The Unraveling of the Reform Experiment in Orissa: A Case of Facile Assumptions, Glaring Fallacies, and Unrealistic Targets

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The choice of Orissa for a pioneering electricity reform experiment seemed logical – a state with low literacy rate, low-income levels and more importantly, negligible agricultural consumption (less than 7%) and hence lacking in a constituency which could effectively resist a drastic overhaul. Nevertheless, for the World Bank, which wrote the reform script, the choice of Orissa came about more by accident than design. Around the mid-90s the Bank-funded Upper Indravati Project in the state ran into rehabilitation problems. Unwilling to give up such a sizeable account, (after all, India with its size and track record of repayments is a very valuable customer for the Bank) the Bank hit upon the idea of converting the Upper Indravati loan into a reform-loan. It set aside 350 million US dollars to be disbursed to the Orissa electricity sector in a phased manner linked to specific milestones in restructuring.

The World Bank's Staff Appraisal Report (SAR) which drew up the blueprint and set the milestones and the procedures for the restructuring experiment was finalised in 1995. The Reform Act was passed in January 1996 and the experiment began in April 1996, with the setting up of the Orissa Electricity Regulatory Commission (OERC) and the unbundling of the Orissa State Electricity Board (OSEB) into two entities, one for hydel generation, viz., Orissa Hydro Power Corporation (OHPC) and the other for transmission and distribution (GRIDCO). Thermal generation was already vested in a separate company, viz., Orissa Power Generation Corporation (OPGC). The total installed generation capacity in the state was 2120 mw of which thermal was 1700 mw and the rest, hydel. GRIDCO was subsequently split into a transmission company with four distribution zones, which were later corporatised. There was a brief and unsuccessful experimentation with a private management contract for the central distribution zone. In 1999, the four distribution companies (DISTCOs) were privatised with the sale of 51 per cent of GRIDCO's equity in each through a competitive bidding process. AES Transpower, a North American company (which also owns a generation company in Orissa) runs Cesco, the central (zone) distribution company while Bombay Suburban Electric Supply (BSES) runs the other three. The workforce of GRIDCO was allocated to the various unbundled entities after a long-drawn out and painful severance process.

The Bank loan comes to GRIDCO at near-market interest rates, not on soft terms like the IDA loans. It has been guaranteed by the Government of Orissa and counter-guaranteed by the Government of India. As is the Bank practice, the loan is disbursed in several milestone-linked tranches to GoI, which on-lends it at a slightly higher rate to Government of Orissa (GoO) which in turn lends it to the unbundled utilities. The total cost of the restructuring and reform exercise is estimated to be $ 2.6 billion in which, apart from the Bank, other agencies such as Asian Development Bank (ADB), Department for International Development (DfID) of UK Government, Power Finance Corporation (PFC), National Thermal Power Corporation (NTPC) and Government of Orissa are also to contribute. The scheme envisaged investment by IPPs to the tune of $ 1447 million.

Of the $ 2.6 billion, $ 515 million would go towards strengthening transmission and distribution (T & D), $ 80 million towards Demand Side Management, $ 28 million towards training of personnel, and another $ 28 million for the Upper Indravati project. The Staff Appraisal Report predicted that the power sector would be a net generator of funds for the GoO from the year 1997!

Six years later, Orissa's power sector is in a worse financial crisis than it had ever been in the pre-reform era. GRIDCO, the state-government-owned transmission company has toted up accumulated losses, which have completely eroded its net worth. It has outstanding loans of about Rs.2700 crores, and dues of over Rs.1200 crores on account of power purchase. In fact, GRIDCO is technically bankrupt. What has kept the company from being sent to the cleaners (i.e., BIFR) is the concern that such a move would send a negative signal to other reforming states. The reform experiment must be shown to have succeeded – even if it has not.

