



**Asia Case
Research Centre**
THE UNIVERSITY OF HONG KONG

POON
Poon Kam Kai Series

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POLITICS, INSTITUTIONS AND PROJECT FINANCE: THE DABHOL POWER PROJECT

In 1992, Indian authorities entered into an agreement with Houston-based Enron Corporation to build a gas-fired power plant in Dabhol in Maharashtra state, India. This was intended to be the world's largest independent power project and the largest single foreign investment in India. The plant was constructed under pathbreaking terms because of the liberalization of electricity supply in India. But when the first stage of the new plant commenced production, the price of electricity was perceived to be unaffordable for consumers. Moreover, there were accusations of corruption in the state government's association with the project, and the project became a pawn in the volatile Indian political environment. Completion of the project was also suspended for years, at great costs to all, and the principal project promoter, Enron, collapsed in the interim. Could it have been done differently? In all, the Dabhol Power Project offers great insights into the negotiation of complex financial transactions with governments in unstable institutional environments.

India

After gaining independence from the United Kingdom in 1947, India's economy was managed with socialist-oriented developmental policies, and there was an emphasis on central planning and intricate regulation of the private sector. Influenced by Mahatma Gandhi's doctrine of *swadeshi*, or self reliance, successive Congress Party governments—all tracing their roots to Gandhi's independence campaigns—restricted foreign investment and imposed high import tariff barriers to protect domestic industries.

By the early 1990s, India faced both a severe external payments crisis and a debilitating federal budget deficit. At the same time, it was losing a strategic ally and economic partner with the collapse of the Soviet Union. Faced with apparently hostile neighbours and an uncertain post-Cold War balance of power, India began to look for new international partners, and for the first time considered allowing foreign commercial interests to participate in key sectors of the domestic economy. Thus in 1991, the Congress Party-led national government

Grace Loo prepared this case under the supervision of Paul Lejot and Dr Frederik Pretorius for class discussion. This case is not intended to show effective or ineffective handling of decision or business processes.

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Ref. 07/335C

under the prime minister, Mr P.V. Narasimha Rao, began a program of liberalisation with two major policy changes: relaxing control of industrial licensing and opening the economy to foreign investments.¹

India's Power Sector

In October 1991, India's government opened the energy sector for private investors to build and operate power generation plants without restriction on foreign ownership.² With a steadily growing population, mass urban migration and agglomeration, and the beginning of a phase of above-trend growth in industrialisation, the power sector was critical to India's economic development. National power demand was growing at an annual rate of almost 8% and was projected to increase to about 140,000 megawatts (MW) by 2005; but total installed capacity was only around 80,000MW in the early 1990s.³

The power generation system was both inefficient and incapable of meeting demand on this scale. Power plants were fuelled mostly by coal mined in the eastern state of Bihar and transported to the rest of the nation by an ageing and inefficient railway network, a process involving significant pilferage. The average mid-1990s plant load factor, that is, the plant capacity used in production, was 57%, falling short of peak load demand by 20–30%.⁴ In addition, up to 20% of the power generated was lost through transmission over poorly maintained and under-invested, low-voltage distribution networks. Pilferage of electricity was common, with many consumers tapping illegally into the grid for their own use or wiring around electricity meters to avoid payment. As much as 25% of the power connections in New Delhi were estimated to be illegal at that time.⁵

Under the two-tier system of the Indian power sector, responsibility was shared between the federal centre and the states, all of which maintained a State Electricity Board ("SEB") involved in the generation, transmission and distribution of electricity. While some central government utilities also generated electrical power, the functions of transmission and distribution were largely left to the SEBs. In the mid-1990s, about 70% of national power was generated and distributed by SEBs.⁶ As India struggled with power shortages, the SEBs were prone to subsidise the tariffs of agricultural consumers while industrial consumers bribed state officials for lower power bills. With losses accumulating at up to US\$2 billion annually, the SEBs' ability to invest in new capacity was severely limited.⁷

Given the importance of the power sector to India's economic development, the government decided to fast-track eight projects to induce foreign investment in this sector as part of a wider program of economic liberalisation. These projects were to be initiated through individual negotiation rather than public tendering and also enjoyed support from the central government, including certain guarantees.⁸ Phase I of the Dabhol power plant was the first such project to be launched and was widely seen as the flagship initiative marking the opening of India's domestic energy sector to foreign interests. At the time of its initiation,

¹ Parry, S. (30 December 2001) "Enron's India Disaster", <http://www.consortiumnews.com/2001/123001a.html> (accessed 1 February 2007).

² Edwards, B. and Shukla, M. (October 1995) "The Mugging of Enron", *Euromoney*.

³ Hill, C.W.L. (2005) "Enron International in India", additional case for *International Business: Competition in the Global Marketplace*, 5th Edition, http://highered.mcgraw-hill.com/sites/0072873957/student_view0/additional_cases.html.

⁴ Nicholson, M. (4 August 1995) "Lights Go out for India's Foreign Investors", *Financial Times*.

