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Revenue loss of Rs 2,040 cr in Tamil Nadu due to backing down of wind power, says CAG

Business Standard: December 8, 2015

Accuses government for allowing undue benefit of Rs 22 crore to RIL

The Comptroller and Auditor General of India (CAG) has said power generators in Tamil Nadu lost Rs 2,040 crore of revenue owing to lack of evacuation infrastructure for wind power. The finding is part of the auditor's latest report highlighting several shortcomings in the renewable energy sector including an alleged undue benefit of Rs 22 crore to Reliance Industries allowed by the government in the form of solar power incentives.

According to the CAG, the break in provision of incentives to wind power developers by the government in 2012 and 2014 adversely affected capacity addition and shortfall in evacuation infrastructure was impacting wind generation. "In Tamil Nadu, the quantum of wind power backed down was 6,018 million units (MUs) during 2007-2014, resulting in a loss of revenue to the extent of Rs 2,040 crore," the report says.

While solar photo-voltaic (PV) project developers availing themselves of Generation Based Incentive (GBI) are not eligible to avail Accelerated Depreciation (AD) benefit under the Income Tax Act, Indian Renewable Energy Development Agency (IREDA) released GBI claims of Rs 22.49 crore for RIL. "This resulted in both GBI and AD being claimed by RIL in the period August 2010 to December 2012," the auditor said in its report tabled in Parliament today. An email sent to the RIL seeking comments on the allegation remained unanswered.

The report covers audit findings for the five year period ended March 2014 and talks about severe shortfall in achieving targets of Renewable Purchase Obligation (RPOs) and capacity addition. It points out India managed to achieve only 4.2 and 4.5 per cent mix of green energy in its total energy supply in 2012-13 and 2013-14 respectively against the national target of eight and nine per cent for the two years. Jammu & Kashmir and Himachal Pradesh had not set up any grid-connected solar projects even as they had potential of 1,11,000 Megawatt and 33,840 Mw, it says.

The auditor also pointed out issues with the government's remote village electrification programme and cases of irregularities in distribution and purchase of solar devices. The CAG report also highlighted several anomalies in the implementation of Prime Minister's Special Package for Arunachal Pradesh including non-completion of hydel projects due to non-availability of funds.

Rajasthan joins Centre's power discom recast scheme

Business Standard: December 8, 2015

The state has recorded the highest discom losses. At present, it owes Rs 85,000 crore to lending institutions

A month after the Union government announced its financial restructuring plan for state power distribution companies, Rajasthan on Monday became the third state to join the scheme. Earlier, Andhra Pradesh and Jharkhand had joined the scheme.



The scheme is the first move of the National Democratic Alliance (NDA) government to set right the power distribution sector through restructuring of stressed loans in the business. The restructuring plan was approved last month. "Congratulations to CM of Rajasthan Smt. Vasundhara BJP on the state joining UDAY (Ujjwal DISCOM Assurance Yojana)," said Power Minister Piyush Goyal in a tweet.

The Vasundhara Raje-led Bharatiya Janata Party (BJP) government in Rajasthan had held a summit last fortnight to attract global investments in the state. CS Rajan, chief secretary of the state, had told *Business Standard* the state was ready to join the scheme and take over half of the total debt of the state's power distribution companies as on March 31, 2015 and the rest 25 per cent by next financial year (2016-17).

Rajasthan has recorded the highest discom losses. At present, the state owes Rs 85,000 crore to lending institutions. The state, along with other loss-making states, has already been put on notice by the Reserve bank of India (RBI) to clear its debt or be debarred from receiving financial aid. Rajasthan has the highest debt of Rs 85,000 crore among states followed by Tamil Nadu's Rs 70,000 crore and UP with Rs 32,000 crore.

As per the scheme, state governments can take over 75 per cent of the debt of discoms as on September 30 and payback lenders by selling bonds. For the remaining 25 per cent, discoms will issue bonds. This would help clean up the cumulative debt of Rs 4.3 lakh crore accumulated on state-owned utilities and bring relief to lenders.

For the next two financial years, the centre will not include the debt taken over by the states in the calculation of their fiscal deficit, which could have gone up by as much as Rs 3.2 lakh crore.