The four privatised distribution companies – which started with a clean balance-sheet - have not been able to make any significant dent in the commercial or technical losses. Distribution losses remain well over 40% in all the four DISTCOs despite some marginal reductions achieved. . Of the 1.3 million electricity consumers in Orissa, only 50 per cent were metered when the private distribution companies took over in 1997. Today, marginal improvements have taken place in metering and collection, but only for low tension (LT) consumers. The DISTCOs have not been able to pay GRIDCO for all the power they have purchased from the latter. Together the four DISTCOs have outstandings of well over Rs.200 crores although GRIDCO does not have the leeway to cut off supplies to them despite the default

What Went Wrong?

Despite the collective wisdom of the Bank professionals and the numerous international consultants, the reform road map contained too many facile assumptions and fallacies, which doomed it right from the start.

1. When the OSEB was unbundled, the assets of each of the unbundled entities were revalued. This was done through an elaborate financial restructuring exercise undertaken with the help of international consultants. In the case of GRIDCO, the liabilities were much higher than the assets. Hence, the latter were simply "upvalued" to match the former, on the advice of the reform consultants. This meant that the difference between the actual value and the upvaluation was just a book adjustment, which merely bloated the capital base of GRIDCO even as it deprived the company of any actual capital infusion. Whatever amount was owed to GRIDCO by the Government of Orissa was simply adjusted against the upvaluation. The large capital base implied huge allocations on account of depreciation. The large liabilities entailed sizeable debt-servicing burden. Besides, the World Bank's SAR had assumed that GRIDCO would earn a 16 per cent return on GRIDCO's equity from day one. Thus, if GRIDCO was to charge tariffs that would reflect its revalued asset base (including a 16 per cent return on equity) from day one, in addition to its costs – power purchase, operation and maintenance (O&M), employee costs etc -it would have meant unconscionably high tariff hikes resulting in tariff shocks.

2. In tune with the Bank's dictat, OHPC, the other unbundled entity also aligned its tariff with its revalued asset base. Thus OHPC's tariffs post-unbundling shot up from 10 paise per kWh to 49 paise from April 1, 1996. GRIDCO's power purchase bill went up from Rs.150 crores in 1996 to a staggering Rs.1200 crores in 2000. Hydel power constitutes 36 per cent of the total power procured by GRIDCO. Thus, a huge power purchase bill compounded the steep increases in revenue requirements necessitated by the huge capital base sent GRIDCO's revenue projections through the roof especially

in a situation where dramatic improvements in T&D loss reduction were not possible. In the circumstances, the OERC fixed tariffs at a level which allowed power procurement costs, employee and maintenance costs, but disallowed certain categories of interest costs and unfunded past liabilities. There was no question of GRIDCO earning any return on equity yet. Thus, there was an invidious asymmetry in the restructuring in which the generating companies could charge tariffs that reflected their revalued asset base, but the transmission and distribution company could not. The tariff hikes allowed by the regulator took care of current liabilities of GRIDCO to an extent, but did not address the problem of past liabilities, which began to mount.

3. Even so, GRIDCO's decline would not have been so precipitate had it not been for the regulator's decision to assume a T&D loss of 35 per cent when the actual losses were in the region of 50 per cent. The regulator went by the SAR's estimates, which put T&D losses at 39.5 per cent. It allowed a tariff that was substantially lower than what GRIDCO had asked for in both the tariff applications. The OERC issued three retail tariff orders: the first in 1997 allowed 11% average increase, the second one in 1998, 9.3% and the third in 2000, 4.5%. (The third order came after the privatisation of the DISTCOs.) The SAR had assumed tariff hikes of 15% and 18% for the first two years. The OERC held that GRIDCO would begin to earn return on equity (RoE) only if it brought down its losses to 35% over and above which targets for loss reduction were set. The targets were clearly unrealistic. Here was a classic case of incorrect assumptions leading to impossible targets.

4. GRIDCO which had hitherto been earning a mandatory 3 per cent return on net capital assets suddenly had to fend for itself since budgetary support was cut off from day one.