⁵ Choukroun, S. (2002) "Enron in Maharashtra: Power Sector Development and National Identity in India", MA Thesis, University of Pennsylvania, p. 15.

⁶ Hill, C.W.L. (2005) op. cit.

⁷ Hill, C.W.L. (2005) op. cit.

⁸ Paterson, C. (March 2006) "Investor-to-State Dispute Settlement in Infrastructure Projects", OECD Working Papers on International Investment from OECD, Directorate for Financial and Enterprise Affairs, No 2006/2, <http://www.sourceoecd.org/10.1787/416335763425> (accessed 1 January 2007).

Dabhol was the world's largest independent power project and the largest foreign-sourced investment project in India.

Enron

Enron Corporation ("Enron") began in Texas in 1985 as a pipeline distribution company delivering gas to power utilities and other commercial businesses. With the landmark deregulation of the US electrical power markets, Enron expanded its activities to include trading in electricity,⁹ collecting substantial margins from differences in inter-state wholesale and resale prices.¹⁰ Enron began to devise complex supply contracts that sought to protect its customers from certain risks, such as changes in interest rates or an inability to pay, but entered into a far higher number of such contracts than its supply contracts would ever need for risk management purposes. The company became authorised by the US Federal Securities and Exchange Commission to adopt accounting practices customarily associated with securities or commodity traders, and portions of its balance sheet assets and other receivables were marked-to-market regardless of their liquidity or likelihood of being realised. The result was earnings generation that could best be termed mythical.

This aggressive corporate approach became further manifested in the falsification of revenue and income to support the group's share price. This grew increasingly complex, in particular involving a series of transactions to conceal overall funded liabilities and to present a less highly leveraged appearance to shareholders and financial analysts. Doubts about Enron's reporting and true performance turned from Wall Street rumour to widespread concern in 2001, and towards the end of that year Enron admitted to having overstated group earnings over four prior years by US\$586 million and of concealing liabilities of around US\$3 billion. The ensuing loss of confidence and collapse was precipitate: in November 2001, Enron's debt was downgraded to junk-bond status¹¹ and the company filed for bankruptcy within weeks. Enron employed some 21,000 employees worldwide at that time.

In the early 1990s, Enron began to expand downstream activities, for example in developing power generation projects to serve as buyers of natural gas.¹² It also sought to move into newly privatised non-US markets.¹³ A subsidiary, Enron International, was set up in 1990 with the mandate of running power generation projects in developing markets. Rebecca Mark, a protégé of Enron chairman Kenneth Lay, was appointed its chief executive. Mark was considered ambitious and influential, and became one of Enron's more high-profile figures.¹⁴ Mark's vision was for Enron to become the largest distributor of liquefied natural gas ("LNG") in India, requiring capital investment of up to US\$20 billion by 2010. In this vision, Enron would set up two LNG terminals and re-gasification units, the first being at Dabhol in Maharashtra. LNG would be imported to meet projected national needs through a terminal facility that Enron was building in Qatar, a gas-rich Gulf state. The two Indian LNG terminals would also help Enron to meet the 15% annual return that it had promised to investors in the Qatar facility.¹⁵

⁹ Washington Post (2004) "Understanding Enron", <http://www.washingtonpost.com/wp-srv/business/enron/front.html> (accessed 8 January 2007).

¹⁰ Online NewsHour (June 2002) "Enron: After the Collapse", <http://www.pbs.org/newshour/bb/business/enron/whatisenron.html> (accessed 5 January 2007).

¹¹ Washington Post (2004) op. cit.

¹² Allison, T. (18 January 2001) "Enron's Eight-Year Power Struggle in India", *Asia Times Online*, <http://www.atimes.com/reports/CA13Ai01.html> (accessed 29 December 2006).

¹³ Fidler, S. (11 February 2002) "Enron Chief Scorned Asset Division", *Financial Times*, <http://specials.ft.com/enron/FT3AB0FQKXC.html> (accessed 28 January 2007).

¹⁴ Anderson, F. (26 November 2001) "Free and Clear of Enron's Woes", *Business Week*, http://www.businessweek.com/magazine/content/01_48/c3759014.htm (accessed 26 January 2007).

¹⁵ Hill, C.W.L. (2005) op. cit.

Thus Enron opened discussions in 1992 with the Indian authorities over the Dabhol power plant, to be built, owned and operated by Dabhol Power Company (“DPC”), an Indian private company unusually owned entirely by foreign interests. Enron owned 80% of the company, with General Electric Corporation (“GE”) and Bechtel Enterprises Inc. (“Bechtel”) each holding 10% interests. GE would supply gas turbines for Dabhol and Bechtel would serve as the turnkey engineering procurement and construction contractor.¹⁶ The three shareholders controlled DPC through a series of companies registered in Mauritius, which had favourable double taxation agreements with India that might help the owners lessen withholding taxes in the event of the project producing surpluses for distribution.¹⁷ A further Enron subsidiary was made turnkey contractor for the re-gasification plant.¹⁸

The Dabhol Project

Development

The Dabhol plant was controversial from inception. Following the decision to open the power sector to foreign direct investment, Indian officials visited the US in May 1992 to seek investment and technological resources for the sector. The delegation met Enron officials, including Rebecca Mark, and indicated their interest in commissioning a private power plant. Immediately upon the delegation’s return, the secretary of power informed the state-controlled power supplier, Maharashtra State Electricity Board (“MSEB”), that Enron would visit the state in June to inspect potential sites along the state’s coastal areas for a proposed power project.

