

**PROJECT INFORMATION DOCUMENT (PID)  
CONCEPT STAGE**

Report No.: AB4400

<b>Project Name</b>	AL QATRANA POWER PROJECT
<b>Region</b>	MIDDLE EAST AND NORTH AFRICA
<b>Sector</b>	Power (100%)
<b>Project ID</b>	P108850
<b>Borrower(s)</b>	Jordan (Guarantor)
<b>Implementing Agency</b>	Ministry of Energy and Mineral Resources TBD: Private sector special purpose company
<b>Environment Category</b>	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
<b>Date PID Prepared</b>	January 13, 2009
<b>Estimated Date of Appraisal Authorization</b>	March 30, 2009
<b>Estimated Date of Board Approval</b>	May 28, 2009

### 1. Key development issues and rationale for Bank involvement

The following is a list of the most important developments that have taken place in the Jordan energy sector since 2007:

**Sustained pressure on demand-supply balance:** Electricity consumption continues to increase and there is a clear need to add new generation capacity even beyond Al Qatrana plant. According to a recently prepared sector investment Master Plan<sup>1</sup>, the system currently operates practically without any reserve capacity if electricity imports are excluded. The peak demands in 2008 and 2009 are projected to be 2,262 MW and 2,456 MW respectively, while the existing generation capacity for the same years (including committed plants and taking into account planned retirements) are 2,332 MW and 2,398 MW, with capacity reserves at 3.1% in 2008 and negative 2.4% in 2009. In order to meet the peak demand Jordan imports electricity from Egypt, whose power system is also under stress. The deficit in the domestic generation capacity is projected to increase to about 400 MW in 2012 (peak demand of 3106 MW vs. available capacity of 2709 MW), even with Al Qatrana power plant in operation, if additional capacity is not added. For this reason the GoJ invited proposals from three generation companies already operating in Jordan<sup>2</sup> for another combined cycle gas turbine (CCGT) power plant of similar size (or larger) as Al Qatrana; however, no proposals were received by the bid submission deadline (December 1, 2008).

**Completion of new plants:** Construction of the 370-MW CCGT East Amman IPP, sponsored by a consortium of AES and Mitsui and for which the Bank issued an IBRD PRG similar to the one proposed for Al Qatrana, is on schedule. Gas turbines at Amman East have been in operation

<sup>1</sup> “Update of the 2006 Generation and Transmission Expansion Master Plan”, Main Report, Final, August 15, 2008, prepared by PB Power for Electricity Regulatory Commission.

<sup>2</sup> The three companies are: Central Generation Company (CEGCO), owned by a consortium led by Dubai Capital; Samra Electric Power Generation Company (SEPGCO), owned by the GoJ; and Amman East, owned by AES/Mitsui consortium.

since mid-2008, with the full completion of the plant expected in June 2009, ahead of schedule. The state-owned power plant at Samra, has also added a 98-MW gas turbine, a part of its second CCGT plant which is to be fully completed in 2010.

**Increased and volatile supply costs and financial pressure on NEPCO:** There have been significant changes throughout 2008 in domestic fuel prices (including for fuel used in power generation), reflecting the changes in the international energy prices and elimination of domestic fuel price subsidies in February 2008 for all products except for LPG. The average wholesale power purchase price to the National Electric Power Company (NEPCO), the single buyer, increased between August 2007 and August 2008 by more than 100 percent, while end-user tariffs increased only by about 25 percent on March 14, 2008, in the aftermath of the elimination of fuel subsidies. As result, NEPCO started to incur significant debts. It finished year 2007 with a relatively modest loss, which increased significantly in the first eight months of 2008. The collapse of international oil prices in October and November 2008 resulted in a reduction of NEPCO's power purchase costs, which by October fell below the average sale price, giving NEPCO the opportunity to recoup the accumulated losses. However, but already accumulated loss needs to be covered. NEPCO also has a sizable investment program to finance: the Master Plan estimates its investment needs at about US\$530 million between 2008 and 2012. NEPCO's financial situation and associated risks will need to be carefully appraised, given the volatility of fuel prices and the evolving international financial crisis, which is likely to make it more difficult to finance working capital and investment projects, both in NEPCO's network and elsewhere in the sector.