States are suggested to take over 75 per cent of discom debt over two years - 50 per cent in 2015-16 and 25 per cent in 2016-17. Discoms' debts, which are not taken over by the state, will be converted by the banks and financial institutions into loans or bonds with interest rate not more than the bank's base rate. Alternately, this debt might be issued by the discom as state-guaranteed discom bonds at the prevailing market rates.

Cabinet may take up power tariff policy this week

Business Standard: December 8, 2015

The policy lays down regulations for setting power tariffs by asking electricity regulators to 'necessarily' be guided by the new policy while framing regulations

The amendments to the national tariff policy for electricity are likely to be placed in the Union Cabinet this week. After the announcement of the Ujjwal Discom Assurance Yojana (UDAY), the Centre is likely to tighten regulations to help in the execution of the scheme.

The policy lays down regulations for setting power tariffs by asking electricity regulators to 'necessarily' be guided by the new policy while framing regulations under Section 61 of the Act.

Earlier, the state regulators would not abide by regulations and twist it according to their requirement, said a former member of Central Electricity Regulatory Commission (CERC). "Now, the state regulators would have to remain in the perimeter of the policy. It would be binding on them to take regulatory decisions as per the amended policy and not as per need."

Among the major additions to the objective of the policy are promotion of renewable generation sources and creating more competition, efficiency in operations, and improvement in quality of power supply. To incentivise distribution companies to procure power from renewable sources of energy, the Centre is likely to notify, from time to time, an appropriate bid-based tariff framework for renewable energy.



The tariff policy has recommended a set of 30 amendments in the existing tariff policy, which was formed as a continuation of the National Electricity Policy, 2005.

In a first, the draft also underlines norms for ancillary services. CERC has been given the right to introduce the norms and framework for ancillary services necessary to support the power system or grid operation for maintaining power quality, reliability and security of the grid, including the method of sharing the charges.

The government has also suggested an increase in fuel cost on account of import to be included in the tariff structure. "In case of reduced quantity of coal supplied by Coal India, vis-à-vis the assured quantity of 85 per cent, the higher cost of imported/market-based e-auction coal for making up the shortfall, shall be considered for being made a pass through by CERC/SERCs (state electricity regulatory commissions), on a case-to case basis, to the extent of shortfall," said an amendment to the policy.

Other major components such as foreign exchange fluctuations, cost of land acquisition and other clearances should have been part of the tariff calculation, but it has been completely ignored, said a senior power sector executive. "Projects stuck for these reasons will continue to remain stranded."

Power generators have, however, been given the freedom to sell surplus power in the spot market if the beneficiary doesn't give two days' notice. The notice period was 10 hours earlier

Power generation: Coal's the reality for now, global lessons in efficiency

The Indian Express: December 2, 2015

Thermal units will persist as mainstay of the power sector in the foreseeable future. Focus should shift to making them competent.

At the 21st Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC), COP 21 in Paris, a resolution on limiting the use of coal across countries was one of the proposals put up for consideration. In the Indian context, this is of particular relevance as coal-fired power stations form the backbone of the Indian power generation sector and will continue to remain so in the foreseeable future, the Centre's concerted efforts to ramp up renewables such as solar notwithstanding.

Globally, the developed world has, by and large, signaled the intent to move off CO₂-belching coal-fired power stations.

Two nations, Japan and Germany, though are emerging as exceptions. In fuel-starved Japan, utilities are setting up a new wave of coal-fired stations as a replacement to many of their ageing coal units. According to data compiled by Kiko Network, a Kyoto-based environmental group, there are over 40 new coal-fired units slated for construction. By comparison, the coal-rich US has only one coal-fired project coming up — Southern Company's Kemper project, a demonstration project for new carbon-capture technology.

Germany too had enunciated a broad roadmap of moving away from the dependence on coal. But accompanied by its more recent plans to phase out nuclear power, new estimates show that Germany's lignite and anthracite coal power output in 2014 had rebounded to its highest level in more than 20 years, something that researchers blame on cheap CO₂ emissions permits and the winding down of nuclear projects.

In end-2013, generation surged to 162 billion kilowatt hours, the highest level since reunification in 1990 when Germany's coal-fired power stations produced nearly 171 billion kilowatt hours of power, largely on account of many old eastern German plants that were



still in operation, according to figures from AGEBA, a group of industry associations and technical institutes.