Maharashtra is one of India’s most prosperous and developed states and the state capital Mumbai (formerly Bombay) is the country’s main financial and commercial hub. When Enron and GE executives arrived in India, they first met central government officials in Delhi and then travelled to Mumbai to inspect sites and meet state representatives. Soon afterwards, on 20 June 1992, Enron and the Maharashtra state government signed a memorandum of understanding (“MoU”) to develop a 2,000MW LNG-fired power plant at Dabhol, 180km south of Mumbai. Agreement in principle over the US\$3.1 billion project was made unusually quickly.¹⁹ Neither central nor state government engaged independent technical assistance or conducted a financial appraisal of the project and the main contract was concluded without competitive bidding of any kind.²⁰

¹⁶ Naik, N. (2003) “Dabhol Power Company”, Case Study, London Business School, http://www.london.edu/assets/documents/PDF/2.3.4.1.6_dabhol.pdf (accessed 28 December 2006).

¹⁷ Allison, T. (18 January 2001), op. cit.

¹⁸ Naik, N. (2003) op. cit.

¹⁹ Callari, R. (2002) “Dabhol: Enron Timeline”, <http://www.albionmonitor.com/0202a/enrontimeline.html> (accessed 28 December 2006); Edwards, B. and Shukla, M. (October 1995) op. cit.

²⁰ Allison, T. (18 January 2001) op. cit.

A state government committee reviewed the project in 1995 and commented that:²¹

*In a matter of less than three days, an MoU was signed between Enron and MSEB in a matter involving a project of the value of over 10,000 crore [US\$2.5 billion] rupees at the time, with entirely imported fuel and largely imported equipment, in which, admittedly, no one in the government had expertise or experience. In fact, the file [on the Dabhol project] did not even show what Enron was—what its history is, business or accomplishment. [...] It looked more like an ad hoc decision rather than a considered decision on a durable arrangement with a party after obtaining adequate and reliable information. Neither the balance sheet and annual accounts of Enron, nor any information about its activities, area of operation, its associates, etc, was obtained by the government then, or even later.*²²

Project Structure

Two months after signing the MoU, Enron submitted detailed implementation proposals to India's Foreign Investment Promotion Board,²³ and on its recommendation, split the project into two separate phases. MSEB had earlier suggested that the project be divided in such a way but Enron had disagreed on the grounds that it would adversely affect Dabhol's economies of scale in production.²⁴ MSEB's motivation is unclear,²⁵ but splitting the project into two phases might have made it easier for the board as Dabhol's sole power buyer to cope with the financial consequences of the project, which in every sense was transforming for the state in terms of capacity, output and costs.

Phase I of the project involved the construction of a 695MW gas-fired power station that would run on imported distillate oil, and was scheduled to commence production in December 1997. Phase II would expand the capacity of the plant to 2,015MW and involved the construction of a 1,320MW gas-fired plant, a re-gasification facility, and an LNG carrier as well as corresponding port facilities including a fuel jetty, navigation channel, and breakwater.²⁶ The second phase was scheduled for commissioning at the end of 2001, and upon the completion of Phase II, the entire plant would switch to using LNG for fuel.

With the completion of Phase II, Dabhol would run on Qatar-sourced LNG, where Enron had extensive interests, including the US\$4 billion development of a new gas field²⁷ and other pipeline construction. Dabhol's total cost would exceed US\$2.8 billion.²⁸ The scheme was designed as a gas-fired baseload station that generates electricity constantly, compared to peakload stations that generate power only during peak hours. Under a 20-year contract, MSEB would buy a minimum amount of electricity at a plant load factor of 90%. The project's debt-to-equity ratio was intended not to exceed 70:30. The capital cost of Phase I was US\$920 million,²⁹ and that of Phase II would be about US\$1.9 billion.

²¹ Ibid.

²² Report of the Maharashtra State Cabinet Sub-Committee to Review the Dabhol Project, 1995.

²³ Allison, T. (18 January 2001) op. cit.

²⁴ Human Rights Watch (1999) "The Enron Corporation: Corporate Complicity in Human Rights Violation", <http://www.hrw.org/reports/1999/enron/enron-b.htm> (accessed 10 December 2006).

²⁵ Ibid.

²⁶ Project Finance (January 2000) "Dabhol: The Big One".

²⁷ Brauchli, M.W. (4 August 1995) "Enron Project is Scrapped by India State", *Wall Street Journal*.

²⁸ Human Rights Watch (1999) op. cit.

