JORF LASFAR ENERGY COMPANY (JLEC)
A MAJOR PLAYER OF THE NATIONAL ENERGY STRATEGY
THE NATIONAL ENERGY STRATEGY, AN ONGOING PROCESS
THE ENERGY CONTEXT

The socioeconomic development of Morocco and the different ongoing major projects initiated across all sectors of the Economy, (especially in the PERG – Rural Electrification Program) have considerably increased the national demand of energy, thus adding to the need to ensure security of supply and access to energy at prices that preserve the purchase power of households as well as the competitiviteness and attractiveness of the country in terms of FDI’S.

The national context
- Since 2002, the energy consumption of Morocco has been increasing on average by 7% annually.
- Morocco’s demand for primary energy is expected to double by 2020 and triple in 2030.
- Morocco’s demand in electricity is projected to double by 2020 and quadruple in 2030.

Morocco is well positionned to become an energy hub.

FACING THE ENERGY CHALLENGES

In order to face the energy challenges, Jorf Lasfar Energy Company (JLEC) comply with the National Energy Program to ensure the power supply nationwide through the performance of the existing units and the expansion project of JLEC 5&6 which will raise the total capacity of the plant to 2 056 MW.
JORF LASFAR ENERGY COMPANY (JLEC)
A MAJOR PLAYER OF THE ENERGY STRATEGY
The Company was created in 1997 by the CMS Generation and ABB consortium, the successful bidder of the international call for tenders initiated by ONE in 1994, to open up the national electric production to private investors.

This call for tender involved the operation and the transfer of the Plant located on the Atlantic Coast, some 127 km southwest of Casablanca.

The site extends over a surface area of 60 hectares and can accommodate up to six coal-fired power plants with a unit capacity close to 350 MW.

The opportunities offered by the Port of Jorf Lasfar in terms of coal imports in optimal technical and economic conditions, the needs in electrical energy related to the industrial development of the region and the promotion of the existing infrastructures have all contributed to the selection of the geographic location of the Plant.
The Moroccan leading independent electricity producer with 44% of national demand and 25% of the installed capacity.

The main supplier of the Office National de l'Electricité et de l’Eau Potable (ONEE)

A company owned by 100% at Abu Dhabi National Energy Company PJSC TAQA since May 2007, a global leader in the energy sector

Four units with a total capacity of 1 356 MW

An availability level reaching over 90% placing it among the best Thermal Power Plants in World

Improving preventive maintenance program for better reliability and performance

Adhering to the highest safety & environmental standards

A human resources policy designed for JLEC employee’s development

A know-how and technical expertise

A company that promotes job creation

A social player role through Health, Education, Culture & Environment

Developing a business with the extension of the plant with two new production units JLEC 5 & 6 (700 MW for a total capacity of 2056 MW)
JLEC 5&6
AN AMBITIOUS PROJECT FOR MOROCCO
In May 2009, TAQA/JLEC and ONEE signed a Protocol Agreement for the accelerated development of the 700 MW expansion of the 1,356 MW Jorf Lasfar power station in Morocco

- Agreement under the patronage of His Majesty the King of Morocco / His Excellency the Crown Prince of Abu Dhabi
- Close collaboration between TAQA/JLEC and ONE for accelerated implementation of the Project

Units 5&6 are two new coal fired thermal generating units of 350 MW gross capacity each, and is located on a site adjacent the existing Jorf Lasfar Units 1-4 (on Morocco’s Atlantic coast ~120 km south of Casablanca)

- In addition to construction of Units 5&6, Project involves upgrade of Jorf Lasfar port terminal (port improvement and extension of coal unloading terminal) / coal handling infrastructure (new coal unloaders / conveyors / stackers)
- Units 5&6 EPC Contract signed with a consortium of Mitsui Daewoo in December 2010
- Construction started on September 2010 with TAQA providing interim funding

**Overall investment:** 1.6 billion USD

**Jobs generation:**

- **Construction phase**
  - 3,000 direct jobs
  - 2,000 indirect jobs

- **Operating phase**
  - 135 direct jobs
  - 1,000 indirect jobs

**Management and protection of the environment**

The environmental impact assessment study on 5 July 2010 conducted as part of the extension of units 5&6 has demonstrated both the compliance with the existing units to the applicable requirements and the non significant and manageable impact owing to this new extension.

The extension of the Plant will have its own liquid waste and fumes treatment facilities, amounting to an investment of 200 million USD.

JLEC has signed on the World Bank’s stricter limit values both regarding liquid wastes and gaseous discharges.

