The financing of the Omkareshwar dam in India

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Contents

<u>Summar</u>	<u>'Y</u>		.i
Introduc	<u>tion</u>		1
<u>Chapter</u>	<u>1</u>	Financing of the National Hydroelectric Power Corporation	2
	<u>1.1</u>	Short description of National Hydroelectric Power Corporation	2
	<u>1.2</u>	Financing structure of National Hydroelectric Power Corporation	2
	<u>1.3</u>	Financing for NHPC's expansion plan	3
Chapter 2		Financing of the Omkareshwar project	5
	<u>2.1</u>	Short description of the Omkareshwar project	5
	<u>2.2</u>	Ownership structure of the Omkareshwar project	5
	<u>2.3</u>	Financing structure of the Omkareshwar project	6
	<u>2.3.1</u>	Equity financing	6
	<u>2.3.2</u>	Debt financing	6
<u>Annex 1</u>		Notes	8

Summary

This study aims to describe and analyze the financing structure of the Omkareshwar dam project in Madhya Pradesh, India. The focus is especially on the involvement of British and German financial institutions in the financing of the project.

The Omkareshawar project is developed by the Narmada Hydroelectric Development Corporation (NHDC), which is a joint venture of the National Hydro Electric Power Corporation (NHPC, 51%) and the state government of Madhya Pradesh (49%). The total investment costs of the Omkareshwar project are estimated at Rs 20 billion (€ 374 million). A major part of the financing structure, about 60%, is planned to come from an syndicated foreign bank loan of US\$ 250 million (€ 224 million).

In May 2003 NHDC invited ABN Amro Bank (The Netherlands), Deutsche Bank (Germany), Standard Chartered (United Kingdom) and Crédit Lyonnais (France) to bid for the mandate to arrange this project financing. Which bank or banks have won the mandate is not yet clear. It seems rather certain that the loan is not syndicated yet and no financing contracts have been signed, as the financiers are waiting for a decision by the Japanese export credit agency Nippon Export and Investment Insurance (NEXI) if it will issue a guarantee for the project. Such a guarantee probably is necessary to extend the maturity of the project financing, without raising the interest rate. NEXI will only issue the guarantee if the project complies with its environmental guidelines.

Foreign banks which might get involved in the loan syndicate for the Omkareshwar project are likely to be found among the group of banks which have provided other types of financing to NHPC in recent years. Among these are:

•	Standard Chartered	United Kingdom
•	Barclays Bank	United Kingdom
•	HSBC	United Kingdom
	(directly and through its French subsidiary CCF)
•	BHF Bank	Germany
	(a subsidiary of ING Bank, the Netherlands)	

Foreign companies supplying equipment to the Omkareshwar project are Voith Siemens (Germany and Brazil) and Alstom (France). There is quite a chance that some financial institutions from these countries will participate in the financing syndicate as well.

In summary, the British bank Standard Chartered is involved in the financing of NHPC in the following three ways:

- In October 2002 Standard Chartered participated as co-arranger in a banking syndicate headed by Deutsche Bank which provided a 16-year ¥ 18,240 million (€ 152 million) loan facility for NHPC's Teesta V project on the Teesta river in Sikkim;
- In December 2003 Standard Chartered was one of the four banks arranging a five-year US\$ 50 million (€ 41.7 million) syndicated loan for NHPC. The loan is intended for general corporate expenses by NHPC, which could include some expenses in connection with the Omkareshwar project;
- In May 2003 Standard Chartered was among the banks invited by NHDC to bid for the mandate to arrange a US\$ 250 million (€ 224 million) loan for the Omkareshwar project. It is not clear which bank has won this mandate.

Introduction

This study aims to describe and analyze the financing structure of the Omkareshwar dam project in Madhya Pradesh, India. The focus is especially on the involvement of British and German financial institutions in the financing of the project.

Chapter 1 will describe and analyze the general financing of the National Hydroelectric Power Corporation (NHPC), while Chapter 2 will focus on the specific financing of the Omkareshwar project.

A summary of the findings can be found on the first page of this report.

Chapter 1 Financing of the National Hydroelectric Power Corporation

1.1 Short description of National Hydroelectric Power Corporation

National Hydroelectric Power Corporation (NHPC) is an Indian government-owned corporation, set up in 1975. Currently, it is the largest hydroelectric power producer in India, with a production capacity of 2,175 MW from its eight power plants. NHPC is among the top 10 public sector companies in India by size of investment. During the year 2002-03 NHPC realised an annual turnover of Rs 13,249 million (\in 277 million) and a net profit of Rs 5,105 million (\in 107 million). The company has 13,000 employees.