²⁹ Sant, G., Dixit, S. and Wagle, S. (September 1995) "The Enron Controversy: Techno-Economic Analysis and Policy Implications", Prayas: Pune, India, http://www.prayas-pune.org/energy/04_Enron_Controversy%20.pdf (accessed 28 December 2006).

Objections

Both Enron and the central government sought financing from the World Bank for Dabhol.³⁰ This was a strategic decision, for not only did the World Bank offer loans on favourable terms for many such power projects but to raise funds in this way would represent endorsement of the project so as to make commercial funding easier to obtain. However, the World Bank's analysis showed that the project would produce too much power at too high a cost for Maharashtra. New unwanted capacity would compel MSEB to replace cheaper coal-fired power output with a source that was as much as five times more costly,³¹ for MSEB was contracted to buy a minimum amount from Dabhol even if the plant's output was unwanted.³² As transmission network capacity between India's five regional grids was limited,³³ and most state electricity boards were in poor financial condition, selling power to other states was scarcely viable.

The World Bank also noted that the Dabhol plant was planned as a baseload power station when Maharashtra faced electricity shortage only during peak hours, and the use of LNG as fuel was dubious given the cost of domestic coal was considerably lower. It concluded that the project did not meet a least-cost test, lacked an overall justification and the Maharashtra-Enron MoU was unduly favourable to Enron. In April 1993, the World Bank turned down the Maharashtra government's loan application on the grounds that the project was "not economically viable".

India's federal authority supervising the power sector, the Central Electricity Authority ("CEA"), studied the project independently and also found that "the entire MoU was one-sided" in favour of Enron. The CEA specifically noted that:³⁴

- Specific details about project costs as required under Indian law were absent.
- The price of electricity generated by Dabhol was high.
- The MoU failed to specify when the 20-year contract would begin, and lacked a specification as to when electricity supply or payment would commence.
- The structure of payments did not conform to earlier guidelines issued by the central government in 1992.
- No provision was made for auditing the project to ensure that the price of electricity was commensurate with its cost.
- MSEB guaranteed a minimum fuel purchase but the fuel supplier was not bound to provide a minimum quantity of fuel.
- MSEB had not verified whether the price of fuel was economical.

Deal Closed

CEA withheld clearance for the project on the grounds that the tariff was overly high. Nonetheless, the Maharashtra government urged the central government to give clearance to the project and the central government succumbed, despite CEA clearance for such projects being mandated by law.³⁵ In December 1993, Maharashtra signed a 20-year power purchase agreement with DPC, putting the final seal on the project.³⁶ To allow Dabhol to proceed, Enron needed to secure some 150 federal and state approvals, resolve many legal issues, and

³⁰ Human Rights Watch (1999) op. cit.

³¹ Choukroun, S. (2002) op. cit.

³² Allison, T. (18 January 2001) op. cit.

³³ Ibid.

³⁴ Ibid.

³⁵ Dutta, S. (2002) "The Enron Saga", ICFAI Center for Management Research.

³⁶ Naik, N. (2003) op. cit.; Allison, T. (18 January 2001) op. cit.

deal in principle with complicated federal and state taxes.³⁷ Enron, with its aggressive lobbying efforts, overcame the notoriously conservative Indian bureaucracy with exceptional speed.

Power Purchase Agreement

The power purchase agreement between MSEB and Enron was a take-or-pay contract under which MSEB committed to purchase an agreed amount of power capacity without heed to the amount of energy it used. MSEB would buy power from Dabhol for 20 years, regardless of demand or whether cheaper sources of fuel were available. While the tariff for electricity for most state power projects increased or decreased marginally over time, the tariff for Dabhol was structured such that it was expected to increase steadily over the project's life.³⁸

Each unit of electricity purchased by MSEB comprised a capacity charge and an energy charge. The capacity charge covered the recovery of capital invested in the project and was calculated predominantly in US dollars, with MSEB bearing all currency risks. The capacity charge would be applied in full whenever a plant load factor of 90% was achieved. The energy charge was a variable component of the tariff based upon the volume of fuel consumed, variable operations and maintenance charges, take-or-pay charges for fuel supplies, and special operations fees. The final price of Dabhol power depended largely on the US dollar–rupee exchange rate, oil price levels and the plant's actual load factor.

The power purchase agreement assured DPC of an internal rate of return of 16%, which was less than many analysts deemed adequate to attract foreign capital, taking into account foreign investors' perception of the risks involved in investing in India. Nonetheless, industry observers calculated DPC's real post-tax internal rate of return to be between 26% and 32%, which amounted to annual excess payments of between US\$15.9–20.4 million from MSEB.³⁹

Phase I Financing

Financing for Phase I of the project was arranged by March 1995.⁴⁰ The three foreign sponsors together contributed an equity investment of US\$276 million. Debt financing came in four main parts:⁴¹

- US\$150 million through a syndication of 12 banks, arranged by Bank of America and ABN Amro Bank NV
- About US\$298 million in commercial export credit loans guaranteed by the US Export-Import Bank
- US\$100 million loan from the Overseas Private Investment Corporation ("OPIC"), a US agency that provided political risk insurance
- US\$98 million in long-term loans through Industrial Development Bank of India ("IDBI"), a state-sector lender.

