Abstract

The report of the Godbole Committee, appointed by the Government of Maharashtra, on the controversial Dabhol Power Project highlights how reckless greed and scant regard for "public interest" amongst various decision makers in the government and private corporations could lead to fooling and fleecing of consumers and general public. It clearly demonstrates that the project was undesirable right from 1992 and had enough "potential" to force a "plan-holiday" on Maharashtra. The project would be disastrous even if MSEB were to function in efficient manner, agricultural tariff were to be doubled, and power demand were to grow at an unprecedented rate. The committee also recommends radical restructuring of the project so as to drastically reduce the tariff as well as the burden on MSEB by half (i.e., by Rs. 3000 Cr./yr.). Dr. Godbole and Dr. Sarma, also highlight the inevitability of constituting a Judicial Commission of Inquiry in order to free MSEB/GoM from irrational contract and to ensure that those responsible for the "governance failure" be made accountable. This paper discusses the observations and findings of the committee and its importance.

1. Background

The Dabhol Power Company, promoted by the US multinational Enron Corporation, is building one of the most controversial power projects in India. Right from the initial stage of signing the Memorandum of Understanding (MoU) in June 1992, the project has faced criticism on several grounds, including techno-economic, environmental, procedural, political, and national security grounds. The major techno-economic and procedural issues in the controversy include, high capital cost, high tariff, inappropriate capacity and base load generation pattern, imported fuel, take-or-pay contract for LNG, irregularities in various statutory clearances and procedures. The project has also been a matter of intense litigation with over dozen public interest litigations (PILs) filed in the High Court as well as the Supreme Court. One of these cases is still pending in the Supreme Court. The project was also the subject matter of political one-upmanship and even electoral battle among various political parties. The claim of spending US $ 20 million (~ Rs. 100 Crores, today), for "educating" Indian officials, that was made by Ms. Linda Powers, the former Global Vice President of Enron, created quite a storm and fuelled allegations of corruption. Enron also claimed that the project provides much needed "development assistance" and boasted of investment of US $ 24.5 million (Rs. 115 Cr., in today's cost) for providing a fifty-bed hospital, a primary school, a vocational school, and drinking water pipelines for surrounding villages.\(^1\) (Linda Powers, 1995)

\(^1\) One Crore (Cr.) is equal to 10 million and 1 US $ is currently equal to Rs. 47.
This controversy entered a new, decisive phase when the bills for electricity produced by Enron, started actually rolling. The phase I of the project was commissioned in May 1999. During the remaining period of the financial year 1999-2000, DPC generated around 3700 million units of electricity (MU), at a plant load factor (PLF) of 66%, resulting in an average tariff of Rs. 4.37/kWh. In November 1999, MSEB submitted application for tariff increase to the Maharashtra (state) Electricity Regulatory Commission (MERC). MERC conducted a transparent public process to deliberate on the tariff increase application by MSEB. During this process, the high cost of power from the DPC project was exposed and MERC was forced to direct MSEB to limit power purchase from DPC, as this was the highest variable-cost plant. MERC directed MSEB to purchase only 3044 MU (PLF of 47%) from DPC during the FY 2000-01, at an average tariff of Rs. 5.7/kWh. This further exposed the real cost of power from this project, which is far higher than the Rs. 2.4 or Rs. 1.89/kWh which were cost figures claimed by the proponents of the project at the time of signing the original and amended agreement respectively. MSEB found it impossible to make timely payments of monthly bills of even Phase I of the project, which is pegged at around Rs. 150 Cr. On this background, it became amply clear that it would be impossible for MSEB to pay the monthly bill of over Rs. 500 Cr. after Phase II comes online. This harsh financial reality along-with the aggressive posture by some constituents of the present coalition government (hereafter referred to as the left parties), forced the Government of Maharashtra (GoM) and MSEB to take a serious re-look at the entire project.

In the last week of November 2000, GoM announced formation of a high-level expert committee to look into all aspects of the project. But, just like the project itself, the formation of the committee witnessed heated debate about the Chairmanship of the Committee. While the left parties were insisting on appointment of an upright and honest civil servant named Dr. Madhav Godbole, as the Chairman of the committee, the pro-Enron constituents of the present government opposed the same. Finally, after a month-long battle of wits, the pro-Enron constituents had to agree to the name of Dr. Godbole. The second thorny issue in the constitution of the committee was inclusion of Dr. Kirit Parikh, a member of the earlier Re-negotiation Group constituted by the BJP - Shiv Sena government in 1995, which sculptured the present PPA. This again invited wrath of left parties as well as the project critiques. Subsequently, Dr. Kirit Parikh chose to stay away from the committee’s deliberations over the DPC project. The third obstacle in the effective functioning of the committee came in the form of its 'Terms of Reference' (ToR). The initial ToR required the committee to review the overall 'demand - supply' situation in Maharashtra, financial impact of DPC project on MSEB, and to suggest appropriate measures to facilitate sell of DPC's power to other agencies. Here again, the left parties successfully forced the government to expand the ToR to ask the committee to specifically evaluate and review all clearances and tariff. On this background of the multitude of controversies surrounding the project as well formation of the committee,

2 The proponents of Enron project projected tariff of Rs. 2.4/kWh and even Rs. 1.89/kWh, at the time of signing the PPA and the amended PPA in 1993 and 1996 respectively. Though these figures were based on several assumptions (at times highly unrealistic), and concepts that are difficult to understand for the common public such as "levelised tariff". No effort was made to reveal the real cost of power, in terms that common consumers can understand. In fact, the entire effort was to portray lower tariff, by resorting to accounting jugglery.
the committee submitted the first volume its report examining the Dabhol Project, to the GoM on 10th April 2001, i.e., within the prescribed time limit of two months. (Hereafter just referred as the Report).

