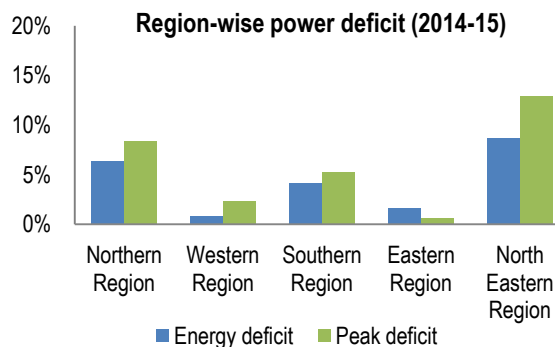
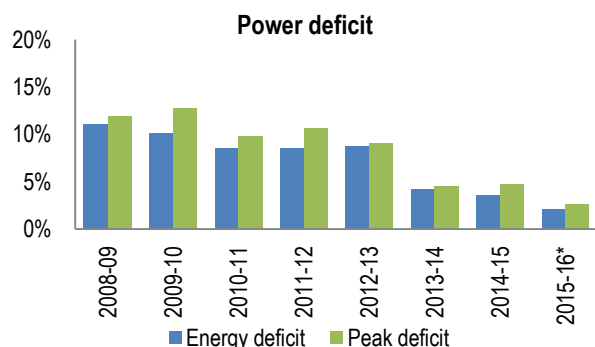


Vital Stats

Overview of issues in the power sector in India

In the recent past, several initiatives have been taken to address the challenges in the power sector. These include structural changes in the regulatory framework as proposed by the Electricity (Amendment) Bill, 2014, and more recently, the UDAY scheme to address financial issues being faced by companies distributing electricity. In this context, we present an overview of the status of the electricity sector and the challenges it continues to face.

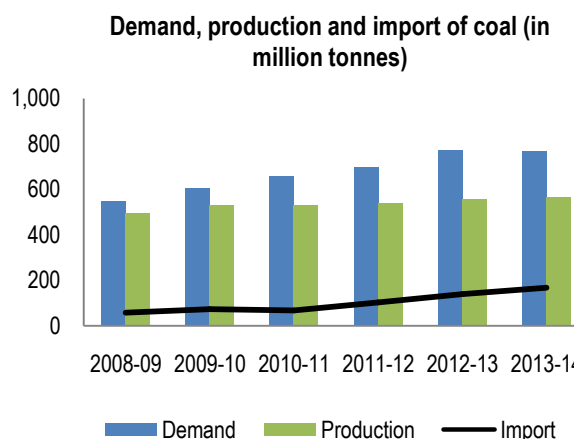
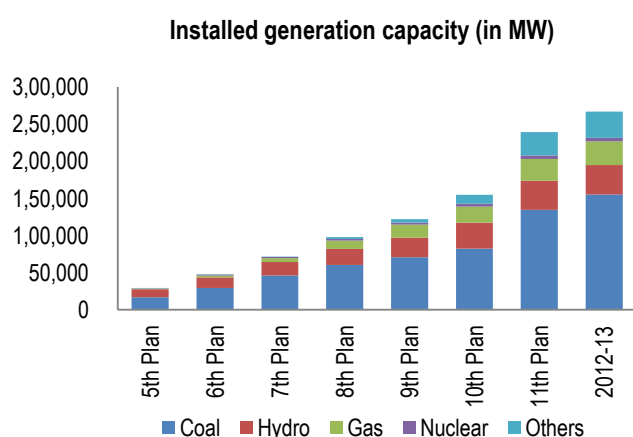
Power deficit decreasing; North Eastern region saw up to 12% peak hour deficit last year



* Provisional data

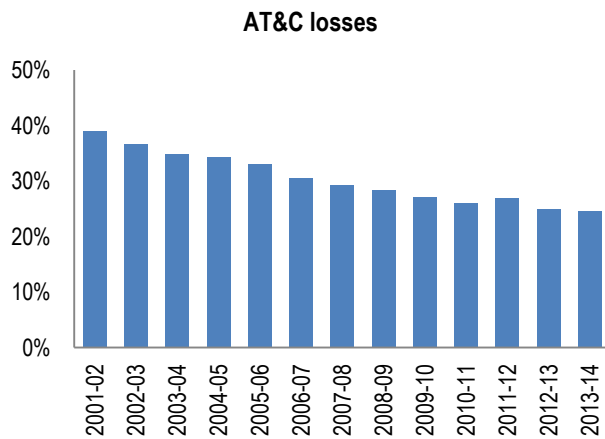
- The power deficit situation in the country has improved in the past few years. From 2008 to 2014, energy deficit (shortfall in energy supply during a day) has reduced from 11.0% to 3.6% and peak deficit (shortfall in supply during highest consumption period in a day) has reduced from 11.9% to 4.7%.
- Some of the issues leading to the power deficit situation in the country include (i) shortage of fuel, (ii) high AT&C losses, (iii) a differential tariff structure, and (iv) delays in tariff revisions. High AT&C losses and losses arising due to issues with tariff affect the ability of distribution companies (discoms) to buy power to supply to the consumers.