During the Tenth Plan period (2002-2007), NHPC aims to expand its total installed capacity with 4,357 MW. Between 2008 and 2017, NHPC hopes to add no less than 27,908 MW.¹

Ties between NHPC and the Indian government are very close. Investment proposals by the NHPC have to be approved by the Cabinet Committee on Economic Affairs (CCEA), which also allocates the equity portion for the projects from the state budget. In the past, equity capital funding from the government helped cover 40%-50% of the costs of NHPC projects. The government also guarantees 83% of NHPC's private bank debt. Furthermore, the Reserve Bank of India helps ensure that NHPC gets payment of previous debts and current invoices by the state electricity boards and utilities that make up its client base.²

1.2 Financing structure of National Hydroelectric Power Corporation

At the end of March 2003, NHPC owned assets with a total value of Rs 186,150 million (\in 3,889 million). These assets were financed by the following stakeholders: ³

 Shareholder (State of India) 	Rs 100,930 million	54.2%
Bondholders	Rs 11,844 million	6.4%
 Domestic bank loans 	Rs 40,077 million	21.5%
 Foreign bank loans 	Rs 23,157 million	12.4%
Others	Rs 10,142 million	5.4%

The total value of foreign bank loans outstanding was Rs 23,157 million (\in 484 million), covering 12.4% of NHPC's total assets. These foreign banks loans were provided by the following banks:⁴

 Skandinaviska Enskilda Banken 	Sweden	Rs 3,267 mln	€ 68 mln
 Nordic Investment Bank 	Norway	Rs 1,922 mln	€ 40 mln
 Crédit Commercial de France, 			
which is a subsidiary of HSBC	United Kingdom	Rs 6,551 mln	€ 137 mln
 Export Development Corporation 	Canada	Rs 3,808 mln	€ 80 mln
Japan Bank of International Cooperation	on Japan	Rs 6,983 mln	€ 146 mln
Syndicate headed by Deutsche Bank	Germany	Rs 626 mln	€ 13 mln

More details on the loan by a syndicate headed by Deutsche Bank are provided in paragraph 1.3.

1.3 Financing for NHPC's expansion plan

As stated in paragraph 1.1, NHPC aims to expand its total installed capacity with 4,357 MW during the Tenth Plan period (2002-2007). This would require a total estimated investment of Rs 314.7 billion (\in 7.3 billion). This amount would be financed as follows:⁵

Own reserves	Rs 9.4 billion	3.0%
 Contributions from the state budget 	Rs 142.0 billion	45.1%
 Domestic and foreign bank loans & bonds 	Rs 163.3 billion	51.9%

Since early 2002, National Hydroelectric Power Corporation thus has been looking for Rs 163.3 billion (\in 3.8 billion) in domestic and foreign bank loans and bonds to finance its expansion projects for the 2002-2007 period (including Omkareshwar, which is discussed in more detail in Chapter 2).

We have found the following information on NHPC's efforts to secure bank loans from foreign banks in this period:

 In May 2002, it was reported that the following foreign banks had contacted NHPC to supply long-term foreign bank loans:⁶

 BHF (Germany), 	
which is a subsidiary of ING Bank	The Netherlands
HSBC	United Kingdom
 Standard Chartered Bank 	United Kingdom

In October 2002 Deutsche Bank arranged a ¥ 18,240 million (€ 152 million) term Ioan facility with a 16 year maturity for the Teesta V project on the Teesta river in Sikkim. The maturity is unusually long because the Ioan is supported by Nippon Export and Investment Corporation (NEXI) of the Japanese government under its Overseas Untied Loan Insurance (OULI) programme and also carries a guarantee from the Government of India. Although the interest rate of this facility was not published, Deutsche Bank did comment that this double guarantee (by NEXI and the Indian government) enables NHPC "to raise long-term funds at very attractive rates to cover both import and local costs through a very flexible facility structure".

Other banks participating as co-arrangers in the syndicate were:⁷

HSBC	United Kingdom
ING Bank	The Netherlands
 Standard Chartered 	United Kingdom
 Société Générale 	France
 State Bank of India 	India

The first part of this loan was already taken up before April 2003, and was therefore reported as outstanding in NHPC's annual report for 2002-2003 (see paragraph 1.2)

- In May 2003, NHPC invited ABN Amro Bank (The Netherlands), Deutsche Bank (Germany), Standard Chartered (United Kingdom) and Crédit Lyonnais (France) to bid for the mandate to arrange a financing package of US\$ 350 million (€ 313 million). This financing package would consist of:⁸
 - US\$ 250 million (€ 224 million) project financing for the Omkareshwar project for a period of 16 years with a net interest rate below 3%; and
 - US\$ 100 million (€ 89 million) for repaying older, high cost loans to NHPC.

