

## Dabhol: A Lesson to All

### Introduction

The concept of Independent Power Producers (IPP) originated in the USA in the late 1970's, with the Public Utility Regulatory Policies Act (PURPA). This was enacted to counter the oil shocks and encourage alternative sources of energy.

Following this, and the successful experiences of public-private partnerships in the utility sectors of other countries, the Government of India initiated a reform process in the year 1991. The primary focus of these reforms was to make the Indian economy more efficient and to promote growth. The thrust was on public sector reforms, privatisation and keeping a check on the increasing fiscal deficit.

The Government also recognised the problem of insufficient investment in the infrastructure sector, such as power, which leads to a general slow-down in the development process. Even planned investment was not always realised, for example, while the eighth plan included a target of increasing power generation by 31,000 megawatts (MWs), only 16,000 MWs was actually added.

Realising these facts, the power sector was opened up to foreign private investors in October 1991, wherein 100 percent ownership was permitted, and the requirement to balance dividend by export earnings was waived. In 1992, in this liberalised scenario, Enron Incorporation of the USA offered to build a power plant at Dabhol in Maharashtra. For this purpose, Dabhol Power Corporation (DPC) was set up as a subsidiary of Enron Incorporation, which had a 65 percent stake. Other affiliates were Bechtel, General Electric (USA) and the Maharashtra State Electricity Board (MSEB).

### Terms of the Agreement

Enron offered to construct a 2015-MW capacity plant, which would be built in two phases. The first phase would be completed in 1997, with a generation capacity of 695 MW. This would be expanded to full capacity in the second phase. The total capital outlay envisaged for the project was \$2.8bn and there was a penalty clause for delay in the implementation of the project.

Under the agreement, the whole power produced in the plant would be purchased by MSEB. The tariff level was decided on the basis of the sum of the cost of capital (Rs 1.22 per KWh) and the cost of operation (Rs 02 per KWh), which totalled a fixed cost of Rs 1.24 per KWh, and the fuel cost, which was variable and linked to the price of fuel in the international market. MSEB was to pay the fixed cost component irrespective of quantity of power purchased from DPC. All payments to DPC were to be made in US dollars. There was also a provision for an escalation of four

percent per annum. Based upon these terms, Enron was expecting to achieve an Internal Rate of Return (IRR) of 30 percent Profit before tax (PBT).

The agreement also provided security to DPC with a payment guarantee from the State Government of Maharashtra and a counter-guarantee from the Government of India, against any default by MSEB. Another provision was the opening of an escrow account – a mechanism devised by lenders wherein an identified stream of revenue is parked with a bank and in case of any payment dispute, the litigant may seek to activate withdrawals from this account. From DPC's perspective, the deal appears to have been nearly risk-free.

The agreement soon ran into difficulties. MSEB declared that it was unable to purchase power from DPC at such high rates and hence rescinded its Power Purchase Agreement (PPA), cancelling the second stage of the project. The agreement was renegotiated

### Initial Contract of 1993: At a Glance

- \$2.84bn total outlay in two phases.
- 695 MWs generation capacities in phase one, using imported distillate as fuel.
- Capacity to be expanded to 2105 MWs in the second phase, with Liquefied Natural Gas (LNG) as fuel.
- MSEB bound to purchase all the power generated by the DPC, and to determine whether the second phase should go ahead by 1995.
- MSEB to pay DPC in US dollars.
- The cost of power to be divided into three components: cost of capital; cost of operation; and cost of fuel (linked to international market price of LNG).
- MSEB to pay the cost of capital and the cost of operation to DPC at the rate of 7.5 cents per KWh (Rs. 2.40 approx.), even if no power is purchased.
- Escalation clause at 4 percent per annum.
- Guarantee of payment by the Maharashtra Government and counter guarantee from the Central Government.
- MSEB to purchase power on a long-term agreement of 20 years.

in 1996. Among the major changes to the agreement, the total cost of capital was reduced to \$2.51bn and the generation capacity was increased to 2184 MWs. Moreover, it was decided to modify the plant to make it capable of using different types of fuels.

### Problems and Outcomes

Right from its inception, the project was plagued with endless controversies and criticised on social, economic, political, environmental and techno-commercial grounds. The Government of Maharashtra faced stiff opposition from all corners against the terms of the agreement and it became a major issue in the subsequent assembly elections. It was alleged that unfair concessions had been made to DPC and that there was a complete lack of transparency in the negotiation of the terms of the agreement. The cost of power was also extremely high compared to the prevailing market rates.