2. The Godbole Committee Report

The first volume of the committee's report extending to about 200-pages is divided in eight chapters. The first chapter is introductory and the next two chapters review the performance of MSEB and the demand-supply position in Maharashtra respectively. Chapter Four narrates various developments relating to the project and the structure of the project as it stands today. The entire fifth chapter is devoted to the analysis of the renegotiations process in 1995 which was conducted by the Re-negotiation Group on behalf of the BJP-Sena government, and the implications of the same. The sixth chapter brings out various aspects relating to the key project clearances such as tariff clearance, CEA Clearance as well as issues relating to demand forecast and due diligence process by project financiers. Chapter Seven presents various options for reducing the impact of DPC project and for restructuring the project so as to make the same viable. The last chapter presents committee's recommendations to the government of Maharashtra. Apart from one recommendation regarding the constitution of the Commission of Inquiry, the entire report is a unanimous report prepared and signed by stalwarts like Dr. Madhav Godbole (former Union Home Secretary), Dr. EAS Sarma (former Union Power and Expenditure Secretary), Mr. Deepak Parikh (Chairman, Industrial Development Finance Corporation), Dr. R. K. Pauchary (Director, Tata Energy Research Institute), and Mr. V.M. Lal (Energy Secretary, GoM).

This report is a watershed in the history of Indian power sector. The report provides in no uncertain terms the findings and conclusions on the following key issues in the controversy over the project;

- How the various objections raised by several critiques (right from 1992) were correct;
- How the project is not in the public interest;
- How disastrous it would be for Maharashtra State and how it lead to "plan-holiday" in the state and;
- How could certain vested interests hijacked the non-transparent, non-accountable and non-participatory decision making processes, and how these vested interests collided to fleece the consumers and extract exorbitant profits for private corporations.

The report is an essential reading for everybody associated with the power sector or interested in understanding the political economy of large infrastructure projects in India. This article highlights some of the critical observations, findings, and conclusions of the report, with a view to demonstrate the above mentioned issues in the controversy over the DPC project. For ease of understanding, various observations and findings of the committee are organised together to demonstrate the decisive nature of the committee's conclusions regarding the following key issues in the controversy;

- Inappropriateness of the project
- Doctored demonstration of reasonableness of the tariff
- Excessive payments and exorbitant profitability
3. Inappropriateness of the Project

One of the fundamental objections to the project is its inappropriateness for Maharashtra's power sector. Appropriateness of any power project could be judged on the basis of the projected demand-supply position in the state as well as the size, type (base load or peak load), and fuel used for the project. As this section demonstrates, the DPC project is inappropriate on all these measures.

The committee has dealt with these issues first in the third chapter on demand-supply situation and then again in Chapter six on critical issues in Dabhol project. The committee's analysis reveals that, in the past few years, the demand from high paying industrial consumers has slowed down while the demand from domestic and commercial sectors is increasing. Such growth in demand components is resulting in peak demand growing more rapidly than base demand. In this context, the committee observes that the generation capacity available in the state is largely the base-load capacity and the state actually appears to be surplus in base-load supply, and hence what is required is addition of intermediate or peak load projects. The situation was same even during the early 1990s, when the DPC project was being designed. The committee concludes that the IPP projects in the state, which are contracted as base load plants with high PLF of around 90%, are ill-suited from the perspective of load profile in Maharashtra.

Coming to the issue of Dabhol Project, the committee demonstrates how, even during the initial stages of project design, at least three key, influential agencies, the viz., the World Bank (WB), the Planning Commission, and the Central Electricity Authority (CEA), had warned the MSEB and GoM about the inappropriate nature of the project. In 1993, the World Bank warned the MSEB / GoM that "... the project would add more capacity than needed to meet the projected load growth in 1998 and would also result in uneconomic plant dispatch", and, "substantial adjustment in electricity tariff would be required to recover cost of the project from consumers and to safeguard MSEB's financial position". (pg. 50). The WB also espoused that, for base load generation, Indian coal and gas were the cheaper options, and even if one had to rely on imported fuel, then importing coal (rather than LNG) was the better option. In the same year, the Planning Commission also opined that "The backing down of the existing thermal generation capacity in Maharashtra due to this new capacity addition would imply heavy additional economic
costs imposed on the power system of MSEB". (pg. 46). CEA's own analysis also confirmed this conclusion, when it clarified that "(As) per the studies conducted by CEA, Dabhol CCGT plant was not the least cost option". (pg. 46). Based on such analysis and documentary evidence the committee concludes that "The Committee is of the opinion that MSEB and GoM erred seriously, based on information available at that time, in proceeding with DPC as a base load project, even when its capacity was reduced to 695 MW." (Emphasis original, pg. 47)

Unfortunately, 1993 was not the only occasion when serious errors in demand projections were committed to accommodate the DPC project. While granting the clearance, CEA, stipulated in 1994, that the Phase II of the project can be taken up only after MSEB/GoM ensure full absorption of power generated (including off-peak power) by the project. Thus, even though after renegotiations, Phase II of the project became binding on MSEB / GoM, DPC still needed to get assurance from MSEB that the full power could be absorbed in the system. Without such a clearance from MSEB /GOM, it was not possible for DPC to achieve financial closure of the Phase II, commence construction and bind MSEB for a contractual payment of over Rs. 6000 Cr. /yr. MSEB issued this clearance to DPC wide its letter dated September 2, 1998. In fact, by 1998, it had become absolutely clear that MSEB's initial demand projections were highly inappropriate and the actual demand growth had slowed down considerably. In this situation, as per CEA's condition and the statutory responsibility of ensuring economy and efficiency, it was essential for MSEB to withhold this clearance till the demand reaches the sufficient levels. Instead of this rational decision, MSEB chose to undertake dishonest and irrational exercise of projecting demand to justify Phase II of DPC. To demonstrate that entire power from Phase II could be absorbed, MSEB projected a growth rate of demand to the tune of 8% to 9% p.a. while the actual growth rate in previous two years was 2% and 5%.