The financing of the Omkareshawar project is discussed further in paragraph 2.3.2.

- In December 2003, NHPC raised US\$ 50 million (€ 41.7 million) via a five year syndicated loan arranged by Barclays Capital (United Kingdom), Emirates Bank International (United Arabian Emirates), Standard Chartered Bank (United Kingdom) and State Bank of India (India). It is the first foreign bank loan by NPHC without government guarantee. The loan is intended for general corporate expenses by NHPC, which could include some expenses by NHPC in connection with the Omkareshwar project. The following banks participated in the syndicate: ⁹
 - Italy Banca Monte dei Paschi di Siena US\$ 5.0 million Barclavs Capital United Kingdom US\$ 6.25 million • Chiao Tung Bank Taiwan US\$ 5.0 million • Emirates Bank International UAE US\$ 6.25 million Natexis Banques Populaires France US\$ 5.0 million National Bank of Kuwait Kuwait US\$ 5.0 million Persia International Bank US\$ 5.0 million Iran • Standard Chartered Bank United Kingdom US\$ 6.25 million State Bank of India India US\$ 6.25 million

Probably this loan is used to refinance older, high cost loans. As said above, the intention was to look for a US\$ 100 million loan but this would need approval from the Reserve Bank of India (RBI). As the RBI is not very forthcoming with approval because of rising foreign exchange reserves, NHPC probably has settled for a US\$ 50 million loan initially. For borrowing this amount the company does not need RBI approval.¹⁰

Chapter 2 Financing of the Omkareshwar project

2.1 Short description of the Omkareshwar project

The Omkareshwar project aims to construct a dam on the Indian Narmada river for hydroelectricity and irrigation purposes. The dam will be situated near the pilgrimage town of Omkareshwar (the location of one of the 12 revered Jyotirlinga shrines of Lord Shiva) in the Khandwa District in the western part of the central Indian state of Madhya Pradesh. The dam will be 949 meters long and 73 meters high and will submerge 9,888 hectares of private, government and forest land spread over 30 villages in the Khandwa and Dewas districts. With an installed capacity of 520 MW the project will generate 1,166 million kWh of energy after completion in February 2008. The project will also provide irrigation to an area of around 146,800 hectares. The total investment costs of the project are estimated at Rs 20 billion (\in 374 million).¹¹

The Omkareshawar project is developed by the Narmada Hydroelectric Development Corporation (NHDC) and was approved by the Cabinet Committee on Economic Affairs (CCEA) in May 2003.¹²

In July 2003 NHDC signed a turnkey contract for the project with a consortium of Jaiprakash Associates (India) and Voith Siemens Hydro Power Generation (Germany). The contract has a value of Rs 14.8 billion (\in 280 million), of which \in 157 million is for the construction works by Jaiprakash Associates and \in 123 million for the complete electro-mechanical equipment supplied by Voith Siemens (which is a 65/35 joint-venture between Voith and Siemens). The project has to be finished in July 2007. If the consortium completes the project before March 2007, it will get a bonus of Rs 48 million (\in 0.9 million).¹³

Construction activities for the Omkareshwar project started when the foundation for the project was laid on 30 August 2003 by the Indian prime minister Atal Bihari Vajpayee.¹⁴

In January 2004 it was reported that the eight turbines for the Omkareshwar project, with a total value of US\$ 30 million, will be supplied by the Brazilian subsidiary of Voith Siemens.¹⁵

In February 2004 the French company Alstom announced that it will supply of 23 spillway radial gates, complete with hydraulic hoists, power units and electrical control equipment for the Omkareshwar project. This supply contract is awarded by Jaiprakash Associates.¹⁶

2.2 Ownership structure of the Omkareshwar project

The Omkareshwar project is undertaken by the Narmada Hydroelectric Development Corporation (NHDC). This company was established in August 200 and develops the Indira Sagar and Omkareshwar hydroelectricity projects. NHDC is a joint venture of: ¹⁷

•	National Hydro Electric P	ower Corporation	(NHPC)	51%
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State government of Madhya Pradesh
 49%

2.3 Financing structure of the Omkareshwar project

The financing structure of the Omkareshwar project will probably look as follows: ¹⁸

Equity

NHPCMadhya PradeshTotal equity	€ 56 million € 54 million € 110 million	15.0% 14.4% 29.4%
Debt		
Long term syndicated loanOther debt	€ 224 million € 40 million	59.9% 10.7%
Total debt	€ 264 million	70.6%
Total investment	€ 374 million	100%

In the following paragraphs we will describe the different elements in the financing structure in more detail:

2.3.1 Equity financing

The equity portion of the project is funded by the state government and the government of Madhya Pradesh, from tax income and/or state debt. We estimate that the equity portion will account for almost 30% of the total costs of the Omkareshwar project. We base this estimate on reports that the central government has contributed Rs 3 billion (\in 56 million) as equity to the Omkareshwar project.¹⁹ As the central government (through NHPC) participates for 51% in the project, total equity would be around \in 110 million, with the state of Madhya Pradesh contributing Rs 44 million.