In India, there is no escaping the reality that coal will continue to be the mainstay of the power generation sector. An area where India can hope for lessons from countries such as Japan is in the efficiency of coal plants, which, in India, comes in at about 25-30 per cent as compared with an average of over 35 per cent in the US. Japan's coal plant operational efficiency is above 40 per cent, according to an analysis by Dutch consultancy Ecofys. J-Power, a Japanese state-owned utility until 2004, claims to have the world's most efficient coal plant at nearly 45 per cent.

In the United States, the Department of Energy is heavily promoting the benefits of integrated gasification combined cycle or IGCC — a technology that gasifies coal to make synthetic gas that can generate electricity — as a means of ensuring viability of coal at a time when environmental regulations become more stringent. Benefits include the possibility of IGCC units being retrofitted to capture carbon dioxide, burn a range of imported coal feedstocks and use less cooling water.

That in India, thermal will continue to be the mainstay of the power generation sector is a given, despite the government's overt focus on solar. This is notwithstanding the latest round of solar auctions in India last month, where US renewables major SunEdison bid a very low tariff of Rs 4.63 a kWh for 500 MW in an solar park being developed by NTPC Ltd in Kurnool, Andhra Pradesh. Cost, though, is not the biggest problem in scaling up renewables such as solar. A bigger problem is how to handle a higher share of solar or wind in terms of its impact on managing the grid.

In India, at over 36,000 MW, renewable energy currently contributes nearly 15 per cent of the country's total installed electricity generation capacity. If the capacity addition of renewable projects such as solar and wind were to happen as per plans, this number is expected to go up to 1,75,000 MW by 2022. That's where the problem could lie.

The steady ramping up of green power — solar, for instance, was just 2 MW in 2010 but is now over 4,000 MW — does go a long way in ensuring some degree of leverage for India at climate talks, but simultaneously poses a serious challenge for grid managers. The availability of solar and wind energy is largely determined by the weather conditions, and therefore characterised by strong variability. As a result, power generation from these sources cannot easily be matched to the electricity demand, like power generated from conventional plants such as coal-fired units and gas stations. Integration of large amount of fluctuating RE in the grid is a serious technical challenge for grid managers to ensure smooth operations of the Indian grid — the fifth largest in the world. To compound matters, RE generation forecasting in the country is in its early days.

A more viable strategy might be to focus on improving the efficiency of the country's coal-fired power plants, replacing older coal plants with supercritical units and pushing for newer technologies such as coal gasification to breach the viability barrier by taking a leaf out of the experiences of Japan, Germany and the US. A renewed push for hydro is simultaneously needed to beef up the green component in India's base-load capacity.

'Make in India' push means large rise in energy need: Report

The New Indian Express: December 2, 2015

The report says India's power system needs to almost quadruple in size by 2040 to catch up and keep pace with electricity demand, which boosted by rising incomes and new connections to the grid increases at almost five per cent yearly.

STATING that the 'Make in India' campaign needs energy to work and efficiency to prosper, a report on the 'India Energy Outlook' by the International Energy Agency says that putting



manufacturing at the heart of India's growth model means a large rise in the energy needed to fuel development. The report, released at IIT-Bombay on Tuesday, projects that the country requires a cumulative \$2.8 trillion in investment in energy supply, three quarters of which will go to the power sector and a further \$0.8 trillion to improve energy efficiency.

"Industry-led growth requires at least 10 times more energy per unit of value added compared with growth led by the services sector. In an Indian vision case, we examine the implications of accelerated realisation of key policy targets, including the 'Make in India' campaign to promote manufacturing and the '24x7 power for all' drive for universal, round-the-clock electricity supply. Fully reliable provision of power and new employment opportunities in the manufacturing sector gives extra impetus to India's economic and social development and its transition to an urban society. The additional demands on the energy system come primarily from industry, not only from energy-intensive sectors but also from other industries that are targeted by the 'Make in India' campaign, such as textiles, food processing, machinery and industrial equipment," it says.

It further says that energy use for road freight, residential consumption and for a more mechanised and productive agricultural sector also rise. The report says to avoid that this extra demand exacerbates energy security and environmental strains requires an even stronger commitment to energy efficiency.

"Opening new, long-term and low-cost financing options is critical to direct investment towards high efficiency and low-carbon technologies. A transparent system of approvals and clearances needs to allow viable projects to move ahead according to a predictable timetable, while safeguarding the consultation and accountability that is essential to win public consent," it adds.