Credit support came in the form of a letter of credit, a guarantee from the state government, counter-indemnities from the central government and an escrow account over some of MSEB's payments. Dabhol was the first of the eight fast-tracked energy projects for which central government offered guarantees in order to attract private sector involvement.

³⁷ Hill, C.W.L. (2005) op. cit.

³⁸ Sant, G., Dixit, S. and Wagle, S. (September 1995) op. cit.

³⁹ Ibid.

⁴⁰ Euroweek (3 March 1995) "Financing in Place for \$920m Indian Project".

⁴¹ International Financing Review (18 March 1995) "Power Project Propelled: Turn Up and Go".

Agreement Revised

In March 1995, prior to the commencement of construction of Phase I,⁴² a new coalition of the nationalist Bharatiya Janata Party (“BJP”) and the Hindu nationalist Shiv Sena replaced the Congress state government that had been responsible for entering into the Dabhol contract. Both the BJP and the Shiv Sena campaigned for election on an anti-Dabhol platform, fanning the widespread perception that dealings with foreigners were likely to be to India’s disadvantage.⁴³

Antagonism towards Dabhol was accentuated by a statement before a US congressional hearing by a senior company official that Enron had spent US\$20 million in education in India to show the benefits of private power projects,⁴⁴ a sum which many in India interpreted to mean bribe money. The new Maharashtra coalition government quickly formed a committee to review the project, led by Gopinath Munde, deputy chief minister and state president of the BJP, who during the campaign had visited Dabhol and pledged to “throw Enron into the Arabian Sea”.⁴⁵ The Munde Committee studied the project and concluded:

- There was no reason not to include competition in bidding for the project. It was an act of impropriety for the central government to negotiate solely with Enron.
- The capital costs of the Dabhol project were artificially inflated.
- The foreign currency denomination of tariff payments would lead to unjustifiably high rates for consumers.
- The high cost of power generated by Dabhol would adversely affect the economic development of Maharashtra.⁴⁶

The report was never published although sections were leaked to the Indian press. In response, Enron’s Mark indicated that the company had taken into account that duties on imported equipment would be subject to the whim of the Indian Customs, implying that Enron had indeed fudged the costs.⁴⁷

The state government declared the Dabhol project cancelled in August 1995 at the recommendation of the Munde Committee. State chief minister Manohar Joshi called a halt to construction work of Phase I until the Dabhol contract could be rescinded.⁴⁸ “This deal is against the interests of Maharashtra”, Joshi said before the state legislature, and “accepting this deal would indicate an absolute lack of self respect and would amount to betraying the trust of the people.”⁴⁹ Nonetheless, Joshi also hinted that the state government would be open to renegotiation if Enron took the appropriate initiative.

The state government’s decision to declare the Dabhol project cancelled prompted Enron to issue an arbitration notice and demand compensation for US\$300 million that DPC had by then injected into the project. The company ran advertisements in prominent Indian newspapers publicising the benefits of the project.⁵⁰ By September 1995, polls showed that 80% of the state and 60% of the nation wanted the project to resume. In the hope of saving its investment, Mark suggested a renegotiation to Joshi, proposing a tariff revision to take

⁴² Nainan, M. (19 September 1995) “Enron Submits Renegotiation Proposals for Power Project”, *Agence France Presse*.

⁴³ Dutta, S. (2002) op. cit.

⁴⁴ Human Rights Watch (1999) op. cit.

⁴⁵ Dutta, S. (2002) “The Enron Saga” Business Case by ICAFI Centre for Management Research, Hyderabad, India.

⁴⁶ Dutta, S. (2002) op. cit.

⁴⁷ Capital Market (13 October 2003) “DPC: Whose Baby Is it Anyway?” <http://www.capitalmarket.com/CMEdit/SFArtDis.asp?SFSNO=680&SFESNO=12> (accessed 20 December 2006).

⁴⁸ Fernandes, N. (3 August 1995) “State Halts India’s Largest Foreign Investment, Enron’s \$2.8 Billion”, *Associated Press*.

⁴⁹ Brauchli, M.W. (4 August 1995) op. cit.

