INDIAN POWER SECTOR

Timelines for implementation of tariff relief for the affected projects still unclear; policy for award of future coal linkages is still pending despite the improvement in domestic coal availability

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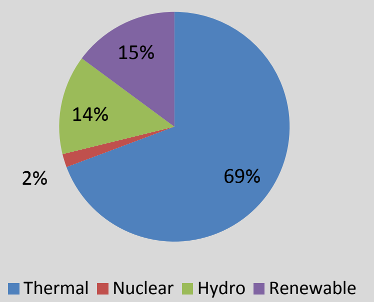
Exhibit: Fuel Mix of Installed Capacity as on Nov'16



Key Growth Drivers

- Timely implementation of UDAY Scheme by Discoms & State Govts
- Demand recovery – Industrial Segment
- Progress in long term PPA tie-up by Discoms
- Implementation of tariff compensation for affected IPPs
- Sustainability of domestic coal output growth

ICRA positively takes note of the order dated December 6, 2016 by the Central Electricity Regulatory Commission (CERC) approving tariff relief under "force majeure" for the imported coal-based power projects of Adani Power Limited (APL) and Coastal Gujarat Power Limited (CGPL), affected by change in regulations in Indonesia. However, the implementation of this order is subject to approval by the Supreme Court of India (SC) and thus, timelines of its implementation are not clear. Further, the tariff relief as per this order is estimated to be lower than the actual fuel cost under-recoveries for APL and CGPL, in ICRA's view. In respect of energy demand growth, which has been subdued since FY2014, ICRA expects the same to recover gradually over the next 2-3 year period with expected improvement in the financial position of the state-owned distribution utilities (or "discoms") following implementation of the Ujwal Discom Assurance Yojana (UDAY) and in turn, leading to an improved off-take and reduction in load shedding. However, any significant pick-up in average thermal PLF level from the current level (59.5% in 8MFY2017 and 62.3% in FY2016) is unlikely in the medium term in ICRA's view, with the increasing share of renewable energy (especially solar based) in the overall energy consumption on all India level and sizeable thermal capacity addition already in place. In this context, the recovery in industrial demand coupled with extent of improvement in the financial health of discoms remains key drivers for energy demand. Further, the recent sharp increase in coal price level internationally (73% between April till December 2016 for eco-grade coal) is a negative for thermal power capacity with short-term PPAs and dependent upon imported coal, also given the subdued tariff levels in short term power trading (either through the reverse auction platform or energy exchange). Moreover, in ICRA's view, the policy for auction of coal linkages is still pending which is a credit concern especially for operational thermal projects/IPPs (estimated 6.8 GW) which have long-term PPAs, but are still awaiting tie-up of long-term fuel supply agreement (FSA). On the regulatory front, the state-owned discoms in nine out of 29 states have filed tariff petition for FY2018 so far, which implies a less than satisfactory progress in filing of tariff petitions, given that the petitions are required to be filed by November 30, 2016 as per the tariff regulations. Out of these nine states, discoms in five states have not proposed any tariff hike, while the discoms in states such as Karnataka, Odisha and Uttarakhand have requested for tariff hike in the range of 4-24% for FY2018. Earlier, the State Electricity Regulatory Commissions (SERCs) in 23 out of 29 states have issued tariff orders for state-owned discoms for FY2017, which implies a modest progress in terms of issuance of tariff orders.

❖ CERC's approval of tariff relief under force majeure for Adani Power and Tata Power is a positive development; however, implementation timelines not clear: On December 6, 2016, the CERC has come out with the final order on tariff relief for imported coal-based projects of APL and CGPL (a subsidiary of Tata Power Company Limited). The CERC's aforesaid order was subsequent to the order issued by the Appellate Tribunal of Electricity (APTEL) on April 7, 2016, directing the CERC to assess the impact of change in regulations in Indonesia, on the projects of APL and CGPL and provide them such relief under the force majeure event, as may be available under the respective power purchase agreements (PPAs). The implementation of the order issued by the CERC is subject to the permission of the SC, given the pending appeals filed by the off-takers before the SC. ICRA is of the view that the CERC order allowing a tariff relief as per directions of APTEL is a positive development for APL and CGPL, however, it is subject to the final approval by the SC and thus, timelines of its implementation are not clear. Further, CERC has not allowed the actual exchange rate level for tariff relief estimation in case of APL; as a result the actual tariff relief requirement at the prevailing exchange rate for APL is estimated to remain higher by about 8-10 paise/unit over the estimated level as per CERC's directive. Further, as per ICRA's estimates, the tariff relief estimate for CGPL at prevailing coal price level based on CERC's order is lower by about 12-15 paise/unit, which is on account of change in formulae by CERC for calculating the tariff relief based on the contracted coal price level, instead of fuel charge recovery as per tariff bid.

