



Orient Power Company (Private) Limited

COMPANY PROFILE



INTRODUCTION

Orient Power Company (Private) Limited (OPCOL) is a private limited company incorporated in June 2003 under the Companies Ordinance 1984. The main objective of OPCOL are the construction, operation and maintenance of 229 MW (Gross ISO) combined cycle power plant situated at Balloki District Kasur, Punjab Pakistan.

OPCOL is the first independent power project (IPP) approved by the Government of Pakistan (GOP) under the 2002 Power Policy.

BACKGROUND & GOP APPROVALS

The initial sponsor, Mr. Nadeem Babar (Initial Sponsor) submitted a proposal to the GOP in August 2003 to build a 400 MW project near Balloki. Project was to be implanted in two phases of 200 MW each. After several months of detailed review, including an exhaustive evaluation of qualification documentation and project plans, the application was approved in December 2003. The required bank guarantee of USD 400,000 was posted by the Initial Sponsor in January 2004 and the Letter of Interest (LOI) formally issued by the GOP on February 12, 2004.

As per the Policy, the standard concession documentation used in the 1994 Policy (i.e. Power Purchase Agreement, Implementation Agreement, and Gas Supply Agreement) were to be used under the 2002 Policy. However, unlike the 1994 Policy, the power rate has to be negotiated after a detailed feasibility study conducted by the sponsors on a case by case basis. Such a study was conducted by an internationally renowned engineering company (Fichtner) having comprehensive scope. After the formal approval of such a study, the next stage was negotiation of tariff rate with National Transmission & Dispatch Company (NTDC) with the feasibility study as a reference point.

The Company appointed Fichtner GmbH of Germany as the expert firm for completion of the Feasibility Study, with Pakistan Engineering Services providing local support for the work. The report was presented in draft form in late July 2004, and after several months of discussion and incorporation of changes proposed by NTDC and and Private Power and Infrastructure Board (PPIB), the final report was submitted in September 2004. The report was approved in late October 2004 and the sponsors were notified to negotiate the tariff with NTDC.

The Sponsors and NTDC had tariff negotiations from mid November to mid December 2004 and reached agreement on the proposed rates. This tariff was approved the board of NTDC as well as by PPIB and the company was instructed in later December 2004 to file its tariff petition for determination by National Electric Power Regulatory Authority (NEPRA).

The Company filed its applications with NEPRA for issuance of Generation License and Tariff Approval, on February 1, 2005, as required under the law. NEPRA, an independent body with judicial power, held open public hearings on March 10-11, 2005 in Islamabad as a part of the process. All issues raised in the hearings were addressed by the Company and in mid-June 2005, NEPRA issued its approval for tariff. However, the tariff approved was revised downwards on several counts. The Company filed an appeal to this Ruling in June 2005. NEPRA again held open hearings and finally issued a revised order in July 2005, approving the tariff very similar to the one requested.

The tariff approved by Nepra is for the life of the project i.e. thirty (30) years and is essentially on cost plus basis. The tariff consists of two main components i.e. Capacity Purchase Price (CPP) and Energy Purchase Price (EPP). The CPP part of the tariff covers the fixed costs like debt (principal and



interest), return on equity, fixed operations and maintenance costs and insurance. The CPP component is payable to OPCOL upon making the plant available to NTDC. EPP is payable in return for the electricity generated and supplied to NTDC and covers fuel cost and variable operations and maintenance cost related to generation. Gas is the main fuel and high speed diesel (HSD) as back up fuel. Tariff components are linked to different indices i.e. Kibor, US\$, US CPI and Pakistan WPI.

The tariff approved by Nepra is to be trued up at COD for currency exchange rates, KIBOR movements and actual debt draw down profile.

NEPRA also issued a Generation License to the Company on July 22, 2005.

With the tariff approval and the issuance of a Generation License, the Government of Pakistan issued a Letter of Support (LOS) to the Company together with finalizing the concession contracts with the Company.