⁵⁰ Hill, C.W.L. (2005) op. cit.

account of Dabhol's special infrastructure and tax requirements and to match the most favourable offer delivered under similar private power projects recently approved in Maharashtra.⁵¹ Enron also suggested switching from distillate fuel to naphtha or LNG from domestic suppliers, and offered MSEB a 30% share in DPC. The state government began negotiations with Enron and in February 1996 the two parties agreed to revise the Dabhol agreement.⁵² Under the new terms:⁵³

- A new turbine design with a fall in price of generation equipment would reduce capital costs by US\$300 million, while increasing total capacity from 2,015MW to 2,184MW.
- The re-gasification plant would be devolved into a separate venture.
- Phase I of the project would use domestic naphtha instead of distillate oil.
- Separation of the re-gasification plant and the fuel switch would reduce costs by US\$450 million and lower the unit rate of power by cutting the fixed cost component of the tariff. This would lessen Dabhol's average unit rate of power⁵⁴ from US\$0.055 for Phase I to US\$0.043 for the entire project, making Dabhol the cheapest large-scale power project under negotiation or implementation in India.
- MSEB was given the option to acquire a 30% share of DPC, which would reduce the project's annual cash outflow by US\$150–170 million.⁵⁵
- The sponsors could sell re-gasified LNG to customers other than MSEB.⁵⁶
- Phase I and II would be implemented simultaneously to cover four months' lost construction time.⁵⁷

The revised agreement was given a counter-guarantee by the central government and a new power purchase agreement was signed in August 1996. Construction work on Phase I resumed by year end.⁵⁸ Under the revised agreement, DPC's annual return on the entire project was expected to be around 20%.⁵⁹

The state government's attempt to cancel the Dabhol project posed a serious setback to the central government's effort to attract foreign investment, especially in India's energy sector.⁶⁰ Dabhol was intended as a trailblazer to lure foreign investment, but the state's behaviour was chilling to certain foreign investors, heightening their perception of India as being relatively risky for cross-border investment. To many observers, the state government's decision was a political ploy by the BJP to discredit the Congress party central government prior to a national election due in 1997.⁶¹ Critics suggested that the new agreement failed to address the underlying cost issues of the project and worsened MSEB's position,⁶² mainly by removing the optional nature of Phase II of the project.⁶³

Phase II Financing

More than 40 lenders became financially committed to aspects of the project, but it took over 12 months before a bank syndicate could be formed to fund the foreign currency debt

⁵¹ Nainan, M. (19 September 1995) op. cit.

⁵² US House of Representatives (22 February 2002) "Fact Sheet: Background on Enron's Dabhol Power Project".

⁵³ India Business Intelligence (29 November 1995) "Dabhol is Heading for a Happy Conclusion".

⁵⁴ Averaged unit rate of power refers to the unit rate of power over the lifetime of the project.

⁵⁵ Inkpen, A. (2002) "Enron and the Dabhol Power Company", Case Study, Thunderbird School of Global Management.

⁵⁶ Naik, N. (2003) op. cit.

⁵⁷ India Business Intelligence (29 November 1995) op. cit.

⁵⁸ Naik, N. (2003) op. cit.

⁵⁹ India Business Intelligence (29 November 1995) op. cit.

⁶⁰ Nicholson, M. (4 August 1995) op. cit.

⁶¹ Fernandes, N. (3 August 1995) "State Halts India's Largest Foreign Investment, Enron's \$2.8 Billion Project", *Associated Press*; Nadkarni, S. (5 August 1995) "Enron Move Sends Out Wrong Signal", *South China Morning Post*.

⁶² India Business Intelligence (29 November 1995) op. cit.

⁶³ Human Rights Watch (1999) op. cit.

requirements of Phase II. Financing for Phase II was completed in May 1999, with the loan described in the specialist financial press as among the most successful international project financings. The projected capital cost of Phase II, including re-gasification facilities, was US\$1.9 billion, with US\$1.414 billion in loans and US\$452 million in equity investment from the original foreign sponsors.⁶⁴ Foreign debt was US\$1.082 billion, representing the most sizeable foreign borrowing sanctioned by India.⁶⁵ The debt package was obtained from a number of sources:⁶⁶

- A local currency loan equivalent to US\$333 million was provided by Indian banks with IDBI acting as arranger.
- Groups of domestic and offshore lenders provided a syndicated loan of US\$497 million.
- OPIC provided US\$60 million in project finance loans.
- US\$433 million as an export credit loan, of which US\$258 million was provided by the Export-Import Bank of Japan (Jexim) and guaranteed by Indian financial institutions and commercial banks. The remaining US\$175 million was provided by commercial banks with a guarantee from Japan's Ministry of International Trade and Industry.
- A second US\$90.8 million export credit loan was provided by commercial banks with Belgium's Office Nationale du Ducroire providing a 95% guarantee, and the other 5% guaranteed by long-term Indian policy banks.

The proceeds were to be applied towards the construction of an additional 1,320MW of generation capacity, an LNG re-gasification facility and port facilities. Enron had by now secured 20-year contracts to buy annually 1.6 million tonnes of LNG from Oman LNG LLC and 460,000 tonnes from Abu Dhabi Liquefaction Gas Co. Ltd.⁶⁷ Unlike Phase I, financiers of Phase II received no counter indemnities but did receive support from the central government through the MSEB backed by the Maharashtra state government.⁶⁸

Godbole Committee

During the 1999 Maharashtra elections, the Congress Party, now projecting Dabhol as a symbol of its opponents, campaigned against the project and defeated the ruling coalition. The new administration set up a committee to review Phase II of the project. Many saw the move as a ploy by the incoming administration to undermine the BJP, which at the time was leading the federal government. The committee, led by Madhav Godbole, released its findings on 12 April 2002 after studying the project for two months and recommended a renegotiation of the power purchase agreement ("PPA") with a reduction and re-denomination of the tariff. According to the Godbole report:

*DPC has emphasized the sanctity of the contracts entered into with it. However, it is well known that many commercial contracts are routinely renegotiated with major changes. In a sense, economic reality dominates technical legality in the commercial world.*⁶⁹

With 90% of the construction cost of Phase II already committed, Dabhol's sponsors strongly opposed the recommendations of the committee but negotiations between the state and Enron broke down for lack of an agreement.