Thus, after reviewing the entire issue of demand projections and appropriateness of the project, the committee concludes that "The committee finds that while the initial demand projections for DPC were flawed in that they ignored different load types in their projections, the demand projection that was the basis for commencement of Phase II was based on patently untenable assumptions, given the information at that time; assumptions that have since proved to be completely unjustified" (emphasis original, pg. 53).

4. Doctored Demonstration of Reasonableness of the Tariff

Reasonableness of the tariff was probably the most controversial aspect of the project. During the development stages, DPC and other pro-Enron lobbies tried to create an impression that the tariff would be Rs. 2.40 /kWh. This was based on several assumptions, which were never explained and the impacts of changes in these assumptions were also not disclosed, though some critiques of the project were clearly able to demonstrate the same (Sant, Dixit, Wagle, 1995). During renegotiations in 1995, the Renegotiating Group claimed that the tariff has been brought down to Rs. 1.89/ kWh. Unfortunately, rather than actually bringing down the tariff, the group resorted to arithmetic and accounting jugglery to create an impression of substantial reduction in
As the current situation of high tariff demonstrates, the entire effort of Enron supporters has been to hide the reality rather than to explain the same in transparent manner to consumers, who have to ultimately bear the brunt of higher tariff. Unfortunately, this attempt of resorting to accounting jugglery based on unrealistic assumptions to hide the real cost of power was not limited to public discourse. DPC as well as MSEB / GoM used such tricks also to convince the Ministry of Power that the DPC tariff is reasonable, and even Ministry of Power chose to accept these tricks.

The committee has dealt with the issue of reasonableness of the tariff first in Chapter Six and again in Chapter Seven. The committee has extensively analyzed whether the demonstration of meeting legal requirement of DPC tariff being less than GoI tariff was reasonable. The tariff structure of the DPC project, as set out in the PPA, is substantially different from the structure prescribed by the Government of India wide notification dated 30th March 1992. Here, it is essential to note that when the PPA was signed in December 1993, it was essential for MSEB and DPC to adhere to the GoI notified tariff structure. But DPC/MSEB chose to adopt a different tariff structure. This indicates the "high-level" of confidence of signatories to the PPA that the Ministry of Power would approve the deviation in tariff structure. As the later events indicate, this confidence was not misplaced. On 22nd August 1994 (i.e. over six months after signing the DPC's PPA), the Ministry of Power issued another notification which allowed a tariff structure different from the one specified in the March 1992 notification, provided that the concerned state government and SEB demonstrate that the actual tariff as per the PPA is lower than the tariff calculated on the basis of GoI methodology (that is contained in the March 1992 notification). On two different occasions, first in 1994 for Phase I and latter in 1999 for Phase II, MSEB and GoM claimed that the DPC tariff, though different in structure, was lower than the GoI notified tariff. This demonstration by the MSEB / GoM was critical, as in the absence of such demonstration, the project would not have gone ahead. In Chapter Six the committee has analyzed whether this demonstration of actual DPC tariff being less than the GoI specified tariff was reasonable. The committee found that MSEB / GoM made the following four crucial assumptions to demonstrate that the PPA tariff was lower than the GoI notification tariff. The committee's analysis and its conclusions in this regard is presented in the subsequent paragraphs.

- **Fixed exchange rate**: Even though the historical experience demonstrates that currency depreciation of Indian Rupees vis-à-vis US dollar is around 8% p.a., the MSEB / GoM assumed a fixed exchange rate. This helped in keeping the DPC tariff lower than the GoI tariff by more than one way. As per the GoI tariff, the return on equity (RoE) above 16% cannot be denominated in foreign currency. In case of DPC, the RoE, is nearly 30%. Assumption of fixed exchange rate effectively leads to denominate the RoE in dollar even if it is actually above 16%, which is the case with DPC tariff. Even though fixed exchange rate was assumed, escalation in O & M cost was assumed to be 10%, (for Phase I calculation) and 8.87% (for Phase II calculation), i.e., at the rate that is close to Indian inflation rate. For maintaining consistency, MSEB/GoM should have used O & M escalation rate equivalent to US inflation. Assuming high escalation (of 10% and 8.87%) with fixed exchange rate
leads to absurd situation of O & M cost becoming over 10% of the project cost in the last year of the project!

- **Heat Rate:** The GoI notification specifies a fuel efficiency norm (heat rate) of 2000 kCal/kWh, for DPC type CCGT plants. While computing tariff as per the GoI norms, MSEB/GoM used this norm of 2000 kCal/kWh, conveniently ignoring two crucial requirements of the notification, that this norm of 2000 kCal/kWh was only the ceiling, and that the actual heat rate should be used for tariff computation, if it is below 2000 kCal/kWh. DPC's PPA guarantees a heat rate of 1878 kCal/kWh. While computing DPC tariff this norm (1878 kCal/kWh) was used. Thus, assuming two different fuel consumption norms helped in inflating the energy cost as per GoI tariff by about 6%!

- **PLF:** GoI guidelines stipulate that IPPs can recover full fixed cost at a PLF of 68.5%, and for higher PLF they would get an incentive resulting in increasing the return on equity upto 31%. MSEB / GoM compared tariff at a PLF of 90 %, which helped in substantially inflating the GoI tariff.

- **Capital cost:** The capital cost is another crucial factor in determining the competitiveness of the DPC tariff. After renegotiations, DPC agreed that it would reduce the capital cost to US $ 2501 million from the earlier stated capital cost of US $ 2828 million, i.e. a reduction of us $ 327 million or Rs. 1500 Cr. at today's cost. As such, while computing the tariff on the basis of GoI notification, MSEB / GoM should have used the reduced capital cost of US $ 2501 million, but in reality MSEB / GoM used the earlier higher cost of US $ 2828 million. This again resulted in inflating the GoI notification tariff.