CONTRACTUAL FRAMEWORK

Engineering Procurement & Construction Contract

In January 2005, the Company issued a limited international tender to three pre-selected contractors. These included (a) Siemens AG, (b) a consortium of Toshiba and Hitachi, as well as (c) PA Export (Formerly CKD Export and before that SkodaExport). Following this competitive process, PA Export (Contractor) and Albario Engineering (Private) Limited were awarded Engineering Procurement & Construction (EPC) contract for a fixed price of US\$ 147.79 million. PA Export had the overall responsibility for the EPC. The contract was signed in December 2005. Under the EPC, contractor has to design, procure the equipment, construct, test and commission the plant. Following financial close in December 2006, the mobilization of the contractor started in January 2007 and construction work started at site subsequent to this. Under the EPC contract the contractor had twenty four (24) months to complete the project. Delay in completion beyond this period which was not excusable under the EPC contract attracted liquidated damages for delay. In addition contractor had to meet minimum output and efficiency parameters and non compliance thereof attracts liquidated damages under the EPC contract. Payments to the contractor were spread over the construction period. This included advance payment at the commencement and progress payment. Each progress payment was liable for retention money withholding which was to be paid to EPC contractor following successful commissioning of the plant. The EPC contractor provided performance guarantee to OPCOL in the form of a bank guarantee to fulfill its obligations under the contract. In addition company had bank guarantee from the contractor for the advance payment it had made together with retention money withholdings and retention money bond. Contractor has Habib Rafiq (Private) Limited and Etimad Engineering (Private) Limited as its sub-contractors.

In early September 09, due to material breaches of the contract by the Contractor, its inability to finish the project within time and insolvency proceedings initiated against the Contractor in Czech Court, OPCOL terminated the EPC Contract. In order to commission the plant OPCOL has engaged the sub-contractors who were originally working on the plant.

Implementation Agreement

The Implementation Agreement (IA) was signed with GOP in November 2006 for a term of 30 years starting with Commercial Operations Date (COD). The main intent of the IA is to encourage

private sector investment in energy sector and to provide assurances of the GOP support to the sponsors and lenders of the project for their efforts to develop and project in an efficient and timely manner. Through IA the GOP guarantees to the sponsors the payment obligations of the power off taker in addition to guaranteeing the payment in the event of termination.

Power Purchase Agreement

The Power Purchase Agreement (PPA) was signed with National Transmission and Distribution Company for a term of 30 years in November 2006. Under the PPA, OPCOL is obliged to sell power generated by it only to NTDC. PPA specifies tariff that is applicable for a term of 30 years. Under the PPA, OPCOL has guaranteed availability and efficiency to NTDC on the basis of which tariff has been determined. OPCOL has twenty eight months to complete the project under the PPA. Gas is the main fuel and high speed diesel (HSD) as back up fuel. In addition there are certain costs under the PPA that are a pass through and not covered under CPP or EPP. Tariff components are linked to different indices i.e. Kibor, US\$, US CPI and Pakistan WPI. Failure of the company to make the plant available to NTDC or its inability to generate electricity when it makes the plant available to NTDC attracts the penalties under the PPA.

Gas Supply Agreement

The company entered in to Gas Supply Agreement (GSA) with Sui Northern Gas Pipelines Limited (SNGPL) in October 2006. Under the GSA, SNGPL has guaranteed the delivery of 38 MMCFD gas for the project which is equal to operating the plant as base load. Under the GSA March to October are the months during which delivery of gas is guaranteed whereas December to February or non-gas months i.e. gas would be supplied on as available basis. Price of the gas under the GSA is as determined by the GOP at monthly intervals and at the same price would be passed through to NTDC.

Operations, Maintenance & Long Term Services Agreement

OPCOL has entered in to Operations, Maintenance & Long Term Services Agreement (OMS) with General Electric (GE) for its 229 MW (Gross) Balloki combined cycle power plant. The term of the OMS is approximately 18 years. The contract is primarily divided in to mobilization phase of twelve months i.e. pre commercial operations date and operations phase i.e. post COD. For performing services the facility is segregated in to covered units and balance of plant. Under the terms of the OMS, OPCL has to procure from and provide to GE the initial spare parts, which have already been procured and handed over to GE. These spares would be used as and when required and replenished by GE at their cost and at the end of contract expiry to be handed back to OPCOL. All payments under the contract are in US\$. Fees are primarily split in to mobilization phase and operations phase. Further during operations phase the fees are split in to fixed fees, variable fees and event based payments to cover for HGPI and major inspection. All fees are indexed at a fixed percentage. Under the OMS, GE has guaranteed the availability, output and heat rate. Inability of GE to meet this guarantee levels attracts liquidated damages under the contract. Similarly if GE exceeds the guaranteed parameters they are entitled to bonus.