Thanks to the very high price of DPC power, MSEB had committed 80 percent of its total revenue to purchasing power from just one source, DPC which had very high price rates. Moreover, it had not identified a market for this power, which was costly in comparison to other sources, so it could not pass on its costs to consumers. In such circumstances, even after the agreement was re-negotiated, MSEB realised that the terms were unsustainable in the long run. Looking at its unmanageable financial deficits, MSEB Submitted application for revision of tariff to Maharashtra Electricity Regulatory Commission (MERC) and the Commission directed MSEB to

purchase only a part of the supply at a rate of Rs 5.74 per KWh. Following these instructions, MSEB gradually reduced the amount of power purchased from the pre-decided 90 percent of the plant capacity. However, this fact exposed the actual cost of power from the project that was projected as Rs 2.24 per KWh at the time of project proposal.

DPC reacted sharply by condemning MSEB for reneging on the agreement, and pushed to recover all due payment. When this failed, DPC opted to pursue all possible avenues including the guarantees from the Maharashtra and the Central Governments and operating escrow account provisions. The exercise of these provisions led to a direct confrontation between DPC and MSEB. The end result was that MSEB stopped purchasing power from the plant and DPC was up for sale, putting lenders at risk of losing their money.

The Godobele Committee, set to examine the entire deal, commented that the World Bank (WB), the Central Electricity Authority (CEA) and the Planning Commission had indicated the inappropriate nature of the project.

Elsewhere, the parent company, Enron Incorporation, has filed for bankruptcy, and a vast array of unethical and illegal conduct has been alleged in its general operations, such as misinforming shareholders, presenting fake annual results and attempting to buy political influence by funding the campaigns of top political leaders. A federal criminal investigation into the matter is underway.

### Renegotiated Agreement 1996: Highlights

- Total capital was to be reduced by \$330 million to \$2.51bn.
- Total generating capacity was to be increased to 2184 MWs from 2105.
- First phase to generate 740 MWs instead of 695 MWs of power with Naphtha as the basic fuel.
- The plant was to be modified to operate with fuels other than Naphtha also.
- Power was to be supplied by DPC at the rate of Rs 1.90 per KWh for first phase, and Rs 1.89 per KWh when the second phase begins in 2000.
- Contracts would be competitively bid and the benefit, if any, would be passed on to the MSEB.
- Capital recovery charge would be revised to Rs 0.78 per KWh.

## Lessons for the Future

The mistakes made in the DPC agreement must not be repeated. In order to avoid such situations from arising in the future, it is crucial to learn lessons from the circumstances and shortcomings of the agreement. This will protect future stakeholders and provide benchmarks by which to examine other agreements.

This episode amply demonstrates that despite the presence of certain safeguards, the lack of transparency in the agreement inevitably resulted in its failure. It also clearly reveals the extent of Government and investor indifference to consumer interests.

The following section explores how the Dabhol experience can throw light on some of the major issues in the prevailing investment environment:

### 1. Can the Government Protect Consumer Interests?

Despite the fact that the Government is ultimately accountable to the electorate, it has tended to compromise the interests of consumers in dealing with large investors. The Dabhol case is of particular importance because the provision of electricity is an important element of the Government's role in providing welfare and encouraging development. It must ensure that affordable services are available for all.

### 2. Do Artificial Incentives Work?

The terms of the Dabhol agreement suggest that the Government of Maharashtra was very keen to push the project at any cost. Bearing all possible commercial risks of the project and offering an assured premium rate of return to the investor created an artificial investment environment and clearly reflected the Government's over-enthusiasm.

The Dabhol case has established the fact that providing artificial incentives to attract investment is neither affordable nor sustainable, even in the short-run. The consequences of such artificial mechanisms will be an inability to hold to commitments and a loss of credibility on both sides.

### 3. How to Initiate Policy Change?

Considering the dynamic business environment, and the tendency of the Government to sign investment deals that are not in the people's interest, there must be an effective opposition to protest against such decisions. Non-Governmental Organisations should be instrumental in the campaign to ensure that people's views reach policy-makers, and that the implications of such agreements are fully spelt-out.

In situations where the Government feels that it is necessary to shift from the pre-stated policy in the larger interest of people, it should apply a consultative approach within a formal mechanism so that the maximum possible views of opposition, technical experts, and NGOs are accommodated while maintaining utmost transparency.

### 4. Should an Agreement be Renegotiated?

In principle, once an agreement has been signed, it should be honoured by all the parties concerned. However, in some cases such as the Dabhol agreement, revisiting the terms of agreement is unavoidable.

If such moves result in a situation where the investors can no longer rely on the binding nature of agreements in general, then a highly unpredictable and inhibitive investment environment will prevail. For an investor, renegotiation may pose an adverse threat, since it may alter the financial projections of the project.