⁶⁴ Allison, T. (18 January 2001) op. cit; Anonymous (15 May 1999) "India_Dabhol Powers Down" *International Financing Review*.

⁶⁵ Allison, T. (18 January 2001) op. cit.

⁶⁶ International Financing Review (15 May 1999) "India-Dabhol Powers Down"; Project Finance (January 2000) op. cit.

⁶⁷ Project Finance (January 2000) op. cit.

⁶⁸ Ibid.

⁶⁹ Report of the Energy Review Committee (10 April 2001) "Report of the Energy Review Committee", Government of Maharashtra, India, http://www.prayas.pune.org/energy/erc_godbole_report_part-I.htm (accessed 4 January 2007).

Cash Crises

Phase I of the Dabhol plant began operations in May 1999⁷⁰ and within one month MSEB raised concerns about its ability to pay a US\$20 million monthly bill.⁷¹ Although MSEB had a relatively strong financial position among India's state electricity boards, it faced common longstanding financial problems, in part due to receiving payment for only a portion of the electricity that it supplied.⁷² Much of its supplied power was lost through transmission inefficiency and pilferage, while MSEB also subsidised tariffs to the state's most sensitive electorate, especially in the agricultural sector.⁷³ Phase I of Dabhol consumed naphtha, a comparatively expensive fuel oil derivative, and crude oil prices had risen sharply in 2000. This was aggravated by a falling rupee, given that MSEB was bound to a US dollar-denominated price.⁷⁴ While MSEB was buying only 33–60% of Dabhol's output, its take-or-pay commitment of a 90% capacity take-up⁷⁵ converted its low usage into a higher average purchase price.⁷⁶ By the end of 2000, MSEB was paying almost five times more at US\$0.161 for each kilowatt-hour of electricity compared with US\$0.034 in most other states.⁷⁷ Faced with financial difficulties, MSEB sold half its 30% stake in DPC which it had acquired after the 1996 renegotiations, increasing Enron's shareholding in DPC to 65%.

With its single customer unable to pay for power, DPC invoked the central government counter-indemnity in February 2001 to recover US\$17 million owed by MSEB since November 2000. The state government eventually paid the amount.⁷⁸ In the same month, MSEB accused DPC of misrepresenting Dabhol's technical capability and made a claim for compensation of around US\$86 million. This was disputed by DPC as an attempt by MSEB to evade contractual payments. Although power generated from Dabhol would become cheaper when Phase II went into operation at year-end since natural gas was substantially cheaper than naphtha, MSEB's overall costs would increase as it was bound to buy LNG under a 20-year supply contract.⁷⁹

DPC had few options if MSEB was unable or unwilling to pay or stopped taking power from Dabhol. Although electricity was in shortage throughout India, cross-state sales were hampered by poor infrastructure. Independent power projects wishing to sell outside their home state needed approval from the state of domicile as well as approval of the tariff by the consuming state's regulatory authority.⁸⁰ Since 1999, Enron had tried without success to persuade the federal and Maharashtra governments to relax these rules so as to enable independent power projects to sell power to more than one state.⁸¹

Foreign creditor banks were now also concerned about MSEB's payment problems, not least since the central government's counter-indemnity applied only partially to Phase II and funds for its construction had ceased to be made available in March 2001 when construction was about 90% finished.⁸² Indian creditors, on the other hand, reduced interest rates on DPC's

⁷⁰ The Economist (31 January 2001) "Generation Gaps".

⁷¹ Choukroun, S. (16 April 2002) op. cit.

⁷² Paterson, C. (March 2006) op. cit.

⁷³ The Economist (26 February 1994) "Infrastructure in Asia: The Trillion-Dollar Dream".

⁷⁴ Inkpen, A. (2002) op. cit.

⁷⁵ Ibid.

⁷⁶ Pesta, J. (7 December 2000) "Indian State Looks Again at Enron Project: Calling Power Princes High, Official Wants New Talks", *Wall Street Journal*.

⁷⁷ Ibid.

⁷⁸ New York Times (30 May 2005) "GE to Help Restart Power Plant in India".

⁷⁹ The Economist (31 January 2001) op. cit.

⁸⁰ Joshi, P. (Spring 2002) "Dabhol: A Case Study of Restructuring Infrastructure Projects", *Journal of Structural and Project Finance*.

⁸¹ Ibid.