- Upward pressure on coal-based cost of generation as MoEF advocates stricter environment norms for thermal power plants; however challenges persist in meeting these norms: ICRA notes the revised emission norms notified by the Ministry of Environment & Forests (MoEF), Government of India (GoI) for thermal power projects (TPPs) are set to impact operational coal-based capacity of 187 GW and under-development capacity of 74 GW. The coal-based power projects are required to invest in additional equipment to comply with the revised emission norms. ICRA estimates that this would entail a capital investment of Rs. 0.6 crore to Rs. 1 crore per MW, based on the ageing of the plant, amounting to an aggregate capex requirement of about Rs. 1.2 trillion[1] which is likely to materialise over the next 2-3 year period, assuming implementation delays. This in turn is likely to result in an increase in capital cost of generation for these projects by 13 paise to 22 paise per unit, depending on the capex incurred. In addition, it is also likely to result in additional O&M costs pertaining to additional equipment installed for complying with the revised emission norms. ICRA, however, believes that the power generating companies are likely to be able to pass on the higher cost of generation to the off-takers, primarily state-owned distribution utilities under the "change in law" mechanism in the PPA. This would put an upward pressure on the retail tariffs, which could be seen in FY2019, assuming that the generating companies implement the revised norms over the next two years. Hence, adequacy of tariff hikes by the regulators for the distribution utilities, factoring such an increase in the cost of coal-based generation, remains important from the cash flow perspective, in ICRA's view. Nonetheless, compliance by the generating companies/ IPPs to meet these norms by December 2017 remains challenging, also due to their apprehensions in terms of cost recoverability and timely approvals for the pass-through of such a cost under the change in law by the regulators. On the positive side, however, this is likely to boost the domestic capital goods sector (power generation equipment), which has been impacted by the slowdown in fresh orders.

- Sharp recovery in Indonesia coal price index in the recent past: International coal prices have witnessed a sharp recovery over the past 7-8 months with the HBA coal price index increasing from the level of US$ 51.2 per MT FOB in May 2016 to US$ 101.69 per MT FOB in December 2016. The price during December 2016 is higher by 90% as against price in December 2015. The eco-grade coal price (GCV 4200 kcal/kg) increased to US$ 53.5 per MT in December 2016 from the level of US$ 31.4 per MT in December 2015. The recovery in prices can be primarily attributed to a correction in supply from Indonesia and China with weather disruptions and supply control measures respectively. While coal price levels have remained thus volatile, any further increase in coal price level would be mainly dependent upon the extent of relaxation in coal supply control measures in China (source: Industry). The sharp recovery in coal prices along with the depreciation of rupee against the dollar and the increase in coal cess (introduced at Rs. 50/MT w.e.f. July 2010 by GoI and increased to Rs. 100/MT w.e.f. April 2014, Rs. 200/MT w.e.f. April 2015 and further to Rs. 400/MT w.e.f April 2016) by the GoI have adversely affected the cost of generation for imported coal-based power projects. The fuel cost of generation for a 100% imported coal based plant at a coastal location using eco-grade coal (GCV of 4200 Kcal/kg) has increased by 52% in December 2016 as against the same in March 2016. Further, the increase in fuel cost of generation is 45% and 40% in December 2016 as against the same during March 2015 and March 2014 respectively for a 100% imported coal-based plant at a coastal location.

- Slowdown in production growth by Coal India Limited (CIL) during the first eight months of FY2017: The weak electricity demand growth during the current fiscal has led to a build-up of coal inventory at CIL's pitheads as well as at the power plants, which in turn has led to a slowdown in growth of coal production by CIL during the first eight months of FY2017. CIL's production remained flat at 323.57 million metric tonnes (MMT) during April to November 2016 as against 321.38 MMT produced during the corresponding period of previous year. The actual production is about 90% of the targeted production of 360.84 MMT for the period. Further, the coal dispatches to the power sector during the period declined by 4.1% to 250.76 MMT as against 261.46 MMT during the corresponding period of the previous fiscal. Earlier in FY2016, the coal production by CIL increased by 9.0% to 539 MMT from 494 MMT in FY2015.

- Slow progress in filing of tariff petitions by state-owned discoms for FY2018: Overall progress in filing of tariff petitions by distribution utilities for FY2018 has been less than satisfactory with utilities in only nine states (out of overall 29 states) having filed tariff petitions so far. This is against the requirement of filing by November 30, 2016 as per terms of the tariff regulations, so that tariff orders could be issued by SERCs within 120 days i.e. by the end of March 2017. While discoms in states such as Karnataka, Odisha and Uttarakhand have proposed tariff revision in the range of 4% to 24%, discoms in states such as Chhattisgarh, Gujarat and Haryana have not proposed any tariff revision and have left the treatment of the revenue gap to the discretion of the respective SERCs. The discoms of Bihar have requested for recovery of the full costs as proposed in the tariff petition. Discoms in Andhra Pradesh and Telangana have requested for some more time to file the tariff proposals.

[1] For the operational coal-based capacity of 153 GW i.e. excluding the 34 GW capacity that has crossed the design life of 25 years

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