Fuel Supply Agreement

The company has entered in to fuel supply agreement in November 2006 with Shell Pakistan for supply of HSD which is to be used as a back up fuel. The term of the agreement is twelve years from COD. Under the PPA, OPCOL is obliged to maintain seven days of inventory during gas months and inventory of fifteen days during non gas months.

TECHNOLOGY AND CONFIGURATION

The plant is primarily a combined cycle power plant with two gas turbines (6FA+) from General Electric, a steam turbine from Skoda Power, HRSGs from Austrian Energy and balance of plant from the Europe, USA and China.

Each gas turbine includes associated auxiliary equipment such as inlet air filters, lubricant oil system, generator, control and starting system. The HRSGs will extract heat from the exhaust of the Gas Turbines through heat exchangers and use it to generate high pressure steam to be fed into the steam turbine generator. Steam exiting the steam turbine generator will be condensed into water through a conventional condenser. A close system to recycle water is to be utilized.

Other mechanical plant equipment consists of condenser, de-aerator, high load motors and pumps, compressed air system, fire protection system, water treatment system, boiler cycle and feed systems, waster-water treatment system, and fuel unloading, treatment and storage system.

Other major plant electrical systems would include main step-up transformers, auxiliary transformers, electrical distributions system, switchgear, motor control centers, central control system, protection systems, and communication system.

Other plant infrastructure consists of a control building, an office block, maintenance shop and warehouses, water treatment building, gas compressor facilities, laboratory, tube wells, and fuel oil handling facilities.

SITE, UTILITIES & INTERCONNECTION

The Company has acquired 30 acres of land on the bank of Balloki-Sulemanki Link Canal near the Balloki headworks, approximately 7 kilometers off the main north-south national highway, N-5, and on a local rural road.

The water to be used for the plant is to be obtained from wells for the plant consumption. The Balloki-Sulemanki link canal originates from the River Ravi at the Balloki head works and is one of the main agricultural canals for central Punjab. This canal have sufficient water supply for a much larger plant size, but is shut down for about 3-4 weeks during the winter for annual maintenance. The water from the plant will be discharged into the canal after neutralization.

The facility is interconnected to the WAPDA system through a double circuit 132KV connection. While a 132 KV station is only 6 Km away, the 220 KV Sarfraz Nagar station 12 kilometers away, and the 500KV national grid is 3 kilometers away. The Company will deliver power to NTDC at the bus-bar on the high side of the transformer and any and all cost associated with the transmission lines is to the account of WAPDA.

PLANT UTILIZATION

Not only the first project implemented under the 2002 policy, it is also the most efficient plant under construction. The high efficiency of the plant makes the variable cost of generation very competitive and is lower than all fuel oil based plants and also better than many of the gas fired units as well. This factor combined with the fact that the plant would be located in the heart of the load center, and as such will have lower transmission cost for NTDC, suggests that the unit will run as a base-load facility achieving very high utilization factor, perhaps in the range of 75%

or higher.

The facility has been designed to switch to back-up fuel of diesel oil in the winter times when supply of natural gas might be curtailed for a period of non-gas months, thereby allowing for high utilization at times of critical need for NTDC.

FUEL

The plant is designed to operate on natural gas as primary fuel, with the back-up fuel being high speed diesel.

ENVIRONMENTAL

The plant meets the World Bank Guidelines for emissions from power plants as well as guidelines of the Pakistan Environmental Protection Agency.

Air emissions are reduced because of the use of clean burning natural gas as well as good combustion practices in the process. Natural gas as the primary fuel produces lower Particulate Matters (PM), Sulfur Oxides (SOx), and Nitrogen Oxides (NOx) while good combustion practices reduces carbon monoxide, PM, NOx and volatile organic compounds. The use of evaporative coolers can lower the inlet temperature and reducing the density of the inlet air, thereby helping improve combustion and lowering the emissions. The addition of humidity also reduces NOx emissions, and if deemed necessary, other measures like water injection can be employed to reduce the NOx emissions. A Continuous Emissions Monitoring System (CEMS) will be utilized for monitoring emission during the operations of the facility.