Table 6 A and 6 B in the Report, (reproduced below, emphasis added) demonstrate the impact of various assumptions on reasonableness of the DPC tariff vis. a vis. GoI notified tariff.

<table>
<thead>
<tr>
<th>TABLE 6A: COMPARISON OF PHASE-I TARIFF SUBMISSION (RS. PER UNIT)</th>
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<tbody>
<tr>
<td>Original Submission by MSEB</td>
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<tr>
<td>----------------------------</td>
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<tr>
<td>DPC Tariff</td>
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<tr>
<td>Gol Tariff</td>
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Source: Committee's Calculations. The complete tariff lines can be seen in Charts 7a to 7e

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3 In fact, the equipment manufacturer has guaranteed a much lower heat rate to DPC than the PPA guaranteed heat rate. So the actual heat rate would be much less than 1878 kcal/kWh.
### TABLE 6B: COMPARISON OF PHASE-II TARIFF SUBMISSION (RS. PER UNIT)

<table>
<thead>
<tr>
<th></th>
<th>Original Submission</th>
<th>Project Cost Reduction</th>
<th>Plus Heat Rate Reduction</th>
<th>Plus Exchange Rate Correction</th>
<th>PLF at 68.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPC Tariff</td>
<td>2.90</td>
<td>2.90</td>
<td>2.90</td>
<td>2.90</td>
<td>3.38</td>
</tr>
<tr>
<td>Gol Tariff</td>
<td>3.26</td>
<td>3.10</td>
<td>2.98</td>
<td>2.87</td>
<td>3.33</td>
</tr>
</tbody>
</table>

Source: Committee's Calculations. The complete tariff lines can be seen in Chart 8

After such in-depth analysis the committee concludes: "The committee considers this combination of circumstances to be beyond the realm of coincidence and thereby is constrained to conclude that these assumptions were deliberately chosen so as to show that the DPC tariff was lower than the Gol tariff. As can be seen, then entire demonstration of public interest owing to the lower DPC tariff is on extremely shaky ground and in the opinion of the committee utterly unsustainable." (emphasis original, pg. 61).

### 5. Excessive Payments and Exorbitant Profitability

Apart from clearly demonstrating how every effort was made, often by resorting to unfair comparisons and assumptions, to justify the competitiveness of the DPC tariff, the committee has also unearthed and clearly quantified several areas where the tariff burden could have been lowered. Even leaving aside the more fundamental issues such as desirability of the project, financing structure, dollar denomination, and inflated capital cost, the committee brings out that the tariff could have been reduced substantially as described below.

- **Excessive payment for regasification facility**: The power plant of DPC, even if fully utilized at 90% PLF, would require only 2.1 million tones p.a. (MTPA) of LNG. But, the project comprises of a regasification plant of 5 MTPA capacity, and the entire cost of this regasification plant is loaded on to the power cost, i.e., on MSEB and its consumers. Further, DPC has entered in to a contract to make this excess regasification capacity available to Enron's subsidiary, Metgas, at a cost much lower than what it is charging to MSEB. If MSEB had negotiated that it would share only the proportional (to its full requirement) burden of cost of regasification terminal, it would be possible to reduce the tariff by over 250 Cr./ yr. (pg. 71,72,77).

- **Excessive payment for shipping and harbor charges**: Similar to the regasification facility, the capital cost of harbor and related facilities is also included in the DPC project cost and its entire repayment is included in the tariff charged to MSEB. But, as per the PPA, MSEB also agreed to pay additional charges (of Rs. 233 Cr. p.a.) in the name of Shipping and Harbor charges. The committee opines that, to the extent these charges are over and above the actual shipping charges, it implies excessive payments.
The committee also notes that though, DPC claims a daily shipping charter rate of US $ 98,000, a similar vessel would be available to Petronet LNG, for US $ 70,000 per day\(^4\). (pg. 73). Thus, on this account alone MSEB would be paying over Rs. 100 Cr./yr. in excess to Enron.

\(\textbf{\textit{Excessive recovery of O & M charges:}}\) DPC is charging operation and maintenance (O & M) expenditure much higher than the norm stipulated by GoI for similar projects. O & M charges as per the GoI norms would be around Rs. 214 Cr./yr., whereas the PPA fixes it at about Rs. 460 Cr./yr. This again implies excessive charge to MSEB to the tune of Rs. 246 Cr./yr. (pg.72).

\(\textbf{\textit{Excessive charge through inflated claims of fuel consumption:}}\) As per the existing PPA, fuel cost is based on fuel consumption at 1878 kCal/kWh, but the actual fuel consumption rate guaranteed by the equipment manufacturer is much (~ 9\%) less. The committee’s analysis indicates that DPC earns additional revenue of around Rs. 332 Cr./ yr on account of this factor alone. (pg. 79).

Thus, it can be seen that, even without questioning the more fundamental decisions (such as capital cost and need for such project), MSEB would have been able to achieve a cost tariff reduction of about Rs. 930 Cr. per year, by proper negotiation on four above mentioned issues. Since most of this cost is dollar denominated the actual savings in future would be higher. The committee also indicates that the return on equity, as obtained through the capital recovery charge component, is around 30\%. Considering that the equity component of the project is around US $ 900 million, such excessive revenue effectively implies a return on equity in the range of 50% p.a., making the internal rate of return, IRR above 40% and that too mostly in dollars! No wonder that the cost of DPC power is exorbitant.