It should be noted however that in earlier NHPC-projects the equity portion was higher, reportedly around 40%-50% of total costs. But probably NHPC and the Indian state have chosen to reduce the equity percentage in recent projects, now NHPC recently has improved its ability to secure long term commercial bank loans at attractive interest rates. The credit rating agency Fitch in August 2003 assigned a AAA rating to NHPC for domestic borrowings. For foreign currency borrowings Fitch assigned a BB+ rating to NHPC, which is similar to the rating for Indian state debt. These ratings are based upon the fact that 83% of NHPC's private bank debt is guaranteed by the government. The Reserve Bank of India helps ensure that NHPC gets payment of previous debts and current invoices by the state electricity boards and utilities that make up its client base. These ratings were reaffirmed in January 2004.²⁰

2.3.2 Debt financing

We estimate that the debt portion will cover almost 70% of the total investment costs of the Omkareshwar project. The largest part (\in 224 million or about 60% of total project costs) will be covered by a syndicated long term loan from a foreign banking consortium. In May 2003, NHDC invited ABN Amro Bank (The Netherlands), Deutsche Bank (Germany), Standard Chartered (United Kingdom) and Crédit Lyonnais (France) to bid for the mandate to arrange a financing package of US\$ 350 million (\in 313 million). This financing package would consist of:²¹

- US\$ 250 million (€ 224 million) project financing for the Omkareshwar project for a period of 16 years with a net interest rate below 3%; and
- US\$ 100 million (€ 89 million) for repaying older, high cost loans to NHPC.

In August 2003 it was reported that NHDC was "in negotiations with Standard Chartered and Deutsche Bank for a loan of US\$ 250 million for the project". If this meant that these two banks had won the mandate to arrange the financing, is unclear.²²

In September 2003 it is reported that "Deutsche Bank and a consortium of foreign banks" were prepared to supply a US\$ 250 million loan for Omkareshwar. But the loan would only become available after an environmental approval of the project by the Japanese export credit agency Nippon Export and Investment Insurance (NEXI).²³

But in May 2004 Deutsche Bank stated that it is "no longer involved with the project in any manner - whether in advising on it or in financing it." ²⁴ This leaves the question who his appointed as arranger for the Omkareshwar project wide open again. ABN Amro Bank (The Netherlands), Standard Chartered (United Kingdom) and Crédit Lyonnais (France) remain likely candidates.

However, the Japanese export credit agency NEXI has not yet given approval to the project, which would be a condition for arranging bank financing. NEXI is probably being asked to play a similar role in the financing of this project as it did in the financing for NHPC's Teesta V project, which was arranged by Deutsche Bank in October 2002 (see paragraph 1.3).

Apart from NEXI, two other export credit agencies are reportedly considering financial support to the Omkareshwar project: COSEC (Portugal) and maybe COFACE (France).²⁵

The Multilateral Investment Guarantee Agency (MIGA), which is part of the World Bank Group, in December 2003 received a guarantee application for the Omkareshwar project by an unnamed private investor. In April 2004 a MIGA officer informally communicated that the agency had turned down this application "because of environmental and social concerns".²⁶

Annex 1 Notes

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- 13 Contract for MP project, Business Standard, 16 June 2003; 123 Mio. € order for Voith Siemens Hydro Power Generation, Press release Voith Siemens Hydro Power Generation, Heidenheim, 25 July 2003; Annual Report 2002-2003, National Hydroelectric Power Corporation, Faridabad, September 2003; Website Jaypee Group (www.jilindia.com), Viewed in April 2004.
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- 22 NHDC to have smooth run on Omkareshwar project funding, India Business Insight, 20 August 2003.

- 23 Indira Sagar and Omkareshwar hydel project costs to come down, Daily Excelsior, 7 September 2003.
- 24 Personal communication by Heffa Schücking, Urgewald, 10 May 2004.
- 25 Personal communication by Heffa Schücking, Urgewald, 10 May 2004.
- 26 Personal communication by Heffa Schücking, Urgewald, 27 May 2004.