5. When the distribution assets were to be privatized, the liabilities of the distribution companies were loaded on to GRIDCO's balance-sheet to the extent of Rs.1950 crores. Only Rs.600 crores of liabilities were still retained in the books of the four DISTCOs put together. This was done once again at the instance of the reform consultants, to make the DISTCOs attractive enough for private sector bidders. The OERC however, refused to allow these liabilities to be factored into the tariff computations of GRIDCO. GRIDCO's debt-servicing burden kept mounting.

6. Similarly, the receivables for power supplied to state PSUs and state government departments were retained in the accounts of GRIDCO since the DISTCOs refused to include them in their balance sheets.

7. The SAR had assumed a load growth of 11.4% in 1997-98, 16.7% in 1998-99 and 9.2% in 1999-00, but the actual load growth turned out to be much less thanks to the recession in the state. Captive generation also weaned customers away from the grid leading to lower revenues than anticipated.

8. The privatised DISTCOs found it difficult to achieve any significant reductions in T&D losses. Saddled with the baggage of the earlier set up, the DISTCOs were either unwilling or unable to take the steps necessary to check the losses. The Orissa super cyclone of 1999 exacerbated the situation.

9. While the umbilical cord of budgetary support had been cut off from April 1996 itself, GRIDCO continued to carry out certain unremunerative but socially relevant activities such as rural electrification for which it received no subsidy from the Government of Orissa.

10. The regulator ordered merit order dispatch in its tariff orders, but owing to the indiscipline of the DISTCOs which routinely overdrew from the grid especially in years when the monsoons failed and hydel potential remained underutilised, GRIDCO has had to purchase costly National Thermal Power Corporation (NTPC) power which pushed up its costs, even as tariffs remained unchanged.

11. If Central Electricity Regulatory Commission's (CERC) 'Availability-Based Tariff' is implemented, GRIDCO's financial position is likely to worsen since it will have to pay capacity charges to NTPC whether or not it requires the power.

The Day of Reckoning

In December 1999, the World Bank conducted a review of the Orissa reforms and came up with a report in which it admits that GRIDCO's financial position is a cause for serious concern and exhorts the GoI and its agencies to pledge assistance to GRIDCO "beyond levels envisioned in current drafts". To quote "The financial condition of GRIDCO is precarious; and the privatization of the distribution business, though successfully accomplished, will not immediately stop the financial hemorrhage in the electricity sector". Although it was the Bank and its experts whose reform recipe brought GRIDCO to this state and therefore one would expect the Bank to devise and fund a course correction, the Bank seems to think otherwise. The Aide Memoire of the Bank adopts a hectoring tone telling each stakeholder what it should do. Thus there are detailed directives for Government of India, Government of Orissa, the OERC, GRIDCO, OHPC and the DISTCOs.

The Aide Memoire claims there was interference in the functioning of the distribution companies. The Bank also claims that money disbursed to Government of India and from there on the to the Government of Orissa has not been passed on to the GRIDCO or the distribution companies, an observation that has been corroborated by GRIDCO. So far GOI has released Rs. 328.71 crores to Government of Orissa of which the latter has released Rs. 238.90 crores to GRIDCO.

The Bank has also thought up new devices to deflect attention from its costly mistakes. In what amounts to a tacit admission that mere privatisation will not improve performance, the Bank now wants village co-operatives to take over village-level distribution. It suggests micro-privatisation where the DISTCO's responsibility will stop at the village/rural transformer level and from then on, it would be the task of the local communities to supply and collect the dues from the consumers. This would entail licensing these communities and fixing the tariffs that they could charge to the final consumers – which means, the regulator could be flooded with thousands of applications for licenses and tariff orders. The Bank also wants the DISTCOs and GRIDCO to do multi-tariff filing, which is tariff applications, should be filed for three years simultaneously.