This exorbitant profitability, also needs to be seen in the context of the multi-layered mechanisms for payment security consisting of the letter of credit, the escrow account, the state government guarantee, and the central government sovereign guarantee, as well as host of the other protective measures such as the insurance cover, guarantees by Indian financial institutions, EPC guarantees, and international arbitration, finally but not the least “political support” enjoyed by the project. With such security mechanisms providing multi-layered, full-proof protection against almost all the risks, the profitability should be more in line with what the investments power utilities in the US would yield, i.e., around 10% and not the exorbitant profitability of over 40% IRR in dollar terms (that too on claimed equity). The risks arising out of the efforts of people of Maharashtra to reduce this exorbitant profitability cannot be the justification such profitability, which in fact, is at the root of the present imbroglio.

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\(^4\) Petronet LNG is a company promoted by GoI and some public sector undertakings for import of LNG.
6 Futility of the 1995 Renegotiations Process

The committee, in Chapter 5, comes down heavily on the outcome of the renegotiations process of 1995. The Renegotiations Group comprised of experts claimed several "benefits" to the state due to successful renegotiations. These include, reduction in capital cost, additional capacity, reduction in tariff, separation of LNG/Regas facility, and reduction in foreign exchange outgo. The committee, after analyzing each of these claims in detail, concludes: "The Group's negotiations resulted in one benefit, specifically the removal of the escalation clause in the tariff, which gave rise to an unconscionably high tariff in the first instance. On almost all other parameters . . . the Group's recommendations proved infructuous" (pg. 38). For example, the Renegotiations Group claimed that the capital cost was reduced to US $ 2501 million and the capacity was increase by 169 MW. But, the committee points out that, for the purpose of tariff comparison, the MSEB / GoM used the capital cost figure of US $ 2828 million. Similarly, the additional capacity also came at a significant cost, in the form of increase in fixed charges by Rs. 250 Cr. /yr. at today's cost, even though DPC had not incurred any additional cost for this capacity addition, as this increase was a result of continuous technical improvements. The claims regarding separation of LNG / Regas facility also proved hollow. While executing the actual PPA these facilities were retained as an integral part of the power project and the entire capital recovery was loaded in the power tariff. Effectively, the net outcome of the renegotiations process was burdening MSEB with thrice the original capacity and increasing the 'must-pay' charges from around Rs. 1200 Cr./ yr. to around Rs. 6000 Cr./yr. This was despite, as explained in Section 3, the project was not the least-cost option and was bound to result in heavy economic costs for consumers. In a nutshell, neither the recommendations of the 1995 renegotiations committee nor its implementation protected interests of MSEB and its consumers. Chapter Six of the report dealing with the renegotiations process ends with aptly reproduced observations of the Bombay High Court, in the case of "CITU and Abhay Mehta v/s DPC and others", "The speed at which the whole thing was done by the negotiating group is unprecedented. What would stop one to say, as was said by the Chief Minister in the context of the original PPA, 'Enron revisited, Enron saw and Enron conquered - much more than it did earlier""(pg.39)

7. Governance Failure, Unreasonable and Irrational Decision Making Process

The sixth chapter of the report deals with the process of approving the project and various clearances. One of the most important criticisms of the project has been the adoption of negotiation route instead of the competitive bidding route. In the Ramdas Nayak case, MSEB argued that the competitive bidding route was not relevant, counter-productive and inappropriate. The committee finds no merit in each of these justifications, and in fact it demonstrates how the negotiation route failed to protect the interests of consumers, how the negotiations route effectively became a tool to protect interests (at times not asked for) of DPC, and how, as a result of these negotiations, virtually all changes, since the signing of the original MoU in 1992, have resulted in benefits to Enron. For example, the MoU mentioned a tariff of 7.3 cents / unit, whereas the PPA signed in December 1993 implies a tariff of 7.5 cents / unit. The previous sections have described how MSEB
GoM went ahead with the project in spite of agencies such as the CEA, the World Bank and the Planning Commission highlighted dangers in the project, and how every effort was made to demonstrate that DPC tariff was lower than GoI notification tariff.

After a brief reference to various failed court cases against Enron, the committee observes that "One would presume that with such judicial scrutiny, all the issues in the project would have been examined thoroughly. Unfortunately, as shown in this chapter, this is far from true" (pg. 40).

After quoting from the judgement of the High Court in the Ramdas Nayak case, in which essentially the court said that the courts could only examine whether the a decision-making process was reasonable, rational, non arbitrary, and whether it was violating Article 14 of the constitution. On this, the committee remarks "The committee believes that this report brings out these very concerns and shows in no uncertain terms that the decision making process followed in this case violated all these salutary principles, i.e. it was neither "reasonable [nor] rational" (pg. 41). Further, the committee adds; "This chapter therefore confines itself to examining the "rationality and propriety" of various decisions made at different times with respect to DPC. The committee is surprised at the breadth of governance failure, which has occurred across times, across governments and across agencies, right from 1992 till as late as 1999 (as shown in Table 4B in Chapter 4). Organs of government at both the Center and State level appear to have been remiss in the discharge of their functions. This chapter will show that every one of the assertions, relating to the benefits from the project, viz. the effectiveness of the negotiations, its design and size, the need for power, and the competitiveness of tariff, for both Phase I and Phase II, have proven to be false and indeed, were based, at the time of the assertions, on extremely questionable assumptions." (emphasis original) (pg. 41)

Lack of due diligence by DPC and financial institutions:
Apart from the above-quoted observations about failure of governance and lacuna in the decision making process, the committee also points out that the DPC and its lenders to the project, have failed in carrying out their duties with due diligence. The committee observes that DPC, and its major shareholders (Enron, GE and Bachtel), and its lenders accepted MSEB’s demand projections (for commencement of Phase II), without any question even though they were highly unrealistic and based on imprudent assumptions.

Role of CEA:
CEA has a statutory responsibility to evaluate and approve power projects from technical as well as economic perspective. After studying the claimed " techno-economic" clearance from the CEA as well as CEA's various assertions with regard to capital cost and economic evaluation of the project, the committee observes; ".. [T]he committee is doubtful whether the economic aspects of DPC were discussed at all [by CEA]. Therefore, the question as to whether CEA did or did not perform its statutory duty of techno-economic examination remains under cloud" (pg. 49).
8. Who's the Real Culprit: High T & D Looses and Low Demand or the Project Itself?