A desulfurization arrangement will be implemented for fume treatment, along with the continuous monitoring of stack emissions.
Abu Dhabi National Energy Company PJSC (TAQA): Project initiator and parent company of JLEC, TAQA North Africa and JLEC 5&6. A global energy operator with a capital of approximately 31 billion USD, with head office located in Abu Dhabi and one of the leading independent power producers in the world, with a gross production capacity of 17,000 MW. Majority owned by the Government of Abu Dhabi

Jorf Lasfar Energy Company 5&6 SA (JLEC 5&6): a direct Moroccan subsidiary of JLEC and 100% indirectly owned by TAQA, is the project leader for the 5&6 new units of the Jorf Lasfar Thermal Power Plant

Jorf Lasfar Energy Company SA (JLEC): Moroccan subsidiary 100% indirectly owned by TAQA and project company for the 1 to 4 existing units of the Jorf Lasfar Thermal Power Plant.

TAQA North Africa S.C.A. (TNA): Moroccan subsidiary 100% indirectly by TAQA (operator of the Plant / energy development activities). Manager of the Operations and Maintenance of the existing units 1 to 4, of the new units 5&6 and of the common facilities, including also the port and the coal yard.

National Electricity Board (ONEE): Public body responsible for the design, management and operation of the Kingdom’s power grid and of the power production resources; signatory of the project contracts with JLEC and JLEC 5&6 (buyer of the entire volume of energy available)

Agence Nationale des Ports (ANP): National authority and legal successor of the Office d’Exploitation des Ports (Moroccan Ports & Harbours Authority); the contractual counterpart of JLEC and JLEC 5&6 concerning the improvement of port services and infrastructures of Jorf Lasfar and the modernization and use of the Jorf Lasfar coal unloading terminal; contractual counterpart of ONEE with respect to the ownership of the Jorf Lasfar coal terminal and its equipment and to the ownership and operation of the Jorf Lasfar fly ash disposal pit.

Exchange Control Office: Provider of the letters of authorization relating to different exchange accounts and questions concerning the operations respecting the units 1 to 4 and 5&6 of the Jorf Lasfar Thermal Power Plant.

Ministry of Finance (MoF): Provider of the letters of confirmation relative to the convertibility of currencies and the transfer questions relating to the projects 1-4 and 5&6 of the Plant de Jorf Lasfar.

Government of Morocco (GoM): Provider of the letter of support and guarantee of the termination amount relating to the projects of units 1-4 and 5&6 of the Plant.
TAQA Completes USD 1.4 Billion Project Financing Arrangements for Jorf Lasfar Power Complex Expansion (JLEC 5&6)

January 28, 2013, Abu Dhabi National Energy Company PJSC (TAQA) has signed final agreements marking the close of the USD 1.4 billion equivalent project financing for the expansion of the Jorf Lasfar power plant in Morocco.

Banque Centrale Populaire (BCP), BNP Paribas, Société Générale and Standard Chartered Bank are the mandated lead arrangers for the credit facilities. Japan Bank for International Cooperation (JBIC), Nippon Export and Investment Insurance (NEXI) and Export-Import Bank of Korea (Korea Eximbank) are providing direct loans and loan guarantees for more than 50% of the total project debt.

The long-term debt, maturing in 2028, represents the equivalent of USD 1.3 billion. The medium-term debt, maturing in 2014, will amount to the equivalent of USD 100 million.

This is the largest international project financing in Morocco in over a decade and the first time Japanese and Korean export credit agencies have participated in a Moroccan project finance.

Despite the on-going instability in global financial market, TAQA have successfully secured sophisticated international financing arrangements from Asian, European, and Moroccan lenders. As the sponsor, developer, and operator of this significant infrastructure project together with ONEE and the Moroccan Government’s support, has undoubtedly helped secure favourable terms.

TAQA received the awards from the Project Finance Magazine Awards (London):
- Project Finance Power Deal of the Year – Africa 2012 for JLEC 5&6 extension project
- Project Finance Sponsor of the Year – Africa 2012

from the World Investment Conference North Africa
- « Best Partnership Award 2012” for the JLEC 5&6 extension project
The expansion is now approximately 80% complete.

The two new units are scheduled to be commissioned in December 2013 and April 2014.
Morocco is taking the lead in the energy field through the launch of programs aimed to secure long term viability while reducing its carbon footprint.

Today, TAQA’s strategy is to develop business opportunities responding to the wind program called “Integrated Wind Program”

TAQA is prequalified for the 850 MW wind project with Nareva, Enel GP and Siemens.

TAQA is also developing other private project under the new regulation on renewables in Morocco.
THANK YOU