⁸² Ibid.

local currency loans to help avoid statutory provisioning for their loans.⁸³ In April, DPC commenced arbitration proceedings in London and served notice of political *force majeure*.⁸⁴ With payments outstanding from four months earlier, DPC threatened to cease supply even though MSEB had paid a later invoice.

Neither state nor central government would meet MSEB's payments on the grounds that the bills were in dispute.⁸⁵ DPC tried to recover payment through the project escrow account but MSEB sought injunctions to block the attempt.⁸⁶ In May 2001, DPC stopped Phase I operations,⁸⁷ sought international arbitration and issued a preliminary termination notice to MSEB, a prescribed step towards ending the supply contract that also triggered a six-month cooling-off period. MSEB disputed the process and asked the Maharashtra Electricity Regulatory Commission ("MERC") to adjudicate the disputed resolution process, claiming that MERC held quasi-judicial powers to adjudicate all state power disputes. In May 2001, MSEB rescinded the PPA, claiming that DPC had misrepresented the power plant's ramp up capability,⁸⁸ and declared the PPA null and void.⁸⁹ Construction of Phase II was halted in June.

Claims and Settlements

In September 2001, Enron's chairman Kenneth Lay announced that the corporation planned to divest assets of US\$4–5 billion⁹⁰ and in the same month offered to sell Enron's 65% DPC stake to the Indian government for US\$2.3 billion, with US\$1.1 billion covering Enron's investment and US\$1.1 billion to acquire the claims of offshore lenders. The two parties disagreed with the terms and no settlement was reached. Enron then invoked clauses in the Dabhol contract to claim US\$5 billion from the central and state governments on the grounds that MSEB had violated the PPA.⁹¹ By the end of October 2001, DPC was preparing to issue a final termination notice to MSEB.⁹²

At home, however, Enron's fraudulent financial and accounting strategies were being exposed, and it sought bankruptcy protection in December 2001. DPC creditors in India asked the Mumbai courts to place Dabhol in receivership to prevent it from being absorbed in Enron's bankruptcy proceedings. Dabhol then lay idle for several years as sponsors, domestic and foreign financial creditors, and national and state governments spun a web of settlement, damages and counter claims. In March 2004, Indian receivers took control of the Dabhol plant⁹³ and foreign commercial lenders terminated the PPA one month later. At the same time, Bechtel and GE acquired Enron's 65% stake in DPC for US\$23 million through an American bankruptcy court and initiated arbitrations to make good their losses.

Epilogue

In 2004, India's United Progressive Alliance took over the central government and set out to clear the foreign debts that arose from Dabhol and restart operations at the plant. By July

⁸³ Paterson, C. (March 2006) op. cit.

⁸⁴ The Economist (21 April 2001) "Enron, and On, and On".

⁸⁵ Paterson, C. (March 2006) op. cit.

⁸⁶ Ibid.

⁸⁷ US House of Representatives (22 February 2002) op. cit.

⁸⁸ A measure of the time taken for the plant to go from a cold start to full output.

⁸⁹ Naik, N. (2003) op. cit.

⁹⁰ McLean, B. (24 December 2001) "Why Enron Went Bust", *Fortune* 144, p. 13.

⁹¹ McLean, B. (5 March 2001) "Is Enron Overpriced?" *Fortune* 143, p. 5; Weil, J. (20 September 2000) "Energy Traders Cite Gains, But Some Math Is Missing", *Wall Street Journal*.

⁹² Naik, N. (2003) op. cit.

⁹³ BBC (2 April 2002) "Indian Receivers Take Control of Dabhol" <http://news.bbc.co.uk/1/hi/business/1907254.stm> (accessed 7 January, 2007).

2005, the government had concluded the arbitration and legal cases arising from Dabhol after settling with Bechtel, which received US\$160 million in settlement,⁹⁴ and GE, which accepted US\$145 million.⁹⁵ Both sought to minimise their losses, and unlike DPC's financial creditors, were able to use the leverage in bargaining that technical resources had been provided, without which restarting the power plant would be difficult to achieve.⁹⁶

Amounts overdue to 19 overseas lenders were settled for US\$230 million at a 20% discount⁹⁷ while OPIC received a settlement of US\$228 million from India's Gas and Power Investment Company Limited funded by domestic lenders including IDBI, ICICI Bank, IFCI and Canara Bank, and the sale of domestic bonds.⁹⁸ The settlement with foreign debtors enabled Dabhol to be revived, and the plant was restarted in April 2006.

⁹⁴ Paterson, C. (March 2006) op. cit.

⁹⁵ Ibid.

⁹⁶ The Economist (1 May 2004) "Can Dabhol Be Fired-Up Again? Energy in India".

⁹⁷ Sridhar, V. (30 July to 12 August 2005) "Reviving Dabhol", *Frontline*.

⁹⁸ Kapoor, S. (September 2005) "Power Play in Dabhol Power Plant Revival", *Hardnews*, <http://www.hardnewsmedia.com/portal/2005/09/109> (accessed 3 January 2007).