As for the liquid effluents, neutralization and oil separation of the wastewater will be employed. Treated wastewater, which would be benign to the environment and even cleaner than raw water, will be discharged in a near by drainage ditch or sewage system. The water will be treated for oil & grease, total suspended solids (TSS), total dissolved solids (TSD) and pH balance in compliance with the GOP effluent guidelines, before discharge.

Sanitary wastewater from the facility will be handled and treated via a septic tank sized to ensure no significant impact on the quality of the groundwater.

The Feasibility Study included a complete Environmental Impact Assessment Report which was approved as a part of the Feasibility Study. Presently the company has necessary environment approval from the Environment Protection Agency for the construction phase.

PROJECT COST & FINANCING

The total project cost at financial close is US\$ 182 or Pakistan Rupees ("PKR") 11,000 million using exchange rate of that time. Main components of the project cost are EPC price of US\$ 147.79 million split in to US\$ 130 million of engineering and procurement ("E&P") and US\$ 18 million of construction ("C"). The E&P price is being be paid in US\$ and C contract price is being paid in PKR which has been locked in at an exchange rate of 1US\$ = 60.97 PKR. Remaining cost of equivalent of US\$ 34.28 million includes interest during construction (IDC) and lenders fees/costs of US\$ 20.29 million, O&M mobilization fee and operational spares at US\$ 5.56 million, and all other costs (land, project development, legal and engineering costs, construction management, government levies) of US\$ 8.43 million.

The project has been financed by a combination of debt and equity in the ratio of 75:25. The debt

has been arranged from a consortium of local banks and is in PKR. All the equity is in US\$. The total debt as allowed by the lenders is PKR 8,600 million including PKR 325 million of cost over run commitment. Base equity agreed is US\$ 45.27 million with cost over run commitment at PKR 125 million. Funding is priced at 3 month Kibor plus 315 basis points With Kibor being reset on a quarterly basis. The loan is repayable in 40 equal quarterly installments commencing from COD.

The consortium consists of six local banks as follows:

Bank	Funding Commitment (PKR Million)
Habib Bank Limited (Agent Bank)	1,850
Muslim Commercial Bank Limited (Security Trustee)	1,850
United Bank Limited	1,800
Allied Bank Limited	1,800
Bank Alfalah	1,000
Pak Oman Investment Company	300
Total	8,600

At the time of tariff approval from Nepra, equipment and supplies for setting up of a power generation project were exempt from import duties and taxes. Subsequently GOP imposed five percent concessional customs duty and one percent federal excise duty on the import of plant and equipment. Tariff approval from Nepra covered any imposition of taxes as pass through to power off taker after COD. However this funding requirement had to be financed for the duration of payment of taxes to GOP and recovery of the same from NTDC. This has been financed with a medium term facility of PKR 650 million from consortium of above banks. The repayment of this facility is in twelve equal installments following COD. The same is to be repaid by NTDC to OPCOL in twelve installments following COD.

SPONSORS

The sponsors of the project are Mr. Nadeem Babar, Oman Oil Company S.A.O.C. and DEG - Deutsche Investitions- und Entwicklungsgesellschaft mbH. Each sponsor’s percentage holding is as follows:

Sponsor	Percentage
Mr. Nadeem Babar	26.10%
Oman Oil Company	49.00%
DEG	24.90%
Total	100.00%

***Mr. Nadeem Babar***

Mr. Babar is a well known and seasoned executive with worldwide experience in energy sector. While Mr. Babar has previously implemented two power projects under the 1994 Power Policy as well achieving financial close for the third in December 2008 under the 2002 power policy. The current project is under construction and is expected to be operational by first quarter of 2009.

Mr. Babar has extensive worldwide experience in development, financing and management of power generation assets worldwide. For fifteen or so years, he has worked in the global power generation business and has developed, financed and/or managed generated projects based on coal, waste coal, natural gas, low BTU gas, residual oil, diesel, wind, hydro, waste-to-energy, biomass, and nuclear technologies. In his career, he has managed over 150 power plants and has been involved in financing in excess of \$10 billion of capital for this sector and conducted business in over 25 countries.