Some of the above finding by the committee (especially w.r.t. governance failure) have been documented earlier also by Abhay Mehta in his book "Power Play" published in 2000. But, as people of Maharashtra started feeling the real impact of DPC's high cost, as well as that of unwanted power, and as skeleton after skeleton of the DPC project started coming out in the last few months, the pro-Enron lobbies started arguing that the real cause of the current financial crisis faced by MSEB is not the Enron project per se, but excessive T & D loss of over 30% in MSEB system and the low demand for power due to recession are the real culprits. It is argued that MSEB is loosing over Rs. 2000 Cr. due to theft of power, and the low demand due to recession and high industrial tariff have resulted in reduced revenue of MSEB. These lobbies argue that the project has nothing to do with problems of MSEB, and, in fact, if MSEB were functioning in efficient manner, it would not have faced such financial crisis. To evaluate these claims, the committee carried out an innovative analysis, succinctly presented in a box titled "A Loss Reduction Fairy Tale" (pg. 14). The analysis shows the impact on domestic consumer tariff under various scenarios of reduction in T & D loss, increase in demand and increase in agricultural tariff. Based on such analysis the committee says: "This implies that if HT and Commercial realisations remain at their current excessively high levels, agricultural realisation rise to Rs. 1.00/unit, i.e. double the existing tariff, and 10,000 MU of commercial losses are converted into paying consumption at an average realization of Rs. 2.75, non-agricultural consumption rises by 36% and agricultural consumption does not grow, then it is possible for DPC to be absorbed without any increase in domestic realizations. However, even this fairy tale is too good to last. As time goes on, DPC tariff will rise and if it were Rs. 4.50 instead of Rs. 4.10, then domestic realizations would have to be increased by 26%.” This clearly demonstrates that DPC project is not affordable even if, overnight, i) MSEB becomes the an efficient utility, ii) non-agricultural demand grows in an unprecedented manner (i.e. realizing last 5 year's growth in one year) and iii) agricultural realization (tariff) doubles.

9. Need and Precedents of Restructuring Long Term Contracts

Similar to the attempts of blaming MSEB's poor performance, in order to deviate public wrath away from DPC, the pro-Enron lobbies have recently (once again) started espousing principle of "sanctity of long-term contracts" and the need to find solutions which would allow selling of power to other states, while protecting Enron's exorbitant profitability. In Chapter Seven, the committee addresses this issue and suggests guidelines for restructuring the project so as to make it sustainable. At the beginning itself, the committee observes that, though the project is characterized by failure of governance and infirmities, its existence cannot be wished away. The committee also observes that, if the cost of DPC power for MSEB consumers is high, then it will be high for consumers of other SEBs also. It also points out that any such proposal would also require approval of the Central Electricity Regulatory Commission (CERC) involving calling of objections from consumers and carrying out public hearings. Thus, the committee opines; "It is therefore imperative that the basic issues involved in this project
are addressed up-front. These would call for financial re-engineering and restructuring of DPC so as to reduce the cost of its power substantially.” (pg. 68). The committee has also discussed the issue of "sacrosanct contracts" and possibilities of renegotiating long term contracts. The committee opines; "economic reality dominates over technical legality in the commercial world", as well as points out that “[DPC] accept that ‘economic realities are what they are’ and are willing to consider 'lowering of equity return'. In their [DPC’s] discussions with the committee they indicated: 'there is nothing sacred about this project’” (pg. 69). In Chapter Eight, Box 16, the committee further illustrates with several examples that renegotiating long term contracts is not unusual and there have been several cases in the past, both in developing and developed countries, in sectors such as power as well as LNG supply, where long-term contracts have been restructured. It also refers to the reopening of the long-term telecom license agreements by the Government of India, on the ground that they were anti-competitive, unworkable, and would lead to unsustainable losses to the private sector licensees.

10. Recommendations of the Godbole Committee

The eighth chapter of the report consists of recommendations of the committee. Here, it is essential to note that except one recommendation (regarding the establishment of the Commission of Inquiry), all other recommendations are unanimous recommendations of experienced and responsible stalwarts like Dr. Madhave Godbole, (who was also the Chairman of MSEB, and Secretary, Ministry of Petroleum and Natural Gas), Dr. EAS Sarma, (who was Secretary, Ministry of Power), and Mr. Deepak Parekh, (who is Chairman of IDFC, one of the key infrastructure financing agency in India). There should be little doubt about the feasibility of implementing these unanimous recommendations made by such an august body.

10.1 The committee's very first recommendation is aimed at improving the transparency in the sector. After observing that PPAs are essentially contracts executed by one party (such as MSEB), but the financial impact of which are to be borne by consumers (through increased tariff) or general public (through taxes or reduction in other essential government expenditure), the committee says; "While commercial considerations may apply in certain instances, the Committee is convinced that, in the case of the PPAs, this concern is overwhelmingly overridden by the public interest.", and, "The public therefore has a right to know what is being contracted on their behalf" As such, the committee has recommended "all documents, including associated contracts, related to all IPPs, including, in particular, DPC, be published by the Government of Maharashtra within two months.” (emphasis original,, pg. 83)

10.2 With regards two other IPP projects in Maharashtra, viz., Reliance and Bhadrawati, the committee has warned that as presently structured, neither of these projects is suitable for Maharashtra’s requirements, and if allowed to proceed, would become another DPC in future years. Hence, the committee has recommended; "MSEB defer all PPAs with IPPs and reexamine them in accordance with the Least - Cost Plan and in any case till such time the demand levels in the State permit full absorption of power generation from such IPPs." (pg. 92)
10.3 The committee has recommended radical restructuring of the project. The broad features of their recommendations are discussed below.