**Fuel supply: increased gas imports<sup>3</sup>:** The GoJ in 2004 signed a 30-year gas import contract with Egypt, which allows imports of gas in increasing amounts with a ceiling reached by 2011. In April 2008, the GoJ negotiated additional imports, increasing the gas import quotas. This has helped to mitigate the impact of the high and volatile oil fuel prices.

**Renewable energy and energy efficiency efforts:** Jordan is taking some concrete steps to develop its renewable energy resources. The World Bank approved in June 2008 a \$6 million GEF grant to help develop a 60-MW wind power project. The Government is evaluating proposals for another 40-MW wind power farm (at Al Kamshah), received at the end of August 2008. A Bank-financed landfill gas project, which includes a 6-MW power plant, is to be presented to the Board in December 2008. A Jordan Renewable Energy and Energy Efficiency Fund (Jordan REEF) is to be established under the Renewable Energy Promotion Law, which is awaiting Parliamentary approval. GEF recently approved a \$1-million grant for energy efficiency, administered by the Bank, designed to support Jordan REEF energy efficiency activities, in partnership with French Government agencies.

**Privatization of generation and distribution:** Two electricity distribution companies, which were majority state-owned, were transferred to the new owner (a consortium led by Dubai Capital) on July 3, 2008. Since the third distribution company is also privately-owned, this means that the distribution segment of the sector is now fully private. On generation side, the

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<sup>3</sup> Data on natural gas quantities are from two documents: (i) "Study of Alternatives Available to Meet the Demand for Primary Energy and Choose the Best Alternative", Hashemite Kingdom of Jordan, May 2007 (page 10); (ii) the study referenced in footnote 2 (p. 116).

Central Electricity Generation Company (CEGCO), which owns eight power plants (out of ten currently in operation), with total available capacity of about 1,536 MW, was privatized in October 2007 to a consortium also led by Dubai Capital<sup>4</sup>. Thus, the only state-owned companies operating in the power sector are Samra electric power generation company (SEPGCO) and NEPCO.

**Legal and regulatory framework and performance:** The government has prepared a “unified” energy law, which covers the power sector (by including the existing General Electricity Law), the oil and gas sector, and renewable energy (by including the Renewable Energy Promotion Law). The energy law proposes to establish a single energy regulatory agency for the electricity and oil and gas sectors, which would subsume the existing Electricity Regulatory Commission (ERC). Regulating the electricity sector has become even more challenging, now that most of the sector has been privatized (with significant dominance of Dubai Capital and cross-ownership between generation and distribution), energy subsidies eliminated, and energy prices even more volatile. The experience with the behavior of the power purchase prices in 2008, described above, demonstrates this challenge very clearly.

**Government energy strategy:** In December 2007 the GoJ adopted an energy sector strategy, which, inter alia, includes liberalization of the petroleum subsector and an increased emphasis on renewable energy and energy efficiency. It also envisages development of power generation in the medium-to-long term on the basis of domestic oil shale and, possibly, nuclear energy. The World Bank, through its technical assistance, is assisting with implementation of the strategy, revisiting some of its elements along the way in response to the fast changing external environment. The Bank is also undertaking a study on fiscal and social impact of energy and food price increases in Jordan.