Generation capacity increasing, but utilisation of generation capacity is still low



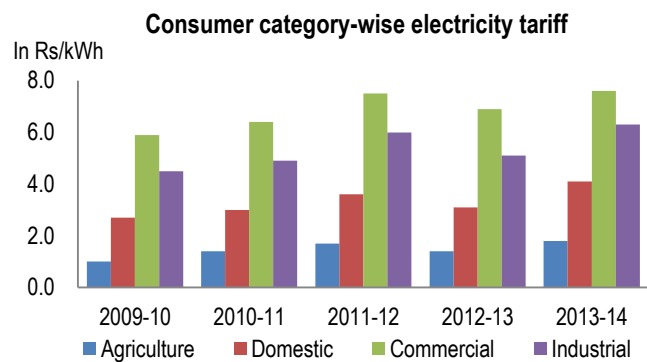
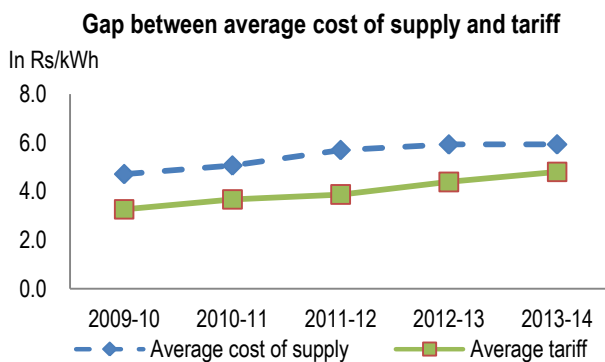
- Historically, inadequate generation capacity was the key contributor to power deficit. However, generation capacity has improved in the last few years due to high participation by the private sector.
- Over the years, the capacity to generate electricity has increased, however the actual generation of electricity has not been commensurate with this increased capacity. Key reasons for the low utilisation of generation capacity are: (i) shortage of fuel, especially coal, and (ii) unviable Power Purchase Agreements.
- The coal sector has failed to match production with the growth in coal-based generation capacity. This has created a gap between the demand and supply of coal. As a result, India's coal imports have risen from 59 to 168 million tonnes from 2008-09 to 2013-14 (185%). Shortage of coal affects the generation of power, leading to power deficits. However, with the reallocation of coal blocks in 2014 it remains to be seen to what extent the supply of coal has been addressed.

Decline in AT&C losses has been slower than the target



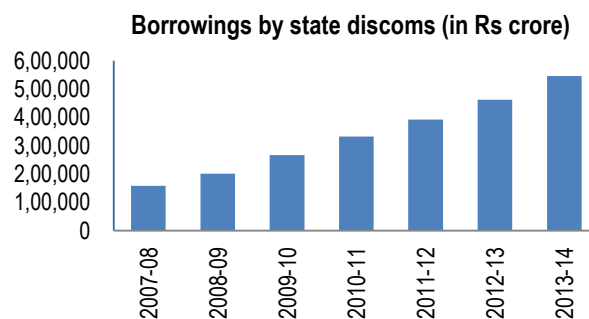
- Aggregate Technical and Commercial (AT&C) loss is the percentage of power procured by the discom for which it did not receive any payment. The national average for AT&C losses for 2012-13 was about 25%. In countries such as UK and US, AT&C losses are about 6-7%.
- Technical loss is the energy lost as heat when electricity is carried over wires. Poor equipment increases this loss. Commercial losses are caused by theft and pilferage of power, and lack of metering and poor billing and collection systems.
- The Accelerated Power Development Program was launched in 2002-03 with the main objective of reducing AT&C losses. However, reduction in AT&C losses (1.1% per annum) has been slower than the target (3% for utilities with losses above 30%; 1.5% for others).

Differential tariff, delays in tariff revisions lead to financial losses



- In 2013-14, the average cost of supplying power was Rs 5.9/kWh whereas the average tariff was Rs 4.8/kWh. In the same year, across consumer categories, the average tariff was highest for commercial (Rs 7.6/kWh) and industrial (Rs 6.3/kWh) consumers. Average tariff was the lowest for agricultural consumers at 1.8 Rs/kWh (due to direct subsidies received from the state government and cross-subsidisation by commercial and industrial consumers).
- Supplying electricity at tariff lower than the cost to supply, along with delay in tariff revisions has led to discoms facing huge financial losses.

Borrowings by state owned discoms has been increasing



- The accumulated losses of state-owned discoms (without subsidies) rose from Rs 11,699 crore in 2004-05 to Rs 71,271 crore in 2013-14. These losses have resulted in state discoms relying more on short-term loans to fund their operations. Borrowings by state discoms rose from Rs 1,58,003 crore in 2007-08 to Rs 5,45,922 crore in 2013-14 (CAGR 23%).
- Consequently, the interest cost on these loans worsens the poor finances of state discoms. Poor finances of the discoms affect their ability to buy power, thus leading to power deficits.

Data Sources: Ministry of Power; Ministry of Statistics and Programme Implementation; Central Electricity Authority; Lok Sabha Questions; Power Finance Corporation; PRS.

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