i. **Separating LNG regasification facility and reducing the burden of LNG:** The committee has observed that the DPC project is effectively an integration of several sub-projects. These sub-projects could be viable independently as they have substantial spare capacity, which could be put for alternative uses. But, as per the current project structure, the entire burden of these projects is put on MSEB. For example, as discussed in Section 5, even though the DPC power plant requires only 42% of the LNG capacity, the entire cost is loaded on MSEB. To rectify this, the committee has recommended that the LNG facility should be separated from the power project. The storage and regasification costs associated with only the actual consumption of LNG for power project should be charged to MSEB through variable energy charge and not as fixed charge. Further, in order to make the project suitable for MSEB's requirements, the committee has recommended that, in the initial years, the LNG off-take by MSEB should be reduced to equivalent of PLF of 30%. The committee has also recommended that energy payments should be based on the "pay-as-use" principle rather than the "take-or-pay" principle. The committee has observed that the Government of India is planning several LNG import projects, amounting to over 20 MTPA capacity (against DPC's capacity of 5 MTPA), and, as said by Enron, there is demand for LNG even in international markets. Hence, it would be eminently possible to restructure the project on these lines. In fact, in its representation before the committee, DPC has also offered to reduce the burden of LNG on MSEB by sale of LNG on spot basis.

ii. **Change over to GoI's two-part tariff structure:** Another important recommendation of the committee is to change the tariff structure to the GoI's two-part tariff structure and that too, with limiting the return on equity substantially. This will, on one hand increase transparency, and on the other hand, will substantially reduce the tariff because of elimination of excessive payments such as fuel arbitrage and decrease in tariff as loans are repaid.

iii. **Financial restructuring and de-dollarisation:** The committee has recommended that, in order to limit the financial impact of the project in initial years, the debt should be restructured with longer repayment period of 15 years and, with initial moratorium of 5 years. Also, in order to reduce the impact of dollar dependency, the committee has recommended conversion of a substantial amount of forex debt to rupee debt and denominating the equity return in rupee terms rather than the dollar terms. Effectively, the committee has recommended converting DPC into an Indian project, from financial perspective.

10.4 Apart from these broad recommendations, the committee has also recommended that the current escrow agreement with DPC should be cancelled and the renegotiated tariff should be benchmarked to lowest tariff from the other gas-based project. The committee has further recommended support of GoI and GoM for ensuring success of financial
restructuring in the form of timely payment of subsidies to MSEB and to provide credit enhancement, without increasing the current government exposure to the project.

Thus, the committee has laid down a solid framework for restructuring the DPC project. Further, unlike the 1995 renegotiating committee's report, this report, through various charts, tables, and time series calculations, clearly presents impact of various assumptions and options. Analysis of the calculations provided by the committee indicate that these guidelines have potential to reduce the fixed charges by over 50% and to reduce MSEBs total burden also by nearly 50%, i.e., a reduction of nearly Rs. 3000 Cr./yr.

10.5 The committee has also recommended that DPC be allowed to sale power outside the MSEB system, provided that DPC designates a certain capacity for such sale and relieves MSEB of the proportional fixed charge component. The committee's another recommendation in this regard is, in our opinion, the most critical recommendation, which clearly conveys committee's opinion about the feasibility of the restructuring and the fate of the current contractual obligations. The committee recommends: Alternatively, DPC may find the conditions of restructuring too onerous and may believe it has prospects of earning better returns if it had the contractual freedom to sell power to other parties directly. If so, the Committee recommends that DPC could be allowed to sell power to any such parties, outside MSEB system, as it may be able to find, but only if DPC then agrees to relieve MSEB of all its contractual obligations relating to the power plant." (both emphases original, pg. 92).

Thus, through this important recommendation, the committee has clearly conveyed that, if DPC is not willing to restructure the project and bring down tariff on the lines recommended by the committee, then MSEB should be relieved of the present contractual obligations. In other words the PPA should be restructured as per committee's guidelines or the PPA should be scrapped.

10.6 This brings us to two critical issues of how DPC could be forced to restructure the project (which essentially implies stripping it of its most coveted benefits like LNG terminal [with high spare capacity] and exorbitant profitability), and how to make those responsible for perpetrating this fraud accountable, so as to avoid repetition of such "failure of governance" in future. Answers to these question could be found in several observations and conclusions of the committee regarding the process of decision making and, most importantly, recommendation by Dr. Godbole and Dr. Sarma of instituting a commission of inquiry. The committee has on several occasions, in no uncertain terms, as mentioned in various earlier sections, unanimously observed:

- MSEB and GoM have erred seriously, based on information available at that time, in proceeding with DPC as a base load project.
- Demand projections made to accommodate the DPC were flawed and based on patently untenable assumptions, given the information at that time; assumptions that have since proved to be completely unjustified
- Entire demonstration of public interest owing to the lower DPC tariff is on extremely shaky ground and in the opinion of the committee utterly unsustainable.
- The decision-making process followed in this case violated all the salutary principles, i.e., it was neither "reasonable [nor] rational".
- Organs of government at both the Center and State level appear to have been remiss in the discharge of their functions. …and every one of the assertions, relating to the benefits from the project, viz., the effectiveness of the negotiations, its design and size, the need for power, and the competitiveness of tariff, for both Phase I and Phase II, have proven to be false and indeed, were based, at the time of the assertions, on extremely questionable assumptions.
- DPC, Enron, GE, and Bachtel, as well as lenders to the project, behaved imprudently, failed in responsibility, and lacked due diligence.
- As a result of such shortcomings, consumers and general public in Maharashtra will have to pay unjustified cost of thousands of crores every year, and "plan holiday (or development holiday)" is becoming a reality.