**Macroeconomic performance:** Jordan’s strong growth performance may come under pressure with the evolving international financial crisis. Real GDP growth, after averaging over 7.7 percent during 2004–07, is estimated to fall to 5.5 percent in 2008 and to less than 4 percent in 2009 due to the expected slowdown in global economy and the consequent fall in Jordan’s exports of goods and services and foreign inflows, including foreign direct investments. Inflation has accelerated to 15.5 percent in the first ten months of 2008 (year-on-year), driven by rapid increases in international oil and food prices that occurred during the first 3 quarters of 2008. Despite elimination of oil price subsidies in February, the fiscal deficit widened over the first nine months of 2008, due to rising wages, transfers, and increased food subsidies. The current account deficit (18.8 percent of GDP in 2007) continued to increase in the first three quarters of 2008, reflecting a significant increase (32.3 percent) in imports of goods and non-financial services, despite good performance of exports, net income receipts, and net current transfers. During the same period Jordan saw continued FDI inflows of US\$2.2 billion. Currently, Central Bank reserves remain strong at US\$8.4 billion, equivalent to over five months of imports. The rollback in international prices of commodities, especially oil, will reduce inflation accompanied by an improvement in current account balance and reserves. However, if sustained, lower oil prices could also reduce capital inflows and workers’ remittances from Gulf countries. External debt

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<sup>4</sup> The only two other power plants currently in operation and not owned by Dubai Capital are the state-owned plant at Samra, with current capacity of 500 MW (to be increased to 608 MW in 2010); and the 370-MW Amman East, owned by AES/Mitsui.

declined from about US\$7.4 billion at the end of 2007 to about US\$5.1 billion by the end of the third quarter of 2008. As for Jordan's financial sector, no major direct losses or capital flights occurred so far, but it is uncertain whether major losses have been incurred by some major clients due to global financial crisis.

**Rationale for Bank involvement:** The Bank has been an important partner over the years to the GoJ helping develop the power sector and guide it through the various stages of development, including its most recent phase of the transition from a vertically integrated public monopoly into an unbundled, demonopolized, commercially driven organization with dominant private ownership and a modern legal and regulatory framework. This transition is still in progress, as the new structure, institutions, policies and practices are getting stabilized and establishing a performance track record. The experience with the first IPP, Amman East, demonstrated general viability of the established sectoral framework and the value of the Bank involvement, leading to the selection of a competent, experienced and credible private sector-based project developer whose performance on the project so far has been exemplary. The Bank's in-principle PRG support for the Al Qatrana project also contributed to the good response from the private sector. The events of 2008 – the instability in the fuel markets, the international financial crisis – illustrate the challenges which the sector and its evolving institutions are facing. The Bank support is still needed to reassure investors and help the sector deal with these challenges more effectively. The Bank remains deeply involved in the sector and has a stake in its success, as it shifts its attention toward the issues of energy security, efficiency, renewable energy, and regional integration.

## **2. Proposed objective(s)**

The project objective is to help meet the electricity needs of the country in an economically and environmentally sustainable manner. The Bank's IBRD PRG aims at providing additional comfort to private investors and, thus, helping the GoJ to attract private investment and reduce cost of financing.

## **3. Preliminary description**

The proposed project includes a 373-MW CCGT, with two gas turbines and two associated heat recovery steam generators, and one steam turbine. The project will be implemented through an EPC contract.

Pre-qualification documents for the selection of project developers were issued on July 26, 2007, with a deadline for submission of August 16, 2007. Out of 23 requests for pre-qualification 11 were granted. The RfP was issued to pre-qualified firms on September 15, 2007, with final deadline for submission of bids, after two extensions, of April 29, 2008. Four proposals were received and the preferred bidder selected in July 2008.

Financial close is expected by May 25, 2009. The first phase of the project (gas turbines) is to be commissioned by August 27, 2010 and the full plant by August 25, 2011. The project is to be financed by a 25 percent equity and 75 percent debt.

## **4. Safeguard policies that might apply**

The project involves construction and operation of a new power station and is Category A. In compliance with OP 4.01, the successful bidder will be required to engage independent experts to conduct an Environmental Assessment (EA), including public consultations. The EA will reveal the other safeguards policies that apply to the project, if any.

## **5. Tentative financing**

Source:	(\$m.)
Borrower	10
IBRD	0.0
IBRD Guarantee	50.0
Foreign Private Commercial Sources (TBD)	406.0
	Total
	466.0

## **6. Contact point**

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