



Project Finance and Guarantees

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Resource Mobilization and Cofinancing Vice Presidency
Project Finance and Guarantees Department

Morocco's Jorf Lasfar Power Station

This project brings worlds-best operational practices to Morocco.

Project Overview

The Jorf Lasfar Power Station is a 1,356 megawatt coal-fired power project located on the Atlantic Coast of the Kingdom of Morocco. The first two units, 1 and 2, were built by the Moroccan state electric utility, Office National de l'Electricité (ONE), and were placed in service in 1994 and 1995, respectively. The second stage, units 3 and 4, will be built by subsidiaries of ABB Asea Brown Boveri Ltd of Zurich, Switzerland. CMS Morocco Operating Co, a wholly owned subsidiary of CMS Energy Corporation of Dearborn, Michigan, will operate all four units as an "independent power producer."

All of the power produced by the generating station will be sold to ONE under a 30-year power sales agreement. The tariff includes energy and capacity payments. All four units of the power station are baseload units.

Jorf Lasfar Energy Company (JLEC) will purchase coal through competitive bidding from various sources overseas under medium-term and spot purchase contracts. The operator will also operate a coal unloading terminal at the port of Jorf Lasfar, two kilometers away from the power station. The project also includes extension and refurbishment of the quay. Depending on the size of vessels actually used, approximately 60 vessels per year will be unloaded at the quay for the power station; in addition, the operator will unload another 12 vessels per year for delivery to ONE's Mohammedia Power Station.

The plant will use electrostatic precipitators to reduce particulate emissions to World Bank standards for coal-fired power stations. The plant design and the specifications in the fuel supply plan will allow the plant to com-

ply with World Bank standards for NO_x and SO₂ air emissions. In addition, bottom and fly ash, which prior to financial closing were released into the ocean by ONE, will be used as landfill initially on site and, subsequent to the operation of Unit 3, in an inactive quarry owned by the Moroccan Ministry of Public Works five kilometers away. The power station uses ocean water for cooling.

Energy Sector Background

The Government of Morocco has embarked on a program to reform the energy sector and to promote private investments in its infrastructure. In the petroleum sub-sector, the distribution companies were privatized during 1994 and 1995. The majority shares of the two national refineries were sold to private investors during 1997.

In the power sub-sector, the Government has taken important steps to secure private investors. For example, in 1994 the electricity law was amended to permit the operation of independent power producers. The Government is also reforming the sector's regulatory framework and practices. The World Bank provides financial assistance to the Government for these efforts.

The World Bank's country assistance strategy for Morocco is to support policies and investments in four areas:

- growth and competitiveness;
- social development;
- environment & natural resources management; and
- modernizing the public sector.

Five different multi-lateral and bi-lateral agencies combined efforts to enable this financing to close.

The Bank's partial risk guarantee for the Jorf Lasfar Power Station is part of a series of projects being developed to improve Morocco's rate of growth and competitiveness.

Project Background

In October 1994, ONE, the state-owned electric utility company, initiated an international competitive bidding to bring world-best practices to Morocco by granting a concession to operate the two existing units at Jorf Lasfar and to build and operate two new units adjacent to the existing units. As mentioned above, the law in Morocco was changed to permit a foreign operator, but ownership of the power station assets is to remain with ONE. The resulting structure is essentially a 30-year lease by the project company of the four units.

ONE selected the ABB/CMS consortium as the winning bidder, and in April 1996 signed a Protocol Agreement which outlined the responsibilities of the consortium, ONE, and the Government. As ONE completed units 1 and 2, contract negotiations were finalized. The project reached financial closing in September 1997. Units 3 and 4 are scheduled to be placed in service before December 2000.

The equity investors in the project company, known as Jorf Lasfar Energy Company, are as follows:

- JLEC Management AB, JLEC Capital GmbH, and JLEC Power Ventures GmbH, which are wholly owned subsidiaries of ABB Asea Brown Boveri Ltd, own 50% of the project.
- Jorf Lasfar Handelsbolag, Jorf Lasfar Power Energy HB, and Jorf Lasfar I HB, which are entities wholly owned by CMS Generation Co., own 50% of the project.

Jorf Lasfar Energy Company is incorporated in Morocco as a *société en commandite par actions*, a legal form similar to a limited partnership.

Financing Structure

The project company has acquired the rights to operate Units 1 and 2 for 30 years.

In return, JLEC paid the lease payments as a lump sum initial amount in present value terms at financial closing. Cash generated by units 1 and 2 will be an important component in the financing of the construction of units 3 and 4.