The Government is responsible for negotiating upon the terms of agreements, and as a representative of people's concerns, it should work closely with experts and civil society organisations to produce a successful agreement. Every effort should be made from the outset to put in place a fully transparent agreement that will not need renegotiation.

Wherever revision of an agreement is absolutely necessary, this should only be allowed with the permission of the relevant independent regulatory body, in cases where there is *prima facie* evidence of major misconduct.

### 5. Who Should Decide about Price?

Despite three revisions of the rate of supply from DPC to MSEB, it was, almost unarguably, too high. The features of the agreement which resulted in this discrepancy, and which should be avoided in the future are as follows:

- Myopic planning on the part of DPC and MSEB. LNG and Naphtha were seen as 'fuels of the future'. Considering the availability and price volatility of those fuels, this was an unwise prediction.
- The rate of electricity supply was linked with Liquefied Natural Gas (LNG) and Naphta prices in international markets. The exchange rate of the US Dollar with the Rupee was also a determinant.
- Under the agreement, MSEB was the sole buyer of DPC power at 90 percent of the plant load irrespective of demand, despite the fact that options for cheaper power were available.

- Consumers, the ultimate users of the service, did not have any representation in the negotiation of the cost of supply. Moreover, the absolute lack of transparency created doubts about the calculated costs.

## 6. Lack of Preparation by Parties to Agreements

There was a serious lack of planning on MSEB's part regarding how it would offload the power that it had committed to purchase. MSEB failed to identify those sets of consumers who could have agreed to pay more for better and uninterrupted supplies. Despite the fact that MSEB was to be the only buyer of all the electricity generated by a 2020-MW plant, it did not draw up a business plan based upon future demand projections. Such an exercise could have helped MSEB to keep its revenue on track. It is crucial that parties do not enter future deals blindly, without making a sufficient forward planning.

## 7. Investment Risk Trade-off

In the corporate sector, the rate of return on a project is closely linked to the level of risk. No business deal can take place without a certain level of risk being borne by both the parties. However, the major promoter of DPC, Enron Inc., passed all commercial risk onto MSEB and the Government in the Dabhol deal. This was contrived by various elements of the agreement such as the provision that MSEB would pay the fixed cost part of the tariff regardless the quality of supply and the

Government guarantee in case of default.

What Enron did not realise was that by attempting to achieve unusual returns on investment without bearing commercial risks, it was exposing itself to additional socio-political risks. Investors must be made to understand that attempting to manipulate situations to provide unusual returns will jeopardise the very existence of their projects.

## Conclusions and Recommendations

The DPC deal failed because of the lack of transparency in the agreement and many other flaws, which originated in the lack of foresight by all parties, MSEB in particular.

Offering untenable artificial incentives will not attract investment in the long run. Instead, the Government should work towards creating a conducive environment for direct foreign investment through policy reforms.

The case is a clear example of Governance failure and irrational decision-making. In future, all commercial deals need to be negotiated on a purely commercial basis. Government should not compel utilities to follow instructions that are not in the broad interests of consumers. Any deal that overlooks consumer interests will evoke severe political and social dissatisfaction, which may prove to be a major threat to the project.

The following recommendations will help future agreements to avoid the difficulties that have arisen in this case:

### General:

- Any potential problem in agreements should be dealt within the first set of negotiations, rather than rectified later.
- Transparency is the key to the successful implementation of any deal.
- Negotiating with investors is a specialised task, and needs an expert panel and stakeholder representation. In particular, consumers should have a say in the negotiation on prices.
- Investors have a legitimate right to maximise their gains.

### Government:

- Government must recognise that investors will be attracted to credible policy and a transparent investment environment, not unsustainable artificial incentives.

- Protecting the interests of the electorate should be the governments' over-riding priority.

### Consumers:

- Consumers must not take it for granted that the Government will protect their interests.
- Consumers need to become more organised and vocal and push for a greater role in policy decisions.

### Investors:

- Investors must recognise that unrealistic commercial agreements result in enhanced political/social risks. Such agreements are likely to fail.
- Investors must learn to accept the commercial risks of those investments, which are accompanied by high rates of return. In the long run, this will be in their own interests.

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This Briefing Paper is researched and written by H. Neogi and Vinayak Pandey of and for CUTS Centre for Consumer Action, Research & Training, D-215, Bhaskar Marg, Bani Park, Jaipur 302 016, India. Ph: 91.141.20 7482, Fx: 91.141.20 7486, Email: cuts@cuts.org, Website: www.cuts.org, and printed by Jaipur Printers (P) Ltd., M I Road, Jaipur 302 001.