Such observations and analysis presented in the report clearly demonstrate the anti-public interest nature of the project as well as the lacuna in the process of decision making. One can hope that, with such clear and unquestionable conclusions, from a government-appointed committee of this stature, the outcome of pending and future court cases would not be as discouraging as in the past. In such an eventuality, the MSEB/GoM (and hence the people of Maharashtra) could be relieved of this blunder without the threats of "termination" and "cancellation" penalties. But, even if this happens, unless those responsible for such blunder are made accountable, the threat to public interest remains. The recommendation of Dr. Godbole and Dr. Sarma of appointing a commission of inquiry becomes critical in this regard.

The Chairman Dr. Godbole and another member Dr. Sarma recommend: "the GoM should appoint a judicial commission of inquiry in order that satisfactory answers are found for the questions raised by the various sections of the people in Maharashtra". (pg. 84). Further, the two members point out that the due process of appraisal and adaptation of the project necessary in order to subserve the public interest had not taken place. They argue: "The fact that this has not been allowed to happen raises questions on whether there has been concerted effort towards exercise of undue influence on the process of decision making at each and every stage in the project. There have been clear lapses in the governance in the whole affair of DPC and this Committee would be failing in its duty if these lapses were not pointed out" (pg. 84). Dr. Godbole and Dr. Sarma further point out: "If the judicial inquiry also establishes that there is exercise of undue influence that had resulted in any decision that was against the public interest, the relevant provisions of the contract law may have to be invoked for legally reviewing the existing contractual commitments with DPC and taking all necessary steps that would subserve the public interest without GoM/MSEB having to incur any contractual liability" (pg. 85)

But the other three members did not agree with this recommendation of institution of a Judicial Inquiry Commission. They have given three main reasons. Their first excuse is that the terms of reference did not provide the Committee with any reason to suggest a Commission of Inquiry. The Terms of Reference of the committee, are sufficiently broad and require the committee to "Suggest appropriate measures to ensure that the interests
of the State, Maharashtra State Electricity Board and electricity consumers of the State of Maharashtra are properly and adequately considered, evaluated and safeguarded”, (pg. 2). In this light of this, it was essential for these members to recommend a mechanism to ensure accountability. The second reason for disagreement put forth by the three members is their doubt that whether such a Commission of Inquiry would serve any useful purpose. Further, in their final reason, the dissenting members observe that the commissions of inquiry in India have rarely completed their task within a reasonable time frame. So they are afraid: "such a Commission if established could, in fact, only act as a hurdle in the re-negotiation of the project as recommended by the Committee" (pg. 85).

As can be seen from these reasons, even though these members have not recommended commission of inquiry, they have not ruled out possibility of 'undue influence' and the need to make those accountable, who were responsible for such governance failure and anti-public interest decisions. Their only concerns, are whether they have the necessary responsibility / authority to make such a recommendation and what is the efficacy of the mechanism of the commission of inquiry. Unfortunately, these members have failed to recommend a better way to prevent such blunder and to make those responsible for such blunder accountable. In the absence of any other recommendation in the report in this regards, which would fulfill the wide mandate and responsibility cast on the committee, it is imperative that the recommendation of instituting a commission of inquiry be implemented by GoM immediately.

As the developments and arrogant attitude of Enron, immediately after publication of the report indicate, they are not willing to restructure the project and bring down tariff in line with the recommendations of the committee. This is not surprising. After all, on the basis of multi-layered financial and legal agreements, DPC's exorbitant profits are safe and secure and its the "duty" of people of Maharashtra, through MSEB, GoM and GoI, to pay these costs. For DPC and its constituents, it is not of any consequence that, despite their hollow claim of providing "development assistance", in reality, the undesirable project and exorbitant profitability is forcing the state of Maharashtra to deprive a large population of weaker sections from essential health, education, and drinking water services. In this scenario, there is little that people of Maharashtra can hope to achieve unless the GoM acts on the recommendation of instituting a commission of inquiry. Unless DPC, its constituents, and friends within and outside the government see a real possibility of stringent legal actions that would force them to be accountable and strip them of undue financial benefits, DPC will not be willing to restructure the project and reduce tariff in line with the recommendations of the Godbole committee. This is the real crux of the recommendation of the Judicial Inquiry Commission made by Dr. Godbole and Dr. Sarma.

11. Conclusions and Lessons

The entire Enron episode is a testimony of the way coalitions of vested interests such as politicians, officials, private companies, and contractors, treat public revenue as the personal "jagir", and use varied tricks and tools to fleece consumers and public. The Godbole committee report proves beyond doubt that the DPC project would lead to ruinous financial impact and it is neither due to external, unforeseen factors like rupee
depreciation, oil price shock, low demand, T & D losses nor due to incompetence and mistakes at times associated with complex techno-economic analysis. In a sense, the report also proves critics of the project wrong to the extent that they failed to expose the real nature and quantum of the siphoning off of public funds and the failure of governance. The report proves beyond doubt that the roots of this crisis lie in the take-over of the sector by the unholy nexus of politicians, officials, and private parties. This take over was achieved by taking advantage of non-transparent procedures, weak regulatory and judicial institutions and mechanisms as well as weak or, at times, greedy individuals. As, in the past, the Enron controversy is poised to take a new "awatar". Only the time will tell to what extent, if at all, the interests of consumers and the nation will be protected in the new "awatar". The entire controversy and the Godbole committee report establish the inevitability and urgency of instituting effective and mandatory, procedures and mechanisms to ensure transparency, accountability, and public participation (TAP). This also needs to be complemented with commensurate efforts to ensure that the civil society groups are adequately informed, trained, and made capable to take up the mammoth challenges of utilizing these TAP mechanisms in order to prevent recurrence of such "governance failure, across time, and across various institutions".

References

- Report of the Energy Review Committee (Godbole Committee), Part I, April 10, 2001 (full text of the report is available at the Prayas web-site: www.prayas-pune.org )

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