Units 3 and 4 have been financed by limited recourse project finance facilities consisting of two types of debt: commercial bank financing backed by political risk guarantees and a US\$200 million direct loan funded by Overseas Private Investment Corporation (OPIC) of the United States. The two rank *pari passu*. The commercial bank financing has four tranches, as follows:

- a DM62 million tranche guaranteed by Geschäftsstelle für die Exportrisikogarantie (ERG), the Swiss export credit agency;
- a DM456 million tranche guaranteed by Società per L'Assicurazione dei Crediti all'Esportazione (SACE), the Italian export credit agency;
- a US\$237 million tranche guaranteed by the Export-Import Bank of the United States, with take-out funding at commissioning; and
- a DM313 million tranche guaranteed the World Bank.

The lead arrangers for the commercial bank financing are ABN AMRO Bank NV, Banque Nationale de Paris, and Credit Suisse First Boston. The project debt will be fully amortized over a 12-year period, commencing at completion.

In addition to providing interest rate swaps for the ERG, USEXIM, and World Bank tranches, the commercial banks will also provide financing for other project costs, thereby providing more flexibility for the sponsors and JLEC.

Contractual Framework

The suite of project agreements is fashioned without the benefit of direct ownership of the power station assets.

- Power Purchase Agreement, between ONE and Jorf Lasfar Energy Company, provides for the sale of energy and capacity from all four units. The Government of Morocco guarantees any termination payment that ONE might owe in the event of

This power station will bring state-of-the-art technology to Morocco.

- a default under the agreement.
- Transfer of Possession Agreement, between ONE and Jorf Lasfar Energy Company, transfers the right of use and quiet enjoyment of all four units to JLEC and provides for the completion of punch list and warranty items on units 1 and 2.
 - Construction and Procurement Agreement, between ONE and Jorf Lasfar Energy Company, provides for the construction and subsequent transfer to ONE of units 3 and 4.
 - Construction Contracts and EPC Parent Guarantee, among Jorf Lasfar Energy Company and various subsidiaries of ABB Asea Brown Boveri Ltd, provides for the turnkey construction of units 3 and 4.
 - Coal Terminal Agreement, between Office d'Exploitation des Ports (ODEP) and Jorf Lasfar Energy Company, establishes an operating scheme for the coal terminal of the port of Jorf Lasfar.
 - Operations and Maintenance Agreement, between CMS Morocco Operating Co and Jorf Lasfar Energy Company, provides for operations and maintenance of the power station and port facilities.
 - Coal Supply Agreements, between JLEC and various coal suppliers, provides for coal through a tendering process with contract approval by ONE.
 - Loan documentation consisting of: Common Agreement, Facility Agreements, Intercreditor Agreement, etc, provide for debt facilities in an aggregate amount of about US\$900 million. Borrowings are in US Dollars and Deutsche Marks.
 - Equity documentation consisting of Capital Contribution Agreements and Capital Contribution Guarantees between ABB and CMS entities and Jorf Lasfar Energy Company, provide for primary and contingent equity contributions.

World Bank Guarantee

The World Bank Guarantee supports the commercial bank syndicate by protecting against political events preventing payment of certain specified termination amounts that would be payable upon termination of the power sales agreement and wind-up of the project. As noted above, the Government of Morocco guarantees this payment, and it would be only if the Government failed to pay that the World Bank Guarantee would make payment to the commercial lenders. The

World Bank Guarantee would not cover events of default caused by operations or force majeure events at the power station, but payment under the World Bank Guarantee could be as a result of such events as:

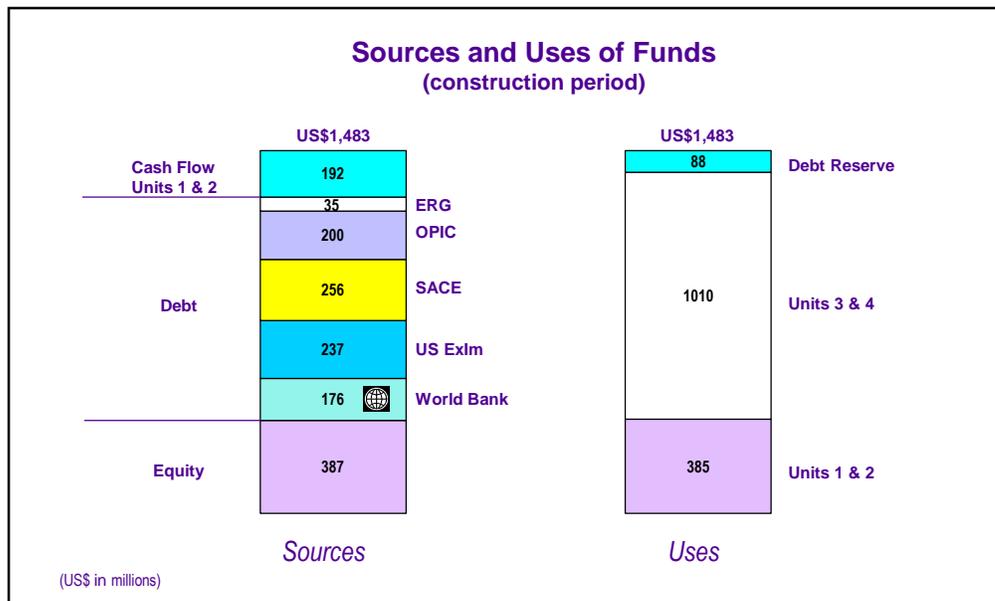
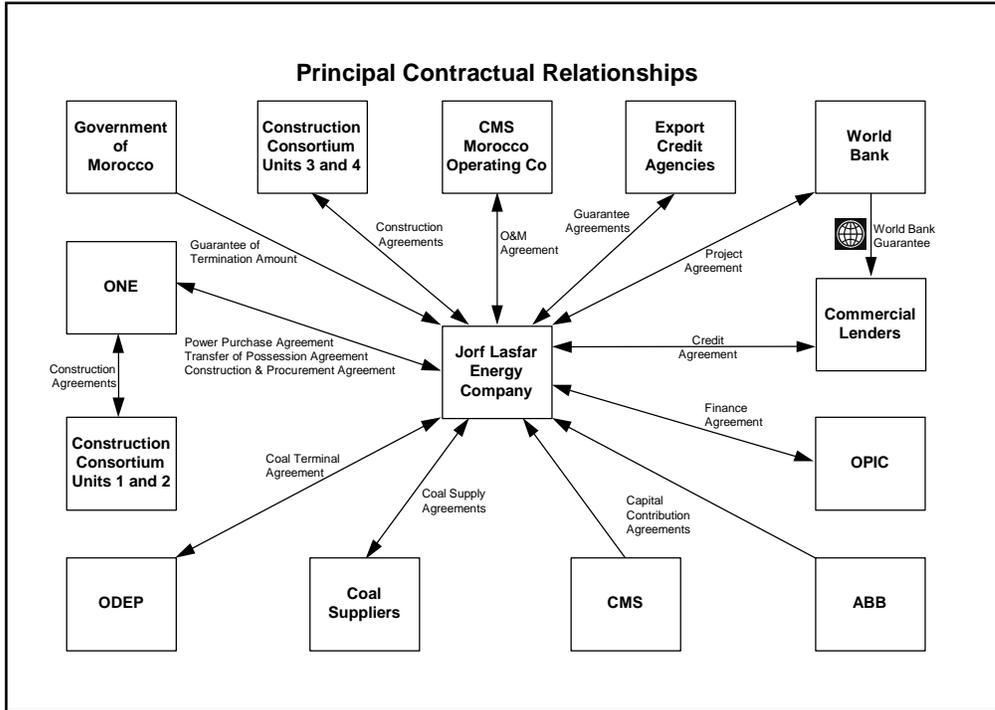
- political force majeure events such as war, invasion, blockade, or terrorist activity;
- natural force majeure events such as earthquake or storm damage affecting ONE;
- general strikes;
- expropriation or breach of "quiet enjoyment" of the site;
- payment default by ONE under the power sales agreement; or
- breach of Government letters in support of currency convertibility and transferability.

The World Bank Guarantee is contained in a Guarantee Agreement between the International Bank for Reconstruction and Development and ABN AMRO Bank NV, as agent for the commercial lenders. It is capped at DM 313,000,000 and declines over the 12-year amortization period of the bank loans. In parallel, the Government of Morocco and the Bank have entered into an Indemnity Agreement whereby the Government will reimburse the Bank for any draws under the World Bank Guarantee.

Benefits of the World Bank Guarantee

The Bank Guarantee was a catalyst for mobilizing the financing for the Jorf Lasfar project, by providing political risk coverage for a commercial debt tranche. With this coverage, most of the project debt was covered against political force majeure events in one form or another.

The Bank's guarantee has demonstrably attracted new sources of financing, reduced financing costs, and provided the commercial lenders with the comfort necessary to extend maturities to 12 years in a country that lacks credit ratings on its sovereign indebtedness. This was possible because the World Bank Guarantee covered risks that the market was not able to bear or adequately evaluate.



For more information on the Jorf Lasfar Power Project and the World Bank's Partial Risk Guarantee, please contact Scott Sinclair (202-473-9157) or Pierre Vieillescazes (202-473-3781) of the Project Finance and Guarantees Department or Jorge Larrieu (202-473-0249) of the Middle East North Africa Department.

To obtain a copy of the brochure, *The World Bank Guarantee: Catalyst for Private Capital Flows* or the *Guarantees Handbook*, please call (202) 473-7594. Please direct editorial comments to Andres Londono, tel: (202) 473-2326.