The report says India's power system needs to almost quadruple in size by 2040 to catch up and keep pace with electricity demand, which boosted by rising incomes and new connections to the grid increases at almost five per cent yearly.

IIT-Bombay Prof Rangan Banerjee said the country needs to meet requirements in a way that it creates jobs and growth. "Energy is not just for requirement. In the Indian context, we need to look at energy at what price, and its impact in terms of job and the local economy," he said, adding that "every five-year plan, we have less generation than what we had planned for because we ran short of money".

According to Dr Ashok Sreenivas, senior research fellow, Prayas (energy group), the least addressed aspect in the country is institutions and how capable they are to formulate, execute and regulate policies. "Institutions in India are not yet mature enough or strong enough to be able to handle some of the transitions we need to make. There is also a significant gap in research and analytical capacities even outside the government. Perhaps the weakest link in our institutional structure are the local municipal bodies. The urban local bodies are weakly empowered, they can only frame policies and not laws...," he said.

India discom reform success is key to power sector woes: Fitch

India Infoline: November 30, 2015

Fitch Ratings says in a new report that successfully addressing the weak financial positions of state distribution companies (discoms) is key to improving the health of India's power sector. The weak fiscal position of these entities has led to sustained delays in payment to market participants and weak off-take from power generators, in addition to increasing the risks associated with much-needed investment in the sector.

The agency sees the new restructuring package offered to the state discoms in November 2015 as a positive. However, the states opting for the package and delivering on the loss-



reductions and efficiency improvements over the medium-term remains essential for the success of the programme.

Fitch forecasts substantial capex to continue in 2016 for the rated utilities in India, weighing on their financial profiles. However, Fitch maintains a stable outlook on the utilities sector and ratings of Indian utilities in 2016.

Power generation slips

Live mint: December 6, 2015

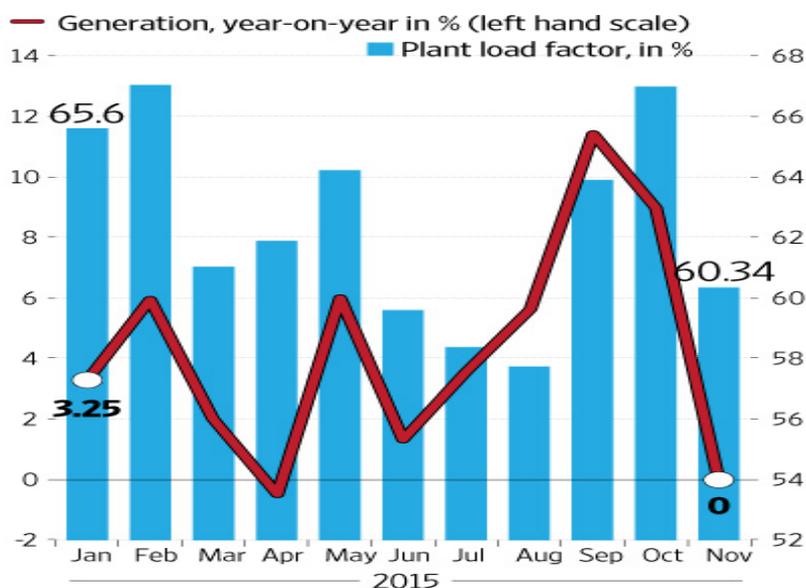
Decline comes at a time when GDP growth is accelerating and shows unfulfilled demand on the ground, leading to idle plants and unused capacities

In April-November 2015, power production increased only 4.55%, compared with 10.73% in the year-ago period.

Power generation in November was flat, compared with a year ago. In part, this was due to the base effect. Electricity production growth spiked to 10% in November 2014 and the overall figures show the same trend. In April-November 2015, power production increased only 4.55%, compared with 10.73% in the year-ago period.

This comes at a time when gross domestic product growth is accelerating and shows unfulfilled demand on the ground, leading to idle plants and unused capacities.

OPERATING METRICS



Source: Centre for Monitoring Indian Economy

“Our outlook for the Indian power sector remains negative because the industry faces persistent challenges, mainly resulting from high, albeit moderating, fuel supply risk, cost over-runs at some plants operated by independent power producers (IPPs), and the limited capacity to pay on the part of financially weak distribution utilities,” said Moody’s in its 2016 outlook report.

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