After almost six years of service, he left El Paso Corporation ("El Paso") in early 2003, where he was the Senior Managing Director of the International Power Division. Prior to joining the corporate sector in 1994, Mr. Babar was an investment banker working in the Energy Finance area.

El Paso Corporation/The Coastal Corporation

El Paso Corporation of Houston, Texas is a Fortune 500 company which is the largest integrated gas pipeline company in the world. It is involved in every part of the gas chain as well as some affiliated businesses including Exploration and Production, Natural Gas Gathering and Processing, Pipeline Transmission, Trading of Gas, Petroleum Products and Electricity, Power Generation, Refining & Petrochemicals as well as Liquefied Natural Gas. In 2002, the Power Generation business consisted of ownership interests in 101 plants with slightly more than half being in the United States and the balance being outside.

In this capacity, Mr. Babar had full responsibility for 32 operating power plants, as well as all development and privatization initiatives in most countries around the world outside of North America. These operations had a gross capacity of 6,500MW, and net ownership of 3,100MW by El Paso, with plants in 18 different locations through 14 different project companies in Asia including Bangladesh, China, India, Indonesia, Korea, Pakistan and Philippines. This group of assets represented an asset value of in excess of \$4.5 billion with equity investments of \$1.2 billion and debt of approximately \$3.3 billion. While Mr. Babar had the full management responsibility for the entire portfolio, and was as such involved in each project on behalf of El Paso, he personally developed and arranged financing for many of the projects in this portfolio.

Prior to the responsibilities described above, Mr. Babar was the Chief Operating Officer of Coastal Power Company, the power generation division of The Coastal Corporation ("Coastal") which merged with El Paso on January 29, 2001. Unlike El Paso, Coastal's power activities were not split between domestic United States activity and international activity. As such, Mr. Babar had full responsibility for all operations of the division which reported almost \$140 million of earnings for the last full year (Year 2000) prior to the merger.

This portfolio of assets includes three power plants implemented successfully in Pakistan: (a) 140MW Habibullah Coastal project in Quetta, (b) 125 MW Saba Power project in Farooqabad, and (c) 157 MW Fauji Kabirwala project in Kabirwala. Mr. Babar was directly involved with the development, construction, finance and management of the first two project, but only in an oversight role at the Joint Venture level with Fauji Foundation for the third project. These three

projects represent approximately \$480 million of capital investment in Pakistan under the 1994 Power Policy.

Cogen Technologies Energy Group

Prior to joining The Coastal Corporation, Mr. Babar was Vice President, Development and Finance, at this privately held power generation company based in Houston. After having been its banker for several years, Mr. Babar joined this company in late 1993. He was involved in financings, either as a banker or a principal, totaling over \$1.6 billion for the company's various projects.

Through a series of transactions, most of the assets of this company were eventually sold to El Paso or its subsidiaries and are currently in the process of being sold onwards. Included in them was the Saba Power project in Pakistan which was started by Mr. Babar at Cogen Technologies.

Investment Banking

Mr. Babar started his career as an investment banker in the Project & Lease Finance Group at the investment banking firm of Drexel Burnham Lambert. After a few years with a boutique investment bank specializing in the energy sector, where he was a partner, Mr. Babar ended his investment banking career at Credit Suisse First Boston, based in New York, where he was Vice President for International Project Finance.

During his career he has participated in some of the most complicated transactions ever completed in the sector. A few of these notable transactions include (a) conversion and financing of a partially built nuclear facility into a 1300 MW combined cycle plant through a sale-leaseback arrangement, (b) first ever municipal bond financing with junk credit for a power plant, (c) first ever non-recourse financing of an international merchant power plant. He has raised capital through most structures including private equity, venture capital, institutional equity, rated public debt, mezzanine financing, tax-exempt municipal bonds, high yield debt, commercial bank debt, working capital lines and letters of credit. In addition he has advised on numerous mergers, acquisition, and divestitures.