The SAR had envisaged that cross-subsidies should be phased out. Even though it has been observed that the thefts are widespread mainly in the HT segment, the Bank has been preaching that industrial tariffs should be lowered and domestic and commercial tariffs should be increased – a notion that the regulator seems to have accepted to some extent in its first two tariff orders. If tariffs were to reflect costs of supply, rural and agricultural consumers would be the hardest hit since supplying to them would require long lines and several step-down transformers while high tension (HT) and extra high tension (EHT) would attract the lowest tariffs. Whether this is politically feasible or desirable in a poor state like Orissa seems to have gone undebated.

Rescue Package for GRIDCO

The Government of India, prompted by the Bank, has put together a Bail-out Master Plan for GRIDCO – which seems like a masterpiece in accounting jugglery. GRIDCO submitted the plan to OERC for approval since it was required to do so under the conditions of the Bulk Supply License. The OERC issued notices to all the four distribution companies, which had been named as respondents by GRIDCO as also other stakeholders, and after hearing all the parties, approved the plan with certain modifications.

The plan assumes assistance from all the stakeholders, namely the National Thermal Power Corporation, financial institutions, state generating stations, state govt. and central govt. The support envisaged is in the form of a reduction of obligations to these, concessions in terms of sale, issuance of bonds to these entities by GRIDCO, in lieu of financial obligations, and certain concessional provisions to be made by the Govt. of India.

- The generators will defer the collection of receivables from GRIDCO by accepting long-term bonds, and the Delayed Payment Surcharge (DPS) would be waived.
- Power Finance Corporation and Rural Electrification Corporation will reschedule their loans and these will be refinanced by tax-free bonds.
- The Govt. of India would have to allow tax-free status to these bonds.
- The distribution companies would have to reduce the T& D losses and make timely payments of bulk supply bills as well as timely repayment of loan interest and installments on the basis of the back-to back arrangements.
- Government of Orissa would guarantee the bonds and also provide cash support over 5 years towards accumulated defaults and to cover cash deficits remaining after these measures.
- OERC would be approached to increase the tariff at a desired rate.

The following are the salient components of the amended Financial Restructuring Plan (FRP) presented to OERC by GRIDCO

- Dues to Central Generating stations to be securitised by issue of tax free bonds Rs. 600 crores
- Rural Electrification Corporation (REC) and PFC loans to be discharged by issuing tax free bonds with state Govt. guarantee Rs. 800 crores
- GRIDCO’s dues to state-owned generating companies Rs. 560 crores
- Rs. 360 crores of the dues to the state govt. and OHPC would be managed through the issue of tax-free bonds with State Govt. guarantee. The balance would be paid out of soft loans receivable from the World Bank.

- The World Bank would be approached to provide another Rs. 200 crores for managing deficits until the turnaround of GRIDCO.

  Besides these certain other measures as a part of FRP have been approved in the 52nd meeting of the Board of GRIDCO. These are as follows:

- Rs. 340 crores taken out of GRIDCO at the time of the first transfer scheme, would be reinvested in GRIDCO, by disinvesting OPGC and OHPC equity.
- Set off of government dues against corresponding GRIDCO dues
- Conversion of zero coupon bond to equity
- Reduction of staff strength by 10%
- Waiver of DPS and penal interest.

On March 16, 2001, the OERC has approved the restructuring plan submitted to it by GRIDCO, but with certain conditions. The OERC has criticised the reform architects for their flawed original financial restructuring model, which landed GRIDCO in the mess that it is in today.

The Commission also refused to make any commitments to GRIDCO regarding the future direction of tariffs. In its order, OERC disputed GRIDCO's contention n that the restructuring plan will only push up bulk supply tariffs without corresponding increases in retail tariffs and that GRIDCO had failed to take into consideration the new debt-servicing liabilities necessitated by the FRP. It has also expressed concern about the debt-servicing and repayment burden that GRIDCO would have to face five years from now and has therefore urged GRIDCO to persuade some of the stakeholders to waive or write off their dues as one-time settlement.

By all accounts, Orissa's electricity consumers are in for some very nasty tariff shocks in the not too distant future – if the reform experiment doesn't collapse altogether, that is.

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