporation of India.
- T&D segment: Within the transmission sector, Power Grid Corporation of India Limited's (Powergrid) ordering is expected to improve in 2016 (with the finalisation of capex plans for the period 2017-22). Further, T&D investments by state transmission companies and discoms are expected to rise in the second half of 2016. In fact, T&D equipment manufacturing will gain traction from these initiatives.

Kuljit Singh

Renewable energy will continue to offer attractive opportunities due to the sheer scale of new projects, which would offset the plunging solar tariffs. Thermal power may have some hidden jewels, particularly in plants that have PPAs at viable tariffs and which will benefit from the increase in coal supply that is expected in

2016. Further, due to the lower investor demand for such thermal projects from international investors and utilities, the remaining investors, who are not so environmentally constrained, may get to earn attractive returns on their investments. Transmission will also attract significant investments from financial investors as this sector has seen limited competition in the recent past. Hopefully, the concerns over aggressive bidding by Powergrid would also get addressed.

What are the next big policy steps that need to be taken in 2016 to address the pending issues in the sector?

Dipesh Dipu

Until a few years ago, fuel and financing were the key concerns for the power sector. However, fuel-related issues seem to have waned, largely due to higher coal production by CIL and lower international prices, which have together made supplies available. However, financing still remains a constraint. Several companies have struggled in project execution as well. The precarious financial condition of several state discoms has only added to the problem with relatively low growth in electricity demand. While UDAY may provide short-term relief, it is now imperative that problems regarding tariff fixation and leakages in the system are depoliticised. Another way of dealing with the problem is to put money in the pockets of consumers through Aadhar-linked and Jan Dhan-linked direct transfer schemes that will result in targeted subsidies and the commercial viability of the entire power supply chain. The policy direction needs to be aligned to this in order to ensure that the momentum being built is not squandered away too soon.

K. Raja Gopal

For the revival of discoms and stalled projects, there is a need for effective implementation of policy initiatives that have already been announced and for supplementing policies wherever necessary. Besides, adequate policy measures are needed on the coal linkage front.

Ashok Khurana

One of the most important policies to have been introduced recently is UDAY. This can prove to be a game changer for the distribution segment if there is the desired participation from the states, or else, it will also fail like the earlier two restructuring packages. The earlier schemes failed because bonds were issued and balance sheets were deleveraged immediately without a "tariff increase and loss control pathway". We need to be cautious and ensure that the new scheme does not fail like the previous ones. In fact, no financial assistance should be provided to those states that do not adhere to the UDAY roadmap.

Besides this, content and wire segregation is another big step that can be expected in the near future. However, its adoption has to be calibrated and it cannot take place at a pan-Indian level immediately. Initially, it should be launched in select areas where cross-subsidisation, loss levels, etc. are at a nominal level. Pilot projects would serve as an incubator and help us learn from their performance and experiences. For the smooth roll-out of this mechanism, the regulators need to work well in advance.

Further, we need to change the power procurement process and transmission planning, and align the two. We need to have short-term, medium-term and long-term PPAs depending on the load profile. Medium-term and short-term access should not be based just on residual capacity. Long-term open access and point-of-connection charges are based on the regional grid. However, with the National Grid, we need to have general network access (GNA) through which a consumer and generator sitting anywhere in the country can supply power to each other seamlessly at the lowest possible cost. GNA is going to be the next move on the transmission side. The Central Electricity Regulatory Commission has already appointed a committee in this regard.

On the fuel availability front, with the

increase in coal production, we are becoming slightly complacent. However, once the economy picks up and the PLF touches 73-74 per cent, coal demand will shoot up. Also, in the coal sector we need to move to commercial mining and bring an end to grade slippages in coal supplies. The MoP is working hard to ensure that we get the coal for which we have paid. While there is competition in generation, transmission and distribution, we need to create credible competition in the coal mining segment as well. The answer lies in moving towards commercial mining and the appointment of a coal regulator for a transparent, impartial and predictable regulatory framework.

R.K. Madan

The various policy steps that need to be taken during 2016 are:

- Policy related to hydro development – There should be an appropriate mechanism to speed up clearances by the Ministry of Environment, Forests and Climate Change, state forest departments; and land and revenue departments.
- A policy should be formulated for discoms to purchase a part of hydropower in their portfolio.
- Distribution reforms, including exiting from costly PPAs by discoms.
- About 60,000 MW of private power projects are distressed due to various issues, including fuel price pass-through and regulatory issues. The government has to facilitate a consensus solution among all stakeholders, enabling such power projects to start operating optimally.

Rajesh Mokashi

The implementation of the Electricity Act Amendment Bill, 2014 (which is yet to be passed in Parliament) will be the next big policy step. The bill, once cleared by Parliament, is expected to bring market-oriented reforms in the sector, such as enabling consumers to choose their power supplier, stricter compliance with regard to renewable power procurement and encouraging open access in an attempt to make

India a unified power market. It would gradually transform the present monolithic, monopolistic and opaque discom structures into a multi-buyer and multi-seller model in the retail supply of power, coupled with a separation of the content (power supply) and carriage (wire) businesses. With the separation of the wire business, the onus of network development would rest with the carriage provider (currently with the state discoms). Further, better implementation of the open access mechanism would ensure market-driven power tariffs across India, encourage cost efficiencies across the value chain, and reduce cross-subsidies. Concomitantly, the implementation of the UDAY and its success in the states would be keenly watched.

Kuljit Singh

The government needs to ensure the viability of the distribution sector under its ownership. This would be a formidable task as several state governments believe that the continued non-commercial functioning of discoms is closely linked to their electoral fortunes. The viability of distribution under government ownership is all the more important as the privatisation of distribution may not find too many takers.

The investments made by international investors have so far been limited to renewable energy. The government will have to take measures to attract international investors in the thermal power and transmission segments or provide initial public offering alternatives for such projects, the money already invested in such projects will be blocked and future projects (particularly in transmission) may find very few takers.

On the thermal power front, the government will have to come out with policies that allow such projects to re-negotiate tariffs under the existing PPAs. The government must continue taking steps to enhance the coal supply situation and restart coal mine auctions for power projects. ■