Academic

Mr. Babar has lectured at numerous global conferences for the electric sector both in five countries regarding financing and development of power plants. He has also conducted free educational seminars for government officials in three countries on privatization and deregulation of the electric sector. In addition, he has lectured at the Haas School of Business, University of California, Berkeley as well as Lahore University of Management Sciences, both to the MBA class as a guest industry expert. He has also addressed the annual IFC conference of bankers.

Mr. Babar holds a M.S. in Civil Engineering Management from Stanford University, a B.A. in Economics from Columbia University and a B.S. in Civil Engineering from Columbia University, all in the United States.

Oman Oil Company S.A.O.C.

Oman Oil Company S.A.O.C. operates in the energy sector both inside and outside of Oman. Company is wholly owned by the Government of the Sultanate of Oman through a commercial

venture. Through participation in energy and energy related projects, the Company plays an important role in the Sultanate's efforts to diversify the Omani economy and to promote Omani and foreign private sector investment.

Within the Sultanate, the Company is focused on the development of oil and gas-based industries and other energy and energy related projects in partnership with international industry players capturing the value chain in the oil and gas sector. The Company's portfolio of investments includes Exploration & Production and related services, Infrastructure & Shipping, Refining & Marketing, Petrochemicals, Aluminium and Power.

Outside Oman, the Company is actively pursuing commercial ventures in the energy value chain.

Currently, Oman Oil Company's domestic and international investment portfolio includes:

- Exploration and Production
- Energy Infrastructure
- Shipping
- Power
- Petrochemicals
- Refining and Marketing
- Metals

DEG - Deutsche Investitions- und Entwicklungsgesellschaft mbH

DEG, member of KfW banking group, is one of the largest European development finance institutions for long-term project and company financing. For more than 45 years, DEG has been financing and structuring the investments of private companies in developing and transition countries. DEG employs staff of over four hundred.

DEG invests in profitable projects that contribute to sustainable development in all sectors of the economy, from agriculture to infrastructure and manufacturing to services. DEG also focus on investments in the financial sector in order to facilitate reliable access to capital locally. To date, DEG has worked together with more than 1,500 companies. DEG has committed financings of around 4.7 billion euros over the past five years alone.

DEG's aim is to establish and expand private enterprise structures in developing and transition countries, and thus create the basis for sustainable economic growth and a lasting improvement in the living conditions of the local population. DEG only take on commitments in projects that make an effective development policy impact, meet environmental standards and comply with social principles.

PROJECT CURRENT STATUS

Project is mechanically complete and in testing and commissioning phase.



**ORIENT POWER COMPANY (PRIVATE) LIMITED
FINANCIAL HIGHLIGHTS**

BALANCE SHEET	2009	2008
	(Rupees)	
SHARE CAPITAL AND LIABILITIES		
Authorized share capital 340,000,000 (2008: 275,000,000) ordinary shares of Rs.10 each	3,400,000,000	2,750,000,000
Equity	2,957,909,919	2,397,529,985
Long Term Liabilities	8,222,309,791	6,179,718,820
Current Liabilities	1,957,937,639	976,308,181
	13,138,157,349	9,553,556,986
ASSETS		
Capital Work in Progress (Property, plant and equipment)	11,160,268,436	8,155,103,693
Long term deposits	5,427,275	5,307,275
Current Assets	1,972,461,638	1,393,146,018
	13,138,157,349	9,553,556,986
PROFIT AND LOSS	2009	2008
	(Rupees)	
Other income	6,632,944	33,093,828
General and administration expenses	(34,480,461)	(18,494,882)
(Loss) / profit before taxation	(27,847,517)	14,598,946
Taxation	3,469,581	(3,626,506)
(Loss) / profit for the year	(24,377,936)	10,972,440
CASH FLOW STATEMENT	2009	2008
	(Rupees)	
Cash Flows From Operating Activities	(118,150,924)	(11,294,558)
Cash Flows From Investing Activities	(3,007,721,019)	(3,836,693,654)
Cash Flows From Financing Activities	3,221,784,985	4,021,362,307
Increase in cash and cash equivalents	95,913,042	173,374,095
Cash and cash equivalents at beginning of year	957,535,127	784,161,032
Cash and cash equivalents at end of year	1,053,448,169	957,535,127